By M. E. Streit*

Basic objectives of this paper are (1) to scrutinize facts and regularities which appear to indicate a specific regional development pattern in Western Europe, (2) to find crucial factors which might determine the dynamic of this pattern, and (3) to derive from these findings conclusions for a policy which is directed towards reducing regional imbalances.

1. Introduction: the issues

Twenty years have passed since the Economic Commission for Europe (ECE) pointed at

- the growing attention which regional disparities received by the European governments,
- the drawback which economic integration may imply for the peripheral regions of Europe,
- the inter-relationships between regional policies and international economic relations, and
- the need for cooperation between countries in the field of regional policy¹.

In the meantime, these points have not lost their importance. On the contrary, the partly strenuous governmental efforts² to cope with regional disparities urgently require a review: The little statistical evidence we have allowing interregional comparisons suggests that by and large regional disparities in per capita income in Western Europe³ have not increased since 1960, but have, in general to some degree even

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¹ See United Nations [1955], particularly pp. 136 f. and 170.

² For a presentation of the various policy measures see, for example, OECD 1970 b, parts V to VII, *Bird* (1967), and *McCrone* (1969). Tentative estimates of at least some of the costs can be found, for example, in OECD 1970 b, Table 2, p. 66 and in *de Castelbajac* (1972).

³ Defined for these purposes as comprising the enlarged European Community and in addition Austria and Switzerland. Admittedly, such an exten-

narrowed. However, even if one leaves aside the problem of how and to what extent to attribute this observation to specific policies, this can hardly be considered a satisfactory record, particularly if attention is also paid to other aspects of regional development. To these belong primarily unemployment rates, flows of migration, economic structure, equipment with infrastructure etc. There is wide agreement that the comparison should be extended to even more social indicators in order to get an appropriate picture of the regional conditions of living. However, already for cross-country comparisons shortage of statistical information is setting narrow limits to such efforts. And beyond that, conceptional difficulties produce serious limitations; perhaps the most important difficulty consists in moving from a one-variable welfare function (income per head) to a — certainly desirable — multivariable welfare function, weighing together a set of social indicators⁴.

Taking up the points raised by the ECE, any assessment of past developments with the aim to improve the analytical basis for future action in the field of regional policy can hardly avoid to deal with the following aspects:

- Regional problems primarily have a long-term character. This means that Keynesian measures of demand management to which governments tend to resort in the first place when faced with employment problems, can only bring temporary relief, and even this rarely without inflationary consequences⁵. In the long-run, the question must be raised whether the various regions have chosen the right "professions" considering secular changes in the structure of demand.
- By a number of reasons it is empirically supported that the locational position and hence the supply conditions of the European regions are affected by economic integration within the framework of the ECE respectively the EFTA. And there is sufficient evidence to show that this effect is even enhanced if the liberalization of trade is accompanied by a liberalization of factor movements, particularly of labour⁶.

sion of the area under consideration can merely be considered as an absolute minimum necessary because these two countries are practically located within the enlarged Community.

⁴ For a recent survey on the corresponding literature see, for example, *Leipert* (1973).

⁵ As is suggested here, regional problems reflect largely a disadvantageous structure and competitiveness of supply. Hence an increase in overall demand will turn to the backward regions as marginal producers on a larger scale only after the prosperous regions show short-term bottlenecks in supply which tend to push up their price-level. But the consecutive inducement to invest in the prosperous regions and the overall rise in cost will soon restore the old disparities.

⁶ For a summary of the Community of the Six' measures to eliminate obstacles to labour movements see, for example, Yannopoulos (1969), pp. 226 ff.

- Trade liberalization can lead to specific regional consequences if discrimination is not avoided. Cases in point are the agricultural protectionism and, more generally, the bias in liberalization favouring trade between developed countries (DC's) as compared with trade between DC's and less developed countries (LDC's). The structural conservation which can result may not at all help the backward regions in the long run.
- The case for international cooperation, already stressed by the ECE, becomes the stronger the more national governments embark upon competitive regional policies because such efforts can easily turn into non-tariff barriers of a size intolerable with regard to a smooth functioning of the international economic order: There is always the danger that the infant industry argument is misused to advocate protection for the purpose structural conservation.
- Finally, a review of regional policies cannot by-pass the question of consistency if basic rationality requirements should not be neglected. An attempt to assess the costs and benefits of a specific policy must take into account the possibility that other policies pursuing other objectives may well be counter-productive with respect to efforts aiming at regional balance.

In the light of these aspects the assessment will consist out of the following sequence of steps:

- First, it appears useful to highlight the regional problems existing in Europe by providing a few selected facts⁷.
- Second, beyond the facts, some regularities pointing at a specific regional development pattern in Europe will be presented and scrutinized.
- Third, attention will be paid to conceptual difficulties and administrative as well as political obstacles which regional policy usually has to face.
- Fourth, the key question as to the analytical basis for policy action will be taken up, namely what are the important, dynamic factors which probably affect the observed regional development pattern.
- Fifth, conclusions will be drawn with regard to those policy measures most appropriate in helping to support and to direct the dynamic which can be found inherent in the regional development pattern and which could reduce regional disparities within Europe.

 $^{^7}$ The informations are primarily selected to give factual support to the perspectives to be developed in the following section. Additional informations can be found in the sources which will be quoted then.

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2. Regional problems: income disparities, migration, structural weaknesses and political obstacles

Disparities

There are still sizeable differences in per capita regional income⁸ within the various countries: In the second half of the 1960s this income was between 50 per cent (e. g. Switzerland⁹) and 190 per cent (Italy) higher in the most prosperous regions than in the poorest regions¹⁰. In 1970, the richest areas in the Community of the Six as a whole had a per capita income about five times as high as that of the poorest¹¹ leaving the latter at a level comparable to some LDC's in Latin America. As already mentioned, the disparities within the individual countries appear to have narrowed somewhat. However, as also indicated, the reliability of such a finding is limited. This does not only result from problems related to the estimation of regional incomes even when considering individual countries and comparing estimates for different periods. At least equally important is the way in which the regions have been delineated¹². In any case, the figures mentioned do show

¹¹ Commission (1973), p. 2.

