ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Robins, Ian

Book Part

Europe's regions within the currency Union: Risks and opportunities

Provided in Cooperation with:
ARL – Akademie für Raumentwicklung in der Leibniz-Gemeinschaft

Suggested Citation: Robins, Ian (2004) : Europe's regions within the currency Union: Risks and opportunities, In: Spatial implications of the European Monetary Union, ISBN 3-88838-232-7, Verlag der ARL - Akademie für Raumforschung und Landesplanung, Hannover, pp. 15-26

This Version is available at:
https://hdl.handle.net/10419/59983

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

IAN ROBINS

Europe's Regions within the Currency Union: Risks and Opportunities

Contents

1 Introduction
2 The Changed Relationships between Members of the Euro-Zone
3. Macroeconomic Consequences of the Euro-Zone for Regions
4 Concentration, dispersal and specialisation
5 Conclusions
References

1 Introduction

In this paper[1] I consider the differences that the single currency might make to the regions of countries within the euro-zone, under three broad headings:

- consequences for the regions of the changed relationships in which countries that are members of the euro-zone stand to each other;
- macroeconomic consequences for regions of their being in the euro-zone;
- the effects on regions of the possible concentration or dispersal of industrial activities and of trends towards specialisation of regions in certain industries.

Because it is still too early for much evidence to be available about the effects of EMU, let alone the single currency in particular, the following discussion is concerned mainly with what theoretical considerations would lead us to expect, but I support, or at least illustrate, these expectations with some empirical observations.

2 The Changed Relationships between Members of the Euro-Zone

2.1 Preliminary Comments: Conditions for an Optimal Currency Area

Theorising about optimal currency areas (OCAs) proposes four necessary conditions for the establishment and endurance of such areas:

- Members of the area must have similar propensities to inflation.
- The economies of the members of the area must be similar and synchronised, so that economic shocks hit all members evenly.
- There should be a high degree of factor mobility between members of the area.
- There should be automatic fiscal adjustments between members of the area.

[1] An earlier version of this paper was presented at the ARL-DATAR workshop on the euro and the regions of Europe, held at the HWWA in Hamburg on 22nd June 2001. I am grateful to the comments of participants at that meeting, and in particular to the trenchant criticisms that JOHANNES BRÖCKER made of my uncritical approach to the conditions for an optimal currency area.

The literature on OCAs since MUNDELL'S original paper (MUNDELL 1961) is extensive. The present paper is in part a reaction to RON MARTIN'S discussion (MARTIN 2001) of whether the regions within the euro-zone meet the conditions for belonging to an OCA. My paper is influenced also by ARMAND-DENIS SCHOR'S argument (SCHOR 2000), based on the history of the Single Market, that members of a currency union may, by their efforts to qualify for the union and then to preserve it, establish the credibility of the currency union as an optimal currency area even though they never fully satisfy the conditions. To support this he cites as empirical evidence the success of the de facto D-Mark zone (Germany, Austria and the Benelux countries). The sufficient condition for the success of this zone was the first of the four conditions listed above: that all the members shared nearly identical preferences and consequent policies with respect to inflation.

This argument gives a reason to believe that the members of the euro-zone can make a success of the single currency area even though they do not satisfy all the conditions fully. Nevertheless, membership of a single currency zone may bring with it some consequences that are, at least at first sight, adverse. My paper is concerned with possible adverse consequences for regions. Although the regions are, of course, not sovereign states that have adopted a currency union, the risk is that their failure to satisfy (some of) the conditions for an OCA may expose them to adverse economic consequences. The opportunity for the regions is that by overcoming these adverse consequences they may improve their own economic position and also help the currency union to come closer to being an OCA.

2.2 Monetary Policy

Fixed Exchange Rates

Within the currency union it is no longer possible for an individual state to use monetary policy, and in particular the exchange rate, as a means of compensating for shocks to the national economy. This raises the concern that adjustment to a shock in a particular region might be slower than it would have been if the national government had been able to alter the exchange rate, and as a result unemployment would be higher and output growth slower than if the exchange rate instrument had been available. This concern becomes more pressing if currency union leads to greater concentration and specialisation of industry at the regional level, thereby making regions more liable to asymmetric shocks.

