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**THE INCREASING COSTS OF INFRASTRUCTURE AND
SOCIAL INVESTMENT WITHOUT DISRUPTING**

THE HARMONIOUS DEVELOPMENT OF THE COMMUNITY

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CONFERENCE
"INDUSTRY AND SOCIETY IN THE
EUROPEAN COMMUNITY

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by
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INFRASTRUCTURES AND PROTECTION OF THE ENVIRONMENT
IN THE COMMUNITY - PROBLEMS OF LIMITATION OF COSTS
AND FINANCING

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I. Definition of subject - Classification and ultimate aim of infrastructures - Need to revise their traditional concept for protection of nature and life medium

- a) The collective equipment - or infrastructures - are usually distinguished from equipment described as directly productive - or superstructures - formed with a view to market production of goods or services. In these economies of the market, the former are considered to be within the jurisdiction of public authorities and the latter to fall in the realm of enterprise.

These classifications are hardly satisfactory. In fact, certain infrastructures are within the jurisdiction of enterprise, their services being sometimes free and sometimes sold at a commercial price or non-commercial price. A case in point is, for example, power, as are, the railways, telecommunications, hospitals and even universities and motorways. On the other hand, enterprises often make investments which are not directly productive, in order to ensure or improve their working conditions. This is the case for instance when they finance roads, vocational schools or cultural or sports installations. Under these conditions, this is rather more a function of their ultimate aim - public interest in its broadest sense - which we suggest for defining and classifying infrastructures, whatever may be their mode of formation, management or financing.

In this context, it is possible to propose a primary distinction between :

- a) Infrastructures with economic aims, which condition the activity of enterprises and the material welfare of men: for example, transport, power, telecommunications.
- b) Infrastructures with socio-cultural aims, which condition the physical , intellectual and moral welfare of men: for example, health, education, culture and leisure activities.
- c) Infrastructures with administrative aims, which condition the effective management of the community and its protection by public powers and services: for example, administration, police and defence.

Undoubtedly, certain of these infrastructures do not have one sole function whose nature isolates them from all others. However, such a classification would allow better identification of their principle objectives and, hence, better specification according to their goal, various categories of collective equipment, costs and recurrent expenditure incurred in their use.

- b) On the other hand, the very concept of infrastructures produces a complementary proposition. The management of land, collective equipment and development should henceforward be conceived 'in accordance with nature' and with a view to protection of the life medium. An increasing number of voices of increasing authority are now proposing this.

Philippe Saint Marc in particular (1) has given a warning that it has become urgent and vital to react against a tendency to self-cancellation of the growth of industrial nations, which is all the more marked as those activities which are favourable to the natural environment represent no more than a small part of production activities, whilst 'neutral' or 'injurious' activities form the major part. Added to industrial pollution (noise, air and water pollution, refuse) those of space (human overcrowding reduction of green areas, distance from nature) tend, according to him, to give rise to a retrogression of the life medium which is greater than the progression of the standard of living measured in terms of national accountancy. As it produces a general psychophysical impoverishment of man, the progress of this pollution threatens to reduce his general welfare at a greater rate than it can be increased by progress in the standard of living.

Although it is difficult to estimate the full extent of this threat, its existence cannot be challenged. This brings into question again the still too 'productivist' and short term traditional approach and concept of collective equipment without sufficient regard to the protection of nature and the life medium (2).

On another plane, this threat suggests that the approach towards the problems of infrastructure should be broadened.

(1) 'La Socialisation de la Nature' - Ed. STOCK - Paris 1971

(2) Cf. also on this subject L. Gérardin 'Les Futurs Possibles' (Hachette 1971), p. 65: 'It is going to be necessary for economists to change their methods and to accept that what Bertrand de Jouvenel has called the 'amenities of life', the quality of life, must be taken into account. Sums spent on the restoration of something which has been destroyed by different means will have to be counted as Negative, and not Positive, as is the case today through a totally incomprehensible aberration. If we do not take care it (the growth) will go beyond the limits and become, how ridiculous this is, a real reduction in the interconnected standard of living with an apparent economic growth.'

In fact, many of them cannot be completely or correctly solved, save by international co-operation and solidarity reached on the level of national and world groups. In this respect the extension of the role of the organs of the European Community appears in particular to be increasingly necessary.

The present and the past - Total data available - Comments on these - Irrational utilisation of resources - Sectioning, disparity and dispersial of efforts - Consequence of lack of harmonisation and co-ordination of policies

- a) It is impossible to classify statistically the infrastructures within the Community according to objectives (1). But this does not prevent the location of the problem of their financing and the search for solutions. In fact, even if the means of this financing are variable and complex, in its total sense this problem is more simple. It concerns the financing of the totality of the infrastructures and directly productive equipments, without producing harmful imbalances. One knows that such imbalances can originate, for example, from a reliance on taxes, savings or credits, internal or external, which is excessively marked or is resented as being too restrictive and which gives rise to an uncompensated monetary creation. Since the means of financing the totality of investments are limited, the allocation of these means without causing disorder poses problems of priority and choice :
- 1) In what measure should these means be allocated both to infrastructures and to directly productive equipment ?

As has been pointed out, some are set in motion by private and well ordered enterprises, hence, in directly productive equipment. Others financed by public or mixed enterprise, appear in national accounts under the heading 'enterprises'. Furthermore, infrastructures of the same kind, depending on the country, are sometimes in the charge of the State and sometimes of public or mixed enterprises.

- 2) What infrastructures take priority in being established or in improvement ?
- 3) What proportion of the resources should be allocated to investments in the public and the private sectors ?

In this context, the evaluation and prospects of investment expenditure must first be dealt with on a macro-economic basis. Despite their inadequacy available data of this nature can throw useful light on the subject.

b) Macro-economic data concerning gross fixed capital formation in the Community

Total public investment lies between 14 and 15% of the gross fixed capital formation during recent years:

T. 1 - Gross Fixed Capital Formation in the Community

in milliards of units of account
at current prices

% of the total

	1967	1968	1969	1970	1967	1968	1969	1970
Enterprise investments	47.7	51.8	60.8	73.7	58.5	58.2	59.6	60.7
Construction of dwellings	21.8	23.8	26.7	30.6	26.8	26.7	26.2	25.2
Public investments	12.0	13.5	14.5	17.1	14.7	15.1	14.2	14.1
Total:	81.5	89.1	102.0	121.4	100.0	100.0	100.0	100.0

Source : Banque Européenne d'Investissement, Rapport Annuel (Annual Report) 1970, page 36.

On the other hand, it would seem that the gross fixed capital formation of public administrations has been relatively stable in relation to the whole and in relation to the Gross National Product (GNP), at current prices, in member countries during the period 1961/70 (1).

T. 2 - The gross fixed capital formation in public administrations in relation to the internal GFCF (I) and in relation to the GNP at current prices (II)

Country	I		II	
	Average 1961/70	Variance	Average 1961/70	Variance
Germany	16.0	1.01	4.1	0.35
Belgium	13.2	2.0	2.8	0.45
France	13.2	0.57	3.2	0.31
Italy	12.4	0.95	2.6	0.21
Netherlands	19.1	0.72	4.8	0.25

Source : Calculated on bases given by the OECD.

These overall figures require comment. In fact, the investments must not be regarded solely from a quantitative point of view or even from the point of view of their origin whether public or private. More than ten years ago, a report prepared by the OECD (2) concerning investments of the member countries during the decade 1950/59 noted the absence of any precise relation :

- between the rate of investment and the rate of growth;
- between the share of public investments in the GNP and the rates of investment and growth;
- between the investments and disposable income of enterprises expressed as a percentage of the national revenue.

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- (1) The variance is higher for Belgium due to a greater effort in infrastructure during the last three years.
 - (2) International report on factors of policy nature affecting investments Bruce Williams.

The establishment of these facts confirms, although it has not yet been proved, the importance of the search for the optimum, that is to say the quality of the economic dimensions and efficiency and of elimination of duplications, cost escalation and wastage in the sphere of investment. This importance is even greater since the investments commit and determine the future. As has been stressed by P. Massé ,

' to invest is, in a way, to freeze' (1) Since the greater part of investments becomes more and more costly, the commitment implied becomes increasingly binding.

Furthermore, as has been recalled, certain investments compromise the life medium, that is to say the ultimate aim of all development policy: human progress. Some authoritative voices consider these investments to be on the increase. Besides, it is evident that, as investment policy - be they of infrastructure or directly productive equipments - becomes more rational and draws nearer to the optimum, it can in large measure economise on methods of financing. For example, the cost of a preventive policy of protection of nature and limitation or even suppression of damaging factors could be very much less than that of rehabilitation of a damaged environment. The pollution which is caused by many industries could often be reduced through relatively inexpensive investments.

Finally, the formation of a European Community involves the search for a balanced development not only of countries but also of regions, that is special support for the conversion of backward or weakened zones.

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- (1) 'Les Choix des Investissements' (P. Massé) Ed. Dunod, Paris
- (2) Cf. particularly on this subject, in addition to authors already quoted: 'Le Jugement dernier' (Gordon Rattray Taylor), Ed. Calmann-Levy and 'Réflexions au bord du gouffre' (G. Picht) Ed. Laffont.

c) In this respect, what is the position today ? Achievements are disappointing in relation to what is possible or desirable. Returning to the previous Table II, we note firstly that the level of gross fixed capital formation in public administrations in relation to the GFCF and to the GNP differs quite noticeably from one country to another. This level was relatively lowest in Italy and decreased in that country towards the end of the period. It was **higher** in the Netherlands and Germany. Thus, disparities in infrastructure influence competitive conditions and the implantation of enterprises. The regions whose economic, social and socio-cultural equipment is most highly developed are generally presenting more attraction to enterprises and to workers, having regard to the 'external economies' thus created. Enterprises are attracted by the facilities afforded by a good infrastructure. Workers by the availability of adequate dwellings, schools, hospitals, transport facilities and sports and amusement facilities. However, excessively dense economic or urban concentrations give rise on the other hand, to external costs which are sometimes so high that they counter-balance these external economies. This is notably why the public powers (the Central State or regional or local bodies) scatter their land with moderately well-equipped industrial zones at the price of high expenditure. The creation of such zones, and granting of subsidies and various facilities to enterprises who establish themselves there, become the privileged instruments of regional policy. Often, direct subsidies granted in the form of capital premiums or interest payments are made up by a range of subsidies or indirect advantages which are difficult to evaluate and hence to compare.

Insufficiently co-ordinated, these instruments are often used in a competitive fashion to attract investors. There is no doubt that such an escalation of demand between countries, regions and even communities increases the price paid by the community as a whole for a specific volume of investments.

In addition, with regard to the time required to equip an infrastructure, many industrial zones have been prepared in expectation of potential investors. Often, these zones have become 'Fehlinvestitionen', few if any industries being established there. It is obvious that this multiplication of initiatives, commendable in themselves, but disparate and unco-ordinated, is costly and inefficient. It is all the more so since the creation of these zones is only occasionally dependant upon satisfactory criteria of economic rationalisation. For example, new industry occupying a sizeable area, but few workers, is not always implanted in less densely populated regions. On the other hand, industries which are pollutive and of high capital intensity are set up in densely populated regions where there is an abundant work force. However, such implantations are frequently encouraged by direct and indirect subsidies which alleviate the production costs of enterprises and also give them a competitive advantage in relation to other companies in the sector. In the final analysis, the new investments encouraged by public powers could at times go so far as to create such a lack of sufficient co-ordination, and excess production capacity as to bring about a price slump. In this case, community expenditure, far from increasing economic productivity, would lead to wastage and create industrial difficulties liable to have social impacts.

d) Forecasts for 1975

The disparity of efforts made by the member States of the Community on this subject appears also in the forecast for 1975. The percentages of public investment, in relation to the GNP are lowest in Italy and France. Italy maintains the same level (2.6% of the GNP) as the average rate for the period 1961/70. The same is true for Germany but at a notably higher level (4.2%). The other countries of the EEC forecast an increase of public investment in the order of 0.5% for France (from 3.2 to 3.7%), of 0.8% for the Netherlands (from 4.8 to 5.6%) of 1.4% for Belgium (from 2.8 to 4.2%). According to these facts, if things remain as they are, Italy and France could remain behind in relation to the other countries of the EEC. However, an increase in infrastructure requirements is forecast, both in the teaching and social sectors and in the economic field (ports, navigation channels, roadways, pipe-lines, airports, industrial zones, applied scientific research) and in the sphere of environment (ecological and anti-pollution programmes).

. The Environment

We have suggested that the problem of the environment should be brought into the conception of collective equipment programmes as a matter of priority.

The world population is increasing at such a rate (1) that increasingly ~~strong~~ pressure is being exerted on nature and on the life medium. (2) The earth is not without limits and its natural resources are not inexhaustable. Left solely to the market forces or managed by public powers more concerned with production or ~~strenght~~ of power than improvement of the quality of life, the industrial or post-industrial society would tend to waste resources which are irreplaceable and to exploit others with lack of consideration. It has been pointed out that scientific research and the economic applications which have been unleashed in obtaining short term objectives do not take sufficient account of long term objectives. Thus the physicist Rabi (Nobel Prize) has stressed that science is becoming 'balkanised' under the influence of specialisation. He observes that the giant research machine is broken up into hyperspecialised cells which become incapable of apprehending and foreseeing how their discoveries will integrate with others and what will be their primary and secondary consequences. A similar situation occurs with the many economic initiatives both of public and private origin.

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- (1) Many 'futurists' or 'prospectivists' reckon that the world population could be between 5.5 and 7 milliards by the year 2,000; that is double the present population. Certain people claim that some 20% of this latter figure are suffering from malnutrition and that some 60% are suffering from nutritional deficiency. It is thus unlikely that the demographic explosion which we are experiencing can be checked rapidly, even at the price of a gigantic effort in developing countries.
- (2) Some biologists consider the earth to be already over-populated, taking into account the resources which are available to us and the life style which we have the right to demand. (Cf. in particular P. R. and A.H. Ehrlich, 'Population resources et environnement' in 'Dialogue', 1971, no. 3).

Already, to take an example, we are engaged in extracting rare minerals from the depths of the oceans, often without sufficient study of the possible repercussions of such an extraction on the marine flora and fauna.(1) In certain regions, the utilisation, and even the destruction of nature becomes such that forests, heathlands, scrub and other natural habitats disappear sometimes for ever (2). If they are abused, fishing and hunting compromise the survival of numerous species. The disappearance of the species and their habitat cuts our genetic and biological capital, whilst producing innumerable imbalances, often as harmful as they are unsuspected. (3)

Man needs horizons. By reason of hyperconcentrations, the space available to him for his habitation, work and transport is becoming smaller in many regions. In parallel with this human overcrowding, activities and dwellings emigrate to new areas of land, to the detriment of green spaces, sites and countryside. This inconsiderate or anarchical swallowing up of nature and of space poses enormous problems for the protection or reconstitution of the environment and life medium, the management of land, of communications and transport.

In addition, industrial waste, pollutive products and the damage to the biosphere tend to produce other shortages, notably in pure water, pure air and biologically healthy nutriments. Resources or natural elements which were once obtained for nothing now take on a commercial value, due to their increasing scarcity. New investments become necessary in order to purify the air and the water. This damage or depletion of natural resources must lead, we feel, to a fundamental revision of economic and political concepts which have, in large areas of opinion, now acquired a generally accepted status.

(1) Cf. in particular 'S. O. S. Environnement' - Le Courrier de L'Unesco

(2) Phenomenons of 'desertisation' or 'laterisation'.

(3) Cf. in particular 'Un premier programme pour l'environnement 2000' - Review of land management (number out of sequence p. 14)

It is thus that the quantitative growth of goods and services, calculated by national accounting systems, is still often considered a measure of progress. However, production or consumption per inhabitant are not good indicators of welfare, since they do not take account of the qualitative aspects and, especially, those of environment and life medium. Bertrand de Jouvenel (1) has shown that the relation can even be the reverse. For example, surely the journey - above all else a permanent factor - between the place of dwelling and that of work gives more hardship than satisfaction ? National accounting nevertheless places this transport within the total volume of consumption, where it is considered to be an indication of progress whilst it in fact reflects a regression in welfare.

This accounting does not take into account the external effects of production and consumption of goods and services. Such external effects (or externals) appear when the activity of an economic agent affects others without being integrated in the economic calculations. So, if these effects can produce advantages (external economies) they may also give rise to disadvantages (or 'external diseconomies' This is the case with all kinds of despoilment which the development of industrial nations tends to foster, unless a remedy is found. The traditionalism of present accounting methods and economic calculation is not without incidence - far from it - on development policies and the positions of the parties and groups from which they originate. On the contrary, it breaks them down and this slows down the search for optimum utilisation of resources.

(1) B. de Jouvenel : Arcadie, Essais pour le mieux vivre futurable. Sedeis - Paris 1968.

The problem has not escaped the attention of certain economists. Even in 1920 it was brought up by Pigou. More recently, many 'futurists' and increasing numbers of institutes or research groups are worried by this. Nevertheless, to date, apart from a few applications, these worries have hardly led to any true environmental policy, encompassing or orienting investment decisions in both the infrastructure and directly productive spheres.

Without going so far as to raise cries of alarm, one must observe the increasing threat of disadvantages caused by the absence of any such policy. The economy today is often developed at the expense of nature and of the medium and quality of life. The search for a balance between the standard and quality of life must therefore become the focal concern of all economic, industrial and social policies, and on international, regional and local levels. The necessity of international solidarity and co-operation in these areas, mentioned in the introduction, will be more easily appreciable if we recall briefly certain problems posed by the pollution of water and air and by the utilisation of earth and space.

IV. Pollution

Public opinion in industrial nations is becoming aware of despoliations and pollution because their effects are becoming increasingly apparent.

(1) 'Economics of Welfare' London 1920

(2) See Gordon Rattray Taylor (idem) 'Le Jugement dernier peut arriver demain'.

- a) The water is suffering increasingly harmful adulteration. The oceans are the final resting place of industrial, urban and agricultural waste. It has been estimated (1) that between three and five million tons of hydrocarbides are thrown into the seas each year by petroleum vessels. To these must be added waste from other vessels (cleansing of tanks and bunkers) natural discharges, oil lost in accidents (shipwrecks, damage, underwater drilling, leakage or breaks in pipes) and that collected by rain water in the atmosphere and thrown back into the oceans (products from industrial chimney stacks which have not been burnt up and from road vehicles) (2) and (3). In internal navigation, hydrocarbide waste is usually discharged into the water courses. Pollution occurring from domestic sewers and from waste waters of industry is also apparent. Lakes and rivers of all sizes become hardly more than enormous open sewers. Many industries use vast quantities of water and subsequently release the discarded part, often in a polluted state or at a high temperature. Agriculture has taken a place among the agents of pollution specifically through the wide use of pesticides, herbicides and fertilisers. Some of these and many other

- (1) Cf. J. A. Ternisien 'Précis général des nuisances', Environnement et Nuisances , Paris 1971, p. 94 et seq.
- (2) Cf. on this subject the study of 'Ocean American Shipping Services' (quoted by 'Enterprise', no. 856 - 9 February 1972 (p. 55)
- (3) According to the Belgian review 'L'Homme et la Nature' (no. 1 - 1971), English oceanic laboratories have established that the North Sea is now being seriously polluted in increasingly large areas.

products flow into the waters. (1) The use of detergents which leads to the appearance of scum on water courses downstream of large urban centres or factories, is now spreading throughout the industrialised world. Thermal pollution through waters used for cooling in power stations becomes a matter for concern. The degree of heat given out is such that the limits of temperature compatible with aquatic life may be quickly reached when it is a matter of very high units. In mentioning the matter of adulteration of water, we make no claim to judge the size or seriousness of the problem. We would only note that a valuable natural heritage is being damaged in this way. In addition, we often draw thoughtlessly on our reserves of deep water, which will have already given rise to a worrying dehydration. Our pure water requirements are increasing and will increase rapidly. Our consumption of water tends to increase under the influence of population expansion and the evolution of our life style, the degree of urbanisation and industrialisation.

(1) According to G. R. Taylor (idem p. 102-103 and 104)

We pass our time pouring thousands of products whose biological effects are for the most part unknown into the oceans and **rivers which** flow into them. This includes petroliferous products, chemical wastes, heavy metals, dry cleaning products, radio-active waste, chemical war gas and vesicants, detergents, pesticides and innumerable other groups of substances. In fact, almost **everything** that we throw away in liquid form reaches the sea, with a few rare exceptions which decompose rapidly, whilst much that we throw into the air also finishes up by falling into the sea. The number of the various substances which we now introduce into the sea is estimated to be half a million and in the great majority of cases we have not the least idea of their effect, since no one has ever tried to find out. 'A much greater peril than that which might be produced by radio active waste. We have already reached the point where detectable quantities of radio-activity are to be found in a cask of sea water taken from anyone spot on the globe. E. D. Goldberg announced in 1968 at the meeting of the A. A. A. S. (American Association for the Advancement of Sciences) : 'Radio-active substances are found in all the oceans and in all organisms of the **marine bio-sphere** Many other authors have made similar observations: cfr. in particular L. Gérardin (op.cit.) p. 62 et seq.

In many countries, of which Belgium is one, a tendency towards a scarcity of fresh water is already becoming apparent. In future, water could become a relatively expensive consumable asset and production factor. (1) This is why the policies necessary for protection of water resources must be defined and applied in order to combat its pollution and to ensure optimum utilisation.

Regional or national initiatives cannot suffice in this sphere. As pure water is unequally apportioned this would lead to wastage in areas of abundance to the detriment of areas which are lacking. On the other hand, since pollution recognises no frontiers, it is absolutely vital that policies should be drawn up and action taken firstly at a community level and then on world scale. This is just as important for sea water as for fresh water.

- b) It has been estimated that the concentration of carbon dioxide in the atmosphere, which was in the region of 290 parts per million a century ago, could increase to 375-400 parts by the year 2000 (2). Combustion processes give off fine particles of sulphur dioxide, nitrogen oxides, and carbon oxides (3). To these are added a mass of dusts, sulphur compounds such as sulphur anhydrides, nitrogen acid, organic compounds and fluorines given off by certain industries or the burning of waste.

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- (1) Some reckon that water requirements will have doubled within twenty years and that unless enormous investments are made water factories (desalination of sea water) will not be sufficient to overcome forecast deficiencies.
- (2) C. Starr 'Energy and Power', Scientific American, September 1971 p. 43
- (3) Coal, 'fuel' and petrol being, by their composition of natural gas, the most pollutive, certain American towns such as Los Angeles, Chicago and New York, have set up communal control centres, in order to force certain coal and crude oil users to change over to natural gas, when the rate of atmospheric pollution becomes too high. In other countries such as Great Britain certain 'smokeless zones' have already been decreed (by the 'Clean Air' Act of 1956). Such measures have brought excellent results but they still remain disparate and partial.

The ever-increasing expansion of road vehicles traffic, contributes to the pollution of air, with carbon oxides, organic compounds, nitrogen oxides and smoke and even further with harmful additive waste. In their field, sonic airϕplanes, which are increasing in number, aggravate phonic and air pollution. Careful attention must also be paid to fall-out, not only of radioactive particles but also of lead, cadmium, zinc, mercury and, tomorrow, of other metals which are coming increasingly into general use.

These despoliations are estimated to have reached such an alarming point that the former Secretary General at the U.N., U Thant, has **launched** an appeal for us to face up to what he has called 'a collective suicide which although slower is as relentless as a war'. In fact, international action would be necessary as much to measure the situation and its dangers scientifically as to guard against them.

- c) Land is poisoned especially by excessive use of certain fertilisers and synthetic pesticides and by the fall-out of wastes from the air. In addition, it is feared that the food-cycle may be threatened by noxious substances, such as mercury, lead, cadmium, DDT and other chemical compounds.

On the other hand, the increase of articles sold in 'disposable' and 'non-returnable' packaging gives rise to a proliferation of refuse and wastes, many of which are not destroyed or are even decomposable. (2) Since products of the earth are often transported far afield, and man's movements are becoming more generalised, crossing frontiers, its protection is not only of interest to national governments. It should also be assured at an international level.

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- (1) Cf. notably on this subject : G. R. Taylor (idem) Chapter 'Expirez, n'inspirez pas ! (Breathe out, do not breathe in !).
- (2) On this subject it has been calculated that the proliferation of refuse increases at the geometric rate of more than 10% per year.

