INTRALAB: In search of inspiring policy practices

Final report

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"INnovation, TRAnsport and LABour Market Policy Practices in EU Member States: the balance between sectoral and integrated approaches and the involvement of sub-national levels"

Client: European Commission, DG REGIO

Ecorys Research&Consulting

Rotterdam, May 2011

ECORYS
Research and Consulting

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Preface

This study is undertaken in the context of discussions on the main policy directions for EU Cohesion Policy for the programming period 2014-2020. The study analyses recent developments in EU-Member States in the balance between sectoral and integrated policy approaches and the involvement of sub-national levels in three main domains: innovation, transport and labour market.

The study has been commissioned by DG REGIO and executed by a team of experts from ECORYS Research &Consulting (including its sister company IDEA Consult in Brussels). The study was undertaken in the period January-December 2010.

The study has been initiated and supervised by Mr. Lewis Dijkstra (DG REGIO). A group of renowned international experts took part in the Peer Review Group that discussed the methodology and (first) results of the study in 4 meetings over the duration of the project. The following experts participated in the Peer Review Group: Prof. Dr. Willem Molle (Erasmus University, Rotterdam), Prof. Dr. Peter Lloyd (ECOTEC, Birmingham), Dr. Alasdair Reid (Technopolis Group, Brussels), and Prof. Dr. Jan Burnewicz/Dr. Elzbieta Adamowicz (University of Gdansk, Gdansk).

The following experts of ECORYS have contributed to the study:

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The Project Team wants to acknowledge the contributions that both DG REGIO and the Peer Review Group members have made to the study in reacting to discussion notes and interim and draft final reports. However, the responsibility for the final report and the reporting on the case studies remains fully with ECORYS Research and Consulting.

Rotterdam, May 2011


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Executive summary

1. This report provides the main results from the Ecorys INTRALAB-study. The study analyses the balance between sectoral and integrated policy practices in EU-Member States in the domains of innovation, transport and labour market (hence 'IN-TRA-LAB'), and the involvement of sub-national levels.

2. The INTRALAB-study has been commissioned by DG REGIO in the context of discussions on the main directions for EU Cohesion Policy for the new programming period 2014-2020. Cohesion Policy funds both sectoral and integrated programmes and strongly encourages regional and local involvement in both policy design and implementation.

Approach and outline of study

3. The study consists of three components:
   a. Review of literature and available data on the performance and recent developments in EU-Member States in each of the three policy domains with a special focus on the mix of policy strategies and instruments;
   b. Analysis of 21 case studies (7 in each policy domain) on the policy practices in EU-Member States;
   c. Conclusions and best practices on the basis of all material.

4. Sectoral policy focuses on policy goals in a specific policy domain predominantly. A labour market policy that is focusing exclusively to meet policy goals in relation to the labour market (e.g. training of unemployed persons) is an example of such a sectoral policy. Integrated policy takes goals from other policy domains into consideration and/or account. An example is the policy in France to stimulate investments in high speed railway lines and networks. At the same time such policy fosters the position of the industries that are producing the capital goods for these lines and trains, it tries to influence the spatial distribution of persons, workers, and firms and institutions, and also makes a contribution to mitigate the environmental impact of traveling by private cars.

5. Cases of purely sectoral policies or fully integrated policies are rare. Policies are positioned on a spectrum going from fully sectoral to fully integrated. The move from sectoral to integrated (or vice versa) is often a gradual one. In a first stage policy goals of other domains can be taken into account, but at the level of delivery, used instruments and process the policy is still very much sectoral. A further step towards integration would be to also take into account other domains at the level of delivery, used instruments and process.

6. The degree to which the policy design and implementation can be influenced at sub-national level ('regional/local discretion') will define whether we call policies centralised or decentralised. This definition might not always be clear-cut. In many cases multi-level governance arrangements make the verdict a mixed one. A distinction between conception, delivery and management is crucial, i.e. involvement in the policy design and/or implementation, consultation on policy intentions and programming documents, (co-)funding

of policy interventions, etc. In case of (co-)funding of policy interventions regional and local authorities will normally be involved heavily in both the policy design and implementation.

7. The selection of the 21 case studies has been undertaken in close consultation with DG REGIO. The main focus is on case studies in EU-Member States that are generally well-performing in a specific policy domain and from which credible lessons can be drawn. That does not mean that all case studies have been successful in meeting all of their objectives.

Main conclusions

8. On the current balance in policies, there is a variety of policy mixes in EU-Member States, even among the subset of well performing ones. The variety relates to differences in terms of economic development, political systems, culture and institutional capacity. Moreover EU-Member States that show a good performance in certain policy domains (or specific areas within these), do not necessarily perform in the same way in other policy domains.

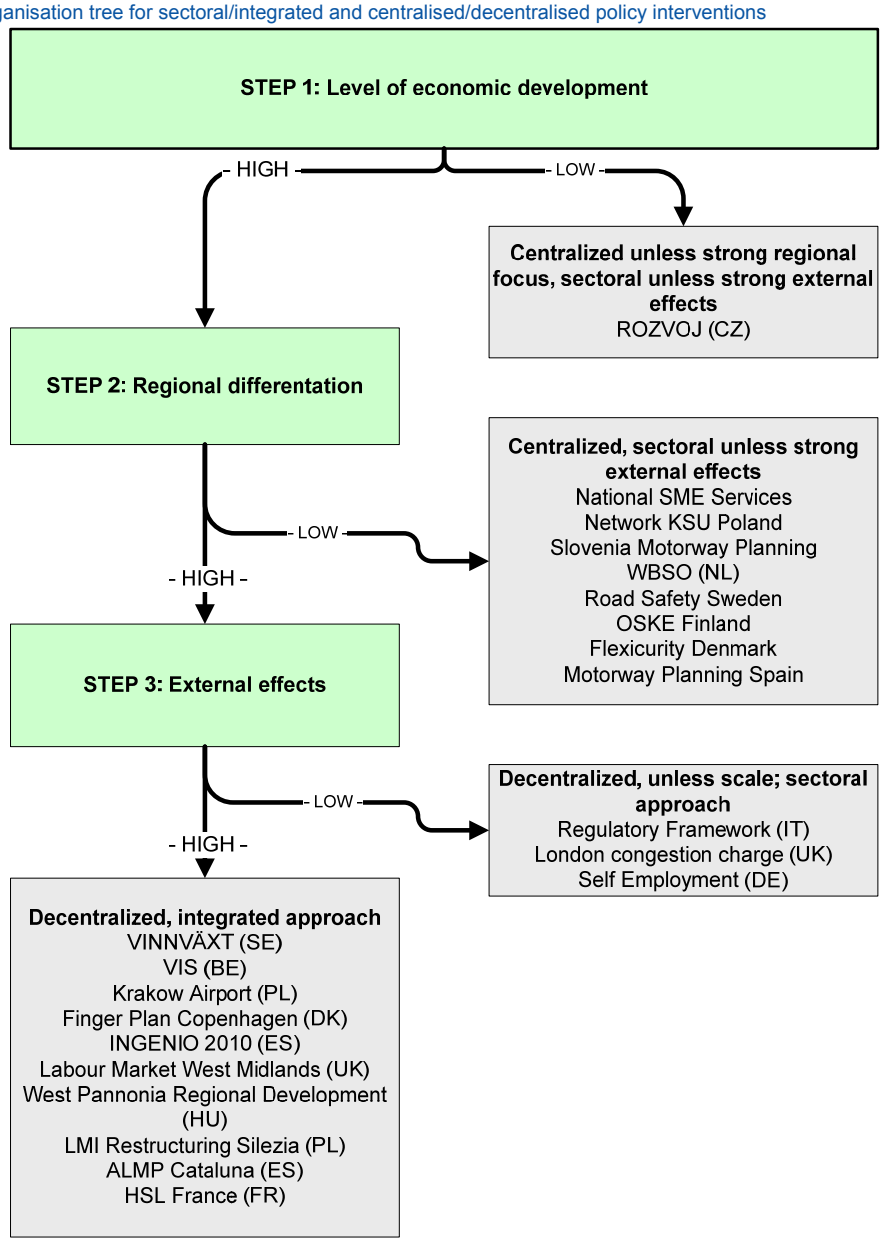
9. The arguments to justify sectoral policies are a lack of external effects and ease of implementation or lack of institutional capacity to implement integrated policies. The reverse holds for integrated policies where presence of substantial external effects usually calls for the organisation of a more complex process of integrating objectives from different policy domains in the management and/or implementation of policies and/or instruments. The latter requires enhanced institutional capacity to cope with the higher complexity.

10. The arguments to justify decentral policies are lack of scale effects and important regional differences. The reverse holds for justifying centralized policies. Should the substantive circumstances point into the direction of integrated and decentralized policies, the development of a country also determines whether or not a country is willing and able to move in that direction.

11. Figure I sketches in a schematical way the these main considerations for sectoral versus integrated policies and centralised and decentralised management and implementation. It also points at the positioning of the case studies which will be discussed below.

12. How can the impact of each type of policy be judged? Despite the variety of policy mixes most countries in North-Western and Northern Europe perform well in most of the studied policy domains. Countries in Southern Europe and especially in Central and Eastern Europe usually show a less favourable performance. This performance is strongly correlated with the level of economic development, measured by GDP per capita. Economic development of a country does not explain everything, however. One can notice remarkable regional differences within some countries (e.g. northern versus southern Italy), while also between countries with a more or less similar level of economic development stark differences exist (e.g. Poland, Hungary versus Latvia).

Figure I: Organisation tree for sectoral/integrated and centralised/decentralised policy interventions



13. Policy performance is determined by several factors. Table I provides a typology per policy domain and areas in EU Member States in terms of sectoral/integrated approaches and level of involvement of regional and local stakeholders. Table II provides an overview of the (development in) positioning of the policy mix in leading EU-Member States per policy domain. From these tables **four general observations** can be derived:
    (i) Both sectoral and integrated policy practices can be found in most parts of the EU, with varying levels of regional and local involvement;
    (ii) For some policy domains the level of economic development and socio-cultural aspects are relatively unimportant for the decision to centralize or decentralise policies. It is clear that decisions on major infrastructural investments are mostly centralized, irrespective of country size, culture or development level. A similar conclusion holds for the decision (not) to integrate policies and management processes. Lack of external effects makes passive labour market policies by nature sectoral, while in other cases policy integration can hardly be avoided as a result of substantial external effects;
    (iii) For many policy fields, there is scope for choice between both sectoral/integrated and centralized/decentralized policies. In such cases one can find a tendency towards more integrated and decentralized policies if the right conditions are in place. Conditions needed in that respect are appropriate institutional capacity and the prevalence of external effects. Without important external effects an integrated policy is often too complicated and usually takes much more time compared to a sectoral approach. Nevertheless one can notice varying solutions in different circumstances. This feature makes it impossible to draw too general conclusions on the right policy mixes, i.e. our report can not present a "one approach fits all"conclusion;
    (iv) Higher regional and local involvement is almost indispensable when bottom-up commitment is required. Regional and local governments know the regional and local situation in detail and are therefore best placed to initiate and adapt policies and to implement instruments that cater towards regional and local situations. In cases where there is a need for a coherent framework at national level and/or important efficiencies can be reached, centralised policies are usually called for (e.g. investments in high-end research policy areas and major transport infrastructure, road safety policy, and labour policy framework). In those cases where important externalities appear, sectoral policies are less desirable: integrated approaches provide better chances to tackle also these externalities.

14. In the domain of **innovation,** policies can be divided into research (R), development (D), and cooperation among different actors, the so-called Triple helix government-universities-business (3H), each with a different logic regarding the balance of policies. Both R- and D-policies have long been centrally and sectorally designed and managed policies, although some tendencies towards more integration and decentralisation of especially implementation can be discovered, notably with respect to D-policies. Triple helix policies have both centralized and decentralized features, but decentralised and integrated policy approaches dominate.

15. Within **transport** one could discern 'hard' projects like infrastructural development, and more 'behavioral' projects (road safety). For the first some regionalisation might work, the latter seems more prone for a national approach.

Table I: Typology of EU Member States practices in innovation, transport and labour market in terms of sectoral/integrated policies and high/low involvement of regional and local stakeholders

Policy domain and area	Central	Regional/local	Arguments for shift (if any)
INNOVATION			
Research policy	Almost exclusively central and mainly sectoral		No shift
Development/innovation	Creation of development/ innovation framework	Regional differentiation, sectoral and increasingly integrated	More efficiency and incorporation of externalities through clustering and innovation of regional/local economic systems
Triple helix policy	Creation of framework for cooperation	Mostly regionally organised, mainly integrated	More efficiency as it leads to involvement of all relevant actors at regional/local level
TRANSPORT			
Provision of infrastructure			
National Road and Rail networks	Mostly central and sectoral; in some cases (peripheral regions) central and integrated		A purely sectoral approach results in inequality. Integration of regional development objective
Regional/local roads		In the past regional roads were in many MS centrally managed, now this is almost completely regional/local; mostly sectoral	National government concentrate on core network; regional roads more efficiently managed by regions
National Airports	National airports highly centralised with increasingly regional/local consultation; predominantly integrated policy		More integration needed because of external effects of air traffic (in particular noise)
Regional airports		Was highly centralised in the past, but now mostly regional and integrated	Regions can ensure effective planning of land infrastructure, as well as business areas
Regional/Urban Public transport		Mostly regional, both sectoral and integrated	No shift
Optimising utilisation of infrastructure	Central, sector oriented for national roads	Decentral for regional roads, but only an issue in urban areas	No shift

Policy domain and area	Central	Regional/local	Arguments for shift (if any)
Demand management			
Pricing measures	Central in so far it concerns the national network; mostly integrated as external costs are taken into account and fiscal measures used	Regional, both sectoral and integrated	Pricing increasingly takes into account not only road maintenance of roads but also external effects
Non-price measures	Mostly central and sector oriented in so far behavior is involved	Local in case of prohibitive measures, time windows etc.	More local measures seen due to external effects
Market regulation	Central, both sectoral and integrated		No shift
Transport operations	Central, sector oriented		No shift, but larger role for regions to increase effectiveness of policy
LABOUR MARKET			
Passive LM-policy			
Unemployment insurance	Central, sectoral		No shift
Short-term wage replacement	Central, sectoral	May differ between regions and economic sectors	No shift, although situation may differ between regions and economic sectors (see e.g. Italy)
Active LM-policy			
Self-employment promotion	Centrally created framework, mainly integrated	Local/ regional differentiation exists, integrated in local/ regional context	Shift towards more integrated policy framework and regional/local involvement to increase effectiveness of policy
Training measures	Centrally created framework, mainly integrated	Local/ regional differentiation exists, integrated in local/ regional context	Shift towards more integrated policy framework and regional/local involvement to increase effectiveness of policy
Regulatory framework			
Wage-setting	Mainly central, sectoral	Local/ regional wage-setting exists, sectoral	Shift allows better targeting towards specific regional/local situation
Employment conditions	Central, sectoral		No shift

16. Successful **labour market policies** (Denmark, Germany) are often national in conception and regional in delivery. Depending on the subject, labour market policies can both be integrated (active labour market policies) or sectoral (passive labour market policies).

17. There are several noticeable shifts over time, not all in the same direction:
    a. For **innovation** R- and D-policies became slightly more integrated over time but should still be called sectoral. Triple Helix policies have become more integrated than they already were. There are not many clear-cut movements along the decentralisation-centralisation axis. A certain form of centralisation can be discerned in those countries where regionalisation has led to lack of coordination (e.g. in Spain);
    b. For **transport** policies, some of the early sectoral and national approaches have later become more integrative in nature, and with more focus on regional/local involvement. In other cases external effects (e.g. pollution) have prompted a more integrative approach;
    c. For **labour market** policies there exists a general tendency across the EU to decentralise Public Employment Services (PES). As they are working together with local/regional actors, policies tend to become increasingly integrated with other policies. Active labour market policies are examples of integrated policies. Competencies to design and implement active labour market policies are increasingly shifted to sub-national levels in order to create policies that fit in the local/ regional context. Finally, passive policies are a classical example of sectoral policies that are designed and implemented at national level. Passive policies are increasingly encapsulated in broader activating policies and tend therefore to become more integrated.

18. The arguments to support the various shifts vary. Sometimes the increase in economic development level prompts a shift as elements of welfare distribution become more important. In other circumstances the growing importance of other policy domains (external effects) and/or political fashions or preferences (e.g. prompting decentralisation or centralisation) are the main reasons behind such shifts.

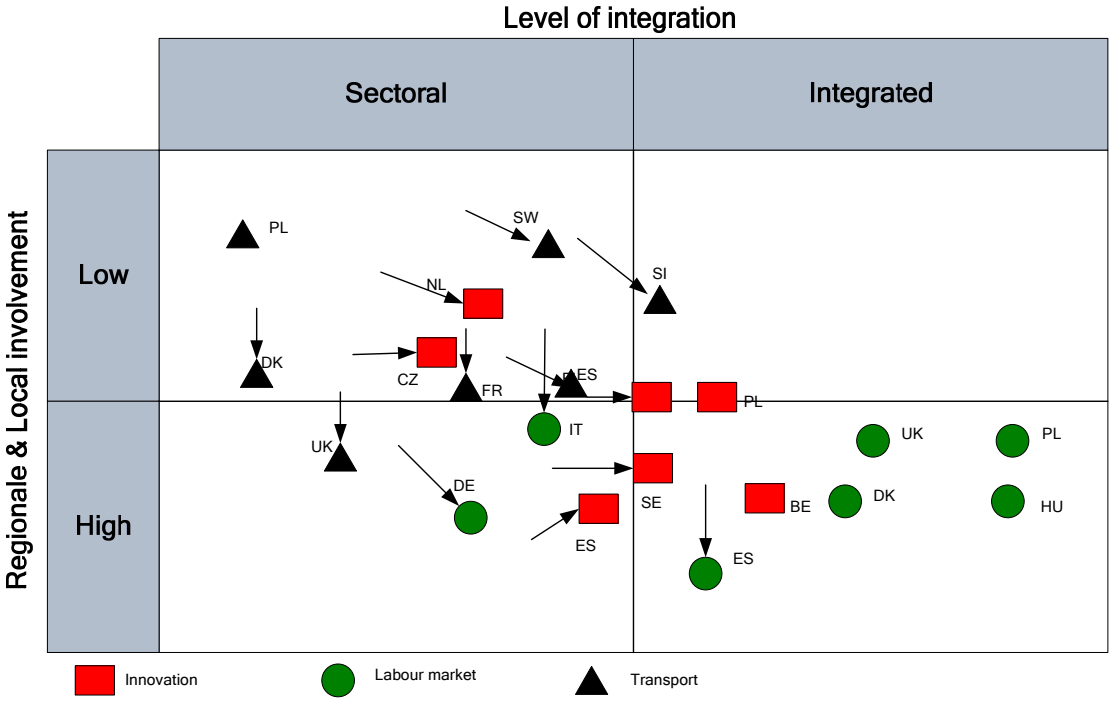
19. Regarding **innovation policies,** good performing countries have a small number of policy priorities, put a higher weight on policy measures directed at improving the R&D cooperation between firms and public research institutions, and better commercialisation and valorisation of knowledge. In most moderate innovator countries (e.g. Czech Republic, Poland, Hungary) more importance is placed on measures directed at stimulating R&D at SMEs and increasing their absorption capacity.

20. Regarding **transport policies** Germany and France are among the top performers. Both countries maintain a balance between central and regional policies, as well as between sectoral and integrated approaches. In transport the performance of Member States depends quite heavily on the level of economic development. As transport infrastructure policy requires substantial (public) investments, countries with higher per capita incomes are likely to perform better than those with lower per capita incomes, irrespective of the chosen policy mix.

21. Regarding **labour market policies** top performing countries have often decentralised policies, certainly with regard to the management and implementation of active labour market policies. In most cases the top performers have shown a shift towards regional/local and towards integrated approaches, but have retained elements of national and sectoral focus. Sectoral passive policies are still predominantly dealt with at national level and guarantee adequate

coverage for all workers. Integrated active policies traditionally belong to the competence of local/regional authorities in best performing countries (e.g in Denmark and The Netherlands). Successful approaches in those countries, however, also show that labour market performance depends on more factors than the level of integration and decentralisation. At minimum, local PES-organisations should be able to decide upon specific policy approaches to reduce unemployment in order to target local/ regional needs.

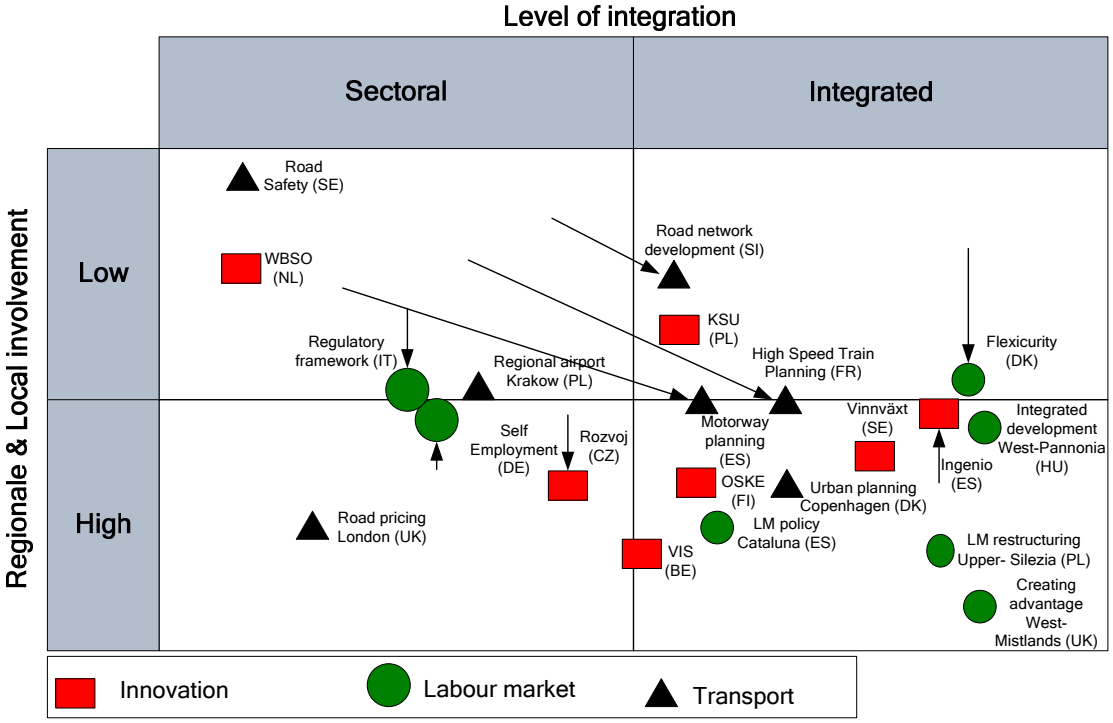
Table II: Positioning and tendencies in policy mix in leading EU-Member States per policy domain



Best practices from case studies

22. Table III presents a typology of the 21 case studies that have been undertaken in the context of this INTRALAB-study, and the shifts in level of integration and regional/local involvement that can be noticed in these over time. Most of the case studies are examples of successful policy practices.

Table III: Typology of selected case-studies in innovation, transport and labour market in terms of sectoral/integrated policies and high/low involvement of regional and local stakeholders



23. The case studies confirm the overall conclusions that have been presented above. Successful examples of sectoral and integrated policy practices in each of the respective policy domains can be found in different situations, each with both low and high regional and local involvement.

24. From the **innovation case-studies** there is not much movement in the policy mix relative to the other domains. Some form of decentralization emerged (VINNVAXT in Sweden, and ROZVOJ in Czech Republic) of programs that were originally deemed to be centralistic, not capturing important regional differences. In other cases (INGENIO in Spain) the set-up was initially (and culturally driven) regional, missing important coordination effects so that a certain form of centralization took place there.

25. The **transport case-studies** show a mixed picture. For road development and implementation the central and sector oriented policy have been effective in both Spain and Slovenia. In Spain a shift towards a more integrated policy can be noticed, now that the core motorway network is quite developed. A similar shift can be expected for Slovenia in the future. Also in other Member States in some stage of network development, transport links are developed which are not only meant to reduce congestion, but at the same time to improve accessibility of peripheral regions. In such cases, the transport objective is combined with the regional development objective. A similar shift from a central, sector approach towards a more

integrated policy is shown in rail infrastructure development in France, where in recent years regional and local governments have strongly voiced their development objectives, thereby influencing the location of terminals and decisions on expansion of the TGV network.

26. From **the labour market case-studies** one can discern a shift towards more integrated and active policies that increasingly involve sub-national authorities. The move to integration reflects the need to tackle poverty and social inclusion, deal with welfare and unemployment issues and also ensure greater reflection of the demand side of the labour market through the engagement of the private sector within a regional context. The stronger regional emphasis is exemplified by regional institutions, regional economic strategies and the development of partnership working approaches. The need to integrate labour market and employment interventions within a strategy that encompasses social inclusion also became important with significant numbers of people either not participating in employment or only in marginal jobs. In the United Kingdom this was reflected at national level by Job Centre + with the City Strategy Programme aiming to relate national aims to locally/regionally driven priorities and circumstances, and clearly reflects a further shift in the mix of policies between sectoral and integrated on the one hand and regional on the other hand.

1 Introduction

1.1 Context of the study

In order to achieve policy goals governments formulate objectives and strategies and make use of specific instruments. Objectives, strategies and instruments will largely depend on context and politics. As a result, objectives, strategies and instruments will often vary over time, space, administrative set-up, and political system.

Policy interventions are designed at different government levels. Within the European Union policies at Member State level have always been important and will remain important in the future. Nevertheless in some fields we see shifts towards both the supra-national level (European Union) and regional level (sub-national governments). Increasingly we even find multi-level government arrangements to achieve easier and better results in specific policy areas. The question is what the driving forces behind these shifts are.

An important aspect in the design of policies is under which conditions sectoral or more integrated policies are to be preferred. Chapter 2 defines these notions in detail, but in brief sectoral policies are those policies where the sector itself (e.g. the labour market) dominates both in term of goals and delivery, whilst (fully) integrated policies do (fully) take other fields into account. The academic debate on this is a lively one, but has not resulted in clear-cut conclusions. Proponents of a sectoral policy approach argue for its simplicity in terms of operation and ease of evaluation[1], while the proponents of a more integrated approach emphasize the potential conflicting results sectoral policies may produce and the advantages of integrated policies as a result of superior coordination[2].

Over the past decades, many EU-Member States have changed the balance between sectoral and more integrated policies. At the same time, changes have taken place regarding the involvement of regional and local governments in policy design and implementation. While for some policies the design and implementation remain clearly sectoral and national, for other policies the links and synergies with other policy areas mean that more coordination and integration is necessary, including a strong(er) involvement of regional and local governments in how these policies are designed and implemented.

In the run-up of discussions on the reform of the EU-Cohesion Policy for the programming period 2014-2020, the concept of place-based development policy[3] was introduced in this debate. This new concept connects three main elements: the place-specificity of natural and institutional

[1] See e.g. A.J. Venables, Shifts in economic geography and their causes, CEPDP 767, London School of Economics and Political Science, 2006; A. Dixit, Evaluating recipes for development success, World Bank Research Observer, Vol. 22, Nr. 2, 2007; World Bank, World Development Report 2009 "Reshaping Economic Geography", 2008;

[2] See e.g. W. Molle, Economic governance in the European Union, forthcoming; OECD, The sources of economic growth in OECD countries, 2003; OECD, Making the most of Regional development Policy through Multi-level , SourceOECD Urban, Rural and regional Development, 2008; OECD, Regions at a Glance, 2009.

[3] F. Barca et al., An agenda for a reformed cohesion policy, 2009

resources and of individual preferences and knowledge, the role played by the (material and immaterial) linkages between places, and the resulting need for interventions to be tailored to places. The concept builds upon a new paradigm of development policy that has gained international consensus over the last twenty years, and which main features are based on tailoring interventions to specific territorial contexts and their spatial linkages, and eliciting and aggregating the knowledge and preferences of local actors. Especially the OECD has developed this line of thought in numerous publications, among others in various territorial reviews[4].

Both the sectoral versus integrated and the centralised versus decentralised policy debate are relevant in the context of EU Cohesion Policy as this policy funds both sectoral and more integrated programmes and strongly encourages regional and local involvement in policy design and implementation. A better understanding of the conditions under which sectoral or integrated policies are to be preferred and the advantages and disadvantages of regional and local involvement could therefore help to structure the debate on how to best design and implement policies.

1.2 Purpose and set-up of the study

Against this background the purpose of the present study has been formulated as follows (see ToR, p.1-3):

"… to analyse the practice within EU-Member States in three policy domains (innovation, transport and labour market) according to four types of policies (high regional/local involvement+integrated policies, high regional/local involvement+sectoral policies, low regional/local involvement+integrated policies, low regional/local involvement+sectoral policies)"

……in order to get …

"a better understanding of the benefits and costs of sectoral and integrated policies and the different advantages and disadvantages of regional and local involvement"

…..which should lead to….

"…help to structure the debate on how to best design and implement this policy" (i.e. EU Cohesion Policy).

The selected policy domains follow from the key areas of EU Cohesion Policy, i.e. fostering of innovation, upgrading of (inter-)national, regional and local accessibility, stimulating the adaptability of the labour force to changing socio-economic situations, and furthering the inclusion of deprived groups in productive sectors and/or social life.

[4] See various OECD Territorial Reviews for various cities and regions; see also OECD, How regions grow, 2009.

As stated in the ToR, the above purpose has been translated into the following three main ***tasks*** in the study:

1. **Literature review**: Literature review on the benefits, drawbacks and complementarities within the three policy domains (innovation, transport and labour market) of a sectoral versus an integrated approach and high versus low involvement of sub-national levels of government;

2. **Member State Policy practice:** Analyse the three policy domains in seven (partly different) Member States focusing on six specific questions (see hereafter);

3. **Identify best policy practices:** to identify which issues should best be dealt with in a particular manner and could be used for inspiration for other Member States at national and/or regional/local level.

In the selection of case studies for each of the policy domains those Member States have been selected that mostly have a strong reputation of addressing these issues effectively.

The literature review and selected case studies in the various Member States have been geared towards answering the following ***key questions***:

a. What is the current balance between the different types of policies?
b. What are the arguments used to justify each type of policy?
c. How has the impact of each type of policy been judged?
d. Has the balance between the different types of policies shifted over time?
e. What are the arguments used to support this shift?
f. What balance is used by the Member States which are seen as the top performers in this domain?

1.3 Contents of this report

This report presents the main results of the study. The main results are summarized in the **Executive Summary.**

Chapter 2 outlines the methodology of the study, including the concepts and definitions that have been used.

In the **Chapters 3, 4, and 5** the policy practices in EU-Member States are presented in innovation, transport and labour market respectively.

In **Chapter 6** we present a synthesis of the main results on the practices in these policy domains.

The case studies in the various EU-Member States in each of the policy domains (in total 21 case studies) have been included in a separate report that is issued as an **Annex** to the present report.

2 Methodology of the study

2.1 Focus of the study

Over the last decades various attempts have been made to develop integrated policy approaches, both at the level of the European Union and Member States. Especially at aggregate levels it is difficult to make integrated policy approaches into a success. At the European level, the Lisbon Strategy for Growth and Jobs has been the most successful in this area. The fact that so many other (EU) policies including Cohesion policy refer to this Lisbon Strategy contributes to its achievement. Other 'holistic' approaches including the Sustainable Development Strategy have not (yet) managed to act as a sufficiently integrating force[5], while the new Europe 2020-growth strategy[6] that is the follow-up of the Lisbon Strategy still needs to show its first results.

The explanation for this difficulty lies in the fact that coordination is costly in particular since Member States are heterogeneous. But even at a national level, where coordination is simpler, it remains uncertain under which circumstances a more integrated approach would work. The real question in this 'eternal' debate therefore appears to be under which conditions integrated/localised approaches or sectoral/national approaches are most effective and efficient. That will be the key issue of this study.

Various studies have already dealt with the effectiveness and efficiency of sectoral and integrated policies at Member States level and the involvement of regional and local authorities. Recently, the Barca-report[7] drew the clear-cut conclusion that integrated policies are preferable over sectoral policies, but that integration needs to take place at the level of localities and regions, i.e. 'place-based' accompanied by 'multi-level governance' arrangements – taking full account of the variety of competences at local, regional and national level across Europe.

The conclusions of the Barca-report are not uncontroversial. Clearly they need a test by empirical evidence. Given the objective of the study, our ambition is to provide value added to the debate by bringing in the following aspects in the ongoing debate:

- **The explicit search for evidence based conclusions**. One of the major problems Barca and his team addressed is the lack of quantitative evidence found in the literature. Notwithstanding all the merits of the work, it is clear that the relationship between the literature findings and the conclusions of the work could be reinforced;
- Our approach rests heavily on **a thorough quest for empirical evidence**. We will start from our in-depth knowledge of the three respective sectors and the vast body of relevant literature that is lying behind these. By analysing this wealth of information, and applying rigour to the assessment related to the key questions raised in this study, our ambition is to arrive at more evidence based conclusions.

[5] ECORYS, Progress on EU Sustainable Development Strategy, 2008
[6] European Commission, Europe 2020, Strategy for a smart, sustainable and inclusive growth, 2010
[7] F. Barca et al, Op. Cit.