⁸ The regional income data available are subject to considerable statistical and conceptual limitations. Compare for these problems *Biehl*, *Hussmann* and *Schnyder* (1972), pp. 64 f., *Commission* (1973), pp. 51 and 59, *Fischer* (1967), pp. 257 ff. and (1970), pp. 239 ff.

⁹ This figure compares the per capita income of two administrative units (Kantone): Basel (Stadt and Land) on the one side, Unterwalden (Obwalden and Nidwalden) on the other (Statistical Source: *Fischer* [1970], p. 248).

¹⁰ For all countries, the approximate percentages (the corresponding regions are given in brackets) were: Belgium/Luxemburg 70 p.c. (Brabant/Limburg), Denmark 50 p. c. (Sjaelland/Jylland), France 90 p. c. (Région Parisienne/Bretagne), Germany 80 p. c. (Köln/Niederbayern, leaving out the two city regions Hamburg and Bremen), Ireland 60 p.c. (East/West), Italy 190 p.c. (Lombardia/ Calabria), Netherlands 50 p.c. (Zuid Holland/Drenthe), United Kingdom 70 p.c. (South East and East Anglia/Northern Ireland). Sources: Biehl, Hussmann and Schnyder (1972), pp. 64* and 65*, Commission (1973), p. 60. (The data for the UK, Ireland and Denmark refer to 1970, the other data to 1969.)

¹² It may suffice to point at the fact that a comparison of the relative dispersion (coefficient of variation) in regional per capita income for Germany in 1960 and 1969 is already somewhat ambiguous because the three city-states Berlin, Bremen and Hamburg enter the calculation as regions. But it would be equally arbitrary to merge, for example, Hamburg with Schleswig-Holstein as a whole simply because no informations are available for smaller adjacent areas. — The actual ratio for Germany is 0.97. The corresponding ratios for the other member countries of the Community of the Six are: France 0.99, Italy 0.75, Belgium and Luxemburg 0.88, Netherlands 1.08; i.e. except for the Netherlands, disparities seem to have narrowed or at least did not increase (computed from the data given in *Biehl, Hussmann* and *Schnyder* (1972), Table 29*, column 1 [for 1960] respectively 2 [for 1969]). A similar result was obtained for Switzerland (1950 - 1965) although with less sophisticated measures of variance (*Fischer* [1967], p. 257). Austria appears to show a widening of disparities (*Österr. Inst. f. Raumplanung* [1966], pp. 23 f.); however this comparison refers to the period 1950 - 1961.

that the disparities are still sizeable. And the income hierarchy of regions did hardly change over time¹³.

Regularities

(1) Closer inspection of the regional income data provides some evidence for a systematic geographical pattern. Already the comparison of the regions with the highest and lowest per capita income shows that in those countries which reach out to the periphery of Western Europe, the poorest regions are located at the periphery¹⁴. For the Community of the Six, per capita regional income appears to decline rather systematically with growing distance from what could be considered as the Community's economic centre, i.e. the Rhein/Ruhr area¹⁵. A similar cone-type decline of per capita income from the centre to the periphery was found when applying a gravity model¹⁶: For the enlarged Community, an area roughly described by the triangle Düsseldorf, Liège, Antwerp was identified as the economic centre. Taking into account that the first quoted regression analysis is limited to the Community of the Six and that the gravity model does not use regionalized figures for Switzerland and Austria and is partly based on quite large administrative regions (Länder) in the case of Germany¹⁷, the following modified pattern appears more plausible: Per capita regional income tends to decline rather regularly in all geographical directions from a somewhat curved development axis running from the mouth of the Thames along the Rhine with the area between Düsseldorf and Frankfurt as the likely peak, along the Rhine over the Alps practically to Milan¹⁸. Additional support for this hypothesis is found when considering the geographical distribution of population within Western Europe¹⁹.

¹³ The coefficients of correlation, comparing the rank of the various regions according to their per capita income in two different years are extremely high. For the Community of the Six (1960/1969): 0.92, for Switzerland (1950/1965): 0.91, and for Austria (1950/1961): 0.94 (Own calculations from the data given in Biehl, Hussmann and Schnyder [1972], Fischer [1967] and Österr. Inst. **j**. Raumplanung [1966]).

¹⁴ I.e. Bretagne, West of Ireland, Northern Ireland, Jylland, Niederbayern, Burgenland and Calabria.

¹⁵ Taking Düsseldorf as the urban centre of the central region, a significant non-linear relationship can be estimated between per capita income of the various regions and the geographical distance of their urban centre from Düsseldorf (*Biehl, Hussmann* and *Schnyder* [1972], p. 74).

¹⁶ Clark, Wilson and Bradley (1969), particularly the result presented on pp. 204 f. (Map III).

¹⁷ Altogether 22 regions but with Hessia, Baden-Württemberg, Bavaria and Schleswig-Holstein treated as "regions".

¹⁸ The major but easily explainable exceptions from this regularity are Hamburg, Bremen, Berlin and Brussels.

¹⁹ For the enlarged Community compare Commission (1973), p. 26 a.

(2) Turning to unemployment and migration, a pattern complementary to the geographical distribution of per capita income appears to exist: For the Community of the Six, the rate of unemployment rises rather systematically²⁰ with growing geographical distance from the suggested economic centre. Extending the analysis to the Community of the Nine, it is unlikely that this pattern is upset in view of the North-South decline of unemployment ratios in England and Scotland and the extremely high unemployment ratios in Northern Ireland and Northern Denmark²¹. Quite in correspondance with the pattern of employment opportunities are the flows of migration: The major net emigration zones of the enlarged Community are on the periphery²² with the described development axis as the major immigration area²³. However, migration within Western Europe is outnumbered by an inflow of labour, primarily from LDC's bordering the Mediterranean basin²⁴.

(3) It is almost common sense that unemployment and migration are causally interrelated with economic structure. This view appears to be confirmed when inspecting more systematically, for example, the regional structure of the Community of the Six: There is a telling inverse relationship between unemployment and the share of the secondary sector (i. e. industry at large) in regional income²⁵. And as already mentioned, the major regions of emigration are the peripheral ones which also have hardly any industry; the same holds particularly true for those LDC's where most of the present migrants to the central European regions come from. But regional population drain in Europe is not completely restricted to agricultural areas. Regions with run down industries are similarly affected by the attraction of central areas; the North of England, the Northwest of France and parts of Belgium are cases in point.