V. The Utilisation of Space

Demographic and industrial evolution reduce the free space within the Community, particularly in densely populated regions where activities and infrastructures are in general most highly concentrated. The accumulation of factories, buildings, terrils' roadways, pipelines and cables either old or modern, is the outcome of an evolution which has occurred, sometimes gradually and at times in spurts, but generally without any unified concepts. Certain zones which were once active become or remain despoiled although new industries may have partially supplanted those which have fallen into disuse in the area. In fact, public intervention in the utilisation of space and land management is relatively recent and, as a rule, still disparate, compartmented and insufficient. Since the last world war, serious preoccupation concerning the regional balance of development and the worries caused by work in proximity to the more densely populated areas, have led to an unorganised swarm of infrastructures and economic activities. In certain regions numerous communities already possess or have in preparation zones of attraction for industry. The dispersal of such initiatives is very costly because it produces a consequential multiplication of investment expenditure. (1) In addition, such dispersal means the utilisation of more space than necessary for the conversion or optimum utilisation of surfaces already built on and it denaturalises the countryside. In certain very industrial regions, forested or agricultural zones thus gradually take on the appearance of large agglomerations still scattered with pockets of green space. In others, the natural sites are intersected by roadways

(1) Cf. specially on this subject A. Marchal - 'Systèmes et Structures Economiques' p. 670 - Iv edition. P. U. F. 1959... 'regional development policy... and this is the first point - if it wishes to be effective, must not be limited to peppering the expanse of a region with subsidies scattered at the whim of requirements or influences. Such a policy would only end in swallowing up enormous sums at no profit. In the second place, the poles of growth must be planted with the encouragement of the public powers.

railways, canals, factories or houses, often without any regard to the ecological consequences of these investments and without any attempt to unify designs in architecture. Apart from the aesthetic disadvantages of this evolution, socio-psychologists stress that space which is broken up no longer has the same restful properties for man as wide open expanses, protected from noise and din as far as the eye can see. Paradoxically, this desire for calm spaces leads to their destruction, in relation to the increase of the standard of living, development of leisure activities and urban population density. In fact, more and more town dwellers set up residence in belts round the edge or else establish secondary residences at a distance. The methods of consumption of nature and the destruction of natural areas are thus accentuated. The disorderly invasion of space also aggravates the traffic problems between industrial zones, between home and work, between home and places of relaxation and leisure activities. Traffic congestion and accidents are on the increase, especially during rush hours and at weekends. On the other hand, the transportation of goods becomes more costly, mainly by reason of stopping time, accidents and increasing insurance costs. In many sectors (for example, those where many points of sale have been installed), the improvement of productivity at the manufacturing stage is completely negated by higher distribution costs, to such an extent that prices are forced to rise.

Without doubt, public powers do endeavour to deal with these problems, especially by the construction of motorways which avoid towns, multilevel crossroads, bridges and tunnels. Often, however, these partial remedies have only a temporary effect and only succeed in the end in transferring the difficulties or producing others.

For example, hypermarkets and shopping centres are installed within reach of towns and motorways. This produces new utilisation of space which destroys the sites and also new causes of congestion or traffic jams on the motorways. The rapid saturation of many infrastructures is an indication of this.

In ~~these~~ conditions, it is no longer reasonable to hope that partial, marginal and unco-ordinated solutions will be adequate to solve correctly the problems posed in the utilisation of space.

Without wishing to specify and propose programmes here, (1) we would suggest that henceforth infrastructures and development should be conceived within the framework of a policy of space which takes into account economic, social, aesthetic and human aspects. In this respect, one of the first major preoccupations must be that of limiting the consumption of empty spaces and natural sites caused by disordered implantations. For example, instead of installing industrial zones in many neighbouring communities, would it not be preferable to go for centralised zonings? Judiciously implanted, such central zones could become the development pole for a whole region. By the elimination of duplications, and overprovisioning, the cost of investment required would not be as high as that caused by fragmented and isolated initiatives. Furthermore, the implantation of such zones could be more rational, more economical and more social with proper management, especially of internal traffic, access roads and facilities which are necessary in order to make them viable.

(1) Some authors, organisms or groups have formulated some: cf. especially Ph. Saint Marc (idem) p. 215 et seq; E. Goldsmith & R. Allen, editors of the manifesto 'A Pledge for Survival' published by the British review 'The Ecologist' (distributed with approval of eminent members of the 'Royal Society'); concerning pollution: 'Seven methods of anti-pollution Policy' - Pr. J. Pen, Economic quarterly review of the 'Amsterdam-Rotterdam Bank', March 1971; J. Ternisien (idem) : works of O. M. S., of the Economic Commission for Europe of the U. N. , of the Council of Europe, of the Communities Commission, of the OECD.

Thinking along these lines, certain zones could be specialised in order to accommodate particular industries. When these are pollutive it would be less costly to cure the influences by one sole action, even by communal installations.

In this area, as in others already mentioned, the international approach would appear to become increasingly necessary. (1) Undoubtedly this should ideally be reconciled with the powerful regionalist aspirations which are evident in Western Europe. But this does not alter the fact that a regrouping is necessary of the functions of land management, protection of the natural medium and the quality of life on a higher political level. On the other hand, political selections cannot be improvised ' a thorough technical study must always be made first, in order to clarify, quantify and measure the options and their multiple implications. The competent technical institution must ensure that the scientific proposals are of unquestionable ~~repute~~ and must conduct its work thoroughly. (2)

VI. Financing of infrastructures

a) A major objective: the limitation of costs by control of optimum expenditure.

This financing poses the problem not only of allocation of public resources and of the level of total public expenditure in relation to the G. N. P. but also of optimum utilisation of public funds.

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- (1) An international conference on the human environment will meet in Stockholm in June 1972, at the instigation of the U. N. - Member countries have been invited to present their reports there.
- (2) Cf. especially on this subject H. Simonet : 'La Gauche et la Société industrielle', Ed. Marabout, Paris et Verviers (p. 106 et seq.)

The proportion of public expenditure in the G. N. P.
has grown recently in all the countries of the Community:

Year	Germany	France	Italy	Netherlands	Belgium	Luxem- bourg
1957	38.3	38.7	30.2	39.4	28.7	30.5
1967	42.9	41.3	36.2	48.0	39.3	37.6

Source : E. E. C. - L'évolution des finances publiques dans
les Etats membres de la Communauté
Européenne de 1957 à 1967 - (1970 no. 8)

With particular regard to the development of public responsibilities, this tendency will probably be maintained, in certain countries at least. In Belgium, for example, it is forecast that the proportion of public expenditure in relation to the GNP will go from 40.6% in 1968 to 47.4% in 1985. This escalation of budgets leads us to pay particular attention to the organisation, efficiency and, in an ever-changing world, the adaptability of the administration. Badly allocated, or employed, public expenditure would have an increasingly heavier social cost and become increasingly unbearable.

In democracy, these aspects must have a growing political impact. Disregarding all ideologies, citizens, their elected representatives, organisations representing the directly productive and work sectors, will surely be inclined to require public powers to make optimum use of accrued financial resources which are obtained from them. It would seem that one may presume this. Besides, it has been pointed out that the means of covering infrastructure expenditure without producing chaos were limited and that it was necessary to supply simultaneous finance for directly productive equipments required for development.

In these conditions, the search for optimum use of resources allocated to infrastructures must become a major objective, not only in intent but also in reality.

In order to make progress towards this objective, reconciling it at the same time with the protection of nature and the life medium, revisions and innovations are necessary under several headings.

- 1) Firstly, long term social objectives, development policies and programmes should be redefined and clarified (1), also the means of carrying them out.

To this end, the future and the options (possible, foreseeable and preferable) should be prepared and studied by the administrations or offices responsible for drawing up these programmes with the scientific proposals required, especially those of 'futurity' centres.

Such work has been undertaken in certain countries. Such centres already exist. It would be desirable to assemble and co-ordinate this work and activity in the initial stages through community organs.

On the other hand, the costs and advantages, direct and indirect, of the options or the proposals should be more thoroughly looked into, which is often not the case . (2).

- 2) Alvin Toffler has written that 'cut off from the future, the citizen becomes a political eunuch'. He proposes 'the democratisation of methods by going to the people'. In order to associate this with the necessary choices with regard to the future, he suggests that 'assemblies for the future of society' should be created.

(1) Especially, by the revision, suggested previously, of traditional national accounting methods and economic calculation systems, by establishing means of measuring public welfare with appropriate indicators.

(2) Without such thoroughness, the financial costs often result much heavier than those foreseen in the original outline plan, which thus compromises the possibilities of future action.

These assemblies would be representative bodies, not only geographic but also social: industry, the working world, the arts, women, ethnic and religious groups, students.

(1) Their work would be prepared by teams of technicians with a view to presenting all possible alternatives and to orienting the choices, in relation specifically to costs. Although such a proposal may appear, at first glance, unrealistic, in so far as the present functioning of democratic regimes is concerned, procedures or organs, either consultative in certain of these milieux, or for joint action on development policy, do exist in the countries of the Community, as well as on the higher Community level. Nevertheless, their competences differ and their work is often confined to short and medium term projects or programmes. It would be possible and desirable to introduce a new dimension : that of future prospects or futurity, into the functions of these consultative or joint action organs ; to harmonise their statutes, making them as representative as possible of the regions and the constituent elements of the social body and also to improve the scientific basis of their work.

3) The scientific, technological and industrial revolutions have forced humanity to assume responsibility for its future, because henceforward it is in a position to fashion it and because these revolutions pose just as much of a threat as they afford any benefits.

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- (1) In this spirit, these assemblies, whose participants would be constantly reviewed and renewed, would serve the social body both as a jury for the great political choices and as advisers for the future.
- (2) As L. Gérardin wrote ('Les Futurs Possibles') - Hachette 1971, p. 162 : 'Of course, the study of futurity is not planning. But the two together form a whole : the first flowing naturally into the second.'

But humanity's vision, behaviour, methods and institutions have hardly been adapted to this situation, although it is true to say that it is a new one in its history.

Europe, like the world, is still divided into more or less autonomous parcels, with preoccupations and policies often singular, isolated and scattered, even contradictory or antagonistic.

With the exception of a few cases of community action and co-ordination, the problems of infrastructure continue to be broached on levels and in contexts which are too exclusively nationalist or even regionalist or local. We have established that, as a result, there are inadequacies, extra charges and wastages, mainly due to duplication, escalation of values and inadequate dimensions.

The equipment policy practised in Europe is one illustration of this among others. The majority of ports are equipped for container traffic, which brings an under-utilisation of installations. Some of them compete to attract vessels of greater and greater tonnage, so that previous costly investments lose their utility before their normal redemption.

Numerous cases of this nature could be quoted, for example, in the sphere of pipe-lines and in countries where regional or local compensation of infrastructures expenditure is practised, without integrating it into the total long term plan scientifically prepared and co-ordinated with projects of neighbouring nations.

- 4) Such a lack of provision for the future, accentuated by the limitation of financial means, leads to the installation of infrastructures of inadequate dimensions or of a too traditional concept. Consequently, they are often rapidly overtaken by technical, economic, social, cultural or sociological evolution. This is the case for example with river, road, rail and air links, or furthermore for universities, vocational schools and hospitals.

False cost economies, which in reality result in losses, add thus to the wastage caused by dispersion of initiatives and a lack of joint action and co-ordination. (1)

- 5) Careful withdrawal of investments at the correct time would provide economies with additional returns. Infrastructures which have become useless should be abolished, reconverted or sold. This is particularly the case for airfields or disused military ground, industrial zones which are little or badly used and decayed, unoccupied or unadaptable buildings. In so far as such investment withdrawals allow the recuperation of resources and the reduction of function expenses, new equipment could be put in its place without extra charges.
- 6) The staggering of public investments is also of consequence from the point of view of our present considerations. By their multiplicative effect, these investments stimulate expansion. They produce employment, revenue for nations and returns for public powers. This is why investment policy is used as an instrument of contingency regulation. However, it is important to be extra careful in handling it of its repercussion on costs, which is often not the case. Indeed, these may be made heavier by the fractioning or delay in execution of the programmes.

(1) It is interesting to recall, in this respect, the principle of maximisation of social earnings (cf. R. H. Haveman, 'The Economics of the Public Sector', New York-London-Toronto, p. 61). According to this principle, the public sector should increase taxes and public expenditure as long as the marginal social utility exceeds the marginal social disutility due to the transfer by tax, of a monetary unit from the private to the public sector. On the other hand, the allocation of public expenditure to the various categories of expenditure and programmes should, according to a reasoning of this nature, result in an equalisation of marginal utility of the monetary unit spent on each programme.

7) In order to restrict the cost of infrastructures and to integrate the conception into a development policy based on the protection of the environment, life medium and the quality of life, it would be necessary to redefine the ultimate objective, missions and often the organisation of enterprises, administrations and public services. This necessity is increasingly realised and stressed. (1) The missions of enterprise no longer lead solely to the objective of profitability but extend to cover elements such as participation in decisions and results, work satisfaction, scale of remunerations, information, responsibilities towards the community of implantation or the surrounding environment. Business men are induced to construct and direct an innovating organisation. (2) As for public administrations and services, the search for efficiency, creativity and the quality of benefits, tends to be more and more generally asserted in relation to the escalation of fiscal and parafiscal charges. On the other hand, state employees no longer consider security of employment or public service as sufficiently satisfactory incentives.

One of the possible ways of reform would be to accentuate the decentralisation of certain functions of public interest, specifically in the sphere of studies, and realisation and management of infrastructures. Specialised organs are more supple and adaptable. Their intervention could be more speedy and less costly.

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- (1) Cf. specially B. Cazes, 'Explorer l'Avenir' - 'Informations et Documents', (p. 31) - December 1971 : H. Janne, 'Le Temps du Changement' - Marabout, 1971 (p. 239 et seq) : 'One must have the courage ... to imagine collective institutions of a new type, conceived with two goals in mind : on the one hand, to accept loyally that part founded on criticisms of the public services, regarding their excessive costs per unit, their deficits and their relative inefficiency, their rigidity, their lack of control and the criticable treatment of users ; on the other hand, to prepare the ground thus for the application of a more direct and more participant democracy.
- (2) Cf. particularly on the subject : Peter Drucker, 'La Grande Mutation' p. 69 et seq. - Ed. d'Organisation; Paris 1970.

Their financing could be facilitated by the personalisation of their mission. It could be more easily foreseen that they should receive payment from the users for their services. A more general use of new instruments and methods would also appear recommendable : for example, 'The Planning, Programming, Budgeting System ' (P. P. B. S.) (1) or 'Rationalisation of Budgetary Choices' (Rationalisation des Choix Budgetaires R. C. B.) (2) , the 'Cost Benefit Analyses', the use of econometric models (3), the Delphi method (4) and the so-called 'scenario'.

Besides, systematic and objective information of opinion in particular through television, radio and press, would appear to be increasingly useful.

- 8) The application, albeit progressive, of the various measures cited here, would allow the limitation of public expenditure both in investment and functioning. It would also contribute, we feel, to improvement of the image of public powers, administrations and services. These are the objectives of primary importance.

The requirements and means of financing

a) Expenditure on infrastructure will grow in the European nations

In public budgets, the expenditure on infrastructure exerts and will exert an increasingly strong pressure in regard to the multiplication and growing cost of equipments in particular.

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- (1) Born in the United States and now used in Europe
(2) First applied in France
(3) As, for example, those used by the economists of the American Treasury, comprising variations and fruits of their experience.
(4) Used by the Rand Corporation, which consists of gathering advice from experts and thence forming conclusions.

and to the rise in exploitation costs. (1) This pressure is closely allied to the speed of evolution of technical progress, industrial development, personal income and style of life. The economic viability of many equipments tends to become increasingly shorter, whilst their users become more and more demanding. Besides, the cost of many collective equipments is accentuated by inflationist tendencies since, in the scheme of things, constructions and buildings are, in the final analysis, work and land. This is notably why we have insisted on the necessity of searching for an optimum infrastructure policy in order to limit expenditure. But, even supposing that it is possible to move fairly rapidly towards this goal, it remains that the volume of equipments to be financed will increase substantially in the years to come. The only additional charges for an indispensable policy of protection of the environment and of nature will tend to increase public budgets considerably. This evolution will pose problems, all the more thorny, since the expense of transfer of public power to the direct benefit of individuals and enterprises has increased by much more than the disbursements of collective interest, which is indirectly to their benefit. Thus, the favourable effect of these disbursements is less easily discerned; they are therefore less popular. On the other hand, it is easier for Governments and Parliaments to obtain allocation of public funds to national, regional or local ends than to longer term projects of international interest, even if the latter are more necessary.

b) Expenditure on infrastructure in the countries of the Community could be higher than forecast

We have shown that new capital expenditure and functions will be unavoidable if we are to protect the environment and to manage lands and spaces.

(1) In relation particularly to the increase of remunerations and the reduction of working time.

Sweden proposes for example to allocate 8 to 10% of her gross national product to this between now and 1980. The United States put this figure between 5 and 6%. (1)

As for member countries of the EEC, they do not forecast, in general, an increase of more than 2 to 3%. (2) However, the requirements of the Community are no less than those of the other countries cited. From this we can deduce that the problem here is not yet appreciated in total clarity and there are even those who hesitate to present it in its full extent and seriousness due to other preoccupations. One may well doubt that this position may be maintained.

c) The problems of financing probably cannot in future be resolved through the usual channels

Since supplementary expenses appear thus as unavoidable, one must ask how we are to finance them. Overall, they should be covered by the taxation policy, by savings or by credit, internal or external. (3)

1) Credit can only be considered as an occasional or marginal contribution

We would point out straight away that recourse to short term debts can only, in our opinion, be considered as an occasional or marginal contribution towards the financing of investments and 'a fortiori' current public expenditure. To allow the contrary, in economically and technically developed countries would be to accept the imposition of inflation by continuous monetary injections on top of the various forms of cost inflation already hardly bearable without chaos.

(1) Cf. particularly : 'La Tribune d'Allemagne' (no. 16) December 1971 p. 8.

(2) According to the services of the Commission.

(3) In so far as the price of services rendered is not paid by the users, as can be forecast in certain cases.

There remains fiscal policy and savings.

2) Foundations and application of taxation policy should be reviewed

The frontiers of fiscal policy are not indefinitely expandable. In so far as personal tax is concerned, the taxpayers revolt, the fiscal basis is gradually eroded, capital is exported, (1) and the cost of controls increases when certain limits are exceeded. Those receiving receipts from earnings and who consider the net proceeds from these try to pass on at the very least a part of the additional taxes to their employers, if they are not to lose their initiative or become less productive. (2) Excessive taxation thus accentuates cost inflation or reduces the productivity of the system. In so far as tax on companies and enterprises is concerned, once certain thresholds have been passed, this threatens the faculties of adaptation, innovation and growth. Indeed, if public interventions and subsidies are not generalised, these faculties depend in the final analysis on the net cash flow, after deduction of taxes. As for so called indirect taxes, levied whenever possible on the transfer of goods or services, these are borne in the end, for the most part, by the consumers. Although these must be differentiated for social reasons, their increase thus causes a rise in the cost of living. In these conditions, it is doubtful whether the increase of fiscal charges alone can resolve the problems of financing the infrastructures which now face us.

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- (1) Notably by means of the numerous 'tax havens' which exist in the world.
- (2) L. Gérardin (idem p. 207 et seq) on this subject mentions the failure of the 'Swedish model', which he considers is becoming increasingly pronounced. He wonders if the true cause of this failure is not a violent reaction of the white collar workers : 'The Swedish Confederation of Intellectual workers' has recently demanded an immediate increase of 23% to compensate for inflation - To compensate also for the new increases in taxation (Sweden is the country with the highest indirect taxation in the world). '

This does not mean to say that improvements and, above all, innovations must not be studied. Indeed, many tax devices have been conceived on the basis of situations which are out of date today or soon to become so and, much more rarely in the futurist context. So, the reviewing of certain tax concepts and their application could improve the yield, acceptance and advantageous effects of taxes. In particular, the measures against frauds and tax evasions would be reinforced by concerted international attitudes and action. In the absence of these, the most vigilant nations risk being penalised when capital is removed or centres of profit or initiative transferred. (1) On the other hand, methods of establishment, collection and control of taxes should be brought into line with the objectives of the development policy and amended with a view to reducing, notably by simplifications, the levy costs. (2) For example, the fiscal policy could contribute to the policy of protection of the life medium and improvement of life quality. Concerning pollution, one principle is tending to become increasingly stressed: 'the polluter must become the payer'. The application of this principle could take on multiple means. Private individuals, public services and enterprises would be forced or induced, mainly by fiscal means, to avoid destruction, damage and pollution, or at the very least, bring them to tolerable proportions. (3)

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- (1) It is well known that multinational enterprises and those who have foreign subsidiaries, can, by various means which are often legal, make part of their profits appear in the place where the tax regime is the most favourable. The same can apply for the many enterprises which deal with foreign countries.
 - (2) This is an enormous task. But it is becoming vital that it is undertaken. F. Bloch-Lainé has drawn up some suggestions in this respect which are especially worthy of interest (in 'Pour une réforme de l'Entreprise', p. 127 - Ed. du Seuil.)
 - (3) Ph. St. Marc (idem p. 274 et seq) proposes a tax on damages and on the utilisation of green spaces, also an 'urban biological tax' (with a view to slowing down excess urbanisation). He expresses the opinion that, in order to stop polluters from polluting, the pollution dues should be at least equal to the cost of purifying.

Nevertheless, unless they are harmonised at international level, measures of this order would create distortions in competitive conditions and would affect commercial exchanges as much as strong liaisons between enterprises in the countries where they are adopted. Indeed, such dispositions would bring additional charges and investments which are not directly profitable and would cause an increase in costs. (1)

Countries which instigate avant garde measures in isolation, in the general interest, would thus run the risk of weakening, by this very move, the competitive position of their enterprises, that is to say that they would jeopardise the level of employment and of life of their population.

3) Preparations must be made for the transitions towards a new society

On a more general scale, the passage of a productivist society still too attached to the quantitative aspects, to a humanist society, with more qualitative goals, will produce such upheavals that the transitions must be studied and prepared. Conversions will be necessary both in infrastructure and directly productive investments. Often, these conversions will have to be made simultaneously. The financial structure is already too weak in many European enterprises and their net profitability has become too marginal or vulnerable for them to be in a position to obtain enough additional capital of their own by self-finance or by the traditional mechanisms of the finance market. Unless they are able to make use of new facilities, these enterprises will hardly be able to finance the conversions they desire.

(1) Without it always being possible or desirable to reflect these increases in cost.

On the other hand, it will be necessary to prepare the ordered development of branches of industry and services whose competition will be necessary for the protection of the environment, elimination of refuse, reduction of pollution, purification of water or its production. Apart from direct public aid, which could become unavoidable in certain cases, in this sphere too one must endeavour to find the optimum, both to limit collective costs and with a view to efficiency. To this end, one could imagine, firstly, the institution of a 'European industrial fund' to prepare the policy to follow and orientate by ~~stimulii~~ or by financial contributions, the decisions of enterprises into a direction which coincides with the priority objectives of this policy. (1) Again, one could study the creation, on an EEC level, of an organ responsible for the preparation of a policy of infrastructure and environment and the inspiration, harmonisation and co-ordination of national and regional actions in these spheres.

In order to facilitate and accelerate the conversions of industry and services it would also be necessary to extend the role and amplify the means of investment or development of public interest by companies or institutes, and such bodies already exist in several European countries. These companies or institutes could be particularly useful to support enterprise's commercial risks - their intervention entails multiplicative effects and their policy could easily be aligned with that of public powers. The need, which we have stressed, for the creation of such an investment company or institute on a European level, to stimulate or revive the necessary conversions seems equally increasingly obvious, for the same reasons. (2)

(1) Various steps have been taken in this connection on a national or regional scale but of a scattered nature. The creation of a community organ would allow the reinforcement, harmonisation and co-ordination of these measures.

(2) Cf. notably 'Le Financement de la Politique Industrielle en Europe', report at the Conference at the European Centre for Public Enterprise

(CEEP), Rome, May 1971 (L'Echo de la Bourse- 3 June 1971) and 'Proposition de créer une société européenne d'investissement' (Revue de la Banque Bruxelles 4 April, 1968 - no. 4) M. Petrilli, President of the IRI specifically expressed a similar suggestion.

- 4) It would be wise to foresee a lack of savings funds with regard to investment requirements, and, hence, to endeavour to find new means of financing

Is it wise to forecast that sufficient savings could be mobilised by traditional methods, in order to complete the financing of infrastructure and equipment requirements? We do not think so.

We know that savings can come from public administrations, enterprises or households.

So, one can hardly foresee the formation of large savings by public administrations. Indeed, their establishment is held back or prevented by numerous factors such as the extension of their present tasks and their requirements, pressures in view of social transfers or public aid, and the frontiers of fiscal expansion.