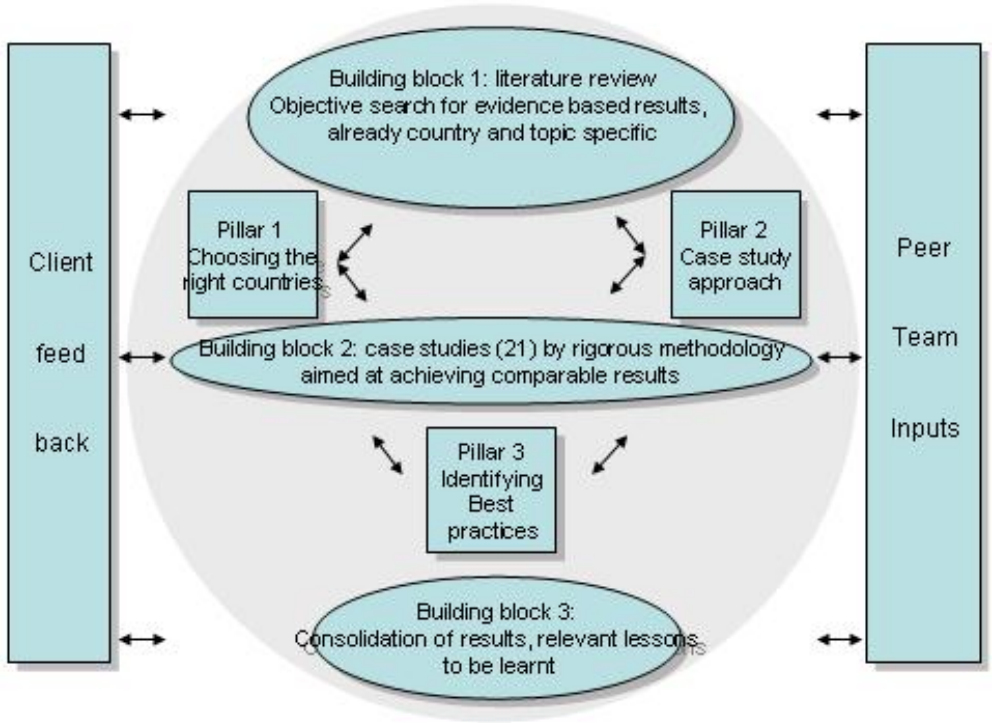
2.2 Overview of our approach: building blocks and pillars

Our methodology distinguishes 3 building blocks that rest on 3 pillars. The building blocks are derived from the ToR that makes a distinction between 3 main tasks: literature review, execution of 21 case-studies, and presenting best practice and drawing conclusions. These building blocks rest upon 3 main pillars:

1. The first pillar contains the criteria for selecting Member States. This selection of Member States where case studies will be undertaken in each of the 3 policy domains, has been undertaken in close cooperation with DG REGIO, with comments and suggestions provided by our Peer Review Group. The most important selection criteria are listed hereafter.
2. The second pillar assumes we have chosen a Member State and explains how we approach a given case study.
3. The third pillar provides insight how **best practices** will be derived from the different sources of information in this study.

Figure 2.1 makes the link between the building blocks, the pillars and the inputs/feedback from both the Peer Review Group and DG REGIO as the client of the study.

Figure 2.1: Main approach of the INTRALAB-study



The selection of Member States and case-studies is crucial since the ultimate goal of the study is to come to best practices. To maximize the probability of finding best practices the selection has been based on the following criteria:

1. Success

The Member State selected should be successful in the given policy domain. Success does not necessarily mean that the Member State is top ranked in that field. For instance, a new Member State may not top the ranks yet, but may have implemented a successful policy that may be more useful for other new Member States than a success story in one of the top ranked Member States.

2. Evidence base

The success should be based on evidence, e.g. coming from ex-post evaluations and/or other data. Without a solid evidence base there is insufficient scope for exchanges of best practices.

3. Diversity

The set of selected Member States should form a balanced portfolio across the European Union.

4. 4. Transferability

The success of a policy should be transferable to some extent, i.e. not be idiosyncratically linked to the culture or history of a particular Member State.

In the next sections we will operationalise important concepts and definitions in the study and point at a few caveats.

2.3 Important concepts and definitions

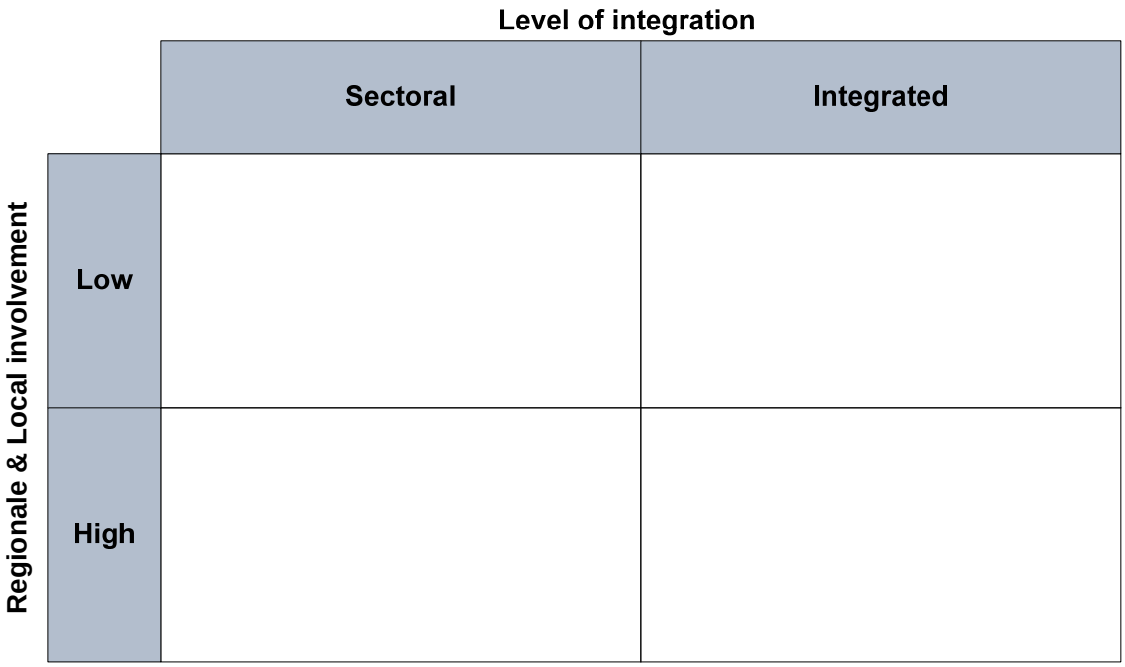
Approach, concepts and definitions in study

As outlined before we will concentrate on Member State policies in 3 domains, i.e. innovation, transport and labour market. For each of these domains we will concentrate on policy practices in relation to sectoral and integrated approaches, and centralised and decentralised government interventions.

In fact this refers to a 2x2 matrix for which we will analyse successful approaches in several Member States with the objective to provide inspiring ideas on what type of policies are showing success under which conditions.

Scheme 2.1 provides an overview of the 4 quadrants that can be distinguished and for which case-studies will be selected that will be analysed in more detail.

Scheme 2.1. Quadrants for case-studies to be selected



It is important to specify in more detail what is understood by the various concepts in order to avoid confusion. The following definitions have been used.

Sectoral policy

A sectoral policy will be understood by policies, strategies and instruments that focus on policy goals in a specific policy domain predominantly. A labour market policy that is focusing exclusively to meet policy goals in relation to the labour market (e.g. training of unemployed persons) is an example of such a sectoral policy.

Integrated policy

Integrated policies take goals from other policy domains clearly into consideration. An example is the policy in France to stimulate investments in high speed lines and trains. At the same time the policy fosters the position of the industries that are producing the capital goods for these lines and trains, it tries to influence the spatial distribution of persons, workers, and firms and institutions, and also makes a contribution to mitigate the environmental impact of traveling by private cars.

Spectrum and more refined distinctions

In reality cases of purely sectoral policies or fully integrated policies are rare. One way of looking at it is to see policies as a spectrum going from fully sectoral to fully integrated. The move from sectoral to integrated (or vice versa) is a gradual one. Usually policy goals of other domains are firstly taken into account, but at the level of delivery, used instruments and process the policy is still very much sectoral. A further step towards integration would be to also take into account other domains at the level of delivery, used instruments and process.

The French high speed rail example can illustrate the point. In case the Ministry of Transport runs the show, but takes some regional and environmental issues into account when designing the policy, this policy is only partially integrated. However when all relevant ministries are involved in the design of the policy and are thereby fully integrating all relevant policy processes and instruments, the policy can be described as fully integrated.

High versus low regional/local government involvement

The degree to which the policy design can be influenced ('regional/local discretion') will define whether we call policies centralised or decentralised. As with the distinction between sectoral and integrated, the definition might not always be clear-cut. In many cases multi-level governance arrangements, make the verdict a mixed one. Again, there is a spectrum here, moving from purely centralised to regional/local involvement in the policy execution without discretion, to fully decentralized discretion. Making a distinction between the conception, delivery and management of policies and the role of regional and local governments in each of these stages is crucial in that respect.

In the case studies we will adopt the richest possible distinctions, allowing for various mixes as discussed above. When drawing conclusions in Chapter 6 we will aim for more broader and aggregate views on the issue. The richness in the case studies is achieved by filling in slightly more complex tables of the following nature:

A. Sectoral/Integrated Policy

Objectives/targets

Delivery process/ instruments	Sectoral	Sectoral, but other domains to be taken into consideration	Objectives of other policy domains fully on board (integrated)
Sectoral			
Other policy domains to be taken into consideration			
Other policy domains fully on board			

The light grey cells reflect types of policies that are predominantly sector-oriented, while the dark-grey cells reflect types of policies that are predominantly integrated. The combinations reflected by the white cells are less likely.

B. Centralised/decentralised policy approach

	National level	Regional level	Local level
Conceive policy			
Manage policy			
Deliver policy			

With respect to a centralised/decentralised policy approach in principle all options are feasible, although policies with substantial funding and impact are usually not conceived at local level. As has been indicated already before one sees increasingly a multi-governance approach, meaning that government institutions at national, regional and local level work closely together in striving for certain goals. Each level plays its part in concerted actions, focusing on specific tasks and responsibilities that contribute to reach these goals in an efficient manner.

Performance of policies

In the case studies we will especially concentrate on policy approaches that can be considered successful. Success can be measured in several ways. In the following chapters we will use the following definitions of success:

1. Countries and regions that show a very good track record in their specific policy domain in terms of low employment, high scores on innovation indicators, good transportation indices, etc.. The idea is that in these countries and regions this good performance will be at least partly linked to good and successful policies. In some cases we might however come to the conclusion that this excellent performance is not so much linked to the policies that have been implemented, but to other factors. If so, it would be important to inventory and assess the various factors that have made their contribution successfully;
2. Successful policies and strategies are those that have been able to reach the policy goals set and achieve these in an effective and efficient way. In many cases in the literature we can find evidence which policies are showing good results. It will be our main objective to explore the literature and undertake the case-studies on the basis of which we can arrive at conclusions on best practices and conditions that influence these. This may inspire policy makers and stakeholders in other parts of Europe to learn from this and improve their approach in specific policy domains.

Considerations on governance

Considerations of governance are often linked to a specific economic rationale. This derives from considerations of endogenous and exogenous factors of development, and increasingly from the focus on ‘soft’ or ’intangible’ factors of competitiveness. For many years, especially in post-war Western Europe, the task of stimulating economic development in a region was mainly dependent on policy instruments that emphasised exogenous rather than endogenous factors. Governments sought to influence patterns of mobile investment through offering incentives and grants in order to direct investment to some regions rather than others. They sought to ’intervene’ in regions and

promote development from 'top down'. This was the common practice of the 1950s, 1960s and 1970s and it still remains widely relevant and practiced[8].

Such an approach is no longer considered to be sufficient, at least in most European countries. Experience tends to show that 'successful' regions are those that succeed in developing their own internal capacities and improving internal conditions that influence and sustain investment. By internal we mean those powers, capacities, competencies and activities, which can formally or practically be undertaken by local or regional actors. These capacities and conditions often relate to how a region recognises and addresses its problems in a cohesive manner, how it seeks to address those problems and promote those opportunities that do lie within its reach, such as (at least partly) education and training, small-scale development, image making and marketing of the region. These are usually areas which do not require large amounts of money, where regional (and local) actors themselves, working together, can accomplish something, at least in initiating a development process. Commonly the first steps in this process involve a partnership of regional and local interests beginning to develop a good understanding of their situation and their vision of how it might need to change.

Basic institutional arrangements to support this are often put in place (partnerships, committees, etc), but nothing that involves major new institutions. Often a main focus for these initial steps are processes of mobilisation, training, capacity-building and confidence-building designed to 'get people involved', 'get things moving' and reverse the cycle of stagnation and decline. Occasionally these may extend to some 'light' reinforcement of local or regional institutions.

Policy-makers - even those involved in conceiving of an essentially regional development approach - often realise that it is vital to stimulate these processes in order to sustain development and ensure that external efforts fall on more fertile ground. To do so, they seek to encourage regional or local planning partnerships, and what is often called a 'bottom up' development planning process. In our experience any regional development process that does not involve some element of this 'bottom up' process usually fails over the medium to long term. Mobilisation of regional and local actors – sometimes through ad hoc or informal forums – is in practice essential to accelerating, complementing and sustaining any regional development process driven by top down considerations and resources.

Integrated/Regional versus Sectoral/Thematic Development

A major issue in the design of regional policies is how regional policies are embedded in national policies. Failure to make this distinction clearly and appropriately can lead to very serious problems in planning and implementation.

Historically regional development is a late-comer to the field of development interventions in the twentieth century. For all of the nineteenth and a very large part of the twentieth centuries governments intervened little in market economies and if they did it was either to provide basic conditions for trade and investment – for the entire country – or to address specific sectoral problems.

[8] See e.g. W. Molle, Economic governance in the European Union, 2011.

Thus the process of industrialisation in most market economies was driven by private sector initiatives, lightly regulated by the state and actively encouraged only to the extent that there were clear implications for national defense and dominance (e.g. Prussian and British support to their key industries in the nineteenth century). By the second half of the twentieth century however, especially after the crisis of the 1930s, governments were no longer prepared to allow the 'economic cycle' to work itself through, irrespective of the social consequences. Moreover state involvement was massively consolidated in the Second World War.

The post–war reconstruction, even in capitalist economies, saw the state intervene massively in terms of ownership and investment in transport, provision of basis utilities (water, energy) and key industries (coal, steel, raw materials). They did so along 'sectoral' or 'thematic' lines and in function of national considerations of economic consolidation and reconstruction and not through an explicit regional or local development policy. As old industries increasingly declined in the 1950s, and beyond, many western governments developed the habit of directly intervening to support entire industrial sectors, to slow or reverse their decline. These policies were usually considered to be 'sectoral' since they targeted specific sectors (e.g. coal, steel, textiles, car production, etc).

Active financial support to market sectors has for a variety of reasons become discredited, and in any case limited by international agreements (WTO) and within the EU by State Aid policy. Increasingly its place was taken by focused 'regional development' approaches aiming to address the wider needs of the territory in decline or reconversion, rather than the specific sector itself which was largely left to the market.

Increasingly therefore national policies have become less sectoral. Sectoral policies remain important in areas where the market is unwilling to invest (physical public infrastructure, education, training, etc). Intervention in the market has been drastically limited to small incentive schemes to businesses (usually start ups or in new sectors), key areas of RTD, etc. These however remain an important field for public intervention to economic development and in almost all (unitary) states, it is the central state, not regions, that fundamentally plans, finances and even implements these programmes.

Sectoral policies may be in decline but more general national investment policies are as common as ever, and increasingly so, in a competitive world. Thus all governments tend to promote a national programme of public investment in key conditions for economic development (transport (roads especially), energy, environment (all, usually infrastructure), and education and training. These remain, in almost all countries, areas of huge public investment where the central state is the prime source of investment and catalyst and actor of development.

Most of these policies are conceived largely or almost exclusively by the central state, and implemented with substantial (or even almost only) state resources, often by State Agencies themselves, though on occasion by delegated local or regional authorities, acting on behalf of the state. In practice this means that even if regional development policies do exist, they usually exist alongside much larger national programmes of public investment focused on „national development" and targeting the larger factors of development.

This is the case in countries with little fiscal decentralisation and a somewhat centralised tax collection, with little or no political regionalisation and decentralisation, and with usually strong state agencies – examples of this in Western Europe are Ireland, France (despite attempts at limited and shared „regional development"), in the Benelux and Scandinavia (though in these two cases it is obviated by a historically strong local government system and in the case of Sweden with large fiscal decentralisation). In these countries it is the central state which is the main public investor in economic and social development in terms of provision of finance, originator of policy and to a large degree, implementer of projects.

In Central and Eastern Europe the main paradigm for public investment is close to this model: most taxes are centralised with the Ministry of Finance and redistributed mainly through national policies of which policies in support of economic development are a large part. Despite EU membership and the institutional impact of the Structural Funds, in no new EU-Member States does the Regional Development Operational Programme make up much more than 30% of the entire EU/domestic public investment programme to support economic and social development, and in several cases it is smaller. Nevertheless in several of these countries local municipalities and counties are de facto main development actors including in so-called 'national policy areas'. In situations such as this, it becomes essential to distinguish clearly the respective roles – in terms of financing, programme planning/conception, programme implementation, project/investment planning and implementation, programme monitoring and evaluation for both those programmes considered to be an articulation of 'national' policies and those an articulation of 'regional' policies.

2.4 Caveats to our approach

It is important to understand that the approach outlined in the previous sections has limitations, which should be taken into account to avoid too general conclusions:

a. First of all, a Member State that is successful in labour market policy does not necessarily need to be successful in innovation. In each specific policy domain we have therefore analysed the performance of both general developments and specific policies/strategies: the outcome has determined the countries for the selection of the case-studies.
b. Secondly, even within one policy field, it will often be the case that one Member State is good in one aspect of policy but not necessarily in another. An example can illustrate the point. In the policy domain 'innovation' a range of 'sectoral' and 'integrated' policies can be delineated: e.g. R&D promotion, IPR protection, cluster development, and sectoral innovation platforms. For each of these innovation policies, the group of best performing Member States is not always the same.
c. Thirdly, the selection criteria for the case-studies may be conflicting: diversity can go at the expense of best practices. There is therefore a need to provide more background information per policy domain on policy approaches and tendencies. On the basis of this background information we have come up with a shortlist of case studies and the main arguments for selecting these cases. The final selection has been done in close cooperation with DG REGIO.

d. Finally, the transferability criterion should not be taken too literally, i.e. particular integrated policies are likely to be relatively specific to national or local circumstances. The lesson to be learned then is not to suggest copying examples from elsewhere, but use these examples for inspiration and learning, adapting these as much as possible to the specific local situation.

Given these traps, caveats and disclaimers the possible end result of the study should be more like the following argumentation:

- Suppose you are Country A;
- Suppose you want to reduce unemployment, in particular in backward regions;
- Assuming you are predominantly centrally driven;
- The following sectoral/integral approaches in regions X and Y could form an inspiration:
  - Since they have similarities with Country A's backward regions;
  - Since there is some evidence base of success;
  - Since the policies have elements of transferability;
  - Since it is plausible that the fact that they are sectoral/integrated is part of the success
  - But Country A needs to build on the inspiration rather than trying to copy it.

While following such an argumentation one should always take duly notice of results that have been reached in certain situations and timeframes which might not be applicable anymore as a consequence of new developments. A clear example of this is the success of the Irish Celtic Tiger based among others on attracting Foreign Direct Investment in the 1990's, but that has largely vanished very recently and has resulted now in more gloomy socio-economic development prospects in that country.

3 Innovation policy practices in EU-Member States

3.1 Introduction

In reform plans formulated in the context of the Lisbon Strategy, innovation policy plays the most prominent role. This is even reinforced in the follow-up plan Europe 2020 which focuses on improving international competitiveness of the European economies at all levels. It is stated that the EU and all Member States shall ensure favourable conditions for improving the competitiveness of the Union's industry, among others through better translating of the effects of research and innovation policies into improvements in industrial potential.

In the implementation of the Lisbon strategy, the roles and the weights of international, national and regional policymaking bodies are far from being clearly defined. The policies are being set-up and managed at the same time through both top-down and bottom-up initiatives. This gives rise to a natural question about the most effective optimal mix of these approaches.

In this study we approach national policy mixes as combinations of integrated and sectoral policy instruments, which at the same time can be centralized (thus top-down) or decentralized (mainly bottom-up) according to their governance mechanisms. Co-existence of both top-down and bottom-up policy approaches in one policy mix can exhibit visible gaps in their implementation as well as clear overlap. Nonetheless, one should not rule out potential synergy effects that may also exist and, thus, must be fully exploited. Therefore, much work was done by European policy makers to develop a new set of innovation policy measures which better suit the modern role of innovation as a systematic factor driving economic development and a major tool to tackle the global challenges.

In Section 3.2 we examine the innovation performance data for the EU27 Member States, analysing the current state of affairs and recent trends in innovation performance. In Section 3.3 we present the summary of the recent trends in national innovation policy mixes. We will consider the recent developments in countries' innovation policy priorities areas and attempt to distil general tendencies in such changes. Based on these findings we present a list of countries from which case-studies in specific areas of research and innovation policy have been selected. In Section 3.4 we outline the main results from these case-studies. Finally in Section 3.5 we will draw main conclusions regarding innovation policy practices in EU-Member States.

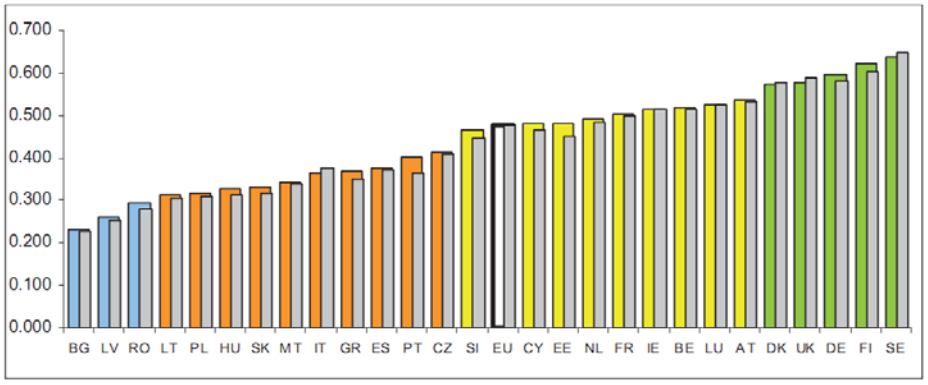
3.2 Innovation performance in EU-Member States

3.2.1 Current innovation performance

In the following sections we present the summary of results produced by the 2010 European Innovation Scoreboard9 which provides measurements of the current innovation performance of EU-Members States. The European Innovation Scoreboard (EIS) is a very useful instrument developed at the initiative of the European Commission under the Lisbon Strategy. It is designed to provide a comparative assessment of the innovation performance of EU Member States. We will consider both the current innovation performance and its evolution over the recent years as main inputs determining our choice of countries to 'host' a number of case studies.

In this chapter we will use the classification of Member States according to their level of innovation performance as presented in the 2010 European Innovation Scoreboard.

Figure 3.1. Summary innovation performance of EU Member States in 2009 (compared to 2008 EIS)



Note: The Summary Innovation Index (SII) is a composite of 29 indicators going from a lowest possible performance of 0 to a maximum possible performance of 1. The 2009 SII reflects performance in 2007/2008 due to a lag in data availability.

The grey coloured columns show 2008 performance as calculated backward from 2009 using the next-to-last data for each of the indicators. This 2008 performance is not identical to that shown in the EIS 2008 as not for all indicators data could be updated with one year. The difference between the columns for 2008 and 2009 show the most recent changes in innovation performance.
Source: European Commission (2010), 2010 European Innovation Scoreboard.

It is evident that for each of these innovation policy issues, the group of best performing Member States is not necessarily the same. Based on their innovation performance in each of these dimensions, countries can be classified as 'innovation leaders', 'innovation followers', 'moderate innovators' or 'catching-up countries'.

In the last (2010) version of the EIS available, the classification of EU Member States was as follows:

- **Innovation Leaders**: Denmark, Finland, Germany, Sweden, and United Kingdom;
- **Innovation Followers**: Austria, Belgium, Cyprus, Estonia, France, Iceland, Ireland, Luxembourg, Te Netherlands, and Slovenia;

9 First appeared in February 2010.

- **Moderate Innovators**: Czech Republic, Greece, Hungary, Italy, Lithuania, Malta, Norway, Poland, Portugal, Slovakia, and Spain;
- **Catching-up countries**: Bulgaria, Croatia, Latvia, and Romania.

3.2.2 Disaggregation innovation performance among groups of countries

In this paragraph we give a short overview of the general observations which are common for countries in the above groups.

The EIS takes account of 25 innovation indicators classified into three dimensions to better capture the various aspects of innovation (see Table 3.1):

- **Enablers** capture innovation drivers external to the firm, including the supply of highly skilled human resources and availability of innovation finance and public support for innovation.
- **Firm activities** capture innovation efforts at the firm level.
- **Outputs** capture the results of innovation both the relative prominence of innovating firms and by several economic effects of innovation activities and the results of innovation in high-tech and knowledge-intensive industries.

Table 3.1: Indicators for the European Innovation Scoreboard 2008-2010

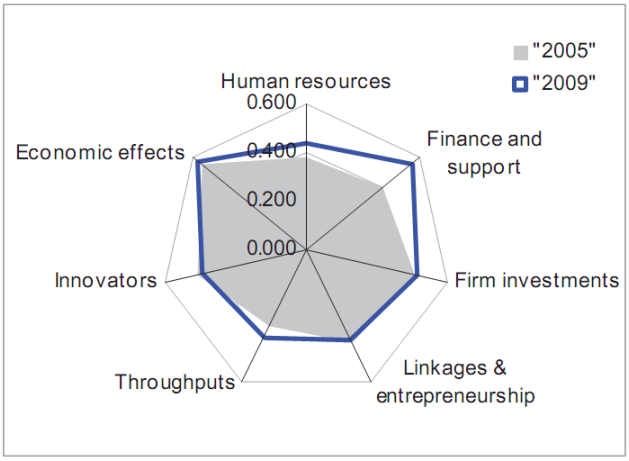
EIS dimension / indicator
ENABLERS
Human resources
1.1.1 S&E and SSH graduates per 1000 population aged 20-29 (first stage of tertiary education)
1.1.2 S&E and SSH doctorate graduates per 1000 population aged 25-34 (second stage of tertiary education)
1.1.3 Population with tertiary education per 100 population aged 25-64
1.1.4 Participation in life-long learning per 100 population aged 25-64
1.1.5 Youth education attainment level
Finance and support
1.2.1 Public R&D expenditures (% of GDP)
1.2.2 Venture capital (% of GDP)
1.2.3 Private credit (relative to GDP)
1.2.4 Broadband access by firms (% of firms)
FIRM ACTIVITIES
Firm investments
2.1.1 Business R&D expenditures (% of GDP)
2.1.2 IT expenditures (% of GDP)
2.1.3 Non-R&D innovation expenditures (% of turnover)
Linkages & entrepreneurship
2.2.1 SMEs innovating in-house (% of SMEs)
2.2.2 Innovative SMEs collaborating with others (% of SMEs)
2.2.3 Firm renewal (SME entries plus exits) (% of SMEs)
2.2.4 Public-private co-publications per million population
Throughputs
2.3.1 EPO patents per million population
2.3.2 Community trademarks per million population
2.3.3 Community designs per million population
2.3.4 Technology Balance of Payments flows (% of GDP)
OUTPUTS
Innovators

EIS dimension / indicator
3.1.1 SMEs introducing product or process innovations (% of SMEs)
3.1.2 SMEs introducing marketing or organisational innovations (% of SMEs)
3.1.3 Resource efficiency innovators, unweighted average of:
Share of innovators where innovation has significantly reduced labour costs (% of firms)
Share of innovators where innovation has significantly reduced the use of materials and energy (% of firms)
Economic effects
3.2.1 Employment in medium-high & high-tech manufacturing (% of workforce)
3.2.2 Employment in knowledge-intensive services (% of workforce)
3.2.3 Medium and high-tech manufacturing exports (% of total exports)
3.2.4 Knowledge-intensive services exports (% of total services exports)
3.2.5 New-to-market sales (% of turnover)
3.2.6 New-to-firm sales (% of turnover)

Source: European Commission (2008), "European Innovation Scoreboard 2008"

According to the EIS-2009 the EU27 annual growth rate in innovation performance averaged at 1.8% over a five year period between 2004 and 2009. The largest contribution to this improvement came from Human resources (2.3%), Finance and support (6.5%) and Throughputs (3.8%). In Economic effects (0.9%) improvement has been very modest, while in Firm investments (-0.4%), Linkages & entrepreneurship (-0.6%) and Innovators (- 1.3%) the situation has deteriorated.

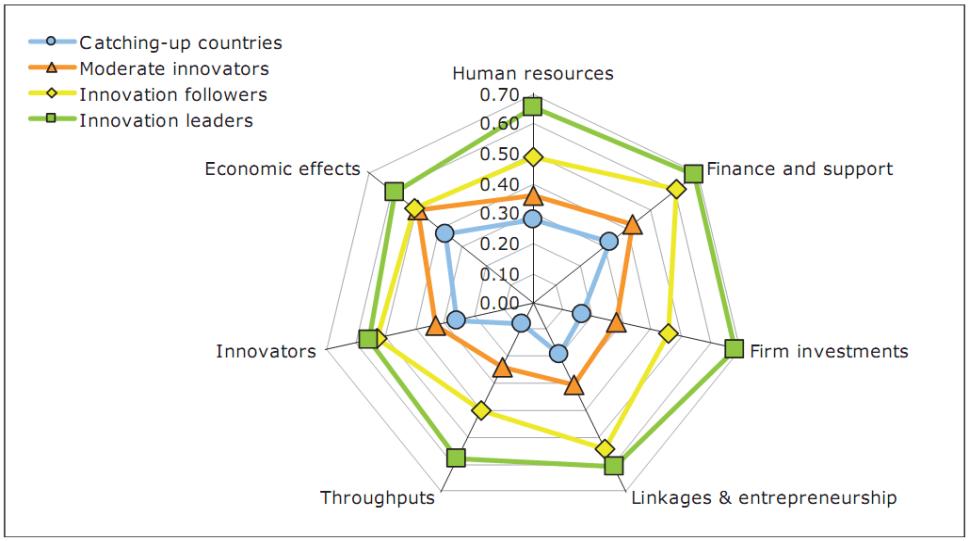
Figure 3.2 Drivers of EU27 innovation performance



Source: European Commission (2010), European Innovation Scoreboard 2009.

Figure 3.3 presents an overview of performance along several key dimensions by different group of countries. In general we observe that the innovation leaders outperform over groups in all respects: Human resources, Finance and support, Firm investment, Linkages and entrepreneurship, Throughputs, Innovators, and Economic effects. The Innovation leaders group is the strongest in Human resources, Finance and support, and Firm investments. On the other side of the spectrum the Catching-up countries under-perform in all areas, while the countries from two middle groups show mixed performance.

Figure 3.3 EIS-2010 Performance by Country Group



Source: European Commission (2010), "European Innovation Scoreboard 2009"

Looking at the inter-group variation in performance we see the largest spread in Firm investments and Throughputs, and the smallest spread in Economic effects indicators. It is remarkable that the performance of Moderate innovators and the Innovation followers in the Economic effects indicators are almost equal and lie close to that of Innovation leaders.

In general we observe a substantial degree of heterogeneity in innovation performance in different indicators among different groups of countries. So the next step in our analysis will be to determine a selection of countries, which will serve as the background for further case studies.

3.2.3 Shortlisting of countries

Based on the above we have opted for the following shortlist of 7 EU Member States from which later in this report case-studies have been selected::

- **Innovation Leaders**: Sweden, Finland;
- **Innovation Followers**: The Netherlands, Belgium;
- **Moderate Innovators**: Czech Republic, Spain, and Poland (Catching-up country in EIS 2009).

This shortlist of countries is based on a balanced mix in terms of innovation performance (albeit with a slight bias towards the upper end of the innovation performance scale), as well as in terms of geographical distribution (Nordic, North-Western European, Eastern European, Southern European countries). In the next sections we will present a summary of the innovation policy mixes in the EU, from which we will derive potentially interesting case studies (read: policy tools being a policy measure or programme).

3.3 Innovation policy mix in EU-Member States

3.3.1 Policy mix, types and levels of governance

Currently the innovation support is provided at different levels (EU, national, regional and local) and by different actors and institutions in Europe. This may result in duplication of efforts or create visible gaps in support measures among countries and regions. With a goal of decreasing these discrepancies and achieving greater cohesion in innovative activities among the Member States it is important to address the question about the optimal combination and coordination of public policy interventions at all levels.

In this study we concentrate our attention on the innovation policy measures which are initiated and executed at the national and regional level. Even though European and international initiatives play an important role besides regional and national programmes, according to the principle of subsidiarity community initiatives or inter-governmental initiatives are beyond the scope of this study, which focuses solely on implemented regional or national programmes, being open or not open to foreign participation. Initiatives for international policy coordination with third countries also stay beyond the scope of this study.

When selecting the cases to be analysed further we guided ourselves primarily by the information provided in Trendchart studies, which analyse the performance and the innovation policy priorities of the Member States10. This information provides a clear picture of the current state and the recent tendencies in the European innovation policy mix.

This being said, we have at our disposal a very large set of possible policy measures to be implemented at national and regional levels, and Member States have in the course of the past 20 years developed an increasingly wide and inter-twined set of policy tools to stimulate innovation. Many different typologies of such 'innovation policy measures' do co-exist. Table 3.2 contains an overview of policy measures towards innovation that are applicable in any Member State (see guidelines for the European TRENDCHART national policy reports).

For each individual policy type in Table 3.2 we have analysed whether the policy tends to be predominantly sectoral or integrated (S or I in the table) and centralised or decentralised (C or D below), making use of the definitions specified in Chapter 2. In several cases the policy types can be both sectoral and integrated, and centralised and decentralised, depending on the most likely or predominant policy design and implementation corresponding to its objectives, which differs from country to country. In other cases the assessment can be more clear-cut. This is the case with e.g. the policy category 'Direct support of business R&D (grants and loans)' which can be considered as sectoral with possible centralised and decentralised features depending on the actual design. The IPR-related policies are clearly centralised (due to the close link to the national judicial system) and integrated as they touch upon interests of many various agents and important economic externalities. The measures for stimulating cooperation in research can be designed and implemented in both centralised and decentralised way, but they have an integrated character as

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they mostly involve different types of stakeholders. The R&D stimulating tax measures can be considered as centralised and sectoral as being directly linked to the budgetary system of the state and a particular vertical mechanism of funds redistribution. A similar manner of argumentation has been used to characterise the rest of the policy categories.