Concentration and specialisation are discussed in Section 3. It may, however, be doubted whether the exchange rate was ever a tool that could be targeted precisely to meet the needs of particular regions within a country. Nor is it clear that response to shocks through the exchange rate is more than a temporary palliative at the national level. The more open an economy is, the more rapidly do its prices and costs adjust to changes in the exchange rate. Within the Single Market, therefore, variations in the exchange rate between Member States would have had only a very limited and temporary effect on the relative competitiveness of countries even had variations not been severely restricted by the rules of the EMS governing the approach to membership of the euro-zone. These rules in effect set a premium on cost-cutting, labour market flexibility and productivity improvements as strategies for competitiveness within a currency union.

It is, of course, possible for a country to enter a currency union with its currency over-valued in relation to the currency of the union, which makes it even more imperative for costs to be reduced and/or productivity greatly improved. This is clearly shown by the experience of German re-unification, when West Germany imposed (and many

East Germans wanted) parity between the Ost-Mark and the D-Mark. The effects of this decision on the economy in the east were compounded by the agreement that eastern wage levels should rapidly rise to match those in the west. Because there was no equally-rapid rise in productivity, the result was a massive inflation of eastern unit labour costs, still 25% higher than in west Germany in 1999, which made much of the already antiquated industry hopelessly uncompetitive.

Interest Rate Policy

One of the more familiar topics in debates about the euro-zone is the 'one size fits all' interest rate policy. Countries in the euro-zone are at a disadvantage, it is argued, because they can no longer operate pro or counter-cyclical interest rate policies, nor can they adjust interest rates to suit the inflationary or deflationary pressures within their own economies. This argument can be extended to the regions. Even when a single country is setting its own interest rates, the rate may be inappropriate for economic conditions in some areas of the country. In the UK in 1999, for example, interest rates were raised to counteract inflationary pressures in the south east of England, and this was a serious handicap to companies in the north of England and southern Scotland, where margins were tighter and inflationary pressures, being much weaker, did not justify a rise in interest rates. It is, therefore, possible that interest rates, set for the EU as a whole could at times be at least as inappropriate for particular regions as for individual countries.

There is, however, a strong argument that in practice interest rates set by the ECB will not often and not for long be inappropriate to particular countries, because business cycles are already closely synchronised across the increasingly integrated economies of the Single Market and the conditions of belonging to the euro-zone require members to have very similar preferences about inflation. On the other hand similarity of overall economic conditions between countries in the euro-zone is found alongside divergences between regions within countries in terms of output growth, diversity of industrial structure, levels of skill and so forth. The problem of interest rates inappropriate for certain regions remains a problem.

Alternatives to Monetary Policy

In the absence of monetary policy instruments, countries have a strong incentive to adopt measures that will quickly return an economy to equilibrium after a shock and compensate for inappropriate interest rates (see BEAN 1998). Important among such measures are reforms to increase the flexibility of labour markets, to raise skill levels and to improve infrastructure, i.e. the kinds of measure often adopted as tools of regional policy. In this way a principal economic cost of belonging to a currency union can provide an incentive to improve the competitiveness of regions that would otherwise be at a disadvantage.

2.3 Regional Policy

Fiscal Aspects

The fourth condition for optimal currency areas (listed in Section 1.1 above) is that there should be automatic fiscal adjustments so as to even out payment flows between countries within the area (see INGRAM 1969). These adjustments include the use of the tax-benefit system to cushion individuals from the effects of economic shocks or failing industries in their own region. They include also other transfers from wealthier to less well-off regions. EMU contains no such mechanism for adjustments between member

countries of the euro-zone, nor is it likely to without a harmonisation of domestic taxes that is, to say the least, unlikely for several years. Consequently, it is left to national governments to continue to provide such adjustments within each country.

Of the two broad types of transfer (through the tax-benefit system and through transfers from wealthier to less well-off regions) the latter is more important from the standpoint of regional policy. In practice such transfers are becoming less feasible because in several Member States there is growing political resistance in wealthier regions to the continuation of transfers to poorer regions. The most vociferous opposition in recent years has come from the Lega Norte (Northern League) in Italy, but in Germany also the wealthiest Länder (Bavaria, Baden-Württemberg and Hesse) brought their challenge to the Länderfinanzausgleich (financial equalisation system between Länder) before the Constitutional Court. The Court ruled in 2000 that the legal framework is not sufficiently comprehensive, clear or transparent. The wealthy *Länder* are now pressing their case in the negotiations over revision to the framework.