On the other hand, the net savings faculties of enterprises are a function of their profitability margins.

Now, if these margins remain high in certain branches, on the other hand, they become slight and fluctuating in many others. Besides, they could be further restricted in many cases by a 'Scissor effect' which is the result of an increase of production costs in parallel (1) with a ceiling on sales prices. (2) It is doubtful whether this restriction can always be compensated by innovations, productivity improvements or by external or scaled economies. Besides, many European enterprises have financed their investments by taking loans on an extreme scale rather than increasing their own funds. (3)

(1) Under the effect of a tendency to increases of wages and social benefits (in parallel with a reduction in the working hours), taxes, primary materials and power, forecast expenditure for the protection of the natural environment and for improving the conditions and value of work.

(2) By virtue notably of the accentuation of international competition and the obligations of the price policy.

(3) By virtue notably of fiscal advantages which result from loan financing and the difficulty of obtaining risk capital.

These factors explain how the State and enterprises already today have recourse in large measure to external financing to ensure their investments. Nothing now would seem to indicate that it will be otherwise tomorrow.

Regarding savings of households, these have reached a relatively high level in Europe. It remains possible that this could expand in relation to the increase of personal incomes and the broadening of their distribution. However, their formation could also be held back by several factors such as monetary erosion, extension of leisure activities, multiplication of available goods and services, desire for improved welfare, facilities offered by personal credit and financing by the deferred payments system.

Under these conditions, it is definitely advisable to carry out a policy of encouragement and stimulation of savings, mainly by tax advantages. (1) But it is doubtful whether this would be sufficient to mobilise the complementary capital necessary for setting up infrastructure and directly productive investments.

Hence, in this sphere too, new solutions must be looked for. Amongst these, the study of a legal system of savings could be made. Of what, for example, would such a system consist? (1) As a complement to direct taxes, levies would be made on certain incomes and put to productive savings accounts of low interest. Capital thus formed would be put principally to the financing of institutions of public interest and priority investment projects. The accounts could be converted in determined proportions and conditions, into shares or debentures (convertible or non-convertible) in enterprises or institutions of community interest. Other forms of mobilisation of these accounts could also be envisaged.

(1) This policy has had favourable results, for example in Germany

(2) Cf. previously quoted report at the Congress of the CEEP (May 1971)

Without doubt, such a suggestion which would recall precedents of forced savings would provoke objections. If we believe, however, that it must be put forward, it is because a realistic diagnosis of the prospects for savings and investment would appear to lead to a choice between certain opinions: inflation, excessive rise in taxation, blockage of development and of necessary conversions or the search for new solutions, one of which would be legal savings. Amongst these options, that of legal savings would appear to be perhaps the least constraintive. (1)

VII. Final Considerations

In stressing so forcefully the problems of conceptions, policy and financing, posed by the infrastructures and protection of the environment in the Community, we have laid no claim to originality. Perhaps we may have been able to contribute in some way, however, to a partial illumination, using the facts and information which we have been able to glean.

Neither have we attempted to predict the future, or even suggest that we would tend to such a prediction. Sharing the belief that one must endeavour to forecast the future in a realistic fashion, we have only wished to show certain grounds for organising ourselves in such a fashion as to arrive there, whilst constantly keeping in mind the theories and future plans in the light of evolutions observed and the resultant new tendencies. Is it not important, in fact, to create conditions conducive to a totally conscious and prepared path towards a humanist society, reconciling growth objectives with those of protection of the environment, protection of life medium and improvement of the quality of life ?

(1) In the course of a conversation in Paris, a similar proposal, although of a much stricter nature, was formulated by one of the directors of a large American bank. This proposal was the following Any increase in wages, salaries, dividends or other income beyond a certain percentage would automatically be put into a savings fund. This fund would pay interest to those whose incomes had been withheld. Such a system would reduce the incentive to look for and to pay excessive salary increases and would procure a new source of capital for the financing of public investments in such spheres as housing, transport and the control of pollution .
(Proposition by W. Butler, Vice-President of Chase Manhattan Bank, cited by the President H. Patterson, during the international financial forum organised by this Bank in Paris, 11th March, 1971.)

Would we not prefer to invent the future than to suffer it? The time is no longer, always supposing that it has ever existed, when it is acceptable to 'approach the future backwards' as expressed by Paul Valéry. The times of nationalist, private and scattered solutions to the problems of development and infrastructure have also run their full course. Regional aspirations must be reconciled with international joint action, co-operation and solidarity which are becoming more necessary than ever. With regard to public expenditure, both in investment and functions, its expansion makes it necessary for us to endeavour to find solutions which will produce the optimum results. In order to reach this point, there must be strong but democratic States, served by competent administrations, and by a network of efficient public institutions. Louis Armand stressed, and rightly that 'men are worn down to no purpose in weak structures. Their efficiency is, on the other hand, increased tenfold by strong structures' (1). This need for strengthening of States does not in the least contradict that of the delegation of missions and of powers required of international organs. On the contrary, the capacity of each would thus be reinforced.

By forcing ourselves to make specific suggestions, we have only wished to show that new channels can and must be found within the framework of a democratic regime, which remains, in our opinion, valuable, and above all capable of perfection, despite the clumsiness and defects which are being increasingly criticised. The forms of democracy are multiple, flexible and can be improved. On the other hand, we cannot see any alternative to this improvement save decadence or some disguised form of dictatorship.

(1) 'Simples Propos' (p. 180) - Fayart, 1968

At the end of his work on 'Les Futurs Possibles' (The Possible Futures) L. Gérardin reminds us of the reply of Ralph Nadler to the reporter Henry Brandon who said to him - 'Many young people no longer believe in reforms. They want to destroy the system in order to create a new one.' His reply was: 'I myself maintain that the democratic system is a good framework to work in. Democracy does not mean 'Status quo', but people must understand how the machine functions, the damage which it causes them and the need to get it into working order.' He then proposed that we should 'question ourselves, and look constructively at the creative re-building of the future'. This is what we have attempted here and what we too propose. The formation and enlargening of the European economic community has given us the opportunity to fashion, jointly and democratically, our future. Let us not allow such a precious chance to slip through our fingers and bear in mind, as also recalled by Paul Valéry, that 'civilisations are mortal.' In grasping this opportunity, let us be capable of reaping the full value of our common interest, and extending our horizons beyond parochialism, private interests or situations and generally accepted cliché ideologies or ideas.

BIBLIOGRAPHY

- L. Armand - 'Simples Propos' - Ed. A. Fayart - Paris 1968
- F. Bloch-Lainé - 'Pour une réforme de l'entreprise' - Ed. du Seuil
Paris 1963
- P. Drucker - 'La Grande Mutation' - Ed. d'Organisation - Paris 1970
- L. Gérardin - 'Les Futurs Possibles' - Ed. Hachette - 1971
- H. Janne - 'Le Temps du Changement' - Ed. Marabout - Paris and
Verviers, 1971
- B. de Jouvenel - 'Arcadie - 'Essais pour le Mieux Vivre Futurable'
Ed. SEDEIS - Paris 1968
- A. Marchal - 'Systèmes et Structures Economiques' - Ed. P. . U. F. 1969
- P. Massé - 'Le Choix des Investissements' - Ed. Dunod _ Paris 1959
- G. Picht - 'Réflexions au Bord du Gouffre' - Ed. Laffont - Paris 1971
- H. Simonet - 'La Gauche et la Société industrielle' - Ed. Marabout
Paris and Verviers - 1970
- Ph. Saint Marc - 'La Socialisation de la Nature' - Ed. Stock - Paris 1971
- J. A. Ternisien - 'Précis Général des Nuisances' - Environnement et
Nuisances - Paris 1971
- G. R. Taylor - 'Le Jugement Dernier' - Ed. Calmann-Levy - Paris
- A. Toffler - 'Le Choc du Futur' Ed. Denoel - Paris 1970

* * * * *

- W. Buttler : Proposition to the international finance forum, **organised**
by the Chase Manhattan Bank - Paris 11th March, 1971
- B. Cazès - 'Explorer l'Avenir' in Informations et Documents -
December 1971
- P. R. and A. H. Ehrlich - 'Population, Ressources et Environnement'
in Dialogue - 1971 - no. 3

- E. D. Goldberg - Meeting of the American Association for
Advancement of Sciences - 1968
- E. Goldsmith and R. Allen - 'A Pledge for Survival' - Manifesto
published in the British review 'The Ecologist'
- J. P. Harroy - 'Vision de l'Avenir économique de l'Europe' -
(European foundation for culture).
- R. H. Haverman - 'The Economics of the Public Sector' - New York -
London - Toronto
- H. Neuman - 'Proposition de créer une Société européenne d'Investissement
in the Revenue de la Banque - Brussels - 4th April 1968 - N 4
- Prof. J. Pen - 'Seven methods of anti-Pollution Society' in the Quarterly
Review of Amsterdam-Rotterdam Bank - March 1971
- Pigou - 'Economics of Welfare' - London 1920

* * * * *

- Annual Report 1970 - Banque Européenne d'Investissement
- International Report on the factors influencing Investment Policy -
by Bruce Williams
- The Financing of Industrial Policy in Europe - Report to the Congress of
of the European Centre of Public Enterprise (C. E. E. P.) - Rome- May 1971
in L 'Echo de la Bourse' - Bruxelles 3rd June 1971
- 'S. O. S. ' Environment - Le Courrier de l'Unesco - July 1971
- 'Un premier programme pour l'Environnement 2000' - Revue de l'Aménage-
ment du Territoire - unnumbered
- La Tribune d'Allemagne - no. 16 - December 1971
- Revue Entreprise - no. 856 - 9th February 1972
- Revue 'L'homme et la nature' - Bruxelles

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CONFERENCE ON INDUSTRY AND THE COMMUNITY

Report by BALDASSARE ARMATO

"Financing infrastructures for a harmonious
Development of the Community"

PROPOSITION

To our way of thinking, the problem of financing infrastructures if it has objective limits in a poor community, has only a political meaning in rich communities such as those of Western Europe. In West European zones where there are huge movements of speculative capital which does not find or does not wish to find productive uses, where there is a constant movement of capital towards other countries, the problem of financing the building of structures and plants to improve the standard of living is eminently a political one. It is at political level, in the most relevant meaning of the term, that resources are parceled out for various uses on the basis of the relation of strength established amongst the different strata of the Community. In this report we, therefore, propose to deal with the main topics of conflict of interests which have been stimulated in Western Europe, a conflict in recent times which has been based on the imbalance created through obsolescence of national authorities and of that minimum of economic democracy which succeeded in taking shape (democratic programmes, parliamentary control, syndical action, etc.) between the Community and the productive world, between social objectives and industrial development.

Chapter 1 - THE PROBLEM OF INFRASTRUCTURES AND THE GENERAL
POLITICAL CONTEST IN THE EEC.

I-1. The problem of definition

The concept of social infrastructure in any of the definitions by sociologists and economists, is neutral on the question of conflict of interests. They do not help us, therefore, to identify the field of action nor the results of this opposition which we think has been outlined in European society.

For this reason, more is required than only an abstract and inclusive concept and a clear distinction is needed of infrastructures on the basis of objectives pursued, even if this distinction can have but a rather vague outline. However, it will be said that even a distinction based on the social or economic objectives sought needs examination at the level of the interests pursued. One can distinguish:

- infrastructures with an economic purpose, necessary to the activities of enterprises (energy, transport, etc.);
- infrastructures of a social-cultural character, which serve the physical, intellectual and moral well-being of the population (health, homes, education, culture, organization of free time);
- infrastructures with an administration purpose, (state apparatus, defence, administration of law); there are still some margins of ambiguity under this heading.

Infrastructures of a social-cultural character could function as an answer to socially distorted needs. A school, for instance, could be directed exclusively towards increasing productivity. The building of houses for emigrants can

serve to perpetuate the imbalance between regions of high productivity and the less developed ones with serious inconvenience to all those involved (in departure and arrival zones) with this phenomenon.

On the other hand, infrastructures with an economic aim of stimulating a balanced development between various regions would answer efficiently the needs of European society. In spite of these margins of ambiguity, it seems to us that in order to characterize certain trends this distinction could be accepted.

I-2. Some considerations on the trend of the European integration process

In documents of the Community organs, mention is frequently made of the "Creation of an original civilization" as the fundamental objective of the process of economic integration. In truth, optimistic as the interpreters may be, it is difficult to find in the Treaty such generous intentions. From its reading, the illusion emerges rather of creating in the Europe of the twentieth century an area of economic liberalism where to the automatism of market forces would befall the task of achieving the aims of civilized progress. The Treaty does not provide for, nor does it ascribe to anyone, the authority to direct European development. The economic and social changes which it has produced have by now revealed how intolerable the situation is. With such background, we are not surprised if, in recent years, more concern has been shown to the problem of securing a maximum rate of expansion so as to recover productive gaps, rather than to the necessity of giving an impulse to objectives of social programme and to economic democratisation.

Apart from some dreamer who continued to propose the idea of an original development, it was all too evident that the objective to be reached was competitiveness with other developed areas in the capitalistic world, turning away anything that could harm this competitiveness.

In the Memorandum on industrial policy, for instance, can be seen how the financing of public expenditure through an increase of public debt is to be avoided in so far that it weakens the means of industrial financing by lessening the availability in the capital market.

The statement of the Memorandum means, therefore, containing public expenditure so as to free resources for industrial development. This is confirmed by the role that in such a contest is allocated to public enterprises and to the policy of public contracts, two factors which should ensure further support to industrial expansion, with a loss of public expenditure.

In the EEC the dualism industry-community has been solved in practice by making the first objectives prevail over the second, and also by taking advantage of the timorous vacuity in democratic control at European level. Paradoxically, in so doing, the same kind of development in the advanced areas of the Western world, whose competition should have been fought, have been proposed again. However, the preference given to spontaneous economic evolution produces in the limits of the relations of strength between productive powers an imbalance in favour of enterprises in contrast to social needs.

This produces in fact a concentration of political power in the productive structures and the burden of a constant passive adaptation by labour to the spontaneous evolution of

economic structures. In essence, workers are called upon to make sacrifices in front of reduced economic activity, to face structural crisis, trade and sectoral restructurisation and to react by mass emigration to the attitude of securing the maximum profits realisable by territorial concentration of investments. The preferential character of access to accumulation by economic forces coupled to an uncontrolled phenomenon of concentrated territorial development are the cause and, simultaneously, the effect of an inability, definable as a system, to face at least parallel social infrastructure development.

Public expenditure which is capable of meeting objectively the needs of productive quantitative development but is unsuccessful in directing the qualitative choices limits itself in reality to the performance of a collateral function unable to supply even adequate answers to those same needs for a territorial planning now indispensable for the pursuit of present tendencies.

1-3. The political problem

In the course of time the tolerance of an advanced industrial society faced with this situation tends to diminish whether in factories, places of work or in the community, even if this does not occur uniformly in the various countries. The trend of this curve is undoubtedly determined by various historical, ideological and institutional factors. For instance, in European countries where organisations of workers actions were born and have grown, workers are far more sensitive to this problem of

economic democratisation. Yet, institution and political organisations do not seem capable of expressing these requirements in a practical way.

The domination which economic groups exert on areas of communication of the masses enables them to extol an ideology whose aim is "the extolling of economic liberalism and individual success to the detriment of collective aspects of social life, to the conditioning of individuals" (1) in their choices and their kind of comportment "in order to preserve power in the hands of a few minority groups". This is probably the most efficient force which allows the extraordinary capacity of adaptation of capitalism. It is in this way that are labelled, like symbols of success, the products destined to individual use: motorcars, domestic electric implements, etc. This ideology has two deep rooted aims: one economic, the continued demand for private consumption which permits an intensification in demand for such goods, strengthening current tendencies; the other political, the proposal that the present mode of development is the only possible and fair one. The phenomenon has thus an important influence either on finding oneself missing out in our society or on the possibility of its change.

In the end there is a missing perspective and structural adaptation to this new reality of modes of political constitutions which should rule the destiny of Western Europe. On the one hand, the democratic institutions founded on a national status are now old irons unable to control, except to a small extent, an economic development now of continental perspective at least.

(1) CFDI - "Pour un socialisme démocratique" - P.40.

On the other hand, even the few prospects which do exist at European and at national levels for guiding economic evolution are frustrated by the inconsistent and unsuccessful revival of institutions. All this leads European citizens to the firm belief that there are no alternatives, at least at short term, to the present situation.

In spite of these negative elements, from 1968 to this day, a real objection to this situation has developed; started in factories, it gained ground in the community and is supported by the revindication for a more ample economic democracy.

"The objection to this situation started in factories, as traditional aims of syndical action concerning wages above all and, therefore, the re-distribution of the enterprise profits, then were added revindications relative to rates, to qualifications, to work organisation in general and even to reinvestments. Thus, on the working side, started a new balance of power in the factory with a spread of always more varied negotiations which in short, could not prevent being transferred at community level where the imbalance in the relation of power society-industry was supported by uneasiness caused through stimulation of regional imbalance, through forced emigration, a want of infrastructure able to respond adequately to the phenomenon of urbanisation.

I-4. New requirements and Community organisms

The events of May 1968 shook France considerably also the convictions of a large portion of European citizens, at the time in Community circles surprise was expressed at the small importance attached in this explosion of the European outlook theme, although many claims in those days put clearly into prominence the national crisis.

There is no doubt that from that moment, began a serious self-criticism on the way to proceed with the integration process even if it has remained hitherto on an intellectual plane or, at most, has remained in some document the practical application of which permits serious doubts to be raised.

In the document on Guidance for a Social Policy (1), for instance, one first of all notices that at the initial phase in the process of integration, bar a few exceptions, "the improvement in standard of living and of work of labour to bring it on a par with progress" was generally mentioned as expected and attributed more "to the functioning of the Common Market which will favour the harmonization of social systems" than "from the expected procedure of the Treaty and the approximation of legislative, regulation and administration provision" (art. 117 EEC).

It is said moreover that "the open prospects for implementing an economic and Monetary Union have changed the conditions of the problem. The necessary coherence between economic and social aspects of the integration process will impose itself always more. The want of simultaneousness in the realisation of economic and monetary aspects, on the one hand, and of the social ones of integration on the other, could compromise the success of the process set in motion".

(1) Preliminary guidance for a Community social policy.

EEC, 17th March, 1971.

To this end, three so called "major aims of society" are mentioned, i.e. full and better employment, a greater social justice and finally, a better standard of living "to be fulfilled not only by an improvement in working conditions in themselves but also through an efficient protection of the physical and psychological health of the individual against "perturbations" of different kinds, with the protection and promotion of natural environment and through improvement of setting-up conditions, a better satisfaction of social-cultural needs".

"Only in the measure in which the Economic and Monetary Union, with all its implications, will effectively contribute to an improvement in the living conditions and the well-being of all, will European integration secure the strong adhesion of the population, in particular, of the young generation which, in the building of the new Europe, seeks the realisation of a new society, conforming to its deep aspirations. This implies the implementation and strengthening of an economic and social democracy, taking a practical form either in the democratisation of economic and social structures or in the assertion of the autonomous role and responsibility of the social sector at Community level".

At this point, one understands that it is necessary to couple this theme to the economic development and to refer to the Third programme of medium term Economic Policy which states: "The economic policy of the Community cannot be limited to the aims of common objectives on the question of development and of stability. It acquires a full meaning in the contribution it makes to the improvement in living conditions: it must tend to raise the living standard and

at the same time, to improve the qualitative conditions of existence; it must moreover contribute to a greater solidarity of the less favoured social classes".

"In order to better satisfy these needs, the greatest importance is to be attached to the correlation of economic and social evolutions. A balanced and sustained economic evolution is an essential condition for social progress; but, in its turn, a satisfactory economic evolution pre-supposes a climate of security and of progress in the social field. Our societies must be able to adapt these two aspects".

There is no doubt that we are in agreement with the enunciation of the problem and the objectives to pursue in the social field, what we do not find convincing on the other hand are the means available at European level to proceed from the enunciation to the realisation of the objectives. In fact, it seems to us that without a qualitative leap by the Community institutions in the sense of their larger democratisation and effectiveness, these objectives will remain on paper. In view of the present institutional weakness, we feel the need to express some reserves on the proposals of consultation between social partners, the outcome of which could only be a revenue policy carried out from an economic outlook.

To justify our preoccupation over the effective possibilities on the part of Community organs to fulfil the objectives which, it seems, they propose, we think it is opportune to analyse the results achieved by the European States regarding objectives proposed during 1965-70 on social infrastructures.

Chapter II - THE OBJECTIVES MISSED BY GOVERNMENTS

II-1. Analysis of the situation

Necessities imposed by the exodus of agricultural population towards towns; and to a no smaller extent through an increasing demand for improvement in the standard of living on the part of European populations have induced many Governments to introduce these problems in their budget or programme policies. The third medium term policy has expressed these enunciations as follows:

"A better fulfilment of collective needs, particularly of education, public health and housing, aimed at ensuring a balanced progress and a fair distribution of services; this priority requires that in the Member Countries, private consumption increases less rapidly than the national product to allow for a faster development in collective services.

The intensification of the struggle against the harmful effects of expansion on natural environment (air and water pollution, noise, excessive urban concentrations) taking into account conditions of international competition, will have to apply progressively the principle that the onus of these actions shall fall on those who have caused the noxious effects".

Unfortunately, however, the analysis of previous results is no cause for optimism. A comparison between estimated and actual consumption and of public expenditure in the six countries of the EEC leads one to rather discouraging conclusions.

G.N.P.
(1965-70)

Public consumption (1)
(1965-70)

	Projections	Results	Projections	Results
Germany (FR)	3,5	4,7	3,1	2,2
France	4,8	5,8	4,5	3,6
Italy	5,0	6,0	5,2	3,8
Netherlands	4,6	5,1	3,1	2,4
Belgium	4,1	4,4	5,6	5,1

These results are confirmed by information on expenditure in the capital accounts of public administrations.

EXPENDITURE IN THE CAPITAL ACCOUNT OF PUBLIC ADMINISTRATIONS

	<u>Projections</u>	<u>Results</u>
Germany (FR)	5,5	2,0
France	8,2	6,6
Italy	18,4	4,6
Netherlands	9,8	5,2
Belgium	7,5	8,6
EEC	4,0	3,2

In conclusion, faced with objectives of increase in the GNP largely exceeded, public expenditure has not increased as expected and (except for Belgium) has not even reached half what had been allotted by Governments. A graphic picture

(1) Source: EEC, Third Medium term Economic Policy Programme

of this situation is given in calculating the coefficients of increase or decrease of public expenditure in relation to the increase in GNP for the whole Community. An estimated increase in public expenditure in capital account of 8.5% was accompanied by an estimated increase in the GNP of 4.3% $\frac{(8.5 \times 100)}{4.3}$ the resulting coefficient is 197.7. In practice, however, there has been an increase in public expenditure of the order of 4.9% against an increase of the GNP of 5.29, it follows that the coefficient is in practice less than half that which had been proposed: 94.2.

All this shows undoubtedly a tendency towards a gradual deterioration in the role of public expenditure in the use of resources. Instead of a percentage reduction in private consumption compared with the public one, the opposite has occurred. The programmed estimates of private consumption have been exceeded in the six countries.

PRIVATE CONSUMPTION 1965-70

	<u>Projections</u>	<u>Results</u>
Germany (FR)	3,5	4,9
France	4,5	5,3
Italy	4,7	6,5
Netherlands	4,-	5,1
Belgium	3,7	4,5
EEC	4,1	5,3

In practice, therefore, due to a lack of success in the use of public expenditure of about 20%, there has been an increase in expenses in private consumption of 25-30% in the EEC. This analysis lends itself to a series of considerations on the political and social plane which confirm and express the assertions made earlier.

II-2. Infrastructures and social evolution.

This development in public expenditure was set in an extremely energetic social contest characterised by an imposing movement of labour from a professional and geographical point of view.

BREAKDOWN OF CIVILIAN EMPLOYMENT IN MAJOR SECTORS IN %.

SECTOR	1955	1960	1965	1970
Agriculture	24,3	19,6	15,9	13,4
Industry	40,0	42,4	43,5	43,0
Services (including public organisms)	35,7	38,0	40,6	42,7

In the agricultural sector, the number of employed has decreased by 6.5 million - equal to 40% - between 1958 and 1970, whilst employment in industry has increased by 3 million and in the Services sector (including public administration) by over 5 million.

(1) Second medium term Economic Policy Programme.

As regards geographical movements, the main development has occurred particularly in the European agricultural zones; we give the pertinent data concerning the Italian internal emigration and the immigration in European countries. (1).