Table 3.2: TRENDCHART categories of innovation policy measures. Typology codes: S – sectoral, I – integrated, C – centralised, D – decentralised

Innovation Policy Categories			
1. Governance & horizontal research and innovation policies	Centr./ Decentr.	Sectorla/ Integrated	Comment
1.1.1 Strategy policy documents (official documents, policy consultation papers, green or white papers, Operational Programmes of Structural Funds)	C	SI	This type of documents is predominantly developed at the national level. They can include initiatives of both sectoral and integrated kind.
1.1.2 Activities of official advisory and consultative forum	CD	SI	Can be designed and implemented at both national and regional level. Can involve various types of stakeholders.
1.1.3 Policy Advisory services (technology foresight, scoreboard type activities, cluster mapping, sectoral studies of innovation)	CD	SI	Same as above.
1.2.1 Strategic Research policies (long-term research agendas)	CD	SI	Can be designed and implemented at both national and regional level. Can involve various types of stakeholders.
1.2.2 Innovation strategies	CD	SI	Can be designed and implemented at both national and regional level. Can involve various types of stakeholders.
1.3.1 Cluster framework policies	CD	I	Such policies can be initiated at both national and regional level. Definitively include various types of stakeholders.
1.3.2 Horizontal measures in support of financing	CD	I	Such policies can be initiated at both national and regional level. Definitively include various types of stakeholders (firms and financing institutions at least).
1.3.3 Other horizontal policies (ex. society-driven innovation)	CD	I	Follows similar logic as above.
2. Research and Technologies			
2.1.1 Policy measures concerning excellence, relevance and management of research in Universities	CD	S	Such policies can be initiated at both national and regional level. Clear sectoral character as it concerns one type of institutions.
2.1.2 Public Research Organisations	C	S	Provisioned predominantly at national level. Clear sectoral character as it concerns one type of institutions.
2.1.3 Research and Technology Organisation (private non-profit)	C	S	Provisioned predominantly at national level. Clear sectoral character as it concerns one type of institutions.
2.1.4 Research Infrastructures	C	S	Provisioned predominantly at national level. Clear sectoral character as it concerns one type of institutions.
2.2.1 Support infrastructure (transfer offices, training of support staff)	CD	S	Can be provisioned predominantly at both national and regional level. Clear sectoral character.
2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)	C	I	Rooted in the IPR issues, which are a national (and international) affaire. Integrated by definition.
2.2.3 R&D cooperation (joint projects, PPP with research institutes)	CD	I	Can be designed and implemented at both national and regional level. Can involve various types of stakeholders.
2.3.1 Direct support of business R&D (grants and loans)	CD	S	Can be designed and implemented at both national and regional level. Involves one particular type of stakeholders.
2.3.2 Indirect support to business R&D (tax incentives and guarantees)	C	S	Fiscal affairs are predominantly a national matter. One type of stakeholders involved.

Innovation Policy Categories			
3. Human Resources (education and skills)			
3.1.1 Awareness creation and science education	CD	I	Can be designed and implemented at both national and regional level. Requires involvement of different stakeholders.
3.1.2 Relation between teaching and research	CD	I	Can be designed and implemented at both national and regional level. Requires involvement of different stakeholders.
3.1.3 Stimulation of PhDs	CD	S	Can be designed and implemented at both national and regional level. Concerns mostly universities and higher education institutions.
3.2.1 Recruitment of researchers (e.g. fiscal incentives)	CD	I	Can be designed and implemented at both national and regional level. Involves different types of stakeholders.
3.2.2 Career development (e.g. long-term contracts for university researchers)	CD	SI	Can be designed and implemented at both national and regional level. Can involve various types of stakeholders or focus on one particular type.
3.2.3 Mobility of researchers (e.g. brain-gain, transferability of rights)	CD	SI	Can be designed and implemented at both national and regional level. Can involve various types of stakeholders or focus on one particular type.
3.3.1 Job training (LLL) of researchers and other personnel involved in innovation	CD	S	Can be designed and implemented at both national and regional level. Focus mostly on one particular type of institution (either university or firms).
3.3.2 Recruitment of skilled personnel in enterprises	CD	S	Can be designed and implemented at both national and regional level. Focuses on one type of stakeholder.
4. Promote and sustain the creation and growth of innovative enterprises			
4.1.1 Support to sectoral innovation in manufacturing	CD	S	Can be designed and implemented at both national and regional level.
4.1.2 Support to innovation in services	CD	S	Can be designed and implemented at both national and regional level. Oriented mostly at private sector (firms).
4.2.1 Support to innovation management and advisory services	CD	I	Can be designed and implemented at both national and regional level. Can involve different types of stakeholders.
4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc	CD	S	Can be designed and implemented at both national and regional level. Oriented at private sector (firms).
4.2.3 Support to technology transfer between firms	CD	S	Can be designed and implemented at both national and regional level. Oriented at private sector (firms).
4.3.1 Support to innovative start-ups incl. gazelles	CD	S	Can be designed and implemented at both national and regional level. Oriented at private sector (firms).
4.3.2 Support to risk capital	CD	S	Can be designed and implemented at both national and regional level. Oriented at private sector (firms).
5. Markets and innovation culture			
5.1.1 Support to the creation of favourable innovation climate (ex. Road shows, awareness campaigns)	CD	I	Can be designed and implemented at both national and regional level. Can target different types of stakeholders.
5.1.2 Innovation prizes incl. design prizes	CD	S	Can be designed and implemented at both national and regional level. Usually implemented as one prize for one particular type of stakeholders.
5.2.1 Fiscal incentives in support of the diffusion of innovative technologies, products and services	C	S	Fiscal matters are mostly national affaire. Most relevant to the innovative organisations in private sector.
5.2.2 Support and guidelines on innovative Green Public Procurement (GPP)	CD	S	Can be designed and implemented at both national and regional level. Has strong knowledge sharing component which makes it integrated.

Innovation Policy Categories			
5.2.3 Impact assessments (on research and innovation issues) of new legislative or regulatory proposals in any policy field	CD	I	Can be designed and implemented at both national and regional level. Has strong knowledge sharing component which makes it integrated.
5.3.1 Measures to raise awareness and provide general information on IPR	CD	I	Can be designed and implemented at both national and regional level. Has strong knowledge sharing component which makes it integrated.
5.3.2 Consultancy and financial incentives to the use of IPR	CD	I	Can be designed and implemented at both national and regional level.
5.3.3 Support to the innovative use of standards	C	I	Standardisation and normalisation issues are set at national and international level. Involves different types of stakeholders.

Source: Trendchart website (2010) and own analysis

The balance between or 'mix' in measures depends of country- or region-specific factors such as level of economic development, level of innovation performance, historical and cultural heritage, openness to foreign influences, characteristics of the science and education systems, etc. Therefore policy mixes can vary largely between countries. This variation is examined in the following paragraphs.

3.3.2 Policy mix at EU-27 level

Here we consider the prioritisation of Member States' innovation policies taking into account the budget data, which provide a more objective look at priorities than a simple policy measure count11. It should be noted that not every important S&T policy measure can be distinguished by having larger budget. For example for the IPR policies (integrated) and some fiscal measures (sectoral) it is not possible to calculate the precise amount of spending, which does not mean that their importance is not considerable. Nonetheless, for the vast majority of measures in national innovation policy mixes the information about their funding provides a good indication about their relative importance in the mix.

Examining the shares of financing presented in Figure 3.4 we observe that there are ten categories of innovation support measures which account for approximately 70% of total funding. The direct support (grants and loans) for business R&D and funding of R&D cooperation policies together amount for about 16%. Indirect support (tax) measures are responsible for about 6% of overall financing volume12. Cluster policies financing takes up 7% of total funding identified. The venture capital (VC) financing and the related support to innovative start-ups amounts to 15% in total, which is a sign of importance given in many Member States to this area. Finally, the policy measures in support for organisational innovation stand relatively high at 6% mainly driven by support to ICT diffusion.

Using the classification presented in Table 3.2 it is possible to consider the information about the top ten measures in Figure 3.4 along the centralised/decentralised and sectoral/integrated

11 The allocation of budget resources among different policy measures provides a better indication of government's priorities under conditions of the limited budget resources, although in the case of large investments in expensive research infrastructures such a measure can exhibit certain upward bias.

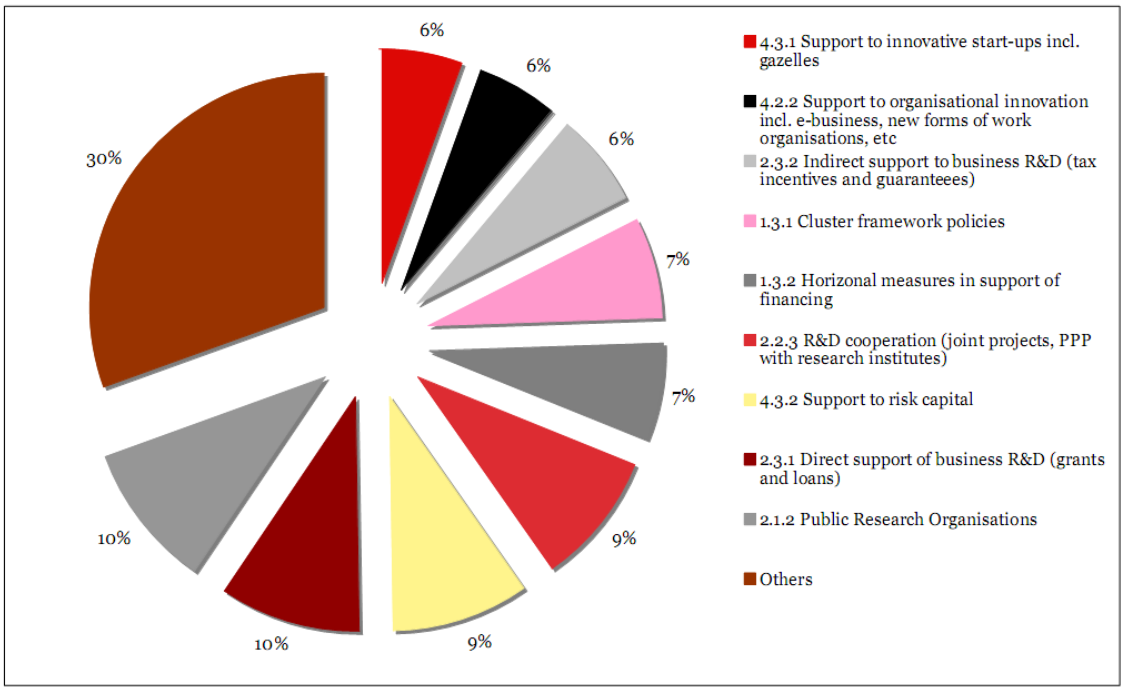
12 This figure is significantly underestimated due to difficulties in compiling data on national corporate R&D tax measures (European Commission, 2010b)

dimensions. Here we observe that the majority of measures among the top 10 have a predominantly sectoral character (responsible for 47% of total financing), while integrated measures account for 23% of total funding. In the centralised/decentralised dimension the situation is less clear cut. Two measures (support to Public Research Organisations and Indirect Support to Business R&D) are considered as centralised and are good for 16% of funding. The rest of the measures in this list can exhibit both centralised and decentralised features and account for 54% of funding in 2009.

So from these figures we can conclude that a large share of public funding goes to the policy measures which can exhibit both centralised and decentralised characteristics. Along the sectoral/integrated dimension we observe that among the top most funded measures a higher weight placed on the sectoral policies with, nonetheless, a noticeable share going to the policy categories with integrated features.

This result gives us a preliminary indication about the relative importance of different types of policies. First, we see that both sectoral and integrated policy categories occupy an important place in the European innovation policy mix. Second, there is evidence that the actual comparison of relative importance of centralised and decentralised policy measures requires a more detailed consideration, such as that proposed in the cases studies below.

Figure 3.4 Funding of policy priorities in the EU-27 innovation policy mix



Source: TrendChart-ERAWATCH database of support measures; analysis Technopolis Group.
Note: Percentages refer to the share of measures addressing a given policy priority in the overall EU innovation policy mix. A single support measure can be assigned up to four policy priorities.

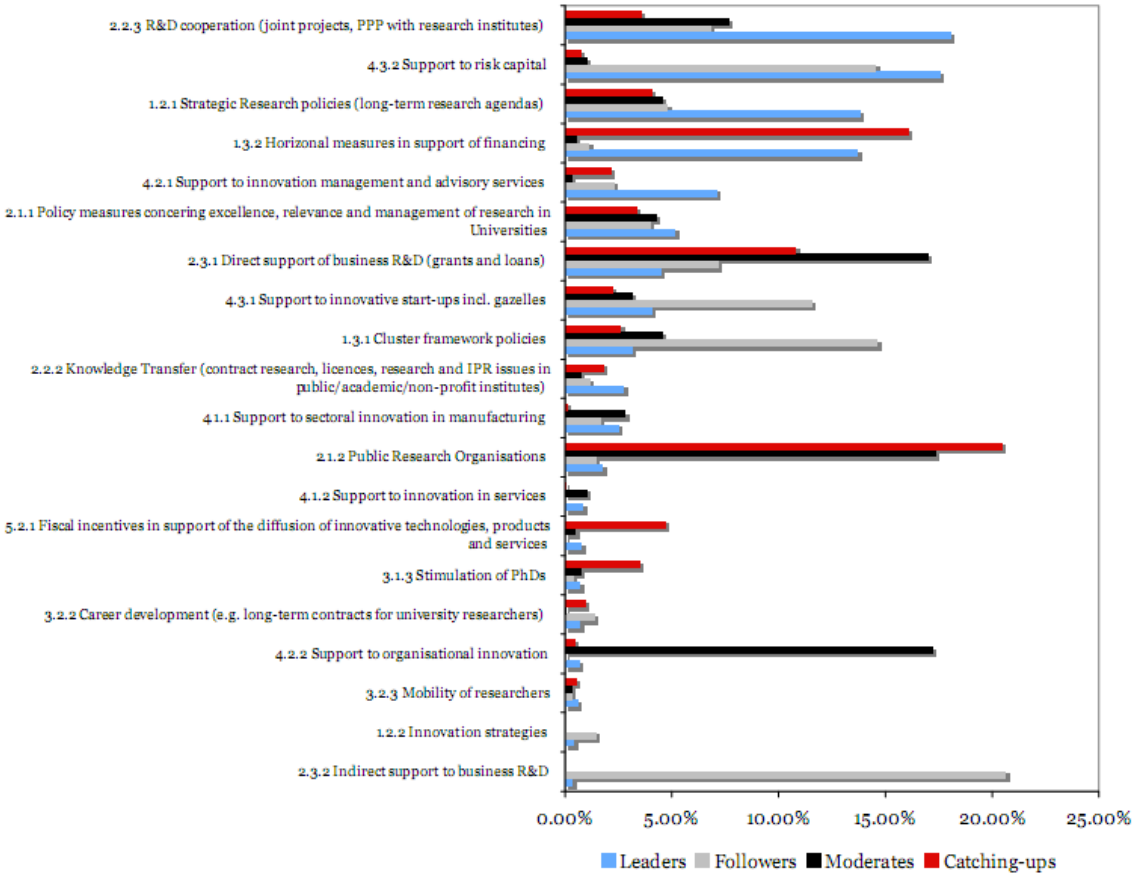
3.3.3 Policy mix according to the level of innovation performance

In Figure 3.5 we observe that R&D cooperation is (and remains) the key policy priority for all EIS groups, especially for those in the Innovation leaders group, where more than 18% of the budget is allocated to the integrated measures aimed at improving R&D cooperation between public/academic/non-profit sector research institutions and enterprises.

When we consider the country groups separately, we observe two distinctive trends: in the Innovation leaders and Followers countries the second most important policy priority corresponds to public support to risk capital, which is likely to be sectoral (cf. Table 3.2) and both centralised and decentralised in design and implementation. In the Moderate and Catching-up country groups the most important measures are those in support of public research organisations followed by the direct support of business R&D, including grants and loans, which according to our characterisations are measures of a sectoral type.

Taking a broader look at the whole picture, the analysis suggests that Innovation leaders concentrate on a smaller number of STI policy priorities than other countries, with four key priorities addressed by more than 20% of their measures. Innovation followers have a more diverse policy priorities pattern with just one policy priority above 20% share of all their measures. Moderate innovators and Catching-up countries seem to have a more horizontal approach with a focus spread more evenly among different priorities.

Figure 3.5. Key policy priorities in terms of budget allocation in the EIS country groups



Source: TrendChart-ERAWATCH database of support measures; analysis Technopolis Group

Recent trends in European national innovation policy mixes

In this section we present main findings from two main sources: the recent Trendchart European Innovation Progress Report 2009 (European Commission 2010b) and the 2010 Annual Report of the Regional Innovation Monitor (Technopolis 2011).

The Trendchart Innovation Progress Report presents a quite detailed analysis of the recent trends in the European innovation policy mix. Analysis in this report builds upon ten years of monitoring innovation policy measures and has formulated the following main observations (for details per country see Table 3.3). It should be noted that this report contains primarily the information which allows us to identify the trends in the sectoral/integrated dimension rather than in the centralised/decentralised one. Below we will be able to fill this gap by considering the information from the Regional Innovation Monitor.

Table 3.3: EIPR 2009 - Summary of recent policy changes in innovation measures

Country	Recent policy trends in innovation measures	Dimension and change
Austria	Integration of several measures to improve efficiency and launch of new programmes notably focusing on university-industry cooperation.	I↑
Belgium	Increase of inward mobility of researchers, new measures to support business R&D and R&D cooperation.	I↑
Bulgaria	Easier access to funding for SMEs and micro-enterprises (part of anti-crisis measure).	S↑
Cyprus	Strengthening of university-industry cooperation and networking between public R&D organisations, private firms and intermediary bodies.	I↑
Czech Republic	Continuation of implementation of the SF OP for Research and Development, no further modifications.	-
Denmark	Mainly R&D measures, included by the ERAWATCH correspondent.	-
Estonia	Modification and continuation of a wide range of measures targeted at support of enterprises: cooperation, incubators, innovative staff, innovation vouchers, cluster developments and mobility of researchers.	S↑
Finland	General increase in public expenditures for innovation, support of innovation in private and public services as well as use of public procurement as a tool enhancing innovation.	I↑
France	Hardly any new measures have been adopted lately, and most of the changes involved the deepening, renewal or modification of existing measures.	-
Germany	Continuous modification of existing programmes rather than developing new initiatives. Increased focus on cooperation between industry and public R&D sector.	I↑
Greece	Modification and continuation of existing measures, new measures started within SF OPs for Innovation and R&D.	-
Hungary	Wide range of measures covering all aspects of innovation and R&D policies, implemented to a great extent within the SF OPs for Economic Development.	-
Ireland	New measure supporting business innovation, innovative start-ups (gazelles) and sectoral innovation in manufacturing.	S↑
Italy	Wide range of measures covering several aspects of innovation and R&D activity, including tax reductions and exemptions.	S↑
Latvia	The programmes are generally aimed at promotion of the knowledge-based economy, i.e. to facilitate knowledge and technology transfer in production in order to ensure development of products with higher value added.	I↑
Lithuania	The new measures reflect the actual start of the implementation of the OPs for the EU SFs implementation cycle 2007-13. They cover a wide range of innovation and R&D areas.	-
Luxembourg	n.a.	
Malta	The new measures cover a wide range of innovation and R&D activities, framed mainly in the EU ERDF scheme 2007-13, and are targeted at stimulating innovation and creating innovation culture among indigenous SMEs.	S↑
The Netherlands	New measures providing support to innovative firms, which have been particularly hit by the economic crisis and face significant decline in turnover in order to enable them to continue their strategic R&D projects.	S↑
Poland	n.a.	
Portugal	Thorough revision of innovation policy with the start of the new programming period 2007-2013, to support 'collective efficiency strategies', i.e. strategies aimed at innovation, notably through cluster, networking, cooperation and training. In mid-2008, in the scope of the Incentive Schemes for SME Qualification and Internationalisation and R&D, were respectively launched, the 'Innovation Voucher' and 'R&DT Voucher'.	I↑
Romania	n.a.	
Slovakia	No new innovation measures have been introduced since the last report.	-
Slovenia	New measures aiming mainly at support of SMEs and innovation services as well as creation of centres of excellence.	I↑
Spain	Modification of existing programmes; new measures aiming at alleviating the effects of economic downturn, mainly with respect to SMEs.	S↑
Sweden	Development and start of sectoral innovation programmes in aeronautical research, vehicle and traffic safety, health and environment.	S↑
United Kingdom	New measures focus on promotion of innovation through national information campaign as well as provision of support in order to ease the negative effects of the economic downturn.	-

Source: Trendchart European Innovation Progress Report 2009, European Commission (2010b).

Based on the main findings of the Trendchart report we can formulate the following statements:

a. ***There is progress in innovation policy in Member States***. Innovation budgets have systematically increased in the period from 2004 to 2008. The observed budgetary evolution suggests that in most of the EU-27 Member States there has been a boost in STI funding over the last five years (sometimes as much as four- or five-fold increase in annual funding terms). Such an increase in volume has been driven mostly by the evolutions in new Member States, yet with a visible contribution from 'leaders-followers'.

b. ***The sustained innovation performance is not a coincidence***. High performance is a result of persistently good governance and good policy. Innovation followers and Innovation leader countries, as identified by the EIS, are primarily the countries with the best governance and policies. They invest in human resources and provide incentives for entrepreneurship and creativity. The innovation policy mix in these countries is relatively stable with the full set of policy priorities covered along both centralised/decentralised and sectoral/integrated dimensions. There are categories of the innovation policy measures of both integrated and sectoral types which have considerable funding shares. The changes in these countries mostly go in the direction of further coordination and partial integration of policy packages towards more effectiveness in implementation. We observe the growing importance of the integrated innovation policy measures in the policy mixes, while preserving in most cases the size and the volumes of well performing sectoral policy initiatives.

c. ***The effects of innovation policy governance are important, but still path dependent and therefore can be slow to change***. Good governance practices contain certain common elements, such as: coordination, priority setting, stakeholder involvement, implementation, and evaluation. These elements are generic for any successful policy mix. Although it is observed that the new Member States gradually incorporate these practices of good governance into their policy making, the progress towards a more effective innovation policy mix is relatively slow. The new Member States tend to introduce a wide spectrum of policies, of both sectoral and integrated type following the example of Innovation Leaders and general EU tendencies. At the same time the sectoral policies in these countries appear to be more successful due to their relative simplicity and ease of management. This factor explains to a large extent the fact that the observable changes in the policy mix of new Member States are mostly visible in introducing and establishing EU-sponsored programmes and the efforts towards improving existing policy implementation practices.

d ***Many changes are driven by the results of policy evaluations, budgetary considerations, and also by changes in countries' policy priorities***. The changes in policy mixes come mostly in the following forms:

- expansion or downsizing the existing policy instruments;
- changing and improving the implementation mechanisms;
- introduction of new policy measures and abolishing the old ones;
- consolidation and regrouping financing for different policy programmes;
- re-distribution of authority between different governance levels.

The 2010-Trendchart report states that over the years most areas of innovation policy intervention were covered in all Member States. Thus we can argue that the period of "extensive" innovation policy mix development is complete. Further developments in national innovation policy toolkits are expected to take place mostly in the area of optimising their governance characteristics. Such a process is already well on its way in Innovation leader and follower countries, which gradually pay more attention to the integrated policy measures and more long-term strategic programmes.

We further "triangulate" our evidence base by considering the 2010 Annual Report of Regional Innovation Monitor "Innovation Patterns and Innovation Policy in European Regions - Trends, Challenges and Perspectives". This report adds to our discussion by presenting evidence of the recent innovation policy mix changes along the centralised/decentralised dimension. According to the 2010 RIM report, there is strong evidence of multi-level governance. There are evident efforts to balance the weight of centralised and decentralised innovation policy initiative. Even in EU-Member States where regional autonomy is high (such as Belgium and Spain) and increasing (such as the new EU-Member States), a number of key decision-making and priority-setting functions remains at national level.

The movements along the centralised/decentralised dimension in different countries are individual and eventually lead to different results. In the surveyed countries there has been a change over recent years towards greater involvement and empowerment of stakeholders (thus more decentralised and likely integrated policy making approach) accompanied at the same time by a lower emphasis placed on centralised policy making towards regions.

Table 3.4 presents the main findings describing the recent trends in the regional innovation policy for a number of European countries.

Table 3.4: 2010 Annual RIM report - Summary of recent policy changes in regional innovation measures

Country	Recent policy trends in innovation measures	Dimension and change
Austria	Recently published Action Plan aims at strengthening the region's overall competitiveness and innovation capacity: the "Innovations offensive Burgenland 2020". Among the main fields of actions are: fostering entrepreneurship and settlement of firms within the region and in selected fields such as environmental technologies, ICT and food industries and fostering cooperation and networks, especially towards partners outside of the region. In Lower Austria, RTDI support is to a large extent jointly developed in the framework of the Structural Funds interventions and tailored to its requirements. In Vienna, definition of key areas: life sciences and medicine, information and communication technology (ICT) and creative industries including multimedia, whereas in Styria, a current emphasis is on ten fields of technology (so-called "Stärkefelder"), which are considered to be of special importance for the region.	CD-, I↑
Belgium	In Flanders policy makers give explicit preference to 'grand projects', 'thematic spear heads' and economic clusters. In Wallonia, there is a continuation of programmes launched in the framework of the previous Marshall Plan (2006-2009) focused on among other priorities on development of human capital, competitiveness poles, business networks, and strengthening scientific research.	D-, I↑
Bulgaria	It is worthwhile to mention that the preparation of pilot Regional Innovation Strategies have not received support from the central government leading to the situation that all innovation measures are co-ordinated at the national level.	C↑
Czech Republic	In Prague, there is a general lack of attention to innovation measures in the current programming period and approval of the Regional Innovation Strategy. In Central Bohemia, innovation is supported through the general support for micro and small entrepreneurship, while Olomouc region has paid more attention to the activities enhancing regional innovation potential especially by supporting innovation infrastructure and development of the cluster initiatives.	CD-, SI-

Country	Recent policy trends in innovation measures	Dimension and change
Germany	Baden-Württemberg focused on scientific excellence, fostering science-industry co-operation (through partnership) and targeted support for young researchers. In Bavaria, a special emphasis is placed on the support of networks and clusters. Nineteen branches and technology fields are identified as being of high importance for the region's future. Berlin adopted thematic focus and for each technology fields a master plan defining strategic goals has been prepared. The innovation policy of Brandenburg is oriented towards the development of specific branches and competences. Bremen's innovation policy is focused on inter-sectoral lead topics which are considered as of strategic importance for the federal state of Bremen. North Rhine-Westphalia concentrates on clustering, networking, and selected areas of knowledge for next-generation innovations.	D-, I↑
Spain	Galicia has adopted programmes aimed at the promotion of activities in the public R&D system and in technological centres coupled with programmes aimed at fulfilling the industry needs. In La Rioja, promotion of clusters in strategic sectors, modernisation and diversification by the incorporation of emerging technologies, knowledge generation and transfer, internationalisation, promotion of environmental culture based on eco-innovation constitute the main policy priorities. Supporting innovation projects in strategic sectors, creation of a collaborative network that allows the identification of business opportunities of high potential is viewed as the main focus on innovation policies implemented in Madrid. For the Canary Islands, knowledge for innovation, human resources, strengthening R&D and innovation capabilities in strategic areas, mechanisms are considered as priorities with the view of improving the productivity and competitiveness in the region.	CD-, I↑
France	Ile-de-France regional innovation policy is focused on collaborative R&D projects (incl. competitive sectors), direct support to business R&D and innovation projects, and support to technology transfer (Regional Centres for Innovation and Technology Transfer – CRITT, technology platforms, Centres for Scientific and Technological Expertise Resources). Emerging policy trends in Nord-Pas-de-Calais include: raising entrepreneurship awareness, attract "high-technologically intensive" investments, creation of innovation in services fund, strong priority to research activities in the fields of rail transportation and health. Lorraine, support to the emergence of innovation platforms, global engineering of complex collaborative project are among the main emerging trends.	I↑
Poland	In Silesia, an array of measures to support the development of industrial and technological parks, business intermediary organisations, financial instruments to support entrepreneurship, internationalisation, modernisation of micro- and small and medium-size enterprises, technology transfer and development of local and regional clusters. More attention is being paid to supporting the existing regional strengths. In particular, plans concern the preparation of the Regional Technology Development Programme (2010-2020).	I↑
Portugal	In Norte, establishment of priority areas, approval of the Cluster and Competitiveness and Technology (based on the French Competitive Clusters model) are among the most recent developments. Similar approach adopted in the Algarve region (e.g. the Knowledge and economy of the sea cluster).	
Sweden	In Mellersta Norrland, the focus is placed on the creation of a number of clusters/innovation system initiatives coupled with ongoing efforts to promote new forms of public-private partnerships. In Västra Götaland, the development of platforms for interactive open innovation in prioritised areas such as automotive/air transport, health/biomedicine, the maritime sector, creative industries and new material is being supported.	I↑
United Kingdom	Policies have tended to include: support for knowledge transfer and collaboration activities between the research base and industry and/or science /innovation parks – often in technology or sector priorities identified as most relevant to the region. Regional innovation policy will undergo considerable changes as a result of the change of government in the UK and its policy responses to the economic downturn.	C↑, I↑

Looking further at the individual observations in Table 3.4 we obtain additional evidence of the increasing role of the integrated policy measures in the innovation policy mixes of most of the European countries. The changes along the centralised/decentralised dimension are mixed and are influenced by additional conditions, both originating in the past and present distribution of weight between the centralised and decentralised decision making. The RIM report also notes the emergence of the 'unbalanced' regionalisation resulting in a variable degree of regional

involvement in innovation policy in different regions of the same country (Spain is a clear example of such a situation).

Recent shifts in innovation policy mix of case study countries

A number of cases analysed below (Section 3.4) constitute a part of the Regional Innovation Strategies in the EU: the VINNVÄXT programme in Sweden, Centre of Expertise in Finland, and the Co-operative Innovation Networks component of the Belgian VIS programme. Emergence and development of these policy measures have been driven by the need to utilise in the best possible way the advantages presented by better clustering and cooperation at regional level.

At this moment the **Swedish policy mix** still contains a large share of sectoral-type policy measures directed at support to sectoral innovation in manufacturing (33% of total funding) and towards research at universities (14,5%). In the process of changing its policy mix the Swedish national strategy for regional competitiveness, entrepreneurship and employment (2007-2013) has put prominently the priorities related to creation of innovation favouring environment and stimulating entrepreneurship. It is specified in the strategy that it is important that the context on a national, regional and local level stimulates innovation and renewal and also that well functioning innovative milieus demand an effective interaction between research, business, public sector and political institutions. And according to the most recent data more than 20% of S&T policy funding is devoted to horizontal and integrated policy categories.

In **Finland** the core of the policy mix is formed by the Research and Technology programmes of TEKES and the Academy of Finland. The majority of Finnish innovation policy instruments is aimed at supporting research in universities and public research organisations, which are mainly sectoral in their design and implementation. An important place is occupied by policy measures targeting dissemination of technologies in enterprises, development/prototype creation, applied industrial research, and promotion of entrepreneurship/start ups. These policies are implemented in both centralised and decentralised way.

In the near future, the innovation policy development in Finland will be dominated by the implementation of the National Innovation Strategy. This strategy puts forward development guidelines for the creation of a broad based and multifaceted innovation policy, to facilitate and promote the development and reform of the knowledge-based competitiveness of the Finnish economy with special consideration of innovation-based regional development. Therefore, we can expect a clear shift in the policy mix towards more integrated policy design and implementation approaches.

Furthermore, in the above examples we see the evidence that in the innovation policy mix oriented at fostering innovation driven growth and competitiveness at the world level, the regional component plays an important role and it is therefore taken up in National programmes.

We can also observe that an effort is made to coordinate and manage some of the regional innovation policy measures at the national level with a goal to ensure better coordination and synergies among regionally-oriented programmes and projects. For example in **Spain**, the INGENIO programme pays special attention to the regional aspect of the innovation policy mix.

Among the 17 Autonomous Communities in Spain there are some dominant regional innovation systems that are defined as the network of organisations, individuals and institutions which determine and shape the generation, diffusion and use of technology and other knowledge. These in turn, explain the pattern, pace and rate of innovation and the economic success of innovation in the region. Having already developed large innovation policy instruments in its regions the Spanish government now has turned its attention towards better coordination of the regional policy mixes. The National RDI Plan designed and managed at a national level, has explicitly included coordination between the central and regional governments in the RDI cooperation area as one of its main objectives.

In the **new Member States** the regionally oriented innovation policies are primarily concerned with the issues of cohesion and convergence, thus putting priority on the less economically developed regions (such as the ROZVOJ programme in the Czech Republic). As the interregional cooperation and coordination in these policies is not prominently present, it can be expected that they perform differently than the regional innovation policies in more developed countries (what is illustrated in the case below).

The **Dutch innovation policy mix** at its current state can be characterized as favouring more sectoral and centralised measures (both based on the share of financing and the number measuresfalling into these categories), which target specific market failures and bottlenecks in the country's innovation system. Yet, in recent years we see the rise of policies in the framework of the programmatic packages, which are designed in a more integrated manner covering different aspects of innovation and production activities in particular technological fields and industries and also regions.

Finally, our analysis of the policy mixes in **Belgium** and **Poland** has provided evidence that the innovation policy toolkits in these countries are relatively stable and primarily focus on improving implementation effectiveness and efficiency. In Belgium the decentralised innovation policy toolkit (i.e. administered at the regional level) is predominantly integrated and decentralised with a strong accent on stimulating R&D cooperation and knowledge exchange between private and public sectors. The Belgian Federal innovation policy contains an important set of R&D stimulating tax policies of the sectoral kind.

The innovation policy mix in Poland is currently formed following the horizontal priorities of the National Strategic Reference Framework which places strong accents on improving competitiveness and stimulating economic growth. As a result the mix as a whole can be characterised as integrated. There is visible regional component present in the way the innovation policies are designed and implemented, yet it should be noted that many regional innovation policy initiatives are developed in the framework of the European programmes while the national measures tend to be more centrally oriented.

The main source of gaining economic competitiveness is seen by the European policy makers in utilizing the synergies between different stakeholders and creation of high performing innovative networks. This understanding is behind the general tendency towards greater involvement of different players via bottom-up approach and greater integration of policy measures.