This political opposition means that regional policy will have to look less towards fiscal transfers and more towards ways of raising the competitiveness of less-advantaged regions and of reducing their exposure to asymmetric shocks. Similar considerations apply to other types of regional aid.

Regional Aid

The merits and drawbacks of adjustments through the tax-benefit system and transfers between regions become more urgent issues if regions are in fact more prone to asymmetric shocks within the euro-zone than they were outside it. IAN BEGG and DERMOT HODSON (BEGG and HODSON 2000) argue that neither of the two current sources of regional aid is adequate to cope with economic shocks. EU structural funds, being determined for five-year periods and awarded to development projects, are not adjustable to cope with shocks. Secondly, the nature of regional aid is circumscribed by the trade and competition policies of the Single Market and the total amount of fiscal resources that could be devoted to regional aid is constrained in theory, if not in practice by the Stability and Growth Pact. Thus, at just the time when interventions to assist regions may become more necessary because of EMU, the rules of the Single Market limit the freedom of action of national governments.

BEGG and HODSON do not go on to argue that therefore the EU should move in with more assistance or that national governments should have more freedom. Rather they urge closer attention to the question of what kinds of regional aid and development policies could help to prevent growing disparities in wealth and economic output between regions across the EU.

Now, it is undeniable that economic disparities between regions in the EU are wide: "At the level of NUTS 2 regions, regional unemployment rates in the EU vary by a factor of ten and regional per capita GDP by a factor of seven." (MARTIN 2001, p. 57). There is also some evidence for the period up to 1996 (Cambridge Econometrics 1997) that, as Single Market measures took progressively more effect, poorer regions within the EU converged on the EU average for GDP per capita because of a spill-over effect from the GDP growth of the leading growth poles (urban areas and other regions) within their own countries, but during this period the gap in wealth between poorer and richer regions within each country widened rather than diminished. On other measures too disparities between the richest and poorest regions within the EU did not lessen during the first ten years of the Single Market. MARTIN (2001), analysing the data gathered by Cambridge Econometrics (1997), found that there was some convergence between

NUTS 2 regions in the EU in terms of GDP per worker (productivity) before the introduction of the Single Market but virtually no convergence after the mid-1980s. When he turned to employment growth, however, he found that the gap between regions with high rates of job growth and those with low rates had not narrowed since the mid-1970s.

Such findings are among the reasons why governments and regional development agencies continually reassess the effectiveness of particular regional policies. In the case of the Mezzogiorno in Italy for example, it became apparent by the mid-1990s that regional assistance, which for nearly forty years took the form of transfers to households and public works contracts without much investment in training, education or new industry, had not succeeded in raising the relative level of the south. The change in policy from the mid-1990s towards more supply-side measures at least put the Mezzogiorno in a better position to benefit from the investment policies of northern Italian firms as first more routine manufacturing was transferred to the south and then industrial clusters and high-tech start-ups became established in the south.

The restrictions on the scope and quantity of regional aid directly and indirectly imposed by the Single Market and the changed macroeconomic position of regions in the currency union (discussed in Section 2) may well prompt a rethinking of the nature and aims of regional policies. BEGG and HODSON argue strongly for the necessity of such a rethinking so as to take advantage of the challenges of changed circumstances. There will, as they also emphasise, be no one template to be followed in the case of all regions.

To examine further the issue of diversity of regional needs, we must next look closely at the changes in the macroeconomic conditions of regions and at some factors influencing firms' decisions about where to locate.

3 Macroeconomic Consequences of the Euro-Zone for Regions

3.1 Price Transparency, the Exchange Rate Risk, and Companies' Decisions about location

Price Transparency

One thrust of the Single Market Programme is the lowering and eventual removal of the barriers to trade across national borders: customs barriers, different regulations and standards alongside the need to obtain certification in each country, different tariffs and different taxation systems. This ambition goes hand-in-hand with the liberalisation of markets and the introduction of wider and more open competition. It is also a part of the Four Freedoms of the Single Market: movement of goods, persons, services and capital. The introduction of the euro in 1999 complemented the Single Market Programme by increasing price transparency between members of the euro-zone and removing the exchange rate risks of trading and operating between different member states. The costs of currency transactions and transfers between countries within the euro-zone, however, remained higher than expected for longer than expected. The arrival of euro notes and coins on 1 January 2002 made prices across borders even more transparent to individual citizens and removed the need to exchange currencies within the euro-zone.