This dynamism of the labour force is outlined by a displacement of people behind capital dynamism the attitude of which is irrational from a political and social angle and does not correspond to the wishes of the populations involved (in countries of departure and in receiving ones), this will be illustrated by other reporters.

(1) Balance of migration movements inside and abroad, originally from the Italian Mezzogiorno (1965-1969)

1965 - 52.777	1967 - 122.465
1966 - 70.764	1968 - 148.283
1969 - 150.604	

TOTAL NUMBER OF IMMIGRATED WORKERS EMPLOYED IN EEC COUNTRIES (1) - (5)

Year	Belgium	Germany (FR)	France	Luxembourg	Netherlands	EEC	Italia
1961	154.000	475.700	(935.700) (2)	20.900	28.000	1.615.000	-
1962	157.000	655.000	935.700	22.400	32.000	1.800.000	-
1968 of which EEC:	200.000 123.000	1.040.000 380.000	1.158.000 262.400	28.600 24.700	100.000 43.000	2.560.000 843.000	33.100 10.000
1969 of which EEC:	201.000 123.000	1.372.000 427.000	1.180.000 260.000	30.100 25.200	103.000 45.000	2.921.000 891.000	35.000 11.000
1970 of which EEC:	208.000 (3) 125.000	1.839.000 (4) 478.000	1.200.000 260.000	32.000 26.000	110.000 50.000	3.426.000 951.000	37.000 12.000
(1) Partly estimated							
(2) 1962 Census							
(3) Including unemployed							
(4) On 30th September 1970, they amounted to 1,948,000.							

(5) Source: "Preliminary guidance for a Programme of Social Policy in the EEC".

As regards our topic, one cannot but underline the fact that it would have needed an increased effort in social structures, since emigrants, in their displacement, create a higher demand in the amount and efficiency of urban infrastructures. In particular, the emigrant from an agricultural zone arrives in an environment where problems exist already of housing, of congestion of transport, of over-crowding, thus making them worse and frequently causing a reaction of rejection of immigrants and they are the source of deeply hurt feelings. "These reactions frequently cause tension and negative repercussions between immigrants, they contribute to resentment and discontent which increases through uncertainty of real prospects of introduction in the local life and of inadaptability. Social tensions spring from prejudices through a lack of understanding the emigrant worker's problems on the part of certain strata of the local population, insufficient information on the part of public opinion; but they also follow the inadequacies of migration policy in the countries of immigration, for instance, on the subject of social infrastructures the general insufficiency of which can be seen in various immigration collectivities, particularly in regions of major industrial concentration (absence of social reception services, of housing, schools, health services, recreation and culture, lack of social assistants and initiatives and assistance for young people, women and the family, etc.)" (1)

From the point of view of the effects, the unsuccessful setting up of infrastructures hits above all the groups and kinds of persons less protected by the community, such as emigrants.

CNEL, observations and proposals on problems of emigration.

Rome, 1970 - P.150.

II-3. Philosophy of economic choices

The estimated objectives of public expenditure which for the EEC showed an average increase of 4% based on a projected GNP increase of 4.3% and were not reached, indicate also a policy choice, the elements of which can be found in the Second medium term Economic Policy Programme. The programme, in fact, proposed some measures which should have determined above all a re-structurisation of the European system of production and thus should have supplied an answer to the problems arising through international competition. Amongst other things, this concept provided that "Member States and the Community institutions will have to try to establish a general climate favourable, as far as possible to the aims of enterprises and their realisation. In particular, they will have to eliminate obstacles to competition policy, to company laws, to taxation and to administrative practices which risk being an obstacle to this movement".

" . . . In particular, it will be necessary to ensure that the conditions exist for a satisfactory growth, considered indispensable so that structural improvements at enterprise and sectoral levels can be achieved rapidly and without serious economic or social inconvenience. It will be necessary in particular to create a favourable climate for investments, since many enterprises will not be able to fulfil the adjustment of their structures to the evolution of demand and to the conditions of production without a sufficient attraction to invest. In this connection it will be necessary for the economic trend policy to seek to distribute sparingly the use of financial and fiscal means so as not to run the risk of upsetting inopportunately the investment effort".

So that enterprises' programmes were not upset and in order "not to oppose" investment efforts, it was evidently necessary to avoid that public organs gave the impression of wanting to direct the economy towards objectives other than those of the enterprises. This thinking explains the fall in public investments at the very moment they were the most needed and it is through this thinking that can be explained, for instance, the choices made in Italy in the ambit of these needs.

II-4. The Italian situation

The Italian economy, with a frailer structure compared to that of other countries, has felt more acutely this tendency to direct national resources to the advantage of private enterprises. In public expenditure, these basic choices can be clearly singled out.

SOCIAL INVESTMENTS BY CATEGORY (1)

(1966 - 1970)

	<u>Programme</u>	<u>Results</u>	
Public Education	960	339	- 621
Health	360	125	- 235
Transports	4.125	3.007	- 1118
Telecommunications	715	927	+ 212
Public works:			
Public Building	395	218	- 177
Land reclamation	330	361	+ 31
Various	1545	733	- 812
Private building	9125	12.315	+ 3190
Errors and omissions	745		- 745
TOTAL	18.300	18.025	- 275

This table is highly significant because it reveals a frightening drop (above 60%) in school and health investments, and of 30-40% in transports and public building. The only items which have exceeded the programmed application, apart from land reclamation, are telecommunications and private building. In effect impulse has been given to applications which help private industry (telecommunications) and private investment (private building). Without the investments recorded in these two sectors the so-called social investments would have shown a reduction of 20% in a period during which national revenue has increased by an annual average of 5%.

To confirm these considerations, we reproduce another table relative to the percentage between the various applications of public works from which it is easy to see that the only sector in constant percent increase is roadworks.

(1) Source: EEC

BREAKDOWN OF EXPENDITURE FOR PUBLIC WORKS (1)

Percentage of the total

	Years	1963	1964	1965	1966	1967	1968	1969	1970
Roadworks		34,3	38,8	38,1	40,7	43,3	47,9	48,9	45,9
Railways		6,5	7,7	8,3	8,0	6,2	5,7	6,1	8,6
Maritime		1,0	1,1	1,6	3,0	2,9	3,4	2,5	3,3
Water works		2,9	3,9	3,5	3,1	4,0	4,0	4,5	4,3
Public building		18,2	18,9	19,2	17,6	15,2	12,2	11,7	13,7
Health		12,7	12,9	13,0	15,1	14,1	13,5	12,8	14,7
Land reclamation		20,0	12,0	10,0	8,0	9,2	9,2	8,8	6,2
Telecommunications		1,0	1,0	2,5	1,4	1,8	1,7	1,8	0,9
Others		3,4	3,7	3,8	3,1	3,3	2,4	2,9	2,4
TOTAL		100	100	100	100	100	100	100	100

(1) Source: ISTAT: CERES formulation

Road making and the regression recorded in all sectors of public transport at a time when urbanization was becoming more intensive was accompanied by a constant distortion in Italian consumption the origin of which goes back to the fifties but which had gone on at an increasing rate. The distortion concerns the impulse given to individual durable consumer goods (mainly cars) compared with collective consumption. This is shown by the progressive reduction in the number of passengers in public transport (tramways; trolleybuses and railways) and by the increase in means of private transport.

PASSENGER TRAFFIC (1)

<u>Tramways</u>		<u>Trolley buses</u>	
	<u>Indexes</u>		<u>Indexes</u>
1960	100,0	1960	100,0
1961	85,6	1961	105,1
1962	62,2	1962	110,6
1963	56,8	1963	107,3
1964	49,5	1964	103,9
1965	41,4	1966	96,7
1966	38,7		

PASSENGERS CARRIED (thousands)

	<u>Railways</u>
	<u>Indexes</u>
1960	547.396
1968	442.874

(1) Source: ISTAT.

At present in Italy the number of cars in circulation should be around 11 million (1960: 1.97 million; 1965: 5.5) with five inhabitants per car, whilst estimates of the increase in the total number of cars registered in 1980 show a ratio of 1 car per 3 inhabitants for a total of 18 million. The estimates are based on an assumption of a development in home demand for cars relative to the development of personal revenue (see estimates by IRI, FIAT, ISRIL, etc.) (1).

To better pin point current congestion, we quote some information on the amount of space available in the national territory for every motor vehicle in relation to the road network.

1950:	3.5 kms.
1960:	100 metres
1968:	50 metres.

(1) Circulation: Source ANFIA

Density of population per motorcar:

1960	-	21,0
1961	-	17,1
1962	-	14,3
1963	-	11,5
1964	-	9,9
1965	-	8,6
1966	-	7,6
1967	-	6,7
1968	-	6,0

The phenomenon of progressive congestion becomes worse if it is related to the increase of metropolitan areas where the density of population per square kilometer is still increasing, an occurrence to be reconciled with the exodus from the South and to the depopulation of the countryside.

To evaluate such congestion a few figures are sufficient: in the 8 large metropolitan areas (Milan, Naples, Rome, Turin, Genoa, Florence, Palermo, Bologna) resided in 1961 in an area equivalent to 3.58% of the whole country, 14,481,000 inhabitants or 28.6% of the whole population; if the present trend is not reversed, in the year two thousand, we shall have a concentration in the same territory of 29,153,000 inhabitants, equivalent to 44.8% of the national population. (1)

In the sector of house construction, the preference given to private industry has determined:

- (a) a heavy increase in prices and an outright opposed trend in the structure of supply and demand. One has thus witnessed the discouraging sight of empty luxury flats whilst there persists the phenomenon of so-called unhealthy habitations (barracks, caverns, walls of urban defence, towers, etc.);
- (b) the systematic evasion of regulating plans with collateral occurrences of corruption of administration, political and civil servants and of organised delinquency.

(1) "Presupposed knowledge and indications for an organised policy of transports" (November 1970)

II-5. Which causes have determined this situation?

It is clear that modern industrial sectors established to satisfy the demand of the international market had a vested interest in building up an internal market to reduce the risks of economic fluctuations. All this occurred, however, at the cost of rationality, i.e. of development of essential consumer goods and of collective consumption should have had priority, not only for reasons of rationality.

Yet it should be noticed that this development has characterised, even if only to a small extent, the economic evolution in all six countries of the Community, as shown by the trend of public expenditure in relation to increases of the GNP. The Italian situation shows painfully the same defects and it is the result of a more backward starting point in the matter of strength of the productive system and social infrastructures.

In short, we are facing a situation which, having escaped from the grasp of the organs which traditionally controlled it, the nations themselves, found no other democratic control points and produced that imbalance in power between industry and society already mentioned.

The problem of a want of institutional adaptation must not induce one to lose sight of the responsibility on the part of governments which were required to give a major impetus to the fulfilment of the infrastructures in the face of social phenomenon already outlined and which did not succeed in fulfilling even the objectives. It seems clear to us that they were persuaded by the industrial lobby to postpone this topic, even if, especially in Italy, the possibilities of financing were somewhat extensive.

Distortions caused by spontaneous development and the inability of established powers to "develop harmoniously" our society, indicate clearly the limits of the "system" set up in Europe immediately after the Second World War and founded on the opening of economies and the want of instruments to direct it. In this examination, the missed development of infrastructures assumes a central function.

II-6. The political answer of reforms

The nucleus of this system relies on the power which a minority has imposed in practice on all development of the society. It is, therefore, natural that the conditions of the encounter should be sketched in principle at the level of the factory. It was in fact at the level of work that was revealed in the more open and brutal manner the enslavement of working man to the needs of production. But it was also clear that the position of intolerable subordination of the citizen in the factory having been characterised, it would have been consistent to transfer by analogy the same relationship of subordination of man at the level of society and of society faced by the production system. If at factory level it was possible to settle by negotiation with the owner, problems of rates, of chains of production and assembly, in one word the organisation of the work, outside the factory those problems which make the worker's life painful could be solved by using the same methods, also problems of regional imbalance and forced emigration, of want of essential democracy, of incapacity of the system to fulfil urban infrastructures.

Syndical organisations in Italy have become the interpreters of these requirements by launching the policy of reforms.

Action for reforms has obtained some positive results, implemented through protocols between syndical organisations and the Government for the reform of homes and of health. The first protocol with some pejorative amendments has become law, the second expired with the dissolution of the Chambers.

Apart from the practical results it seems to us that the positive elements remain valid in this first syndical initiative.

The first is the individualisation of the parallel between the power of the contractor in the factory and in society and the statement of the problem not as a key to streamlining the system but as a key to the change in relationship of power inside the system itself.

The second is represented by the consciousness acquired by workers of the necessity for action for the fulfilment of infrastructures as an instrument to modify the development mechanism, changing purely productive aims, of production in itself and for itself, by aims of social progress, by an improvement in the quality of living.

In the third place, the choice of syndical action with its aspects of challenge has contributed in no small measure to showing the unconcern between the real country and the institutions, pointing out in the Italian experience the most significant political proof of the increasing inability of the national apparatus to cope with the new social requirements.

The action had its limits above all in the absence of any precedent it could follow, in the second place due to the diffidence with which political parties and Parliament have surrounded it.

There is no doubt that during some phases of the fight, errors were committed but it is also true that the large majority of Italian workers has given its full support to this action and that its aims remain doubtless valid on the way towards a renewal of Italian and European society. The abundance of agreement shown on the part of workers demonstrates undoubtedly the importance of these needs in a turning point of social policy.

II-7. Philosophy of action for the reforms and its "novelty".

We shall now quote two extracts from the syndical documents on house building and transport which show clearly the lines along which this action has moved.

"An organic policy for the home must systematically aim at establishing an optimum relation between individual and environment at the level of culture and well-being with which present society agrees. This means that enjoyment of the home must in the first place be assured by high qualitative standards and with uniform criteria for the collectivity of citizens; moreover, it is linked with the enjoyment of all the civil and social services which go with the dwelling: urban transport, parks, schools, hospitals, libraries, places for leisure, etc. In this meaning, the policy of the home becomes a decisive element for the implementation of a higher level of living in the nation.

The means through which, hitherto, it has been attempted to ensure the use of the residence are, on the other hand, entirely contrary to these criteria. They give rise to marked inequalities between the various classes of citizens and give the home a permanent character of scanty resources. This is because it has acquired the form, the destination and

the rule of any economic possession subjected to the laws of supply and demand and to distortions of income and of profit.

The only coherent way to fulfil an optimum relation between person and dwelling is, therefore, to take away from the dwelling, as happens in the case of other fundamental necessities of the collectivity, its character of exclusive economic possession and to give it the more ample aspect of prevailing social service".

Transport Policy.

"The same bond exists between the mechanism of spontaneous economic development of our system with the relevant territorial and sectoral imbalances and overall progress in the transport sector, where are proposed again the same mistakes in development and similar regional and local wants.

The lines of alternative intervention in the sector, therefore, are subordinate to objectives of a radical change in the kind of development carried out up to now. These objectives must take a practical form above all as precautions against public expenditure apt to slow down the dangerous tendency towards the concentration we have at present of buildings and industrial installations in few metropolitan areas. Thus is outlined in the first place the necessity of an overall planning of the transport sector subordinate to new objectives of harmonious general development. Yet the guiding idea of planning, as optimum aim of resources in function of certain objectives must not assume a merely efficient appearance.

The objectives aimed at and the technological perspectives of the sector in other terms cannot be subordinated to a simple reckoning of economic costs and benefits. They must be

rigidly established in relation to the interests and expectations of the working class, not only in terms of economic and social growth but also of increased free time, of a more extensive participation in the political and social life of urban centres and of the country, of better physical and psychological health. From this point of view, the reckoning of direct and indirect economic costs, must correspond to an evaluation of social benefits, with redistribution of revenue, of regional re-balancing, a higher rate of mobility, in civilization and better human conditions".

The first document in proposing the withdrawal from market attitude the building of homes, has the precise meaning of eliminating speculation from an essential need. The second to make transport policy an active element in directing economic development and not to be its by-product. In both cases, the revindications are alternative clues to present development founded on the priority given to development objectives at short and medium term and the subordination to these of long term ones which alone can bring an improvement in the quality of life.

It is on the basis of these considerations that can be seen the irrationality of the present real power structure for the spreading of large masses and the inconsistency of the assumption that it is necessary "first to produce then distribute" leaving to a minority the task of defining "what" and "how" to produce. It is precisely the choice of "what" and of "how" which determines the features of a society, if it will be human or inhuman, if it shall be democratic or oligocratic, if in the end it will be worthwhile living.

These revindications are set in entirely new terms as to previous syndical experience, not only in means of action (the strike), but also in aims. The demand is not made in fact

according to tradition, of benefits for workers in face of an economic development the direction of which is left to others, but an alternative development capable of realising workers' aspirations. Hence the harshness of the encounter and the deep strategic meaning assumed in the encounter, the revindication of social structures.

Chapter III - PERSPECTIVES

III-1. Reality of the problem at national and European level.

In synthesis a certain economic development favoured by the Treaty and by national political behaviour impedes a rational and adequate development of infrastructures right at the time when this development becomes the junction between citizens' aspirations, social progress and economic development. Certainly the conflict between development of infrastructures and short and medium term objectives based on the preservation of competitiveness of national products, in relation to the other European countries and of their products in relation to international competition, gives the problem an extremely political character and a continental dimension.

The political moment of the encounter of interests between forces which propose to carry forward a certain development of society and the others which subordinate it to needs of productive development and of European and international competition, is that of the sharing out of revenue between productive and social employment. The present institutional structure of European countries does not seem to be able to solve within itself this discussion between groups of interests. The Italian experience of expressing this discussion in a direct confrontation between syndical action and Government has resulted in a series of perplexities and difficulties. Perplexities determined even ad hoc in the public opinion

on presumed attempts by syndical organisations to occupy a place outside their competence and in particular to occupy the very political space of the parties. Objective difficulties are evidence above all by insufficient syndical action to solve completely such problems only within the ambit of a direct encounter with the Executive and with Parliamentary Groups.

A problem of syntheses of new instruments of action, not of method or of contents.

Moreover, the economic correlation of EEC countries, tends to leave out at the lowest common denominator the social uses of resources as a way of thinking of increased competition in the area and in the absence of re-balancing mechanisms at European level.

The drop in social investments and goods of collective consumption brings into play not only the overbearing action of European oligopolies and the political will of Governments, but also limited institutional instruments of the Community. The political forces of the Left and the syndicates must finally take charge of this new dimension in their action.

III-2. Enlargement

Certain hesitations shown by parties of the Left in certain candidate countries are in fact rather justified in view of what was said previously. Above all, Great Britain, Denmark and Norway enjoy social and infrastructure development systems more satisfactory than those of the six countries of the EEC. We do not know in what measure the economic structures of these countries will succeed in avoiding a slowing down in their infrastructures.

It is realistic to suppose that, as matters stand, also in these countries results can be obtained of the same type as those which have characterised the economic and social developments of the Six, in the sense mostly used of assigning priorities to uses of resources for economic purposes. We are of the opinion, however, that given the present situation of financial institutions in the European area, pressures could occur in any case.

The increase in international competition, the transfer of capital, the large international banks, the Euro-dollar market, are realities which weigh also in countries outside the EEC. The control of these phenomena certainly is not due to an expression of nationalism but to a new institutional revival and a new distribution of political and economic powers in the Community.

III-3. The Werner Plan

The solution, according to some experts, could be found in the implementation of the Werner Plan and in the decisions of the Council of Ministers of the 8th and 9th February which followed. In recent months, many doubts have been expressed on the effective possibility of applying these decisions, nevertheless, the Economic and Monetary Union remains one of the priority objectives in the present phase of development of the EEC.

The Economic and Monetary Union raises at once the problem of the Community's external relations; in fact the monetary mechanism with the reduction of internal fluctuations and with the fixing of a specific exchange rate for the dollar, implies the idea of an immunisation of the economic evolution of the Community in the face of phenomena developing on the international market. It remains to be said that Werner's project will bring about the unification of financial markets and will determine a common financial

policy, which may allow the control of the same phenomenon of the Euro-dollar and of Euro-emission. This perspective however, is again open to discussion through the events of August 1971 and by the Washington agreement which, not having solved the problem of convertibility leaves open areas of major uncertainty not easily linked with monetary decisions foreseen in the Werner Plan. The less reassuring aspects are to situate in various degrees of efficiency the proposed monetary measures on the one hand and the economic and social policies (regional, social, budgetary, etc.) on the other.

In fact, no proposals are made on measures nor on timing on a social level; when it is evoked in terms of finality it is as a by-product rather than a point of reference.

The decisions taken on 8th and 9th February underline the necessity of continuous collations between States, the peremptory recall to stability as an end in itself, could lead moreover to seeking a minimum common denominator at the lowest possible level of agreement between the Six Governments which could flow in a philosophy of permanent and controlled "deflation" for the whole Community.

The essence of the contrived monetary union entrusts, moreover, a prominent role to economic policy, to monetary manoeuvre in the hands of Central Banks, it constitutes a strong mechanism of monetary co-ordination which is the absolute bond between Community and national economic policies

The same hypothesis of economic programmes (and wider ones of economic policy) would lead back to the choice and actions of the Central Banks. It would have

a priority to the point of becoming in fact exclusive, lines of economic policy of accelerating and braking, of "stop and go", of inflation and deflation manoeuvred so as to regulate and correct the economic trend deriving from mechanisms of present accumulation and development, without aiming at modifying them structurally through the development of social infrastructures and of an effective reversal of spontaneous tendencies.

In substance, if effective measures are anticipated, they are concerned with the monetary situation (reduction of margins of fluctuations and co-ordination of monetary and budgetary policies). For correctives at the level of economic integration there are no measures nor any indications of the timing, but simple expressions of wishes for their application.

III-4. The Autumn Summit Meeting.

Numerous are those who hope that this change of tendency will be examined during the deliberations of the Prime Ministers Summit Meeting scheduled to take place in the Autumn. In this connection, we can but express our scepticism. If there emerges a single lesson from our twenty years of community life, it is that such a Summit may take a courageous decision like the one of allotting a consistent number of resources to the development of infrastructures and, in particular, to the social-cultural ones. In these negotiations between Prime Ministers, even if there are voices in favour of such decisions they will vanish rapidly because a mechanism of decision based on international negotiations is in itself destined to find a compromise of a passive and irrelevant nature in respect of the problems and of the structure of power in the EEC. It is probable that there will be a declaration of principle which mentions without doubt the "quality of life", but it is certain that the means will not be established nor will the conditions to realise it be determined.

CONCLUSION

We think that we have shown sufficiently that the misery of social infrastructures in the six countries of the EEC is the product of a certain ideology, of a certain productive system, of a certain relation of strength between social classes. The ideology is the one of consumption, the productive system is a liberal one, the imbalance in the relations of strength relies on institutional insufficiency which makes our social structures dependent on the productive mechanism. The result determined by these three elements is a society which is inhuman, irrational and disequibrated in its development. A society which limits democratic rights in obsolete territorial dimensions and in incapable institutional organs.

The unsuccessful development of infrastructures constitutes, however, the neuralgic point, the Achilles heel of its ideological fabric tending to the preservation of present equilibrium. Because their scarcity is more noticeable in industrialised urban clusters, they are more easily channelled into movements of public opinion. Because they tend to penalize the needs and aspirations for a higher quality of life which are necessarily born in a society which has got over the threshold of poverty. Finally, because the principals responsible for this situation feel frustrated and challenged. (1)

(1) Article by Agnelli, Espresso, 27th February 1972.

The real problem is, therefore, how to give an outlet for these human aspirations born from the crisis of the way of life and the principle myths which had characterised political and economic discussions in Europe after the Second World War. Because the privation of infrastructures above all brings into cause the progressive parties and the syndicates, in short, the European Left parties which have been unable to give an outlet to these new aspirations of the masses.

The inability shown by these forces to give a political synthesis to those aspirations felt by all European citizens and to give it a Community dimension is one more of the elements which favoured the prevalence of productive objectives over social ones.

This delay must be caught up with as rapidly as possible so that social Europe may be born from a movement of extensive and organised public opinion capable of imposing brave solutions (this, Summits cannot do) and institutional progresses able to reverse present tendencies. This is a matter of linking the fights in factories with a far-reaching political scheme, the starting point of which is the fight against man's subordination to the productive apparatus in the factory, and finds the means, the institutions and the kind of the most efficient fight to give a human aspect to the European society of the future. This is a matter of making a European proposal of the workers, rooted in their real interests and in their conscience, which questions the aspect of power and the lines of development along which has moved the process of European integration. Only by taking over the burden of these interests can the Community institutions realise the facts of "an original model of development" and "improve the quality of life".

