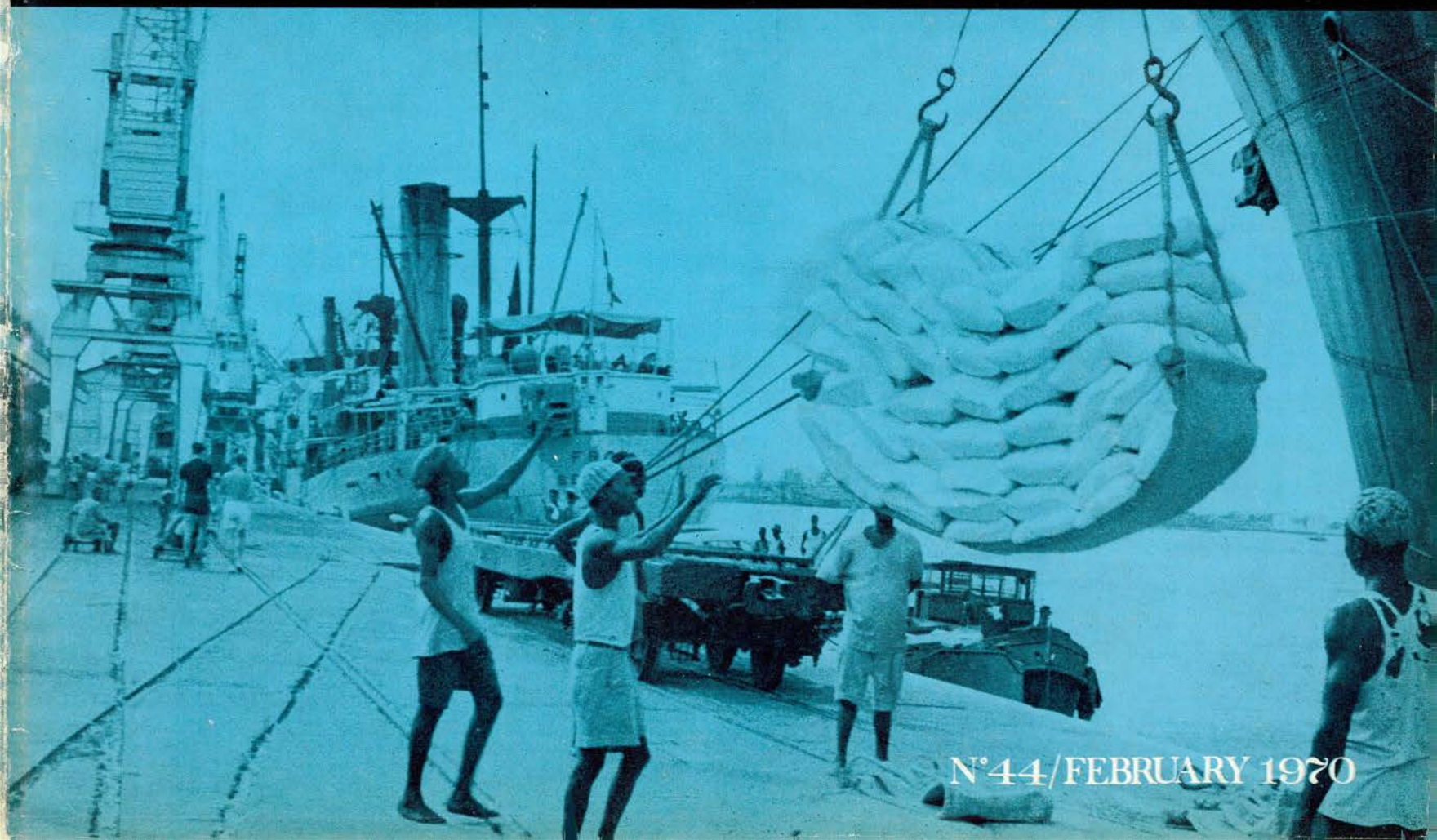


the **OECD** **OBSERVER**

**NEW STATISTICS ON OECD COUNTRIES
TOWARDS A PREFERENTIAL TARIFF FOR
DEVELOPING NATIONS A NEW SYSTEM
OF NATIONAL ACCOUNTS CHANGING TO
A VALUE-ADDED TAX MORE EQUITABLE
GEOGRAPHIC DISTRIBUTION OF AID** ~



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TARIFF PREFERENCES FOR DEVELOPING COUNTRIES

by

Erbart Poincilit, OECD Director for Trade

In accordance with an undertaking accepted within the framework of the United Nations Conference on Trade and Development (UNCTAD) the developed Member countries of OECD have set out their present position with regard to what is officially called "the establishment of a mutually acceptable system of generalised, non-reciprocal, non-discriminatory tariff preferences in favour of developing countries". It consists in the first place of a fairly brief comparative summary of a number of features of a possible preference scheme or schemes as initially envisaged by a number of developed countries. Secondly, to that overall survey has been annexed the material from which it was constructed — each country's communication to OECD of the kind of preference system it envisages at present. These outline schemes contain different

views, ideas or proposals on different aspects of tariff preferences. To bring them into such a close relationship to each other that they can really be considered to form a system of generalised preferences remains the main task ahead.

The documentation which was handed over to UNCTAD, therefore, does not provide a final answer from the developed countries. However, it marks one stage in the preparation of a world-wide system of tariff preferences on which the OECD has been working for several years and, indeed, an important one. One may say that all the cards are now on the table and we know on what base we will have to build further. This stage also provides a useful vantage point from which to look backwards and forwards.



At least three stages can be distinguished in events so far: first, pressure from the developing countries; second, consideration by developed countries in a restricted expert group; third, consideration by OECD as a whole.

As to the first stage, its genesis is to be found in the condition of the developing countries as it had become apparent by the early 1960s. The developing countries have a pressing need to earn more foreign exchange, not only to meet their immediate needs but also, and more particularly, to finance their development. They obtain foreign exchange from two sources: exports of goods and services and financial assistance. It may be that discussion of a preference system is timely, if only to remind us that increasing aid is not the only way of furthering development.

The Three Stages

In fact, a substantial increase in the exports of developing countries is an indispensable element in the elaboration of a general development strategy for the years ahead.

The developing countries began to press for generalised preferences as one way of increasing export earnings as early as 1963, in the GATT. The initial response was anything but favourable. A basic assumption of the GATT, since it was set up, has been the absolute primacy of non-discrimination in the form of the most-favoured-nation principle. Several developed countries, including some of the largest, made it clear at that time that they could not accept a system which involved any form of discrimination.

The issue was very soon revived in another forum, with much greater insistence, by the developing countries in the first United Nations Conference on Trade and Development in Geneva in 1964. Under this renewed pressure the developed market economies reacted in different ways. Some were disposed to admit at least the possibility of granting prefer-



Mr. Perez Guerrero, Secretary General of the United Nations Conference on Trade and Development (UNCTAD) receives from Mr. Emile van Lennep, Secretary General of OECD, documentation setting out the position of the developed Member countries in regard to tariff preferences in favour of developing countries.

ences to developing countries; others were not yet prepared to contemplate any departure from the most-favoured-nation principle. There was, therefore, no possibility of unanimous decision at that time. A recommendation was adopted, however, calling for urgent examination of all aspects of the problem.

After the Geneva conference, when the UNCTAD became a permanent body and thus was able to keep the issue alive, the second stage began: towards the end of 1965 the OECD set up a special group of senior officials from four Member countries — France, Germany, the United Kingdom and the United States. In November 1967 this group presented its report which has been the basis for all subsequent work. It recognised that preferential treatment as such was not likely to be a satisfactory solution to the problems of that large part of developing countries' export receipts which comes from the sale of primary products. The Group thought however that preferences could provide a significant stimulus to export trade in manufactured and semi-manufactured goods. The Group did not present a single set of proposals for implementing a scheme of preferences, but it drew attention to a significant number of factors which would have to be considered, and problems which would have to be solved, in drawing up such a scheme. The Group, moreover, suggested possible solutions for a number of these problems.

With the distribution of this report to all Member countries, the discussion became general and the third stage began. The OECD Council approved

the main lines of the report in December 1967, and it became the basis for the Western Group's position at the second UNCTAD Conference which opened soon afterwards, in February 1968, in New Delhi. The problem of preferences was a central issue during the debates of that Conference, which finally passed a resolution recognising "unanimous agreement in favour of the early establishment of a mutually acceptable system of generalised non-reciprocal and non-discriminatory preferences which would be beneficial to developing countries". The same resolution attempted to set a timetable for the work so that the scheme would be elaborated during the year 1969. The developing countries recorded their hope that it would become effective at the beginning of 1970.

From that point work has gone on steadily under the auspices of OECD's Trade Committee covering the whole membership; New Zealand was invited to participate in the work and Australia attended as an observer. Simultaneously an UNCTAD Special Committee on Preferences has been following the issue. After some discussion of general principles, the OECD body decided in the Fall of 1968 to follow a more pragmatic approach by asking each prospective donor country to elaborate, on an illustrative and provisional basis, but as concretely as possible, (that is to say with lists of products to be covered or to be excluded) the main features of the kind of preferential system they envisaged. Once these submissions had been transmitted to OECD, they would be studied and compared with a view to

moving towards a scheme as concerted and harmonised as possible. This decision gave rise to a fairly long drawn-out process since not all countries could meet the deadline originally fixed for 1st March 1969. The last individual country position arrived in the OECD in July of this year, and substantial modifications in initial positions were received until early in November. Meanwhile the potential donor countries had agreed, in the UNCTAD body, to provide it with substantive documentation to illustrate the progress made so far by not later than mid-November.

Therefore, the time for studying and comparing the various positions was short, and it has not so far proven possible to harmonise the individual

proposals into a comprehensive scheme. Hence, the document transmitted to the UNCTAD still includes a variety of individual and provisional suggestions. The area of common ground between them should not however be considered as negligible: similar approaches are to be seen not only in such aspects as, for example, duration of the system, and the institutional machinery to handle the scheme, but also in more fundamental features. To mention only one important aspect which can be considered as resulting from the discussions at OECD, all major donor countries or areas are now generally envisaging duty-free entry for the goods imported under preferential treatment.



To discern what effects a preference scheme would have and in what degree it would serve the interests of the developing countries one might first look at the present structure of developing countries' international trade, taking into account the existence of established preferential arrangements, and then consider various specific characteristics of any new system and their implications.

*The
Practical
Effects
of
Preferences*

Looking first at current trends in developing countries' exports of manufactured and semi-manufactured goods, these seem to be promising. For the selection of goods that has been used in OECD analysis, embracing the bulk of industrial manufactures and processed agricultural products, OECD imports from the developing countries expanded between 1960 and 1968 from \$1.6 billion to \$5.1 billion. This is an annual rate of increase of 15 per cent compared with 12 per cent for OECD imports of the same goods from all sources. These figures might lead one to wonder whether any special tariff treatment is really necessary, since without it exports have increased so rapidly in this sector, but such an assessment would be overly hasty. For one thing, a detailed scrutiny of the trade involved shows a high degree of concentration of exports in a very few developing countries and within those countries in relatively few lines of goods. The vast bulk of developing countries and individual industries therein have not shown themselves to be competitive up to the present.

A second consideration is that a not insignificant part of this flow of goods is already entering duty-free either in categories not protected in the developed countries or under existing Commonwealth, and to a lesser extent, Common Market preferences. However, nearly three quarters of the industrial exports from developing countries have not benefited

until now from any tariff advantages. Altogether, the case for improving the export earnings of developing countries as a whole is not greatly affected by these statistical facts. Neither has it proven possible to derive any conclusive quantitative data from studies on the effects of existing preferences. There are too many factors which at any point of time influence trade patterns, and preferences alone could not be isolated satisfactorily.

As to these current preference schemes, they raise particular problems for a generalised system. We can divide present preferences — which are all "partial" (from a geographical point of view) as opposed to the generalised system now proposed (which would apply to all developing countries) — into two kinds, according to whether the preferences are granted by developed to developing countries or vice versa. The latter are the so-called reverse preferences. The best known instances of both kinds arise within the Commonwealth and between the Six and their African associates.

The preferences now granted by developed to developing countries raise a particular problem of balancing benefits: the introduction of a generalised scheme would dilute the advantages at present enjoyed by the developing countries in some markets, while opening up opportunities elsewhere. Clearly a decision as to which benefits are preferable cannot be made by the developed countries alone. But present indications are that the United Kingdom and the Six do not feel that they can reasonably ask their developing partners to give up what they already enjoy. These countries thus expect partial and generalised preferences to operate side by side to the extent, at least, that the former exceed the latter in magnitude. Some other donors, however, including the Nordic countries and the United States, consider that both kinds of current preferences should be done away with, as an essential feature of any new system. The divergence of views constitutes one of the important questions which will have to be faced in due time. Duty-free treatment in the major developed countries' markets would evidently facilitate the solution in part.

(continued on page 6)



So much for the present structure of trade. What are the principal characteristics of any likely preference scheme? Five aspects are of particular importance. Some of them are interlinked, but they can be discussed separately and illustrated with reference to the initial positions made known to UNCTAD.

*Five
Likely
Features
of a
Generalised
Preference
Scheme*

ing what are developed countries and what are developing countries, or to determine at what stage of development a country would pass from one to the other or enter into some kind of intermediate category. So there must be border-line cases in both categories.

In the event, eighteen countries are at present prepared to grant preferences : Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States. For the Member States of the European Economic Community, it is the EEC as such which acts in this matter. Furthermore, the four Nordic countries have put forward a joint submission. Therefore, while there are 18 countries envisaging participation as donors in the generalised system of preferences, their present provisional positions in this regard are contained in only ten submissions.

Inssofar as beneficiaries are concerned, the solution proposed by the OECD Special Group in 1967 was self-election, that is, any country which considers itself to be developing should be free to request preferential treatment. It would be understood however that donor countries on an individual basis may decide not to grant preferential treatment to specific developing countries, if they have compelling reasons (not based on competitiveness). Since then no specific alternative has been proposed.

(2) The second important aspect is product coverage : what range of goods should benefit from preferences? As mentioned above, the 1967 Special Group's view was that preferences would be most effective specifically for manufactured goods and semi-manufactures. The developing countries themselves have also concentrated their demands for preferences on these categories of products, as well as on processed agricultural products of special interest to them.

The Special Group had suggested that particular provision be made for processed agricultural products which have the double character of being particularly important to many developing countries, while they present particular difficulties for many developed

countries in view of their agricultural policies. Practically all donors have agreed to consider including a number of these goods on a case-by-case basis.

It is considered that generalised tariff preferences should apply in principle to all industrial semi-manufactures and manufactures, but there is not in fact any precise, agreed definition of such products. The connected and delicate problem of definition of primary products and of their treatment also remains unsolved. It should however be stressed that these problems of definition concern borderline cases only.

(3) The third significant factor in determining the impact of the system is the *depth of cut* proposed in the various national tariffs. Clearly, the greatest advantage would accrue to the developing countries if the system could involve duty-free entry. But too much insistence on this might in some cases greatly limit the number of products on which preferences could be granted. This outlook has indeed influenced some of the provisional offers made, notably in the agricultural sphere — since some offers provide for less than a 100 per cent cut in tariffs. It is true, however, that the majority of the countries involved are now contemplating duty-free entry for industrial semi-manufactures and manufactures; of these, some provide for the imposition of certain ceilings for goods admitted under preferential treatment.

(4) Characteristic number four is the *duration of the scheme*. If the system is going to have a significant effect on production structures in the beneficiary countries, it must last long enough to justify new investment and reorganisation. But the donor countries' willingness to depart from their previous attachment to the most-favoured-nation principle has never been absolute. They have continued to regard such a departure as being merely a temporary aberration and consequently have envisaged ten years as a reasonable period. The developing countries on the other hand have always pressed for a longer period — 20 years for instance — but such a demand has among other things raised the question of whether such a period of application would be appropriate for all the developing countries and all their products, given the wide variations which exist between them. The donor countries intend to review the operation of generalised preferences before the end of the 10-year period to determine whether the system should be continued, modified or abolished.

(5) The final characteristic, which may also be the most important and which is closely linked with the other features of the scheme, is the question of donor countries reserving the right either to *exclude* certain products from the scheme from the outset, or to *withdraw* preferences from products after the scheme has begun through the operation of safeguard or escape clauses. The need for such powers is generally recognised by all donor countries. Incidentally, this issue is not to be confused with product coverage, which is a question of broad categories rather than individual products.

It hardly needs to be emphasised that a relatively small overall increase in imports from developing countries into any donor country brought about by

the preferences scheme, could, in theory at least, have much more severe local effects at the industry or even plant level than the overall percentage would indicate. It is this danger which initial exclusions or subsequent resort to safeguard mechanisms are intended to meet.

Nevertheless, there are good reasons for hoping that the use of such techniques will be kept to the absolute minimum. The first and most obvious is that initial or subsequent exclusions go directly against the objects of the exercise by reducing the developing countries' potential export earnings. The second reason is more subtle: insofar as the precise goods covered by such techniques will be closely related to the individual circumstances of each donor country, there would inevitably be differences in the action taken by each donor, and this must make it substantially more difficult to secure an equitable sharing of the effort under the system. Such sharing is a cardinal requirement of many donor countries for any acceptable scheme. Thirdly, the question might be asked: is it not possible that much, if not all, of the impact of preferences on particular indus-

tries or plants might be cushioned by absorption into the annual increase in demand for imports which is a feature of a growing economy?

The overall effect of provisional positions taken in this respect is quite promising for proponents of a liberal scheme. Some major countries do not provide at present for any initial exceptions at all or have submitted quite short lists. Other countries hope that through the use of ceilings it will not normally be necessary to resort to either initial exceptions or subsequent escape action. No country of course is prepared to forewear the use of the devices in any circumstances.

The overall impression given by the set of schemes as they stand at present is that potential donor countries do not envisage excessive resort to either initial exclusions or subsequent escape clauses. This rather optimistic picture has been confirmed by the general trend of modifications to initial offers made so far in the course of OECD's work: most of them pointed in a more liberal direction rather than towards the lowest common denominator.



Looking at the five features which will determine the impact of the proposed preference scheme on trade flows, as they appear in the offers which have gone to the UNCTAD, it is possible to recognise two main approaches. One is to have well-defined initial exceptions and provision for possible escape action through safeguard clauses but otherwise to allow preferential entry without limit. The second major approach is to allow preferential entry to all items but to provide for predetermined ceilings. This division is not in any way an absolute one, but it contains the crux of a distinct divergence of view which our countries must overcome. Apart from any question of outright choice between the approaches, there is the associated difficulty of deciding whether all donors must adopt substantially the same system or not. The United States' preference offer is indeed premised upon the adoption of a common scheme by all major donor countries. The other countries do not impose the same condition, though some have worked on the hypothesis that such a common scheme was really the aim of the OECD work.