²⁴ In Germany, for example, the ratio between foreign labour coming from member countries of the enlarged Community and from third countries was about 1:3 in 1972 (*Stat. Bundesamt* [1973], p. 144).

 $^{^{20}}$ Coefficient of determination (R²) for the relationship between these two variables: 0.63 (*Biehl, Hussmann* and *Schnyder* [1972], p. 74).

 ²¹ Compare, for example, the instructive map 3 in Commission (1973), p. 126 a.
 ²² Commission (1973), pp. 129 f.

²³ A striking case within the enlarged Community is Germany. In 1972, the share of foreign labour in the total labour force amounted to 10.5 p.c. compared with 0.7 p.c. in 1958, France (7.3 p.c.) and, Belgium (7.2 p.c.) coming next (Kommission [1974], p. 226). With a peak of 24.6 p.c. in 1964 (Jöhr, Huber [1968/ 1969], p. 378), Switzerland held an European "record".

²⁵ The corresponding, statistically significant (at 99 p.c.) coefficient of determination (\mathbb{R}^2) is (—) 0.43. Furthermore a significant although comparatively weak, positive correlation can be found between the share of agriculture in regional income and the rate of unemployment ($\mathbb{R}^2 = 0.13$); taking into account that particularly agriculture is a sector where much disguised unemployment can be found, the statistical result probably represents an understatement. (For the coefficients compare *Biehl*, *Hussmann* and *Schnyder* [1972], Table 5, p. 74).

Obstacles

(1) The question which necessarily will come up, namely whether the past trend of migration can be extrapolated into the future, cannot be answered without taking into account a further regional problem. On the one side we have regional depopulation which in most cases implies a loss of economic viability because the departure regions tend to lose the most dynamic part of their population²⁶. On the side of the central regions which primarily absorb these migrants, there is a growing awareness of the social net costs including environmental damages caused by a steady concentration of economic activity and of population. But the corrective measures which are contemplated or enacted are highly dirigistic, beginning with Switzerland's legislative action in 1964 to stem the inflow of foreign workers. And it may be questioned whether legal barriers to mobility of labour are at least in the medium run the most appropriate corrective action particularly if the objective to secure a socially most efficient use of resources over space should not be neglected. As location theory suggests²⁷ the extensive movement of workers to the works can be explained by a failure to close gaps between private and social costs of production and consumption at any location. For agglomerations which can only expand at strongly increasing costs to be incurred when providing additional public goods and when trying to conserve decent environmental standards, allocative efficiency would require to charge in full with these costs of expansion (marginal net social costs) all producers and consumers located in or moving into such agglomerations. On the other hand, there are urban centres which could reach a larger size ultimately at comparatively lower costs and consequently should be encouraged to do so by charging producers and consumers again with the (rather declining) incremental (marginal) costs of expansion. However, the practical difficulties to follow such an allocation device result from the well known characteristics of public goods including the environment, namely how to match the paying group to the benefitting group. Neither the net costs of expansion can be properly assessed nor can they be charged appropriately, i.e. according to the extent to which these goods are used by the individual. Frequently, the congested areas even do not manage to cover their total costs, i. e. to balance their budgets. And even if they succeed they still charge practically on average the individual producer and consumer considerably less than the costs of expansion. Otherwise they would score budget surpluses. And these could

²⁶ For an elaboration of this point compare, for example, *Williamson* (1968), pp. 102 f.

²⁷ Compare, for example, v. Boeventer (1962), particularly the policy conclusion on pp. 186 f.

¹⁸ Zeitschrift für Wirtschafts- u. Sozialwissenschaften 1974/3

be transferred to potential urban centres which find themselves hard up to provide an initial infrastructure consisting largely out of indivisible respectively complementary projects which are vital to make such centres attractive.

(2) Turning the regional policy and to how it is practiced by the European governments, it may be worth to note the OECD's verdict that "starting from assistance given to particular regions in order to cope with particular problems, mainly unemployment, policy has moved on to placing regional and national problems in a common interrelated perspective"²⁸. However, this perspective does not necessarily lead to an actual change in policy and even if it would be the case there remains the question whether it is the most appropriate policy.

First, there are administrative and political obstacles to a satisfactory coordination of legislative and governmental measures likely to affect the regional development within a national framework. A case in point is a sometimes far-reaching decentralization of budgetary powers which does not necessarily take care of the regional aspect; in most countries, and not only on the national level, one can find that even in regional policy as such responsibilities rest with quite a number of ministries, departments and other administrative agencies. What is even worse, the allocation of public funds can be definitely biased against a distribution according to the needs of regional development. On the administrative level there is a potential advantage of agglomerations over smaller administrative units with respect to planning expertise. And since competition for funds to be provided by higher authorities is frequently decided via competition of projects, lack of planning expertise can also mean lack of funds. On the political level, it is observable that agglomerations as concentrations of electors tend to induce central governments to give special attention to their problems²⁹. And these consist primarily of bottlenecks in their infrastructure. To remove these bottlenecks requires funds at an increasing scale without providing more

²⁸ OECD (1970 b), p. 33.

²⁹ Giersch (1973), pp. 110 f. Further administrative and fiscal factors favouring agglomerations are reported in *Rapport* (1971), pp. II/1/29 ff. In *Bildungswerk* (1973), pp. 40 ff., a major fiscal distortion is discussed consisting of the wide-spread practice to attribute tax revenues to those locations (regions, countries) which the tax-payers can declare their home-base. Such a practice ignores the origin of the taxable receipts. And since the prosperous areas are important as origins of investments elsewhere because of their wealth and as financial centres which even collect and provide as credits savings from other areas, they will also receive the returns and the derived public receipts which largely determine the capacity to provide additional infrastructure. Such a fiscal system leaves unnecessarily much to clumsy transfer systems through which public funds are channelled from the rich to the poor regions.

than temporary relief; temporary only because the new capacity again increases the attraction of these centres merely to open up new bottlenecks. The losers in the political struggle for public funds are the less densily populated areas and medium-sized urban centres irrespective of their development prospects. But to exploit their potential would require, as explained above, a geographical redistribution of public investments away from agglomerations producing under decreasing social returns to scale. This does not imply that less developed regions are always the losers, particularly if they are considered as marginal constituencies. However their decisive power in elections is no reliable indicator for their development prospects. Furthermore, political power of such regions can easily be misused to support existing weak industries and to delay a necessary structural adaptation. Finally, one can still observe the political influence of the 19th century belief that prosperity of an urban centre or a region depends almost exclusively on industrial development regardless of the economic maturity of the area in question and of specific locational advantages favouring other sectors.