PROBLEMS OF INFRASTRUCTURE FINANCING

by

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Conference on Industry and Society

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PROBLEMS OF FINANCING

The need to establish general policy conditions favourable to the development of infrastructures and hence for a movement of public opinion in this direction, changing the present balances which govern the fundamental choices of our system, does not, although a priority need, entirely exhaust the subject. This policy action is inherently long-term and can be carried out only in successive stages, with the occasional launching of projects having more advanced objectives. It therefore seemed worth while to pinpoint the problems posed by infrastructure financing in the present economic balances and sort out the information, albeit fragmentary, which the trade unions have given on this problem in the EEC Member States. The aim of the investigation is not so much to produce a list of proposals as to determine the common background of trade unionists of the various countries on a problem such as this, involving the whole of society but of special importance to workers.

The investment made in socio-cultural infrastructures, which are the most neglected but of the most interest to workers, almost always represents a transfer of income between social classes, in that it is mostly the poorer classes who benefit from it, and often a transfer in time, in that in many cases it is particularly the socio-cultural infrastructures (hospitals, schools, etc.) which have the effect of increasing productivity in the long-term only and therefore from a purely economic point of view may generate inflationary pressures.

According to the prevailing opinion, in open economic systems such as those of the Community countries the channelling of some resources towards such uses may in the short term engender a loss of competitiveness in relation to other countries' products on the domestic market and on international markets, accompanied by

monetary trends and fluctuations which would jeopardize the establishment of the economic and monetary union. These opinions based on a liberal economic conception, while they are apparently indisputable from the standpoint of social justice, can easily be refuted from an economic standpoint if the long-term development projections are taken into consideration. There is no doubt that, in a wider view of economic evolution, social and cultural progress is indispensable to such competitiveness of the system. Even in the short and medium term, however, notwithstanding the stabilizing effects which may be exercised by a policy to stimulate low-cost housing or public transport, it has to be admitted that it was precisely in a period of decline in public investment (1965-70) and social infrastructures that inflationary strains caused increasing anxiety and affected both countries with high public spending rates (such as the Scandinavian countries) and countries with less highly-developed social services (such as Italy and France). This means that the inflationary pressures deriving from increases in public investment of a not immediately or not directly productive character are negligible factors in an economic context which contains far more significant factors of inflation. The other implicit criticism in the steps previously set out in the Second European Medium-Term Programme is that any diversion of financial resources into social applications would result in inadequate structures of production and thus inhibit the necessary reorganization measures, since private enterprise would not be able to find on the capital markets the means of carrying them out. This assertion too can easily be refuted, either on the grounds of the qualitative objectives which economic growth should have and which would, on the basis of this argument, be perpetually deferred, or on the grounds of the long-term economic outlook. However, even in the medium and short term it is a

fact that the current abundance of funds on the capital market serves rather to generate phenomena of a speculative nature and the accumulation of unused resources than to bring about technological progress or give a fresh impulse to production. The speculative capital released by the inability or unwillingness of the authorities to develop the social infrastructures and by the accompanying "disaffection" of private enterprise is both one of the causes of the rapid growth in unemployment and a "strategic reserve" for speculators (a matter of 50-60 thousand million dollars) which, if not supervised and directed, hangs like a sword of Damocles over the economic and monetary union. After these matters of, in our opinion, unjustified concern are removed from the general picture, there remains the necessity of considering this problem and determining the priority objectives and the best means of channelling resources to them. While there is and will still be a problem regarding limits to the assignment of resources for social uses, this will depend on the development of the economic and monetary union, since, in the long run, unduly divergent trends in public spending in the various countries will be incompatible with that union.

European trade unions and infrastructures

We have already spoken of the action of the Italian unions in the previous part of this paper. A rapid glance at the official programmes or statements of other unions shows that analysis of inadequate development of infrastructures is a preoccupation common to almost all European unions. The action programme of the three Dutch confederations starts with a statement of the reasons for the need for the trade unions to become involved in the fundamental choices of economic and social development.

One of these reasons is the danger of economic development being based solely on a private-enterprise economy with respect to the natural environment, the undervaluing of social infrastructures against individual goods and services and the (negative) influence of an economic doctrine built round concepts of production growth on the education and behaviour of consumers and on the mentality of the general public. To combat these negative aspects the NVV, NKV and CNV have submitted a whole series of demands to the government, including a call for more housing construction, a 10% reduction of classroom overcrowding, and environmental protection. A large part of the report by George Debunne to the FGTB Congress putting forward demands is devoted to the improvement of the quality of life and, in the same context, to problems of housing, urban and rural development and transport. The final resolution calls for the coordination of the various means of transport, a dynamic housing policy and the creation of public enterprises to fill the gaps left by private enterprise in these sectors. The Congress of the FO in France was uncompromising on the housing problem; one clause of the final motion says that housing is an inalienable right for every individual and every family and that the full exercise of this right is a condition of human dignity. The debate in France on infrastructures was stimulated by the formulation of the Sixth Economic Plan. On this subject, all three of France's leading trade-union organizations (the FO, CFDT and CGT) criticized the tendency in the Plan to neglect social infrastructures.

Methods of financing

The method generally advocated by the unions for financing in order to sustain public spending, which has to be increased to a higher rate with respect to the GNP (as is generally maintained outside the trade union movement also), is taxation.

At the last FGTB Congress this problem had a prominent place and it was reaffirmed that the State should find the resources necessary for ensuring social progress by increasing the taxation on large incomes, inheritances and corporate profits. The same kind of demand is found again in the proposal for taxation reform launched in Italy under the reform policy:

"1. The GGIL, CISL and UIL affirm that the institution of a more modern and more equitable system of taxation is now urgent, as a fundamental structure to provide the State with resources and means to permit the achievement of public, economic, social and democratic ends and the carrying out of major structural reforms, in the general context of the redistribution of income to the benefit of the less privileged classes. The taxation reform should thus be inspired by the constitutional principles of progressive taxation and of adequacy and efficiency with regard to the vast public resources necessary for the gradual elimination of the many aspects of the field of charges equivalent to taxes."

One of the points in the Dutch unions' action programme is that the trade union movement is ready to take the consequences of the choices made and of the demands for an increase in public spending on infrastructures, and hence a reduction in the rate of growth of private consumption. It is also stated that a survey among union members indicated that the 0.52% increase required in the taxation burden to meet the demands of the unions was regarded as tolerable. All the unions in the EEC countries assert, however, that account must be taken not only of the increased need for state revenue and the consequent necessity of introducing taxation reforms but also of the inequity of the taxation systems and that efforts should be made to remedy this inequity. This demand, coupled with a call for higher public spending on

infrastructures, is also made by the DGB in the "DGB proposals on tax reform". With this in view, the German unions are demanding that the proposal of the Commission set up in West Germany to prepare the way for the tax reform be amended so as to ensure steeper tax graduation.

Capital market and national debt

A second source of infrastructure financing, according to the unions, is use of the capital market by the authorities. The Italian unions consider that the financing of new housing when the reform is in full swing should also be covered by recourse to the capital market. The Dutch unions in turn speak of the use of both private and public funds. In this connection the policy advocated in some countries, particularly West Germany, on workers' funds is of special interest. The DGB has, of course, always urged better distribution of business assets and workers' participation in capital formation, but has sought to prevent such participation from affecting wage development and from being passed on in prices by business enterprises. Ways and means of implementing this policy are therefore special union agreements and tax concessions by the State for this type of fund. So far the aims of this policy based on the DGB statement of 9 October 1968 are an intensification of asset formation by workers and participation by workers in asset growth. The development of such union agreements has been impressive in recent years; to quote only one figure, about eight million workers are receiving benefits from their employers under such agreements.

The benefits furnished by the employers may be in the form of bonds, shares or liquid money. These funds, however, were largely inaccessible in the period when workers could not have them under their supervision and thus found their way into the

normal financial channels. In November 1971, however, the DGB called in a further statement for the institution of autonomous funds managed by the workers and the authorities for money payments and bond issues. On the basis of this new stipulation, a debate has been taking shape from which is emerging a possibility of using these funds for investment in infrastructures and for rendering decisions by private enterprise socially more rational. In this way the funds would be one of the means of securing a say in general economic decisions, which has been one of the more important demands of the German trade unions in recent years.

Infrastructure costs

The problem of financing is also closely connected with the cost of social infrastructures, especially the cost of land and building construction. While the trade union documents provide numerous impulses to further technological development in the construction sector, whose backwardness is viewed as a defect in the system, which has given priority to other sectors of production, criticisms and demands have been chiefly concerned with the legal provisions governing building land. The French unions, for instance, have repeatedly shown up the incompatibility of the lines in the Sixth Plan, which relies mainly on the market machinery, with the solution to the problem of social infrastructures. In a motion carried by the Belgian FGFB Congress, one of the demands was for a genuine land policy and the elimination of speculation in land; the Action Programme of the Dutch unions states that the ownership of building land should be limited in order to prevent speculation and to permit immediate expropriation and a land policy. But the most explicit and incisive statements are perhaps those issued by the Italian unions which have since found their way into law, with some modification.

"Compensation of expropriation of farmland should be at an agricultural price determined on the basis of soil utilization at the time of making the compulsory purchase order. Any appreciation in market value as a result of existing or planned infrastructure work which has been, is being or will be carried out by the local authorities or by any action on the part of the public authorities should not be taken into account. Compensation for already developed land should be by the application to the farmland value of coefficients established for determining a price which is never higher than the Land Registry value or the assessed fiscal value of the construction or land, whichever is lower."

Regarding the criteria to be applied to compensation for expropriation, the principle is thus reaffirmed that it is necessary to avoid shifting on to the community the burden of the income stemming from the increase in land prices caused by urban development phenomena. The amount of the compensation should therefore be calculated on the basis of the agricultural market value of the land.

The problem of infrastructure management is also closely linked with the financing problem. It has certain aspects which give rise to heated argument between the central and local authorities and, in the matter of vocational training, for example, between employers and workers. Vocational training in Europe often takes the form of apprenticeship; the trade unions have pointed out the abuses and inefficiency to which this system is exposed, at a time when there is a need for more training than private enterprise can offer. With regard to the level of management in general, the unions support decentralization (France, Italy and Belgium).

CONCLUSIONS

The main financing tool proposed by the unions is taxation, even if some of the methods advocated are original. This is clearly because of the greater fairness ensured and the possibility of income transfer, which taxation offers. In the CFDT and CGT programmes in France, an additional tax on employers using migrant labour, equivalent to 1% of the wage, is demanded for the construction of housing for migrant workers. Such a measure has two advantages: it increases the resources for housing construction and it discourages labour-intensive investment in immigration areas, making such investment more costly.

Measures of this type have been announced in some regions in Northern Italy, more particularly by the Lombard authorities. A quasi-fiscal measure has been proposed by the trade unions in Belgium with respect to commuters (workers). The employers would pay contributions for workers' journeys which would be used to form a fund which would have the effect of making such occupational travelling free and at the same time assist the financing of transport infrastructures. These independent steps by trade unions and other bodies show that there is also a need for rationalization of the taxation system.

A second consideration is that the tax system throws into clear relief how far the administrative levels and shop-floor representation have lagged behind the expansion at the economic level. Nevertheless, we feel that this instrument remains useful, subject to appropriate adjustments to this new state of affairs. The matter of multinational companies is dealt with in other papers. It is sufficient here to say that the unions are watching with great interest the progress of the Commission's

"European" company project and consider that the proposed statute, though it may be open to criticism in other ways, has undoubted advantages in that its aim is to standardize the legal pattern for European companies. With regard to multinational companies transcending European frontiers, the ICFTU has on a number of occasions proposed an international convention to regulate the conduct of these centres of economic and political power, with reference to, among other matters, taxation problems.

Taxation will therefore remain irreplaceable as a major component of infrastructure financing only if subjected to a radical reform based both on its greater flexibility and decentralization and on its gradual transposition to Community level. This, however, does not rule out recourse to methods of direct financing (for infrastructures more closely linked with production and those involved in combating the pollution caused by certain industries) and recourse to savings capital. The IRI motorway experiment in Italy, financed by bond issues, is what we consider an interesting example and we are also of the opinion that in future too the capital market should have sufficient availabilities to solve problems of social infrastructure. The problem is rather that of setting up financing machinery to channel savings in a different way from that currently in operation. It is precisely the supervision and channelling of investments by the authorities and the resulting effects of democratization of the economy that form the bedrock of Europe's power to create an original pattern of civilization.

In conclusion, I would like to add that we are confronted by a situation marked by some encouraging and some disappointing features. They are encouraging because the background to and general conceptions of the problem are common to almost all the

European trade-union organizations, and it therefore seems possible to develop a unified strategy for this practical problem, as for others. They are disappointing because this strategy has nevertheless not yet been established and we have all remained confined within our frontiers while our governments have responded to union demands by expressing anxiety concerning the decline in power to compete with other countries - which would have been far less controversial if expressed by a European executive.

On the other hand, only one other type of political outlook would have enabled the Commission to accept these demands. Unfortunately the increasingly confederal and diplomatic trend in the Community, which seems to be towards a period of inter-State negotiation, does not seem the best approach to solving the problem. Hence, as in other sectors, the need for political development and democratization of the EEC constitutes a fundamental demand by the trade union movement.

Rome, April 1972.

COMMON MARKET
AND
PUBLIC SECTOR RESOURCES

THE RISING COST OF PUBLIC SECTOR INFRASTRUCTURE AND
RESOURCES AND THE PROBLEM OF THEIR FINANCING WITH A VIEW
TO HARMONIOUS DEVELOPMENT IN THE COMMUNITY

by
Michel ALBERT

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The problem of the cost and financing of public sector resources is both vast and insufficiently known. In a simple report like this one, a global analysis of any significance cannot be expected.

The only acceptable method is a partial approach. It has therefore been agreed with the Direction générale des Affaires industrielles that this report should attempt rather to answer the following questions :
Is there, within the Community or, to be more exact, because of the way the Common Market operates at present, a tendency towards a type of society where private prosperity, or even opulence, would contrast with relative poverty in public services and resources ? Does not free competition and lack of compensatory factors within a customs union involve a risk of widening the resources gaps between the member countries ? How could such a development be prevented ? What contribution could the Community make in this respect ?

With this approach in mind, and after thus placing limits to our subject, we shall merely study the retrospective accounts and the economic projections drawn up by the six member countries within the framework of the Committee on medium-term economic policy, and educe the significance of the results of that study.

CHAPTER I

THE PROBLEM AND WHAT IS AT STAKE

Are public resources, like buildings, collective by nature or by reason of their utility ? How does this, originally budgetary, idea dovetail in with national accountancy principles ? Let us take what may be considered the minimum elements in order to outline, immediately after the more European aspects of the problem, those aspects which constitute what is at stake for all inhabitants of the Community.

A. BASIC IDEAS

Public infrastructure and resources are investments designed to satisfy public needs. What are those needs ?

The description by B. CAZES (1) is clear and useful :
"In addition to individual consumption for which the consumer must pay, individuals and families have needs of which the satisfaction is dependent on the decisions of the authorities. The relative importance of those decisions and the relevant public spending may vary from one country to another, depending on the political traditions which determine in each country the division between the public and the private sectors, on ethical considerations (one purpose of providing free compulsory education is to avoid parents' having to compare the expense of education with other expenditure for more immediate benefits), and on the extent to which services rendered by certain investments, such as urban road maintenance, can be "individualized" and invoiced.

It will thus be seen that public resources may be collective by nature or by reason of circumstances. The border which separates them from invested assets in the private sector varies with time and place.

(1) "La vie économique", A. COLLIN

To consider solely resources which are collective by nature is to adopt the narrow definition which Professor MANCUR OLSON, the initiator of the first attempts in the U.S.A. to draw up a social report, sets out as follows (1) : "Leaving certain terminological subtleties aside, we may define a collective good as a good which non-buyers cannot be prevented from consuming. National defence is a classical example of such a good, as it is practically impossible to exclude an inhabitant of a country from the advantages (or dangers) of the nation's system of defence. To a great extent, the advantages of the police and judiciary systems are also part of the common weal. A constitutional monarch is a particularly clear example of a collective good; the benefits of his reign extend to all his subjects, whether they be more royalist than royalty itself or republicans.

"Non-collective, or private, goods, by contrast, are goods which can be denied non-buyers. For example, if a person buys a loaf or a car, other people are denied the article bought. In other words, private goods are not consumed severally or in common".

As can be seen this is an extremely restrictive definition. It would mean that a school or a hospital bed would not be considered as a public good, when in fact they are symbolic of what are frequently called public resources. Whatever it is worth for the purpose of making an analysis, therefore, we must adopt a broader concept which, in practice is necessarily the idea of gross fixed capital asset formation or public sector investment.

The reason for this assimilation is simply that the gross fixed capital assets of the public sector are the only useful aggregate which has been statistically standardized within the Community (2).

(1) The Public Interest - N° 12 - summer 1968

(2) However, as this standardization could not be affected for the various components of the aggregate, this reasoning remains necessarily of a macro-economic kind.

The concept we have thus adopted is largely a matter of form : the criteria are the source of finance (public funds) and the legal status of whoever is in charge (exclusively the State or local authorities). This concept, adopted for the purpose of our analysis, applies to the great majority of capital expenditure for equipment required for the provision of non-negotiable goods and services by the public sector, and to the main functions of general administrative departments, such as education, transport and communications, expenditure on public health and urban and rural utilities.

Nevertheless, it may be considered unsuitable or deficient for several reasons, particularly because :

- a) it reflects inputs but gives no indication of the total stock.
So far there is no universally applicable means of comparing overall public sector resources in the various countries of the Community. Inventories for the various sectors are seldom useful. For instance, it is almost impossible to make valid comparisons of hospital resources, whereas market research provides very detailed information on private sector resources. It is known, for example, that fifty-two per cent of households in the Netherlands have an electric hair-dryer, that in twenty-three per cent of Italian households there is at least one cat, and that thirteen per cent of German families have at least one bird ... (1);
- b) the figures of gross fixed capital asset formation in the public sector are of course gross inputs which give no information on the real value of the resources they represent (e.g. overheads connected with the awarding of contracts, output of public service);
- c) gross fixed capital asset formation in the public sector does not include all public investments : e.g. investments for public undertakings as a whole, including the Post and Telecommunications (2);

(1) 30 jours d'Europe, January 1972.

(2) For instance, the concept adopted by the French Commissariat général du Plan is broader : it includes, besides the investments made by public administrative departments and hospitals, those made by the Post and Telecommunications and by the Paris transport service, the Régie autonome des transports parisiens.

- d) the factors covered by the concept are not entirely homogeneous. For instance, in Italy a large part of investment in roads, and none of the investment for motorways, is excluded from the figures of gross fixed capital assets in the public sector (1);
- e) some capital transfers within the public sector, by definition excluded from the figures for gross fixed capital assets, nonetheless contribute to the stock of public sector resources;
- f) the distinction between expenditure on capital investment and operating costs is often reached by arbitrary decision. It is of little importance whether a public service requires more equipment or more manpower (2); the main thing is that the service should satisfy needs. Consequently, the most advanced research today seeks to go beyond the conflict between investment expenditure and operating costs by endeavouring to quantify the benefits with which public financing provides the end-users, the consumers.

Considerable progress in this respect has been made in France, thanks to the first attempts to measure the "broad household consumption", which includes consumption as understood in national accounting principles; community services which are "divisible", that is to say those of which the beneficiaries may be fairly easily identified; and transfers related to the consumption of goods or services (e.g. social security benefits) (3).

It has, for instance, been calculated that public expenditure affects hardly one per cent of food consumption, whereas it accounts for two-thirds of expenditure on education, sports and health.

(1) In France, on the other hand, the investments of the mixed economy companies holding concessions for the operation of motorways, which have amounted over the last few years to about 2-3 % of the additions to gross fixed capital assets in the public sector, are included in the aggregate.

(2) This is also the case in education, where audio-visual techniques can partly, but only partly, substitute for teachers.

(3) CREDOC : J. DESCE, Consommation 1969, n° 2.

This extremely interesting research has prompted UNESCO to develop it at the European Centre for the Co-ordination of Research in Social Science (ECCRSS) in Vienna. The results of this research are available only in France. This is all the more regrettable as the research has a bearing not only on Western Europe but also on the socialist democracies.

Reverting to the gross fixed capital asset formation (GFCAF) in the public sector, for want of a preferable alternative, the question must be asked, before broaching the European aspects of the subject, whether there is a specific problem of cost and financing of public infrastructure and resources.

So far as the first point is concerned, although the cost of public investment often increases at a relatively rapid pace, it does so mainly because as much as two-thirds of it is in building and construction, which is subject to the two-fold effect of rising wages and the increasing cost of land which is in short supply.

However, these remarks are of minor significance compared to what Bertrand de JOUVENEL (1) has to say concerning the sector of "non-declining cost activities", that is to say, where economies of scale are not operative, productivity remaining constant or only slightly increasing. This is the case, inter alia in medical treatment, the cost of which in the United States increases three times as fast as overall purchasing power. Bertrand de JOUVENEL shows that goods produced by sectors where increasing productivity is the rule tend to be supplied in terms of market forces (2), whereas the public authorities are required to dispense the other goods (3).

(1) Analyse et Prévision - November 1969.

(2) Cf. developments in the telecommunications system mentioned on p.

(3) There is perhaps a sort of financial burden here which in a way reminds us of the relationship between the Community and the member States which agree to pool problems and old techniques (coal, agriculture, customs dues) but are intent on keeping what may be future advantages to themselves (atomic energy, scientific research, the problem of direct investment, and so forth).

However, the public authorities often lack the means of doing so satisfactorily. Even in the affluent societies, impending shortage is characteristic of the activities incumbent on the public sector. Even worse, as GALBRAITH demonstrated long ago, the industrial system tends to make increasing private wealth coincide with impoverishment of the public sector.

Underlying this contrast is the consumer-taxpayer argument. When a consumer buys something on the market he obtains an immediate personal satisfaction; when the taxpayer settles his tax liability, he obtains cold comfort from the prospect of much later or hardly perceptible satisfaction in exchange. Of course, we all know that the taxpayer's tribute is essential, of only to permit the consumer to enjoy in peace the income which remains to him. This type of argument, however, is hopelessly inadequate to redress the characteristic imbalance of our industrial societies.

Consequently, the hordes of city dwellers, every morning and evening, crowd into the comfortless public transport vehicles while private cars in the increasingly traffic-jammed streets are three-quarters empty (1); the excessive individual consumption of drugs is exacerbated concomitantly with the shortage of hospital beds (2); a plethora of children's toys is now accompanied by a scarcity of playing grounds, and so on. In every aspect of society the same disequilibrium is to be found to some degree.

(1) In France, the report published in 1969 on the nations "transport" accounts, showed that the average Frenchman in 1967 devoted 82 % of his "transport" budget to private transport and only 18 % to public transport; from 1962 to 1967, the total cost of transport by private car rose 7 %, whereas the cost for public transport rose 25.3 %.

(2) In 1965, inmates of psychiatric hospitals in France exceeded capacity by 19 %, one patient in six having to make do with a stretcher instead of a bed. In addition, 67,000 beds out of 108,000 were more than 80 years old ("L'argent signe de santé ?", Convergences, SPES, 1969).

This imbalance points to the central problem of the financing of public resources which, as such, will not, however, be dealt with here. We shall thus avoid any exposition of old theories according to which orthodox budgeting enables investments to be made from borrowed funds whilst current expenses must be covered by revenue : in both cases funds are drawn from the national product and consequently the satisfaction of private needs compete with the satisfaction of community needs. This is what we are concerned with here. The problem of recourse, to a variable extent, to borrowing is related rather to political considerations.

B. EUROPEAN ASPECTS

Nowhere more so than in Europe is it necessary to remedy this disequilibrium between increasing private wealth and impoverishment of the public sector. It stands condemned by our whole tradition, from ancient Athens which might not have been Athens were it not for its public monuments, through the Middle Ages with its cathedrals, to the invention in Europe of free compulsory education and of social welfare services in a free society.

Yet the economic revolution bids fair to aggravate the disequilibrium, due to the raising of the standard of living which henceforth takes the form of a relatively excessive increase in tertiary consumption in which the share of the public sector, and hence the need for public financing, is particularly large.

It can be understood, therefore, that in the initial stages of their economic programming, the EEC countries laid stress on the problem of collective resources.

Event in matters in which the Common Market has made most headway (customs union, common agricultural policy) success was achieved only after protracted efforts to bring the member countries' initial stand-points into line with one another. In contrast, it was a striking fact that their essential aims in matters of collective resources were spontaneously defined in terms of consentaneous points of view.