A major study of the effect on market equilibrium of price transparency in a currency union (Davidson et al. 1998) distinguishes three possible effects:

- Enhanced information to consumers facilitates price comparisons, and increases competition.

- Enhanced information to firms facilitates co-ordination, and decreases competition.
- Enhanced information improves opportunities for arbitrage across countries, thereby increasing competition.

For individual citizens price transparency between countries could affect their purchasing decisions, but two other broad groups of considerations weigh heavily:

- the possibility of making informative comparisons of the quality and associated features (such as after-sales service) of the products;
- the related costs, such as time and effort to discover the prices, ease or difficulty of ordering systems and costs of transport and delivery.

The second group is relevant to the assessment of the amount of trouble it is worthwhile taking to search out or obtain particular types of good at lower prices. Even within a single country, costs of time, information and transport discourage consumers from seeking lower prices for many kinds of good. In recent years, however, some of these costs are beginning to be lowered by e-commerce.

For these reasons the single currency is likely to have an effect on purchasing decisions only if accompanied by other facilitators such as a great expansion of e-commerce. Since e-commerce is still in its early days it is hardly surprising that purchasing decisions have not yet altered sufficiently to exert much downward pressure on prices, especially before the practical boost given by the introduction of euro notes and coins.

It is, finally, worth setting the possible price effects of the single currency more clearly in their context by mentioning that in many areas more direct action under competition legislation is required if price transparency is to make any practical difference to price levels. Car prices provide a good example. The European Commission's twice-yearly surveys of car prices in Member States show that the single currency made virtually no difference and that even within the euro-zone prices for the same model still differed by more than 25% in 2000. One response to this is the small but growing market for bypassing the franchised dealer network and buying cars over the internet from the least expensive source. This, however, requires time and effort from consumers and access to electronic information. Euro-pricing lowers some of the information costs, but the effective force to reduce differences in car prices should come from the reform of the block exemption from EU competition rules in 2002.

The Exchange Rate Risk and Companies' Decisions about Location

The costs of converting between the currencies of the euro-zone finally disappeared on 1 January 2002, but the exchange rate risk between all members of the euro-zone (except Greece) ended on 1 January 1999 and had in effect ended several years earlier between Germany and the Benelux countries. This has altered the trade-off between relocation and staying put for companies that no longer have to produce in one currency area and sell in another within the euro-zone. This change might be expected to favour members of the zone whose national currencies used to be unstable, but which have competitive advantages, for example lower labour costs.

In practice, however, the experience of EMU suggests that the ending of exchange rate risk may not weigh very heavily in companies' location decisions. Portugal and Italy (especially southern Italy) would seem to be prime examples of countries/regions where the ending of exchange risk, coupled with a more stable fiscal and monetary climate, should enhance their advantages of lower labour costs. Portugal did receive an

increased amount of foreign direct investment in 1997 and 1998, but since then investment has tailed off as companies seem to have been deterred by wage inflation, poor manufacturing productivity and relatively high tax rates (higher, to take a crucial example, than those in another geographically-peripheral location, Ireland). Under these circumstances membership of the euro-zone does not outweigh the disadvantage of distance from the core of the EU. From the point of view of the regions, it is worth noting that the foreign investment went preponderantly to the areas around the two growth poles of Lisbon and Porto, thus leaving the western north-south arc of the country as unfavoured as it has always been.

Southern Italy, on the other hand, has received an increasing amount of investment in recent years, but principally from companies in the north of Italy rather than foreign investors. Foreign investment is relatively slight in Italy, and the vast majority of it goes to the northern region of Lombardy and its capital, Milan (see ERNST and YOUNG 2001). Northern Italian companies, notably Fiat, were relocating the more routine parts of the production process to the south of Italy while retaining design and the higher-value parts of manufacturing in the north. Their motives were partly to cut costs, but also to cope with the increasing labour shortages in the north. At the same time they were offering special support and training to recruits from the south who might come north to help fill the skills gap. Since 2000, however, some southerners trained in the north have returned south to start up high-tech companies and even some companies have left the north for the less-crowded and less expensive lands of the south. Industrial clusters have grown up in Apulia and Calabria, and the magazine, Wired, has drawn attention to foreign investment in what some Italians like to think of as their version of Silicon Valley, the Etna Valley in Sicily, (a pleasing development for those who remember that in Greek mythology Hephaestus, the armourer of the gods, had the Titans working for him under Mount Etna).