Second, there is a reservation to be made as to the national orientation of regional policy which has already been indicated in the introduction: According to past experience it is likely that national policy makers ignore the border-crossing interdependence of regional developments which are particularly important in an economically integrated Europe³⁰, and that they easily forget their reponsibility for and the potential gains from free world trade at large. To get really away from the conventional patchwork which even begins to shape the plans for a common regional policy of the enlarged Community³¹, the perspective must be widened beyond national borders and beyond petty and short-sighted national interests.

³⁰ The fact that not all countries of Europe belonged and still do not belong to one common market did not prevent a growing degree of economic integration of the various trading areas. The outcome of all estimates of the static trade effects of the Common Market is that trade creation exceeded trade diversion to an extent which cannot easily be turned into the opposite result in view of the theoretical and empirical measurement problems. As to the dynamic effects (e.g. scale economies accessible in a wider market) one has to set against them the positive impact on third countries via growth-induced imports (Compare for a more recent survey of published estimates of the trade effects of the Common Market and for an additional measurement effort Kreinin [1972]). Furthermore, the Kennedy round lead to a lowering of the tariff fence around the Community. As to the future, it is necessary to take into account that those EFTA-countries which did not join the Community already have (like Austria and Switzerland) or are negotiating freetrade agreements with the enlarged Community.

 $^{^{31}}$ See, for example, the author's criticism of the likely common regional policy in *Streit* (1973), pp. 49 ff.

3. Regional perspectives: Structural change, European and world-wide economic integration

Structural pattern

Structural change and regional development are not merely interrelated because this change does not take place in a spaceless economy. When considering larger areas, like the Community of the Six³², a more or less systematic relationship appears to exist between economic maturity (measured as per capita income) of a region and its composition of output³³:

- The primary sector, i. e. agriculture at large, has a share in regional output which tends to decrease steadily with increasing per capita income.
- The secondary sector, i. e. energy and watersupply, extracting and manufacturing industries, construction, tends to gain an increasing share in total output but after a certain per capita income has been reached its share tends to decrease somewhat.
- The tertiary sector, i. e. private and public services, shows a path of development which — although with comparatively lower statistical significance — corresponds practically in reverse to the one observed for the secondary sector, with a declining share in the early stages of economic development and increasing share after a threshold per capita income has been passed.

The structural pattern appears to conform rather well to results obtained primarily in cross-country studies, particularly as far as the primary and secondary sector are concerned³⁴. The cross-country pattern which, like the regional one, is the aggregate outcome of partly diverging trends within the sectors, can usually quite convincingly be explained by a rather limited number of factors:

³² Biehl, Hussmann and Schnyder (1972), pp. 77 f.

³³ Regional product is split up into the conventional three sectors according to the classification of the Community's statistical office (NACE), i.e. primary sector (NACE 0), secondary sector (NACE 1 - 5) and tertiary sector (NACE 6 - 9).

³⁴ It may suffice to recall the famous studies by S. Kuznetz (1957), H. B. Chenery (1960), the United Nations (1963), and H. B. Chenery and L. Taylor (1968). For most recent results obtained from cross-country data with a sample size up to 62 and from time-series referring to the West-German economy (up to 19 observations) compare Fels, Schatz and Wolter (1971), particularly those results summarized on p. 255. The results obtained by the ECE (United Nations [1970], pp. 55 - 138) are not always as conclusive as those mentioned before, last not least because the sample size in smaller (up to 18 observations) and because it refers primarily (13 observations) to industrialized countries. For a discussion of the resulting long-term perspectives compare also United Nations (1970) and — for the OECD area — OECD (1970 a), pp. 166 ff.

- changes in income-elasticities of demand depending upon the degree of maturity of any given economy;
- changes in the relative scarcity of factors of production again depending upon the average per capita income which, for example, in the case of capital largely determines domestic accumulation via savings;
- complementarities between various economic activities making them mutually dependent upon secular changes in the structure of demand and of factor supply, linkages between some services and industrial production being cases in point;
- substitution processes as a result of technological progress affecting particularly the use of raw materials and of energy but also the proportions in which labour and capital can be combined in production processes;
- specialization in production possible and rewarding through international trade and, consequently, locational reorganization of production across national borders.

The resemblance between the cross-regional and the cross-country results invites to pursue the question whether both findings could be merged in helping to explain the locational dynamic within an economically integrated area such as Western Europe. An answer to this question would also refer to the key question raised at the beginning of this paper. Unfortunately, there is no comprehensive regional development theory at hand which would lend itself easily to the kind of diagnosis and projection which this question asks for³⁵. However, a scrutiny of the explanatory factors just mentioned together with some elements of regional theory could help to provide at least tentative answers. Some are rather obvious or at least well-known and can be briefly summarized:

- Sector-specific changes in income-elasticity of demand are primarily exogenous to an individual region as a relatively small area. The regional impact of such changes depends largely on the already existing structure of production. The theoretical line of argument follows the familiar export-base model.
- Related to the factor just mentioned is the demand derived largely from industrial growth within a single region. Primarily affected are the so-called complementary services³⁶, e. g. banking, insurance,

³⁵ As studies dealing with questions similar to those pursued here may be quoted Williamson (1968) and Borts and Stein (1968). However the latter study has an element of self-restraint because of the effort to argue primarily along neo-classical lines.

³⁶ A more recent analysis of the development factors governing the service sector can be found in *Katouzian* (1970). There, a quite useful distinction is made between new, complementary and old services.

transport. However, there is also a feedback because easy access to such services tending to locate in urban centres helps to improve the locational attraction of a region.