This is shown by the analysis of the projections adopted by the member States for the first programme of medium-term economic policy (MTEP), and is reflected in a figure of symbolic value : the rate of increase in public investment during any five year period should on an average, throughout the Community, be double that of the gross overall product (8,5 % per annum in volume, as against 4,3 % for the GNP). In addition, this very remarkable difference was no more than the work of chance or of a fleeting combination of circumstances. It reflected a political determination based on one of the soundest of principles.

That official policy of the Six condemns the disequilibrium between the ever greater satisfaction of private needs and the inadequate satisfaction of collective needs. It was defined as follows by the Commission and later by the Council of Ministers in 1967 (1) with the full approval of the Economic and Social Committee and the Parliament of Europe :

"Apparently, the only possibility of ensuring a larger margin for growth in private consumption lies in checking expansion in public expenditure. It is a possibility, however, which is largely illusory.

"At the beginning of the century, public expenditure by the large States was rarely greater than fifteen per cent of their gross national product. Everywhere today, in spite of the sacrifices imposed by the pressure of taxation to meet it, public expenditure exceeds one-third and, in States which have most widely developed their social security systems, sometimes accounts for almost half of the GNP. This is an evolution which it seems difficult to reverse.

"To believe that it could soon be brought to a halt would be tantamount to claiming that a balance had been achieved in the satisfaction of private and collective needs. But no such balance has been achieved. The demands of public health are still neglected compared with feeding habits; the density of motor traffic increases at a greater pace than the provision of roads and parking space; the infrastructure for education, culture, science and lags far behind the development of private resources of all kinds.

(1) J.O. des Communautés, 25 April 1967. "Premier programme de P.E.M.T."

Under these circumstances, we must all realize that excessive growth of private consumption will inevitably lead to yet more stringent privation in terms of hospitals, roads or schools. In addition, future economic expansion (transport, education, research, housing) is largely dependent on public expenditure.

"Consequently, living standards, even the very quality of existence, are already, and in the future will be even more, dependent to a great extent on the sum total of collective resources and services which, when all is said and done, only taxation can pay for in the long run.

"In any case, if the increase in public investment were curtailed, the result would be no more than a very moderate improvement in private consumption, which would increase by hardly one per cent for a 15-20 per cent cut in such investment".

This makes interesting reading today, the more so because, if it still conveys the intentions of the governments of the member countries, those governments have, on the whole, by no means achieved their objectives in this field.

Hence the basic question : is there not, behind the machinery which runs the Common Market in its present form, some invisible force thwarting national governments and favouring a type of growth which is commercial and inequitable, a notable characteristic of which is the contradiction between private prosperity and the mediocrity of a large part of the public services and resources ?

To reply to this question we must consider the facts, that is to say the objectives on the one hand and the results on the other, both of the Community as a whole and of the individual member States.

CHAPTER II

THE EEC PUBLIC SECTOR RESOURCES POLICY

COMMON FEATURES

The table given in Annex I shows, for the five main countries of the EEC, the forecasts and results for the period 1965-70, and the forecasts for 1970-75, of the rate of growth in the overall product and of the four major uses of that product, namely public and private consumption, and gross capital asset formation in the direct production sector and in the public sector.

A. OBJECTIVES

The projections (1) of the Community's first programme of medium-term economic policy for the 1965-70 five-year period are a clear illustration of the principle mentioned above.

Whatever the differences in gross product growth rates (2) (Germany 3.5 %, Italy 5 %), the distribution of that growth among the four major uses is consistent with a philosophy which to a remarkable degree is common to all member countries. The policy of each is to limit consumption in order to increase capital investment (GFCAF), with priority to investment in the public sector.

Such is the target of those projections : redress the imbalance between the satisfaction of private and public needs. A useful formula for the calculation of the advance which each country allocates to public investment in comparison with the gross national product can be obtained thanks to a "coefficient of equalization" (see Annex II).

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- (1) These projections, prepared by the national administrations concerned, show both contingent forecasts and definite objectives.
 - (2) Calculated in terms of volume. It should be noted, incidentally, that, unlike the projections for the third programme (1970-75) which are based on values, those for the first programme had to be based on volume.

This simple calculation shows also more or less the same pattern in the new projections for 1970-75, except for the special features of concern to France which will be discussed later. This continuity of intent is the more notable for the fact that, as can be seen from Annexes I and II, the Community as a whole resulted not in the desired restoration of the balance, but in a relative decline in the volume of its collective resources : the "coefficient of decline" (1) is 94.2.

B. RESULTS

That result is curious, the more so as forecasts of overall product growth were appreciably exceeded (5.2 % as against 4.3 %). Indeed, that extra margin should have been assigned as a matter of priority to those uses which it is considered should be granted precedence, namely, public resources. It would seemingly have been more easy to do so as those resources are equivalent to about only 3-5 % of the GNP. Their rate of volume increase, therefore, if the States had had the slightest degree of mastery over their own finances, should have been of the order of about ten per cent per annum. Yet, in fact, the rate was less than half that figure (4.9 %).

This short-fall is the more serious as it concerns all member countries except Belgium; its impact is the more widely felt as public sector consumption also was below the levels forecast, and in that respect there was no exception. The contrast between objectives and results as a whole, and throughout the entire Community, is a contrast between the public and the private sectors.

1. The Private Sector

a) Private Consumption

The countries of the Community as a whole endeavour to keep the rate of expansion in private consumption below the rate of overall product growth. This is shown by the projections for

(1) According to the definition adopted, decline occurs when the "coefficient of equalization" goes below 100.

the first programme for all countries except Germany. That exception suggests a bold approach, in view of the rather warning tone of the following excerpt from the first programme :

"All things considered, it would hardly be realistic to expect real private consumption over the period concerned to exceed the projection forecasts. If private consumption growth at the beginning of the five-year period were to reach a higher rate, a relatively abrupt check on private spending would be inevitable at the end of the period. The consequences, which would be non-productive and even harmful, particularly for employment in certain sectors, would far outweigh the earlier advantages (1)".

It is a striking fact that the relative austerity thus forecast for all the countries in 1965 failed, except in France. This can be seen from the comparison of forecast and actual figures for private consumption and overall product. The failure was so marked, indeed, that the orders of magnitude were inverted and this inversion, incidentally, as already mentioned, was the more significant in view of the fact that the real value of the overall product in each country had increased much more rapidly than expected.

It is difficult to believe that the Common Market had any direct influence on these results.

On the other hand, it may well be assumed that there was an indirect, albeit minor, influence favourable to the limitation of real consumption increase, in so far as increased competition results in equal production at relatively lower cost.

- b) Gross fixed capital asset formation in the private sector hardly calls for comment. That results were appreciably higher than forecast in all countries except Italy (that country's projections for investments as a whole being over-ambitious) was undoubtedly

(1) It was only the particularly favourable international situation for the greater part of the five-year period which prevented the occurrence of such difficulties which, moreover, may have been only deferred for some countries.

due both to the fact that they reflected the general prosperity and to their direct medium-term link with the momentum of private consumption.

2. The Public Sector

Unlike the private sector, the public sector is characterized by results which in general fall short of the forecasts, often to a considerable degree.

This is shown in the first place by figures for :

- a) Public Consumption : 3.2 % as against 4 %, throughout the EEC.

Germany is a special case. The growth rate of consumption in the public sector, averaging 2.2 % per annum, is almost one-third less than the apparently cautious forecast of 3.1 per cent.

These findings are all the more important because not only was no part of the unexpected excess overall product assigned to current needs in the public sector, but the share which was allocated to those needs was lower than had been allowed for in the projections, in spite of the higher than expected overall economic performance of the member countries.

Growth in public sector consumption no doubt depends to some extent on the year-to-year policy of governments, which are not trammelled by projections based on economic reasoning. None the less, it is difficult to understand why in all countries results in this field - where forecasting is less a matter of chance than it is in others - were so strikingly below expectations. It may well be asked whether some powerful and unexpected forces - inflation for example - have not been working against the governments' intentions.

Be that as it may, the new forecasts for the current five-year period show two kinds of reaction to the results reported, namely either a change in policy with a view to inhibiting in varying degrees the increase of consumption in the public sector

(as is the case in France, Italy and the Netherlands), or, on the contrary, as in Germany, a clear determination to bridge the gap :

"the growth rate exceeding that of the expected GNP in the Federal Republic, is unquestionably an expression of policy and of "the need to bridge the gap" in many sectors (particularly in education, vocational training and public health)". (1)

b) Investment in the Public Sector

This is both the most interesting aggregate in itself, and the one which is at the centre of our subject. It may therefore be useful to examine the factors which, in this field, have, as already mentioned, led to results radically different from forecasts.

The first question which arises concerns prices. All factors in Annex I refer to quantity. Could not the low public sector investment from 1965 to 1970 be due, at least in part, to a rapid increase in the cost of such investments ?

The reply is given in Annex III, which shows how the public sector GFCAF price index fluctuated in the six member countries of the Community and in the four candidate countries from 1961 to 1970. It would seem that no general law can be inferred from a comparison of that index with the index of implied GNP prices.

The actual process itself, that is to say the quantitative development of public sector investments from one year to the next, is characterized by a marked lack of uniform continuity (cf. annex IV, pp. 1-10) which, for the six member countries and for Great Britain, is reflected in the comparison of their GFCAF variation coefficients and their GNP variation coefficients. (cf. annex V) Apart from in Luxembourg, the GNP coefficient varies between about 0.2 per cent and 0.5 per cent, whereas the coefficient for public

(1) Study group on medium-term economic outlook, "Perspectives pour 1975", part one, Brussels, March 1971.

sector GFCAF is about double those figures. In other words, public sector investment variations from one year to another are twice as large as those of the GNP.

These general indications are perhaps less eloquent than some concrete examples. For example, from 1966 to 1968, the rate of increase in public sector investment, calculated in terms of value, rose :

- from - 12.3 % to + 11.8 % in Germany, and
- from - 2.6 % to + 20.4 % in Italy.

As can be seen, public sector budgets for fixed capital in recent years, whatever the intentions of the States, were merely used as a means of balancing out or adjusting.

Whereas governments intended the aggregate of such fixed capital assets to be the mainstay, the permanent objective around which the others should be deployed and varied to serve a strategic aim which was, more or less explicitly, to be a European response to the challenge and dilemma of "Industry and Society", that aggregate in reality resembled rather a cork bobbing on the waves, buffeted about by fluctuating circumstances.

Those fluctuations were singularly lacking in symmetry, dependent on rising prices exceeding the most pessimistic fears, and regularly inhibiting progress in the building up of public sector assets.

This central phenomenon may be resumed as follows for the whole of the EEC from 1965 to 1970 :

	<u>GNP</u>	<u>Public sector investment</u>
Forecast	4.3	8.5
Actual	5.2	4.9

Such a phenomenon can only be explained in two ways :

- either the projections of the first MTEP programme were completely wild - yet it is so surprising that all countries made the same mistakes, in the same direction and on such a massive scale(1); that this hypothesis may be discounted;
- or it must be admitted that the increased rate of real growth, far from favouring public sector resources development, can in certain circumstances actually hinder it and even lead to its relative regression, not only in the short term, but also in the medium term (2).

This is undoubtedly what has happened in the EEC since 1965, considering the rate of inflation which has accompanied its relatively rapid growth. Under the circumstances, which still persist today, it might be easier for the countries of the Community to achieve rapid development of their public sector resources with a more moderate rate of increase of the order of four per cent, rather than with accelerated development of up to five per cent (3).

This conclusion, which is about as senseless as Galileo's theory that the earth revolves about the sun, and not the sun about the earth, runs counter to all ideas prevailing in official circles, particularly in France where it is disproved by the experience of the last few years, seeing that, from 1968 to 1971

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- (1) The projections on which the MTEP programmes are based are undoubtedly defective in some respects and inadequately synchronized. No doubt the reservations expressed above on the content and significance of public sector investment and resources must be borne in mind. Nevertheless, the trend indications examined here appear to be indisputable.
 - (2) This is particularly the case in default of an effective monetary policy and where, for political reasons, fiscal flexibility cannot be used sufficiently.
 - (3) In this respect, it is rather intriguing that during the last decade Great Britain, whose economy is so mediocre, maintained a relatively high rate of increase in public sector investment, at least until 1969, since the share of GNP allocated to such investment rose from 3.4 % in 1961 to 4.8 % in 1970 (cf. Annex IV, p. 10).

an unprecedented overall growth (20.4 % by volume, i.e. 6.4 % annually) has been accompanied by diminished expenditure in public sector investment in absolute terms. Furthermore, how widespread is this erroneous belief, has been recently observed during the discussions on the major options of the Fourth Plan when the representatives of heads of undertakings proposed opting for a "Japanese style" rate of growth, arguing, inter alia, that accelerated growth would produce surpluses available for public sector resources. This option was rejected because of the sacrifices such accelerated change would involve for certain sections of the population (1), but no one, not even from the government representatives, questioned the grounds of the employers' argument concerning the relationship between growth and public sector resources.

For instance, we all know that a high rate of growth - other things being equal - makes for increased private investment and inflation. We are all aware that, the monetary policies of the EEC member States proving less and less effective, greater

(1) "To advocate vigorous growth is to urge a country not to spare any effort. But we are equal to the task, for there is no question of committing the nation to disorderly growth, that is to say, of releasing all the brakes which control the changes under way. This eventuality was envisaged when the options were being prepared, and thoroughly examined in the symbolic form of an annual GNP growth rate of 6.5 per cent. That work, like the in-depth consultations carried out by the socio-industrial bodies concerned, showed the lack of realism in such a hypothesis. Indeed, the nation is not prepared to accept the consequences, such as the intensification of the rural exodus, the increased mobility of manpower, the rapid disappearance of small-scale enterprises engaged in crafts, trade and industry. Violent and abrupt efforts are incompatible with the stage of development which we have reached. What is more, we need orderly and regular progress limiting individual inconveniences. To encourage and keep abreast of change, that is the type of growth we aim for".

(Introduction to the report on the Fourth Plan, p. 12)

recourse must be made to the economic regulators of budgetary systems; that is to say, the input of public sector resources - the only flexible element within the purview of budgets dependent on fixed-rate taxation - must be considered merely as an instrument, or even, in a sense, as a measure of surplus. No national policy, however, seems to take into account that the accelerated growth of the GNP in fact restricts that public demand which causes the EEC to drift towards a type of society very different from that chosen by the responsible governments.

Such a society, moreover, would hardly be acceptable to the less favoured sections of the population. Indeed, a shortage of public sector goods and resources aggravates social inequalities. In the absence of suitable public hospitals, the wealthy can afford private clinics; if public education is not provided, they can send their children to private schools; inadequate public transport is no inconvenience to those who are masters of their own timetables, especially if they have their private chauffeurs. It is the small and the weak who are the first victims of all these shortcomings.

Such is the lesson to be learnt from a macro-economic study of the public financial policy of the member countries since 1965. United in an ambition to reduce the social inequalities by bringing better living conditions within the reach of their populations, they are united also in the almost general disappointment of their ambition.

Moreover, the resultant relative aggravation of social discord is doubled, as we shall now see, by the widening of the structural inequalities in the infrastructures and public sector resources of the member countries.

CHAPTER III

TWO TYPES : FACTORS FOR DIVERGENCE

So far we have based our arguments on growth rates, that is to say data derived from inputs. Let us now consider those inputs themselves. Unlike the previous study, this one shows what is more or less stable in each of the national systems and underscores the differences between them. In this way an attempt may be made to interpret the differences from country to country of the general phenomena analyzed above.

The six member countries and the four candidate countries are classified hereunder according to the average GFCAF rates in their public sectors in relation to GNP over the last reported five years (1).

Table 1

Netherlands	4.96	Luxembourg	4.19
United Kingdom	4.80	Germany	4.00
Denmark	4.66	France	3.40
Norway	4.40	Belgium	3.20
Ireland	4.20	Italy	2.42

It can clearly be seen that these ten countries fall into two categories which seem to be connected neither by geographic nor socio-religious factors. It seems reasonable to assume there from a distinction between two types, the "Nordic" and the "Latin".

So far as the EEC countries are concerned, moreover, that distinction is corroborated by many other factors, such as the more old-fashioned economic structures in the Latin countries, higher protective tariff before the founding of the Common Market, and so forth. As a result of those differences, France and Italy, particularly the latter, have had to make special efforts to adapt to the Customs Union. The fact is undoubtedly not unrelated to the following remarks about those countries.

(1) (Cf. Annex IV, pp. 1-10). For the candidate countries the source was the OECD and not the . Last year, 1970, except for Luxembourg, Denmark and Norway, which was 1969; and Ireland. 1968.

A. THE "NORDIC" TYPE

The first category seems to confirm the existence of a sort of "Nordic" type in which not only is the scope of public welfare particularly extensive - as is well known - but in which public sector investment - and this is undoubtedly less well known - absorbs at least four per cent of the GNP (1).

The four candidate countries fall naturally into this category. It can readily be imagined that they are keen to know whether the Common Market system does not include some sort of concealed mechanism leading to a "competitive deflation" of standards in the finance procedures of the public authorities.

Two cases, Germany and the Netherlands, are particularly interesting in this respect.

1. Germany

With a four per cent rate, Germany is in a midway position. However, although calculated on the average of five years, that position seems to be more circumstantial than structural. From 1963 to 1965, in fact, the Federal Republic had reached a distinctly higher rate, namely 4.4 per cent (cf. Annex IV, p. 1)

(1) From this angle, it would appear useful to point out that the level reached by the USA has been both lower (3 %) and stable for a decade (cf. Annex IV, p. 11). This is sound confirmation that the effort devoted to private sector resources is not proportionate to overall wealth. In this connection, it may be tempting to draw a parallel between the "American type" and the "Latin type", both distinct from the "Nordic type".

Political history in Germany may show that from the time they assumed responsibility for the country's economic affairs, the Social Democrats - in spite of the fact that their doctrine is the one which is most in favour of developing public sector resources - never achieved growth rates exceeding one-third of the rates that the Christian Democrats had set as their targets. However, to see in that a change of policy or the effect of an error in calculation would be an illusion.

The cause is two-fold :

In the first place, during the 1965-67 recession, the Länder and the district authorities drastically reduced investments, for the simple reason that their revenue from taxation had itself declined due to the reduced economic activity. Local authorities did not even take advantage of the lower interest rates to increase their borrowings. That, among other things, caused the collapse of public sector GFCAF to - 12.3 % in 1967.

Far from redressing the balance, as it should have done, the public sector in the Federal Republic at that time acted as a pro-cyclic aggravation of the recession (1).

Later, from 1968 to 1970, the rate of growth in public sector investment increased, but a larger part of the increase was accounted for by higher prices, which rose by more than 16 per cent in the year 1969-70 (cf. Annex III). This extraordinary inflation was itself largely due to the following paradox : in spite of its growing economic strength, the Federal Republic of Germany over the preceding years had experienced increasing and particularly serious difficulties in the way of an independent and effective monetary policy, due to the increased amount of floating capital speculating on the revaluation of the DM.

(1) This phenomenon was at the origin of the important law of 1967 relating to the programming of public finances. This example shows the need for a regulating organization along similar lines for the future European Economic and Monetary Union.

This inability to control its money could only be overcome by Germany in three ways :

- revaluation of the DM (experience has shown the possible disadvantages);
- restrictive regulations on capital transfers (which are necessarily detrimental to the proper allocation of resources and are, at least in the long term, a factor which weakens the country's institutions);
- formation of a European monetary union (which was essential to enable the Community to regain independence in credit policy).

It so happens that all the EEC countries have experienced, in varying degrees, difficulties comparable to those besetting Germany, as is shown in Annex II. Least affected were the Netherlands and France.

Bearing in mind the role which public sector resources can play in the reduction of social inequalities, it can be stated that the absence of an economic and monetary union indirectly contributes to aggravate those inequalities in the member countries of the EEC.

2. The Netherlands

The Netherlands, a typical example of the "Nordic type" was able to avoid these difficulties until 1969.

It is the first in line of the ten, in the order of ratio of public sector GFCAF to GNP, with a rate approaching 5 per cent. It is its firm intention to maintain that position and even to increase its lead, its 1975 target being 5.6 per cent (1).

(1) This record is undoubtedly not unconnected with the cost of port installations and protection from the sea.

The strange thing, however, is the fact that apparently Holland has been, and is still, able to retain mastery of its policy when it is, of the ten countries, the one which is most dependent on external trade. External trade, indeed, accounts for about fifty per cent of its GNP.

If is a fairly widespread belief in the Common Market - particularly in France - and a fear which is sometimes acute in the candidate countries - especially among some trade union circles - that the wider a country opens its economy to foreign trade, the more difficult it is for it to put into practice ambitious financial policies designed to make the country a model society. In short, free trade necessarily leads to "consumer societies" of a standard type.

This idea was particularly clearly expressed in a recent report (1) by an extremely competent French expert, Monsieur Claude TRABUC which was presented by Monsieur Jean CHARBONNEL, Chairman of the National Assembly Finance Commission : "The width of the opening for foreign trade, and the trading partners' share in the GNP, are what determine the options available in policies concerning prices, wages, budgets, taxes and rates of interest, in which government action has a regulating effect but beyond which its decisions have no effect or an effect which is unsought or which leads to disequilibrium".

According to this idea, then, there is no way out. Economic interpenetration would inevitably give rise to an irreversible process leading to dependence on abroad which would, inter alia, "dictate" the lines of budget policy. The simile of the cork on the waves comes to mind once more.

(1) "Système monétaire international et politique monétaire européenne", June 1971.

There is something admirable about the fact that proof to the contrary is provided by Holland, a country which is small only in size, and for which to bring such messages to others is in keeping with its tradition.

But we have yet to understand why the Netherlands has had a particularly wide margin of freedom in this matter.

Several factors may have contributed. In the early days of the Common Market, Holland was very competitive, due largely to its relatively low wage levels, and remained so for several years thanks to a relatively effective revenue policy. Subsequently, public sector budgets were very useful compensators during the recession of 1967-68. On a more general level, the buffer against the disequilibrium prevailing abroad was maintained, thanks no doubt to exceptional circumstances (such as the coming into operation of Gronningen Gas) but also to the excellent results of a policy of specialization and acquisition of foreign markets, which for a whole generation has constantly strengthened the competitive position of the Netherlands economy.

However, the tolerable limit of inflation was reached in 1969, when Holland had to reduce considerably the rate of increase in public sector investment (cf. Annexes III and IV, p. 9), in company with the other countries.

It is not for that, however, that we may ignore the lesson to be drawn from the Netherlands' example : the possibility of financing an ambitious policy of public sector resources, even for a small EEC country, may depend as much on the soundness of its economic institutions and of the policy relating to those institutions as it does on the extent of its intercourse with the rest of the world.

B. THE "LATIN" TYPE (1)

In table one on page 20, three of the ten countries have an average public sector GFCAF / GNP ratio of less than 4 per cent. Three of the four are "Latin type" countries, the fourth is Belgium, where the "Latin" character has become attenuated.

(1) "Contemporary Latin type" might be preferable. Whereas a low rate of public sector resources development is a feature of the modern Latin type, the decadence of Ancient Rome, by contrast, was due to the fact that too many citizens lived in idleness for too long at the expense of a lavish exchequer.

Italy and France call for special consideration.

1. Italy, or the "growth race"

The structural backwardness of Italy compared to the other European countries is not its only singularity. It is the only one of the ten member and candidate countries which, for the last ten years, has devoted a decreasing fraction of its GNP to public sector resources (cf. Annex IV, p. 5) : the average rate of 2.78 per cent for the years 1961-65 declined to 2.42 per cent for 1966-70 (1).

How can we explain this trend in a country about which the least that can be said is that its public sector infrastructure in general is by no means satisfactory ? The reply may perhaps be found in the reasons underlying the break in the trend which is shown in the following table.

Table 2

ITALY (2)

Average rate of annual growth (at 1963 prices)

	GNP	Public sector GFCAF
1951 - 1955	5.6	7.2) 8.6 %
1955 - 1960	5.6	10.0)
1960 - 1965	5.3	3.4) 4.0 %
1965 - 1970	6.0	4.6)
Projection		
1970 - 1975	6.0	12.3

(1) The ANAS and IRL investments in roads are not included in public GFCAF. If they were the percentages would be increased to 3.2 for 1961-65 and 3.0 for 1966-70.

(2) Source, except for the years 1951-55 : Third MTEP programme, Report of the medium-term economic prospects study group known as the "Groupe de WOLF" (p. 104).

As can be seen, from the time when the Treaty of Rome came into effect (to all intents and purposes in 1960), the growth rate of Italian public sector investment fell by half (8.6 per cent from 1951-60, as against 4 % from 1960-70), despite the fact that the increase in GNP was stable.