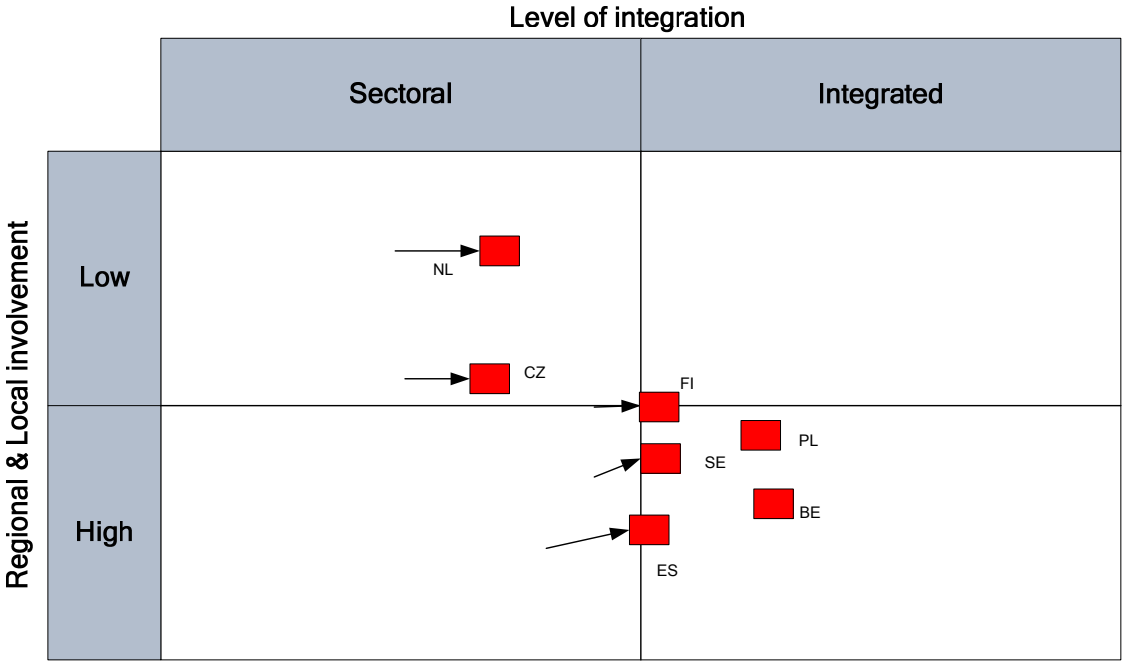
This, nonetheless, does not mean that the successful and well performing sectoral measures are being scaled back. Such instruments are still prominently present in the policy mixes of Sweden, Finland and the Netherlands while these mixes are being developed towards greater integration via, among others, the triple-helix policies. Thus, comparing the overall current balance in the policy mixes of these countries to those of, for example Belgium and Poland, would make them appear less integrated at this moment.

In Figure 3.6 we present a schematic picture describing the current perceived state and policy shifts (as a combination of perceived ongoing changes and future plans) of the national innovation policy mixes in the countries considered in cases.

In the majority of countries included in this study the starting position for their innovation policy mixes is situated in mostly the sectoral half-plain. There is a clear indication of shift towards more integrated policies with greater involvement of different stakeholders. Such tendencies are observed in both more centralized mixes (those of The Netherlands and Czech Republic) and the more decentralized ones (Spain, Sweden and Finland).

In the countries with a strong regional component in the innovation policy mix we observe efforts to achieve a greater degree of coordination between regional innovation system strategies. This is often done by introducing a national priority setting agenda, which provides a common support base to regional initiatives and a platform for their coordination. Such tendencies do not lead to greater centralisation, though, as they in many cases are being balanced by giving more responsibilities and authority to the regions when it comes to implementation of these policies (Technopolis 2011).

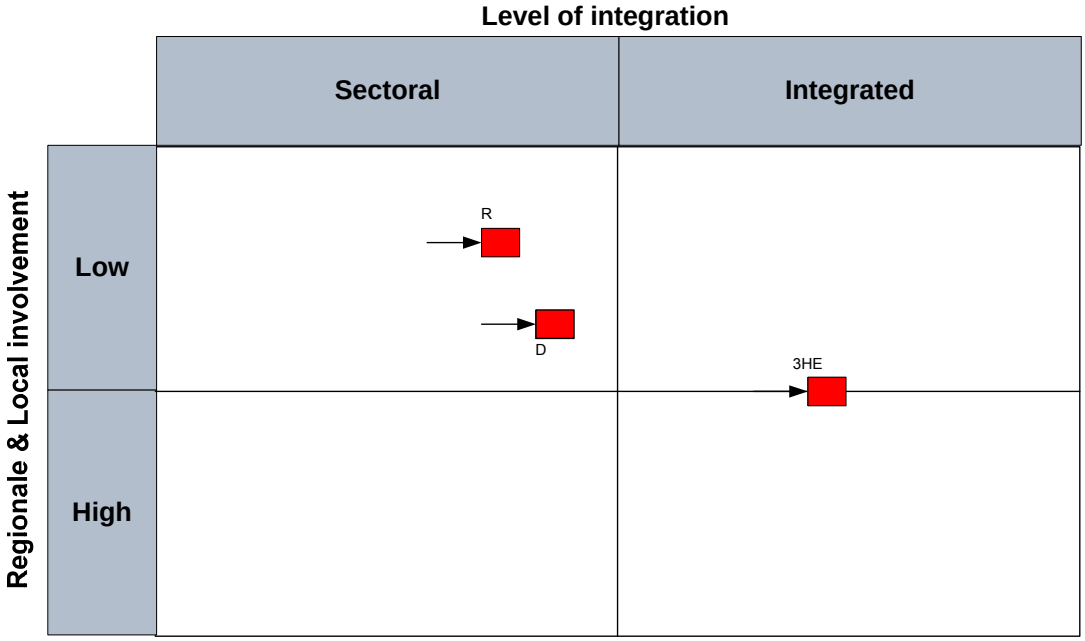
Figure 3.6 Generalised positioning and tendencies in innovation policies by country



Furthermore, in Figure 3.7 we attempt to provide a generalized picture about the observed tendencies in the innovation policy mixes on a more aggregate scale. To do that we have decided to group the policy measures (and the cases) according to a more general classification, where we present three distinctive types of policies: the research policy (R-type), pure innovation policy (D-type), and the policies directed at stimulating cooperation and knowledge exchange among different actors (3H(elix)-type). We find this degree of aggregation optimal for giving us an insight into more general tendencies, while at the same time allowing us in distinguishing separate tendencies in the major components of innovation policy.

These three types of policies have distinctive features, and one common tendency. Being often oriented at one particular type of actors (such as universities, research organisations, firms, etc.), the R- and D- type policies were historically administered in a more sectoral and centralized way. The 3H policies are predominantly the policies, which combine features from both R- and D-type policies, but also have a distinctive multi-stakeholder and multi-objective character, which allows to put them into a separate category. These policies are by nature integrated and have both centralized and decentralized features, depending on their objectives and the configuration of targeted stakeholder groups.

Figure 3 7. Generalized positioning and shifts in innovation policy areas



We can observe that the degree of centralisation in the R-type policies does not change considerably and is likely to keep its centralised character driven by the established funding practices. Regarding the pure innovation (D) policies we observe that it does show some movement in the direction of decentralisation, especially in the area of SME-related policy measures. As this component of innovation policy becomes more demand-driven and competitiveness-oriented, the effort is made to utilise the advantages provided by a greater regional focus in the policy management and delivery.

It is further observed that these policies gradually shift in the direction of the more integrated approach in both design and implementation. This tendency reflects the general attempt among the policy makers to make the innovation policy mix involving a broader circle of stakeholders. The 3H-type policies are also becoming even more integrated as new mechanisms for cooperation and knowledge exchange are being discovered and promoted. Regarding the possible shifts along the centralised/decentralized dimension, it is very difficult to detect a common tendency, as we observe different movements at the level of individual Member States.

3.4 Evidence from case studies

3.4.1 Selected case studies

In the following sections we present the main conclusions from seven case studies selected to obtain a general view at the current innovation policy mix in Europe and emerging or ongoing tendencies and shifts.
The following case studies have been selected:

- Flemish Cooperative Innovation Networks (VIS) – Belgium;
- Support Programme to Dynamically Growing SMEs (ROZVOJ) – Czech Republic;
- Centre of Expertise Programme (OSKE) – Finland;
- R&D tax subsidy (WBSO) – The Netherlands;
- National SME Services Network (KSU) – Poland;
- INGENIO 2010 initiative – Spain;
- VINNVÄXT support programme – Sweden.

More detailed information on each of the case studies can be found in the separate case study report.

3.4.2 Belgium: Flemish Cooperative Innovation Networks (VIS)

Analyzing the recent tendencies in the policy mix, we in general can conclude that the main changes are being made towards better and more efficient implementation of the existing policies, with a trend towards concentration (thus centralization at the regional level) of the executive bodies. In the Walloon and Brussels regions we observe the emergence of some sectoral priorities at the level of policy initiatives.

When looking at regional specific developments we observe the following:
The Federal Government has continued to expand and strengthen the number of fiscal measures in favour of business R&D and innovation, with notably the introduction of a new R&D tax credit. The major changes are described in more detail below. Given the limited scope for action in favour of enterprise level investments in innovation of the Federal authorities this orientation is coherent and responds to a long running critique of the ineffectiveness of fiscal subsidies for R&D and innovation in Belgium.

The region of Brussels-Capital has begun to develop for the first time an innovation policy, through the drafting of a first regional innovation plan as already discussed above. The Brussels-Capital policy-mix is clearly influenced by the specific nature of the urban economy confined to a relatively small geographic space, within which services dominate the regional economy, even if the industrial sector remains present. The policy-mix being developed is based on a sectoral/clustering approach (priority for funding being given to three specific sectors) complemented by a drive to stimulate creation of new 'high-tech' or knowledge intensive enterprises; and an effort to improve the commercialisation of the academic and public sector research base in the region.

The Flemish Government has complemented the already fairly extensive horizontal IWT programme for R&D support targeted at specific bottlenecks in the innovation system and its effort to encourage increased co-operation amongst networks of actors (the VIS projects, BE56) with a number of measures that are more oriented towards enterprise creation and growth. These measures are managed by the Flemish Holding Company, consist mainly of other means of support than subsidies (loans, guarantees, etc.) and are partly financed by private parties.

In Wallonia, the 2005 Priority Actions ('Marshall Plan') has given a new framework for intervention in favour of R&D and innovation as described previously. In 2005, the Walloon

Government decided to allocate an additional appropriation of 270 million Euro between 2006 to 2009 in favour of R&D and innovation. In 2006, the main emphasis has been on implementing this budgetary commitment through specific measures. The key new measure has been the launch of the competitiveness poles (BE_86) described in more detail below.

All three Belgian regions have at their disposal a relatively full set of policy measures. These policy measures are implemented in a decentralized way with some coordination effort at the federal and the inter-community level.

The innovation policy measures in Belgium do not target a specific industry. This definitely holds for Flanders, which has a strong preference for integrated and horizontal policies. As an exception, one can mention the competence poles programs in Flanders and Wallonia, which focus on specific sectors (such as SMEs) or technologies (ICT and medical technologies), although in the implementation stage the policy is realized in a horizontal manner. Furthermore, the federal measures for innovation support consist virtually only of fiscal measures without fixed budget.

In terms of budget appropriations, we see that Brussels Capital and Wallonia/French community have very similar priorities structures in their policy mixes (European Commission (2009b)). In Flanders we observe a larger set of instruments, and a larger share spent on support for innovative enterprises (for example, the VIS program for advisory services, and VC support). Flanders spends less on measures towards improving governance and horizontal policies, yet it has a larger number of measures in these areas.

Box 3.1 Flemish Cooperative Innovation Networks (VIS) - Belgium

The VIS-programme has the following characteristics:
Sectoral/Integrated: Sectoral-integrated
Centralised/Decentralised: Decentralised

The VIS programme is a valorization support program of the IWT. The global objective of the VIS is to stimulate technological innovation in Flemish enterprises, primarily SMEs, by increasing awareness of technological innovation, improving access to technological knowledge and supporting the implementation of knowledge in enterprises. The VIS programme addresses several main aspects of innovation support:

- Collective research (CO);
- Regional Promotion of Innovation (RIS);
- Issue-focused Promotion of Innovation (TIS);
- Thorough Technological Advice (GTA).

The VIS scheme is a substantial measure in the innovation instruments (EUR 129 million on a yearly base or around one quarter of the total Flemish support measures budget in 2009) and has been used as a best practice instrument in Belgium.

The policy measure, which was analyzed in Belgium is the Flemish Cooperative Innovation Networks (VIS). The main objective of this programme is to stimulate cooperation and knowledge

transfer between research organizations, intermediaries and companies. A long-term objective is to increase the competitiveness of SME's by reinforcing their innovative capacities.

Below we present the main results of this case study in the context of the key questions for this study:

a. Current balance in policies

The VIS programme fits well into the current structure of Belgian innovation policy mix, which is predominantly structured around decentralised (at the federal level) and integrated policies.

b. Arguments to justify policies

The programme was designed according to a bottom-up approach as a comprehensive measure, providing regional and thematic stimulation, as well as research budgets. Additional favourable factors were the local regional nature of the policy (thus shorter 'administrative' distance for both the beneficiaries and the policy administrators) and the fact that the Flemish region does have the necessary knowledge capacity available, which provided an extra impulse to public-private cooperation.

c. How can impact of each type of policy be judged

The performance of the VIS measures has been judged positively in several external evaluations (for details see the case description in the separate case studies report). The main advantage of this policy is its ability to target different kinds of participants and activities employing different instruments and their combinations. The companies indicate that the VIS scheme is a good or even perfect match with their needs.

d. Has the balance shifted over time?

As for the recent tendencies in the Belgian policy mix, the VIS programme has undergone certain corrections with an objective of streamlining its implementation and decreasing the administrative burden for both beneficiaries and administrators. The global balance of decentralised/centralised and sectoral/integrated policy approaches in the Belgian policy mix does not exhibit any considerable shifts, which in this case would allow us to consider the VIS programme as an example of a good practice.

e. Arguments to support the shift

As of this moment, the Belgian innovation policy mix does not exhibit considerable shifts. Most efforts are directed towards improving effectiveness and efficiency of the current policy measures implementation.

f. Balance top performers

The elements of the Flemish Cooperative Innovation Networks programme by their design and implementation resembles several other cases in our analysis:

- VINNVÄXT programme in Sweden in the segment of thematic and problem-oriented cooperative research between public and private innovating actors;
- INGENIO programme in Spain, especially the CENIT sub-programme directed at public-private interaction in research;

- OSKE programme in Finland in the context of thematic and regional orientation of cooperating clusters.

All three countries, where these comparable cases come from, can be currently characterised as countries with a predominantly sectoral policy implementation tradition with different degree of centralisation. Two of these countries are Innovation leaders (Sweden and Finland) and one is a Moderate innovator (Spain). Yet as we mentioned above, these countries also show a noticeable shift towards more integrated innovation policy design, and the corresponding cases serve as examples of such a shift.

The current objectives of the program are quite broad, which can be considered to be in line with the broad and bottom-up approach that underlies the VIS-program. To summarize the set of factors contributing to success, one can say that the main advantage of the VIS-initiative lies in its ability to meet the individual needs of participants, which in this case is mostly due to the local regional nature of policy and the fact that the Flemish region does have the necessary knowledge capacity available.

With a certain degree of confidence we can conclude that the total economic effect of the VIS-program in Belgium is likely to be positive. We expect most of the benefits to originate in the fact that the public support for R&D cooperation makes R&D more efficient and effective, extends the number of potential innovations, and contributes to improvement of product quality at firms.

In general, with an emerging trend towards more horizontal and integrated policy implementation in Belgium, the VIS program provides an example of a balanced approach to sectoral policy design and objectives combined with the horizontal integrated approach to implementation.

3.4.3 Czech Republic: ROZVOJ-programme

The Czech National Innovation Policy represents an umbrella approach emphasising the connection between research and innovation, as well as the commercial application of research, the need for quality human resources, and systemic changes within the state administration, including:

- the role of research as a source of innovation;
- the necessary link between research and business so that research results can be transferred into practical commercial applications;
- the need for more active cooperation between the public and private sectors through joint projects and mobility;
- the role of human resources as a basis for innovation processes;
- the need for the state administration to play a more effective role in R&D and innovation.

In the coming years there is going to be no real change in the concept of the policy mix. Rather, progress should be made towards the implementation of the current policy mix and improving performance in the areas, where problems were identified, for example:

- human resources for R&D and R&D capacities;
- cooperation between public research and enterprises;
- commercialisation of R&D results (such as patenting, and setting up spin-offs).

Among the measures directed at improving innovation capacity of Czech enterprises we consider the ROZVOJ programme in support of the dynamic growing SMEs by provision of grants/subsidies to modernise their equipment and technologies. This programme falls into the package of measures toward greater competitiveness and growth of Czech enterprises.

Box 3.2 ROZVOJ Programme to Dynamically Growing SMEs – Czech Republic

The ROZVOJ programme has the following characteristics:
A. Sectoral/Integrated: Sectoral
B. Centralised/Decentralised: Centralised (with some regional focus)

The general goal of the ROZVOJ programme is to stimulate development in regions with concentrated support of the state (i.e. the regions with visible development problems and misbalances). The instruments aim at supporting implementation of new, progressive production technologies and projects with growth potential as well as those contributing to reduction of regional disparities. The current programme ROZVOJ is focused on supporting projects that:

- create technical and economic pre-requisites for increasing flexibility, performance and efficiency of the production process;
- increase qualitative parameters of products;
- increase the number of products or variety of products;
- lead to improved competitiveness of small and medium sized enterprises.

In the period 2007-2013 the programme ROZVOJ supports the following activities:

- acquiring new technology equipment with higher technical parameters and better usability;
- realisation of projects which increase the effectiveness of processes in companies.

Based on two evaluations carried out, it can be indicated that the ROZVOJ programme has achieved its objectives if measured by the increase in value added of the supported companies and by the number of new jobs created. At the same time the evidence about the programmes contribution to innovation support is not convincing.

With respect to the key questions of this study the following can be noted:

a. Current balance in policies

The ROZVOJ programme is clearly centralised and sectoral in design and implementation. In this sense it is an example of the 'mainstream' policy measure in the Czech policy mix, which is also predominantly centralised and sectoral. The policies do allow for regional specifics, which is, nonetheless, centrally determined and/or approved.

b. Arguments to justify policies

It is managed as a part of the national (centrally defined) operational programme which is directed at improving competitiveness of Czech enterprises. In the framework of this programme it has been decided that the support of ROZVOJ is aimed only at certain (22) branches of manufacturing industries.

c. How can impact of each type of policy be judged

The programme did enable the SMEs to modernise their production capacities, increase efficiency, and allowed them to produce improved or new products for the company (yet usually known elsewhere). Therefore, the "innovations" supported by the programme were mostly buying new machinery or technology equipment, not really introducing unique products or even developing new/unique technologies.

In economic terms we may speak of improvement in static efficiency of Czech enterprises, which in the short term provides clear positive effects, but tends to be short-lived as the production inefficiencies get worked out and new sources of growth become needed.

d. Has the balance shifted over time?

At this moment the Czech policy makers have acknowledged the need in more integrated innovation support measures, especially those directed at public-private cooperation. Yet most policies continue to exhibit mostly centralised and sectoral characteristics. To a certain extent such a situation is caused by the fact that the Czech Republic's innovation system still finds itself in the initial development stages, in which we tend to observe more redistributive, and thus centralised and sectoral policy approaches.

e. Arguments to support the shift

Therefore at this moment one can not talk about visible policy shifts along the axes of centralised/decentralised and sectoral/integrated policy approach. There is, nonetheless, the possibility that the Czech innovation system will gradually move from supporting an efficiency-driven economy to an innovation-driven economy.

f. Balance top performers

Compared to the countries, where similar support measures were or are being implemented, the Czech case does not stand alone. Poland's SME services network programme is also targeting SMEs with growth potential. There are the SME support measures in the policy mixes of, for example, Belgium (VIS) and The Netherlands (WBSO starter facility). We note only one and very important difference in this case. Unlike providing grants for equipment purchases by ROZVOJ, the SME-targeting measures in the advanced innovating member states provide financing mostly for purchasing R&D labour or R&D services. Exactly this difference separates the efficiency-driven development from the innovation-driven one.

3.4.4 Finland: Centre of Expertise Programme (OSKE)

The existing national policy mix in Finland is extensive by its coverage. The recent developments are characterised by a general increase in public expenditures for innovation, support of innovation in private and public services as well as use of public procurement as a tool enhancing innovation.

The most actively utilised policy measures include:

- direct subsidies in the form of grants for research projects within thematic programmes;
- support and services to SME's in relation to innovation, co-operation and technology consulting and transfer;
- public innovation in the form of grants, loans, venture capital, and infrastructure supply.

Finland does not apply preferential tax treatment to R&D and innovation however. Companies can tailor an individual mix from the public support schemes and services available to reflect their specific needs and challenges. The country's policy mix maintains an emphasis on the development of the business environment, the creation of an atmosphere favourable for entrepreneurship, stimulating the entry of firms in the market, and support for growth-oriented companies.

Box 3.3 Centre of Expertise Programme (OSKE) - Finland

The OSKE-programme has the following characteristics:
A. Sectoral/Integrated: Integrated
B. Centralised/Decentralised: Decentralised

The aim of the Centre of Expertise Programme is to enhance regional competitiveness and to increase the number of high-tech products, companies and jobs.

The key principles of the programme are:

- to utilise local strategies to meet national innovation policy targets;
- triple helix interaction between academia and the private and public sectors;
- to combine regional strengths and specialisation (bottom-up) with coordination on the national level by a cross-sectoral committee representing ministries, research organisations and industry (top-down).

The case under consideration in Finland is the case of Centres of Expertise Programme. Since its launch in 1994, this policy has undergone several rounds of evaluation. The last round provides a positive general assessment of the programme with the following relevant aspects:

a. Current balance in policies

The positioning of the Centres of Expertise between mainstream innovation policy, which still exhibits strong features of the sectoral/centralised approach and the regional development policies with more integrated features is considered as one of the defining elements of the programme and generally seen as a success.

b. Arguments to justify policies

The combination of regional strengths and specialisation (bottom-up) with coordination on the national level by a cross-sectoral committee representing ministries, research organisations and industry (top-down) is one of the defining elements of the programme and most assessments conclude that this has substantially contributed to the positive outcomes. Another key success factor appears to have been to define clusters that are of sufficient critical mass and link them with smaller scale regional business value chain activities.

c. How can impact of each type of policy be judged

The Centre of Expertise programme (2007–2013) has succeeded in boosting the competitiveness and attractiveness of small localities in particular. It has also enhanced the division of duties between regions, while enabling closer cooperation between enterprises and research institutions working in different regions. Moreover, by eliminating overlaps, the programme has intensified the efficient utilisation of research and innovation activity resources.

d. Has the balance shifted over time?

Regarding innovation governance and policy trends, there are clear signs that Finland has entered a new phase of development. Firstly, there is a move towards a broad based (integrated) innovation policy which challenges the traditional technology and production centred perspective. Secondly, the existing innovation governance system and its structures have been under critical consideration during the last years with more emphasis placed on regional competitiveness and thus more decentralised features of some innovation policies.

e. Arguments to support the shift

Finland's Government has now prioritised understanding why the knowledge and infrastructure developed in Finland has not been taken up and translated into concrete commercial innovations as efficiently as hoped.

f. Balance top performers

Compared to the other comparable programmes in Europe, the Centres of Expertise appear to belong to the set of integrated policies which are currently occupying an important place in innovation policy agenda's. Among such comparable programmes we can name:

- Denmark – DNRF programme;
- The Netherlands – Top Research Schools (Toponderzoekscholen);
- The Netherlands – 'Leading Technology Institutes' (Technologische Topinstituten – TTI);
- Switzerland – National Centres of Competence in Research.

Recent evaluations of these programmes provide a positive assessment of their direct and indirect societal impacts. Similarly to Finland, the current policy mixes in these countries still have a considerable volume of centralised sectoral measures, and the above programmes are considered as important steps in bringing more momentum to the shift in direction of more integrated innovation policy measures.

3.4.5 The Netherlands: WBSO R&D tax subsidy

In order to better address the challenges of the innovation system, the Dutch Ministry of Economic Affairs has renewed and restructured its instruments and their implementation. The aim of the proposed reform of the policy mix is to achieve greater flexibility and customised solutions to meet the needs of businesses.

The new approach also clusters the restructured instruments in two different "packages":

- A "basic package", primarily aimed at SMEs, providing information and advice on, for example, access to the knowledge infrastructure, and financial support in the form of credits, loans and guarantee schemes.
- A "programme-based package" aimed at specific key areas of strategic importance for the Dutch economy. In collaboration with the Ministry of Economic Affairs, actors within a specific key area (industry, universities, etc.) define organisation and objectives of an innovation programme, allocate financial resources, and formulate projects supporting the programme objectives. After approval of the programme, the government provides "tailor made" support, including (co-)financing, with the help of the instruments clustered within the "programme based package".

Furthermore, in reaction to the recent economic crisis, new measures were introduced providing support to innovative firms, which have been particularly hit by the economic crisis and face significant decline in turnover in order to enable them to continue their strategic R&D projects.

Box 3.4 R&D tax subsidy (WBSO) – The Netherlands

The WBSO-programme has the following characteristics:
A. Sectoral/Integrated: Sectoral
B. Centralised/Decentralised: Centralised

The main objective of the WBSO is to promote R&D and innovation in enterprises by reducing the total cost of the R&D labour. It is a fiscal policy measure that subsidizes 42% of the wage costs for R&D employees by reducing wage tax withholdings and social security contributions. For the firm to qualify for the program employees should work on technological R&D activities aimed at the development of new products, processes and software.

Innovating enterprises in The Netherlands spend in total around 5,5 bln euro on R&D each year.

For this study we have chosen to analyse one of the most important innovation policy measures currently in use in The Netherlands, the R&D tax subsidy scheme for the R&D labour costs. The WBSO programme has been evaluated several times by different research groups. Given the aim

of the WBSO, a central question in these evaluations is whether and to what extent the WBSO stimulates companies to conduct more R&D activities (1st order effect) and to become more innovative (2nd order effect). The following conclusions can be drawn from this:

a. Current balance in policies

In general the Dutch innovation policy mix at its current state can be characterized as favouring sectoral and centralised measures, which target specific market failures and bottlenecks in the country's innovation system. With this respect the WBSO programme is a clear example of such a mainstream policy measure managed in the centralised way with a clear sectoral approach (tax subsidy for the R&D labour costs).

b. Arguments to justify policies

This type of measure (fiscal incentive) was chosen to stimulate R&D in firms due to the fact that wage costs form a bottleneck for the take-up of R&D. A fiscal form was chosen so it could easily merge with private spending on R&D. Also the low threshold and generic and broad coverage of a fiscal form fits well with the aim of the measure.

c. How can impact of each type of policy be judged

An evaluation of WBSO in general concluded that WBSO-users use the fiscal advantage fully for R&D and invest own means on top of that. The effect on R&D expenditure depends on the size of companies: effect is larger in small companies. Revenues (extra private investments in R&D) are larger than costs of the act.

d. Has the balance shifted over time?

In the recent years we see the rise of policies in the framework of the programmatic packages, which are designed in a more integrated manner covering different aspects. Such developments, nonetheless, can not be considered as a pure shift due to the fact that most of the existing measures with centralised and sectoral design were left in place and even expanded (for example, the WBSO). Thus we can not talk about noticeable policy shifts along centralised/decentralised and sectoral/integrated dimensions.

e. Arguments to support the shift

In order to better address the challenges of the Dutch innovation system, the Ministry of Economic Affairs has renewed and restructured its instruments and their implementation. The aim of the proposed reform of the policy mix is to achieve greater flexibility and customized solutions to meet the needs of businesses. Similarly to other countries with strong innovation performance, the ultimate goal of these changes is to stimulate improve economic competitiveness.

f. Balance top performers

The R&D tax subsidy policies are present in a number of Member States. Countries such as Spain, Norway, Denmark, Hungary, France, Austria and the United Kingdom are leading the international comparison or have the strongest R&D tax treatment incentives in Europe. The balance of centralised/decentralised and sectoral/integrated innovation policy measures in these countries is pretty divers, what makes us conclude that the R&D tax subsidy measure can be given as an example of a good working centralised sectoral policy, which can perform well under different circumstances.

3.4.6 Poland: National SME Services Network (KSU)

The identified policy objectives tend to be rather broad, although there are signs that the situation is changing. One of the planned initiatives of the Ministry of Economy is to launch sectoral foresight studies, in order to identify sectors with the biggest innovation potential. At the same time existing programmes are evaluated.

Regarding the relative performance of particular policies, it is observed that the existing fiscal incentives are considered a weak form of support. After relatively low interest in the status of the R&D Centre, there are plans to amend the Act on Some Forms of Support for Innovation Activities.
The loans for innovative initiatives targeting small and medium-sized enterprises, which is managed by the Polish Agency for Enterprise Development (PAED), has been criticised, because the commercial banks offer more attractive conditions. Thus this programme is subject to change.

There are also examples of overlapping measures in support of business R&D activities. But in the light of recent frequent changes both in the legislative framework and the innovation policy mix, it is argued by local policy makers that a focus should be on improving the delivery of existing programmes rather than to substantially re-design the innovation support mechanisms.

Box 3.5 National SME Services Network (KSU) – Poland

The KSU-programme has the following characteristics:
A. Sectoral/Integrated: Integrated
B. Centralised/Decentralised: Decentralised-centralised

The goal of the programme is to increase entrepreneurship and the objectives are:

- to increase the availability, range and quality of specialised services offered to enterprises in order to increase the effectiveness of their in-house innovation activities;
- to provide adequate infrastructure to new technology-based firms to facilitate their survival and growth;
- to upgrade innovation-related skills and diffuse new technologies in enterprises.

The National SME Services Network (Polish name: Krajowy System Usług – KSU) is a network of 214 non-commercial organizations (business assistance centres, regional development agencies, associations, etc.) which provide advisory, information, training and financial services for entrepreneurs (mostly micro, small and medium-sized enterprises) and persons intending to start a business activity.

Below we present the main findings of the case study carried out for the Polish National SME Services Networks. As currently evaluations are being carried out in relation to the operational aspect of this measure's performance, we are not able to draw already well grounded conclusions about the economic and societal impact of this policy. Nevertheless we can state the following with respect to the key questions for this study:

a. Current balance in policies

When considering the overall Polish innovation-policy mix, the main activities in this policy domain take place at the level of central government, although several instruments are being administered at the regional level. The National Strategic Reference Framework for 2007-2013 sets objectives of Cohesion Policy in support of Economic Growth and Jobs and constitutes an umbrella for the most important instruments of the Polish policy mix in the field of innovation. As a result the most important instruments have more integrated than sectoral features.

b. Arguments to justify policies

The KSU network is an important part of the national strategy related to the support of SMEs and support for business environment institutions. On the one hand it involves direct support to SMEs (e.g. assistance in technology transfer), on the other it also supports business environment institutions co-financed within other innovation and enterprise policy initiatives (which is an indirect objective).

c. How can impact of each type of policy be judged

The services provided under National SME Services Network improve the innovativeness and competitiveness of the companies to some extent. The services provided under this programme tend to upgrade innovation-related skills and diffusion of new technologies in enterprises. The upgrade of innovation related skills may occur in the case of the KSU consulting. Diffusion of new technologies in enterprises does take place, although the impact is limited.

d. Has the balance shifted over time?

The dominating trend in policy changes is represented by further increases in centralised and integrated policy measures. The consolidation of strategies seems to serve the same purpose. The new instruments that are currently being planned at central level will be aiming at: fostering co-operation, rising the awareness of the importance of innovation, implementation of innovation responding to the social problems like climate change, energy and the aging society.

e. Arguments to support the shift

Policy makers recognise the need to address the important challenges for the national innovation system, among which the most prominent are stimulating and deepening the innovation capacities of the Polish companies and improving science-business relations.

f. Balance top performers

There are numerous innovation policy measures in place which target the SMEs directly or indirectly. Among the cases considered in this study virtually each one of them has SMEs as its target groups. Similarly to what we concluded in the Dutch case, we can state that the SME innovation support is the type of policies which can be implemented along any of the centralised/decentralised and sectoral/integrated dimensions as long as it meets the needs of its target group and is implemented in an effective way. For example, the KSU programme is in general well designed with all the mechanisms in place and the priorities well defined. The main point for improvement lies in implementation, such as the improvement in quality of consultants' services and better coordination with other knowledge exchange initiatives.

3.4.7 Spain: INGENIO 2010 initiative

R&D and innovation continues to be a budgetary priority of the Spanish public policy authorities. In the recent years there has been a shift towards five main directions for R&D and innovation funding:

- Strengthening of the science and technology base: R&D and innovation projects, scientific and technological infrastructure projects;
- Strengthening industry-science linkages by providing support of research transfer projects, increasing the innovation capacity of firms, expanding equipment and infrastructure base in research parks, innovation management and technology transfer;
- Promoting technical research in firms, financial aid for the creation of new firms, investment in private risk capital funds, support to technology centres;
- Development of human resources: financial support to incorporate R&D and innovation personnel into private firms or technological centres.

Box 3.6 INGENIO 2010 – Spain

The INGENIO-programme has the following characteristics:
A. Sectoral/Integrated: Integrated
B. Centralised/Decentralised: Decentralised-centralised

The strategic aim of the programme is to achieve full convergence with the European Union in 2010, in per capita income, employment and the knowledge society.

To achieve the above mentioned objectives, the INGENIO 2010 Initiative focuses its efforts on the following:

- Allocating more resources to R&D&I
- Promoting legislative reform that will encourage R&D&I activities
- Implementing a new system to monitor and evaluate R&D&I policies
- Focusing incremental resources on four strategic actions aiming at support for cooperation among scientists, cooperation between public and private sector, greater involvement of general public in innovation, greater participation of Spanish researchers in European cooperative research initiatives.

The INGENIO 2010 programme is a recent set of policy measures with an established monitoring system to follow and evaluate its progress. With regard to the key questions for this study we observe the following:

a. Current balance in policies

The types of policies pursued in Spain cover all the RDI areas, scientific and technological sectors, enterprises etc. All of them promote policies and initiatives to impulse the innovation in the respective territories and thus regional economic growth. The focus of these centres is mainly regional, based on specific innovation plans and strongly adapted to the needs of the territory, but at the same time they interact complementarily with different policy and territorial levels (national, interregional and international). In general the Spanish innovation policy system is decentralized and integrated, which is also followed in the setup of the INGENIO programme.

b. Arguments to justify policies

The rationale for the development of an INGENIO policy package is the necessity to address the main challenges posed before the Spanish innovation system and also the goal to achieve convergence with the leading innovating states by 2010.

c. How can impact of each type of policy be judged

The impact of the INGENIO programme has not been yet evaluated ex post. Nonetheless there is a comprehensive monitoring system in place, which allows to follow the progress in the policy's implementation. As for now the programme's indicators show positive signs of progress with most of the target values being achieved. There is evidence of strong interest expressed by the private sector in participating in the programmes sponsored by the INGENIO initiatives.

d. Has the balance shifted over time?