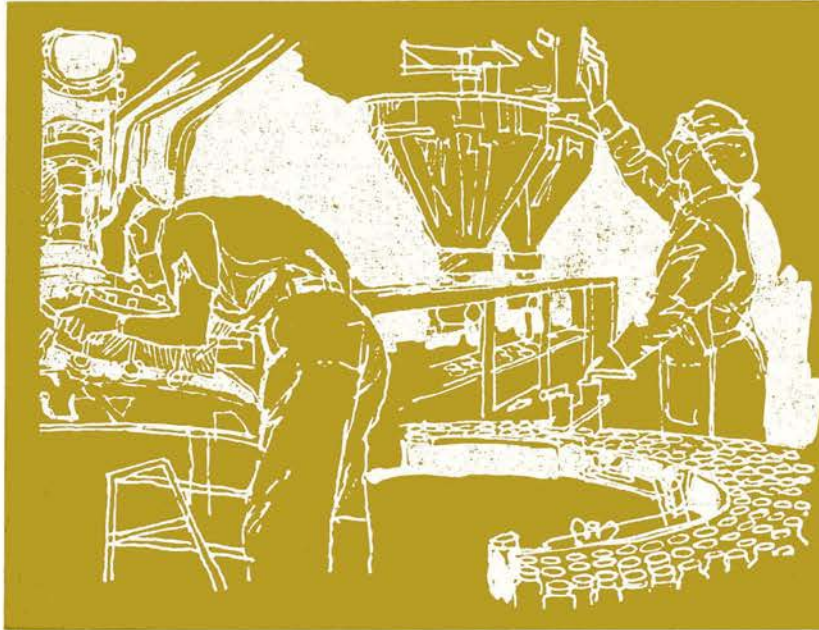
The Outstanding Issues

This most important issue and others which still remain will have to be tackled with the aim of arriving at a comprehensive system which could be accepted by all donor countries and would bring the maximum of benefits, or rather the maximum of opportunities, to the less developed countries. The elements with which to build such a system are now

on the table. It remains for the prospective donor countries in OECD to continue their work with renewed efforts to secure as much harmonisation as possible between their present provisional individual positions. Since detailed information on these positions has been transmitted to UNCTAD, they will be doing so under the spur of informed comment from the potential beneficiaries.

It is to be expected that, simultaneously, the question of preferences will be discussed more intensively inside each donor country by those who will be most directly affected, that is the industrial sectors competing with preferential imports.

In this connection it is certainly true from one limited point of view — that of non-beneficiary countries in their capacity as exporters to other donor markets — that preferences will result in discrimination, except, of course, insofar as they are themselves in free-trade areas or customs unions. But the other and, I think, the more important aspect of the matter is the kind of competition which the beneficiaries will be providing in the home market of each donor vis-à-vis domestic production. And here there is no element of discrimination; developing countries' industries will only be placed *on an equal footing* with domestic industry in the importing country. This exercise is concerned primarily with giving developing countries an opportunity to demonstrate their ability to earn their own way. It would be going too far to describe the objective as "trade, not aid". Rather it is a matter of trade as well as aid, of matching our countries' established efforts in the field of financial and technical assistance with genuinely commercial trading opportunities by providing them, through preferential access, with the opportunity of competing on equal terms with domestic producers.



RESEARCH POLICY IN CANADA

The outstanding feature of the way in which scientific activity is organised in Canada is the leading role played by the Federal Government. This state of affairs results from the combined effect of a number of day-to-day policy requirements : Canada's future depends upon maintaining a constant balance between Provincial prerogatives and Federal powers. The Federal authorities are particularly concerned to consolidate the sphere of general public interest, and have therefore for many years closely identified themselves with the performance of research. The emergence of new centres of non-governmental research however gives new importance to the Government's role in formulating and animating national science policy. The essential aim of the policy makers is to gear scientific activity to economic and social progress, adopting a specifically Canadian approach.

The problems of industrial research and general economic aims are analysed by François Hetman in the following article, while Georges Ferné deals with the Federal research machinery (see inset), higher education and the formulation of science policy; the authors are members of the OECD Scientific Affairs Directorate, which has reviewed the position in Canada as part of its series of publications on national science policy (1).

(1) " Reviews of National Science Policy - Canada", OECD, 1969.

As most Canadians would agree, the history of science in Canada is largely that of the Federal laboratories run by the National Research Council, the Ministry of Agriculture, the Ministry of Energy, Mines and Resources, and the Ministries of Fisheries and Forestry. Immediately after the First World War, when Canada became aware of the increasing importance of the scientific factor in the economic structure, neither universities nor firms were in a position to make significant contributions to the national effort. The Government had to take the initiative and develop its own laboratories in the light of urgent immediate needs.

Since the Second World War, however, Canada has acquired a vigorous university research capacity and this is rapidly expanding in the country's higher education centres. Credit for this is mainly due to the grants made by the National Research Council and the Medical Research Council, for research on the exact and human sciences, and to the work of the Canada Council in the social sciences.

The general expansion of the university system has acquired a vigorous university research capacity made in 1966 between the Federal and Provincial authorities. Since that date, the Federal Government has borne a large part of the cost of higher education, which is, constitutionally, a Provincial responsibility.

On the other hand, industrial research is generally regarded as relatively under-developed. The first aims of science policy in Canada are therefore to reorient the R and D effort, to reinforce industrial research and to link the work of the universities and government research centres more closely with the country's economic and social goals.

An international comparison suggests that Canada is at the mid point in the list of major OECD countries as regards its total R and D expenditure. This may seem rather on the low side, in view of Canada's per capita gross national product, but it also indicates a reserve of resources for the future. If, as it intends, Canada raises its total R and D effort from

the present 1.5 per cent (it was 1.3 per cent in 1965) by stages to 2 per cent, and then to 3 per cent of the gross national product, Canada could take its place among the pacemakers in the field of non-military research. This projected increase in R and D expenditure would not, however, of itself ensure the effective mobilisation of research for the achievement of the major national goals, set in the light of general economic criteria.

Industrial research and economic aims

Economic expansion is seen as a central aim on which the efforts of the whole Canadian nation should be focussed. In the national context, this means that the economy must be capable of maintaining its competitive position, primarily in the North American market. This raises the question of productivity; on this point the scientists' analysis of the situation coincides with the concerns of economists and businessmen.

There is a widely held opinion that Canadian industry should endeavour to keep its productivity in line with that of the United States. The best way of doing this seems to be to strive for technological excellence in certain fields where Canadian science can exercise an effective influence. This would mean giving priority to scientific activities directly geared to economic and social goals. The first task of science policy must therefore be to strengthen the technological potential of Canadian industry by every possible means. For this purpose, the Government is called upon, in particular, to stimulate applied research and its industrial development.

The reinforcement of industrial research

The growth in expenditure and manpower allotted to R and D in Canadian industry has already been very fast over the last decade (an average rise of nearly 9 per cent per annum from 1957 to 1966), but this growth rate is deemed too low; it is thought that it should be accelerated if what are generally considered to be the three weaknesses of industrial research in Canada are to be overcome:

- insufficiency of R and D in industrial companies in absolute terms;
- insufficiency of R and D in industrial companies relative to that carried out by Government Departments and Federal agencies;
- structural weakness, evidenced by a relatively high proportion of fundamental and applied research in the overall national R and D effort and a lower proportion of development.

The case for speeding up the growth rate of R and D in industry may be summarised as a logical sequence:

- (a) First, the various forms of State aid to industrial research should be widened and intensified;
- (b) Such aid should be reserved for Canadian enterprises and Canadian subsidiaries of foreign firms which can undertake to apply the research results in priority in the Canadian economy;

(c) R and D should thus lead to greater specialisation in Canadian industry, which would then be in a position to increase the size of its production units and enlarge its production runs;

(d) Specialisation, in turn, should lead to lower production costs and higher productivity;

(e) Canadian enterprises would thus reinforce their competitive position internationally and especially vis-à-vis American industry; the one-way penetration of the Canadian market by American enterprises could be attenuated, and a reverse flow would tend to set in;

(f) Canadian industry would then possess its own centres of innovation and could envisage propagating its own techniques and products in certain fields both in North America and in other parts of the world.

In order to ensure this sequence, the effect of the various forms of aid must be determined, and the most favourable points of impact must be selected for the effective communication and development of the research results. The stimulus thus given is, however, itself subject to considerations of efficiency and cannot take the place of initiative or the calculated taking of risks. Thus, on a long-term view, it seems desirable for industry to finance its own R and D effort to the maximum.

The use of research and development to improve Canada's place in world competition is a delicate task: public means are limited, and companies' own resources will have to be mobilised if the influx of foreign capital is to be diminished. These constraints point to the need for a considerable effort in the sphere of industrial management. If the research effort is to be an integral part of industrial strategy, transmission lines between different centres of R and D will have to be established. Nothing can be done unless a vigorous spirit of innovation develops.

For some little time now there has been a deliberate and selective orientation of the evolution of Canada's manufacturing industry by government action, coinciding with the creation of a number of specific institutions, including the Canada Economic Council, development banks, productivity boards, vocational training programmes and the like. These various innovations are designed to impart a new direction to Canadian industry, and to stimulate, by economic as well as fiscal measures, industry's propensity to invest and its bolder commitment to R and D. This may be seen as an unofficial essay in programming, which is fully consistent with the general spirit of Canada's institutions.

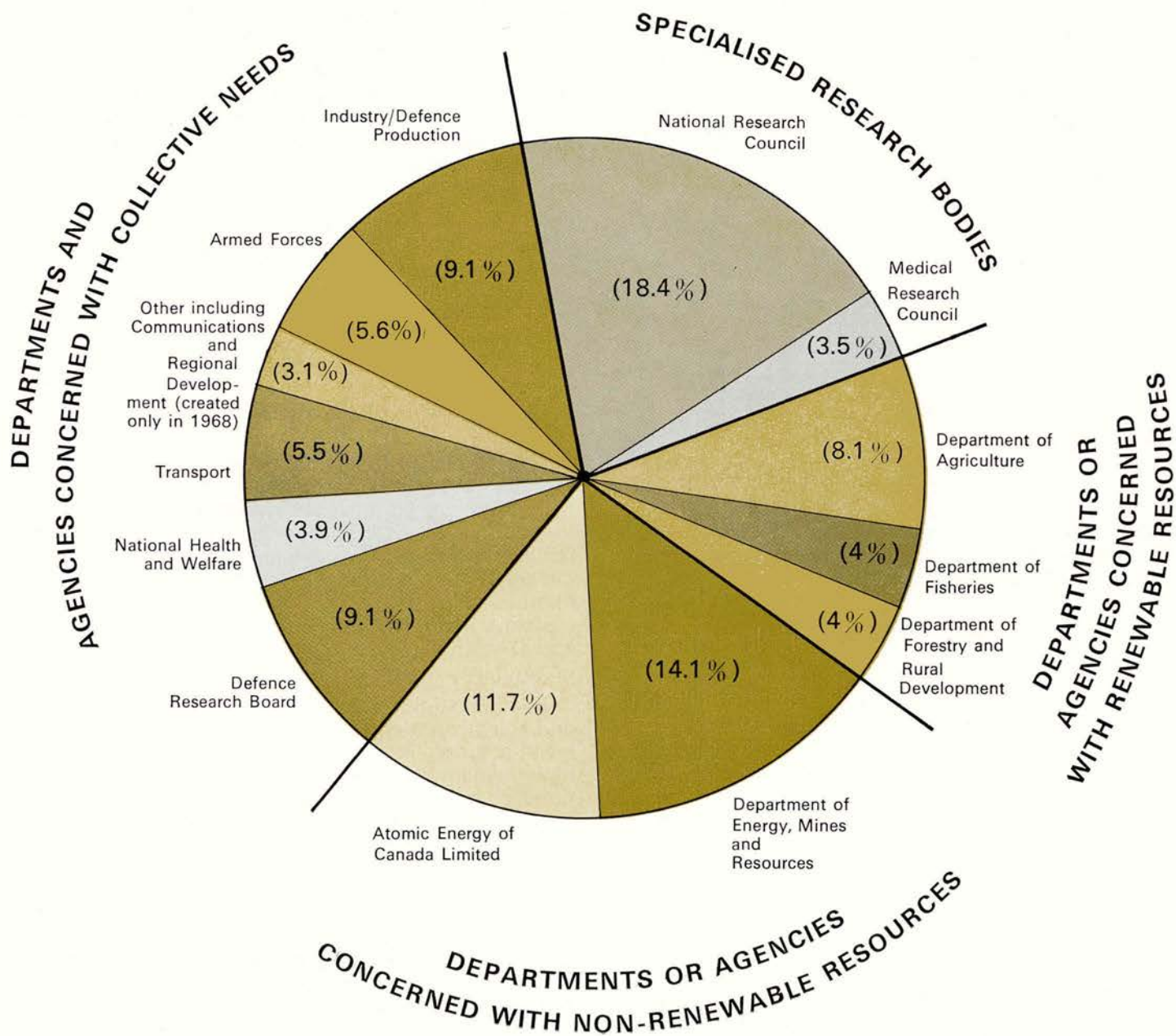
National aims and major programmes

This policy of more deliberate orientation seems likely to be intensified during the coming decade. The Science Council has already submitted recommendations to the Government concerning the major national targets: these are conceived as "rallying points" to be translated into major research programmes in which the task of science would be more closely linked to innovation and new lines of industrial

(continued on page 11)

ORGANISATION OF FEDERAL R & D IN CANADA

I. Departments and Agencies which Finance Research per cent of 1967-68 Federal current research expenditure



II. Institutions dealing with science policy and co-ordination

Over the last ten years, while Federal expenditure has risen by more than 150 per cent (from \$ 249 million to \$ 600 million) the Canadian Government has been systematically re-organising the machinery of science policy, step by step in the light of the findings of the many

commissions of enquiry set up in recent years.

In its re-organisation, the Government has chosen to retain some old-established institutions side-by-side with new machinery introduced in recent years. In practice the older institutions are responsible

to the Cabinet, the more recent ones to the Prime Minister.

The chief body answerable to the Cabinet is a Committee of Ministers, the **Privy Council Committee on Scientific and Industrial Research**, set up in 1916 for the co-ordination and general supervision

of government scientific activities. It was intended, in particular, to facilitate compromises between the sometimes divergent interests of the various government agencies. The Committee was further instructed, in 1947, to investigate all new proposals in the scientific field before any final decision was taken. The Committee met only rarely, however, and seems to have focussed its activities on the discussion of new programmes which were likely to involve heavy investment.

In May 1969 it was decided to strengthen the role of the Committee which was re-activated by order of the Prime Minister. It now meets once a week, under the Chairmanship of the President of the Treasury Board, who is also the Minister with authority over the National Research Council (1).

In order to ensure more continuous co-ordination, a second body was set up before the War, with a membership of Deputy Ministers and Vice-Presidents of the Departments concerned. This **Advisory Panel on Scientific Policy**, too, met very rarely.

It may be assumed that the renovation of the Privy Council Committee to which the Panel is responsible is bound to re-activate its efforts.

Neither the Committee nor the Panel could, however, be expected to cope with all aspects of modern science policy, which demand both specialised technical competence and day-to-day attention. Furthermore, the mounting scale of the existing problems suggested that the Prime Minister himself should be more directly associated with the formulation and activation of science policy.

The **Science Secretariat** was next set up in the Privy Council Office, to second the Prime Minister in technical and administrative matters. The main function of the Secretariat, formed in 1964, is to advise the Prime Minister, the Cabinet and the Privy Council Committee on the

1. ALLOCATION OF THE FINANCE AND PERFORMANCE OF RESEARCH AND DEVELOPMENT, 1965 (Percentages)

	Finance	Performance
Government	51.5	35.8
Higher education	10.4	21.4
Industry	31.2	41.6
Non-profit institutions	2.1	1.2
Foreign sources	4.8	—
TOTAL	100.0	100.0

The importance of the Federal Government in Canadian science is evident in both the finance and performance of research. As shown in the table, 21.4 per cent of R & D funds were allocated to higher education in 1965 - a distinctly higher percentage than in other industrialised countries. The reverse side of the medal is the generally recognised relative weakness of the industrial R & D sector. It is considered that special efforts should be made to reinforce industrial research in Canada.

technical aspects of current problems. At the Government's request, it also plans the work of commissions of enquiry, and advises the Department of External Affairs on scientific questions bearing on international relations.

The Science Secretariat was also made responsible in 1966, for providing the necessary administrative services for the new **Science Council** consisting of scientists nominated in their individual capacities, which was formed to make re-

commendations to the Prime Minister on the orientation of national science policy. It proved difficult, however, for the Secretariat, as an arm of the government participating in the preparation of decisions and having access to highly confidential information, to maintain a satisfactory working relationship with the Science Council—a learned body enjoying considerable autonomy, and drawing on information accessible to the public to comment freely on government policy. The two entities were therefore separated in 1958.

Shortly afterwards, to confer some unity on all these governmental bodies, it was decided to vest the functions of Director of the Science Secretariat, Secretary of the Privy Council Committee, and Chief Science Advisor to the Cabinet, in a single person.

In response to this reorganisation of the Executive, the Canadian Senate set up a special committee to investigate science policy. After hearing a great many Canadian and foreign experts, the Committee will shortly publish its findings.

Does this mean that the task of reorganising the Federal machinery is now complete? Many observers think not. It is, for instance, sometimes proposed to set up a new advisory body, manned by the public servants responsible for science matters, to appraise and co-ordinate the Administration's activities, while making suggestions for their future orientation. Again, some Canadians do not rule out the possibility of creating a Ministerial Department of Science. Lastly, the suggestion is frequently made that the Federal system for the execution of research should be re-organised, with a view to defining more precisely the functions of the various officials responsible for research or the distribution of funds, in accordance with major national targets.

(1) Cf. : Robert J. Uffen - *Recent Changes in Government Organisation for Science Policy*, Science Forum, October, 1969.

development. This conception makes the roles of science a dramatic one: the scientific effort is explicitly geared to economic expansion, as well as to national unity and the problems involving independence.

This outline of the suggested major research programmes (see inset page 12) is a pointer towards the probable broad trends of future science policy:

1. A considerable speeding up in the growth rate of government funds allocated to R and D.

The launching of major research programmes will clearly demand a sustained increase in the financial effort. The first projections of total R and D expenditure show annual growth rates ranging from 11.4 to 21.5 per cent, the lowest figure being already appreciably higher than the rate in the past decade.

The major part of the funds released for R and D would be channelled to industry, with the Federal Government taking responsibility for the largest portion of the financing. R and D expenditure is expect-

ed to rise to nearly 3 per cent of GNP by the end of the decade 1970-1980; this is thought to be the percentage required to provide Canada with a sound basis for research compared with other leading industrialised countries.

2. The continuance of the steep rise in R and D expenditure in the universities, mainly owing to much larger contributions from the Federal Government; this might lead to great changes in the manner of execution of university research. The fact is that no problem is more hotly debated in Canada than that of university research. A recent survey of Federal financing of such research led to the publication of a report recommending not only adjustments in the relevant legal procedures, but important institutional changes as well (1). (Continued on page 12)

(1) Special Study No. 7 **The Role of the Federal Government in Support of Research in Canadian Universities**, prepared for the Science Council of Canada and the Canada Council, Ottawa 1969.

Outline of the Major Research and Development Programmes

- Group A : Prototype major programmes :
Space programme,
Management and development of water resources.
- Group B : Areas for immediate planning :
Transport,
Urban development,
Computer applications,
Aid to developing countries.
- Group C : Areas for continuing consideration :
Health care,
Economic development of Northern Canada,
Development of energy sources,
Oceanography and marine and under-water technology,
Weather prediction, modification and control.

3. A relative slackening off in the growth of R and D expenditure in the Government Departments and Federal agencies, resulting in a relative drop in the scale of Federal research.

The Federal laboratories have played a leading role in the Canadian scientific effort since the First World War. Their structure, however, is now being reviewed, owing to the need to develop science and technology in other sectors.

The role of Federal laboratories is thus being criticized from two points of view. Some consider that fundamental research, which should be entrusted to the universities, has accounted for too large a part of the activities of certain laboratories and that since the original functions of these laboratories have been completed, their new tasks have not been sufficiently well defined. Others believe that a few large Federal laboratories have been entrusted by the government authorities, as a matter of course, with applied research programmes which should have been contracted out to industrial firms.