No doubt private investment in Italy also slackened off, and perhaps more markedly still, from 1960-65, but only to make a vigorous recovery in the years which followed. Another important factor no doubt is the Italian budget items known as "residui passivi", that is to say, credits carried forward because an ill-equipped public sector has been unable to spend them. None the less, the overall, savage and lasting character of the break in the trend suggests that the following hypothesis is the most plausible : At the time when the Treaty of Rome became effective, Italy was very concerned about its industrial backwardness. It even feared that there might develop, and on a European scale, cumulative phenomena similar to those which had reduced the Mezzogiorno to economic decadence a century ago. Hence the existence of a scale of priorities for the satisfaction of the capital needs of industry, behind a screen of apparently favourable programmes for the promotion of public sector resources development. Italy plunged headlong into the growth race, and in that way confirmed the "Italian miracle".

But the miracle was made possible only by an excessive geographic concentration of industry and by large population movements; the backlash was the crisis, not only social but economic or, to be more precise, industrial, which has beset the country for the last two years.

What, indeed, was the cause of the crisis if it was not, at least to a great extent, that the workers who migrated from the south to the north of Italy bore the brunt of the inadequacy of the public resources necessary for a higher standard of living than that which was theirs ? In other words, by concentrating on the quantitative progression of its economy, to the detriment of the qualitative needs of its most vulnerable

workers, Italy managed to place its economic development in jeopardy (1). So true is this, that the crisis began in 1969 with a series of general strikes for a new public sector resources policy covering transport, town planning, hospital reform and, especially, housing.

The Conference for which this paper is intended is entitled "Industry and Society" and it seems that we have broached here one of the main points of this vast subject.

In the framework of the Conference, it would seem useful to give close attention to the two cases of Italy and the Netherlands. In 1958, they were the Community countries with the lowest per capita income. The former staked everything on industry. After a splendid start, its forced march towards industrialization seems now to have become sluggish, like a man struggling through a quagmire. The latter, by contrast, while placing the satisfaction of public needs high on the list of priorities, and in spite of the difficulties of the economic situation, can be held up as an example for the success of its industrial economy.

Let us take a concrete example of that contrast. Although public sector resources as defined for the purpose of this study do not include housing, housing policy is a case which is particularly enlightening. In the Netherlands, where 9.6 houses per thousand inhabitants were built in 1969 (as against only 5.2 per thousand in Italy), housing is to a great extent considered as a public resource. Of the houses built in the Netherlands that year, 84.9 per cent were subsidized from public funds, in other words, nearly ten times the 8.8 per cent in Italy.

(1) A by no means original conclusion. It was reached by the Italian employers' representatives (Confindustria) in 1970. It is, however, useful to show how it is justified by the results of macro-economic analysis, the more so as the Italian case offers, for the first time, decisive experimental proof of the importance of the criticisms which B. de JOUVENEL has been levelling for more than ten years at the calculation methods current in national accounting.

The corresponding proportion for the EEC as a whole was 48.3 per cent (1). In the Netherlands, 40 per cent of the total cost of housing was subsidized from public funds, as against 5 per cent in Italy, so that from 1958 to 1967, rents rose by 51 per cent in the Netherlands and by 97 per cent in Italy (2).

On the morning of 19 November 1969, no doubt for the first time in history, a general strike as a protest against the housing policy - and not against low wages - broke out in Italy.

2. France in the wake of Italy

Now we come to something even more surprising. Just as, some ten years ago, it launched out into its well-known ambitious policy of technological independence, in the wake of England which was then in fact beginning to falter along the road on which it had set out, France is now set on a course very similar to the one Italy has been following since the sixties and the results of which we have just mentioned.

However, there is one notable difference. The Italian authorities proceeded on their course with reluctance, and because they saw no preferable alternative. This is confirmed by the very ambitious Italian projections of public sector GFCAF (cf. Annex I). In France, on the other hand, the decision was freely chosen, a decision which was barely outlined in the Fifth Plan but clearly set out in the Sixth Plan, and the central aim of which seems to be to offset the decline of its political influence by rapidly developing its economic power.

Page 4 of Annex IV shows that the ratio of public sector investment to GNP, after regularly increasing - in all by about a third - from 2.5 per cent in 1961 to 3.3 per cent in 1965, became stable at 3.5 per cent.

(1) Commission des Communautés européennes
Rapport sur la situation en 1970 p. 258.

(2) This comparison should in no way be construed as a plea for rent control.

Similarly, the following table, taken from the report of the Study Group on Medium-Term Economic Prospects - known as the "Wolf Group" - shows that since 1965 the growth rate in public sector investment has fallen by half.

Table 3

FRANCE

Average annual growth rate of
GNP appropriations

	G N P at market prices	Consumption		G F C A F			Public sector
		Private	Public	Total	Dwellings	Enterpr. without dwellings	
1960 - 1965	5.8	6.1	3.2	10.1	11.4	8.9	13.5
1965 - 1970	5.8	5.3	3.6	7.7	5.9	8.7	6.6
1970 - 1975 (1)	5.7	5.8	3.6	6.3	3.4	7.2	7.0
(2)	5.8 à 6 % (P.I.B.)	5.5	4.2			6.8	7.3

There are many indications, concerning both public sector revenue and expenditure, which combined to underline the change of policy which has gradually come about in France and which culminates, in the Sixth Plan, in an even more definite option in favour of the "Latin type".

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- (1) Figures taken from the report of the Study Group on Medium-Term Economic Prospects, annex to the Third MTEP programme (p. 104).
- (2) Source : Sixth Plan - Detailed programmes of action, p. 5. The figures given here are merely for guidance. Reasoning must be based on the data given in the Third programme, which are the same as those in the Sixth Plan but presented with data for other countries in a manner which is standard for all.

With regard, first of all, to public sector investment, it is interesting to compare the two successive projections and the equalization coefficients which can be deduced from them; still basing ourselves on the report of the experts of the Wolf Group.

Table 4

FRANCE

Rate of annual growth in volume

	G N P (1)	Public Sector G F C A F (2)	Equalization coefficient $= \frac{(2) \times 100}{(1)}$
Projection for 1965-1970	4.8 (*)	8.2 (*)	170.8
Projection for 1970-1975	5.7	7.0	122.8

The medium-term projections for 1970-75 drawn up by the six EEC countries confirm that flexion of French policy has a bearing on overall public demand (consumption) and public sector investment. This is clear from the following table.

(*) Taking the revised national accounts for France into consideration, the up-dated figures are 5.5 % and 10.1 %.

Table 5

E E C

Public demand on the GNP

Year	Germany	France	Italy	Luxembourg	Netherlands	Belgium
1960	16.7	15.2	15.1	15.2	17.5	14.4
1965	19.6	15.8	16.6	15.0	20.0	15.4
1970	20.2	15.5	15.1	-	21.0	17.3
1975	21.0	15.3	16.7	-	21.1	18.9
% 75/60	+ 25.7 %	+ 0,7 %	+ 10.6 %		+ 20.6 %	+ 31.3 %

It can be seen from this table that, of the EEC countries, only France intends the public sector demand on GNP in 1975 to remain at a level approximately the same as the one it had reached fifteen years previously (Demand by private industry and households is excluded by definition).

Consideration of public financial activities as a whole, including inter alia transfers and social services, in comparison with the GNP, leads to the following basic conclusion : after being the first of the EEC countries in order of GNP allocations to the public sector (including transfers) in 1960, France intends to be the last in 1975.

Table 6

Share of GNP assigned to public use

	1960		1975	
	Rate	Order in rank	Rate	Order in rank
Germany	33.0	3	38.8	3
France	33.9	1	38.0	5
Italy	30.7	4	38.3	4
Netherlands	33.5	2	47.9	1
Belgium	29.8	5	39.7	2

The originality of this policy is the more deserving of attention for the fact that it follows a concept of public sector financing in regard to which views, particularly those of Germany and of France, are conflicting.

In Germany, the new idea of target-setting programming of public financing, introduced by the Act of 8 June 1967 on economic stability and growth, implies that in any event a degree of development in public sector resources must have priority : that is one of the aims of the public finance programming. It needed some unexpected circumstances, and in a way a case of force majeure for the spirit of that Act to be respected - although in a somewhat perfunctory fashion until 1970 (cf. Annex IV, p. 1). Finally, however, the Federal Republic agreed to what we may call the supreme sacrifice, the revaluation of its currency in order to maintain or restore balance among the main lines of force.

In France, on the other hand, stress is laid increasingly, as in the Sixth Plan, for example, on the "decisive contribution" which the administration of public finance can make to the "moderation of prices, private incomes and trade balance" (1) and even, within limits, to the compensation of laxism in credit policy or to the effort to counter the consequences of monetary under-evaluation.

(1) Introduction, page 20.

In spite of the relatively favourable results in France from 1965 to 1970, so far as public sector GFCAF is concerned (cf. Annex I), it would seem that the following distinction may be drawn : Germany henceforth seeks to manage its public finance in a manner more directly related to the satisfaction of public needs, whereas in France public finance has rather been considered for some years as an instrument for the strengthening of industrial power.

There is an obvious analogy between the latter feature and the Italian policy of the sixties.

The analogy becomes even more striking if we consider revenue, rather than expenditure, and especially their structure as summarized in the following table taken from the report of the Wolf Group.

Table 7

Tax revenue expressed as a percentage of GNP

	Tax Revenue		
	indirect	direct	total
	(1)	(2)	3 = (1)+(2)
<u>Germany (Fed.Rep.)</u>			
1960	13.6	9.3	22.8
1965	13.2	9.9	23.1
1970	12.8	11.0	23.9
1975	12.1	12.0	24.1
<u>France</u>			
1960	16.1	6.1	22.2
1965	16.7	6.3	23.1
1970	15.3	7.0	22.3
1975	14.1	7.4	21.5
<u>Italy</u>			
1960	11.3)	5.5	16.8)
1965	10.9) (1)	6.4	17.3) (1)
<u>1969</u>	10.7)	6.9	17.6)
1975	10.6)	8.7	19.3)
<u>Netherlands</u>			
1960	9.8	12.2	22.1
1965	10.0	12.6	22.6
1970	11.4	13.9	25.4
1975	11.4	15.6	27.0
<u>Belgium</u>			
1960	11.4	7.5	18.9
1965	12.0	8.6	20.6
1970	12.9	10.9	23.8
1975	12.0	14.0	26.0

(1) After deduction of subsidies, 1-2% of which came from the GNP in the sixties.

The first thing to be noticed is that France is going the opposite direction to its partners : its intention is that by 1975 the pressure of taxation should be less than it was in 1960 (21.5 % as against 22.2 %). This objective is deserving of our attention because there is a link between the pressure of taxation and the development of public sector resources.

Even more significant, however, is the change in direct taxation. Not content with having fallen to the bottom of the league in 1970, when even Italie overtook it (1), it fully intends to stay there, and even to reduce its points rating by 1975 (2).

The simplest way of measuring the extra effort which the various countries are prepared to exert to improve the financing of their public sector resources is perhaps to consider that it is equal to their direct tax effort index (E.I.). The latter effort may be calculated by the following formula :

$$EI = \Delta tb$$

where : Δ = the increase in direct taxation over the period considered, and

Tb = the basic rate, i.e. the tax rate at the start of the period.

(1) The above figure relates to 1969. More recent data show that in 1970 direct taxation in terms of a percentage of GNP was higher in Italy than in France.

(2) This objective is all the more remarkable as it seems rather to contradict the central idea of the Sixth Plan (1970-75), i.e. industrialization. This, we know, generally goes together with increased taxation, particularly of the direct kind (cf. in this respect, the five stages described by H.H.Hinrichs in "A General Theory of Tax Structure Change during Development").

The results, from 1960 to 1975 (projections) are :

- Germany	270
- France	130
- Italy	320
- Netherlands ..	362
- Belgium	650

It can be seen that two of the "Latin type" countries, especially Belgium, are making real efforts to follow the "Nordic types" (1). France, on the other hand, according to all the indications studied, is characterized by its quasi-immobility, a sort of structural stopper which is even reflected in its projections. Consequently, the gap is increasing between it and its progressing partners, and even between it and Italy, whose course it seems to be drifting into, if not deliberately adopting, at the risk of being punished for its sins tomorrow as Italy is today.

It is possible, indeed, that, in the future, economic prosperity will be in the nature of a premium earned by those countries which were able to give first priority to the tangible instruments of higher living standards which are known by the abstract term "public sector investment".

(1) The effort in Belgium was probably made easier by the large influx of foreign capital seeking investment in that country, and which acted as a buffer against a trade deficit. The increasing volume of public sector investment thus financed was in part the result of duplications arising from the existence of two languages (e.g. education, etc.).

C O N C L U S I O N S

It is scarcely ten years since the more perspicacious began to understand that the future of western society would depend not only on economic growth but also on the quality of life which developed in that society.

That qualitative aspect of development is closely linked to the available public sector resources: first and foremost on those which, like roads and telecommunications, are essential for private production and consumption; secondly on those which provide the intangible benefits of security, culture and health (1); and finally those which are daily becoming more necessary for a healthy life without artificial nuisances and for man to re-establish contact with nature. Air, water and other benefits of nature which are free today may be available tomorrow thanks only to costly investments in the public sector.

The rising tide of social needs which will continue to accelerate will demand of every country an enormous effort to adapt which it would be interesting to analyze. However, we can only mention it in passing here, in order to underline those consequences for the Community which may be as demanding as they are productive.

(1) To show to how recent are the generally accepted ideas on the growth of public spending, we need only say that not so long ago there were well-meaning people who were convinced that progress in preventive medicine - vaccination and so forth - would stabilize public health expenditure. So different from reality were expectations of the influence of progress in medical science that no one was surprised in 1942 when BEVERIDGE forecast that the cost of the national health service in Great Britain would not rise before 1965.

A. Towards a new public finance structure

In the first place, it is highly likely that before the end of the century, in every industrial western country, the share of GNP finding its way into the public coffers will become stable. Fiscal and para-fiscal pressure will in general continue unabated, but in the most advanced countries it is already approaching the tolerable limit. This statement seems to be confirmed by, among other things, the early work of the ECCRSS (1) which suggests that on both sides of the Iron Curtain the share of GNP assigned to public consumption is today comparable.

Moreover, there is every reason to believe that the need for public infrastructure and resources will continue to grow at a much faster pace than the GNP. Let us take an example. Only a few years ago States had to offer subsidies to encourage local authorities to acquire resources and overcome excessive caution in their management. Today, the situation everywhere is quite different. Local elections are won by the provision of schools, swimming-pools and cultural centres, so that the State tries to direct, if not to control, the propensity of local authorities to make investments. Only recently was the political life of one of the member countries almost totally paralyzed for weeks as a result of a quarrel between two towns about the course of an autoroute.

The interplay of these conflicting trends will probably lead to profound changes in policy and even in public financial structures. To follow the underlying logic, infrastructures must be distinguished according to the nature of the needs they are intended to satisfy.

1) No notable change is to be expected in infrastructures for administrative purposes of public order, justice and national defence: the impossibility of attributing the benefits of such services to individuals makes it necessary to retain the relevant financing system.

(1) Cf. page 6 above.

2) Infrastructures for socio-cultural purposes are necessary for physical, intellectual and moral welfare (health, education, culture, leisure activities), and their overall cost increases more rapidly than does the cost of other types of infrastructure, mainly due to the present need for urban resources. The services they provide can generally be attributed to individuals and measured, so that a price can be charged for them. To what extent this technique of financing infrastructures by charging for their services should be adopted will be one of the major questions of future policy in every country.

An apparently irreversible evolution has so far impelled our societies to make socio-cultural services collective. But due to the rising tide of new needs which the market cannot satisfy, it seems difficult to avoid certain changes of dividing lines in a direction opposite to the one we are accustomed to.

For the last century the outstanding feature of the evolution of public financing, particularly in Europe, has been a vast rearrangement of the dividing lines between needs, according to whether they were considered to be within the purview of private enterprise or to be the responsibility in a small or large degree of the community (education, health, care of the elderly, housing). Since the thirties, it has been the extraordinary expansion of expenditure on social services which has caused the greatest changes in public budgets. Today the limits are in sight. It is probable that social services will have to be more closely adapted to the social condition of the beneficiaries. The time may not be far off when a choice will have to be made between, for instance, the noise abatement campaign and the refunding of dental expenses to some sections of the population, particularly in view of the fact that free service is always costly for someone, and arbitrary decisions favourable to the subsidized consumer but detrimental to the subsidizing taxpayer are often costly for everyone.

Correlatively, it will become necessary in many cases to decentralize administrative activities in order to bring the teller of public funds closer to the object to which those funds are assigned. The principles of budgetary unity and universality are therefore going to be breached ever-wider by the need to find new resources and especially to "fleece the lamb without a bleat". The best method of doing so would be to apply to public services, wherever possible, rules similar to those of a market economy, by substituting a selling price for a budget appropriation.

3) That should be the rule for infrastructures for economic uses which are essential to private enterprise and individuals (power supply, transport, communications, etc.). They should in principle be entirely financed by the proceeds of the sale of their services at cost price. This principle should brook no exception other than certain specific cases, for instance with part exemption, that is to say, the price charged to certain categories of users being lower than cost, when this is adopted as a method to bring about re-allocation (regional policy) or redistribution (social policy); or full exemption, that is free supply, when such priority is granted to the economic need that its satisfaction must be ensured by the community (e.g. footpaths).

This principle definitely implies the revision of public financing and certain budget operations, one significant example of which we can give. Faced with the sudden enormous demand for telephones in 1969, Great Britain and France decided simultaneously to grant their telecommunications services a wide degree of autonomy. The competent Ministry in Germany drew up a project on the same lines (1).

(1) "Vision", July-August 1971.

The same principle especially concerns the Community in an increasing number of fields of public service where, paradoxically, public funds, so inadequate elsewhere, are, at least in part, wasted. Why? Because they constitute an instrument of international competition within the Common Market. Consider the sea ports and inland waterways, and industrial areas or airports in the frontier regions, and you will see that the credits and subsidies lavished upon them act as a sort of concealed protectionist policy seeking to promote national activities to the detriment of the foreign competitor. Since 1958 expenditure of this type has assumed totally unexpected proportions.

That all these excesses continue to be tolerated is contrary to the spirit of the Treaty.

B. The Community's new responsibilities

At the time when the Treaty of Rome was signed, however, the very expression "public sector resources" had scarcely become current with its present acceptation. We can regret that even today the Community has not fully weighed up the new problems which that expression implies. So inadequately has it done so, indeed, after its fourteen years of existence, that the methodical comparison of the state of public infrastructures and resources in the various member countries has even yet not begun.

The important dates in financial history are those of inventories: and this is an inventory which must be undertaken as a matter of urgency.

Preparation for the future is not envisaged either, even in respect of research. Each member encounters the same difficulties in rationalizing budget alternatives, yet a start has hardly been made to the comparison of experience, and each country duplicates its neighbours mistakes.

Worse still: free competition, the elimination of trade barriers founded on nationality, nearly always stops at the door of the public sector. The EEC is a very uncommon market so far as

the public sector is concerned. Domestic suppliers retain a de facto monopoly for the supply of public sector resources, just as they did in the worst years of protectionism, at no matter what cost to the taxpayer. The collective loss is the greater because public sector investments are already on the increase and will climb more rapidly in the future.

There is even worse to come.

What is the meaning of "to govern"? It means, according to the etymologist, to set a course, to choose and make for an objective. So far as the infrastructures which are gradually to reform Europe are concerned, the governments of the Six countries, as we have seen, have chosen their objectives and, by a miracle, those objectives are all more or less the same. But they cannot hold their course and the six countries continue to drift, carried off by the currents from across the Atlantic.

It would certainly be useful if, as suggested in the first MTEP programme, and like Germany or Belgium recently, the member countries adopted a several-year programme system for public financing. But that is not enough. If a period of even minor economic stress should occur, the Ministers of Finance, of whatever country and party, would be compelled to cut expenditure on public sector investment. Let the inflationist trend continue as it has for several years, and the financial programming will be reduced to the value of a pious hope.

What has been happening since 1965 in the EEC should surprise no one. As early as 1964 the Currency Committee expressed regret that the monetary policy was powerless to solve the problems of adjustment to combinations of events without increasing support from the budget. It is just as powerless, and even more so, in 1972.

If they wish to escape the constraints to sacrifice their public sector resources, the member countries must face the following alternative: either they must considerably improve the flexibility of their tax systems - and how narrow the latitude for action is in that field is well known; or they must make their monetary policies much more effective - without, however, resort to the methods of protectionism. There is only one way out, namely, the founding of the monetary union or, to be more exact, the economic and monetary union (EMU) (1).

Since 1965, all member States have been under increasing pressure to lay stress in the "policy-mix" on the instrumental aspect of the budget, because they have been progressively losing their grip on their own monetary situation. The dwindling of this, in principle, sovereign power is related to the increase of the share of foreign trade in contributing to the GNP and, especially, to the predominant influence of the USA in international monetary relations.

That is why it would be absurd to transpose to Europe ideas such as those of MILTON FRIEDMAN, according to which adjustment to circumstances should be made solely by control of the monetary circulation. Such ideas are notoriously typical of a citizen of a country which has retained mastery of its own style of growth. It is only at the level of the Community that the necessary ways and means may be found for the achievement of comparative autonomy. But it is communally that the Community must give effect of those ways and means.

In other words, it must build up the EMU; not ten years hence, but now. It would have been easier to take the plunge in 1965 than in 1970 or 1972. It will be even more difficult to make the decision in 1970 or 1980.

(1) The aim would be not only the necessary co-ordination of economic policies, but also the implementation of a genuine community spirit in matters of infrastructure financing in depressed areas, and community budgeting on a considerably greater scale with a view to redressing the structural balance.

First because the mistakes, laziness, retreats and pusillanimity of the past undermine the best of resolutions and jeopardize the future, but especially because, for many years, the results of the member countries' policies on prices, economic structure and public sector resources have been widely dissimilar and even contradictory. And finally, that contradiction will be further aggravated by expansion.

We already knew that the absence of an economic and monetary union was equivalent to a concealed tax burden on the income of every inhabitant of the Community.

We must now recognize that the situation is far worse even than that.

The Common Market, incontestably, has been a powerful factor in the economic progress of the member countries. But due to the very fact that it has not been completed by suitable common policies, it tends more and more to be a structure favourable to the creation of social inequalities.

This is true for the various arrangements for social progress, which are likely to have an adverse effect on productivity and economic competition (working hours and conditions, notably in industry): the more trade among members of the Community develops, the greater the risk of disequilibrium, and the more the members must be circumspect in their dealings with one another.

It is true also of public sector investment, which should nevertheless be given pride of place in government action with a view to improving the quality of life and reducing social disparities. It must indeed never be forgotten that in general it is the poorest and the weakest who suffer most from the inadequacies of public sector resources.

Yet all the experience of the EEC countries in this field - even of the Netherlands, which is exemplary in this respect - shows that it is impossible to fulfil in lasting fashion an ambitious programme for public sector resources without acting in a sufficiently broad economic spectrum.

The countries which comprise the EEC cannot, at the national level, escape the constraints which, since 1965, have caused their public resources policies to flounder time after time, nor can they find the ways and means of ensuring a better social policy, unless they retreat to some form of protectionism which, in any case, would for them be a factor of economic regression.

It is a grievous dilemma:

- either continue the EEC in its present unfinished state, and tolerate year in year out a strict limitation on action for social progress;

- or revert to protectionism and thereby place in jeopardy the development of the economy itself.

Reconciliation can only be brought about through the Economic and Monetary Union. This is now so clear that it permits of the following three-fold conclusion:

1. the absence of the EMU means greater social inequality within each member country;
2. the absence of the EMU means greater inequality between the member countries, that is to say a lesser degree of community among them, unless it be the undesirable form of community described in the third aspect of this conclusion;
3. the absence of the EMU means greater pollution, bottlenecks and all the other evils to which industrial societies are heir.

For, in the long run, that is what public sector resources mean.