There have been recent developments towards more effective and closer coordination of the regional policy mixes and priorities. This can be considered as a shift towards more centrally coordinated priority setting, but balanced by the shifts towards more regional responsibility in implementation. With regards to the shifts along sectoral/integrated dimension, there is evidence of strengthening the integrated policies toolkit in the total policy mix.

e. Arguments to support the shift

These developments go along with the general European tendencies towards greater integrated implementation of innovation policy. Improvement of competitiveness and economic cohesion are also important arguments.

f. Balance top performers

The INGENIO programme represents a large multi-instrument innovation policy which is similar to other national wide-angle policies in Europe, such as the VIS programme in Belgium and Central Innovation Programme in Germany. The common similarity among these programmes is that they resulted in fusion and/or greater coordination among previously independent policy measures. Such an approach can be considered a good example of the shifts toward more centralised and integrated innovation policy implementation and design.

3.4.8 Sweden: VINNVÄXT - programme

The Swedish innovation system can be characterised as having a governance structure with a thin ministerial layer. The authority for implementation is transferred to a complex array of agencies that are responsible for the design of policy instruments.

Most public resources in the Swedish system are concentrated in measures constituting the policy mix incorporating R&D (performed mainly within universities), business development, promotion of foreign direct investments (FDI) and venture capital funding. Therefore, many policy actions are focused on cooperation within triple helix: promotion of R&D and innovation activities in SMEs, pre-seed venture capital funding, and measures to handle the increasing impact of globalisation. In addition to the existing innovation programmes, several new initiatives were introduced in the framework of the research bill on "Research for a better life" and the implementation of the national innovation strategy "Innovative Sweden".

The key measures are grouped into research oriented on the one hand, and market oriented on the other. The measures to create international competitive research environments, increases in the funding of strategic research (life sciences, engineering and sustainable development), as well as strengthening of graduate schools are collected in the research category. In the group of the market-oriented measures we find: improving technology transfer and structures for commercialisation of research, as well as supplying the seed financing through the Innovation Bridge programme.

The most recent actions in these directions include development and start of sectoral innovation programmes in aeronautical research, vehicle and traffic safety, health and environment.

Box 3.7 VINNVÄXT-programme – Sweden

The VINNVÄXT-programme has the following characteristics:
A. Sectoral/Integrated: Integrated
B. Centralised/Decentralised: Fully decentralised

The programme aims at supporting regional innovation systems to make them internationally competitive and sustainable over the long term.

VINNVÄXT is built around a concept where a few selected regional innovation systems receive grants and are regularly evaluated in order to secure progress. One of the guiding principles of the programme is that the regional projects are selected on the basis of a competitive call for proposals. A prerequisite for the programme is the active participation of players from the private, public and research sectors and from the political sphere.

The main focus of funding is on needs-based research and development in support of product innovation, less so process innovation. VINNVÄXT also comprises a number of support activities such as seminars, training/education, the exchange of experience and the extension of knowledge/research.

The case study in Sweden is the VINNVÄXT programme for support of regional innovation systems. The available evaluations indicate that the VINNVÄXT programme was successful in terms of stimulating the long-term development of strong regional innovation systems. In relation to the key questions of this study we can conclude the following:

a. Current balance in policies

Overall, Sweden's innovation policy mix has evolved towards more horizontal policy-making, integrating parts of research and industrial policy into a coherent innovation policy. The development of new instruments such as VINNVÄXT in 2001 was to a large extent based on solutions launched in the early 1990s, which first witnessed the introduction of programmes characterised by collaboration, co-funding, and a generally strong emphasis on decentralisation coupled with accountability and a departure from the sectoral principle that dominated Swedish R&D funding until the late 1980s.

b. Arguments to justify policies

VINNVÄXT seeks to develop world class clusters, support regional innovation systems to make them internationally competitive and sustainable over the long term. Thus, the global objective is the sustainable competitiveness of innovative Swedish regions.

c. How can impact of each type of policy be judged

The international evaluation team concluded in its 2007 review of the programme (VINNOVA 2007) "that the VINNVÄXT programme stands out as a world class national programme" and VINNVÄXT is clearly the dominant broad-based innovation policy measure aimed at the creation of regional innovation systems in Sweden.

d. Has the balance shifted over time?

In the innovation policy mix of Sweden we observe growing importance of the integrated policy measures with a clear accent towards fostering regional competitivens and thus, more decentralised approach to their design and implementation (see also point a.).

e. Arguments to support the shift

The arguments that are put forward are that Sweden needs to build competitiveness based on high value added and high knowledge content in products and services. In relation to this research, development and innovation are central parts of the Swedish innovation policy.

f. Balance top performers

According to the OECD the VINNVÄXT programme has successfully combined an explicit focus on exploiting specific regional comparative advantages, by going beyond high-technology industries to encompass a variety of regional assets and a cross-sectoral perspective, which encourages cross-fertilisation among activities. This programme has its counterparts in Germany (Innoregio) and Finland (Tekes Technology Programmes). It also served as an inspiration for the Scottish Innovation System. Our general observation is that the regional innovation cluster programmes are mostly part of the policy mix in the leading innovation countries with well established governance tradition and experience in implementing the integrated policy measures at the national level.

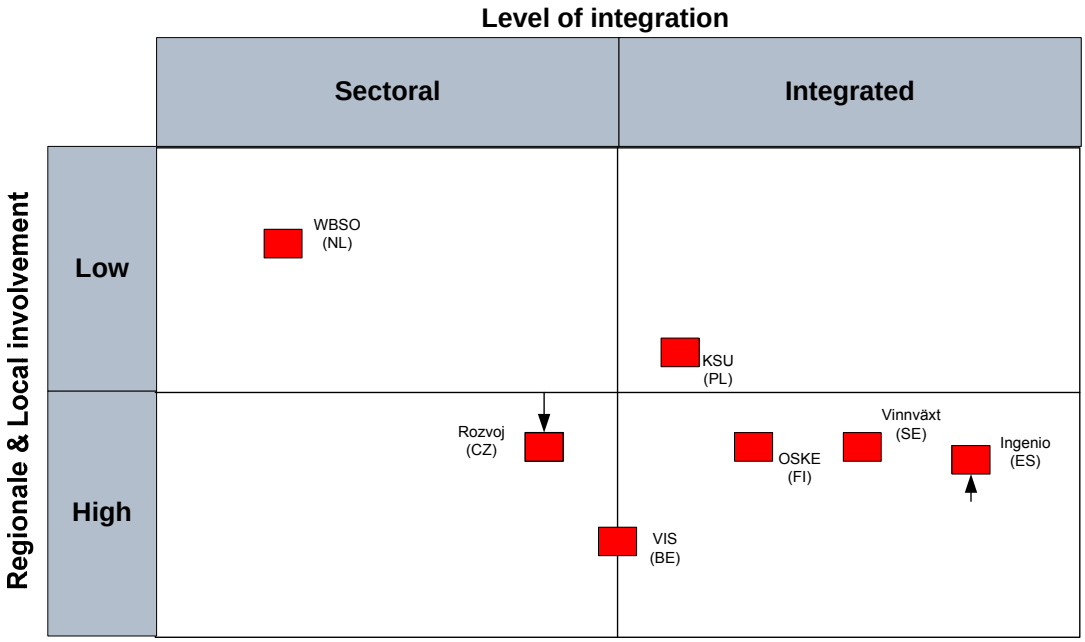
3.4.9 Positioning of and tendencies in the selected case studies

In Figure 3.8 we present a schematic overview of the observed positions and tendencies in the policies examined in the cases, focusing on centralized/decentralized and sectoral/integrated dimensions. This positioning has a qualitative character, thus the relative location and the distances among the case are chosen arbitrarily. More details on the case studies can also be found in the Annex.

One can observe that most of the considered cases present the policy measures, which are relatively stable in their design and implementation. Two cases, nonetheless, have been adjusted over time to improve their effectiveness. The ROZVOJ programme in the Czech Republic introduced as a policy with a centralized character in the beginning, has been modified to include and put more weight on decentralized elements. At the same time, the initially decentralized

programme INGENIO in Spain has set up more coordination mechanisms and started shifting towards more centralized implementation without yet shifting completely to another quadrant.

Figure 3.8 Relative positioning of individual innovation policy cases



3.5 Conclusions

At the European level we see that recent policy prioritisation programmes developed by EU-Member States put a strong accent at improving competitiveness and stimulating economic growth through more and better innovation. The policy toolkits devoted to achieving these objectives contain both sectoral and integrated policies. We observe that there is more and more attention paid to stimulating R&D cooperation, knowledge exchange and commercialisation as the means to increase the competitiveness of European enterprises.

Against this background the following conclusions can be drawn in relation to each of the key questions for this study regarding the innovation policy domain:

a. Current balance in policies

At the EU-27 level we observe two distinctive patterns. In countries that are good innovation performers there is a relatively higher weight put on policy measures directed at improving the R&D cooperation between firms and public research institutions, better commercialisation and valorisation of knowledge. In most moderate innovator countries more importance is placed on measures directed at stimulating R&D at SMEs and increasing their absorptive capacity (being more prominent in new Member States). The former set of policies is primarily integrated in their design and directed at involving a wide circle of stakeholders, while the latter policies are often administered in a more sectoral manner with a narrower set of involved players.

We observe that the innovation leaders concentrate more on a smaller number of innovation policy priorities than other countries, and with a clear accent on a several strategic policy priorities in most cases directed at better utilisation of public-private R&D collaboration. Innovation followers have the most dispersed policy mix priorities in a clear attempt to combine the strategic R&D cooperation and cluster policies with more market and enterprise-oriented measures. Moderate innovators and catching-up countries appear to set their priorities closer to enterprises with the focus spread more evenly among different priorities. In the group leading innovating countries and innovation followers in considered in our cases set, we observe three states with a strong decentralised regional component in their mixes (Finland, Sweden and Belgium) and one relying on the centrally administered policies (Netherlands).

From the cases for the moderate innovating countries, such as Czech Republic, Poland and Spain we observe that the regional factor in their innovation policy mixes plays a visible role at different levels and definitely at the level of management and delivery of policy measures. The initial policy design and priority setting often takes place in a more centralized way, with an exception of Spain, where the policy priority setting role of regions is rather strong.

Among the observed cases we can also distinguish two additional types of policy measures: the 'mainstream' established measures corresponding to the current balance in the policy mix (such as the Dutch WBSO and Belgian VIS), and the 'policy shift' measures, representing new policy designs and driving the shift itself (INGENIO in Spain, VINNVAXT in Sweden, and ROZVOJ in Czech Republic).

b. Arguments to justify policies

The priorities for different innovation policy measures in Member State are taken up in the National Innovation Programmes. In the way the states place accents on one or another priority we can observe two distinguishable patterns. In richer and more developed innovation leader and follower countries much attention is paid to increasing very competitiveness in the world market by realizing advances in the industrial R&D development, commercialisation, and the diffusion of technologies. In the moderate innovator countries, which just recently have established the basis for their innovation policy mixes, we see a clear focus on stimulating innovation and commercialisation at SMEs (for example in Bulgaria, Czech Republic, Estonia, and Slovenia) and improvement of own R&D capacity with a goal to reach a higher level of their innovation potential.

Finally, another important direction for the future development of innovation support policies in many EU countries (regardless their innovation performance), is to continue to take steps towards improvement of existing policy measures and improving efficiency of their implementation.

c. How can impact of each type of policy be judged

The evidence from the case studies shows that in addition to policy design, the quality of policy implementation plays an important role in determining its impact. For example, two cases with mixed evidence of success both come from new Member States (Poland and Czech Republic) that are moderate innovators. The policy evaluation results point out that the policy design and their objectives were well positioned and formulated. Yet shortcomings at the implementation stage

have led to the situation where not all policy objectives were achieved. Among the main sources of such shortcomings we can name the lack of coordination with other policies (in Poland) or too much attention paid to one aspect of the policy measure while neglecting others (such as in Czech Republic).

The innovation policy measures examined in cases for innovation leaders and followers come up with mostly positive results, showing the signs of progress and effectiveness in achieving their objectives (Cases from Sweden, Finland, Belgium and Netherlands). It became evident that the policy measures, which have proven their effectiveness, maintain their position regardless the general shifts in policy orientation. In such cases, regardless the general move towards more integrated policies, good sectoral policies are able to maintain their position.

d. Has the balance shifted over time?

There is an observed general shift in innovation policy mixes towards more integrated and centralised policy design and implementation. These tendencies are observed both in the funding data for different policy categories at the European level and confirmed by the findings from the case studies.

The policy measures directed at the Research sub-domain exhibit a visible shift towards more integrated approach to their design and implementation. The same holds for the pure innovation (Development) policies. The policies directed at synergies and cooperation (so called Triple Helix policies) already being integrated show some tendencies towards more coordination in policy design while keeping implementation decentralised in order to achieve greater synergies among existing measures in different regions.

For the Innovation leaders such a shift is represented by the growing importance of the integrated policies towards support to innovative (regional) clusters and cooperation between public and private institutions. For both the innovation followers and moderate innovators the current policy mix shifts include expansion of the policy measures towards the innovative SMEs support, which includes a wide range of services and cooperation opportunities with different agents. Furthermore, we can observe that the new Member States acknowledge the need to pay special attention to improve the effectiveness and the efficiency of their policy implementation.

e. Arguments to support the shift

In their drive for greater competitiveness of European economies the governments have introduced reforms of the policy mix (mostly via their National Innovation Programmes) to maintain and expand their R&D capacity, achieve greater flexibility and customized solutions to meet the needs of businesses, and thus to speed up the process of bringing innovation to the markets.

Similarly to other countries with strong innovation performance, the innovation leaders and followers pursue an ultimate goal of improving their economic competitiveness. Moderate and catching up innovators work towards development of fully functional innovation system and increasing effectiveness of own innovation policy instrumentaria.

f. Balance top performers

The Innovation leader countries and innovation followers show a more strategic approach to changing their policy mix. They concentrate on small set of main policy measures with a broad reach achieved by the greater degree of integration and, where necessary, using advantages of more decentralised policy design and implementation components. Many of the recent changes in these countries were made towards optimisation and integration of policy mechanisms (most prominently in Austria, Finland, Germany, and Belgium). Furthermore, the steps to promote more industry-science collaboration via more integrated and decentralised measures among other benefits result in greater variety and accessibility of support to research and innovation.

4 Transport policy practices in EU-Member States

4.1 Introduction

Before addressing policy practices in EU Member States we shortly address the framework used. We define and describe the various types of policies and introduce possible means of measuring the impact of transport policies.

Sector-oriented versus integrated policies

Transport normally is the result of economic or social activities, like production, consumption, education or recreation. Policy interventions in the domain of transport are therefore always directly or indirectly connected to such underlying socio-economic activities. This automatically implies that transport policy interventions in many cases (also) derive from policy goals on other domains and thus may be perceived to be of an integrated nature; they may for instance be geared to stimulating economic development.

At the same time increasing mobility is meeting its limits. Fast transport is cherished, but not when it results in behaviour that affects the health of others. Growing mobility is a sign of welfare, but usually also implies that more energy is consumed, more greenhouse gas is emitted, more noise is produced and more infrastructure is needed, sometimes at the detriment of the natural environment and thus negatively affecting welfare.

This implies that there is an (increasing) interrelation between transport policies and other policy domains, like (regional) economic development, health and safety, environmental protection, fiscal policy, security etc. In transport policy documents worldwide one may find this interrelation translated in such a way that objectives in these fields are taken into account: accessibility of urban centres, regions; sustainability of transport; safe and secure transport; charging the user for external costs of transport (polluter pays principle), etc. This interrelation between transport and other policy domains makes it even more important to clearly distinguish between the different types of policies: the primarily sector-oriented policies and the primarily integrated transport policies.

Regarding transport issues we will use the following distinction in this study:

- ***Sector-oriented transport policies*** are policies that in their objective are primarily focused on the functioning of the transport 'market', e.g. by increasing transport capacity, improving capacity utilisation and/or improving the quality of transport operations (be it private or public transport). If there is a prime focus on a transport objective, the delivery will also focus on transport sector instruments.
- ***Integrated transport policies*** are policies that in their objectives are not only focused on the functioning of the transport market, but **also** have clearly described objectives derived from other policy domains, such as environmental protection or regional development. This may result in instruments from such policy domains also being used in the delivery of the policy.

Crucial in the distinction is the question whether there are clearly described **non-transport objectives** in relation to transport policy measures.

Transport policy areas

Apart from the above distinction in types of policies, also a distinction needs to be made in terms of specific transport policy domains. Broadly speaking five policy areas can be found in the field of transport:

1. Policies relating to the ***provision of transport infrastructure*** (supply).
   A major task of Ministries of Transport or Public Works is to ensure that the transport infrastructure has sufficient capacity and quality to cater for demand. This task relates to all kinds of transport infrastructure, including publicly and privately provided/operated transport infrastructure. Transport policies cover all kinds of infrastructures, such as road links; railway links, passenger and freight terminals; waterways, sea routes, sea ports and terminals; airports and air routes; and pipelines. Typical policy domains in this respect are network planning, infrastructure development (construction) and maintenance of infrastructure.

2. Policies relating to ***the optimisation of the use of transport infrastructure.***
   A separate set of transport policies relates to the optimisation of the use of transport infrastructures. The idea behind such policies is that, by ensuring optimal use of the existing capacity, the need for expansion of infrastructure may be postponed, be it for some time or indefinitely. These policies may relate to utilisation of roads, but also of railways, shipping channels, runways, etc. Instruments in this policy field are for instance traffic management, slot allocation, priority rules, etc.

3. A third set of policies is related to the ***management of transport demand.***
   Such policies differ from those described in the paragraph above as demand management policies **actively** aim at stimulating, spreading or reducing transport demand. The need for such policies can result from various situations, like a lack of finances to increase infrastructure capacity, a temporary lack of infrastructure capacity, the wish to increase social inclusion of vulnerable groups in society or from environmental concerns (noise, pollution). Typical instruments are pricing measures (road pricing; discounts on public transport fares for elderly or outside rush hours), provision of alternatives for travel (e.g. working from home using IT means) or regulation of transport (e.g. introduction of time windows for starts and landings).

4. A fourth typical area relates to the ***market regulation.***
   Market regulation policies typically relate to public transport services like those of high speed trains or conventional trains, trams, buses, taxi's or airlines, but may also relate to auxiliary services, such as piloting of vessels. The role of governments in these areas is to make sure that the market (supply, price setting) functions as intended and that the interests of all parties (providers, users) are safeguarded.

5. The fifth type of policies relates to ***operations*** of the transport fleet.
   The aim of such policies usually is to safeguard public interests in the field of health, safety, security, etc. Public interests may result in traffic regulations on speed limits and soberness of vehicle drivers, maximum levels of carbon dioxide emissions by the transport fleet, or public service obligations regarding public transport services to peripheral regions.

4.2 Transport system performance in EU Member States

4.2.1 Measuring the effectiveness of transport policies

The effectiveness of policy is normally measured using indicators related to the policy goals. Transport policies are no exception to this. Given the distinction in types of transport policies, the indicators may purely relate to the transport sector itself or also to the other policy domains. In measuring the effectiveness the following types of indicators will be used:

- *Indicators for provision of infrastructure*
  The provision of infrastructure can be measured in quantitative and qualitative terms. When using quantitative terms the measurement may be in terms of numbers (of km, of airports, of seats, etc) in relation to e.g. population, land area or size of the economy. Qualitative indicators also take into account the status of the infrastructure; such indicators are usually not available for many countries in a consistent manner.

- *Indicators on the utilisation of infrastructure*
  The utilisation of infrastructure can be measured in absolute terms, using the number of vehicle or passenger km per unit, or in relative terms, relating actual utilisation to maximum capacity (as a percentage). In case such indicators are available at country level, they usually relate to the total road, rail or waterway network.

- *Indicators for transport demand*
  Indicators for transport demand measures are less straightforward, as they depend on the specific reason for the policy measure. For instance, if the policy is aimed at spreading demand over transport modes, the modal split of transport demand can be a good indicator. Other purposes of demand management lead to other indicators, such as the degree of internalisation of congestion or external costs (in case of road pricing), the percentage of travellers on fare discounts (in case of preferential treatment), etc..

- *Market regulation*
  For market regulation no commonly used indicators are available; these will depend on the goals of the policy.

- *Indicators on operations*
  Indicators on operations may take different forms, such as the allowed vehicle speeds or emissions, the percentage of offenders, the percentage of target groups being served by public transport, etc.

Although theoretically indicators can be defined, a comparison of 27 EU Member States still requires that these indicators are available for all countries and are collected following a common methodology. As this is not the case for several indicators, we will limit the measurement of effectiveness of transport policy to certain aspects only.

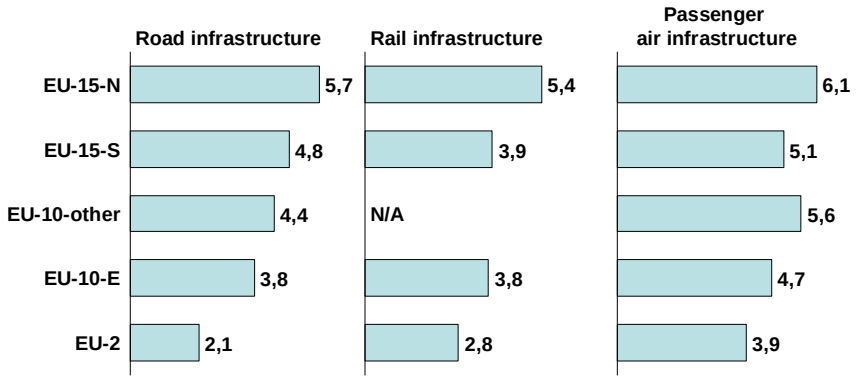
Measuring the effectiveness of transport policies is challenging. In essence, the effectiveness of policies depends on the actual state of transport and mobility (where are we now) and the speed of change of the economy and the transport sector (if you have to come a long way, the absolute level does not always give the right indication). In interpreting selected indicators such factors need to be taken into account.

4.2.2 Infrastructure quality assessment

Overall picture

Firstly, we will look into the overall quality of infrastructure as perceived by international experts. From the Global Competitiveness Report 2009-2010 issued by the World Economic Forum it follows that there are clear distinctions between (groups of) European Member States regarding the level of quality of their infrastructures. Figure 4.1 summarizes this data.

Figure 4.1 Quality of infrastructure[13].



Source: World Economic Forum, Executive Opinion Survey 2008, 2009[14].

The general picture emerging from this qualitative assessment is that the Northern EU15 Member States score better than Southern EU15 Member States, followed by the Eastern EU Member States; Romania and Bulgaria (EU-2) score lowest.

[13] Defined as: How would you assess … infrastructure in your country? (1 = extremely underdeveloped; 7 = extensive and efficient by international standards).

[14] EU-15-N: Sweden, Finland, Denmark, United Kingdom, Ireland, Netherlands, Germany, Belgium, Luxembourg, France, Austria
EU-15-S: Italy, Spain, Portugal, Greece
EU-10-E: Poland, Hungary, Czech Republic, Slovak Republic, Estonia, Latvia, Lithuania, Slovenia
EU-10-other: Cyprus, Malta
EU-2: Romania, Bulgaria

These scores generally reflect differences in economic prosperity. The stage of economic development is strongly related to the expansion and quality of the transport networks, in particular of roads and railways. For instance, Antti Talvitie[15] has described the way in which road networks and road administrations develop. In his view infrastructure networks tend to develop gradually in the early stages of economic development; this network growth accelerates when demand for transport services increases faster. At more advances levels of development the growth rate of the network generally declines and may even come to a standstill, meaning no further expansion of the length of the network. At this stage the emphasis may rather be on the quality and utilisation of the network than on the network length. During these later stages the role of the road administration changes as well, from a public works type of organisation towards an organisation that directs others, with for instance a larger role for regional governments.

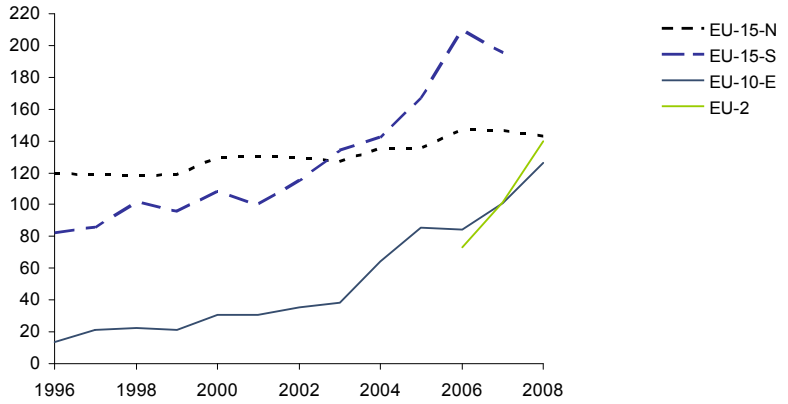
Such a pattern of infrastructure development is more or less reflected in the scores on the networks shown above, as well as in the investment data presented below.

Road infrastructure

With respect to the quality of the **road infrastructure** the northern old[16] Member States score better than southern old Member States, while the 2004 entrants score better than EU-2. The latter difference is clearly related to the lower levels of economic welfare in these countries; at the same time the 2004 entrants have been able to benefit already some time from the EU investment funds. Figure 4.2 shows road investment levels for groups of countries. The difference in investments (and therefore growth rates) between the groups of countries more or less reflects the above stages: high growth in EU10East and EU2, high but decreasing growth in EU15South and stable growth in EU 15 North.

[15] Antti Talvitie, International experiences in restructuring road sector, Transportation Research Record, Volume 1558, 1996, p 99-107.
[16] The Member States of the EU before the big accession of the 10 new countries in 2004.

Figure 4.2 Road infrastructure gross investment spending at current prices and exchange rates (€/inhabitant).



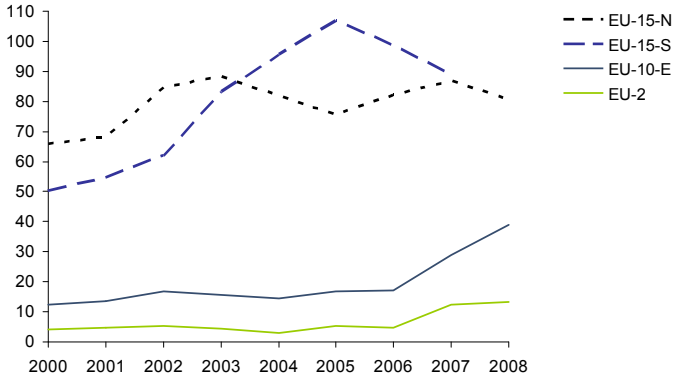
Source: OECD International Transport Forum; Eurostat. Northern Europe: data not available for the Netherlands; Southern Europe: data for Greece unavailable

Rail infrastructure

For **rail infrastructure**, a similar picture emerges, although in this case the difference between the EU15South and the EU10 is almost absent (see figure 4.3). This may be explained by the relatively strong rail heritage from the communist era in the latter group of countries.

All EU15 Member States (in both Northern and Southern Europe) have recently shown a strong development of intercity and high speed rail connections, as reflected in the investments levels in the figure below. The data on investment levels show that in the case of railways there is a gap in investment between the EU15 and the EU12. It may reflect a preference for road investments over rail investments in rapidly developing economies.

Figure 4.3 Rail infrastructure gross investment spending at current prices and exchange rates (€/inhabitant).



Source: OECD International Transport Forum; Eurostat. Northern Europe: data not available for the Netherlands; Southern Europe: data for Greece unavailable

Passenger air infrastructure

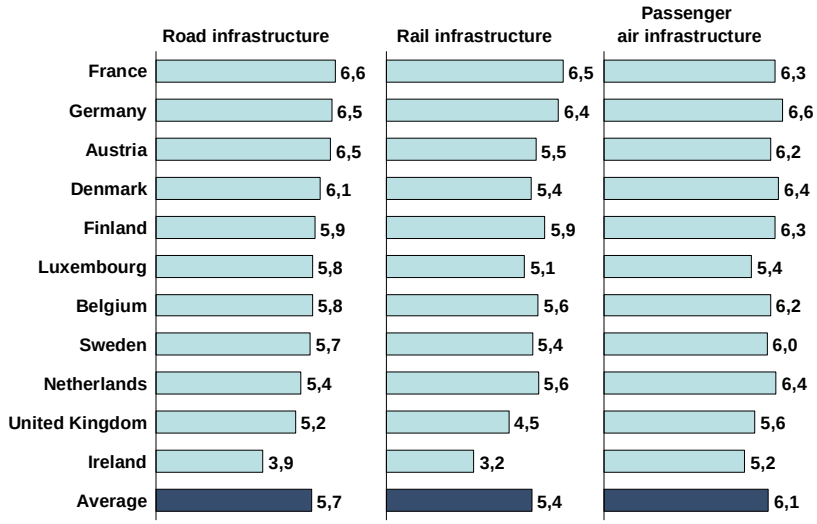
Regarding **passenger air infrastructure** all groups of countries show a higher quality than for road or rail infrastructure (see figure 4.1). This may reflect the fact that necessary investments in air networks are limited compared to those needed for road and railway infrastructures; moreover the investments can partly be borne by commercial operators. Also passenger air infrastructure tends to get high political priority at lower stages of economic development, for accessibility/connectivity and other reasons, like image.

Figure 4.4 gives more detailed insight in the performance of individual countries.

For EU 15 Northern Europe Members States it appears that:

- France and Germany stand out for both rail and road infrastructure. Both countries have well-developed motorway networks and the availability of several high speed rail connections;
- Ireland is clearly lagging behind for both rail and road, with a score even below the southern European group;
- The UK also has a relatively low score for rail infrastructure. This could be the result of all problems around the privatisation of the network in the 1990s.

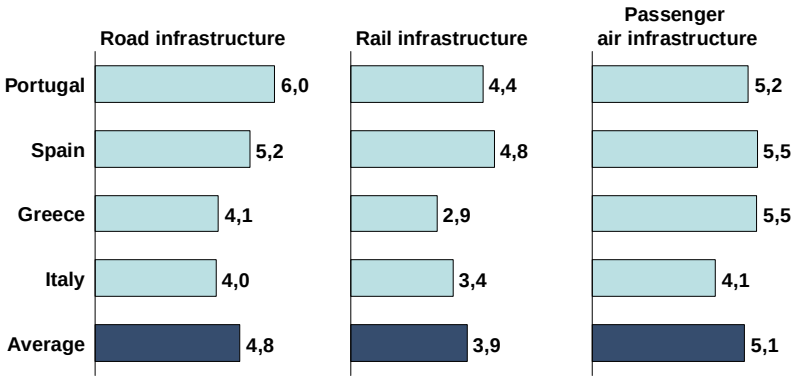
Figure 4.4 Quality of infrastructure. How would you assess … infrastructure in your country? (1 = extremely underdeveloped; 7 = extensive and efficient by international standards).



Source: World Economic Forum, Executive Opinion Survey 2008, 2009.

Figure 4.5 below shows the country scores for the EU 15 Southern Europe Member States.

Figure 4.5 Quality of infrastructure. How would you assess … infrastructure in your country? (1 = extremely underdeveloped; 7 = extensive and efficient by international standards)



Source: World Economic Forum, Executive Opinion Survey 2008, 2009.

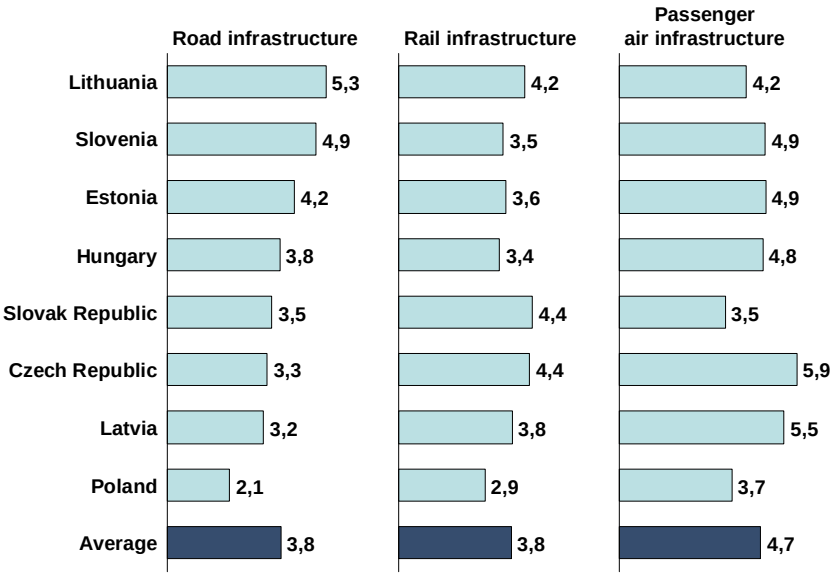
The country scores show that:

- Greece and Italy are behind the others, even below the average score for the new Member States for rail. For Italy this can not be explained by a low investment level, which has been higher than in the rest of the Union over this period;

- Portugal scores very high on road infrastructure, even above the average for the EU 15 North Member States. This is due to the large investments made, funded for the most part from the EU-Structural and Cohesion Funds. Italy has been doing much less investments during most of this period, which is reflected in its score for quality of road infrastructure.

Figure 4.6 shows the scores for EU12 countries.

Figure 4.6 Quality of infrastructure. How would you assess … infrastructure in your country? (1 = extremely underdeveloped; 7 = extensive and efficient by international standards).