The contradictory nature of these criticisms underlines the complexity of the problem raised by the Federal laboratories' central role in Canada's scientific structure, and accounts for the government's caution in examining various reorganisation proposals. Some of those proposals involve splitting up such bodies as the National Research Council to allow concentrated action on two fronts: the support of university research, which would be entrusted to one or more institutions not performing research on their own account; and Federal research, which would in part be reallocated to different institutes, chosen to suit the requirements of the national programmes adopted, and playing a pilot role in their execution (2).

4. Reorientation of national R and D expenditure by launching extensive new programmes, planned to dovetail with the national targets and to promote the growth of innovation and production in Canadian industry.

This view of the future implies some remodelling of national R and D activities to more concrete programmes, more directly assimilable by the economic and social structure, on the lines of the American R and D system: the latter is a constant point of reference in Canada because of the degree of interpenetration and interdependence of the two economies.

Manifold efforts required

The whole principle of major programmes may, however, come up against certain difficulties at industry level. One chief aim of this policy is to give a large share in the programmes to industrial companies. This implies a certain scale of operation and a substantial range of research capacities. But it is by no means obvious that there are enough authentically Canadian companies of the required type in the branches which are of special interest for the future orientation of research. This leads to the root problem—how to reconcile the major targets of a research policy guided by the pursuit of national aims with the fact that the decision-making centres of the largest companies often lie outside the country.

Some people think the answer lies in "Canadianisation". In most cases, this is visualised not as a reversal of the status quo, but as a system with a series of built-in discriminatory safeguards, flexible enough to avoid any paralysis of economic growth, yet effective enough to encourage the Canadian element.

Three alternatives are most often suggested:

- (a) to establish a preferential social and economic structure;
- (b) to set up a special investment fund for the encouragement of Canadian companies;
- (c) to take direct action through the formation of public companies.

There is no certainty that the Canadian Government could go very far in any of these three directions. The relative importance of foreign interests is only one aspect of a deep-seated unquestionable fact—the functional integration of Canada's economy in the North American market.

Yet the three approaches are not mutually exclusive. They should rather be combined in the general context of Canada's aspirations and their long-term implications. Probably such a policy could bear fruit only in a "cybernetically" regulated system where the decision-making centres can focus their attention on specific targets, as the need arises, thus orienting all the interests active in Canada towards the general aims of Canadian society.

(2) See in particular the reorganisation proposals formulated in the above mentioned report on university research.

CHANGING TO TVA

To meet ever increasing public expenditure governments are relying more and more on general consumption taxes to supplement personal income, profits, and payroll taxes as a source of revenue. Recent developments in consumption taxation have centred on the TVA (value-added tax). During the last 3 years Denmark, Sweden and Norway have changed from a general sales tax to a TVA, Germany, the Netherlands and Luxembourg from a cascade tax to a TVA, while France has modernised and extended her pre-existing TVA. In addition Belgium and Italy are committed to adopting a TVA and many other countries are weighing the merits of this form of taxation.

In view of the widespread interest in the TVA, OECD's Fiscal Committee asked the Secretariat to prepare a report outlining the problems involved in changing to and operating such a system. This report formed the basis for the following article.

HOW TVA AND OTHER CONSUMPTION TAXES WORK

There are various possible ways of administering a tax on value added, but the method adopted in countries actually operating such a system is that a seller pays tax on the total value of his sales minus tax on the total value of his purchases. Thus, assuming that a TVA is in operation and all goods and services are liable at 10 per cent of the tax-inclusive value, a manufacturer must deliver his customer an invoice indicating separately the amount of TVA, which will be 10 per cent of his net selling price. If the manufacturer sells goods worth \$100,000 during the accounting period, he must submit a tax return at the end of it in respect of these sales representing \$10,000. The manufacturer is, however, entitled to a deduction of TVA paid on his purchases, so that if during that accounting period, he spent \$50,000 on raw materials, a new machine, electricity, transport, advertising, repairs, etc, he would be entitled to deduct the tax paid of \$5,000 on these input-elements provided he can produce the relevant invoices indicating the TVA that has been charged. In these circumstances, his actual payment to the revenue authorities would be \$5,000 (\$10,000 - \$5,000). This deduction of TVA paid on purchased goods is allowed irrespective of whether value has been added and irrespective of whether the goods have been sold. Thus, it is not necessary under the TVA to follow the history of particular purchased goods, for the deduction is applied on an overall basis; total tax paid on inputs is credited against total tax on sales. All traders subject to TVA are entitled to these deductions, but not, of course, the final consumer in the country levying the TVA. (Retailers are also excluded from the deduction if the tax does not extend to the retail stage.) If, however, the goods are exported, the manufacturer is not required to pay the \$10,000 of TVA, and simply receives a repayment from the revenue autho-

rities of \$5,000 of tax which he has previously paid to his suppliers of goods and services.

A triangular relationship thus exists between buyers, sellers and the taxing authorities as indicated by the groups of arrows in Chart I. On each sale the buyer pays the tax to the seller, the seller pays this tax to the taxing authorities and the taxing authorities deduct from the seller's tax bill any TVA he may already have paid his suppliers on his own purchases. The collection of the TVA may accordingly be regarded from three points of view. From the point of view of the taxing authorities, tax is received from selling traders on the value added by them each time the goods are sold. Secondly, from the point of view of the buying trader, he can disregard tax invoiced to him by the seller because it will be reimbursed by the taxing authorities. Finally, from the point of view of the selling trader, he can disregard the amount of tax he pays directly to the tax authorities since he is merely acting as a collector of the tax from his customer.

The main characteristic of a tax on value added is that, although tax is collected each time a product or its components are sold, it is only upon the value that has been added at each stage. The sum of the values added at successive stages is equal to the final price of the product, so that the sum of the tax paid at the different stages will equal the tax which would have been payable if it had been collected as a single payment at the final stage.

The main types of general consumption taxes, other than the TVA, are first sales taxes, where tax is levied at one stage only, usually when goods are sold by wholesalers to retailers (wholesale sales taxes), or by retailers to consumers (retail sales taxes) and secondly cascade

taxes where tax is levied each time the product (or its components) is sold, on the total value of the product (or its components) at the time of the sale. (The collection mechanism of a retail sales tax and a cascade tax are illustrated in Chart II.) Thus TVA is like a multi-stage cascade tax in that it is collected fractionally and like a single-stage sales tax as regards the amount finally collected, so that assuming equal rates of tax under a TVA and a sales tax, if the final stage of the TVA stops at sales by wholesalers to retailers, the amount collected equals that of a wholesale sales tax, while if sales by retailers are also subject to TVA, the amount collected equals that of a retail sales tax. This is illustrated by the two charts which also show how a cascade tax at 5 per cent may produce a greater yield than a TVA or retail sales tax at 10 per cent.

TVA VERSUS OTHER CONSUMPTION TAXES

TVA VERSUS SALES TAXES

• Economic Aspects

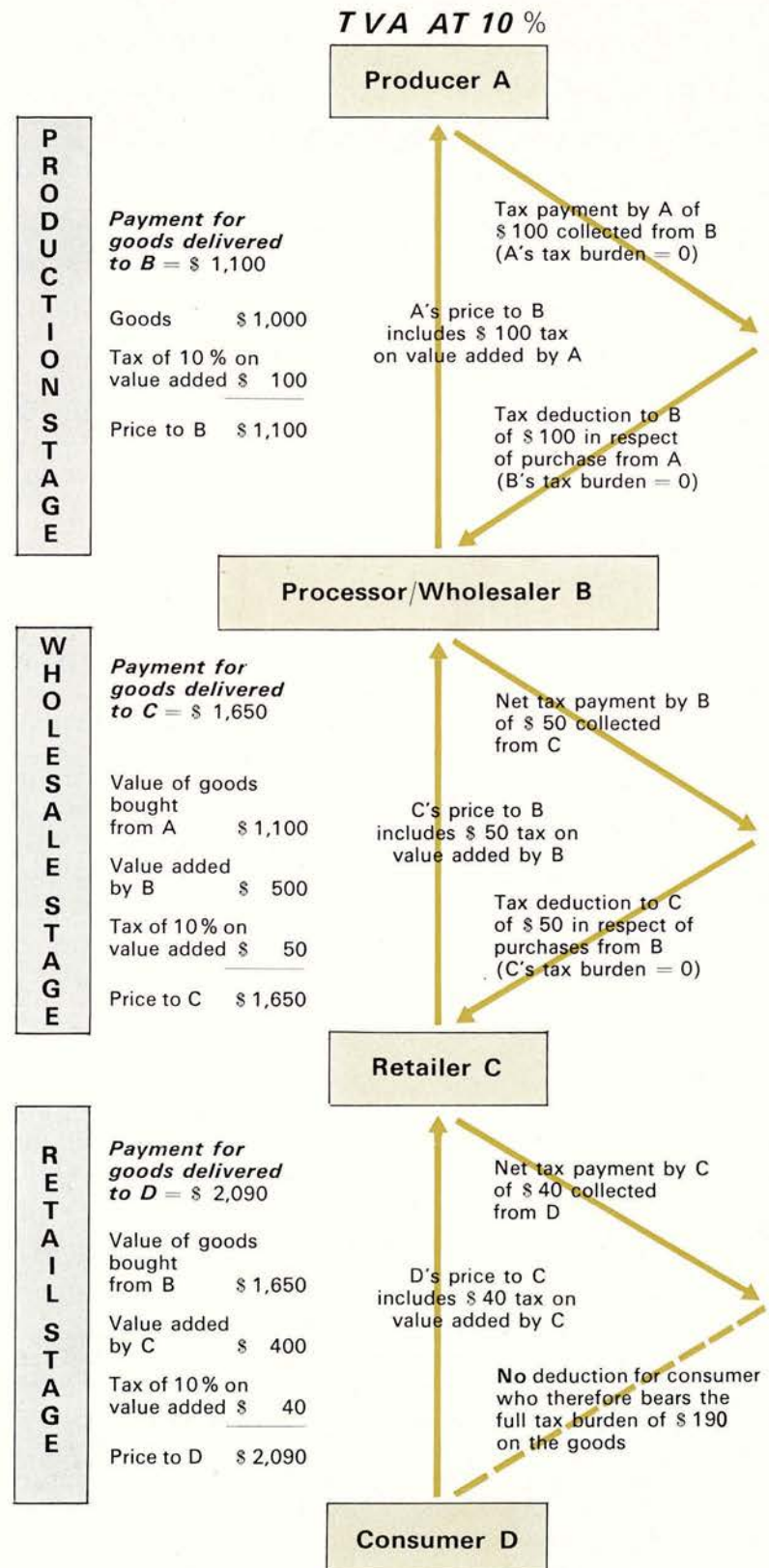
As indicated above, given the same rate and coverage, the amount of tax collected is the same under a sales tax and a TVA. Corresponding to the TVA *deduction system* described above is the *registration system* of sales taxes, under which all registered traders are entitled to buy goods free of tax but become liable to tax on sale to an unregistered person. The different mechanisms of the two systems means that under the TVA, traders first pay tax to their suppliers who pay it to the revenue authorities and then have it deducted from the tax due on their own sales, while under sales taxes traders delivering to registered persons do not pay tax at all. The important point from the economic point of view is, of course, the amount actually collected rather than the method of collection, so that apart from certain fairly minor differences resulting from the different methods of collecting the tax, the TVA can be regarded from the economic point of view as more or less equivalent to a sales tax. Due allowance should however, be made for possible differences in *tax shifting* (1) and *taxe occulte*.

i) Tax Shifting

As regards tax shifting, neither a TVA nor a sales tax will necessarily be fully shifted into consumer prices, though their transparency and their mechanism encourage full shifting. In practice, according to a variety of economic factors, retail prices may increase by more or less than the increase in tax. Most writers have taken the view that the different methods of collecting the tax should not affect shifting and that the two kinds of tax

(1) Tax shifting relates to the degree to which prices increase when taxes are imposed or increased. Full forward shifting is the situation that arises, if following an increase in tax, the difference between the price of the goods before and after the increase is equal to the increase in tax on these goods.

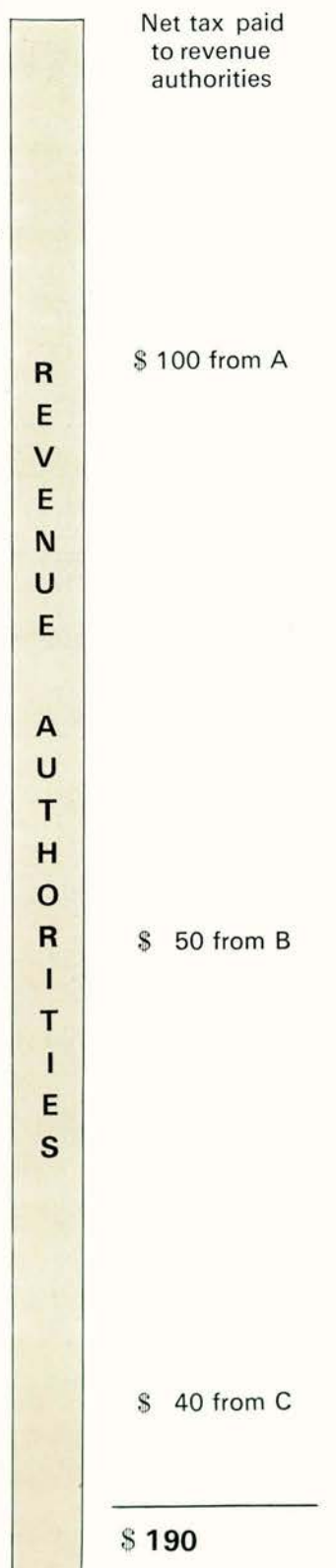
I. - SIMPLIFIED DIAGRAM SHOWING MECHANISM OF A TVA*



* It is assumed that (a) TVA is at 10 % of the tax exclusive value, (b) the tax A is \$ 1,000, (c) the value added by B (processing, packing, labour, costs, and added by C (labour costs and profits) is \$ 400. The possibility of backwards taken into account, nor the fact that in practice tax will usually have been paid

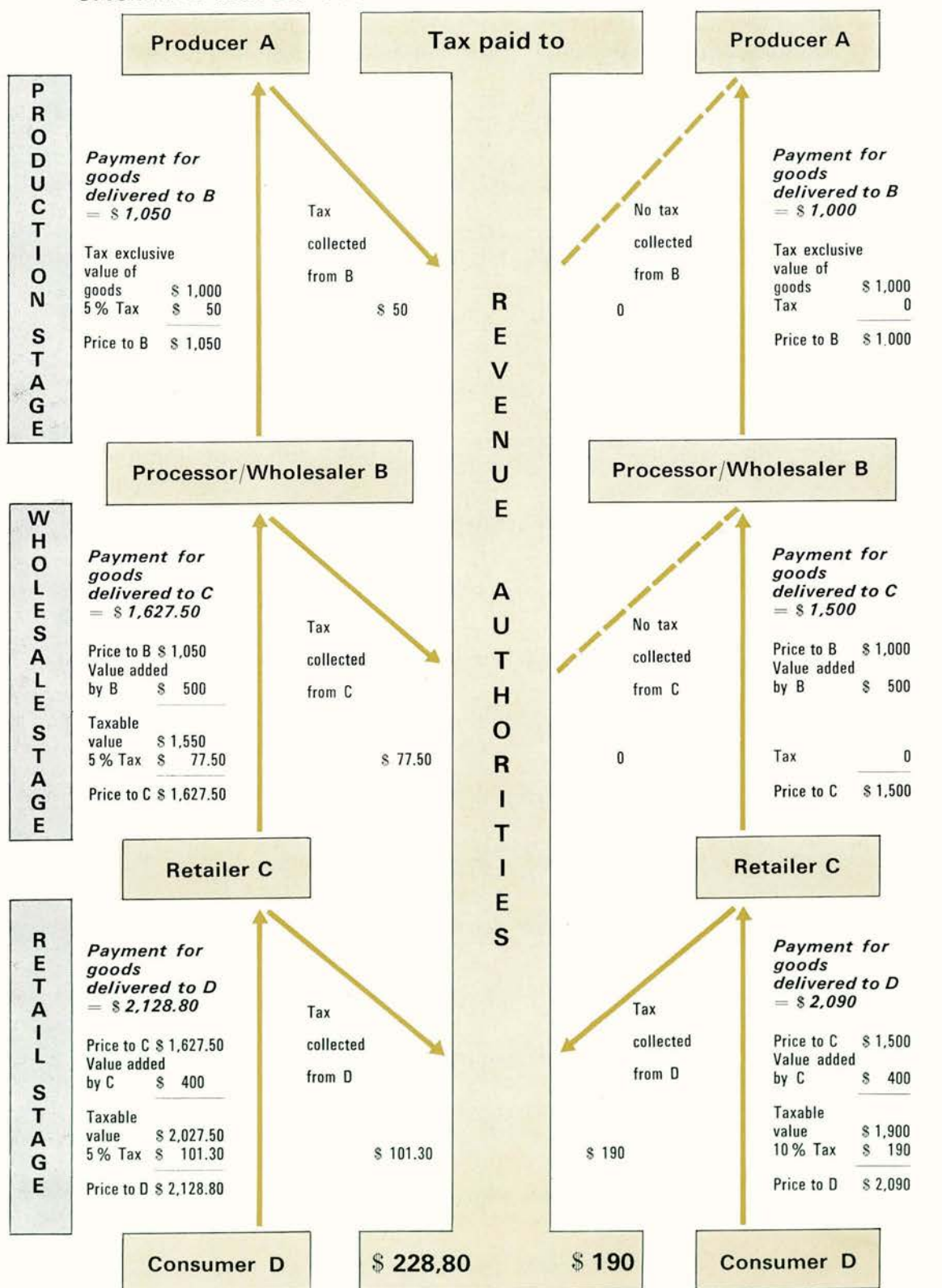
COLLECTION

II. SIMPLIFIED DIAGRAM SHOWING COLLECTION MECHANISM OF A CASCADE TAX AND A RETAIL SALES TAX (*)



CASCADE TAX AT 5 %

RETAIL SALES TAX AT 10 %



exclusive value of goods sold by profits) is \$ 500, (d) the value shifting or tax occulte is not on components supplied to A.

* Simplifications and assumptions as in Chart I. In practice cascade systems are sometimes levied at lower rates at wholesale stage and sometimes not levied at all at retail stage, but as tax levied at pre-production stages is not taken into account in the Chart, the relative yields are fairly realistic.

should be shifted more or less to the same extent, a view borne out by the Swedish experience, where a change from a sales tax to a TVA of similar rate and coverage has not appreciably affected prices. It has, however, been suggested on the one hand that a TVA is likely to be more fully shifted forwards than a sales tax because traders wish to recoup themselves for having to lay out the tax on their purchases and on the other hand that the TVA is likely to be less fully shifted forwards since traders are more aware of the tax under a TVA and of the interest in reducing their business costs.

II. Taxe Occulte

General consumption taxes normally include within their scope goods and services of a kind used for industrial or commercial purposes. To do otherwise would entail levying very high rates of tax on goods not used for such purposes to obtain sufficient revenue, especially as a very important range of products (e.g. vehicles, petrol, stationery, buildings, furniture) may be used either for commercial or industrial purposes or for private purposes. In the absence of some fiscal device to prevent it, however, the taxation of producers' goods involves a kind of double taxation: for an element in the value of any product is the tax on the capital equipment, auxiliary materials and services used in its production, and tax on this element of value is collected again, and under multi-stage systems several times, when the product itself is taxed.