3.2 Factor Mobility

In MUNDELL'S original argument (MUNDELL 1961), if members of a currency union are liable to asymmetric shocks, then a high degree of factor mobility is necessary for the currency to be viable. Since adjustment is not possible through the exchange rate, factor mobility is the only alternative to negative output growth and rising unemployment. His argument may be applied to regions within countries that are members of a currency union. Even if all the member countries have economies of similar diversity and structure so that no one country is unduly liable to asymmetric shocks, some regions within countries might not be so fortunate, since the diversity of economic structure enjoyed by the whole country may depend on specialisation and concentration of a limited range of activities in some of its regions. The risk then is that capital may freely move out of some region hit by an asymmetric shock, but in practice labour and property markets are hard to clear and labour mobility between regions is hard to achieve. Labour mobility across national boundaries within the EU is even rarer than mobility between regions within one country.

The argument, in short, is that in a currency union some regions tend to become more specialised in a smaller range of industries. The upshot would be that some regions would be more exposed to asymmetric shocks in the euro-zone, but that the factor mobility of labour is not adequate to compensate for this.

When one assesses this argument, it is evident that much depends on the delimitation of the regions. The more tightly the geographical boundaries are drawn, the more plausible the argument seems. The argument also treats regions as single entities, but in practice the economic fortunes of any one region depend on its relations in a complex

geographic and economic system of interlocking regions and sub-regions within regions. What is needed is an examination of regions as functioning economic entities, of the systems that link more prosperous with less prosperous regions. I return to this subject in Section 4, and I discuss in Section 4.3 the question whether regions in the eurozone, or the wider Single Market are at risk of becoming over-specialised. Independently of those two issues, we can advance the counter-argument that increased flexibility in the labour market should be the goal rather than a degree of labour mobility between regions or countries that might be socially disruptive even if attainable. There was, after all, considerable mobility of labour across national boundaries and across the Atlantic in the nineteenth century and much seasonal movement of labour between European countries in the mid-twentieth century before the Single Market was introduced (e.g. from Portugal to France long before Portugal joined the EU). Labour was moving from areas of declining industrial monocultures or where opportunities were so limited that there could be hardly any flexibility of the labour market within large regions. Recent data suggesting that labour migration rates within the EU have declined (see GROS and HEFEKER 1998) can be taken as evidence that labour markets have become more flexible, thus reducing the need for labour mobility over long distances.

4 Concentration, dispersal and specialisation

4.1 Three Predictions from New Economic Geography

The recent developments in Italy (described in Section 3.1) encapsulate two trends, both of which are forecast by the New Economic Geography (NEG), and a third, which is a reasonable inference from NEG theory:

- Industries that can achieve economies of scale tend first to concentrate in particular locations so as to reduce transaction (notably transport) costs.
- Later these industries disperse backward links in the value chain as congestion, labour costs and other diseconomies take more of a toll in areas of industrial concentration.
- In some cases the diseconomies in the areas of concentration lead to dispersal towards lower-cost and less crowded areas of industries for which economies of scale are either not very important (e.g. start-ups) or are less important than avoiding the diseconomies.

In an integrated market, industries are likely to concentrate in areas that are close to their principal markets (and therefore with a level of prosperity related to the place of the industry on the value chain), and which also have such supply-side advantages as skilled labour and good infrastructure. Industries will also attract all the related services and ancillary activities. The consequence is that areas with advantages are likely to become even more advantaged and also come to house a wide range of types of economic activity, and will thus become more protected against asymmetric shocks. It is also probable that the range of industries will help promote labour-market flexibility. The lower-cost regions to which backward links in the value chain are dispersed, may well (although not inevitably so) have a more limited range of economic activities (since there are very likely to be more lower-cost than favoured higher-cost regions in a currency union) and are thus more exposed to asymmetric shocks.

4.2 Some Empirical Evidence

At a broad level of description these predictions are valid for the EU. There is a swathe of more prosperous areas concentrating a broader range of higher-value activities stretching from the Greater Dublin area of Ireland (something of an anomaly, geographically speaking, because of the influence of US investment), via southern England, the Benelux countries, northern (and some parts of southern) France, western Germany to northern Italy. But a simple contrast of this more prosperous core with the less prosperous periphery would not do justice to the facts. Patterns of concentration and dispersal vary between industries, and core-periphery distinctions are repeated across Europe. The economic prospects of regions and the effects on them of the Single Market and the single currency depend on how the regions stand within these more complicated patterns.