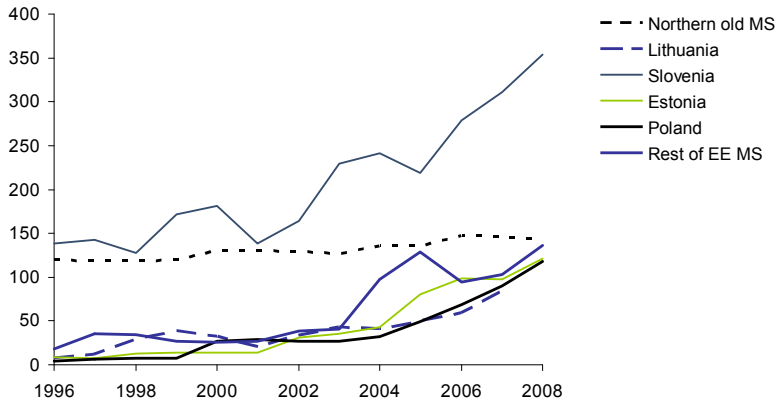


Source: World Economic Forum, Executive Opinion Survey 2008, 2009.

Within the new Eastern European Member States, amongst others stand out:

- Some countries score relatively good on some infrastructures, especially for road infrastructure and to a lesser extent for airports; none of the EU12 Member States scores high on all infrastructures.
- For road infrastructure, the investment figures cannot explain the good position of Lithuania and Estonia nor the particularly low score for Poland. The very low number of motorway kilometres in Poland has for sure influenced this low score for Poland. The position of Slovenia has been largely influenced by high investment levels in the recent period.

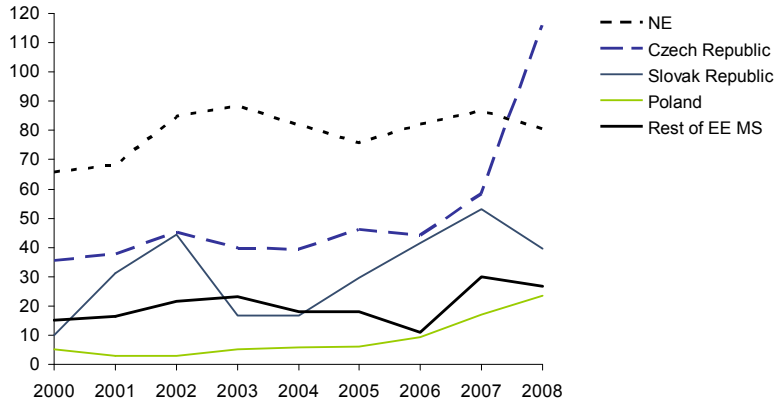
Figure 4.7 Road infrastructure gross investment spending at current prices and exchange rates (€/inhabitant).



Source: OECD International Transport Forum; Eurostat. Northern Europe: data not available for The Netherlands

- For rail, investment figures are mainly in line with the relative scores on quality. The Czech and Slovak Republics invest more than the Eastern European average, but less than the Northern European level. Poland is lagging in investments and has a low quality score for rail as well.

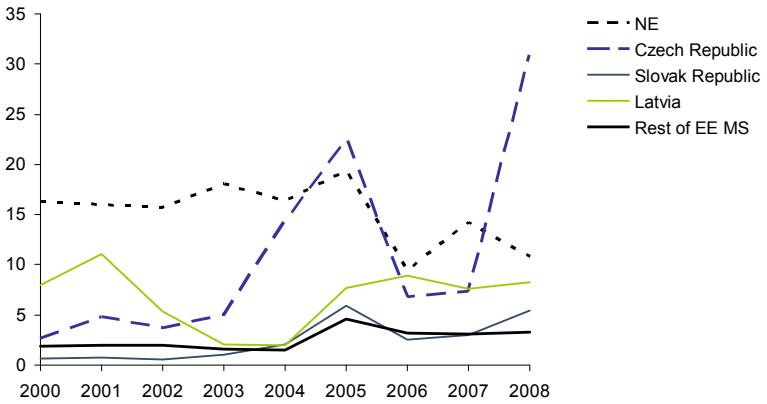
Figure 4.8 Rail infrastructure gross investment spending at current prices and exchange rates (€/inhabitant).



Source: OECD International Transport Forum; Eurostat. Northern Europe: data not available for the Netherlands

- For airports, the Czech Republic and Latvia score well. Per capita investment levels have been higher in these countries than in the rest of Eastern Europe. The Slovak Republic has a low quality rating for its airport infrastructure; this cannot only be explained by much lower investment levels than elsewhere in the region.

Figure 4.9 Airport infrastructure gross investment spending at current prices and exchange rates (€/inhabitant).



Source: OECD International Transport Forum; Eurostat. Northern Europe: data not available for the Netherlands

4.2.3 Transport system performance in the EU-27

Next we turn to the demand side. To assess performance in this area "traditional" transport indicators like number of tonnes transported on the network per road or rail, or the number of traffic causalities will be used. More sophisticated indicators of accessibility have been developed in the past, e.g. the Accessibility Problem Index[17], but this index is presently being improved and will not be presented here.

In interpreting the indicators it should be kept in mind that not only the absolute level of the indicators, but also the trend in the value of the indicators is important. It may be that some less developed countries have adopted an effective strategy resulting in large changes in transport system performance, even though the absolute performance level is still below the EU average.

The performance of the transport system is traditionally measured by a number of indicators. The most relevant indicators, for which time series will be presented, are provided here:

- Freight transport: transport relative to the size of the different networks;
- Passenger transport: passenger kilometres (pkm) traveled relative to the size of the different networks;
- Car ownership levels relative to the number of inhabitants;
- Road accidents and fatalities relative to population.

These performance indicators are presented for individual countries. In line with the above description we distinguish also between the EU15 and EU12 countries separately.

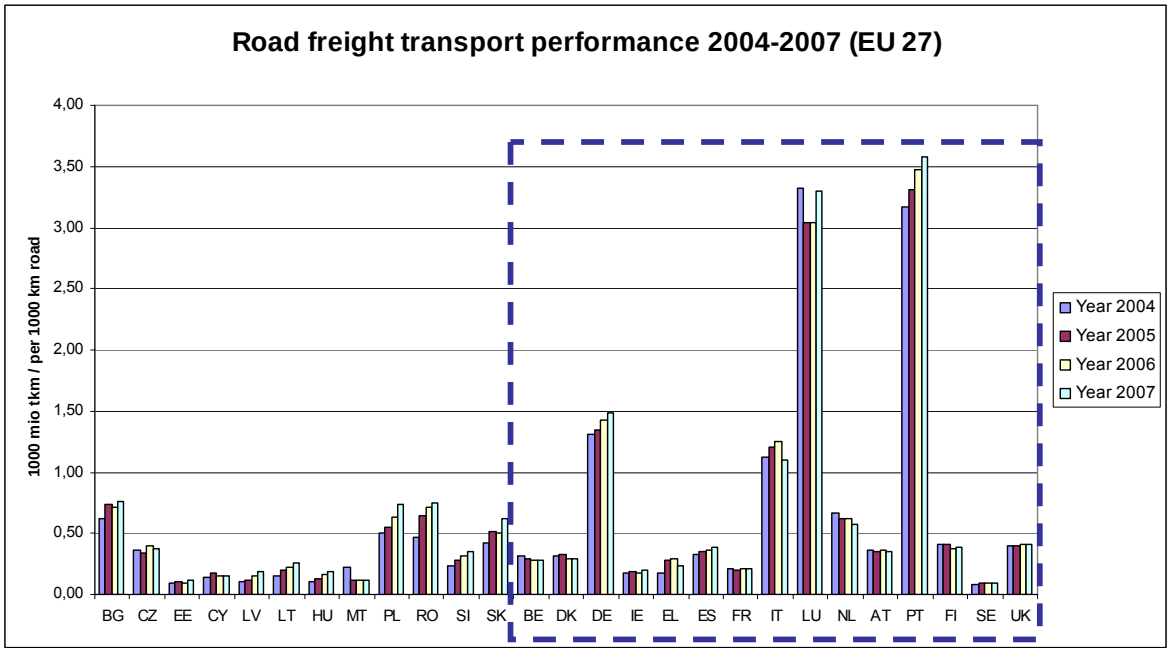
[17] See: ECORYS, Spiekermann & Wegener, *Strategic Evaluation of Transport Investment Priorities*", DG Regio, 2007

Freight transport performance indicators

Figure 4.10 shows the use of roads for freight movements. Generally speaking the road freight levels are higher in the Northern and Southern EU15 than in EU10+2. This clearly reflects differences in economic development resulting in differences in freight movements. However, it may also reflect that at some development stage networks grow less fast than the economy, resulting in more intensive use of the existing networks.

The figure further shows that growth rates over the period 2004-7 have differed, with relatively high growth rates in the EU10+2 countries.

Figure 4.10 Road freight performance

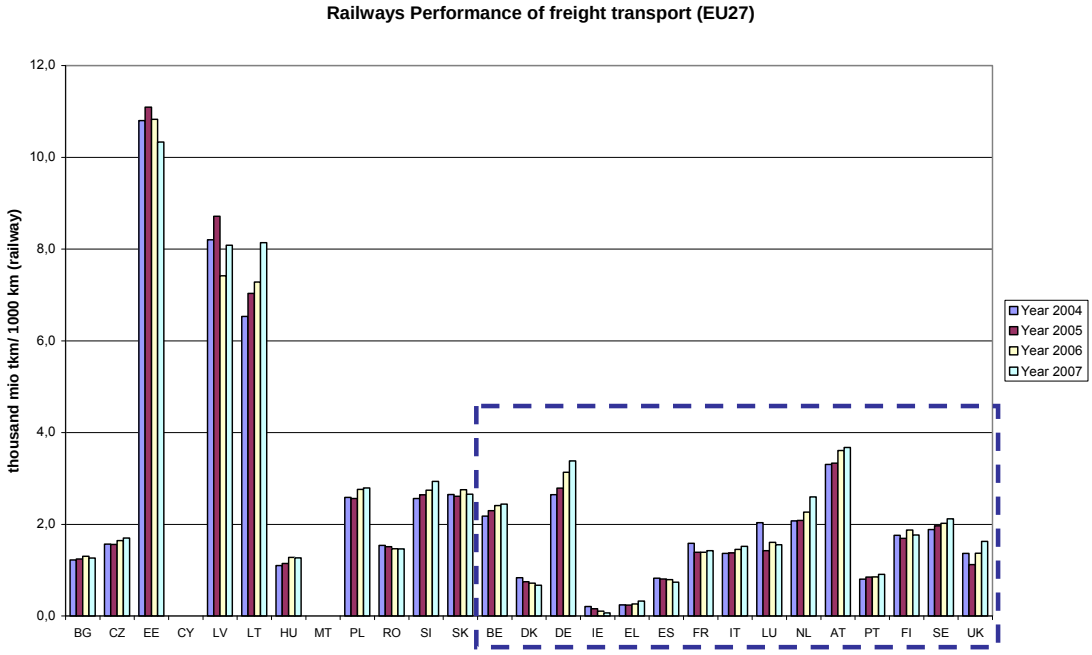


Average level and annual growth rate per group of countries over the period 2004-7:
EU15N: 0,72 (0% p.a.) ; EU15S: 1,05 (+3% p.a.); EU10: 0,27 (+10% p.a.); EU2: 0,67 (+12% p.a.).
Source: Statistical pocketbooks, Eurostat

The similar figure for rail freight performance (Figure 4.11) shows that:

- The rail transport network use for freight is highest in the EU10 member states. This reflects the strong rail tradition in these countries.
- Growth in rail movements is highest in the Northern EU15 Member States. This may reflect recent transport policies in these countries to stimulate rail freight. The use of railways for freight has significantly improved between 2004 and 2007 in Germany and The Netherlands (8% in both countries).

Figure 4.11 Rail freight performance



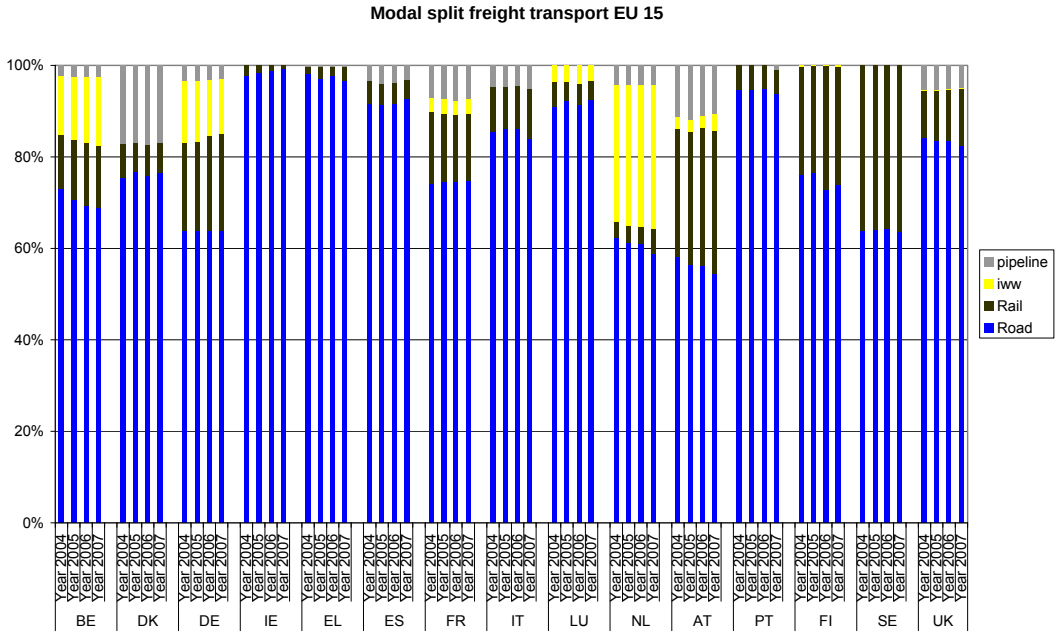
Average level and annual growth rate per group of countries over the period 2004-7:
EU15N: 2,0 (+3% p.a.) ; EU15S: 1,0 (0% p.a.); EU10: 4,6 (+2% p.a.); EU2: 1,4 (0% p.a.).

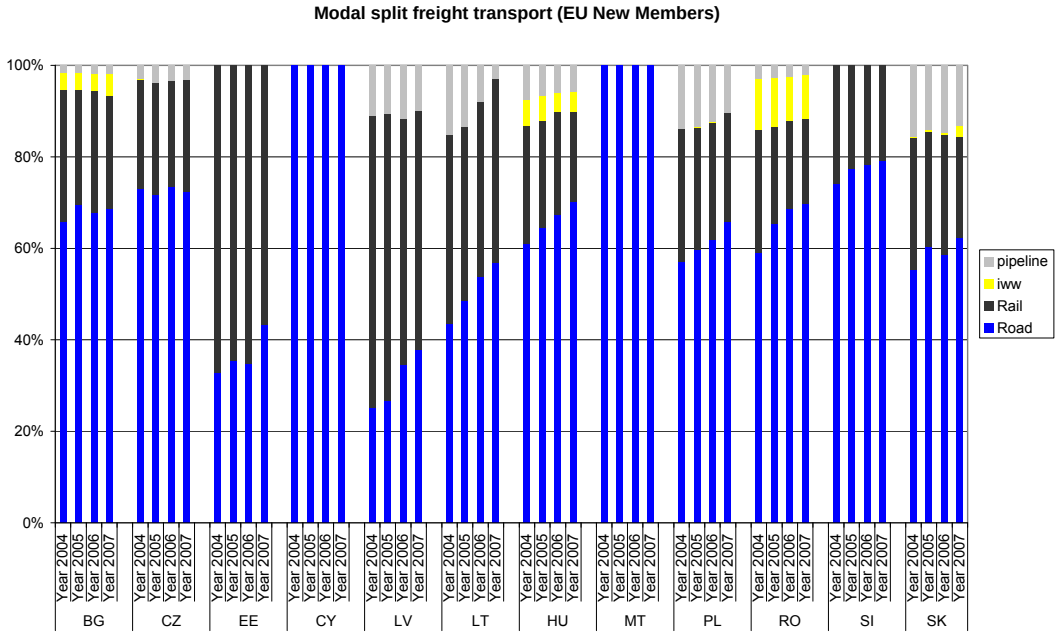
Source: Statistical pocketbooks, Eurostat

The use of various transport infrastructures is reflected in the split of freight movements over the various modes. The data for EU15 in Figure 4.12 show that, relatively speaking, the share of road is lowest in the Northern EU15 Member States. This partly reflects the availability of modes like inland waterway transport and pipelines in some of these countries, but is also the result of transport demand management policies stimulating rail transport.

The EU10+2 show a mixed picture in terms of modal split (see Figure 4.12), with a higher share for rail movements in transit countries and high shares for pipeline movements in some countries. Most striking, though, is the overall trend of increasing shares of road transport in total freight movements in EU10+2.

Figure 4.12 Modal split freight transport EU15 and New Member States





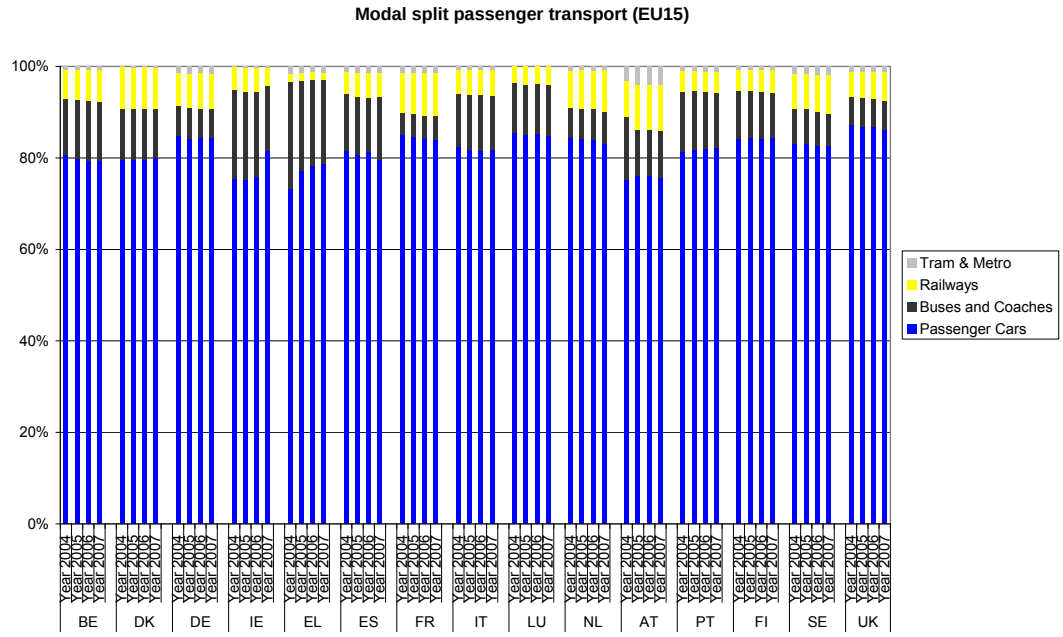
Average level and annual growth rate per group of countries over the period 2004-7 for share of road in modal split:
EU15N: 74% (-1% p.a.) ; EU15S: 89% (-1% p.a.); EU10: 65% (+4% p.a.); EU2: 67% (+5% p.a.).

Source: Statistical pocketbooks, Eurostat

Passenger transport performance indicators

For passenger transport a similar performance indicator is available on modal split (see Figures 4.13 and 4.14). The EU15 data show high road shares in all countries, in particular the Northern EU15. In some these Northern EU15 Member States the road share tends to decline, though. At the same time the share of rail is growing in these Member States. In most cases this reflects the policy to further develop rail infrastructure, but it may also reflect increasing congestion on the roads.

Figure 4.13 Modal split passenger transport EU15



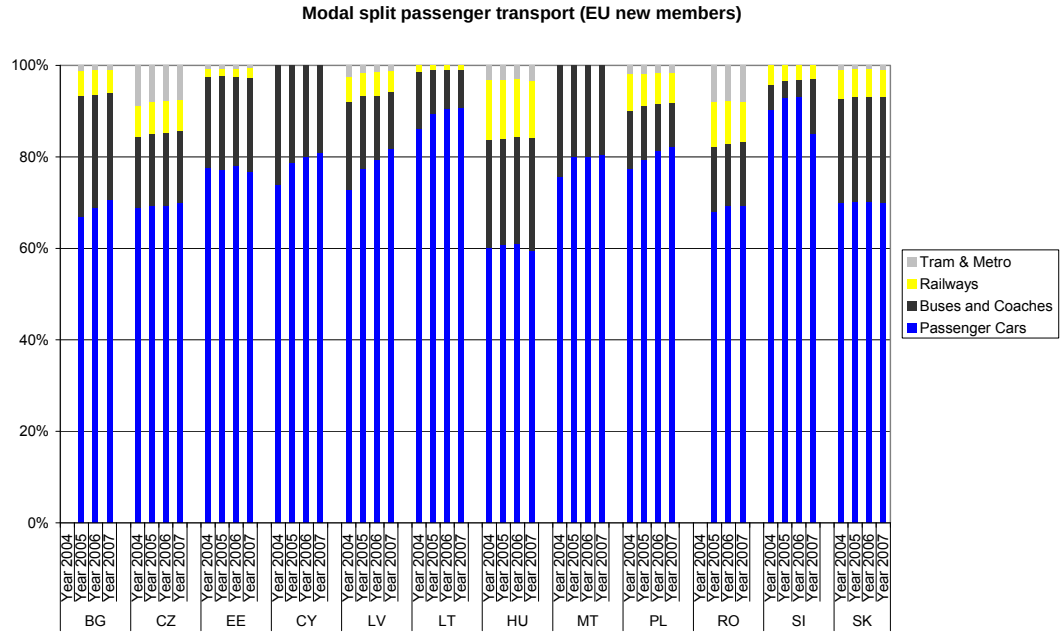
Average level and annual growth rate per group of countries over the period 2004-7 for share of road in modal split:
EU15N: 82% (0% p.a.) ; EU15S: 81% (0% p.a.);

Source: Statistical pocketbooks, Eurostat

The role of road transport is increasing in EU 10+2, although it is still at a lower level than in EU15. In particular buses and coaches play a strong role in EU10+2, which in most cases reflects lower levels of car ownership (and lower income levels). The role of rail transport is surprisingly low, which reflects lower levels of service, even despite the extensive networks.

From this short description it is clear that transport policies play an important role in the structure of demand. The modal split is the result of both availability of road, rail and other infrastructure, as well as policies influencing (the mix of) transport demand, by pricing measures or otherwise.

Figure 4.14 Modal split passenger transport EU12



Average level and annual growth rate per group of countries over the period 2004-7 for share of road in modal split:

EU10: 77% (+1% p.a.); EU2: 69% (+2% p.a.).

Source: Statistical pocketbooks, Eurostat

Car ownership

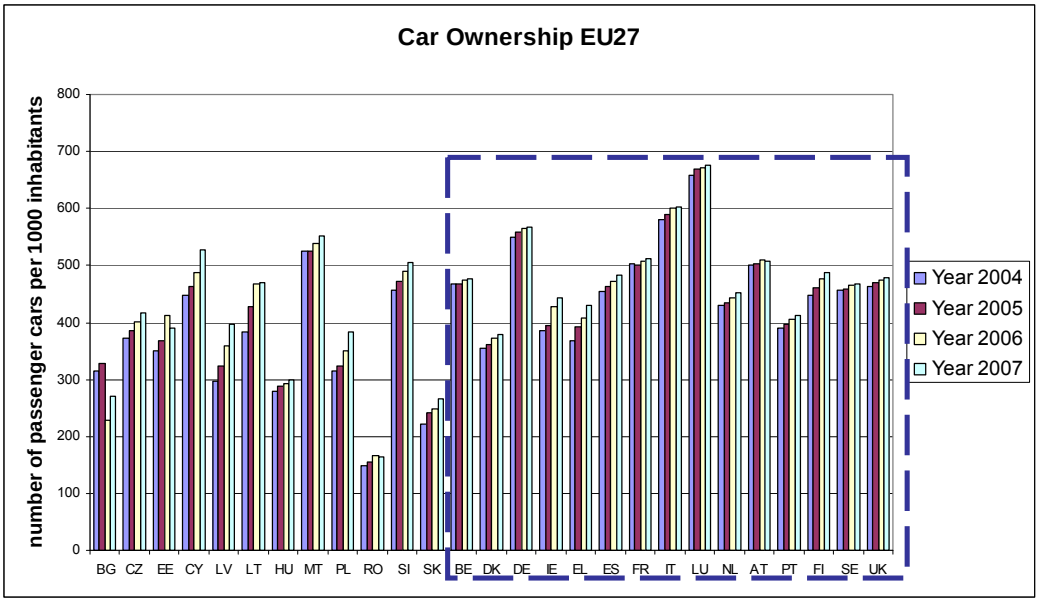
Car ownership generally reflects the level of prosperity of a country: the higher the level of per capita income, the higher car ownership. Differences in absolute car ownership therefore do not reveal transport policy effectiveness. However, in comparing countries of similar level of development, insight in the effectiveness of policy measures may be derived. For instance, in case a country has a high quality public transport system, car ownership may be relatively low. Also high congestion levels (a sign of inadequate transport policy) may result in higher use of public transport and lower car ownership.

The data in the next figure confirm the higher car ownership in EU15 as compared to EU10+2 (Figure 4.15). At the same time it shows substantial differences in the growth in car ownership between EU10+2 (high) and EU15 (moderate); the decline shown for Bulgaria is (partly) due to the registration method.

Looking at individual countries, car ownership is high in Northern EU 15 Member States like Luxemburg, Germany and UK (reflecting high per capita incomes), but also on the island countries Malta and Cyprus reflecting the absence of rail infrastructure.

Car ownership is lower in The Netherlands than in most other EU15 Northern Member States, reflecting the extensive public transport system in this country. The low level of car ownership in Hungary may also be explained by the relatively well developed public transport system (in particular buses, coaches) that plays a large role in the fulfilling transport demand.

Figure 4.15 Car ownership



Average level and annual growth rate per group of countries over the period 2004-7:
EU15N: 483 (+2% p.a.) ; EU15S: 474 (+2% p.a.); EU10: 393 (+5% p.a.); EU2: 222 (-1% p.a.).

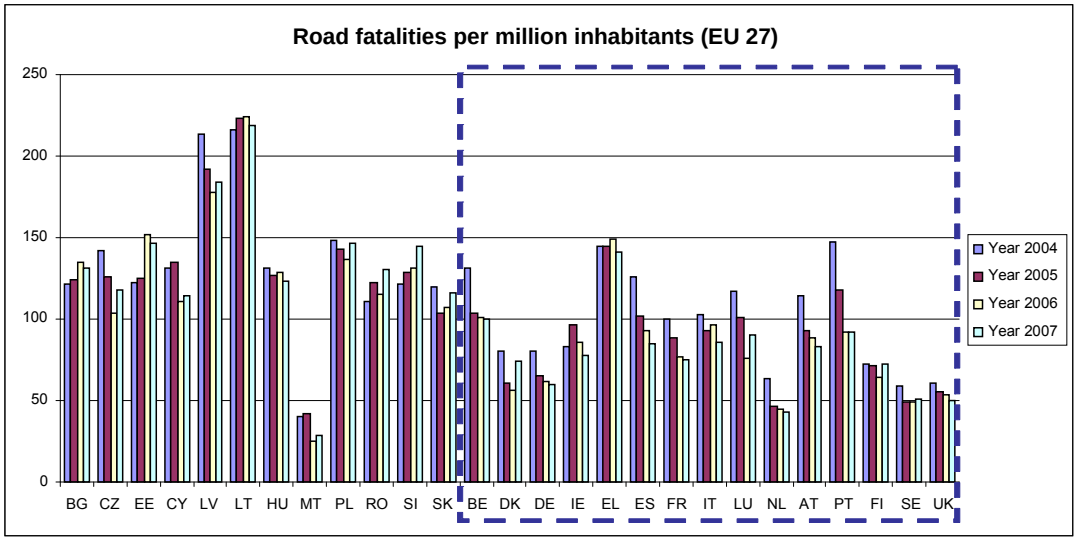
Source: Statistical pocketbooks, Eurostat

Road safety performance indicators

The EU had adopted as the goal for road safety policy to reduce road fatalities with 50% by 2020[18]. Each Member State has translated this objective in its transport policy. The indicator below gives insight in the effectiveness of national road safety policies. Figure 4.16 shows stable low levels in Northern EU15 and strong declines in Southern EU15. Generally the level of road fatalities in EU15 is much lower than in EU10+2, despite the higher car ownership in EU15.

[18] **See**: http://ec.europa.eu/transport/road_safety/events-archive/2010_07_20_road_safety_2011_2020_en.htm

Figure 4.16 Road fatalities



Average level and annual growth rate per group of countries over the period 2004-7:
EU15N: 75 (-6% p.a.) ; EU15S: 108 (-9% p.a.); EU10: 133 (-2% p.a.); EU2: 124 (+4% p.a.).

Source: Eurostat, statistical pocketbooks

4.2.4 Conclusions on transport sector performance

The previous paragraphs described transport sector performance in EU Member States in general terms. It illustrates that infrastructure network development is most advanced in the northern EU 15, followed by southern EU15 and EU10+2. It also shows that in air transport the differences between the groups of countries are limited.

In terms of use of the infrastructure there are marked differences between groups of Member States, with growing shares for rail transport in EU15 (in particular the Northern Member States), as compared to reducing rail shares in EU10+2. This is a direct reflection of modern rail infrastructure development presently lagging behind in EU10+2 on the one hand, and on the other hand transport demand policies stimulating rail transport, other public transport and inland waterway movements in some EU15 Member States.

In the field of transport operations marked differences were found in traffic safety levels. The Northern EU15 Member States score generally well in this area, while most progress is made in Southern EU15 Member States. EU10+2 Member States show lower levels of road safety, with slower progress towards achieving the goal of reducing fatality levels.

4.3 Transport policy mix in EU-Member States

4.3.1 Strategic directions

In the last decades extraordinary productivity gains have been achieved in the transport policy domain, which helped to increase economic growth. Despite these improvements, transport still suffers from congestion, accidents, pollution, inadequate pricing and underinvestment (in some countries and regions). In addition, the continuous economic growth in the EU27 will lead to generation of additional traffic, which cannot be accommodated with additional infrastructure only. Policy instruments focusing on optimal utilisation of existing infrastructure and managing transport demand have become increasingly important to achieve high performing transport networks. In the highly populated and richer parts of the EU another clear tendency has been to better integrate spatial development, regional development and transport and mobility solutions.

On the basis of an assessment of long term trends, in 2003 a number of strategic directions in transport policy were identified to meet challenges in transport. These strategic directions that are still valid to-day, are the following[19]:

- strike a new balance between strategies for reducing demand and those aimed at increasing capacity mobility;
- involve the public more closely in the planning process;
- promote a more integrated and strategic approach to planning and avoid excessive fragmentation of planning and investment processes and operations management;
- make road safety an integral and permanent goal of transport policy by refusing to accept the inevitability of road accidents;
- improve the co-ordination of infrastructure planning;
- improve assessment methods in order to reduce the time taken to implement projects and ensure their sustainability;
- make greater use of direct charges for infrastructure use collecting charges as close as possible to the point of use, whilst ensuring that the competitiveness of peripheral countries is safeguard;
- increase the use of new technologies, which offer many ways to improve the efficiency, safety and sustainability of the transport system.

These directions point at a more integrated approach in transport policies (with spatial planning, fiscal policy, innovation), as well as at larger involvement of regional and local governments, in particular in the management and delivery of transport policies.

4.3.2 Trends in transport policy mix

In this section we address the issue of the types of policies that have been followed by EU Member States to address the pressing issues in the transport policy domain. We first describe the policy mixes generally used in the various sub-domains and than turn to particular countries. In this we

[19] Source: ECMT, 50 years of transport policy, success, failure and new challenge. (2003)

go into the argument for such policies, which are usually implicit, addressing the key questions for this study (see Chapter 1.2).

General issues in transport policy

A main goal of transport policies is to improve the access to regions or urban areas, including the access to economic centres of national importance, such as ports and airports. The improvement of accessibility is usually pursued by either providing infrastructure (supply) or by managing/regulating transport demand, or a combination of the two.

Development of national networks

There is an interesting policy mix noticeable in EU Member States in the development of transport infrastructure. The dominant objective in development or road and rail infrastructure is to solve capacity problems. Such policies are generally centrally planned when it concerns national networks of motorways or railroads. A central type of policy logically follows from the character of such networks, as they serve the national development and international connections of the country. In none of the Member States such policies are developed and managed at regional or local level.

In various Member States, however, the development of national road or rail infrastructure links is increasingly also steered by other objectives than pure transport capacity problems. In such cases the links are seen as necessary conditions to stimulate local or regional development. The planning of these infrastructure works is then more often influenced by regional /local governments. In such cases the development of transport infrastructure is thus rather of a regional/local and integrated character.

This shift generally appears in countries with uneven growth distribution, with strong growth in centres and lagging development in more peripheral regions. This occurs in many Member States, in particular in the more developed ones. In such Member States generally a shift is noticeable at some stage of network development, from more central and sector-oriented approach to a regional and integrated approach.

In new EU Member States this shift in decision making is seen earlier, as the approach is stimulated by the EU policies and funds. For the large national investments in transport infrastructure, however, the national governments usually are setting the scene and are also mainly responsible for design and implementation.

The reason behind the shift is thus that also objectives of other policy domains are taken into account in the development of the network. This generally happens earlier in more developed Member States than in less developed Member States. The reason for this is that generally in economic development the focus is on economic growth rather than on distribution issues. Another reason for a shift in policy is that funding becomes available (e.g. from the EU) for the specific inclusion of such objectives in the planning process. A third reason for the shift towards greater influence of regional and local governments lies in the external effects of the construction and use of infrastructure. Such external effects are usually very local, meaning that local governments demand a stronger role to safeguard the interest of local communities.

Top performers in the field of national road and rail network development are Germany and France. Both these countries have over time struck a balance between national and regional interests by have a substantial (informal) role of regions in the development and implementation of the network development policy.

Regional networks

The role of regional and local governments is much larger in the development of regional networks. In many Member States regional/local road networks are now wholly managed by such governments. This was not the case in the past though. In many Member States the responsibility for regional networks has shifted from the national to the regional level. Again this shift happened earlier in the older EU Member States than in the new Member States, but nowadays the shift has been completed in many, if not all, Member States. The development of regional road networks is in many cases steered by a mixture of capacity constraints considerations and the wish to contain the external effects (road safety, economic development) of mobility.