- Once industrial development is under way in a laggard region, it can rely on a rather elastic supply of labour which does not only flow from agriculture but also from less competitive so-called old services, e. g. domestic services. It is this part of the service sector where disguised unemployment is concentrated in backward areas of DC's and even more in LDC's as a whole³⁷.
- Finally but again not primarily related to the degree of economic maturity of a single region, there is the locational impact of the fast growth of the so-called new services, e. g. education, research and development, health. Many of these services tend to prosper in the existing agglomerations, a major exception being holiday resorts. Since the new services have quite favourable income terms of trade compared with other sectors and partly generate their own labour force (i. e. via education), they have begun to outcompete industry which, so far, dominated most agglomerations in the centre of Europe.

Locational dynamic

But none of the points raised in the previous section comes really close to the question of the locational dynamic. They presuppose more or less that a region already has a somewhat diversified structure of output; under such conditions particularly the final point shows how a locational spread of economic activities might come under way. To pursue the key question, however, two observations made in the preceding section have to be recalled: First, there is this high concentration of industry in the area which was identified as Western Europe's development axis with the degree of industrialization falling rather steadily from this centre to the periphery³⁸. Second, so far, this axis was the outstanding immigration area, both, for labour from within Western Europe as well as from the neighbouring LDC's, and, last not least, it also attracted complementary capital³⁹.

³⁷ As far as LDC' are concerned, a major case of disguised unemployment in the service sector consists out of an "overcrowding of government offices from top to bottom" (*Katouzian* [1970], p. 374).

³⁸ The geographical distance from the economic centre of the Community of the Six chosen in *Biehl*, *Hussmann* and *Schnyder* (1970), "explains" 40 p.c. $(R^2 = 0.4)$ of the decline of the industrial share from the centre to the periphery (ibid., Table 5, p. 74).

³⁹ However, it should be emphasized that the flow of foreign direct investment last not least into the centre of Europe which aroused much suspicion in certain quarters was to a considerable extent also a response to other factors, primarily an overvalued dollar and the common external tariff of the Community of the Six. For a critical appraisal of some of the related anxieties see, for example, *Streit* (1973), pp. 194 ff.

(1) For the genesis of this locational pattern a hypothesis referring to the locational impact of economic integration in Europe was put forward as early as 1949⁴⁰: The so far identified centre will become particularly attractive for industrial and complementary activities because of a privileged position in view of economic distances to all other parts, supported by advantages of historically grown and naturally favoured agglomerations creating external economies, and by laggard prices for land. Other centres of growth, mainly the national capitals, will lose some of the attraction as soon as they lose via economic integration their protection through tariff- and non-tariff barriers which are equivalent to additional costs of transport and of communication⁴¹.

(2) With regard to the heavy migration to the centre of Western Europe, the forementioned hypothesis can be complemented. Industrial and related economic expansion go on at comparatively low private costs because - as already explained - practically no efforts were made to charge producers and consumers in this area appropriately with social net costs of a further expansion. In addition, the move of works to the workers, i. e. economic expansion outside the central regions, was retarded by a pressure on wages in the centre: Migrant workers from within and outside Western Europe were and still are readily inclined to move into the agglomerations and to live there frequently under poor conditions which — if at all — would be accepted by the labour force of the corresponding host countries only if they were compensated by higher incomes. The bidonvilles around and even inside these agglomerations cannot be overlooked and begin to make themselves felt as temporary homes of a large vulnerable new proletariat. It was only a matter of time until these people became aware of being underprivileged and until they began to develop and express a desire for equal conditions of living. And primarily inward migration from LDC's neighbouring Western Europe is likely to produce a clash of cultures which easily breeds social tensions. These become conceivable because the clash of cultures is combined with the creation of a helot class of other races available to do the despised and menial jobs inviting other parts of the population to develop attitudes of superiority and disdain. In other words, although with a lag, the costs of an unchecked expansion of the centre of Europe begin to attract public attention. But beyond the sociological factors just indicated, there is also a growing awareness of the secondary investments (mainly into the infrastructure at large) which are required to cater for the mass immigration, a point raised much earlier by economists⁴².

⁴⁰ Giersch (1949/50).

⁴¹ Not confirmed was the conclusion that this process of centralization will lead to an increase in regional disparities (*Giersch* [1949/50], p. 91).

⁴² Compare, for example, the discussion of some of these warnings in *Jöhr* and *Huber* (1968/69), pp. 10 ff.

(3) However, the explanatory potential of immigration for the relatively stable centre-periphery pattern of the past has not yet been fully exploited as to the question of the locational dynamic. A glance at the occupational distribution of foreign labour appears to be quite revealing: foreign labour is not simply used to do the "unpleasant, even if moderately well-paid, jobs"43. In Germany (in 1972), for example, about one out of five foreign workers employed in manufacturing industry had a job in industries which are faced with comparatively strong competition from LDC's. And these industries appear to be the most suitable export industries of LDC's because, in most cases, they require little human capital compared with the industrial average44. That some of these industries, i. e. clothing and textiles, were protected (in 1972) by effective rates more than twice as high as German industry as a whole⁴⁵ can hardly be considered as a chance result⁴⁶. At a first glance a share in employment of one fifth may still look modest a figure; however, it is rather straightforward to see that the foreign labour which is pulled into Western Europe via trade policy is not restricted to the jobs kept there through protection; as all other cases, the creation of jobs in one industry (sector) will produce further employment opportunities via interindustry (intersectoral) linkages and via the spending of income.

4. Synthesis: The secular regional development pattern and the complementary policies

Forces at work

Taking stock of the results obtained so far, the forces which appear to govern the regional development pattern in Western Europe can be usefully divided into three categories:

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⁴³ As Vera Lutz (quoted according to Jöhr, Huber [1968/69], p. 18) put it in her analysis of the Swiss case in 1963 when she drew the attention to the fact that foreign labour is concentrated in industries which have low requirements as to human capital.

⁴⁴ This refers to the following industries: clothing, leather products, musical instruments, toys, jewellery and sporting goods, footwear, woodwork, plastic products and textiles. They have been identified by a model based on a modified Heckscher-Ohlin hypothesis (compare *Fels* [1972], particularly pp. 98 ff.). The participation rates of foreign labour have been calculated from *Bundesanstalt für Arbeit* (1972). The share of these industries in total employment in manufacturing in 1972 was 17.7 p.c.; their corresponding share in export turn-over was only 7.2 p.c. compared with an average for manufacturing of 20.0 p.c. (Statistical Source: *Statistisches Bundesamt* [1973], pp. 225 and 232).