A study conducted in the late 1990s (MIDELFART KNARVIK et al. 2000) revealed a structured pattern of concentration and dispersal of manufacturing industries across the whole EU over the period 1970-97. Some industries that were once concentrated in central areas of the EU became more dispersed. These included medium to high-tech industries (such as computer hardware and instruments) that require a high level of skill in the workforce, but also slow-growing, labour-intensive industries (such as beverages and tobacco) that seek lower labour costs. Ireland and Finland above all benefited from the first kind of dispersal, while southern countries with lower labour costs benefited from the second kind. Thus Portugal, Spain, Italy and, to a much lesser extent Greece, benefited from both kinds of dispersal. Some industries that used to be present throughout the EU became more concentrated in low-cost countries as the return on capital declined (textiles and furniture). Other industries remained concentrated (motor vehicles, aircraft, electrical apparatus, chemicals), but there was an increasing tendency to concentrate the high-value end of these industries in central areas where research facilities and highly-skilled personnel are available and to locate lower-value activities such as production away from the centres. While centres are concentrated along the line of high-wage, high-skilled urban areas that runs from eastern Ireland to northern Italy, there are other concentrations of high skill and research, such as Stockholm, Helsinki, south-eastern France and Catalonia. Finally, some industries remained dispersed throughout the EU because of the location of their inputs (food, wood & paper), the scattered nature of their markets (printing & publishing) or the requirements of their production processes (shipbuilding).

Some common factors are found in these patterns: clustering around research facilities, the requirement for high levels of skill and for secondary and higher-education qualifications, the concentration of higher-value activities in favoured centres.

These trends were seen in a European market becoming more integrated as single market measures took effect. The euro is likely to introduce greater internal stability by removing the exchange rate risk within the euro-zone and so to consolidate the integrated market. Under these circumstances the trends already seen are likely to be strengthened. These trends do not imply a continued widening of disparities between regions within countries, but, instead, more complex patterns of regional advantages. The established growth poles are likely still to attract a high proportion of high-tech industry, but there are some examples of successful high-tech clusters based around universities outside the established centres (as Oulu in Finland and technopoles in south-eastern France). Diseconomies in the established centres can also lead to a dispersal of industrial activities. Market services, however, because they tend to depend either on agglomeration economies or the distribution of population and purchasing power, are more likely to remain concentrated in urban areas. This is even more true of financial

services since technology and the integrated market on a global scale combine to reduce transaction costs and make concentrations of skills, expertise and liquidity the central determinants of advantageous location. HALLET (2000) found that between 1980 and 1995 financial services concentrated more than any other type of market service, and located in the high-growth, high-income urban areas.

At the same time, the expansion of the EU's effective markets towards the east, even many years before the actual enlargement of the EU, helps former peripheral regions within the EU. As in Austria and east Germany, companies find new markets into which to sell and can also achieve economies by relocating parts of their production to nearby low-wage areas.

These trends take place on a continent characterised by a patchwork of favoured and unfavoured regions rather than by a clear, geographically-defined stratification of, say, high-growth central area and low-growth periphery. In spite of the greater prosperity of the central urban swathe, there are in fact many centres of higher growth from where activities are dispersed to the immediate area or outsourced further away in the same country or beyond its borders. It is not surprising, then, that HALLET (2000) found that between 1980 and 1995 there was an increasingly similar pattern of specialisation across all regions. This ought to make them less susceptible to differentiated regional shocks.

4.3 Some Extrapolations

The statistical data underlying the studies cited are, unavoidably, earlier than the introduction of the euro. They also cover too short a period of time to allow any firm conclusions about long-term trends within the EU. Nor does the experience of the US offer a reliable guide. In all the crucial respects (flexibility of labour markets, labour mobility, institutional structures and traditions, fiscal systems) the differences are great. Furthermore, as MARTIN (2001) argues, any current similarities in economic developments between the US and the EU may well have more to do with the influence of such forces as globalisation and technological change than with the shared features of integrated economies. In fact MARTIN'S argument brings home the fact that the trends discussed in this paper are evidently consequences of the decisions of companies, some of which operate on a global scale and most of which are seeking to meet the competitive challenges of changes in the technologies of production and communications. The increasing integration of the EU market, including the introduction of the euro, is itself a response to these conditions and facilitates the trends discussed, without being their principal cause.