The deduction system of the TVA and the registration system of sales taxes described above are the fiscal devices which enable tax administrations, insofar as they wish to do so, to eliminate this "consumption" tax on business over-heads, or "taxe occulte" as it is now usually called. But in practice, relief from *taxe occulte* is generally far greater under TVA than under sales taxes. This is possibly due to the fact that to control abuse (that is private use of goods declared for business use) under a sales tax involves verification of actual use, whereas under a TVA, to get a tax deduction on purchases made for private use, it is necessary to make a false declaration that they are for business use and such false declarations on a large scale are likely to reveal a suspicious relationship between sales and purchase figures.

• *Technical Aspects*

The relative technical advantages and disadvantages of the TVA and sales taxes may be summarised under the following headings:

I. Revenue Security

The TVA is superior to a sales tax from the point of view of revenue security for two reasons. In the first place under a TVA it is only buyers at the final stage that have interest in an undervaluation of their purchases since, as indicated above, the deduction system ensures that buyers at earlier stages will be refunded tax on their purchases. Therefore, tax losses due to undervaluation can be expected to be confined only to the value added at the last stage. Under a retail sales tax, on the other hand, retailer and consumer (and under a

wholesale sales tax, wholesaler and retailer) have a mutual interest in under-declaring the actual purchase price, and losses due to such undervaluation will relate to the total value of the product. Secondly, under a TVA, if payment of tax is successfully avoided at one stage, nothing will be lost if it is picked up at a later stage, and even if it is not picked up subsequently, the State will at least have collected TVA paid at stages previous to that at which the tax was avoided, while if evasion takes place at the final stage, the State will lose only the tax on the value added at that stage. If evasion takes place under a sales tax, on the other hand, all the tax due on the product is lost to the State.

In addition, the TVA system facilitates considerably control of taxes on business profits, for since traders have for TVA purposes to receive and book invoices for their purchases, auditing officials of tax administrations can take copies of invoices to cross-check the books of sellers. This incidentally is a safeguard against one form of evasion not possible under a sales tax, which may, however, take place under a TVA: that is the production of false invoices by quasi-purchasers, in order to obtain the deduction of the tax on their non-existent purchases. On the other hand, staff limitations may not permit very great use of the data available under a TVA system, and it is also arguable that the chief danger of revenue evasion comes from small traders, who in any event may be outside the scope of a TVA.

II. Administrative Work for Traders

Traders have to keep far more complicated records under the TVA. In certain cases, traders will find TVA simpler, e.g. a retailer selling vans to both private consumers and business firms would have to separate them under the sales tax (assuming that the first transaction is taxable and the second exempt) but under the TVA he would charge them all in the same way, for the purchasing trader would get a deduction and the purchasing private consumer would not. But generally it seems clear that traders have much less administrative work under a sales tax where traders prior to the final stage are not concerned with the tax and sellers at the final stage have to declare only their sales and not their purchases. Thus the number of taxpayers increased from 168,000 to 331,000 in Sweden on change from a final stage sales tax to a TVA and from 45,000 to 350,000 in Denmark on change from a wholesale sales tax to a TVA including the retail stage.

III. Administrative Work for Revenue Authorities

The fact that there are more collecting points means that there is, *prima facie*, more work for tax officials under a TVA system. On the other hand, the better accounts that traders are compelled to keep under the TVA may make control easier.

IV. Flow of Revenue

Leaving aside the question of the greater degree of revenue security it provides, the fractional method of collection of the TVA favours the revenue authorities as against traders since, while the authorities get some of the tax at an earlier stage than they would under a sales tax, the trader normally has to lay out money to pay

tax on purchases from his suppliers before getting it back, whereas under a retail sales tax, the trader does not normally have to pay tax before he collects it from the consumer.

• *Political Aspects*

In recommending a change from a sales tax to a TVA, the 1964 Report of the Swedish Royal Commission took into account the fact it would be desirable to increase receipts from indirect taxation, and a similar view has recently been expressed by the Norwegian Government. If it is the intention of a government to increase considerably receipts from consumption taxation by raising the rate and extending the range of goods and services to which the tax applies, it may be politically easier to do this by introducing an entirely new tax than by extending an existing tax. Another point is that the more the revenue required from the consumption tax, the more important becomes the greater revenue security which the TVA provides. A second factor, also unconnected with the nature of the TVA and sales taxes as such, is the possible future entry of certain countries into the Common Market, when they would probably have, in any event, to adopt a TVA. The evasion factor combined with the fact that all EEC Member countries operated a multi-stage tax was probably the main reason for the EEC's prior preference for a TVA to a retail stage tax.

• *International Trade Aspects (2)*

It is sometimes fallaciously argued that a change from a sales tax to a TVA should be balance of payments advantageous. It follows from the fact that they are more or less economically equivalent and that both permit exact border adjustments that this cannot be the case. There might, nevertheless, have been in practice some slight international trade effects resulting from the change which may be divided into:

— Favourable effects :

(i) A change from a sales tax to a TVA has sometimes been accompanied in practice by an extension of coverage and an increase in rate. This is favourable for the balance of payments to the extent (if any) that the tax is not fully shifted forwards.

(ii) The change may be accompanied by a decrease in uncompensated tax occulte. This is favourable in the absence of other measures (such as the 1 per cent payroll tax introduced by Sweden) to compensate for the loss of revenue involved.

(iii) Some countries operating a TVA allow exporters, unlike home traders, to obtain tax free goods, and this can encourage exports. Under sales taxes registered traders, whether exporters or not, can obtain tax-free goods.

— Unfavourable effects :

(i) Domestic prices might increase even in the absence of an increase in overall tax receipts insofar as there is

any re-allocation of the tax burden in respect of particular goods or services since the tax increases are likely to be passed on to the consumer to a greater extent than the tax decreases.

(ii) Insofar as there is less evasion under TVA, the effective burden on domestic taxpayers would increase relative to the border tax adjustment.

TVA VERSUS CASCADE TAXES

• *Defects of Cascade System*

The main reason for the change from a cascade system to a TVA system was that the countries of the European Communities (all of whom except France were operating cascade systems) wished to harmonise their consumption taxes and the cascade system has at least three serious defects. In the first place, the amount of cascade tax finally paid on a product depends primarily on the number of times it is sold, so that an integrated firm pays much less tax on the same kind of product than do small firms. Secondly, and following from this, it is impossible to say how much tax should be levied on imported products and how much should be refunded on exported products to compensate exactly for the tax paid on similar domestic products sold on the home market. Thus, border tax adjustments have to be based on *averaging*, which means that in particular cases they may be sometimes too high and sometimes too low. The third important defect of the cascade system is that it is not a *pure consumption tax* but involves heavy taxation of investment goods and thereby discrimination against capital-intensive firms in favour of labour-intensive firms. The deduction system of the TVA and the registration system of the sales tax enable taxation of producers' goods to be eliminated insofar as Governments wish to do so, but the cascade system lacks any fiscal device to reduce tax occulte.

• *International Trade Aspects*

An important question, which has recently been much discussed in the trade consultations of OECD, is the likely effect of recent changes from a cascade system to a TVA on the country's balance of payments. At first, it was generally considered that a change from a cascade system to a TVA should be balance of payments favourable because there was general agreement that the average import charges and export rebates under a cascade system were pitched on the low side, while under a TVA the border adjustment would be exact. In practice, however, there are several offsetting factors to be taken into account.

In the first place, the export intensive firms tend to be integrated and so are likely to pay less tax under the cascade system than the average firm, although they would be receiving the average export rebate. Secondly, the change to a TVA means that some firms would be paying more tax and other less than before (assuming, as has been the case in these changes, that the object is to produce more or less the same amount of revenue under the TVA as under the cascade system); since enterprises

(2) See "Border Tax Adjustments and Tax Structures in OECD Member Countries" OECD, November 1968.

in general tend to pass on tax increases to consumers but to utilise tax reductions to improve their profit margins or to offset their ever-rising costs, changes of this kind are likely to lead to an overall increase in the price level.

Thirdly, in all the cases of actual and contemplated changes from a cascade to a TVA system, it has not been found possible to go directly to a pure TVA. In practice, investment goods remain chargeable generally for about four years with a tax which is not deducted and not compensated at the border. This is because, if a country passed straight from a cascade tax to a pure TVA, firms would postpone investment and run down stocks with unacceptable disturbances to the economy. Such disturbances could be avoided only if governments refunded cascade tax on goods in stock and on investment goods, but this would have serious budgetary consequences.

Fourthly, because the TVA provides revenue safeguards (described above) not present in a cascade system, a greater portion of the tax due is likely to be collected under a TVA, thus increasing the actual, as distinct from the nominal, burden on domestic taxpayers. Finally, when it is said that border adjustments are exact under a TVA, it is assumed that tax occulte is not taken into account, whereas when it is said that there is undercompensation under a cascade system, it is assumed that the domestic burden includes tax occulte.

In practice, however, so many various factors are involved (in particular the amount of undercompensation and how far the economic situation permits price rises) that it is impossible to generalise about the trade effects of a change from a cascade tax to a TVA, and it is not easy even to assess these effects in cases of particular changes.

TVA VERSUS NON-CONSUMPTION TAXES

Associated with the TVA question, even if not a necessary feature of it, has been the idea of using it to obtain an increased yield from consumption taxation in relation to other forms of taxation. In this respect a distinction should be made between the Scandinavian idea of increasing consumption taxation and reducing the personal income tax and the idea of increasing consumption taxation and reducing taxes on entrepreneurs (whether corporate profits taxes or payroll taxes) which has been discussed in the United Kingdom and the United States and put into practice in France.

TVA VERSUS PERSONAL INCOME TAX

The increase of TVA combined with a reduction of personal income tax involves a transfer of the tax burden from savers to spenders, and generally from the rich to the poor, and has in the past been disapproved of on social grounds. Preferences recently expressed in Sweden and Norway for making such a change are probably due to the fact that in countries with high wages and extensive social security systems, high rates of income tax may be considered to have a disincentive effect not only on management but also on labour while the socially regressive effects of a move towards consumption taxes can be offset by an increase in welfare benefits. An additional point is that it is probably easier to influence consumer demand, at least in the short term, by changing rates of consumption tax than by changing rates of personal income tax.

TVA VERSUS PROFITS AND PAYROLL TAXES

While it has not actually happened in practice, the possibility of reducing or abolishing profits taxes and making up the revenue with a TVA has been much discussed in the United Kingdom and United States.

It has been argued that this would stimulate the economy by transferring the tax burden from efficient traders who make large profits to less efficient traders with high costs. On the other hand, it has been denied that high profit-making firms are necessarily the most efficient, and attention has also been drawn to the socially regressive effect of shifting the tax burden from high profit-making firms to consumers. The tax burden may also be transferred from entrepreneurs to consumers by substituting for all or part of a payroll tax, a new or increased TVA. Thus in November 1968, when entrepreneurs' costs and consumers' purchasing power had both increased considerably as a result of the wage agreements of the previous summer, France abolished the payroll tax on wages and increased the rate of TVA.

INTERNATIONAL TRADE EFFECTS OF MOVE TOWARDS INDIRECT TAXATION

On a more controversial level, it has been argued that a move towards increased reliance on consumption taxation, whether at the expense of personal income taxes, corporate income taxes or payroll taxes, would be balance of payments advantageous, because under GATT rules consumption taxes can be imposed on imports and relieved on exports while other taxes cannot. Against this it has been argued that increases in costs of materials and wages, etc., following from an increase in consumption taxation lead to such large increases in prices of domestic goods that no international competitive advantage can be expected by moving towards relatively greater taxation of consumption. This is a complex matter centering upon the degree of forward shifting of different kinds of tax and is at the heart of the border tax adjustment controversy. (3)

(3) See "Border Tax Adjustments and Tax Structures in OECD Member Countries".

THE OECD MEMBER COUNTRIES (6th year)



The OECD OBSERVER presents in this issue a set of tables showing the diversity of the economies of the twenty-two Member countries of the Organisation. These tables, which were drawn up at the end of 1969, set forth the final statistics for the year 1968. They are not intended to provide all the comparative data needed for an understanding of each country's economic situation in relation to the OECD group as a whole : they give some idea, however, of the economic pattern in the individual countries.

The figures have been supplied by the Statistics and National Accounts Branch of OECD. For further information, readers are referred to other statistical publications of the Organisation : Main Economic Indicators, Statistical Bulletins of Foreign Trade, Manpower Statistics, and Statistics of National Accounts.



SYMBOLS EMPLOYED:

- () OECD Secretariat Estimate ;
- Nil ;
- .. Not available.

Unless otherwise stated, all the figures are for 1968.

	AREA (1,000 sq. km)	AGRICUL- TURAL AREA (1,000 sq. km)	TILLAGE and temporary grassland (1,000 sq. km)	POPULATION (thousands)	INHAB- ITANTS per sq. km
AUSTRIA	83.8	39.2	16.7	7,350	88
BELGIUM	30.5	16.2	8.9	9,619	315
CANADA	9,976.2	643.6 1966	434.0 1966	20,772	2
DENMARK	43.0	30.2	27.1	4,870	113
FINLAND	337.0	28.3	27.6	4,689	14
FRANCE	551.2	335.5 1967	197.9 1967	49,915	91
GERMANY	248.5	136.4	80.7	60,184	242
GREECE	131.9	90.9 1967	38.5 1967	8,803	67
ICELAND	103.0	22.8	—	201	2
IRELAND	70.3	48.0	11.9	2,910	41
ITALY	301.2	195.0	144.6	53,798	179
JAPAN	369.7	68.8	59.4	101,090	273
LUXEMBOURG	2.6	1.4	0.7	336	129
NETHERLANDS	33.6	22.4	9.2	12,725	379
NORWAY	323.9	10.0	8.4	3,819	12
PORTUGAL	91.5	(49.0)	(43.7)	9,497	104
SPAIN	504.7	342.6	204.8 1967	32,622	65
SWEDEN	449.8	35.4 1967	30.9 1967	7,912	18
SWITZERLAND	41.3	21.8	3.9	6,145	149
TURKEY	780.6	523.9	266.0	33,540	43
UNITED KINGDOM	244.0	194.1	73.8	55,391	227
UNITED STATES	9,363.4	4,356.1 1967	1,764.4 1967	201,152	21

TOTAL INCREASE IN POPULATION percentage (annual average 1958-1968)	NET IMMIGRATION (+) OR NET EMIGRATION (-) 1968 (thousands)	TOTAL CIVILIAN EMPLOYMENT (thousands)	of which :		
			AGRICULTURE, FORESTRY AND FISHING (%)	INDUSTRY (%)	OTHER (%)
+ 0.50	— 6	3,182 1967	20.0	40.3	39.7
+ 0.60	+ 6	3,615	5.6	44.9	49.6
+ 2.00	+ 97	7,537	8.6	32.3	59.1
+ 0.75	+ 2 1967	2,302	13.1	38.4	48.5
+ 0.70	— 10	2,090	26.0	34.0	40.0
+ 1.10	+ 100	19,741	15.8	40.4	43.8
+ 1.05	+ 278	25,865	10.2	48.2	41.6
+ 0.75	+ 6 1967	3,610 1967	50.1	21.2	28.7
+ 1.75	0	(72)	(15.5)	(37.2)	(47.3)
+ 0.20	— 18	1,057	29.6	28.7	41.7
+ 0.85	— 130	18,874	22.5	41.8	35.7
+ 1.00	— 5	50,020	19.7	34.6	45.7
+ 0.80	+ 1	139	12.1	45.3	42.6
+ 1.30	+ 6	4,428	7.9	41.3	50.8
+ 0.80	+ 2	1,465	15.5	36.6	47.9
+ 0.85	— 39 1967	3,087	32.3	36.2	31.5
+ 0.90	— 53	12,170 1967	29.4	36.6	34.0
+ 0.65	+ 13	3,782	9.3	41.0	49.7
+ 1.70	+ 31	2,705 1967	7.8	52.2	40.0
+ 2.60	• •	(13,417)	(72.7)	(11.4)	(15.9)
+ 0.65	— 48 1967	24,884	3.1	46.7	50.2
+ 1.40	+ 444	75,920	5.0	(33.8)	(61.2)

Notes : a) Gross Domestic Product at market prices b) Includes stock appreciation c) Net Domestic Product d) Electricity, gas and water included in "other activities" BLEU : Belgium Luxembourg Economic Union		AUSTRIA	BELGIUM	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND	IRELAND	ITALY	JAPAN	LUXEMBOURG	NETHERLANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZERLAND	TURKEY	UNITED KINGDOM	UNITED STATES
		GROSS NATIONAL PRODUCT at market prices		11,400	20,750	62,440	12,390	8,010	126,230	132,480	7,550	450	3,100 1967	74,980	141,810	710 1967	25,230	9,020	5,010	25,200	25,570	17,160	11,600
at current prices and exchange rates (million US \$)		9,630	17,080	52,590	9,930	7,600	108,110	117,060	6,670	380	2,590 1967	63,920	114,220	610 1967	19,470	7,290	4,150	21,510	20,590	13,910	9,620	99,530	770,900
at 1963 prices and exchange rates (million US \$)		1,550	2,160	3,010	2,540	1,710	2,530	2,200	860	2,240	1,070 1967	1,390	1,400	2,130 1967	1,980	2,360	530	770	3,230	2,790	350	1,850	4,380
per capita at current prices and exchange rates (US \$)																							
STRUCTURE OF GROSS DOMESTIC PRODUCT (%) at current prices																							
agriculture		8.1	5.4	5.9 1967	9.1	15.3	6.6 ^(a)	3.9 ^(a)	21.2	• •	19.5 1967	11.1	10.5 ^(c)	6.2 1967	7.0	6.8	19.0	16.3	5.9 ^(a) 1967	• •	33.8 ^(c)	3.0 ^(b)	2.9 ^(a)
mining and quarrying, manufacturing industry, construction, electricity, gas and water		50.3	41.1	38.5 1967	39.6	39.2	47.8 ^(a)	50.9 ^(a)	27.3	• •	33.5 1967	38.6	37.9 ^{(c) (d)}	50.9 1967	42.2	37.2	42.2	33.7	45.2 ^(a) 1967	• •	26.5 ^(c)	45.8 ^(b)	36.4 ^(a)
other activities		41.6	53.5	55.6 1967	51.3	45.5	45.6 ^(a)	45.2 ^(a)	51.6	• •	47.0 1967	50.3	51.6 ^{(c) (d)}	42.9 1967	50.8	56.0	38.8	50.0	48.9 ^(a) 1967	• •	39.7 ^(c)	51.2 ^(b)	60.7 ^(a)
GROSS FIXED ASSET FORMATION																							
percentage of GNP at current prices		23.6	21.1	23.3	20.5	23.2	24.9	23.1	26.0	32.0	19.1 1967	19.4	34.0	25.1 1967	26.5	26.7	19.2	20.9	23.6	24.9	19.4	18.2	16.6
US \$ per capita at current prices and exchange rates		370	460	700	520	400	630	510	220	720	200 1967	270	480	530 1967	530	630	100	160	760	700	70	340	730
PRIVATE CONSUMPTION EXPENSES																							
percentage of GNP at current prices		59.4	63.5	60.9	62.8	55.9	60.8	56.2	69.6	68.2	68.6 1967	63.6	52.2	61.1 1967	56.1	53.9	70.5	70.2	55.3	58.0	• •	63.0	61.2
US \$ per capita at current prices and exchange rates		920	1,370	1,830	1,600	960	1,540	1,240	600	1,530	730 1967	890	730	1,300 1967	1,110	1,270	370	540	1,790	1,620	• •	1,170	2,680
CURRENT GOVERNMENT EXPENDITURE AND REVENUE (% of GNP)																							
current expenditure		31.7	33.4	30.3	31.4	28.7	34.5	32.6	24.3	23.1 1967	28.8 1967	31.8	14.4	33.8 1967	35.5	35.3	• •	17.1	37.4	22.4	• •	33.3	28.7
current revenue		37.5	33.6	35.2	37.0	37.1	37.7	37.1	27.4	31.4 1967	30.3 1967	33.2	20.6	36.0 1967	40.7	41.6	• •	21.4	48.1	26.8	• •	37.4	30.0
OFFICIAL HOLDINGS of gold and foreign exchange 31st October 1969 (million US \$)		1,378	2,202 BLEU	2,636	345	273	3,913	9,227	283	40	580	4,435	2,843	2,202 BLEU	2,503	515	(1,369)	981	525	3,312	220	2,482	14,531
OFFICIAL DISCOUNT RATE 30th November 1969 (with date of last change)		4.75 11-9-69	7.50 18-9-69	8.00 16-7-69	9.00 12-5-69	7.00 28-4-62	8.00 9-10-69	6.00 12-9-69	6.50 15-9-69	5.25 1-1-66	8.38 31-10-69	4.00 14-8-69	6.25 1-9-69	7.50 18-9-69	6.00 4-8-69	4.50 27-9-69	2.75 1-9-65	5.50 21-7-69	7.00 10-7-69	3.75 15-9-69	7.50 1-7-61	8.00 27-2-69	6.00 4-4-69