⁴⁵ Compare Donges, Fels, Neu et al. (1973), Table 4, p. 26.

⁴⁶ A regression analysis trying to explain Germany's trade with developing countries provided statistically reliable evidence that those industries which perform most poorly in international competition enjoy the highest degree of protection (*Fels* [1972], p. 98).

- Centripetal forces released by a lowering respectively removal of tariff and non-tariff barriers within Europe (economic integration) and primarily attributable to agglomeration economies;
- Centrifugal forces which reflect (1) secular changes in the intersectoral income terms of trade pushing some activities out of the high-cost, high-income agglomerations and creating possibilities last not least for completely new ones, (2) the well-known effects of congestion which make themselves felt sooner or later during the process of spatial economic concentration;
- Retarding forces which can be traced back to ill-conceived economic policies as well as to a general political and administrative origin and which, in various ways, so far prolongated the process of agglomeration particularly in the centre of Western Europe by offsetting largely the centrifugal forces.

Removing retarding forces

For any policy which aims at reducing the regional imbalance in Western Europe and which tries to employ as much as possible the market forces to achieve this objective, a first and most obvious step would be to turn to the retarding forces.

(1) So far, the market mechanism as a spatial allocation device has been largely left to work with the "wrong" price signals: the gaps between social and private costs of production, for example, are more than obvious in the congested centre of Western Europe. However, to close such gaps correctly is hardly possible as already explained. But this does not mean that there are not at least rough and ready measures conceivable to redress the locational imbalances; a tax on the value of land⁴⁷ and an employment tax varying with the degree of regional employment density⁴⁸ are worth to be seriously considered. Since land derives its value from the returns earned respectively the satisfaction enjoyed by using it, a general and periodic land tax would not be piled on top of market rents. Given an inelastic supply it would have to be borne by the landowners. Hence its prior function would be a fiscal one; the revenues could be used to support the expansion or the development of other urban centres required to decentralize economic growth. An inherent allocative effect of such a tax could, first, be expected to the extent to which — in an imperfect market — landowners would be induced to try harder to devote their property to the best possible use. Second, and

⁴⁷ Proposed as a tax on the increase in the value of land in *Giersch* (1971), pp. 91 f. Our basic argument, however, does not change when considering simply a tax on the total value of land.

⁴⁸ Proposed in Bildungswerk (1973), p. 40.

related to it, hoarding of land in the expectation of impending appreciation would become more costly; as a consequence urban sprawl would possibly be decelerated⁴⁹.

A tax which varies according to the regional density of (full-time) jobs would work in the same direction since the envisaged tax-base is a proxy for the geographical concentration of production as one of the major sources of the social costs of urbanization. The total tax to be paid by an employer could depend on the difference between the actual density of jobs in his region and, say, the average density of a country or a group of countries like the enlarged Community. And if the actual density would be below this average, the employer could claim a subsidy which could be paid out of the tax revenues raised in areas with an above-average density. In this way, the tax would redistribute public funds automatically between locations of high density and those of low density thus combining some kind of congestion tax with an employment subsidy.

(2) The case for an employment subsidy is a more general one requiring some elaboration. At present, most regional aids are directly or indirectly capital subsidies. However, such a bias is hardly compatible with a quite familiar situation: backward regions with below-average productivity and a system of wage bargaining where money wages are negotiated primarily on the basis of the productivity and employment record of prosperous regions⁵⁰. Such a constellation is bound to increase the regional problems because wage costs in backward areas may be too high compared with labour productivity even if effective wages paid in more prosperous parts are still higher than negotiated ones. In this case, regional minimum-wage unemployment would be a normal market result. If the price for labour is distorted as explained, it should be corrected by paying an employment subsidy in the hope of attracting complementary capital which could help to rise productivity to a level compatible with the negotiated money-wage rate. If the market would be left to work with the "wrong" price for labour, emigration from the backward regions and congestion in the more advanced ones are very likely to be the ultimate outcome.

(3) Foreign trade policy of European and other DC's towards LDC's was and still is neither conducive to a most advantageous international division of labour nor to regional balance in Europe. So far, complementarities dominated trade relations between DC's and LDC's; the latter provided the raw materials for industrial expansion of the former and particularly those agricultural products requiring specific climatic conditions. Although LDC's are quite suitable as locations for some in-

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⁴⁹ For the more detailed argument compare Gaffney (1969), pp. 147 f.

⁵⁰ Compare for the basic argument Giersch (1949/50), p. 92.

dustries in view of their endowment with less skilled but abundant labour and in view of the availability of competitive labour-intensive production techniques, such industries were prevented to prosper there. Instead they were kept in DC's via massive protection and — in the case of Western Europe — labour was imported from the neighbouring LDC's with not at all pleasant regional consequences. A more liberal trade policy combined with the forementioned measures to decongest could help to bring the work to the workers. This would not at all be disadvantageous to the European economies. First of all, some of the production in question is likely to stay in Western Europe although it would probably relocate on a larger scale into those regions where the competitive conditions are still rather similar to those in LDC's. Second, a take-over of production by LDC's would hardly be possible without combining their manpower with European capital and know-how provided these LDC's would remove the barriers to capital imports which still prevail or are even set up in some cases. Third, there is no justification to fear that liberalization will create lasting employment problems in Western Europe. Strong pressure of demand favouring particularly the modern services is clearly recognizable in many parts of Europe. And if the industrialization of LDC's would be accelerated via a more liberal trade policy, it is most likely that the DC's and hence also Europe will be in a quite favourable position to provide the complementary services, particularly in view of the lack of expertise of LDC's, e. g. in consulting, banking, insurance, research and development.