The effects of these trends on regions within the EU is problematic. If we extrapolate from these trends we may predict with some confidence that output and employment growth will continue to be concentrated in urban growth poles, many of which will be in the swathe of cities between south-eastern England and northern Italy, but with many others scattered throughout the EU. Related activities (intermediate inputs) will tend to be dispersed from the centres to avoid problems of congestion and high prices. More labour-intensive activities will be dispersed to areas where labour costs are lower but educational levels are high, and many such regions have already been found in candidate countries to the east of the EU. Older, low-growth industries will be dispersed further in search of lower labour costs and will eventually almost vanish from within the EU. In short, there will be no simple pattern of centre and periphery within the EU, but many centres throughout the EU.

To obtain a more precise idea of these patterns and to understand them better, it will be necessary to look in more detail than has yet been attempted at the types of industrial structure (for example, the constituents of different types of cluster, and different kinds of industrial mix) to be found in the EU and to see how these are related to different types of location. In particular it will be necessary to look at structures that do not correspond either to regions or to single urban areas. These structures are the different types of urban system (groupings of several urban areas). This requires collecting data at a more micro-level than the broad statistics at NUTS 1 or NUTS2 level that have been used in previous studies of regional convergence or divergence. The Institute for World Economics (IfW) at Kiel embarked recently on the assembly of a database relevant to industrial mix and urban systems (see KRIEGER-BODEN 2000).

The resulting patterns of relative economic growth may well be only loosely related to the NUTS regions or to administrative regions within each country. Economic growth in any particular centre affects the travel-to-work area, but networks of suppliers and related services are often based outside the administrative region, outside that country or outside the EU. Such conditions help to explain why there are sharp economic differences between neighbouring areas within the same region or even the same urban area and why regions without growth centres often do not benefit from growth in neighbouring regions of the same country.

5 Conclusions

The chief drawbacks of the euro (from the perspective of regional development) lie in the possible inappropriateness of interest rates, the absence of fiscal and related adjustment measures, the relative immobility of labour and the restrictions on national governments with relation to regional policies. The principal advantages lie in the stimulus that the drawbacks give to rethinking regional policy and fostering patterns of industrial diversity in which more flexible labour markets are encouraged. The winners will still be winners, but the stability and integration of the market give other regions a better chance of joining them.

References

BEAN, C. (1998): The interaction of aggregate-demand policies and labour market reform. In: Swedish Economic Policy Review, X.

BEGG, I.; HODSON, D. (2000): Regional Adjustment Mechanisms under EMU. In: Tijdschrift voor Economische en Sociale Geografie, 91, p. 1.

CAMBRIDGE ECONOMETRICS (1997): Regional Growth and Convergence. In: Single Market Review Series, Volume 1, EC/Kogan Page.

DAVIDSON, R.; DAVIES, S.; GASIOREK, M.; LYONS, B.; ULPH, D.; VAUGHAN, R.; WINTERS, A. (1998): EMU and the Integration of European Product Markets. In: Final Report for EC Contract II/98/006, Centre for Economic Policy Research, London.

ERNST AND YOUNG (2001): European Investment Monitor, London.

GROS, D.; HEFEKER, C. (1998): Factor Mobility, European Integration and Unemployment. In: Centre for European Policy Studies, Working Documents 120, Brussels.

HALLET, M. (2000): Regional Specialisation and Concentration in the EU. In: Economic Papers 141, ECFIN, Office for Official Publications of the EC, Luxembourg.

INGRAM, J. (1969): Comment: The Optimum Currency Problem. In: Mundell, R.; Swoboda, R. (eds.): Monetary Problems in the International Economy, Chicago, Chicago University Press.

KRIEGER-BODEN, C. (2000): Globalization, Integration and Regional Specialisation. In: Kiel Working Paper No. 1009, Kiel.

MARTIN, R. (2001): EMU versus the regions? Regional convergence and divergence in Euroland. In: Journal of Economic Geography, 1, p. 1.

MIDELFART KNARVIK, K.; OVERMAN, H.; REDDING, S.; VENABLES A. (2000): The Location of European Industry. In: Economic Papers 142, ECFIN, Office for Official Publications of the EC, Luxembourg.

MUNDELL, R. (1961): A Theory of Optimal Currency Areas. In: American Economic Review, p. 51.

SCHOR, A-D. (2000): La théorie des zones monétaires optimales : l'optimum, le praticable, le crédible et le réel. In: L'Actualité économique, 76, p. 4.