BLEU : Belgium
Luxembourg
Economic Union

AUSTRIA

BELGIUM

CANADA

DENMARK

FINLAND

FRANCE

GERMANY

GREECE

ICELAND

CURRENCY

monetary unit

Schilling

Belgian
Franc

Canadian
Dollar

Krone

Finnish
Mark

French
Franc

Deutsche
Mark

Drachma

Krona

currency units
per US \$
30th October 1969
market rates

25.870

49.680

1.076

7.510

4.211

5.578

3.690

30.000

88.100

IMPORTS
(goods only)

total (CIF)
(million US \$)

2,496

8,333
(BLEU)

(FOB)
11,431

3,213

1,593

13,926

20,150

1,392

138

from other OECD
countries
(million US \$)

2,025

6,561
(BLEU)

(FOB)
10,229

2,630

1,136

9,907

14,671

1,054

113

from rest of world
(million US \$)
(excl. unspecified)

470

1,766
(BLEU)

(FOB)
1,202

583

457

4,018

5,456

337

25

total imports
as percentage of GNP
at current prices

21.9

38.8
(BLEU)

18.3

25.9

19.9

11.0

15.2

18.4

30.7

increase in volume of
total imports from 1963
to 1968
(percentage per year)

9.6

10.1
(BLEU)

12.5

7.9

5.7

9.5

9.0

8.9

• •

EXPORTS
(goods only)

total (FOB)
(million US \$)

1,989

8,164
(BLEU)

12,556

2,582

1,636

12,672

24,842

468

82

to other OECD countries
(million US \$)

1,432

7,166
(BLEU)

11,196

2,161

1,198

8,724

19,258

331

64

to rest of world
(million US \$)
(excl. unspecified)

556

945
(BLEU)

1,361

401

437

3,945

5,517

137

18

total exports
as percentage of GNP
at current prices

17.5

38.0
(BLEU)

20.1

20.8

20.4

10.0

18.8

6.2

18.2

increase in volume
of total exports
from 1963 to 1968
(percentage per year)

8.6

10.5
(BLEU)

11.5

7.0

7.0

8.2

11.2

9.6

• •

FOREIGN
TOURISM

In thousands :
(a) nights in all types of lodgings
(b) arrivals of foreign tourists
at frontiers
(c) estimate of the number of
nights spent in the country

(a)

(a)

(b)

• •

• •

(c)

(a)

(b)

(b)

48,745

6,282

12,869

• •

• •

103,000

17,277

879

40

percentage of change
over 1967

+ 8

- 4

- 20

• •

• •

- 8

-

+ 4

+ 7

IRELAND	ITALY	JAPAN	LUXEMBOURG	NETHERLANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZERLAND	TURKEY	UNITED KINGDOM	UNITED STATES
Pound	Lira	Yen	Luxem- bourger Franc	Guilder	Krone	Escudo	Peseta	Krona	Swiss Franc	Lira	Pound	Dollar
0.417	627.400	357.720	49.680	3.605	7.158	28.650	70.150	5.170	4.330	9.000	0.417	1.000
1,175	10,253	12,987	8,333 (BLEU)	9,293	2,704	1,178	3,502	5,122	4,493	770	18,958	(FOB) 33,114
970	6,516	5,484	6,561 (BLEU)	7,464	2,295	822	2,441	4,054	3,965	588	11,212	(FOB) 22,916
186	3,714	7,501	1,766 (BLEU)	1,826	409	348	1,061	1,067	527	182	7,741	(FOB) 10,188
39.7	13.7	9.2	38.8 (BLEU)	36.8	30.0	23.5	13.9	20.0	26.2	6.6	18.5	3.8
7.1	5.1	13.2	10.1 (BLEU)	9.2	9.3	• •	13.1	7.1	6.2	• •	6.3	12.2
776	10,183	12,972	8,164 (BLEU)	8,342	1,937	732	1,589	4,937	3,949	496	14,822	33,982
720	7,275	6,097	7,166 (BLEU)	6,972	1,574	476	1,114	3,890	2,951	354	8,774	20,821
36	2,797	6,871	945 (BLEU)	1,256	362	253	464	1,047	997	143	6,034	12,041
26.2	13.6	9.1	38.0 (BLEU)	33.1	21.5	14.6	6.3	19.3	23.0	4.3	14.4	3.9
7.6	15.7	18.7	10.5 (BLEU)	10.5	9.7	• •	17.5	7.3	9.4	• •	4.7	6.3
(c) 21,186	(a) 61,337	(c) 5,775	(a) 1,526	(a) 5,408	(c) 21,805	(c) 9,573	(a) 38,625	• •	(a) 28,526	(b) 383	(c) 78,800	(b) 10,711
+ 11	+ 1	+ 6	+ 2	+ 1	+ 2	- 3	+ 11	• •	+ 1	+ 11	+ 7	+ 11

CALORIES per inhabitant and per day 1967-1968 or 1967			AUSTRIA	BELGIUM LUXEM- BOURG	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND
			2,920	3,070	3,170	3,150	2,970	3,170	2,960	2,910	• •
IRELAND	ITALY	JAPAN	NETHER- LANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZER- LAND	TURKEY	UNITED KINGDOM	UNITED STATES
3,470	2,890	2,460	3,170	2,940	2,780	2,790	2,880	2,990	• •	3,150	3,140

DWELLINGS COMPLETED (number per 1,000 inhabitants) <i>* Dwellings started</i>			AUSTRIA	BELGIUM	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND
			1967 7.0	1968 4.1 *	1968 8.2	1967 9.2	1967 7.9	1967 8.5	1968 8.4	• •	1967 9.0
IRELAND	ITALY	JAPAN	NETHER- LANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZER- LAND	TURKEY	UNITED KINGDOM	UNITED STATES
1968 4.0	1968 6.3	1968 11.8 *	1968 9.7	1968 8.8	1967 5.7	1968 7.6	1967 12.7	1968 8.6	1968 4.7	1968 7.7	• •

NET CONSUMPTION OF ELECTRICITY kWh per head and per year (excluding losses)			AUSTRIA	BELGIUM LUXEM- BOURG	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND
			2,538	2,664	7,780	2,163	3,461	2,216	3,088	715	2,980
IRELAND	ITALY	JAPAN	NETHER- LANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZER- LAND	TURKEY	UNITED KINGDOM	UNITED STATES
1,432	1,764	2,345	2,333	13,354	590	1,109	6,432	3,745	183	3,481	6,532

PUBLIC EDUCATION EXPENDITURE as a percentage of GNP at market price			AUSTRIA	BELGIUM	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND
			1967 4.40	1967 5.57	1965 5.65	1967 6.12	1967 6.43	1967 4.81	1966 2.96	1964 1.89	1967 4.80
IRELAND	ITALY	JAPAN	NETHER- LANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZER- LAND	TURKEY	UNITED KINGDOM	UNITED STATES
1967 4.23	1967 5.44	1965 4.54	1967 6.71	1967 5.81	1965 1.44	1967 2.06	1966 7.40	1964 3.62	1967 3.70	1965 4.15	1967 5.10

TELEPHONES (number per 1,000 inhabitants)			AUSTRIA	BELGIUM LUXEM- BOURG	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND
			1967 159	1967 184	1967 408	1966 293	1967 204	1967 141	1967 172	1966 67	1967 320
IRELAND	ITALY	JAPAN	NETHER- LANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZER- LAND	TURKEY	UNITED KINGDOM	UNITED STATES
1967 87	1967 132	1968 107	1966 203	1967 255	1967 65	1968 113	1967 489	1968 437	1967 9	1967 218	1968 540

PASSENGER CARS (number per 1,000 inhabitants) <i>* Private and commercial</i>			AUSTRIA	BELGIUM LUXEM- BOURG	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND
			1967 132	1967 160	1967 282	1967 176	1967 113	1968 240	1968 194	1968 18	1967 180
IRELAND	ITALY	JAPAN	NETHER- LANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZER- LAND	TURKEY	UNITED KINGDOM	UNITED STATES
1967 110	1967 136	1967 48	1968 157	1968 156	1966 30	1968 50	1967 246	1968 192	1968 4	1968 196	1968 414 *

TELEVISION SETS (number per 1,000 inhabitants)			AUSTRIA	BELGIUM LUXEM- BOURG	CANADA	DENMARK	FINLAND	FRANCE	GERMANY	GREECE	ICELAND
			1967 134	1967 185	1966 284	1967 237	1967 193	1968 185	1968 248	• •	1967 120
IRELAND	ITALY	JAPAN	NETHER- LANDS	NORWAY	PORTUGAL	SPAIN	SWEDEN	SWITZER- LAND	TURKEY	UNITED KINGDOM	UNITED STATES
1966 111	1967 144	1968 206	1967 200	1968 179	1967 29	1968 90	1967 289	1968 164	—	1968 280	1967 392

A NEW SYSTEM OF NATIONAL ACCOUNTS

Despite the complexity of modern economies, efforts are being made to present information on current trends in such a way as to include as many of the elements as possible in a single system. The aim is twofold: first to trace out the repercussions of a policy action or spontaneous development in some particular sector of the economy on all the others and, second, to make more meaningful comparisons between countries.

Already great progress has been made in this direction through the development of a system of national accounts. Another important step is being taken with the revision of the present system which is here described by M. René Bertrand, Head of OECD's National Accounts and Growth Studies Division.

Economic information is of ever-growing importance in the modern world. The machinery is so complex that government action as well as entrepreneurial and individual decisions must be guided by a sound knowledge of economic processes and of how they interact.

The diversity and scope of the published statistics which come from various sources are so large that to turn the raw supply thus obtained to best account is no simple task. Whence "the value of a general, logical framework containing the most important economic data, which, owing to a common system of definition and nomenclature, are interrelated and can be compared" (1).

The sort of framework which the system of national accounts thus tends to provide (2) must be defined not merely in national terms but at international level, since it is becoming increasingly irrelevant to consider each country's economy separately.

Since the end of the last World War the role of international organisations, particularly the Organisation for European Economic Co-operation (OEEC) the predecessor of OECD, has been essential in promoting the adoption and implementation of standardised systems which would enable consistent sets of data to be internationally compared.

As early as 1947 the United Nations published a monograph by Prof. Richard Stone on social accounting, which was the starting point for all later development. Soon after OEEC was established in 1948, it convened a research group at Cambridge, which worked out a system of accounts for practical use. In 1952 this became OEEC's official "Standardised System of National Accounts", followed in 1953 by the United Nations' introduction of a similar, though not identical, "System of National Accounts" (SNA). A revision in 1958 brought the two systems much closer together.

Adjustment of the Systems in the Light of Advancing Economic Knowledge and Improved Statistical Information

Owing to the analytical methods current at the time, these systems were chiefly concerned with the formation and utilisation of national income. By making systematic use of the accounts to discuss the economic trends and policy implications of its Member countries, OEEC helped these countries to set up or strengthen their national accounts.

Meanwhile, the methods of analysis which made use of overall figures on the formation of national income or its utilisation for consumption and investment purposes were being supplemented by other approaches which entailed a more detailed examination of economic transactions.

To understand better the process of production of goods and services, the interdependence of different industries could be shown with tables which traced the flow of products from one to another for processing until they were finally sold to the consumer, the investor, or exported. With the growth in the use of computers these tables of inter-industrial relationships, or input-output tables, suggested and developed by Professor Wassily Leontieff, could be greatly expanded and used to determine, for instance, what

(1) Bernard Brunhes: "Présentation de la comptabilité nationale française", Collections l'INSEE, Paris 1969.

(2) Each enterprise, each public or private body which has assets to manage — even each household — has its own way of keeping accounts; since national accounting and individual accounting complement each other, a desirable goal is that they be made consistent.

each industry would have to contribute to produce an additional unit of some product. Such tables are now prepared, more or less regularly, by all countries, and are widely used for planning and forecasting.

At the same time, transactions involving various types of financial assets and liabilities were systematically recorded in another set of accounts. The first step in this field was taken by S. Copeland for the United States economy.

Finally, studies of productivity and of the conditions needed for growth meant that account had to be taken of the factors of production, especially capital and labour; this in turn required the development of statistics in this field that would be as comparable as possible with the production data previously available.

Thus a number of countries had already tried to extend the scope of their national accounts by bringing into a single system statistics which ought to be interconnected but were obtained independently. The international organisations could not ignore this evolution, not only because their role is to standardise and even promote the preparation of statistics in their Member countries, but also because they are concerned with analysing international economic conditions and need improved methods for this purpose.

Stages of the Revision

In 1963 the United Nations decided to undertake, in conjunction with OECD and the Conference of European Statisticians, a revision of the international systems of national accounting. Five years of work led to the adoption by the United Nations Statistical Commission in March 1968 of a new System of National Accounts, or SNA (3), designed to replace the older systems of both the United Nations and OECD. Meanwhile the six Common Market countries were developing a European System of Accounts (ESA), much along the lines of the SNA, thus providing some degree of compatibility between the various international systems. Efforts to devise a new system of accounts are not yet at an end. In the coming years the problems to be resolved will include how to measure economic data at constant prices; how to draw up real balance sheets instead of only recording flows; how to work out statistics on the distribution of income and on total consumption; regional accounts, and finally to develop a system of demographic accounting linked to national accounts proper.

Towards a System of Accounts Designed to Cover all Economic Transactions

The time taken for the revision shows how difficult it was to work out the new system since some countries wanted only a few minor adjustments and additions whereas others wanted the old system to be thoroughly recast. A compromise was ultimately reached : while no break has been made with past tradition, the much broader base of the system makes it something entirely new, especially if applied as a whole.

The idea is not merely to supplement the old accounts on formation and utilisation of national income with production accounts subdivided according to industry or type of commodity in the form of input-output tables, or to explain how the surplus funds of a particular group are made available to another in need of finance. The goal is also to devise a framework which is capable of accommodating any and all economic operations. It has even been stated that all economic statistics should in the long run be included in the National Accounts framework or at least linked to it, so as to ensure perfect consistency between them. What is involved is identifying the economic agent at the source or destination of a transaction or classifying transactions according to nature or object. Thus the importance of adopting standard classifications for industries, products, types of financial assets, occupations, the destination of goods, the purpose of various types of consumption, etc.

The attempt to achieve uniformity is evident in the manner of presenting the system of accounts. It takes the form of a matrix (square cross-entry table), capable of extension by the addition of new rows and columns (4).

The value of the system is not only that it simplifies the presentation of statistics or ensures absolute correspondence of all the data. Its chief merit is to show how the data are interrelated and how they are made compatible; for example cross-entry tables can be used to determine how far industries classified by type of commodity coincide with the same industries classified by economic activity.

It is extremely likely that some statistics will for a certain time be dealt with separately before any attempt is made to incorporate them into the National Accounts : this will probably be the case for statistics which are a by-product of non-statistical government activities (e.g. income data derived from income tax returns) and which evolve with the institutional framework, or the appearance of new needs; it will also probably be the case for statistics aiming at very special goals.

The Distinction between Transactions in Goods and Services and Financial Transactions.

The difficulty of attaining complete uniformity became evident when an attempt was made to

(3) The system is described in "A System of National Accounts", published in English by the United Nations in 1968. No final version yet exists in French.

(4) In "A System of National Accounts", the complete system is illustrated by a matrix containing 88 rows and columns. It is, however, a highly simplified model, since industries are divided into only four groups, commodities into four categories, etc. A full answer to the new questionnaires on national accounts that the international organisations plan to send to their member countries would alone require the use, where the data is contained in a single matrix, of a table containing several hundred rows and columns. The number of empty boxes would however be considerable.

combine in the new SNA transactions in respect of goods and services, the financial payments which are the counterpart of these flows or which are unilateral in character (transfers of income), and finally transactions in respect of financial assets.

It finally had to be recognised that transactors engaged in the production of goods and services, in the consumption of goods or their acquisition for capital formation could not be listed under the same heading as transactors keeping accounts of receipts and expenditure of widely differing origin, showing a financial balance. While production activities can thus be recorded at establishment level (5) that is, for a relatively elementary unit where the sales and purchases of commodities as well as the utilisation of capital and labour can be ascertained, a different, generally higher level, where decisions regarding the management of assets are taken (as by an enterprise or holding company), is required for flows of funds to be meaningfully recorded.

The Various Types of Transactor

In the new SNA there are hence two ways of classifying transactors. In dealing with production, consumption and capital formation, a distinction is first made between the *producers of commodities* on the one hand (that is of goods which can be sold on the market and provide income to pay for the factors of production) and, on the other hand, the *producers of non-commodities* (goods not sold on a market, where costs must be met by other types of income such as taxes, gifts, etc.).

The transactors engaging primarily in the production of commodities are known as industries. They are normally classified by kind of activity. Each industry not only encompasses establishments belonging to private enterprises, but also any others answering to the description found in the non-commodity sector which engage in some specific type of activity. Nationalised enterprises and even government establishments, which while commercially active enjoy no real financial independence, are also regarded as part of the industry sector. Provision is moreover made in the sector for classification by type of commodity.

In the case of non-commodity items, a distinction is made between government as an instrument of public administration and as provider of free services to the population (education, health, roads, etc.) as opposed to private non-profit institutions serving households (6) (hospitals, churches, fraternal bodies, etc.). On this point the new system differs fundamentally from the previous scheme. Households are moreover considered to be producers, but only insofar as paid domestic services are concerned (7).

The list changes as soon as the income and outlay and capital finance accounts are considered. Corporate and quasi-corporate enterprises, whether belonging to the public or private sector, are divided between financial institutions — whose special role in dealing with financial assets is thus more clearly brought out — and non-financial enterprises.