The development of regional public transport network, including metro lines and bus networks, has generally been steered at regional level; this is clearly the level at which the main interest lies (subsidiarity). Provision of infrastructure is in these cases meant to contribute to the economic efficiency of a particular region or city.
In this respect transport policies go hand in hand with regional development policies. In many countries, such as UK, there is a strong and increasing link between these policies, which is reflected in integrated development plans, including spatial planning. Other countries are less far in integrating these policy lines, but are becoming increasingly aware of the need to integrate transport, economic and spatial planning.

However, as financing needs are usually high and may surpass the capacity of regional governments, in many cases there is also a decision role for the national government. In such cases it reflects the fact that impact of the investment is also felt at national level and/or external effects at national level (e.g. image of a capital or mainport).

The case of regional airport infrastructure is rather special. The development of regional airports is in many cases steered not so much by capacity constraints, but rather by regional development objectives. The decision making is likewise dominated by regional/local governments and has a strong integrated character.

Optimisation of use of transport infrastructure

Transport policies aimed at optimisation of use of transport infrastructure are by nature sector-oriented policies, steered by central government or central authorities. Because, such policies look at the overall network, be it road, rail or otherwise, which requires a central approach. The role of regional/local governments, if any, is limited to flagging the need for utilisation optimisation measures. Even when the infrastructure manager has organised itself through regional offices, like is the case for many road administrations, the approach is still quite centrally steered.

Top performers in the optimisation of use of road infrastructure are The Netherlands and United Kingdom. Both countries have followed a strong central and sectoral approach in this.

Demand management measures

Transport demand management policies can have various reasons. In many cases these policies are geared to influence demand with the explicit goal of avoiding the need for investment in capacity, or of making optimal use of available capacity. Measures to stimulate demand outside rush hours are an example of such policies. Or initiatives such as school and workplace travel plans, personalized journey planning, public transport information and marketing, and tele-working. Given their nature and origin, they are mostly centrally initiated and sector-oriented type of policies.

Other types of demand management policies, involving pricing measures, may combine goals of reducing the congestion and reducing the negative environmental impact of traffic (noise, GHG emissions, air quality). Such policies may originate at local level and are either more sector-oriented (if the main goal is improving accessibility) or integrated (in other cases). Examples of such policies are local initiatives to introduce congestion charging (London, Stockholm) or to restrict the access for most polluting freight vehicles to urban areas, like in German cities. A clear example of a demand management policy can be found in Austria, which offers rail infrastructure for freight movements, while at the same time discouraging road freight traffic.
Both types of policies appear to be effective, depending on the level at which the policy objectives are defined: at national level, like influencing modal split of mobility because of external effects, or at regional level, e.g. combating congestion and stimulating economic development.

Thus, top performers show an central and more integrated approach (Austria, Germany) or a regional approach, which has a mixed approach ranging form mostly sectoral to a more integrated approach (UK, Sweden).

Market regulation

The regulation of the provision of urban and regional public transport is a sector-oriented policy. Within the national transport policy the affordability of public transport is usually an important issue. Given the market failures in this sector (private transport costs deviate from social costs), most governments developed a subsidy policy for public transport services. In addition, in many countries (e.g. The Netherlands, UK, and Germany) the provision of regional public transport services has been subject of competitive tendering.

In some countries (e.g. The Netherlands) the tendering has a clear link with the transport policy objective to ensure the accessibility of the regions; the regional lines are often loss-making for the operator and subsidies are used to ensure that a basic level of service is provided. There are clear indications that the policy is successful in terms of e.g. higher service levels at the same level of subsidy. For most Member States market regulation is a centrally steered policy and sometimes sector-oriented, sometimes integrated.

The integrated element appears when there are strong elements of public service obligations in the contracts (e.g. ferry services in Denmark, Greece; bus services in rural areas in almost all Member States).

Transport operations

Regulation of transport operations is in nearly all cases a central and sector-oriented policy type. The clearest example is on traffic regulations, which are the domain of national governments. In includes regulations and enforcement of speed limits, right of way rules and the use of mobiles, drugs and alcohol by traffic participants. It is noted that the penalties for not obeying the rules (e.g. speeding) differ substantially per country in the EU, but they are in each case centrally set. The difference found in safety levels is partly due to differences in levels of enforcement, traffic education and differences infrastructure.

Summary

Table 4.1 summarizes the above differences in transport policy domains and specific areas. The table shows that most transport policies are centrally steered. Involvement of regional and local governments in particular appears when development objectives play a strong role, resulting in integrated transport policies, or when regional or local networks are involved.

Within the central transport policy measures there are both sector-oriented policies and policies in which other policy domains are integrated. Such domains relate to health, environment or regional development.

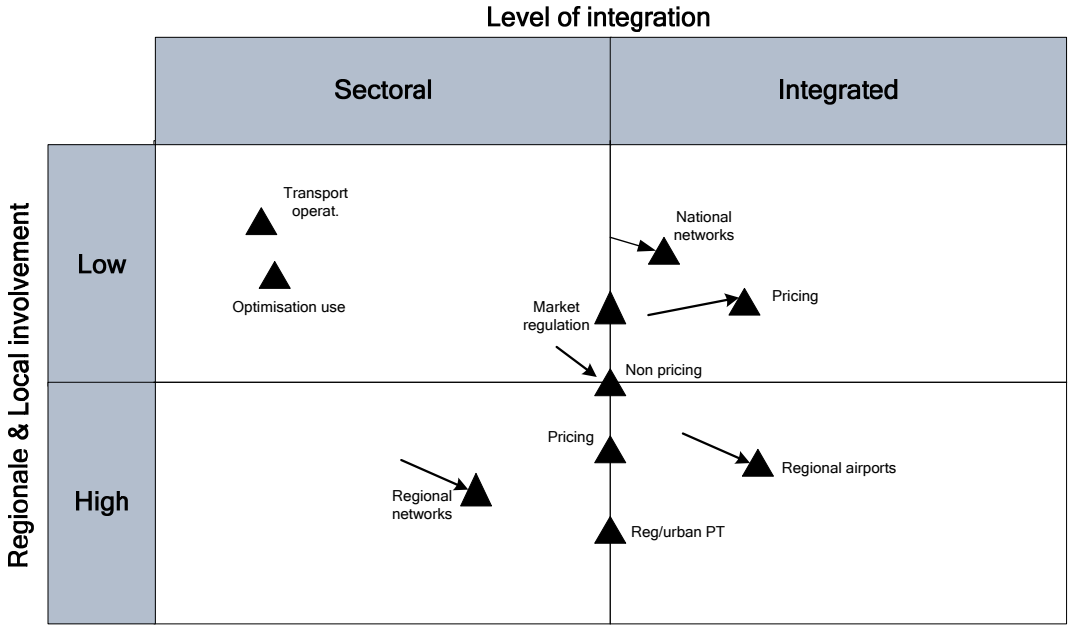
Table 4.1 Summary of situation and tendencies in transport policy mix

Policy domain and areas	Central	Regional/local	Argument for shift (if any)
Provision of infrastructure			
National Road and Rail networks	Mostly central and sectoral; in some cases (peripheral regions) central and integrated		A purely sectoral approach results in inequality. Integration of regional development objective
Regional/local roads		In the past regional roads were in many MS centrally managed, now this is almost completely regional/local; mostly sectoral	National government concentrate on core network; regional roads more efficiently managed by regions
National Airports	National airports highly centralised with increasingly regional/local consultation; predominantly integrated policy		More integration needed because of external effects of air traffic (in particular noise)
Regional airports		Was highly centralised in the past, but now mostly regional and integrated	Regions can ensure effective planning of land infrastructure, as well as business areas
Regional/Urban Public transport		Mostly regional, both sectoral and integrated	No shift
Optimising utilisation of	Central, sector oriented for	Decentral for regional roads,	No shift

Policy domain and areas	Central	Regional/local	Argument for shift (if any)
infrastructure	national roads	but only an issue in urban areas	
Demand management			
Pricing measures	Central in so far it concerns the national network; mostly integrated as external costs are taken into account and fiscal measures used	Regional, both sectoral and integrated	Pricing increasingly takes into account not only road maintenance of roads but also external effects
Non-price measures	Mostly central and sector oriented in so far behaviour is involved	Local in case of prohibitive measures, time windows etc.	More local measures seen due to external effects
Market regulation	Central, both sectoral and integrated		No shift
Transport operations	Central, sector oriented		No shift, but larger role for regions to increase effectiveness of policy

Figure 4.17 presents the positioning and tendencies for the above described policies for the various sub-domains/areas in transport over the past decades.

Figure 4.17 Generalized positioning and tendencies in transport policies



4.3.3 Positioning of transport policies of EU-Member States

The above description illustrates that Member States may have different approaches in their transport policies, depending on the character of the mobility problem and the geographic level at which it arises. This means that one may find in the same Member State a strong central and sectoral approach in one issue, a central and more integrated approach in a second issue and an almost fully regional approach in a third issue.

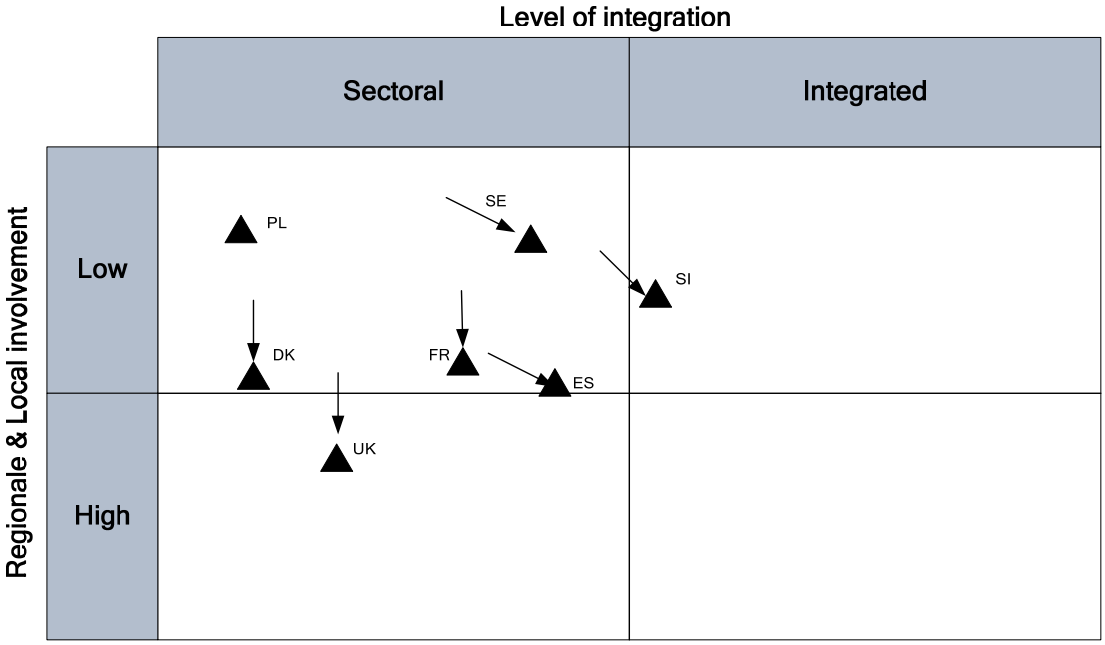
This make is difficult to have a clear cut positioning of transport policies of Member States. We have nevertheless endeavored to position the national transport policies of the seven Member States of the case studies (see Figure 4.18) and the visible shifts in such policy mixes.

The overall balance of the transport policies is in our view in all seven Member States that it is a quite centrally steered policy. In particular infrastructure development at national level, demand management policies and transport operations are in most of the Member States centrally conceived and managed, even though regions may be consulted or play a role in implementation. This is not to say that some of the transport policies at sub-domain level are less sector oriented or more steered from the regional level.

Apart from this central conclusion on the overriding type of policy, we see three types of shifts:

- A **larger involvement of regions** in the development, management and implementation of transport policy. This movement is seen in Denmark, France and UK. In all three countries over the years lower government levels have become more important in the transport sector policies in particular in the development and maintenance of national road and/or rail infrastructure;
- A **larger role for non-mobility related objectives** in development, management and implementation of transport policy, in particular elements of regional development (Spain, Slovenia) and environment and health (Sweden, Spain, Slovenia);
- **No substantial shift**. In the case of Poland we have not found significant changes in the types of policy used regarding mobility issues.

Table 4.18 Positioning and tendencies in policy mix in leading EU-Member States, transport policy domain



4.4 Evidence from case studies

4.4.1 Selected case studies

On the basis of the various policy sub-domains, a variety of case studies has been carried out. The cases were chosen in such a way the case is supposed to represent best practice in the policy field and/or of a top performing MS. The following cases have been analysed:

Infrastructure development:
- motorway network planning in Spain
- motorway network development, financing and construction in Slovenia
- high speed rail network development in France
- regional airports in Poland
- integrated urban planning in Copenhagen, Denmark

Demand management:
- congestion charging in London, UK.

Transport operations:
- road safety policy in Sweden

The following paragraphs present the highlights of the case study in terms of the central questions to this study. More information can be found in the separate case study report.

4.4.2 Spain: Motorway planning

The motorway network planning in Spain started of as a sectoral and quite central type of policy. As motorways were built on the basis of user revenues, the motorways with highest revenue potential were constructed, i.e. with highest traffic. With the Cohesion Fund becoming available for Spain, network construction followed a project approach based on an overall view of completing a network that serves all regions. In this phase influence of the Autonomous Regions increased in terms of planning and implementation. In the third phase, which only recently started, Cohesion Fund money is no longer available and a more integrated planning is foreseen of the network, combining transport functionality with even more regional coordination and safety objective. Motorway network planning has thus become even more integrated than in the past.

The reason for the first shift from sectoral to more integration of objectives of economic development and integration of peripheral regions reflects arguments of spreading of welfare; at the same time the regions became more important in the planning. In the later shift also objectives of other policy domains (safety, environment) play a role in the network development. This reflects the general trend worldwide of more dealing with the negative externalities of mobility.

Similar shifts from fully central to more regional, and from fully sectoral to a more integrated approach, are found in other Member States. This increased integration is, however, best reflected in the objective level, and less in terms of instruments in implementation. An exception to this is the EU policy to have Environmental Impact Assessments carried out compulsory.

Despite these general changes, in most, if not all, Member States the responsibility for planning and implementation of the motorway network remains with the central government, even though the role of regions in planning has been growing. This reflects the nationwide character of the network.

With respect to the formulated key questions the following can be noted for this case study::

a. Current balance in policies

The current policy with respect to motorway planning in Spain is predominantly centrally steered with growing regional influence in planning. The policy started of as mostly sectoral oriented, but has shifted over time to a an integrated type of policy, taking into account regional development objectives..

b. Arguments to justify policies

The main argument for the present integrated approach lies with the desire to better take into account non-transport policy elements. The regional influence is growing to take on board regional economic objectives.

c. How can impact of each type of policy be judged

The past sectoral approach has been efficient in developing roads, but less in developing an network view. The recently started integrated approach has yet to prove its impact.

d. Has the balance shifted over time?

Yes, as described the balance shifted over time from purely central and sectoral in the past, towards a central approach with regional influence and a more integrated approach including environmental and regional development objectives in the network development.

e. Arguments to support the shift

The argument for the shift is the desire to better take into account regional economic development as well as to counter balance negative external effects, and thereby to become more effective.

f. Balance top performers

Spain is not among the top performers in road network infrastructure, but has achieved reasonably fast results. These results have been strongly stimulated by EU co-financing.

Box 4.1 Motorway planning in Spain

The Motorway planning programme in Spain has the following characteristics:

A. Sectoral/Integrated: Highly sectoral in past, goals of other policy domains are now taken into consideration

B. Centralised/Decentralised: Conceiving, management and delivery at both national and regional level

With respect to road network planning in Spain three periods can be seen.

- 1960's to early 1980's: the first motorways were developed as private toll roads ('private toll period');
- From early 1980's to around 2005: the private toll act was frozen and roads were developed with public funds, including European funds ('cohesion fund period');
- 2005 – 2020: a Strategic Infrastructure and Transport Plan is introduced (PEIT); cohesion funds are no longer available to Spain ('PEIT period').

The development of the policy type is in line with the development of Spain as a country. The civil war had left the country extremely poor in 1939, a situation that persisted for decades. As there was a serious lack of money in the system, the Government authorized private companies to attract foreign loans through their international partners that could be invested in the roads network.

The government froze the Toll Motorway Program in 1982 and motorways were from then onwards funded from public budgets and European Funds. In the private toll road period motorways were concentrated in the economic and tourist centres of the country. During the Cohesion Fund period regional cohesion was a driving force behind the development of a radial network connecting Madrid to most of the regions. In order to absorb the maximum amount of EU funds, planning was project-driven, leading to rapid development of roads.

According to the PEIT documentation the Spanish infrastructure was developed in an autonomous way, leaving projects to compete with each other for budget rather than to support each other in providing the best services to the public. Functionality of investments had been ignored in the previous period leading to a network that is not developed in line with real demand and leaving some of the existing roads with obsolete quality and safety standards. In 2004 the roads network was still relatively centralized, increasing the disparity between different regions and leading to concentrated economic activities around a limited number of economic centres. PEIT was introduced to address these issues. PEIT also aims to coordinate motorway development with the autonomous regions. The effect of PEIT cannot be measured as the evaluation has not yet been published and the economic crisis disturbs the effects which the PEIT has on economic development.

4.4.3 Slovenia: Road corridor development

The case of motorway development in Slovenia differs from the case of Spain, as not only planning of the network, but also the tasks of financing, construction and maintenance of the motorways (road corridors of international importance) have been combined in one public company. In this way the whole network development process has been integrated in a highly centralised structure. The approach has proven successful, as the motorway network of Slovenia has developed very fast.

Although the policy on paper can be characterised as somewhat integrated, as it includes objectives from other policy domains (impacts on traffic, congestion, competitiveness and the environment), in practice environmental and regional development objectives are less taken into account. This is reflected in insufficient integration of the motorway network with the other roads, thereby not creating an optimal effect on regional development, and insufficient attention to environmental effects. These are perceived as shortcomings of the strategy, which may result in a gradual change towards a truly integrated policy. At the same time fiscal instruments are used for road development as a financing strategy for the maintenance and financial costs has been taken into account.

With respect to the formulated key questions the following can be noted for this case study::

a. Current balance in policies

The current policy is centrally steered and predominantly sector oriented. Recently non-transport policy objectives have been taken on board.

b. Arguments to justify policies

The main argument for the strong central approach is desired speed in developing the motorway network.

c. How can impact of each type of policy be judged

The central sectoral approach has proven to be very efficient in realising motorway network development, but did until recently not succeed in integrating non-transport policy objectives such as regional development and environmental protection.

d. Has the balance shifted over time?

The policy balance has recently been shifting to a more integrated form of road network development, taking into account the environmental and regional economic development objectives.

e. Arguments to support the sh*ift*

The argument for the shift is the desire to properly and effectively take into account the non-transport policy objectives. It should thus improve the overall effectiveness of the motorway network development.

f. Balance top performers

Slovenia is a top performer as it comes to fast development and implementation of the motorway network.

Box 4.2 Road corridor development in Slovenia

Road corridor development in Slovenia has the following characteristics:

A. Sectoral/Integrated: Highly sectoral in past, goals and instruments of other policy domains are now taken into consideration

B. Centralised/Decentralised: fully nationally directed

The Ministry of Transport of Slovenia appointed a dedicated state-owned agent, DARS (Družba za avtoceste v Republiki Sloveniji; Motorway Company in the Republic of Slovenia), for managing, constructing and maintaining the motorway network. DARS followed the transport policy goals to create a safe, integrated motorway network connecting Slovenia to its neighbouring countries and merging it with the European transport network. It acquired the right to collect toll revenues for the network's management, construction and maintenance.

The establishment of this independent body proved very successful in the process of the motorway development. The objectives of economic development (more passengers and cargo in the motorways), improvement of road safety (new technology, ITS) and diminishing congestion (due to road extension and widening) were successfully reached. In addition, regional development in areas next to the motorways (or the inter-modal points) boosted.

One major negative effect of the centralised policy was, however, that it excluded already remote regions; it followed specific national targets, amplifying the differentiation between regions. Also, even though sustainability was included in the main strategy, environmental impacts were neglected leading to protests of the Ministry of Environment and several NGOs (stakeholders were not involved in decision making). Finally, due to the emphasis on the motorways, funds were deprived from other modes of transportation such as rail and public transport.

4.4.4 France: High Speed Railways Network planning

The case of planning and realisation of High Speed Rail infrastructure in France is a good example of a transport policy that started off as a sectoral and central policy and gradually evolved towards a more integrated policy, with increasing influence of the regions. Whereas in the past the planning of railway lines was performed on the basis of transport demand, nowadays objectives of regional/spatial development are

The argument for the shift lies in the perceived positive external effects of the rail terminals, as they help to structure spatial planning and thereby boost urban development.

At the same time, however, the case also shows that overestimation of positive external effects can result in less effective policies. This is reflected in for instance the creation of a HSR station in the

middle of nowhere. The anticipated regional development around this station never took place. It shows that an integrated approach is not necessarily more effective.

The case also illustrates how integration of the transport policy with innovation objectives can be successfully pursued. Due to the active government policy on High Speed Rail development, the French rolling stock sector has developed strongly and France has been able to not only export rolling stock, but also the corridor concept of high speed rail to neighbouring countries.

France can be seen as one of the top performers in this field, as it has a very developed network, which effectively uses conventional track, and has done so at high speed.

With respect to the formulated key questions the following can be noted for this case study::

a. Current balance in policies

The policy with respect to development of the High Speed Rail network is centrally steered, but with increasing influence from regions. The policy shifted from a purely sectoral policy in the past, to a more integrated policy nowadays. In planning network extensions and terminals, the regional development objective has become much more important.

b. Arguments to justify policies

The main argument for the sectoral approach that was used in the past can be seen to be one of efficiency: the lines with highest impact on travel patterns were constructed. The present more integrated approach takes into account the regional and local spatial development objectives of regions and municipalities.

c. How can impact of each type of policy be judged

The sectoral approach was efficient in transport terms, the more integrated approach is less geared to economic efficiency and more to spatial distribution of economic activities. In that some of the decisions have been effective (i.e. Lyon) others less effective (i.e. the “beteraves” terminal in Picardie without any regional development).

d. Has the balance shifted over time?

As described, the policy balance shifted over time, from central and sectoral oriented, towards a centrally steered policy with growing regional influence and integration of the regional development objective.

e. Arguments to support the shift

The argument for the shift is the desire to take into account the regional economic development effects of High Speed Railways more properly.

f. Balance top performers

France is a top performer in development of high speed rail services.

Box 4.3 High speed railway network planning in France

High speed railway development in France has the following characteristics:

A. Sectoral/Integrated: Highly sectoral in past, although some goals from other domains were taken into account. Now highly integrated.

B. Centralised/Decentralised: mainly nationally directed, although regional and local authorities are highly involved in terms of planning and consultation, and follow-up developments around existing and new train stations.

The policy of high speed rail passenger transport was initiated by the French national railway company SNCF in the 1950s. While the building of the motorway network was starting and domestic airline services were growing, the SNCF concluded that as a response to this growing competition, rail transport had to become much faster.

At the initiative of the SNCF, the government approved the construction of the first line in 1976, between the country's two largest cities, Paris and Lyon. Originally, the TGV service was planned to run between the two cities only, onward travelling passengers would have to change trains. But when the line opened SNCF started using the ability of running on classic tracks to continue trains to onward destinations, thus offering direct trips to many cities in the east of France, on the Mediterranean coast and in Switzerland. By 1985, 30 cities in this area had TGV train services to/from Paris, between 2 and 20 return services per day.

By the early 1980s, when the first TGV services proved to be very successful in terms of patronage and effects on car use and air travel, most regions in France had become convinced that they needed a TGV service to Paris to boost their regional economy and that they could not afford to be left behind when other cities got a TGV station. High speed rail had become an instrument of regional development policy and was serving the government's policy goal of a more equitable economic development in all regions of France, just like the development of the motorway network did. This resulted in many discussions between the government, the parliament, the regions and local authorities on which lines should be built next and where they should run

4.4.5 Poland: Regional airport development Krakow

Like in most countries, the policy with respect to regional airport development in Poland is defined at central level. Over time, however, the role of the regions has become stronger, in particular in implementation of the policy. In defining the policy, not only arguments of accessibility of the regions play a role, but also the expected impact on the business climate and thereby on regional development.

The case of Krakow shows that the fact that the state has remained a majority shareholder may have hindered the development of the airport. This indicates that a more decentral approach to the development of the airport, like followed for neighbouring Katowice, may even have been more effective in realising the integrated objectives.

With respect to the formulated key questions the following can be noted for this case study::

a. Current balance in policies

The current policy is a mix of central and regional policy, with an integrated nature.

b. Arguments to justify policies

The main argument for the central/decentral mix and integrated nature is to improve the effect of the airport development for the regional business climate, and therefore for regional economic development.

c. How can impact of each type of policy be judged

The central/decentral approach appears less effective, as it may hinder effective development of the airport. A complete decentral approach may have been more effective in that it could have catered better for the regional development needs.

d. Has the balance shifted over time?

Yes, in the past the policy was more centrally steered.

e. Arguments to support the shift

The argument for the shift towards larger regional involvement has been the desire to take into account regional economic development objectives.

f. Balance top performers

Poland is not among the top performers when it comes to regional airport development. Countries with many (successful) regional airports, like e.g. Germany, have followed a predominantly regional approach.

Box 4.4 Regional airport development, the case of Krakow, Poland

The regional airport development in Poland has the following characteristics:

A. Sectoral/Integrated: Integrated approach in terms of goals, while instruments of other domains are taken into consideration in the delivery

B. Centralised/decentralised: the policy is conceived and managed centrally, but the actual delivery takes place at regional level.

Since the accession to the EU in 2004, growth of air transport in Poland has been exceptionally strong: the total number of air passengers increased between 2004 and 2008 by 130%. Several factors played a role in this: liberalization of air market that enabled entrance of low cost carriers (LCC) and the increased mobility of the Polish society.

To facilitate growing demand, the aviation policy has focused on the development of regional airports. Improved accessibility should in turn enhance the competitive position of regions and contribute to economic development. Krakow Airport is Poland's second-largest airport after Warsaw measured by the number of passengers; in 2007 the airport served 3 million passengers, clearly outpacing other regional airports. Like other regional airports it has largely benefited from the entrance of LCC.

The economic impact of Krakow Airport on the region can be mainly observed in stimulated tourism and to some extent in attracting business activities. The fastest developing sectors are: high-tech, automotive, tourism and the BPO sector. International accessibility is an important factor in location decisions of these industries. The city of Krakow and its surroundings seem to benefit most from the development of Krakow Airport due to their overall attractiveness.

Both national and regional government have played a role in the development of Krakow Airport. Currently the initiative and the responsibility for airport development lies within regional authorities, but the national government has instruments to intervene. Moreover, the state is a majority shareholder.

4.4.6 Denmark: Integrated urban planning in Copenhagen

The case of the Finger Plan in Copenhagen is an example of integrated planning of (urban) transport infrastructure and spatial development. The policy has a clear dual objective and in implementation instruments from both policy domains have been used. Planning and implementation of the policy has been with the regional government level throughout the years, even though at some stages national legislation was used to safeguard the implementation.

The type of policy chosen is logical from the subsidiarity point of view; it has been effective in terms of spatial planning. In terms of decreasing the use of motorised transport in urban areas the policy appears to be less effective, as other cities with varying degrees of an integrated approach show similar or even better results. Evidence from other Member States suggests that the regional approach may have helped in increasing effectiveness of the policy.

With respect to the formulated key questions the following can be noted for this case study::

a. Current balance in policies

Over the years the policy on integrated urban planning has been of a regional and integrated nature.

b. Arguments to justify policies

The main argument for the regional approach is one of subsidiarity: the spatial planning is the domain of the local and regional authorities. The argument for integrated policy is that it would be more effective than a sectoral approach in taking into account all possible effects.

c. How can impact of each type of policy be judged

The regional integrated approach has been relatively effective as it comes to spatial planning; the impact on congestion is visible, but not overwhelming.

d. Has the balance shifted over time?

No, no major shift in policy can be seen over time.

e. Arguments to support the shift

Not relevant.

f. Balance top performers

Copenhagen has been relatively effective and can be seen as a top performer in the field of integrated spatial planning.

Box 4.5 Integrated urban development in Copenhagen, Denmark

The regional airport development in Poland has the following characteristics:

A. Sectoral/Integrated: Fully integrated approach in terms of goals and instruments

B. Centralised/decentralised: the policy is fully managed and delivered at local level, with consistent support of the national level.

In 1947 the concept of the Finger Plan has been embraced, in which urban development would concentrate along five railway tracks that run out of the centre of Copenhagen. In between those five "fingers" green wedges would be preserved. This concept has been more or less respected since then and has been a starting point of all successive plans for the region, like the Regional Plan 1973, the New Regional Plan 1988 and the 2007 Finger Plan.

The central line in these plans can be described as:

- The finger structure has been more or less adhered to over more than 60 years. The idea has never been under serious pressure.
- With the inauguration of the "proximity-to-station"-policy urban development has formally been tied to the availability of public transport, in particular the five train tracks.
- The "proximity-to station"-policy has been complemented with the decision to construct the Copenhagen metro and take anti-car measures like increasing parking fees and stimulating the use of bikes.

Based on research carried out in the past, the policy shows clear results:

- Residents and employees close to a train station tend to use more public transport than when located far off, and drive less kilometres by car
- This should have led to a better traffic situation in terms of emission, congestion and need for road infrastructure.
- Urban development has been done closer to the stations in the fingers than before as a result of the "proximity-to-station"-policy.
- The original green areas between the fingers still exist, albeit to less extent than originally desired.

4.4.7 United Kingdom: Road pricing in London

The congestion charge that was introduced in London in 2003 is specifically meant to combat congestion. In doing so, the business climate was to be improved, while revenues could be used to improve public transport. This transport demand management policy is an example of a regional policy, which is predominantly sector-oriented. The regional approach made it possible to decide on it and implement it in a speedy manner.

The policy has had substantial effects on congestion and traffic speeds, in particular in the first years since its introduction. The experiences in Stockholm with an urban toll system are similar. The type of policy used in both cases (regional, mainly sectoral) thus appears effective in reaching

the transport policy goal, as well as the underlying goal of increasing living conditions in the urban areas.

At the same time the experience with road pricing in the Netherlands shows that a more central and, in particular, a more integrated type of policy is difficult to decide upon and implement. Although bringing environmental objectives into this policy may have increased support for the policy, it also complicated the decision process. This experience may be specific for the situation of the Netherlands, though, as other toll initiatives with combined transport and environment objectives, like in Germany, were relatively effective.

With respect to the formulated key questions the following can be noted for this case study::

a. Current balance in policies
The current policy of congestion charging in London is a sectoral policy at regional level.

b. Arguments to justify policies
The main argument for the regional approach is one of subsidiarity: the congestion problem to be combated is really a local/regional problem.

c. How can impact of each type of policy be judged
The regional sectoral approach has proven to be effective. The outcome with respect to congestions has been achieved, while the underlying goal of improving living conditions has been realised.

d. Has the balance shifted over time?
No, no shift over time.

e. Arguments to support the shift
Not relevant.

f. Balance top performers
London is a top performer in introducing an efficient local toll system to combat congestion, thereby contributing to environmental objectives.

Box 4.6 Congestion charging scheme in London, UK

The congestion charging scheme in London has the following characteristics:

A. Sectoral/Integrated: Highly sectoral in terms of goals, although goals of other domains are taken into consideration

B. Centralised/decentralised: Fully decentralised approach at local level

The London congestion charging is executed by the Transport for London introduced in 2003. Since February 2003 motorists driving in central London on weekdays between 7:00 am and 6:30 pm are required to pay £5. In July 2005, this was increased to £8; residents receive a 90% discount for their vehicles. The zone was expanded to the west in 2007, with new charging hours between 7:00 am and 6:00 pm.

The primary goal of the London congestion charge is to lower the levels of congestion in the inner city. The objectives defined in particular were as follows (Derek Turner Consulting, Central London Congestion Charging Schema, Has it achieved its goals? PowerPoint presentation, 2003):

- Reduce inner London traffic levels with 10-15%
- Cut road transport delays with 15-25%
- Increase speeds by 10-15% inside zone
- Improve conditions outside zone
- Improve bus operations
- Produce net revenue of £ 130 million per annual
- Achieve a modal shift

The introduction of a congestion charge in London was successful. The goals were met regarding decreased traffic levels and congestion improvement of bus operations. In the first years there was an improvement in terms of speed, however, it is now back to its level of 2002. Thereby the scheme generates more revenues than expected, the wider economics (employment, key business sectors) in London seems not dramatically been affected. This implies that a congestion charge is a policy with no permanent effect unless changing the type or level of charging.

4.4.8 Road safety policies in Sweden

Sweden is one of the Member States with the lowest level of road fatalities. This result has been achieved on the basis of a dedicated policy with ambitious targets, which combined the necessary elements in terms of regulation, education, enforcement, improving vehicle technology and improving infrastructure. In itself the type of policy used can be described as a sector oriented, centrally-led policy.

For some of the elements, like regulation, education and vehicle technology, this type of approach is clearly the most effective, as a regional approach may easily result in higher costs because of duplication of activities.

Like in the case of high speed rail in France, also the Swedish road safety policy has stimulated innovation in the vehicle technology and has strengthened its car manufacturing sector.
In recent years the role of the regions, in particular in the field of infrastructure measures, has been increasing. A similar trend can be seen in other countries with high traffic safety levels, like The Netherlands. Also implementation of education activities is at regional or local level in some of these countries. Despite the larger involvement of lower levels of government, the policy continues to be mainly central, though.

With respect to the formulated key questions the following can be noted for this case study::

a. Current balance in policies

The current policy is a sectoral policy at central level.

b. Arguments to justify policies

The main argument for the central approach is that it involves road users in the whole country, and thus a central approach is most effective in reaching these road users.

c. How can impact of each type of policy be judged

The central sectoral approach has proven to be effective. The goal of reduction in road fatalities has been realised.

d. Has the balance shifted over time?

No, no shift over time.

e. Arguments to support the shift

Not relevant.

f. Balance top performers

Sweden is a top performer in road safety and the policies that persued in that perspective.