(4) Most difficult to overcome are the administrative and political obstacles to a better regional balance within the individual countries and in Western Europe as a whole. On a national level or within the enlarged Community the problem of political over-representation of agglomerations could be possible attacked by establishing a Chamber of Regions on a basis similar to the US Senate as part of the parliamentary system⁵¹. And these regions could be more equally and properly equipped with planning capacity. The difficulties in coordinating regional policies are even larger on the level of Europe as a whole. Assuming quite reluctantly that the enlarged Community will succeed in organizing an effective common regional policy, there will be even more need and responsibility on her part to cooperate with European non-member countries. In principle a European coordination could take

⁵¹ Such a chamber is proposed in *Cairncross, Giersch* et al. (1974). Looking at individual European countries and leaving aside the critical question of the most appropriate delineation of "regions", Switzerland at least prima facie comes closest to such a legislative construction, i.e. the "Ständerat". The West German "Bundesrat" does not conform to the basic idea because the Länder governments (i.e. only indirectly the electorate) delegate representatives and their number partly depends on the size of the population of the various Länder.

place on the level of the Council of Europe although its performance, for example, in environmental matters (e.g. the Rhine Commission) is not very encouraging.

Complementing the market mechanism

There remains the question whether more must be done than simply correcting the market signals and removing administrative as well as political obstacles. The answers are well-known: First, a large part of the national product is not determined by the market but by decisions of the legislative and of governmental agencies. And as far as government spending takes the form of investment into infrastructure at large its regional impact is most obvious and asks for much more consistent planning than experienced so far. Second, the market mechanism, with a few exceptions (forward markets), does coordinate ex post and not ex ante. However, the latter is necessary whenever investment decisions have to be taken which are highly interdependent. Under such conditions economic growth can be easily biased in favour of existing centres of economic activity. The reason is that any single investor who wants to expand or to take up production will most likely find potential suppliers of inputs for as well as users of his own output in sizeable urban centres together with other important amenities. Hence he will tend to locate where all or most investments complementary to his production are already available. The conclusion for any policy which tries to decentralize industrial and related growth in Western Europe would be: "The setting up of new industries can be expected to prove a lasting success only if the places chosen are well provided with a good infrastructure of public amenities, schools, hospitals, shopping and trading facilities. Also, new industrial zones will in general be viable only if they can lean on a major urban centre⁵²!" Such a requirement amounts to a growth-pôle strategy⁵³ trying to set against the dominating agglomerations of Western Europe well-equipped urban centres which are efficiently integrated in a multi-mode transport system and from which impulses would disseminate to the surrounding locations. However, this would require much more cooperation between the European countries in order to avoid the waste which can be produced if regions compete with expensive immobile and long-lasting investments into the infrastructure.

Secular development pattern

Taking into account the various policy measures as well as the market forces which have been discussed, the following secular development

⁵² v. d. Groeben (1969), p. 5.

⁵³ For an analysis of the growth-pôle hypothesis from the point of view of regional policy compare *Streit* (1971).

pattern would be conceivable which could reduce more quickly the existing regional disparities in conditions of living:

- According to the regularities in sectoral change and in the interregional distribution of income per head, it could be expected that the central areas of Western Europe will increasingly provide services requiring highly qualified manpower whereas regions at a distance from the centre will become more and more attractive as industrial locations, particularly if employment opportunities will be further reduced in the primary sector according to its long-term development prospects.
- Locational shifts in industrial production will not stop at the borders of Western Europe if the LDC's were allowed to use more fully their competitive advantage in the production of industrial commodities requiring comparatively little capital and qualified labour, and if agricultural protection will be no longer a taboo to Europe's trade policy. This would imply a steady change in the distribution of labour between the various regions inside and outside Europe; thereby the production of commodities and services requiring much physical but especially human capital would expand respectively be taken up in the most mature regions and less demanding activities would move to less mature regions.

Summary

Western Europe's regional problems are characterized by providing some crucial facts; furthermore, a specific regional development pattern is traced by scrutinizing apparent empirical regularities. Then attention is paid, first, to conceptual difficulties and administrative as well as political obstacles which regional policy usually has to face; second, hypotheses are analyzed which could explain an observable relationship between regional economic maturity and composition of output. The results obtained are merged and complemented in an effort to answer the key question of the paper: What are the forces which appear to govern the regional development pattern in Western Europe? The answer allows, finally, to outline basic features of a rational policy which aims at reducing the existing regional imbalances.

Zusammenfassung

Westeuropas Regionalprobleme werden zunächst mit einigen zentralen Fakten gekennzeichnet; darüber hinaus wird ein spezifisches regionales Entwicklungsmuster überprüft, das durch einige empirische Regelmäßigkeiten belegt zu sein scheint. Sodann gilt die Aufmerksamkeit erstens, konzeptionellen Schwierigkeiten sowie administrativen und politischen Hindernissen, die der Regionalpolitik gewöhnlich entgegenstehen; zweitens werden Hypothesen analysiert, die eine beobachtbare Beziehung zwischen regionalem ökonomischem Reifegrad und Wirtschaftsstruktur erklären könnten. Die erzielten Ergebnisse werden zusammengefaßt und ergänzt in dem Bemühen, die zentrale Frage der Arbeit zu beantworten: Welche Faktoren scheinen das regionale Entwicklungsmuster Westeuropas primär zu bestimmen? Die Antwort erlaubt es schließlich, eine rationale Politik zu umreißen, die darauf gerichtet ist, die bestehenden regionalen Entwicklungsunterschiede zu verringern.