UTILIZATION OF OVERALL PRODUCT

(percentage annual growth rates)

	Overall Product	Consumption		Gross formation of fixed capital assets		
		Private	Public	Total	Sector (2)	
					Private Sector	Public Sector
Germany	: projections 65-70	3.5	3.1	3.5	3.0	5.5
	: achievements 65-70	4.7	2.2	4.1	4.5	2.0
	: projections 70-75	4.5	5.4	5.0	4.4	6.3
France	: projections 65-70	4.5	4.5	5.3	5.8	8.2
	: achievements 65-70	5.8	3.6	7.7	8.7	6.6
	: projections 70-75	5.7	3.6	6.3	7.2	7.0
Italy	: projections 65-70	5.0	5.2	10.1	12.2	18.4
	: achievements 65-70	6.0	3.8	8.1	8.7	4.6
	: projections 70-75	6.0	4.5	8.5	9.1	12.3
Netherlands	: projections 65-70	4.6	3.1	6.6	5.7	9.8
	: achievements 65-70	5.1	2.4	6.9	8.2	5.2
	: projections 70-75	4.6	1.7	5.6	6.1	5.8
Belgium	: projections 65-70	4.1	5.6	4.0	4.0	7.5
	: achievements 65-70	4.4	5.1	4.8	7.3	8.6
	: projections 70-75	4.8	4.3	7.0	7.3	9.1
EEC	: projections 65-70	4.3	4.0	5.5	6.1	8.5
	: achievements 65-70	5.2	3.2	6.1	6.6	4.9
	: projections 70-75	5.2	4.5	6.1	6.1	7.3

(1) Including dwellings

(2) Excluding dwellings, except in Germany (lines 2 and 3)

N.B. : The data in the above table is taken from the first and third medium-term economic policy programmes. They are not entirely standardized and given only as guidance. It is asserted, however that the general conclusions to be drawn therefrom unquestionably reflect a true picture. It should be noted, among the treaty disparities, that the overall product :

- forecast for 1965-70 (1st programme) was based on GNP at 1960 prices-except for Germany (1965 prices);
- achieved in 1965-70 and forecast for 1970-75 (3rd programme) is based on GNP at 1963 market prices up to 1970 and on 1965 prices thereafter.

ANNEX II

COEFFICIENTS OF EQUALIZATION (> 100)
OR
OF DECLINE (< 100)

concerning the GFCAF growth in the public sector
compared to the growth of the GNP

$$\left(\frac{\Delta \text{GFCAF (Pub.)}}{\Delta \text{GNP}} \times 100 \right)$$

Germany	projections 65-70	$\frac{5.5 \times 100}{3.5} = 157.1$
	achieve'ts 65-70	$\frac{2.0 \times 100}{4.7} = 42.5$
	projections 70-75	$\frac{6.3 \times 100}{4.5} = 140.0$
France	projections 65-70	$\frac{8.2 \times 100}{4.8} = 170.8$
	achieve'ts 65-70	$\frac{6.6 \times 100}{5.8} = 113.8$
	projections 70-75	$\frac{7.0 \times 100}{5.7} = 122.8$
Italy	projections 65-70	$\frac{18.4 \times 100}{5.0} = 368.0$
	achieve'ts 65-70	$\frac{4.6 \times 100}{6.0} = 76.7$
	projections 70-75	$\frac{12.3 \times 100}{6.0} = 205.0$
Netherlands	projections 65-70	$\frac{9.8 \times 100}{4.6} = 213.0$
	achieve'ts 65-70	$\frac{5.2 \times 100}{5.1} = 102.0$
	projections 70-75	$\frac{5.8 \times 100}{4.6} = 126.1$
Belgium	projections 65-70	$\frac{7.5 \times 100}{4.1} = 182.9$
	achieve'ts 65-70	$\frac{8.6 \times 100}{4.4} = 195.4$
	projections 70-75	$\frac{9.1 \times 100}{4.8} = 189.6$
EEC	projections 65-70	$\frac{8.5 \times 100}{4.3} = 197.7$
	achieve'ts 65-70	$\frac{4.9 \times 100}{5.2} = 94.2$
	projections 70-75	$\frac{7.3 \times 100}{5.2} = 140.4$

E E C

GROSS FORMATION OF FIXED CAPITAL ASSETS (GFCAF) IN THE PUBLIC SECTOR

Price index (a) : 1963 = 100

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GERMANY (Fed. Rep.)										
- GFCAF in public sector	90.1	95.8	100	101.9	102.1	103.9	101.4	104.4	110.4	126.7
- GNP	93.2	97.0	100	102.8	106.5	110.2	111.6	113.4	117.3	125.8
- (overall GFCAF)	(91.7)	(97.0)	(100)	(102.4)	(105.5)	(108.0)	(106.8)	(107.9)	(112.9)	(125.1)
FRANCE										
- GFCAF in public sector	90.7	93.4	100	104.6	107.2	109.0	111.3	116.0	123.4	131.0
- GNP	90.0	94.3	100	104.0	106.5	109.7	112.8	118.1	127.5	134.6
- (overall GFCAF)	(91.2)	(94.4)	(100)	(104.1)	(107.1)	(109.2)	(112.0)	(115.1)	(121.6)	(130.1)
ITALY										
- GFCAF in public sector	90.6	93.8	100	108.7	115.4	120.9	125.0	128.3	135.6	147.3
- GNP	87.0	92.0	100	106.3	110.4	112.8	116.2	117.9	122.7	130.4
- (overall GFCAF)	(89.2)	(93.0)	(100)	(107.4)	(109.7)	(111.2)	(113.7)	(116.1)	(123.4)	(137.0)
NETHERLANDS										
- GFCAF in public sector	91.8	94.9	100	107.7	113.9	120.9	124.1	128.6	141.1	153.7
- GNP	92.2	95.2	100	108.0	114.3	121.1	126.1	130.6	138.0	144.4
- (overall GFCAF)	(93.7)	(95.6)	(100)	(106.0)	(110.9)	(116.4)	(118.7)	(120.8)	(128.8)	(138.5)
BELGIUM										
- GFCAF in public sector	91.2	94.8	100	106.5	111.6	117.5	125.8	129.6	138.9	153.1
- GNP	96.1	97.2	100	104.7	110.0	114.9	118.3	121.5	126.2	132.7
- (overall GFCAF)	(91.5)	(95.2)	(100)	(106.6)	(111.5)	(115.5)	(120.3)	(123.2)	(128.5)	(140.6)
LUXEMBOURG										
- GFCAF in public sector	95.5	95.6	100	107.2	110.1	113.7	115.9	120.4	128.5	138.8
- GNP	(88.2)	(92.8)	(100)	(110.8)	(114.6)	(116.9)	(116.7)	(124.7)	(135.3)	(149.5)

(a) Paasche indices obtained by dividing absolute values at current prices by values calculated at 1963 prices

GROSS FORMATION OF FIXED CAPITAL ASSETS (GFCAF) IN THE PUBLIC SECTOR

Price index (a) : 1963 = 100

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
UNITED KINGDOM										
- GFCAF in public sector	92.9	96.9	100	103.0	106.0	109.6	112.2	115.1	121.2	
- GNP	94.4	98.0	100	103.0	108.0	112.7	116.1	120.9	126.9	
- (overall GFCAF)	95.3	98.0	100	102.4	106.0	109.9	111.3	115.1	120.1	
DENMARK										
- GFCAF in public sector	91.5	94.6	100	103.5	108.9	116.3	121.0	131.3		
- GNP	88.7	94.7	100	104.9	112.4	120.8	127.9	135.1	142.7	
- (overall GFCAF)	82.7	95.8	100	103.4	109.8	114.7	119.9	125.3	131.2	
NORWAY										
- GFCAF in public sector	93.5	97.1	100	101.3	109.9	115.7	120.2	124.4	131.8	
- GNP	94.9	97.6	100	105.5	110.5	115.3	120.0	124.3	128.0	
- (overall GFCAF)	96.9	98.6	100	100.6	106.9	111.0	113.6	119.6	123.8	
IRELAND										
- GFCAF in public sector	100	94.4	100	109.5	105.7	110.7	112.5	.	.	
- GNP	93.2	97.4	100	109.2	114.0	118.2	121.8	126.8	.	
- (overall GFCAF)	94.9	98.0	100	105.9	109.5	112.7	115.7	119.4	.	

(a) Paasche indices obtained by dividing absolute values at current prices by values calculated at 1963 prices-

GROSS FORMATION OF FIXED CAPITAL ASSETS (GFCAF) IN THE PUBLIC SECTOR

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole										
(State)										
- in 10 ⁹ DM	11.23	14.02	16.26	19.51	20.19	21.02	18.43	20.60	23.30	29.40
- 1961 = 100	100	125	145	174	180	187	164	183	207	262
- % annual growth	+18.3	+24.8	+16.0	+20.0	+3.5	+4.1	-12.3	+11.8	+13.1	+26.2
- % of overall GFCAF	13.4	15.0	16.4	17.2	16.5	16.6	16.1	16.5	15.9	16.2
- % of GNP at current prices	3.4	3.9	4.2	4.6	4.4	4.3	3.7	3.8	3.9	4.3
- NB: net savings in 10 ⁹ DM	(26.09)	(26.48)	(24.89)	(28.76)	(23.06)	(24.50)	(16.43)	(20.29)	(36.67)	(40.86)
B. Central Govt.										
- in 10 ⁹ DM	4.22	5.13	6.02	6.99	7.35	7.46	8.11	7.85	8.80	10.93
- 1961 = 100	100	122	143	166	174	177	192	186	209	259
- % annual growth	+12.2	+21.6	+17.3	+16.1	+5.2	+1.5	+8.7	-3.2	+12.1	+24.2
- % of overall GFCAF	5.0	5.5	6.1	6.2	6.0	5.9	7.1	6.3	6.0	6.0
- % of GNP at current prices	1.3	1.4	1.6	1.7	1.6	1.5	1.6	1.5	1.5	1.6
- NB: net savings in 10 ⁹ DM	(18.29)	(17.36)	(16.37)	(19.34)	(14.19)	(16.07)	(12.73)	(16.40)	(28.03)	(28.82)
C. Local Authorities										
- in 10 ⁹ DM	6.90	8.71	10.16	12.25	12.68	12.65	11.52	12.06	14.00	16.88
- 1961 = 100	100	126	147	178	184	183	167	175	203	245
- % annual growth	+19.8	+26.2	+16.6	+20.6	+3.5	-0.2	-8.9	+4.7	+16.1	+20.6
- % of overall GFCAF	8.2	9.3	10.3	10.8	10.4	10.0	10.1	9.7	9.6	9.3
- % of GNP at current prices	2.1	2.4	2.6	2.9	2.7	2.6	2.3	2.2	2.3	2.5
- NB: net savings in 10 ⁹ DM	(4.69)	(5.51)	(5.11)	(5.34)	(4.84)	(4.80)	(4.48)	(4.37)	(7.29)	(4.95)
D. Social Security										
- in 10 ⁹ DM	0.11	0.18	0.18	0.17	0.16	0.21	0.24	0.17	0.19	0.20
- 1961 = 100	100	154	164	155	145	191	218	154	173	182
- % annual growth	-42.1	+63.6	-	-5.6	-5.9	+31.3	+14.3	-29.2	+11.8	+5.2
- % of overall GFCAF	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1
- % of GNP at current prices	0.03	0.05	0.05	0.04	0.03	0.04	0.05	0.03	0.03	0.03
- NB: net savings in 10 ⁹ DM	(3.11)	3.61)	(3.41)	(4.08)	(4.03)	(3.63)	(-0.78)	(-0.48)	(1.35)	(7.09)

GROSS FORMATION OF FIXED CAPITAL ASSETS (GFCAF) IN THE PUBLIC SECTOR										
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole										
<i>(State)</i>										
- in 10 ⁹ FB	12.5	14.7	17.5	23.1	21.2	25.5	30.2	35.5	37.0	44.4
- 1961 = 100	100	118	140	185	170	204	242	284	296	355
- % annual growth	+14.7	+17.6	+19.0	+32.0	- 8.2	+20.3	+18.4	+17.5	+ 4.2	+20.0
- % of overall GFCAF	10.3	10.9	12.3	13.5	11.4	12.5	13.9	16.3	15.4	15.8
- % of GNP at current prices	2.1	2.3	2.5	3.0	2.5	2.8	3.1	3.4	3.2	3.5
- NB: net savings in 10 ⁹ FB	(4.6)	(6.2)	(2.9)	(16.6)	(7.6)	(16.1)	(19.0)	(8.1)	(13.1)	(21.3)
B. Central Govt.										
- in 10 ⁹ FB	5.9	7.9	9.6	13.9	13.3	16.7	19.0	22.5	24.6	28.5
- 1961 = 100	100	134	163	236	225	283	322	381	417	483
- % annual growth	+ 7.3	+33.9	+21.5	+44.8	- 4.3	+25.6	+13.8	+18.4	+ 9.3	+15.9
- % of overall GFCAF	4.9	5.9	6.8	8.2	7.2	8.2	8.7	10.3	10.2	10.1
- % of GNP at current prices	1.0	1.2	1.4	1.8	1.6	1.8	1.9	2.2	2.1	2.2
- NB: net savings in 10 ⁹ FB	(-1.5)	(1.1)	(-2.7)	(2.5)	(-1.7)	(3.9)	(4.4)	(-0.2)	(7.5)	(10.8)
C. Local Authorities										
- in 10 ⁹ FB	6.6	6.6	7.6	8.6	7.1	7.7	9.9	11.7	11.9	15.4
- 1961 = 100	100	100	115	130	108	117	150	177	180	233
- % annual growth	+22.2	-	+15.2	+13.2	-17.4	+ 8.5	+28.6	+18.2	+ 1.7	+29.4
- % of overall GFCAF	5.4	4.9	5.3	5.0	3.8	3.8	4.6	5.4	5.0	5.5
- % of GNP at current prices	1.1	1.0	1.1	1.1	0.8	0.8	1.0	1.1	1.0	1.2
- NB: net savings in 10 ⁹ FB	(1.4)	(1.3)	(1.2)	(-0.1)	(0.5)	(3.4)	(4.9)	(4.9)	(2.6)	(2.8)
D. Social Security										
- in 10 ⁹ FB	-	0.2	0.3	0.6	0.8	1.1	1.3	1.3	0.6	0.5
- 1961 = 100	-	100	150	300	400	550	650	650	300	250
- % annual growth	-	-	+50.0	+100.0	+33.3	+37.5	+18.2	-	-53.8	-16.7
- % of overall GFCAF	-	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.2	0.2
- % of GNP at current prices	-	0.03	0.04	0.1	0.1	0.1	0.1	0.1	0.05	0.04
- NB: net savings in 10 ⁹ FB	(4.7)	(3.8)	(4.4)	(14.2)	(8.8)	(8.8)	(9.7)	(3.4)	(3.0)	(7.7)

Source : OSCE

GROSS FORMATION OF FIXED CAPITAL ASSETS (GFCAF) IN THE PUBLIC SECTOR										
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
- in 10 ⁶ FF	8254	10180	12052	14329	15936	17608	19973	21510	24608	27698
- 1961 = 100	100	123	146	174	193	213	242	261	298	336
- % annual growth	+18.5	+23.3	+18.4	+18.9	+11.2	+10.5	+13.4	+7.7	+14.4	+12.6
- % of overall GFCAF	11.7	12.7	13.2	13.2	13.3	13.3	13.9	13.7	13.4	13.1
- % of GNP at current prices	2.5	2.8	2.9	3.1	3.3	3.3	3.5	3.4	3.4	3.4
- NB: net savings in 10 ⁶ FF	(13062)	(11937)	(14998)	(21319)	23322	(25578)	(24903)	(22162)	(35940)	(38466)
B. Central Govt.										
- in 10 ⁶ FF	2317	2936	3573	4045	4747	5502	6372	7159	7547	8643
- 1961 = 100	100	127	154	175	205	237	275	309	326	373
- % annual growth	+20.3	+26.7	+21.7	+13.2	+17.3	+15.9	+15.8	+12.4	+5.4	+14.5
- % of overall GFCAF	3.3	3.7	3.9	3.7	4.0	4.2	4.4	4.6	4.1	4.1
- % of GNP at current prices	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.0	1.1
- NB: net savings in 10 ⁶ FF	(8311)	(6530)	(9590)	(16029)	(17898)	(19662)	(13335)	(12620)	(22632)	(25565)
C. Local Authorities										
- in 10 ⁶ FF	5815	7084	8286	10006	10856	11777	13275	13984	16655	18622
- 1961 = 100	100	122	143	172	187	206	228	241	286	320
- % annual growth	+18.4	+21.8	+17.0	+20.8	+8.5	+8.5	+12.7	+5.3	+19.1	+11.8
- % of overall GFCAF	8.2	8.9	9.0	9.2	9.1	8.9	9.2	8.9	9.1	8.8
- % of GNP at current prices	1.8	1.9	2.0	2.2	2.2	2.2	2.3	2.2	2.3	2.3
- NB: net savings in 10 ⁶ FF	(1953)	(2645)	(2695)	(2913)	(4088)	(5295)	(5569)	(6451)	(8058)	(9199)
D. Social Security										
- in 10 ⁶ FF	122	160	193	278	333	329	326	367	406	433
- 1961 = 100	100	131	158	228	273	270	267	301	333	355
- % annual growth	-1.6	+31.1	+20.6	+44.0	+19.8	-1.2	-0.9	+12.6	+10.6	+6.7
- % of overall GFCAF	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2
- % of GNP at current prices	0.04	0.04	0.05	0.06	0.07	0.06	0.06	0.06	0.06	0.05
- NB: net savings in 10 ⁶ FF	(2768)	(2762)	(2713)	(2377)	(1336)	(621)	(5999)	(3091)	(5250)	(3702)

I T A L Y

GROSS FORMATION OF FIXED CAPITAL ASSETS -GFCAF) IN THE PUBLIC SECTOR										
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
- in 10 ⁹ Lires	709.9	757.3	837.6	978.3	938.5	1013.7	987.4	1189.3	1212.8	1373.9
- 1961 = 100	100	107	118	138	132	143	139	168	171	194
- % annual growth	+4.1	+6.7	+10.6	+16.8	-4.1	+8.0	-2.6	+20.4	+2.0	+13.3
- % of overall GFCAF	12.9	12.0	11.4	13.2	13.6	13.9	11.9	12.8	11.3	11.1
- % of GNP at current prices	2.9	2.8	2.7	2.9	2.6	2.6	2.3	2.5	2.3	2.4
- NB: net savings in 10 ⁹ Lires	(909.1)	(970.5)	(953.9)	(1178.1)	(244.4)	(117.3)	(877.1)	(620.6)	(387.3)	(416.6)
B. Central Govt.										
- in 10 ⁹ Lires	280.7	327.0	334.7	355.3	325.3	328.0	371.2	475.4	462.0	558.7
- 1961 = 100	100	117	119	127	116	117	132	169	165	199
- % annual growth	+2.5	+16.5	+2.4	+6.2	-8.4	+0.1	+13.2	+28.1	-2.8	+20.9
- % of overall GFCAF	5.1	5.2	4.5	4.8	4.7	4.5	4.5	5.1	4.3	4.5
- % of GNP at current prices	1.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0
- NB: net savings in 10 ⁹ Lires	(705.6)	(786.4)	(617.6)	(789.9)	(163.8)	(363.4)	(208.4)	(641.0)	(438.3)	(578.3)
C. Local Authorities										
- in 10 ⁹ Lires	331.1	358.4	410.1	497.0	516.6	522.6	518.9	528.2	581.0	597.2
- 1961 = 100	100	108	124	150	156	158	157	160	176	180
- % annual growth	+3.7	+8.2	+14.4	+21.2	+3.9	+1.2	-0.7	+1.8	+10.0	+2.8
- % of overall GFCAF	6.0	5.7	5.6	6.7	7.5	7.2	6.2	6.7	5.4	4.8
- % of GNF at current prices	1.4	1.3	1.3	1.5	1.4	1.3	1.2	1.1	1.1	1.0
- NB: net savings in 10 ⁹ Lires	(-35.0)	(-78.3)	(-155.2)	(-248.1)	(-167.6)	(-297.1)	(-187.5)	(-229.1)	(-318.6)	(-284.5)
D. Social Security										
- in 10 ⁹ Lires	40.2	52.9	63.0	66.0	62.2	101.1	98.9	104.0	111.0	110.4
- 1961 = 100	100	132	157	164	155	252	246	259	276	275
- % annual growth	-12.4	+31.6	+19.1	+4.8	-5.8	+62.5	-2.2	+5.2	+6.7	-0.5
- % of overall GFCAF	0.7	0.8	0.9	0.9	0.9	1.4	1.2	1.1	1.0	0.9
- % of GNP at current prices	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
- NB: net savings in 10 ⁹ Lires	(238.5)	(262.4)	(491.5)	(636.9)	(248.2)	(51.0)	(143.8)	(208.7)	(267.6)	(122.8)

GROSS FORMATION OF FIXED CAPITAL ASSETS (GFCAF) IN THE PUBLIC SECTOR										
	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Public sector as a whole (State)										
- in 10 ⁶ FL	1947	2164	2483	2993	3236	3567	4047	4823	5180	5610
- 1961 = 100	100	111	128	154	166	183	208	248	266	288
- % annual growth	+11.3	+11.1	+14.7	+20.5	+8.1	+10.2	+13.5	+19.2	+7.4	+8.3
- % of overall GFCAF	17.8	18.6	20.0	19.3	19.1	18.4	19.0	20.0	20.1	18.9
- % of GNP at current prices	4.3	4.5	4.7	4.8	4.7	4.7	4.9	5.2	5.0	5.0
- NB: net savings in 10 ⁶ FL	(2555)	(2093)	(1781)	(2073)	(2615)	(2940)	(3067)	(4222)	(4930)	(5720)
B. Central Govt.										
- in 10 ⁶ FL	640	619	705	796	934	1040	1178	1410	1560	1770
- 1961 = 100	100	97	110	124	146	163	184	220	244	277
- % annual growth	+31.7	- 3.3	+13.9	+12.9	+17.3	+11.3	+13.3	+19.7	+10.6	+13.5
- % of overall GFCAF	5.9	5.3	5.7	5.1	5.5	5.4	5.5	5.8	6.1	6.0
- % of GNP at current prices	1.4	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6
- NB: net savings in 10 ⁶ FL	(2077)	(1882)	(1895)	(2189)	(2337)	(2869)	(3247)	(3459)	(4100)	(4320)
C. Local Authorities										
- in 10 ⁶ FL	1307	1545	1778	2197	2302	2527	2869	3413	3620	3840
- 1961 = 100	100	118	136	168	176	193	220	261	277	294
- % annual growth	+3.4	+18.2	+15.1	+23.6	+4.8	+9.8	+13.5	+19.0	+6.1	+6.1
- % of overall GFCAF	12.0	13.3	14.3	14.2	13.6	13.0	13.5	14.2	14.0	12.9
- % of GNP at current prices	2.9	3.2	3.4	3.5	3.3	3.3	3.5	3.7	3.5	3.4
- NB: net savings in 10 ⁶ FL	(112)	(91)	(-149)	(-246)	(87)	(-57)	(-372)	(11)	(70)	(690)
D. Social Security										
- in 10 ⁶ FL	-	-	-	-	-	-	-	-	-	-
- 1961 = 100	-	-	-	-	-	-	-	-	-	-
- % annual growth	-	-	-	-	-	-	-	-	-	-
- % of overall GFCAF	-	-	-	-	-	-	-	-	-	-
- % of GNP at current prices	-	-	-	-	-	-	-	-	-	-
- NB: net savings in 10 ⁶ FL	(366)	(120)	(35)	(130)	(191)	(128)	(192)	(752)	(760)	(710)

ANNEX V
Variation coefficients of public sector GFCAF and of GNP (1961-70)

	σ	\bar{x}	$\frac{\sigma}{\bar{x}}$
<u>A. Gross formation of fixed capital assets</u>			
Germany	7.75	7.9	0.98
France	4.58	10.5	0.44
Italy	7.14	4.3	1.66
Netherlands	5.30	6.7	0.79
Belgium	9.60	9.6	1
Luxembourg
United Kingdom (1)	6.8	11.7	0.58
<u>B. Gross national product</u>			
Germany	2.29	4.9	0.47
France	0.94	5.8	0.19
Italy	1.43	5.7	0.25
Netherlands	1.75	5.2	0.34
Belgium	1.29	4.9	0.26
Luxembourg (1)	2.4	3.4	0.71
United Kingdom (1)	1.32	2.8	0.47

(1) 1961-69

The following conclusions may be drawn.

1. Average \bar{x}

On the whole, the GNP is increasing in quantity by an average of 5 per cent per annum in the EEC countries, with the exception of Luxembourg, and by 3 per cent in the United Kingdom. Over the same period, the GFCAF increased by 5-10 per cent, and even by nearly 12 per cent in the United Kingdom.

2. Standard gap σ

The GNP standard gap represents, depending on the country, one-fifth to one-half of the average, which shows a relative concentration of the growth rate about the average. On the other hand, the GFCAF shows much larger variations, the standard gap being between one-half and two-thirds of the average, which reflects some very wide variations.