Private unincorporated enterprises are simply regarded as having the character of households, since

the proprietor makes no distinction between his own assets and those of the business. Finally there is the government, comprising the various establishments belonging to the productive sector but not regarded as financially independent, and the private non-profit institutions serving households, including those of their activities which are commercial in character.

A “rest of the world” account completes the picture.

Articulation of the Various Accounts

Due to the diverse classification of economic agents, articulation of the accounts may seem fairly complex, yet can quite easily be understood when the national economy is considered as a whole. In dealing with commodities, input-output tables can be used to ascertain, by aggregating the data for each group, total sales of goods and services (inclusive or exclusive of any taxes) and total intermediate purchases of goods, the difference serving to compensate wage-earners, allow for the depreciation of fixed assets, and pay certain indirect taxes. A balance (which may be negative) is however left, known as an “operating surplus”.

Production activities of the government and of private non-profit bodies serving households are valued at cost (intermediate purchases, compensation of wage-earners, depreciation), and are assumed to consist of services rendered by such institutions to themselves for an equivalent cost. This convention is open to criticism on the grounds that the quantity and quality of services provided by these agencies do not necessarily follow cost trends. The lack of any ascertainable market price makes the use of some other method of estimation especially delicate, yet efforts undertaken to measure the “benefits” yielded by government activities by comparison with their “costs” in order to rationalise budgetary choices point to progress in this direction.

The “net output” or “value added” — that is the difference between gross output of goods and services and purchases of raw materials and intermediate goods — is distributed as in conventional systems among consumption (by households, government and non-profit institutions), gross capital formation (fixed investment and increases in stocks) and the net balance of exports and imports of goods and services. As these various accounts (consumption expenditure and capital formation) are based on flows recorded within national boundaries, certain adjustments will have to be made, for instance to

(5) *Establishments are defined as identifiable production units marked by concentration in a single location and essentially engaging in a single type of activity.*

(6) *Households are defined as applying to individuals living under a same roof who constitute a single consumption unit. A Household may thus consist of one person.*

(7) *Whereas earnings (so far as they can be ascertained) from baby-sitting are included in the national product, the work of housewives is not. Households which own buildings come under the “housing” industry.*

allow for purchases by foreign tourists in the country concerned.

The link of the above with the "income and outlay" or "capital finance" accounts is through the operating surplus, compensation of wage-earners, consumption expenditure or capital formation. These accounts also record the formation of income unconnected with production activities within the country and show how it is distributed, allowing for various kinds of transfer: taxes, social security contributions and benefits, etc. Saving (or dissaving), or the difference between current receipts and current disbursements of the various types of transactors (in this case classified by institutional sectors), supplemented by any transfers of capital, is used to finance the capital transactions of these agents. To the extent that balance fails to be achieved, a need for funds or an excess of resources will result, as reflected in such financial transactions as changes in cash holdings (banknotes or demand deposits) and various credit operations, which are also made to appear in the accounts.

Finally, for these same institutional sectors, changes in financial assets and liabilities, as well as tangible assets accumulated through capital formation, are to serve in linking assets at the beginning of the period to assets at the end, allowing for needed adjustments for revaluation purposes, since account must be taken of possible changes in value other than those directly produced by current economic transactions. This "balance-sheet" component of the SNA will not be introduced until a later date.

Changes in Definitions of Flows

If only by reason of the redefinition of institutional sectors and types of activity, flows as recorded under the previous system cannot be altogether reconciled with data compiled according to the new SNA. There are however many other causes of divergence. Insofar as governments and non-profit institutions are now regarded as producers, the result has been that capital depreciation is included among their costs.

The "domestic concept" has been adopted for production, consumption and capital formation accounts; the prices used have been more narrowly defined and taxes are more carefully handled, with the result that certain fees paid by individuals — such as for radio licenses, shooting licenses, etc. — are no longer regarded as indirect taxes, these being exclusively left to the production sector.

Finally, conventions in respect of certain imputed transactions have been changed and apparently have been made simpler. Imputed rent on government buildings is thus no longer taken into account, while the notion of imputed interest, increasing private consumption and income, has been rejected and bank activities financed by the difference in interest paid out on deposits and that received on loans are now treated as intermediate consumption for the production sector as a whole.

Even for such large traditional aggregates as gross national product or gross domestic product, figures

obtained under the new system cannot be expected to correspond exactly with those previously published.

It is difficult to foresee the net effect of such revised definitions, especially as corrections occur in opposite directions. In the case of larger aggregates, however, presumably the rates of growth should not be very different merely as a result of the new definitions. Yet if when putting the new system into effect countries should thoroughly re-organise their accounting procedure by relying on far more complete data — thereby complying with the fundamental intentions of the system — the statistical effort thus exerted may well mean that the published figures will be considerably revised.



It would be wrong to suppose that reform of the international system of national accounts is now complete. As mentioned earlier, many aspects of the new SNA must still be gone into more deeply, such as constant-price data, balance sheets, regional accounting, etc.

Many cases moreover exist where solutions have been adopted which are clearly not entirely satisfactory:

- measurement of the productive contribution of government and non-profit institutions;
- omission of internal activities by households, including work by housewives;
- failure to allow for certain negative aspects of production in growth economies, such as nuisance effects or disutilities (pollution of air and water, urban crowding, etc.);
- the fact that intangible assets such as the accumulation of knowledge are not measured, and that research expenditure has been treated as intermediate consumption;
- the impossibility, in constant-price measurement, of showing changes in the terms of trade and thus a possible gain or loss.

Since in respect to these problems theoretical discussions have not produced uniform or even compatible views, it would certainly be premature to try to introduce into the international system of accounts, reforms based on some particular current of thought, but at some future date further revision of the SNA will most likely have to be undertaken.

Even as presented, the new SNA may seem revolutionary. In any event it will require a considerable effort of adjustment on the part of quite a few countries, and many years are bound to elapse before it can be applied with a fair degree of thoroughness.

This is the goal which the international organisations must now pursue. In 1970 the United Nations and OECD will ask their Member countries to prepare a set of tables containing data which follow the new SNA definitions. The hope is that a powerful incentive will thus be provided for promoting a radical revision of each country's accounting system so that it can become an instrument increasingly suited to the requirements of modern society.

To increase agricultural trade :

INTERNATIONAL CO-ORDINATION

ONCE a potential importer can be certain that the agricultural products delivered to him will correspond exactly to what he has ordered, one of the main obstacles to trade is removed; namely, the lack of precise identification of the goods. The farmer's produce then acquires new value and trade is encouraged. All OECD action in the field of agricultural standardisation is based on this fact and aims at giving the importer confidence in product specifications which are guaranteed by official control in accordance with international standards.

The Committee for Agriculture is now taking stock of ten year's work along these lines. In key sectors of crop production and agricultural machinery, methods of international co-operation have been established, terminologies and classifications prepared and control methods adopted by common consent of the OECD countries. This need is so widely felt that some of the OECD schemes have been joined by non-member countries: South Africa, Cyprus, Israel, New Zealand and Poland — and by Yugoslavia.

The first subject to which the Organisation turned its attention was trade in seed. Three Schemes for the Varietal Certification of Seed moving in international trade are in operation at the present time, covering herbage seed, cereal seed, and sugar-beet and fodder-beet seed; a similar scheme with the same objective has also been introduced for the control of forest reproductive material moving in international trade.

Forty-one thousand tons of herbage seed were certified by the national authorities during the 1968-69 season, as against less than 3,000 tons ten years ago. Certification of other types of seed covered smaller quantities because the corresponding schemes are

more recent, but the volume is increasing rapidly.

This increase is easily explained: constant research makes it possible to improve seed and to determine what seed gives the best results in a particular region. The farmer who is aware of these research findings might hesitate to order the appropriate variety for his farm if he were not certain of receiving exactly that seed. Now he need not hesitate; mistakes that occurred frequently in the past have been eliminated and the national seed certification service in the producing country guarantees the nature of the seed.

The same concern is evident in the OECD Scheme for the application of international standards for fruit and vegetables. Standards (now covering 26 commodities) have been established jointly by the participating countries. The control services of the consigner country check that the product conforms to the markings on the consignment and issue a certificate of quality for the batch examined. Thus an importer ordering Royal Sovereign strawberries Class "Extra" or cauliflowers Class I from a member of the Scheme may be sure of the nature and quality of the produce delivered to him.

The process is as beneficial for the producer, as for the importer, since a satisfied purchaser is likely to reorder, and this benefits the producing country as a whole: thus the Mediterranean countries have been able to increase their foreign exchange resources through the expansion of their exports to the Scandinavian countries.

Fifteen OECD countries plus Yugoslavia and Israel have joined the Scheme for all or some of the products it covers, representing an annual flow of some 9 million tons. All OECD countries — and members of the United Nations or its specialised agencies — can apply

for membership. If they join the Scheme, they designate an authority — generally attached more or less directly to the Ministry of Agriculture — to be responsible for enforcing the standards and controlling their application; they undertake to observe the provisions of the Scheme in all trade with the other participating countries.

The OECD did not wish to confine the benefits of co-ordination to agricultural products only, but turned its attention also to agricultural equipment. It drew up a Standard Code for the official testing of agricultural tractors and — quite recently — another for the official testing of small engines used in agriculture and commercial horticulture.

Before the introduction of the Code, countries importing agricultural tractors from a variety of exporting nations had to do their own testing, in order to obtain valid comparisons, and for this purpose had to maintain expensive laboratories; as each country did so independently, this led to a substantial waste of time and money.

To remedy this, it was necessary that tractor models should be tested once and for all and the results of the tests recognised as valid in all countries. The OECD took the initiative of proposing a general agreement to this effect. The countries concerned agreed on specific common rules to be observed in official laboratory tests of tractors: in future it will be sufficient for a given tractor model to be subjected to these tests in an approved national laboratory. Only one testing is required.

The results are published in a special report and circulated extensively among those concerned. If a particular country wants to carry out a further series of tests, it is free to do so, but in practice it is unnecessary to extend the list of tests imposed by the Code. Standardisation in this field benefits the manufacturers, the farmers who can choose the model best suited to their needs, the farm management experts and the official testing stations for agricultural machinery. At the present time over half the agricultural tractor models produced throughout the world have been tested in accordance with the principles of the Code.

See table on pages 32-33

OECD MECHANISMS FOR INTERNATIONAL

Denomination	OECD Schemes for the varietal certification of seed moving in international trade		
	Herbage seed	Cereal seed	Sugar beet seed and fodder beet seed
Year created	1958	1966	1968
Coverage	Legumes and grasses	Oats, wheat, barley, rice, rye	Sugar beet and fodder beet
Member countries	All OECD countries plus Cyprus, Israel, New Zealand, Poland, South Africa, and Yugoslavia	Austria, Canada, Denmark, France, Germany, Greece, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland, Turkey, United Kingdom, Yugoslavia	Austria, Denmark, France, Germany, Italy, Netherlands, Sweden, Turkey, United Kingdom.
Scope	Common terminologies, varietal purity testing methods and procedures are adopted by countries joining the Schemes; the aim is to establish comparable standardised controls, not to judge whether the product should be accepted or rejected.		
Application	Basic seed and certified seed (one or more generations produced from basic seed) are produced by private firms or by official agencies. The national authorities guarantee in each country that the seed on sale complies with the particulars given by the producer. In the case of beet seed, they also guarantee the quality of the product.		
Administration	Once a year the representatives of the national authorities meet and appoint an Advisory Group. Progress is reviewed and recommendations for any necessary modifications in the Schemes are submitted to the Committee for Agriculture. The OECD is assisted by a Co-ordinating Centre (at present the National Institute of Agricultural Botany, Cambridge) which provides the necessary technical expertise and the facilities needed for the exchange of seed samples and for seed testing in trial plots.		
Other Organisations concerned	IIRB (International Institute for Research in Sugar Beet), ISTA (International Seed Testing Association), EEC, EUCARPIA (European Association for Research on Plant Breeding), FAO, FIS (International Seed Trade Federation), ICIA (International Crop Improvement Association), EPPO (Europe and Mediterranean Plant Protection Organisation).		

NAL CO-ORDINATION IN AGRICULTURE

OECD Scheme for the application of international standards for fruit and vegetables	OECD Scheme for the control of forest reproductive material moving in international trade	OECD Standard Codes for the official testing of agricultural machinery	
		Agricultural tractors	Small engines used in agriculture and commercial horticulture
1962	1967	1959	1969
Apricots, citrus, cherries, strawberries, peaches, pears, apples, plums, table grapes; artichokes, asparagus, carrots, ribbed celery, curl-leaved endives, Witloof, endives, cabbages, cauliflowers, Brussel sprouts, cucumbers, spinach, French beans, lettuces, onions, peas, broad leaved (Batavian) endives, tomatoes.	List of species in preparation.	All tractors with four driving wheels and some track-laying tractors.	In principle, all engines of 15 hp or under.
Belgium, Canada*, Denmark*, France, Germany, Greece*, Israel*, Italy, Luxembourg, Netherlands, Portugal, Spain, Switzerland*, Turkey*, United Kingdom, United States*, Yugoslavia*. * Countries applying the standards only for certain products.	Austria, Belgium, Denmark, Italy, Netherlands, Norway, Portugal, Switzerland, United States.	All OECD countries — except Canada and the United States — and Yugoslavia.	—
Quality standards are established at international level and imply the elimination of products not conforming to them. Standards relate to shape, colouring, sizing, permissible defects, packaging, presentation...		Common terminologies, testing methods and procedures are adopted by countries joining the Schemes; the aim is to establish comparable standardised controls, not to judge whether the product should be accepted or rejected.	
The national control service of the exporting country issues a certificate attesting that the consignment conforms to the Scheme's quality standards for the class (Extra, I or II) appearing on the label.	Control of forest reproductive material follows the same principles as seed testing, but the procedures are different owing to the slower rate of reproduction.	An official specialised agency in each country carries out laboratory tests on locally produced tractors and small engines. It prepares a technical report stating the characteristics of the equipment and its behaviour in different conditions. These technical reports are published for the benefit of users (importers, dealers, Agricultural Extension Services).	
Plenary meetings of representatives of national authorities have general powers to study all problems concerning the Scheme and to suggest modifications or extensions.	The Scheme is administered by means of periodic meetings of the national authorities designated to apply it. The first meeting was held in October 1969.	The Codes are administered by an annual meeting of the national authorities designated to apply them. The OECD is assisted by a Co-ordinating Centre (at present the Centre National d'Etudes et d'Expérimentation du Machinisme Agricole, France) which helps the Secretariat in all technical questions raised by the application of the Codes and carries out any experimental work to improve them. In other development work the Secretariat is assisted by the National Institute of Agricultural Engineering, United Kingdom.	
EEC, UN-ECE, Codex Alimentarius, FAO-WHO.	The same as for seed testing, plus IUFRO (International Union of Forestry Research Organisations).	EEC, CEMA (European Committee of Associations of Manufacturers of Agricultural Machinery), FAO, ISO, FIEI (Farm and Industrial Equipment Institute).	

ENERGY POLICIES IN TURKEY

Turkey, which after Norway possesses the highest hydro-electric potential in Europe and large reserves of lignite, faces special problems due to intensive use by the population of non-commercial forms of energy. The Turkish authorities are therefore taking steps to alter the pattern of consumption of the various energy resources. They have described the broad lines of their policy and the present energy situation in the country in a report to the OECD Energy Committee. The following article highlights some of the points made in the report.

The main question occupying the attention of the Turkish authorities in the energy field is the present pattern of energy resource utilisation. Energy resources in Turkey fall into two categories : commercial (coal, petroleum products, hydraulic energy, etc.) and non-commercial (wood and dried dung). It is the non-commercial resources which give rise to formidable problems in Turkey.

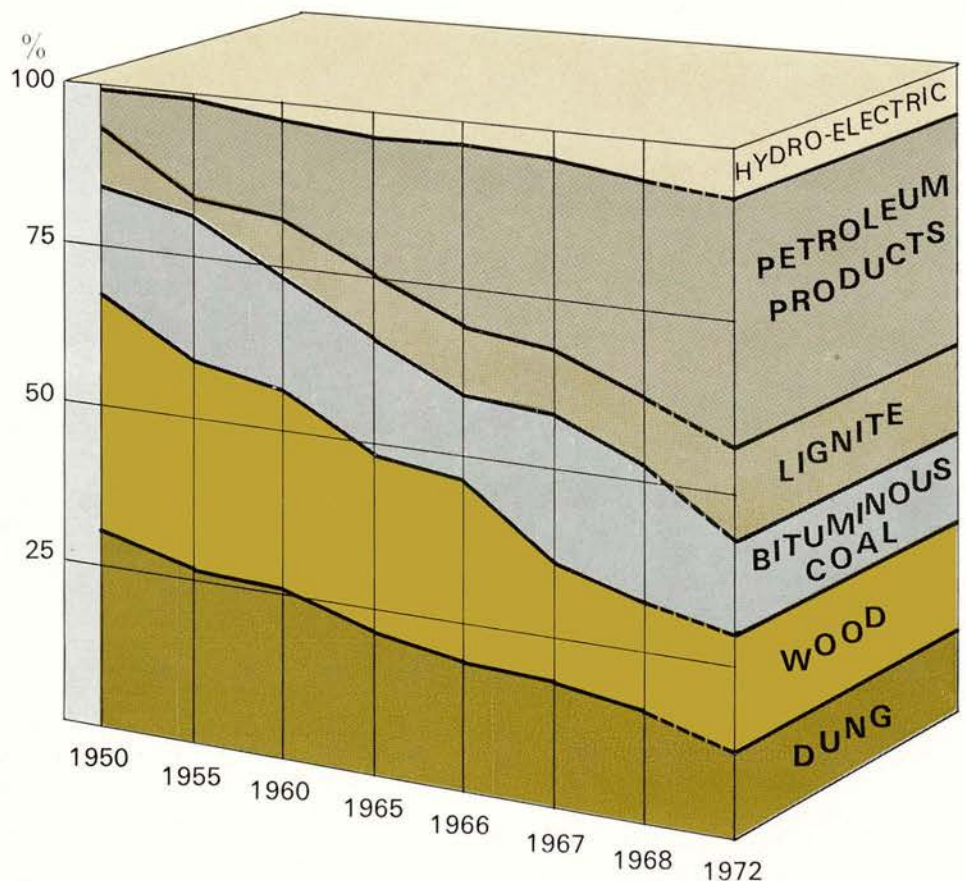
As far as wood is concerned, demand exceeds normal production by six to seven million tons. The inhabitants raid the forests to make up this shortfall. Some of this wood, which might otherwise be suitable for industrial purposes, is thus wastefully used for firewood. The result is deforestation and the erosion of fertile soil. Every year arable land is lost to farming and additional areas rendered barren. The Turkish authorities' aim is to reduce the consumption of firewood to a level such that the normal exploitation of the forests makes it possible to satisfy demand, while commercial fuels are used instead of firewood.

In the Central, Eastern and South-Eastern provinces, which have been denuded of forests, the inhabitants use dried dung to obtain the heat needed for cooking and heating. The soil is thus starved of nitrogen, its fertility is steadily reduced, and agricultural yields decline year by year.

The dung used for heating represents the equivalent of 60 million tons of wet manure. If this amount were spread over farmland in the proportion of 1 ton per decare, and the area thus treated put under wheat, an extra 4.5 million tons of wheat would be cropped every year with a value of T.L. 3.4 billion. Assuming that 50 per cent of this could be achieved by farmers, a crop increase of T.L. 1.7 billion in value would be possible.