References

- Bildungswerk europäische Politik (Edt.) (1973), Gutachten zur Übergangsphase der Wirtschafts- und Währungsunion, Manuskript, Bonn 15. 11. 1973.
- Biehl, D., E. Hussmann and S. Schnyder (1972), Zur regionalen Einkommensverteilung in der Europäischen Wirtschaftsgemeinschaft, Die Weltwirtschaft, Heft 1, 1972, pp. 64 - 78.
- Bird, R. M. (1967), Regional Policies in a Common Market, in: C. S. Shoup (Edt.). Fiscal Harmonization in Common Markets, New York, London, Columbia University Press 1967, pp. 385 - 456.
- Boeventer, E. v. (1962), Theorie des räumlichen Gleichgewichts, Tübingen, J. C. B. Mohr 1962.
- Borts, G. H. and J. L. Stein (1968), Regional Growth and Maturity in the United States: A Study of Regional Structural Change, Reprinted in: L. Needleman (Edt.), Regional Analysis, Harmondsworth, Penguin 1968, pp. 159 - 197.
- Bundesanstalt für Arbeit (1972), Amtliche Nachrichten der Bundesanstalt für Arbeit, (20) 1972, No. 11, pp. 916 919.
- Cairncross, Sir A. et al. (1974), Economic Policy of the European Community: The Way Forward, London, Macmillan 1974 (Forthcoming).
- Castelbajac, P. de (1972), Les Aides à l'Expansion Industrielle Régionale dans les Pays du Marché Commun, Notes et Etudes Documentaires, Paris, La Documentation Française, September 11, 1972, No. 3917.
- Clark, C., F. Wilson and J. Bradley (1969), Industrial Location and Economic Potential in Western Europe, Regional Studies 3 (1969), pp. 197 – 212.
- Commission of the European Communities (Commission 1973), Report on Regional Problems in the Enlarged Community, Brussels 1973.
- Donges, J. B., G. Fels and A. D. Neu et al. (1973), Protektion und Branchenstruktur der Westdeutschen Wirtschaft, Tübingen, J. C. B. Mohr 1973.
- Fels, G. (1972), The Choice of Industry Mix in the Division of Labour between Developed and Developing Countries, Weltwirtschaftliches Archiv, 108 (1972), pp. 71 - 121.
- Fels, G., K.-W. Schatz and F. Wolter (1971), Der Zusammenhang zwischen Produktionsstruktur und Entwicklungsniveau, Weltwirtschaftliches Archiv, 106 (1971), pp. 240 - 278.
- Fischer, G. (1967), Das Volkseinkommen der Kantone 1950 1965, Wirtschaft und Recht, 19 (1967), pp. 229 270.
- (1970), Methoden und Ergebnisse kantonaler Volkseinkommensschätzungen als Instrumente des bundesstaatlichen Finanzausgleichs, Schweizerische Zeitschrift für Volkswirtschaft und Statistik, 106 (1970), pp. 237 – 255.

- Gaffney, M. (1969), Land Rent, Taxation, and Public Policy, Regional Science Association, Papers 23 (1969), pp. 141 - 153.
- Giersch, H. (1949/50), Economic Union between Nations and the Location of Industries, Review of Economic Studies, 17 (1949/50), pp. 87 - 97.
- (1971), Kontroverse Fragen der Wirtschaftspolitik, München, Piper 1971.
- (1973), The Case for a European Regional Policy, in: Commission of the European Communities, Study Group on Economic and Monetary Union, Brussels, October 1973, pp. 109 - 125.
- Groeben, H. v. der (1969), Regional Policy in an Integrated Europe, Community Topics, No. 33, November 1969.
- Jöhr, W. A and R. Huber (1968/69), Die konjunkturellen Auswirkungen der Beanspruchung ausländischer Arbeitskräfte. Untersuchungen mit Hilfe eines Simulationsmodells der Schweizerischen Volkswirtschaft, Schweizerische Zeitschrift für Volkswirtschaft und Statistik, 104 (1968), pp. 365 - 610; 105 (1969), pp. 3 - 92.
- Katouzian, M. A. (1970), The Development of the Service Sector: A New Approach, Oxford Economic Papers 22 (1970), pp. 363 383.
- Kommission der Europäischen Gemeinschaften (Kommission 1974), Bericht über die Entwicklung der sozialen Lage in der Gemeinschaft im Jahre 1973, Brussels – Luxemburg 1974.
- Kreinin, M. E. (1972), Effects of the EEC on Imports of Manufactures, The Economic Journal, 82 (1972), pp. 897 920.
- Leipert, C. (1973), Soziale Indikatoren. Überblick über den Stand der Diskussion, Konjunkturpolitik, 19 (1973), pp. 204 - 256.
- Mc Crone, G. (1969), Regional Policy in the European Communities, in: G. R. Denton (Edt.), Economic Integration in Europe, London, Weidenfeld & Nicolson 1969, pp. 194 - 219.
- OECD (1970 a), The Growth of Output 1960 1980 Retrospect, Prospect and Problems of Policy, Paris, OECD 1970.
- (1970 b), The Regional Factor in Economic Development: Policies in fifteen industrialized OECD countries, Paris, OECD 1970.
- Österreichisches Institut für Raumplanung (Edt.) (1966), Raumordnung in Österreich, Vienna, March 1966.
- Rapport sur la capacité concurrentielle de la Communauté Européenne (Rapport 1971), Par un Groupe de Travail Institué par la Commission, Commission of the European Communities, II/481/71-F, November 1971.
- Statistisches Bundesamt (1973), Statistisches Jahrbuch für die Bundesrepublik Deutschland 1973, Stuttgart und Mainz, Kohlhammer 1973.
- Streit, M. E. (1973), European External Economic Policy at the Crossroads, Konjunkturpolitik 19 (1973), pp. 189 - 203.
- (1971), Regionalpolitische Aspekte des Wachstumpolkonzepts, Jahrbuch f
 ür Sozialwissenschaft, 22 (1971), pp. 221 – 234.
- (1973), Europäische Regionalpolitik: Konventionelles Flickwerk oder konzeptionelle Reorientierung? in: W. Ernst und R. Thoss (Edt.), Raumordnung und Verwaltungsreform, Münster, Institut für Siedlungs- und Wohnungswesen der Universität Münster 1973, pp. 37 - 57.
- United Nations (Edt.) (1955), Economic Survey of Europe in 1954, Geneva, United Nations E/ECE/194, 1955.

- United Nations (Edt.) (1970), Economic Survey of Europe in 1969, Part 1, Structural Trends and Prospects in the European Economy, New York, United Nations E/ECE/753, 1970.
- -- (1972), Economic Survey of Europe in 1971, Part 1, The European Economy from the 1950s to the 1970s, New York, United Nations E/ECE/814, 1972.
- Williamson, J. G. (1968), Regional Inequality and the Process of National Development: A Description of the Patterns, Reprinted in: L. Needleman (Edt.), Regional Analysis, Harmondsworth, Penguin 1968, pp. 99 - 158.
- Yannopoulos, G. N. (1969), Economic Integration and Labour Movements with Reference to the EEC Countries, in: G. R. Denton (Edt.), Economic Integration in Europe, London, Weidenfeld & Nicolson 1969, pp. 220 - 245.

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