It would take 5.75 million tons of lignite to replace the energy obtained from the half of the total dung output thus saved. The total cost of this lignite, at T.L. 120 per ton, would be T.L. 690 million. Subtracting this T.L. 690 million from T.L. 1.7 billion, there would still be an extra T.L. 1 billion accruing as increased incomes to farmers. If this were divided equally among the farmers, the incomes of 2 million families would be increased by about T.L. 500 per year. These figures prove that the manure on the farms

1. THE PERCENTAGE CONSUMPTION OF VARIOUS TYPES OF ENERGY RESOURCES



should not be burned as dung for heat, but used as fertilizer. The Turkish authorities consider therefore that it is essential for the development of Turkey's economy that lignite be used for heating in place of dung.

A start has already been made in the move away from non-commercial sources of energy. The percentage of wood used in total energy consumption declines every year (36.1 per cent in 1950, 20.8 per cent in 1968). The percentage of dung used fell from 31 per cent in 1950 to 16.7 per cent in 1968, the absolute amount of dung used as fuel having been kept almost constant. But the Turkish authorities wish to speed up this trend, and this means increasing the production of commercial fuels by enough to offset the decline in the consumption of non-commercial fuels, and ensuring that commercial fuel prices are held at levels that consumers are willing to accept them as substitutes.

Turkey is now well into its second Five-year Plan (1968-1972), and the energy sector is playing a vital role in it. In the first plan (1963-67),

7.3 per cent of total investment was devoted to the energy sector; in the second, its share has risen to 8 per cent. This indicates the increased importance attached by the Turkish authorities to energy problems.

Another indication of the high priority accorded to this sector was the regrouping in 1964 of all the agencies concerned with energy under the direction of the Ministry of Energy and Natural Resources. The Energy and Resources Department, a central department of the Ministry, is in charge of the planning and co-ordination of energy resources, the technical control of all activities, and the control of the operational agencies. The Petroleum Department is responsible for granting licences for petroleum surveys and operations, and for other related activities. The Liquid Fuel Division deals with pricing questions.

The same Ministry supervises the work of several other agencies; the Mineral Research and Exploitation Institute, the Electrical Surveys and Planning Administration, and the State Hydraulic Works Directorate, which is

responsible for the construction of large dams, while the operation of power plants and the transmission of electricity is done by a special agency, Etibank. Another official body, the Coal Mines Authority of Turkey, is responsible for part of the production of lignite, the rest being handled by a number of private companies. Crude oil production is in the hands of Turkish and foreign private companies. A government-owned company, T.P.A.O., also produces petroleum, and owns the refinery at Batman, the pipeline between Batman and Iskenderun, and a part share in the refinery at Ipras. It is also building a refinery at Izmir.

The energy policy of Turkey can be summed up as follows :

- to develop the various primary energy resources existing in the country, and meet the entire energy demand from these resources;
- to substitute commercial sources of energy for non-commercial ones which have an important place among the other natural resources and which have a harmful effect on the country's economy when used as fuel.

The breakdown of the energy resources consumed in Turkey is given in Chart 1. The relative decline in the amount of non-commercial energy resources used is evident — it has fallen from 67.1 per cent in 1950 to 37.5 per cent in 1968. Chart 2 shows the increase in per capita energy consumption. The situation as far the main primary energy resources are concerned is as follows :

BITUMINOUS COAL

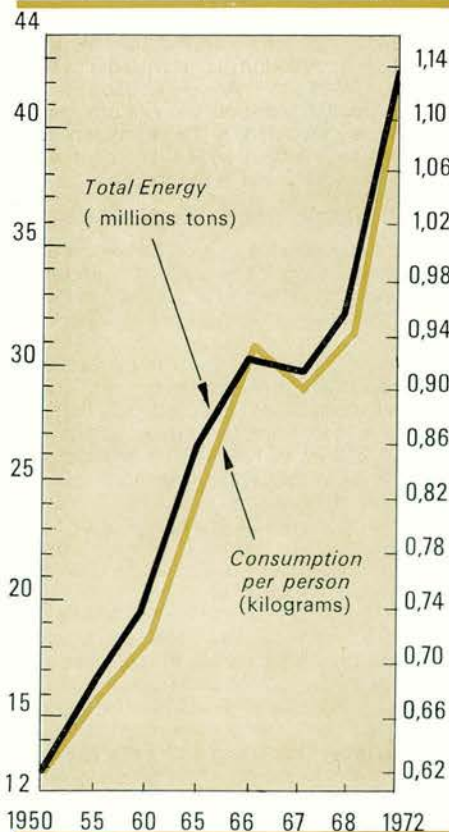
The only location where coal is mined in Turkey is Zonguldak. This bituminous coal meets a large part of domestic demand for industrial energy. As mining progresses, coal is extracted from seams of increasing depth, which adds to mining problems and the need for further investment. The coal of this region has an average heat value of 6,300 kcal per kilogram. Geologic and underground investigations give the following reserves position (in millions of tons) :

Proven resources	233
Probable resources	293
Possible resources	404
Geologic resources	458
TOTAL	1,388

Coal output is steadily increasing, but not as fast as total energy consumption. As a percentage of that total, coal consumption declined from 21.8 per cent in 1950 to 14.8 per cent in 1968. Industry is the largest user of bituminous coal.

The output figures for coal-derived products are given in Table 4. Manufactured gas plants meet city demands in Ankara, Istanbul and Izmir. Other plants produce both coke and gas. As the

2 - TOTAL AND PER CAPITA ENERGY CONSUMPTION IN TURKEY (in coal equivalent values)



supply of coal in Turkey is limited, the authorities consider that it should be reserved for the production of smelting coke for the iron and steel industry, whilst coke for domestic heating could be made from lignite or a mixture of lignite and coal. Petroleum products, natural gas, electricity and solar energy are also being considered as substitutes for manufactured gas.

LIGNITE

Lignite fields are found in almost every part of Thrace and Anatolia. The average heat value of these deposits is 4,200 kcal per kilogram. There are proved reserves of 167 million tons. Studies made by specialists under the German technical aid programme have pushed up the figure for estimated reserves to 4,200 million tons.

These studies have revealed lignite fields in Elbistan suitable for open-cast mining. Feasibility studies are under way for the utilisation of this lignite for the production of briquettes, electric power, and fertilizer to meet the requirements of the Eastern and South-Eastern regions of Turkey.

The share of lignite in total energy consumption is increasing year by year. It rose from 4.8 per cent in 1950 to 11.4 per cent in 1968. The Turkish authorities consider it essential that this trend should continue and that lignite for domestic heating should replace coke, wood and dung, thus allowing these products to be put to better use.

(continued on page 36)

3 - GROSS PRODUCTION OF ELECTRICITY IN TURKEY

(in '000 kWh and percentage)

Year	Hydraulic	%	Thermal	%	Total	Production per person (kWh)
1950	30,100	3.8	759,524	96.2	789,624	38
1955	89,150	5.6	1,490,868	94.4	1,579,818	65
1960	1,001,410	35.6	1,813,622	64.4	2,815,072	101
1965	2,167,200	43.9	2,774,300	56.1	4,941,500	157
1966	2,317,800	41.9	3,217,200	58.1	5,535,000	172
1967	2,369,600	38.4	3,796,900	61.6	6,166,700	187
1968	3,177,500	46.1	3,708,300	53.9	6,885,800	204

PETROLEUM PRODUCTS

One of the principal policy objectives is to increase petroleum production to cover domestic demand. There are known reserves of 55 million tons, but as Turkey is in the middle of the large petroleum fields of the Middle East, it is likely that total reserves are in fact much larger. Exploration has begun, and the first oil wells have been drilled at Raman and Garzan by the Mineral Research and Exploration Institute. Some foreign petrol companies have found other petroleum deposits.

Three stages are envisaged in long-term policy objectives for petroleum in Turkey: first, to increase local refining capacity and cut out the need for imports of petroleum products; second, to increase the local production of crude oil so that imports of crude are no longer necessary; and finally, to push the local production of crude oil to the stage where Turkey can become an exporter of crude oil or refined products.

The first stage has been achieved. The refineries at Ipras, Batman and Mersin are refining local and imported crude oil. Another refinery is under construction at Izmir.

The second stage is already underway. National crude oil production has risen from 17,537 tons per year in 1950 (3.5 per cent of total consumption) to 2,751,720 tons in 1967 (48 per cent of total consumption). A 494 km-long pipeline with a capacity of 3,650,000 tons per year is now in operation.

To encourage foreign investment, Turkish Law No. 6326 on petroleum provides for total tax exemption on all activities judged to be in the country's economic interest.

Liquified petroleum gas, a by-product of the refineries, is used in towns of medium size. Consumption is rising steeply. The Ipras refinery was the first to produce liquified gas. It has a capacity of 45,000 tons. New plants are now in operation in other refineries. Total annual capacity will rise to 118,000 tons, and will be even greater when plant for the production of this by-product is constructed at the Izmir refinery.

HYDRAULIC ENERGY

Studies made in collaboration with the United Nations Economic Commission for Europe show that the economically developable hydro-electric potential of Turkey is

90 TWh per year, the largest in Europe after Norway's. Electrical energy production increased by 1,000 per cent between 1950 and 1968, and yet, in that year, only 3.3 per cent of hydraulic potential was being exploited.

Progress has been made with the construction of the Keban and Gökçekaya power stations, which produce an average of 6 TWh per year. The third five-year plan also provides for the construction of further power stations at Karakaya-Karababa. Estimates show that 17 per cent of the hydraulic potential will be developed by 1972, and 46 per cent by 1982. At the latter date, 66 per cent of total electrical energy production will be from hydraulic resources. But because of the amount of investment required and the irregular rainfall, the Turkish authorities consider that the highest economic performance will be obtained by a combination of thermal and hydraulic energy.

In 1966 only 36 per cent of the inhabitants had electricity in their homes, but electricity production is increasing very rapidly (Table 3). As distribution networks spread, the population will use more and more electricity. Consumption is expected to increase by 14 per cent per year in the course of the second plan.

WOOD AND DRIED DUNG

Wood still remains one of Turkey's most important energy sources. At present yearly demand ranges from 13 to 15 million tons. On the other hand, normal firewood production from the forests is about 6 million tons. The increase in the production of wood has not kept pace with the growth in population, and the production of wood declined from 264 kg per capita in 1963 to 236 kg in 1967. The production of firewood should reach 8 million tons in the course of the second plan, but it will still be far short of total demand. Hence the need already noted above to replace wood by lignite. The same is true for dried dung, which must be restored to the farms for manure. The Turkish authorities intend to undertake the measures necessary to ensure that this happens. But it should be noted that the complete elimination of wood and dung as fuels is bound up with gross national income per inhabitant. When Turkey has reached the stage of development foreseen in the second plan, the population will have a standard of living

high enough to permit it to purchase commercial fuels.

OTHER RESOURCES

Studies are in progress in Turkey on the utilisation of atomic energy for peaceful purposes. The Mineral Research and Exploration Institute has found uranium deposits which could supply a nuclear plant of 350 MW capacity for 20 years, or one of 500 MW capacity for 15 years. Natural gas deposits exist at Çiralik. Other deposits have been discovered but studies have not yet been made of these reserves to determine their suitability for economic uses. Opportunities exist for exploiting geothermic energy in the regions of Tekke and Kizildere, similar to the Larderello region in Italy, which produces 2 to 3 TWh. The Mineral Research and Exploration Institute is studying this question. Solar energy received daily from the sun's radiation in Turkey is the equivalent of 350 million tons of coal. The Turkish authorities consider that some of this energy must be utilised. In some Turkish cities, hot water is obtained from experimental apparatus with collectors.

4 - PRODUCTION OF COKE AND MANUFACTURED GAS

Year	Coke ('000 tons)	Manufactured Gas (million cubic metres)
1950	457	166
1955	706	276
1960	731	301
1965	1,459	499
1966	1,592	508
1967	1,307	518
1968	1,421	667
1972	(1,849)	(582)

5 - CONSUMPTION OF LIQUIFIED PETROLEUM GAS

(In tons)	
1961	630
1962	6,063
1963	11,155
1964	23,806
1965	46,922
1966	80,156
1967	(109,000)
1968	158,233
1972	(422,000)

CAN DEVELOPMENT ASSISTANCE BE MORE EQUITABLY DISTRIBUTED?



How should the limited supply of aid funds be “rationed” among the more than 100 developing countries so as to contribute most to development?

Should preference be given to those with the greatest “need”?

And how is need to be defined?

To those with the best “performance”?

Should this be measured on the basis of “effort” or “achievement”?

And how should the country’s own performance record

be distinguished from chance factors such as the discovery of oil?

This problem is a recurrent one in the discussions of OECD’s

Development Assistance Committee, the aim being not only to help individual donor countries develop objective criteria for aid distribution

but also to encourage co-ordination so that these individual efforts add up to a more rational allocation pattern for the developing world as a whole.

It is one of the subjects discussed in the 1969 Report of the DAC Chairman which has just been published and which forms the basis of the following article. Other problems treated in this report will be the subject of articles in later issues of the OECD Observer.



In preparing a strategy for the Second Development Decade, one of the questions that has arisen is how the distribution of aid as between countries might be improved. Better aid distribution, it is felt, can be a major tool to enhance effectiveness both of resource transfers and of the efforts of the recipients, the latter being always the most important contribution to the final result.

What governs present aid distribution

The allocation of bilateral assistance among less developed countries depends on decisions made by the individual donor countries (1). These decisions have been influenced by the existence of historical, political, linguistic, monetary and commercial links between individual donors and recipient countries. The relative weight of these factors, acting separately or in combination, varies to a considerable extent from one country to another. Since these factors are not usually subject to rapid modification, changes in the basic geographical distribution have been slow, and many assistance programmes are still heavily concentrated on certain recipient countries and regions. However, some of these donors have recently begun to diversify their programmes slightly while other countries, which have in the past been more global in their aid distribution, are now seeking to concentrate on fewer countries. (See insert page 38 for the pattern of individual donor countries’ official aid flows.)

While “gap” studies — that is, estimates of the assistance requirements of individual countries — have in general had little influence on donors’ decisions with respect to their aid allocation, a factor that has influenced the distribution of aid is the specific resource requirements estimates made for a few countries, notably those for which consortia have been set up (India, Pakistan, Turkey) but also to some extent for those with consultative group arrangements. Group members have in general made a serious collective effort to meet, or approach, the aid requirement figure emerging from these evaluations.

A number of donor countries, especially the smaller ones, unable to staff their own aid evaluation programmes, rely on the existence of such groups and the objective guidance provided as an assurance that their aid to such countries is needed and will be well used. The consequence is that a large portion of the aid

(1) The discussion relates only to official flows, the direction of private flows being governed by other considerations.

1. TOTAL NET OFFICIAL AID RECEIPTS OF 82 DEVELOPING COUNTRIES
Annual average 1966-68 as a percentage of imports, of GDP and per capita

Countries	Official aid as a percentage of Imports of Goods and Services (1)		Official aid as a percentage of GDP (2)		Official aid per capita (3)		Countries	Official aid as a percentage of Imports of Goods and Services (1)		Official aid as a percentage of GDP (2)		Official aid per capita (3)	
	%	Rank (4)	%	Rank (4)	\$	Rank (4)		%	Rank (4)	%	Rank (4)	\$	Rank (4)
Laos	217.8	1	34.9	1	24.4	8	Cambodia	13.0	42	1.3	63	2.0	71-72
Afghanistan	71.6	2	3.0	39	2.5	67	Brazil	11.9	43	0.9	67-68	2.4	68
Rwanda	67.9	3	10.0	9	4.0	52-55	Nigeria	11.8	44	2.0	55	2.3	69-70
Vietnam (South)	54.3	4	20.3	2	27.5	5	Ecuador	11.5	45	2.1	52-53	4.9	46-47
Mali	53.2	5	5.6	18	4.0	52-55	Ceylon	11.3	46	2.4	46	3.5	58-59
Upper Volta	53.2	6	7.9	13	4.0	52-55	Sierra Leone	11.1	47	2.7	43	4.1	51
Niger	50.7	7	8.0	12	6.4	36-37	Guyana	10.1	48	6.3	16	19.4	9
Chad	50.2	8	7.6	14	5.9	40	Ivory Coast	9.9	49	3.8	31	9.8	19
India	43.8	9	3.1	37	2.3	69-70	Haiti	8.3	50	1.4	61	1.0	79
Dahomey	39.9	10	9.0	10	7.1	29-31	China (Taiwan)	8.0	51	2.2	51	5.4	43
Pakistan	35.9	11	3.6	32	4.0	52-55	Zambia	7.7	52	4.0	30	11.4	15
Somalia	34.9	12	14.2	5	7.1	29-31	Mauritius	7.7	53	3.0	40	7.5	26
Mauritania	34.5	13	5.5	23	7.1	29-31	Panama	7.4	54	2.6	44	14.2	13
Tunisia	32.1	14	8.2	11	18.3	10	Costa Rica	7.4	55	2.3	48	9.9	18
Jordan	30.8	15	11.8	6	25.9	7	Nicaragua	7.3	56	2.9	41	9.7	20
Madagascar	29.6	16	5.9	19	6.8	33	Sudan	7.3	57	1.5	60	1.5	76
Malawi	29.4	17	11.0	7	7.0	32	Philippines	7.1	58	1.6	58	2.8	62-65
Congo (Brazzaville)	29.2	18	16.4	3	27.7	4	Honduras	7.0	59	2.3	49	5.2	45
Senegal	29.1	19	5.6	21	12.6	14	Israel	6.7	60	2.3	47	30.7	3
Liberia	27.8	20	15.0	4	31.6	2	Uruguay	6.0	61	0.9	67-68	4.8	48
Turkey	25.6	21	2.0	56	6.2	38	Guatemala	6.0	62	1.2	65	3.6	56-57
Indonesia	25.5	22	3.0	38	1.9	73-74	El Salvador	5.9	63	1.7	57	4.7	49
Congo (Kinshasa)	25.5	23	5.6	20	5.3	44	Thailand	5.8	64	1.4	62	1.9	73-74
Dominican Republic	24.5	24	5.2	25	14.3	12	Peru	5.4	65	1.1	66	4.5	50
Togo	24.0	25	6.3	17	6.7	34	Mexico	5.2	66	0.5	74-75	2.6	66
Korea (South)	23.7	26	6.5	15	8.5	23	UAR (Egypt)	5.1	67	0.7	70	1.4	77
Ghana	22.4	27	2.8	42	8.8	21-22	Jamaica	4.8	68	2.0	54	10.8	16
Cameroon	22.1	28	5.4	24	7.2	28	Venezuela	4.3	69	0.8	69	8.3	25
Ethiopia	21.2	29	2.5	45	1.6	75	Malaysia	4.0	70	1.6	59	4.9	46-47
Tanzania	19.7	30	4.3	28	2.9	61	Iran	3.8	71	0.7	71	2.0	71-72
Colombia	19.4	31	2.1	52-53	6.6	35	Yugoslavia	3.3	72	0.6	73	2.8	62-65
Bolivia	19.2	32	5.0	27	8.8	21-22	Spain	2.8	73	0.4	77	3.3	60
Uganda	19.0	33	3.2	36	2.8	62-65	Lebanon	2.5	74	1.3	64	6.0	39
Gabon	19.0	34	5.5	22	26.9	6	Greece	2.3	75	0.5	76	3.5	58-59
Paraguay	18.7	35	3.2	35	7.3	27	Iraq	1.9	76	0.3	78	0.9	80
Algeria	16.5	36	4.2	29	8.4	24	Cyprus	1.3	77	0.5	74-75	3.6	56-57
Chile	15.3	37	2.2	50	16.3	11	Trinidad & Tobago	1.2	78	0.7	72	5.5	42
Kenya	15.2	38	5.0	26	5.8	41	Kuwait	1.0	79	0.2	79	10.7	17
Malta	14.6	39	10.3	8	53.8	1	Libya	0.5	80	0.2	80	1.3	78
Morocco	14.6	40	3.5	33-34	6.4	36-37	Saudi Arabia	-2.8	81	-1.0	82	-2.3	82
Guinea	13.8	41	3.5	33-34	2.8	62-65	Argentina	-3.9	82	-0.2	81	-2.0	81

1. Imports of goods and services 1967.
 2. GDP data, 1966.

3. Population data, 1967.
 4. Ranking based on data calculated with two decimals.

volume of a number of donors is concentrated on countries for which consultative arrangements exist.

How aid is presently distributed

What is the actual pattern of aid distribution as it has emerged? To answer this question it is obviously not enough to compare the dollar amounts received, these differing widely from country to country. A more conventional method is to see what each country

has received *per capita* of its population. But this is not the only and perhaps not the best measure. Insofar as foreign exchange constraints are the major obstacle to faster development, the contribution of aid to foreign exchange availabilities as expressed by imports of goods and services is relevant. A third measure would be to express aid as a percentage of investment, indicating what proportion of that other bottleneck to growth — capital for investment — had been contributed by aid. Unfortunately, investment (and savings) data of even reasonable quality

2. TOTAL NET OFFICIAL AID RECEIPTS BY CERTAIN GROUPS OF RECIPIENT COUNTRIES

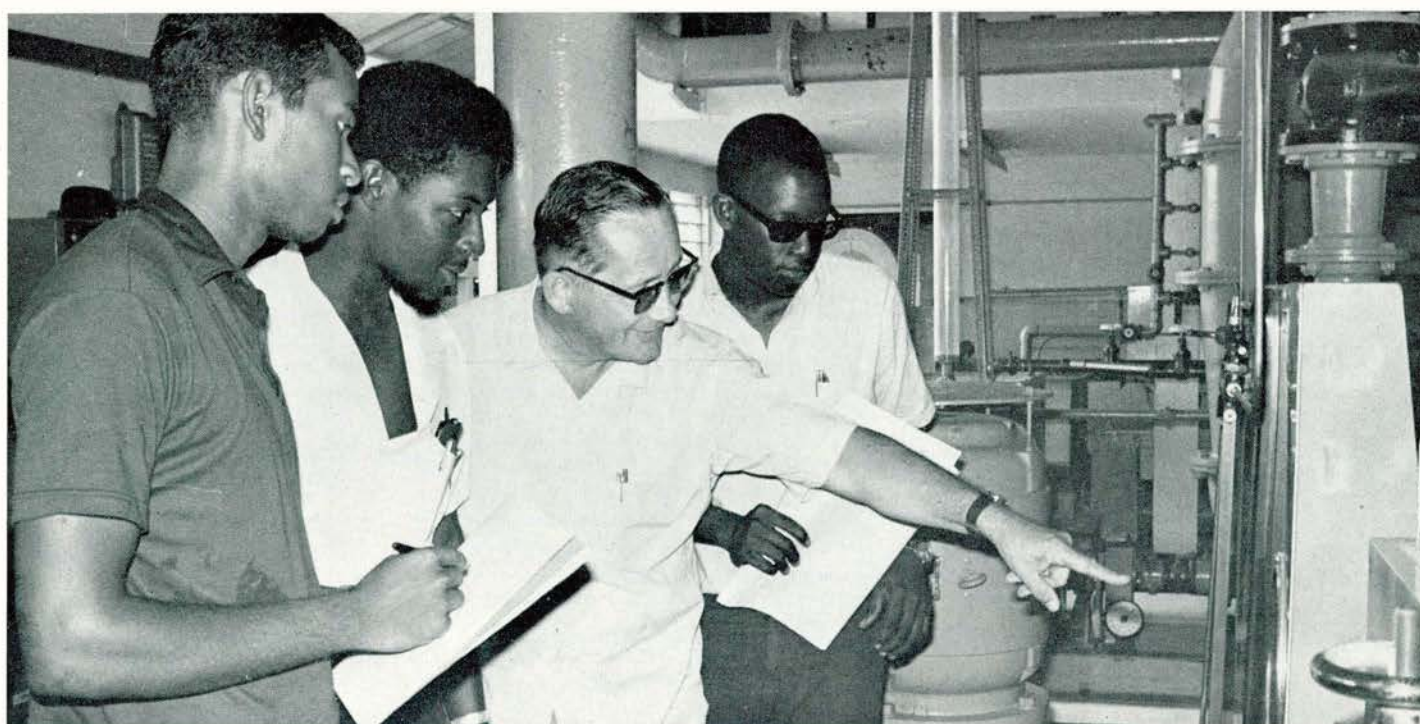
per capita, as a percentage of imports and of GDP

Groups of Countries	Official aid receipts 1966-1968 per annum		
	\$ per capita	As % of 1967 im- ports of goods and services	as % of 1966 GDP
Oil-producing countries	2.91	3.42	0.79
Consortia and Consultative Group Countries	3.00	20.72	2.73
Independent Countries with Spe- cial Links	3.95	20.71	3.76
Commonwealth	2.97	22.79	3.00
French Franc Area	8.22	16.71	5.53
US Special Links	7.82	19.36	5.16
Belgium - Special Links	4.78	29.20	6.11
Italy - Special Links	7.08	34.87	14.65
Dependencies	17.06
French Overseas Departments and Territories	167.43
UK Overseas Dependencies	5.69
Netherlands Overseas parts of the Kingdom	40.47	..	9.54
Australian Trust Territories	44.07	88.30	31.50
US Trust Territories	27.39
Portuguese Overseas Provinces ...	2.17	..	1.74
Other Developing Countries	2.76	7.64	0.95
Europe	3.13	2.97	0.48
Africa	2.17	11.54	1.66
America	3.15	7.71	0.75
Middle East	8.87	7.56	2.51
Other Asia	1.70	24.00	2.40
TOTAL DEVELOPING COUNTRIES	4.23	15.30	2.69



are available for only relatively few countries. As an alternative, the ratio of aid to gross domestic product has been used; this gives some measure of the importance of aid to the economic system as a whole, whether its primary role is to add to investment, maintain consumption or help pay for imports.

(Continued on page 40.)



These three different measures give widely differing results as shown in Table 1. Of the top ten recipients of aid, expressed as a percentage of imports, only four are also among the top ten which regard to aid receipts as a percentage of GDP, and only two with regard to per capita aid receipts. The largest recipient in absolute terms, India, ranks as number 9 according to aid receipts as a share of imports of goods and services, as number 37 as a percentage of GDP and as number 69 on a per capita basis.

Ranking the developing countries with regard to their aid receipts in terms of the three alternative measures shows, for example, that 50 per cent of total aid is received by (i) countries having only 21 per cent of the total population of the less developed countries; (ii) countries having only 19 per cent of total product and (iii) countries having only 14 per cent of total imports of the developing countries. Grouping recipient countries according to certain characteristics (see Table 2) reveals spectacular discrepancies in aid receipts between different groups,

whether these are expressed in per capita terms or as a proportion of imports or GDP.

Taking per capita receipts as an example, it can be seen that whereas the overall average in recent years was \$4.23 per capita per year, oil-producing countries received only \$2.91 which is understandable on the grounds of their smaller aid requirements. The average receipt of \$3 for the consortium-consultative group countries appears puzzling since these countries do not appear to be favoured by virtue of the fact that such consultative arrangements have been created for them. The average for this group is of course highly influenced by the receipts of India (and to a lesser extent Pakistan). The independent countries with special links to certain donors received on average just under \$4 per head, but within this group there are wide variations: while the Commonwealth countries received under \$3, the French franc zone recipients received over \$8.

Perhaps the most striking picture is that of the dependencies which on average receive \$17.06 per

WHERE OFFICIAL DEVELO

With respect to the geographical distribution of their aid, DAC Member countries can be divided into three categories: the first group, whose pattern of aid allocation is mainly governed by historical, political and economic links, includes Australia, Belgium, France, the Netherlands, Portugal and the United Kingdom.

The second group is composed of countries which do not have historical or political links with certain recipients, but which, nevertheless, have decided to concentrate their aid on a few countries of "first choice". To this group belong the Scandinavian countries, Canada and Japan.

The third group, consisting of the United States, Germany, Italy, Austria and Switzerland, includes those programmes whose allocation of aid is rather widespread over many recipient countries in different regions of the world.

The main policies which govern the geographical distribution of official assistance of the individual bilateral donors can be summarised as follows:

The allocation of *Australia's* assistance has been mainly motivated by the virtually complete responsibility Australia has assumed under a UN Trusteeship agreement for Papua and New Guinea, absorbing about two-thirds of the total aid programme. The remainder of the bilateral capital assistance goes to less developed countries in South and South-East Asia, mainly under the auspices of the Colombo Plan, SEATO, the Indus-Basin Fund and the Laos-Stabilisation Fund. A policy change in 1966 led to increased aid to Indonesia, which has now replaced India as the major recipient after the Trust Territory. Technical assistance has been given on a wider basis but largely to Commonwealth countries.

In recent years, the *Austrian* aid policy

has aimed at geographical concentration on countries with which it has traditional trading ties — Greece, Yugoslavia and Turkey (which absorb about a third of disbursements) — and on India, Iran, Pakistan and Thailand (which together receive nearly half).

The geographical distribution policy of *Belgium* was marked by its special links with its former dependencies in Africa until the last three years, when a deliberate attempt was made to spread aid over a larger number of countries. New aid agreements with Cameroun, Ivory Coast, Senegal and Indonesia have led to a drop of disbursements to the Congo (Kinshasa) from over four-fifths of total bilateral aid in 1965 to under two-thirds in 1967. However, the Belgian authorities now intend to revert to their former policy of aid concentration on the former dependencies, notably the Congo (Kinshasa), but also Rwanda and Burundi.

The announced aid allocation policy of *Canada* has given priority to developing countries where Canada has important interests and which have mobilised and effectively used resources for development. This has favoured countries for which consortia or consultative groups have been set up — notably India and Pakistan which received substantial contributions — or where growth priorities have been firmly established. It is intended to intensify this pattern in order to further improve the link between Canadian aid, recipients' performance and the contributions made by other donors. Apart from this major thrust, Canada has recently added to its previous special role in the former United Kingdom colonies in the Caribbean a more active interest in aid to francophone Africa and to Latin America.

The *Danish* aid policy aims at concentrating on certain relatively poor countries,

all of which have received Danish assistance in the past and with whose administrations firm relations have been established. These are principally Kenya, Tanzania, Uganda, Malawi, Zambia and India.

The allocation of *French* assistance is governed by continued special interest in countries forming part of the franc zone, i.e. its own overseas departments and territories, as well as the African and Malagasy states and former dependent countries in North Africa, especially Algeria. A recent deliberate effort to spread more French capital aid to countries outside the franc zone has resulted in raising their share in net official aid disbursements from 5 per cent in 1963 to 15 per cent in 1967, but a further sizeable increase is not expected. This aid has been on considerably harder terms than that provided for countries with present or former political ties to France. With respect to technical assistance — an important share of the total aid effort — a more flexible policy has been adopted vis-à-vis countries outside the franc zone.

In the absence of traditional links with developing countries, the *German* aid policy has been increasingly guided by the principle that assistance should be mainly directed to countries which are able and willing to use it most productively. Besides this emphasis on self-help performance, other criteria such as special needs, friendly relationship, political considerations, have also influenced German aid allocation, which has as a result remained rather scattered.

Italy's aid allocation to less developed countries has been largely influenced by the type of assistance extended: some capital projects were concentrated on Nigeria, Tanzania and Zambia; consolidation and refinancing credits benefited Yugoslavia,

head i.e. four times the average for all less developed countries. Among the other developing countries, those in Latin America received \$3.15, also somewhat less than the average. Similar patterns emerge when the comparison is made on the basis of aid receipts as a share of imports or GDP.

The studies on aid distribution carried out by the DAC Secretariat point to several other features of present aid distribution.

● *The Inertia of Aid*

A striking feature is the virtual absence of change in the collective aid distribution to countries from one year to another. Donor-recipient relationships, once firmly established, are not likely to change rapidly. Shifts in these patterns are both politically difficult and undesirable from the point of view of the recipient country where aid often finances large development undertakings in yearly tranches. As normal as this pattern is, it shows that newcomers on the recipients' side or countries where aid needs rise rapidly

over time face some difficulty in fitting their claims into an existing pattern, the room for manoeuvre being limited to the increment in the aid volume from one year to another.

● *The "Small Country Effect"*

In past official aid allocations, there has been a marked tendency for each recipient country to receive a minimum amount, regardless of its size, plus a certain amount related to the size of its population. For example, in 1964-67, each country received an average of about \$18.6 million plus \$2.30 per person as net bilateral official assistance. This pattern, however, should be looked at as an *ex post* phenomenon rather than as the result of a deliberate distribution policy. What makes it noteworthy is the high degree to which it provides a statistical explanation of aid distribution.

● *The Rationality of Present Aid Flows*

It is argued — and rightly — that the present geographical pattern of aid flows is not a wholly

DEVELOPMENT ASSISTANCE GOES

Argentina, Brazil and, more recently, Indonesia; grant aid has been concentrated on Somalia where Italy has maintained a special interest.

An increasing number of Asian nations have come into the orbit of Japan's assistance programme, major recipients being Indonesia, India, South Korea, Pakistan, the Philippines and Taiwan. Special stress is placed on the need for self-help by recipients. Japan's technical assistance is also concentrated on Asia, but covers in all over 70 countries in all the less developed regions.

After the discontinuation of aid to West Irian in 1963, the Netherlands decided to widen the geographic scope of its capital assistance programme. Previously it had been heavily concentrated on the overseas parts of the Kingdom, Surinam and the Netherlands Antilles. These have retained priority, but in addition capital assistance is now extended to countries for which consortia or consultative groups have been organised in order to benefit from the collective assessment of these groups. As a result, apart from the overseas territories (which received 40 per cent on average in 1964-66), aid went primarily to Greece, Turkey, India, Pakistan, Colombia, Nigeria, Sudan and Tunisia.

The growing number of consultative groups and the Netherlands' limited aid resources have recently led to a reappraisal of this policy. The Four-year Plan for Netherlands' development aid, 1968-71, stipulates that geographic concentration on a number of specific developing countries should be based on the existence of an aid-coordination arrangement and on the Netherlands' expertise in development co-operation with the country concerned. The following countries have been selected: India, Sudan, Tunisia (financial assis-

tance); Indonesia, Pakistan, Peru, Colombia, Nigeria, Kenya, Tanzania and Uganda (financial and technical assistance). Surinam and the Netherlands Antilles retain their high priority.

In view of its limited resources, Norway has followed the principle of concentrating aid on a few recipients with whom it has established close co-operation: the East African countries, Zambia and India.

Portugal's aid is exclusively devoted to the development of its overseas provinces, mainly Angola and Mozambique.

Sweden's aid allocation policy has been characterised by the principle of concentration on a few countries and a limited number of activities. Major recipient countries have been selected inter alia on the basis of past aid experience and individual judgments on development planning: Ethiopia, Kenya, Sudan, Tanzania, Tunisia, India and Pakistan.

Switzerland has not professed any geographic preferences. Recipients of capital aid are selected on the basis of their self-help efforts, broadly defined. Technical assistance is concentrated primarily on very poor developing countries.

The United Kingdom devotes about 90 per cent of its bilateral aid to Commonwealth countries. It sees no intrinsic virtue in a policy of geographic concentration since it is, in the case of many small recipients, often virtually the only donor. While not attaching firm self-help conditions to the extension of aid, the United Kingdom is concerned with measures to assure the efficiency of a particular transaction. In a recent statement, the Minister of Overseas Development endorsed the view of the Estimates Committee that "subject to the basic moral purpose of the aid programme, aid should be increasingly concen-

trated on those countries which offer the greatest potential markets".

For the United States there has been a continuous trend towards geographic concentration to improve the efficiency of the assistance programme. In 1966, the Congress laid down the principle that — apart from Latin American countries covered by the Alliance for Progress — no more than 10 countries should receive development loans and only 40 countries technical assistance. The number of these countries, however, was later expanded under the discretionary authority of the President to waive this limit in certain cases. Renewed emphasis has also been placed on the self-help initiatives of less developed countries and the linking of US assistance to such initiatives.

In fiscal year 1969, the US Congress prescribed that 14 countries would receive four-fifths of the AID programme, of which three-fifths were to be extended to 11 "developing-emphasis" countries where aid programmes can roughly be characterised as: (a) "building up momentum" (Morocco, Congo [Kinshasa], Indonesia); (b) "midstream" (India, Pakistan, Chile, Colombia, Tunisia, Ghana); and (c) "phasing down as countries make a successful transition to self-sustaining development" (Turkey, South Korea). One-fifth would go to the three countries most affected by the war in South-East Asia — South Vietnam, Laos and Thailand.

The distribution policy for food aid under Public Law 480 has been mainly based on considerations of need. Over 50 per cent has normally been absorbed by India and Pakistan; other major recipients are Indonesia and Brazil. Export-Import Bank loans are extended on the basis of promoting United States exports and the recipient's creditworthiness.

“rational” one, at least from the standpoint of promoting development, both in the sense that it is not based upon common objective developmental criteria and that the sum of individual bilateral and multilateral donor flows does not always even out inequities arising from decisions by other donors.

Donor aid agencies are not entirely free to allocate their assistance in accordance with development criteria. Traditional ties with certain developing countries, their political and commercial interests as well as other considerations set inescapable boundaries to the allocation process.

Even if they were completely free, it could hardly be expected that they would all reach the same conclusions about individual cases. These conclusions are by necessity based on value judgments, for example with respect to how much weight should be given to the “need” of developing countries or, alternatively, to their capacity to make effective use of the assistance provided. This is a choice between essentially humanitarian and economic objectives which, unfortunately, sometimes compete with, rather than support, each other. Although a unit of growth may require a higher aid input in a poorer country than in a richer one, this may still be desirable in order to reduce inequities in welfare among the less-developed countries.

Within the development framework, one must also choose between buying more development, which may be based in part on fortuitous circumstances like oil discoveries, and rewarding self-help policies that seem to be sensible, even though progress may be slower if the initial resources are relatively meagre. Another dilemma is inherent in the choice as to whether objective performance achievement or subjective self-help effort is more important to long-term development in the economic, the social and the political field.

The underlying value judgments are further complicated by the manifold conceptual and statistical problems which prevent a distinct identification of such notions as “need”, “performance” and “self-help”.

The final aid allocation pattern which emerges then is a balance — different for each donor and often cumulating for all donors quite erratically — between a variety of considerations — not all of which are directly development promoting. Nor, in turn, are the domestic efforts of the developing countries by any means exclusively directed towards their own development. Hence, what on both sides might appear as a lack of purpose merely reflects the natural diversity and complexity inherent in all national policies.

It is important, however, to establish alternative guidelines which are clear and as widely agreed as possible so that present practice can be judged for the efficiency of its contribution to agreed development purposes, and so that those who favour a higher priority for such objectives can have precise criteria, to press on donor authorities.

A search for such objective criteria is continuing within the DAC. In the absence of a common aid decision maker, only a well coordinated approach can result in an allocation pattern which makes optimal use of scarce aid funds for the promotion of agreed objectives.

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