Box 4.7 Road safety policy in Sweden

The road safety policy in Sweden has the following characteristics:

A. Sectoral/Integrated: Highly sectoral in terms of goals and instruments

B. Centralised/decentralised: Fully national approach

Road Safety policy is laid down in Vision Zero. Vision Zero states: "the design, function and use of the transport system will be adapted to eliminate fatal and serious accidents." The logic behind Vision Zero is the principle that people, by nature, will make mistakes. However, such mistakes should not lead to fatal accidents or serious injuries. Vision Zero combines infrastructure and regulation measures, together with traffic education.

From the detailed case of Sweden's road safety policy, as well as the brief discussion of the other countries, a few key success factors emerge.

First, the concerned national ministry needs to be the leading party in improving road safety, clearly a sector-oriented policy. Without such leadership, there is a lack of consistency, support and attention, as well as coordination and funding that is crucial.

Secondly, the national ministry is also best able to coordinate with other sectors and levels of government. With the revision of Vision Zero in Sweden, the role of lower governments has been defined more clearly. The main argument raised was more effective spending of resources and better addressing of specific safety hazards. This is a development towards a less purely central policy. The national ministry also appears crucial for another aspect of leadership: it needs to set a goal; it needs to promote a consistently safer road transport system. Concerning the role of the national ministry, there is strong similarity between all cases.

Thirdly, having an ambitious goal as zero fatalities seems to be working, but is not necessarily crucial to improving road safety. Indeed, Sweden has this goal and is one of the safest countries in this respect. However, it has not yet managed to realise this vision. Other countries, with a comparable level of safety, have not put down such a target.

Both infrastructural measures, such as roundabouts, and soft measures, such as a low blood alcohol limit, are needed to have safer roads. The Swedish case shows that investigation into the causes of accidents may help to prevent similar accidents in the future if lessons are learned from individual accidents, as well as general trends. Merely implementing certain infrastructural measures or announcing stricter limits will not suffice. Enforcement, consistent across the country, with a high chance of getting caught with serious consequences, is a crucial factor in ensuring that people comply.

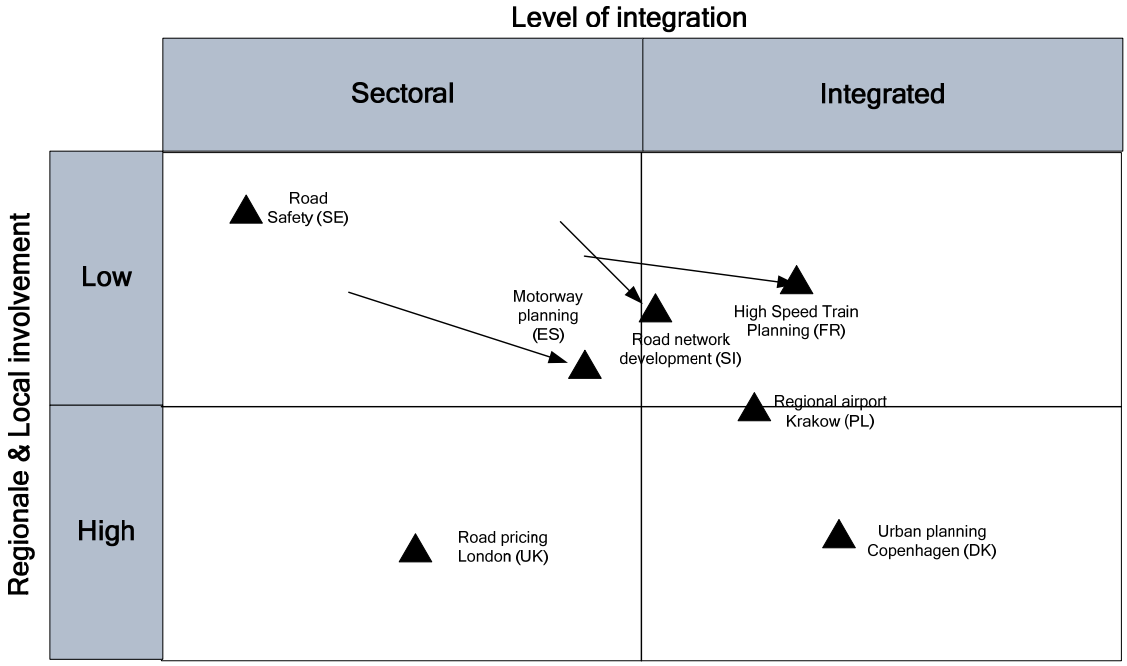
4.4.9 Positioning of and tendencies in the selected case studies

Figure 4.19 provides a typology of the transport case-studies. The case studies in the field of transport policy largely substantiate the picture described for the various transport areas in paragraph 4.3. More comparative details can also be found in the Annex.

In the case of road development and implementation the central and sector oriented policy has been effective in both Spain and Slovenia. In Spain a shift towards a more integrated policy is seen, now that the core motorway network is quite developed. A similar shift may be expected in Slovenia. Also in other Member States in some stage of network development, transport links are developed which are not only meant to reduce congestion, but also to improve accessibility of peripheral regions. In such cases, the transport objective is combined with the regional development objective.

A similar shift from a central, sector approach towards a more integrated policy is noticed in high speed rail infrastructure development in France, where in recent years regional and local governments have strongly voiced their development objectives, thereby influencing the location of terminals and decisions on expansion of the high speed rail network.

Figure 4.19 Relative positioning of individual transport policy cases



The case of regional airport of Krakow illustrates that a strong central role may not be effective in case regional interests are to be promoted, in particular when such interests not only relate to the transport sector, but also to other policy domains like regional development. A regional approach to such policies is more promising in terms of policy effectiveness.

In traffic safety policy in Sweden the approach has remained central and sector oriented. Although the originally very ambitious goals were not realized, the effectiveness of the Swedish approach is clearly seen from EU-wide statistics on road fatalities.

The cases of Copenhagen and London show that regional/local transport policies can be effective. In Copenhagen a successful integrated approach to spatial and public transport development has been maintained over many decades. In London the more sector oriented approach to congestion charging has been effective in reducing congestion levels.

4.5 Conclusions

The evidence from the transport policy field suggests the following answers to the key questions of this study:

a. Current balance in policies

Transport policies are mostly steered from the central government level and are in many cases sector oriented. In particular when it comes to road and rail network development and traffic safety, a central and sector-oriented approach is usually taken. In the case of network development this appears generally to be an approach with quick results. However, at the same time externalities may occur, in terms of environmental effects or increasing regional disparities. From a welfare point of view this may be less effective. Thus, at some stage of development, when such externalities get more weight, a more integrated approach is taken, particularly when per capita income has grown and a shift from a growth towards a more welfare distribution type of development is made.

In specific transport policy areas an integrated approach is followed, such as regional public transport, regional airports or congestion charging. Integrated approaches are sometimes combined with strong involvement of regional and local governments or even decision making at those government levels. Such policies in particular deal with regional problems of congestion or urban planning.

b. Arguments to justify policies

The main argument for a specific type of policy is the expected speed in reaching the policy objectives. Speed in implementation calls for a central approach when it concerns the whole network or all traffic users. When policy objectives are mixed or in case non-transport objectives are more important, an integrated approach is usually followed, sometimes with stronger involvement of regional and local governments. The latter is particularly the case when there is a direct link with regional development objectives. In such case the subsidiarity principle calls for a more regional approach.

c. How can impact of each type of policy be judged

The evidence suggests that a central sector-oriented approach is can be effective in dealing quickly with network or nationwide sector issues. This may happen at the expense of negative external

effects. In other cases the integrated regional approach can be more effective, in particular when the scale if of the problem is at regional level or externalities play a strong role.

d. Has the balance shifted over time?

As described, the balance in transport policy may shift with increasing per capita incomes, from a predominantly sector-oriented approach, to a more integrated approach. The shift, however, is not seen in every transport policy domain and is not always substantial, if it occurs. If there is a need for regional differentiation, or if there are strong external effects, a shift towards more regional and integrated policy approaches is seen.

e. Arguments to support the shift

The main argument for the policy shift is a shift in emphasis from growth orientation towards distribution (regional development) or environmental concerns (externalities). Such shifts in emphasis on distribution and environmental concerns, call for different, more integrated, approaches in transport policies.

At the same time there is a growing trend to tackle mobility problems at the regional level, thereby giving more (financial) means and power to regional governments. The reason for this is that mobility problems in many cases are regional, rather than nationwide problems, which need tailor-made solutions. Despite these shifts, some transport policy issues are likely to remain being steered from the central level, like for instance traffic safety and network planning.

f. Balance top performers

Germany and France are among the top performers in transport policy. Both countries maintain a balance between central and regional policies, as well as between sector and integrated approaches. Also other well performing countries have such mixes. The performance of Member States in the transport and infrastructure field, however, depends less on the policy mixes, but rather on the level of development. As transport infrastructure policy requires substantial (public) investments, countries with higher per capita incomes are likely to perform better than those with lower per capita incomes, irrespective of the policy mix followed.

5 Labour market policy practices in EU-Member States

5.1 Introduction

The labour market is a complex policy domain of which labour market policies constitute only one type of policies. Labour markets are usually organised via a broader regulatory framework that encompasses all "the laws and conventions that establish the rights and entitlements of workers and structure the relationship, as well as the measures to protect and promote employment"20. This regulatory framework includes social policies, labour relations, wage setting mechanisms, rules governing employment contracts as well as labour market policies.

In modern welfare states, each component of the regulatory framework constitutes an institutionally separated policy domain based on different legal foundations (e.g. social rights and industrial rights). These policy domains also differ with regard to their specific historical development and implementation practice.

Labour market policies are usually subdivided into active and passive policies. A distinction between the functions of labour market policies has been proposed by the OECD in 1994 and is currently widely accepted21. Passive labour market policies provide income to those who are (temporarily) not active on the labour market, e.g. because they are unemployed. Passive policies usually constitute a part of the social security system. Active labour market policies moreover, aim to improve the functioning of the labour market by enhancing labour market mobility and adjustment, facilitating the redeployment of workers and enabling people to seize new job opportunities as they arise.

A similar distinction can be found in the Eurostat-labour market policy database22. The database distinguishes the following types of policy:
a) **Labour market services** of the public employment services;
b) **Active measures**, including training, job sharing and job rotation, employment incentives, supported employment and rehabilitation, direct job creation and start-up incentives;
c) **Passive measures**, including out-of-work income support and early retirement.

Labour market policies may pursue equity goals or may enhance efficiency in terms of employment creation. These policies involve measures that "are oriented towards improving the functioning of labour markets in order to generate outcomes that are socially acceptable" 23.

Labour market policies that seek to promote efficiency are ultimately focused on the creation of employment. These include the range of government interventions that are targeted at improving the functioning of the labour market by balancing supply and demand for labour. Efficient labour

20 Visser & Hemerijck, (1997). Een Nederlands Mirakel. Beleidsleren in de verzorgingsstaat.
21 OECD (1994). The OECD Jobs Study.
22 Cf. http://epp.eurostat.ec.europa.eu/portal/page/portal/labour_market/labour_market_policy
23 Cf. Schmid, O'Reilly, Schömann (1996).

market policies provide sufficient incentives to work and generate relatively high employment rates24.

Labour market policies may also pursue objectives that are related to equity objectives. Efficient integration of the labour force into the market is after all closely connected with individual preferences and shortcomings and hence subject to inequalities.

Efficiency- and equity- enhancing objectives may be also pursued or opposed by policies from other domains of the regulatory framework governing the labour market. In addition, the objectives of such policies can be even mutually exclusive. Rules that govern employment contracts for example, have become more flexible across the EU, allowing for a rise of new forms of employment, such as part-time employment. While this may have led to employment growth, it may also have led to a deterioration of social security of workers. Part time workers are for example not fully eligible for unemployment insurance benefits (see for these issues the Italian case study).

Labour market policies can be either of an active or passive nature. While the former includes measures to promote labour market mobility and adjustment, facilitate the redeployment of workers and enable people to seize new job opportunities as they arise, the latter type mainly includes income provision to those (temporarily) unemployed. Labour market policies seek to enhance both efficiency and equity on the labour market. These objectives may contradict each other. In addition, these objectives can be also pursued by other policy domains that make up the broader regulatory framework governing labour markets and of which labour market policies constitute one part.

5.2 Sectoral and integrated policies

A labour market policy can be considered as 'sectoral' if it encompasses measures whose objectives are exclusively concerned with the labour market, therewith referring to equity and efficiency on the labour market. Integrated policies moreover, pursue objectives that transcend the domain of the labour market by –for example- taking economic development into account.

A distinction between sectoral and integrated policies cannot be made solely with reference to policy objectives. Also the policy instruments play a role. A policy can also be integrated if instruments from other policy domains are deployed. Employment creation for example, may also be very well promoted via macro-economic policies.

Given the interdependencies of labour markets with other policy domains, only a few government interventions in the labour market can be considered as purely 'sectoral'. Labour market policies seeking equity objectives are more likely to be sectoral than labour market policies wit efficiency enhancing goals.

24 Cf. Sapir, A. (2005).

Passive labour market policies form the clearest examples of sectoral labour market policies. Unemployment insurance systems solely fulfill an income protection function for workers who (temporarily) lost their jobs. Aside from this equity-related objective, passive policies can also improve efficiency on the labour market.

Unemployment insurance systems however, have been repeatedly used by national governments to create employment opportunities for younger workers. It used to be a common practice in Continental EU Member States, to shed elder workers into 'pre- retirement arrangements', therewith assuring their income via unemployment insurance benefits until they would reach the formal retirement age25.

While the instruments of passive policies mainly include insurance benefit systems, the instruments of active policies are much more differentiated and therewith more likely to be integrated.

Since the end of the Second World War passive labour market policies have been deployed in virtually all EU Member States, but active labour market policies were initially set out in mostly Scandinavian countries. Some of these active labour market policies are clear examples of integrated policies because they are closely connected with education and training of workers for example.

Instead of using active labour market policies, most national governments across the EU used to stimulate employment creation through macro-economic adjustments, i.e. Keynesian demand-management26. Profound changes in recent decades however, increasingly rendered national governments unable to pursue these policies. Instead, the direction of their policies changed towards 'activation' and includes a blend of different measures. This will be set out in the sections below.

Labour market policies can be either sectoral or integrated, depending on their objectives and instruments. If these are solely concerned with the labour market, in terms of equity and/ or efficiency, then labour market policies are sectoral. If they encompass other policy domains, they count as integrated. Labour market policies seeking equity objectives are more likely to be sectoral than labour market policies wit efficiency enhancing goals. Finally, the instruments of active policies are much more differentiated than those of passive polices and more likely to be integrated.

5.2.1 Territorial Employment Pacts

Lloyd (2010) qualifies local development as a 'method' or a 'process' that is characterised through its sensitivity to sub national needs for policy. Territorial Employment Pacts (TEPS) are prime examples of such sub national -grounded experiences. The main objective of TEPs is to concentrate and intensify employment efforts in circumscribed geographical areas through a global

25 Cf. Esping-Andersen, 1990.
26 Cf. Scharpf, F.W. (1999).

and integrated approach. Via the mobilisation of all parties concerned with employment around a joint project that permits improved coordination of job-creating actions in a given territory. TEPs were mostly set up at municipal level, although there was considerable freedom for the EU Member States to also adopt TEPs at regional (e.g. provincial) level.

According to the Austrian Coordination Unit, TEPs are "contracted regional partnerships to improve the link between labour market policy with other policies in order to improve the employment situation on regional and local level27. In co-operating as partners, the specific aims of TEPs are:

- to increase effectiveness and efficiency in the use of resources;
- to improve the quality of support given to certain target groups;
- to secure and create jobs;
- to obtain funding for the region and
- to preserve in a sustainable manner the region as a place to live."

TEPs have been launched in the mid-1990s by the European Commission, with the aim of increasing the impact of the Community Structural Funds on regional and local employment. The geographical areas covered by TEPs must be eligible for European Social Fund (ESF) funding under any one of its Objectives. The involvement of the social partners is explicitly called for, preferably starting with the initial elaboration phase.

5.2.2 Structural challenges

Changes that confront EU Member States are both of endogenous and exogenous nature. Internal challenges left traditional social security and social care systems unable to provide adequate answers. Ageing populations, changing gender roles, post-industrial work patterns etcetera created new sets of (individualised) risks that "engender sub-optimal employment levels, new inequalities and human-capital biased patterns of social exclusion" (Eichhorst & Hemerijck, 2009). These risks overstretch existing welfare systems as the labour market and the family have been weakened as sources of welfare.

Challenges from without moreover, include economic internationalisation and increased international competition that limit the scope for redistributive measures. The creation of a level playing field for business has led many academic observers to believe that the increase in cross-border competition in finances, goods and services reduces the capacity of national governments to act (e.g. Scharpf, F.W, 1999). Economic internationalisation limits the scope of countercyclical macroeconomic management, while increased openness leads to the risk of capital moving to low-level regulated and low-tax countries.

Economic internationalisation is particularly challenging in EU Member States. Free movement of capital, goods, services and labour is fully realised only in the EU and to much lesser extent on a global scale. European economic integration moreover, has profoundly altered the context for national labour market governance and social protection. The introduction of the internal market

27 Cf. http://www.pakte.at/?_lang=en

and the EMU, especially the Growth and Stability Pact, created new supranational rules that constrain economic policies of individual Member States, for example by limiting deficit spending.

5.2.3 The 'activation turn' in labour market policies

Governments reacted to these structural challenges by turning to activation policies. Even though specific reform trajectories diverge among Member States, there exists substantial convergence of policy objectives, target groups, concrete measures, governance models and outcomes (cf. Eichhorst et al. 2008). The approach is predominantly about making benefit receipt dependent on job search activities, acceptance of available job offers or on participation in active labour market policies. In order to stimulate labour market entrance, the approach seeks to combine effective re-employment services with strong job search activities, enforced by moderate sanctions.

A prominent variant of activation policies that is particular promoted by the EU is the flexicurity approach. According to the Communication on flexicurity from the European Commission (2007) a successful flexicurity strategy should balance carefully the income insurance function of the unemployment benefit system with an appropriate "activation" strategy that is designed to facilitate transitions into employment and boost career development28. The EU flexicurity approach includes therefore effective labour market policies that help people to cope with rapid changes on the labour market and that reduces unemployment.

EU Member States significantly differ among each other on this approach, which is something the EC acknowledged. Yet, despite the differences, 'common elements of flexicurity' can be identified. These are29:

- Flexible and reliable contractual arrangements through modern labour laws, collective agreements and work organisation;
- Comprehensive lifelong learning strategies to ensure enduring adaptability and employability of workers;
- Effective active labour market policies to assist the labour force to cope with rapid change and to reduce and ease the transition from unemployment to (new) jobs;
- Modern social security systems that provide sufficient income support, encourage employment and facilitate labour market mobility.

Activation and governance

The introduction of the activation agenda triggered national governments to delegate LMP competencies to authorities at regional and local level. Labour market policies a herewith formulated and implemented by distinct institutions. The exact institutions involved are likely to vary with the different stages in the policy process.

28 European Commission (2007). Towards common principles of Flexicurity: More and better jobs through flexibility and security.
29 Ibid.

A policy is typically conceived, managed and delivered30. Usually different labour market institutions are responsible for each stage: While the design of policies is undertaken by Ministries of Labour, policy delivery is done by local branches of Public Employment Services and/ or municipalities.

The policy process may involve different levels of governance. All three policy elements can be carried out at national, regional or local level. While Ministries of Labour predominantly operate at national level, Public Employment Services are nationally, regionally and locally organised. The extent, to which Public Employment Services are truly organised at sub-national levels of governance, depends on their discretionary space, i.e. the freedom to decide upon actions autonomously. In addition, conceiving labour market policies may very well occur at sub-national level by regional and/or local authorities.

In the past, conceiving, managing and delivering labour market policies typically belonged to the tasks of national authorities31. The development of labour market policies like unemployment insurance contributed heavily to the establishment of the nation state in Europe in the post-WWII decades32. Such policies reaffirmed the existence of a given 'nation', i.e. the group of insured persons. Passive policies like unemployment insurance are still largely a national concern.

The introduction of the activation agenda, the focus on employability in labour market polices, but also broader reform issues such as a commitment to New Public Management created new incentives to 'devolute' conceiving, managing and delivering of labour market policies to lower levels of governance. This is especially true for (active) labour market policies like counseling and training of the unemployed.

When taking a closer look, the precise reasons of the increased role of sub national authorities in labour market policies differ significantly between EU Member States. From a theoretical perspective, the added value of local involvement is essentially threefold33.First, policies can be made more in line with the needs and sensitivities of local labour markets and mirror herewith more realistic opportunities. Second, the involvement of sub national authorities creates possibilities to build capacity of people and groups to create a mutual trust that ultimately strengthens civil society. Third, the involvement of sub national authorities facilitates the creation of partnership networks of various actors and therewith enhances mutual learning and the sharing of good practices and innovation and creativity.

Such theoretical considerations motivated organisations like the OECD as well as the EC to repeatedly prescribe the devolution of LMP competencies. The OECD for example argues that because of the fact that the delivery of ALMPs takes place at the local level, policy-making,

30 Cf. Lloyd, P. (2010).
31 Cf. Ferrera, M. (2005).
32 Nation states are typically sovereign to the outside world and internally hierarchical organised. While subjective entitlements to insurance schemes confirmed the sovereignty of the nation, the concentration of authoritative, administrative and fiscal resources at the central level established the internal organisation. In addition, centralised social insurance schemes brought along further domestic standardisation and therewith a gradual eradication of the territorial diversity in institutional structures and practices. Uniform social services, like Public employment services were also established during this period.
33 Cf. Lloyd, P. (2010).

including policy design and implementation, should occur at exactly that level34. In addition, European Commission supported a more localised approach to labour market policy by stressing the potential for job creation through cooperation between local authorities, enterprises, and social partners. The EC also stressed that labour market policies should allow for sufficient flexibility for sub national authorities when implementing these policies. In addition, such policies may be very well designed at sub national level. Another EU incentive for Member States to transfer LMP competencies to sub national level stems from the European Social Fund (ESF)35.Local employment promotion (mainly through ALMPs) has been a prominent objective of the 2000-2006 as well as the current 2007 – 2013 ESF programming period.

In practice however, the transfer of labour market policy competencies occurred for a variety of reasons that differ between EU Member States. The case studies that have been undertaken for this project illustrate this diversity.

Such devolution may take place because of political reasons. In Italy, regional authorities sought to increase their power vis-à-vis the national government by claiming exclusive competencies in the area of active labour market policies. In Denmark, the merger of small local authorities was 'bought off' with an increase of LMP competencies of the future larger local authorities.

In Spain however, the failure of the national PES to deliver effective active labour market policies triggered a wide public debate that resulted in a shift of competencies from the national level to the level of the Autonomous Communities.

Recent reforms in Germany provided local Public Employment Services with quantitative performance targets in line with the NPM philosophy. Even though policies are still mainly conceived at national level, local PES now have the discretionary power to deploy active labour market polices according to their own will.

In those CEE countries were more integrated policies have been studied, the devolution of LMP competences occurred in line with a broader transformation of post-Communist states to strengthen local democracy36 and to provide effective local answers when anticipating on the problems that came along with the shift towards market-based economies and to reform in line with the Acquis Communautaire for EU accession. In Poland for example, the involvement of local authorities and social partners became indispensable for effective delivery of LMPs as local PES offices increased and employers obtained a stake in financing ALMPs as soon as significant regional differences in economic and labour potential became more apparent37.

In the UK finally, labour market policies are still predominantly nationally organised, but the establishment of Regional Development Agencies and subsequent strategies for regional development created a new basis for interventions at EU, national and regional level that took active labour market policies on board.

34 OECD (1994). The OECD Jobs Study.
35 Cf. Büchs & Lopez- Santana (2007).
36 Cf. Nemec, J. (2007). Decentralisation reforms and their relations of local democracy and efficiency: CEE lessons.
37 Cf. OECD (2003). Managing decentralisation: A new role for labour market policy.

5.3 Labour market performance in EU-Member States

5.3.1 Clustering labour markets

Current shifts towards activation and the greater involvement of sub-national authorities across the EU take place against the background of various historical policy legacies38. There exists considerable variance in labour market institutions, the different levels at which these operate, the policy implemented, and the objectives pursued. When governing labour markets, EU Member States are directed by the various institutional frameworks that govern their labour markets. Each of these frameworks produces different outcomes.

The variance in the organisation of labour markets across the EU can be pictured in a simplified manner through a clustering exercise. For the purpose of this study, all EU Member States have been grouped in accordance with their performance on the main flexicurity indicators:

- Flexible contractual arrangements: OECD employment protection index, whereas a score above the average counts as negative (i.e. less flexible);
- Comprehensive lifelong learning strategies: Participation persons in lifelong learning (education and training);
- Effective labour market policies: Total spending on ALMPs (2007);
- Modern social security systems: Replacement rates of unemployment Insurance benefits (both for one earner married couple without children and for a Two-earner married couple, 2 children).

The next step consists of determining their eligibility for 'flexicurity pathways'. The European Expert Group on Flexicurity (2007) identified four 'Pathways' on the basis of the four components of flexicurity39. Each pathway reflects a specific challenge. EU Member States may draw on one specific pathway or on multiple pathways. These four pathways are:

- Reduce asymmetries between non-standard and standard employment by integrating non-standard contracts fully into labour law, collective agreements, social security and lifelong learning, and consider making employment in standard contracts more attractive to firms;
- Enhance companies' and workers' adaptability by developing and strengthening transition security;
- Address opportunity and skills gaps among the workforce by broadening and deepening investments in skills;
- Enhance employment opportunities for benefit recipients, prevent long-term welfare dependence, regularise informal work and build up more institutional capacity for change.

Five types of 'flexicurity regimes' have subsequently been identified on the basis of their scores on the flexicurity indicators compared to EU averages (see Table 5.1). An EU Member State becomes eligible for a certain pathway as soon its performance on relevant indicators differs significantly from the EU average.

38 As for example conceptualised by Esping-Andersen (1990). He identified different welfare regimes. Sapir (2005) built upon this approach.
39 European Expert Group on Flexicurity (2007). Flexicurity Pathways. Turning hurdles into stepping stones.

One type of flexicurity regime includes EU Member States that are not eligible for any of the pathways and seem to have their labour market organised fully in line with the flexicurity components. Another type includes those Member States that are eligible for multiple pathways and need to adjust their labour markets vis-à-vis various flexicurity components. Finally, there are three types of regimes that point to a single flexicurity – related challenge only:

- The need to create more contractual flexibility;
- The need to invest more in (unemployed) persons (through ALMPs and LLL)40;
- The need to review the social security system.

Whether Member States have a single challenge only or multiple challenges does not necessarily say anything about the dimension of the challenge. Some countries are confronted with a single large challenge, others with multiple smaller challenges, depending on the deviation of the EU average.

Table 5.1 EU Member States and Flexicurity regimes

Flexicurity regime	EU Member States
1. 'Forerunner countries' with labour markets fully in line with flexicurity principles	Austria (AT), Denmark (DK), Finland (FI), the Netherlands (NL)
2. 'Countries requiring flexibility' entering pathway A on flexible labour markets	Germany (DE), Spain (ES), France (FR), Luxembourg (LU)
3. 'Countries requiring LMP reform' entering the pathways B & C on investing in (unemployed) persons (ALMP & LLL)	Cyprus (CY), Czech Republic (CZ), Estonia (EE), Italy (IT)
4. 'Countries requiring social security reform' entering pathway D on social security	Ireland (IE), Sweden (SE)
5. 'Laggard countries' entering multiple pathways	Belgium (BE), Bulgaria (BG), Greece (EL), Hungary (HU), Lithuania (LT), Latvia (LV), Malta (MT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), United Kingdom (UK)

Since the above regimes have been identified on the basis of outcomes, they deviate from the regimes that have been previously identified in comparative welfare state research. The well-known welfare regimes of Esping-Andersen (1990) for example, were identified on the basis of on institutional resemblances. The outcome-based regimes are much less sustainable. They represent a snapshot in time and as soon as an individual country solves its flexicurity-related challenge(s), it changes to a different regime. Institution-based regimes on the contrary, are considered to develop in a 'path dependent' manner through which their institutional characteristics survive over longer periods of time.

Despite the limited durability, the added value of the flexicurity regimes lies predominantly in their complexity-reducing function. Given the large variety of challenges on the labour market

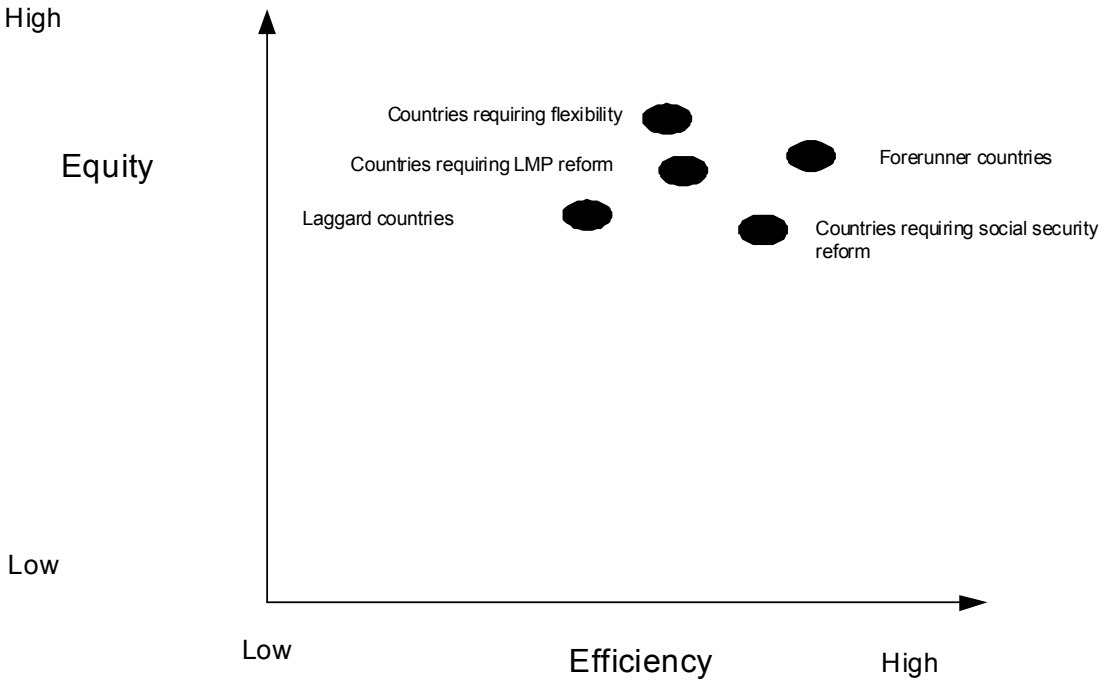
40 The pathways on ALMPs and LLL have been merged for reasons of simplicity.

across the EU, regimes simply refer to the flexicurity-related challenge (s) shared by certain EU member states.

Regime performance

The different flexicurity regimes produce different labour market outcomes in terms of employment (efficiency) and equity41. Figure 5.1 shows that Member States that have their labour markets organised fully in conformity with the principles of flexicurity (Forerunner countries) score optimally with regards to both equity and efficiency. Member States that need to modify their labour markets along multiple pathways (Laggard countries) score worst on both dimensions. Logically, those Member States entering the pathway on flexibility or investing in (unemployed) persons (Countries requiring flexibility and Countries requiring LMP reform) perform suboptimal with regards to efficiency. Those Member States entering the pathway on social security (Countries requiring social security reform) perform suboptimal with regards to equity. The different outcomes are depicted in Figure 5.1.

Figure 5.1 Flexicurity regimes and performance in terms of efficiency and equity



The scoring and performance of each Member State/ Regime will be explored in more detail in the following sections.

41 Measured in terns of average Total employment and Unemployment Insurance benefit replacement rate per type.

5.3.2 Labour market performance and economic development

Labour market performance depends on regime characteristics. At the same time, performance is very well dependent on the structure of product and capital markets (and vice versa). When assessing labour market performance across the EU, the level of economic development should thus be taken into account.

Economic development can be grasped by the Global Competitiveness Indicators of the World Economic Forum. Competitiveness is defined by the Forum as "the set of institutions, policies, and factors that determine the level of productivity of a country".

The Forum applies 12 variables to cluster countries into:

- Factor-driven economies;
- Efficiency-driven economies;
- Innovation-driven economies.

Whereas factor-driven economies primarily compete on the basis of their factor endowments (unskilled labour and national resources), efficiency-driven economies are more advanced and produce higher quality products and services through more efficient production processes, and innovation-driven economies reflect the highest stage of economic development where companies compete through permanent innovation, producing new and different goods and services through sophisticated production processes.

The vast majority of economies of EU Member States are innovation-driven therewith reaching the highest stage of development42. There exists however considerable divergence between countries. Table 5.2 provides an overview of the ranking of individual EU Member States on the Global Competitiveness Index.

Table 5.2 Ranking of individual EU Member States on the Global Competitiveness Index

Countries	CGI score
Forerunner countries	
Austria (AT)	5.13
Denmark (DK)	5.46
Finland (FI)	5.43
the Netherlands (NL)	5.32
Average score	5.34
Countries requiring flexibility	
Germany (DE)	5.37
Spain (ES)	4.59
France (FR)	5.13
Luxembourg (LU)	4.96

42 In terms of GPD per capita and the extent to which countries are factor driven, only the economy of Bulgaria is an efficiency-driven economy. The economies of Hungary, Latvia and Romania currently experience a transition from efficiency to innovation-driven.

Countries	CGI score
Average score	5.00
Countries requiring LMP reform	
Cyprus (CY)	4.57
Czech Republic (CZ)	4.67
Estonia (EE)	4.56
Italy (IT)	4.31
Average score	4.50
Countries requiring social security reform	
Ireland (IE)	4.84
Sweden (SE)	5.51
Average score	5.20
Laggard countries	
Belgium (BE)	5.09
Bulgaria (BG)	4.02
Greece (EL)	4.04
Hungary (HU)	4.22
Lithuania (LT)	4.3
Latvia (LV)	4.06
Malta (MT)	4.3
Romania (RO)	4.11
Poland (PL)	4.33
Portugal (PT)	4.4
Slovenia (SI)	4.55
Slovakia (SK)	4.31
United Kingdom (UK)	5.19
Average score	4.4

Source: World Economic Forum 2010.

Forerunner countries also have very high CGI scores (5.34 on average), while Laggard countries have the lowest CGI scores (4.4 on average). Interestingly, Countries requiring social security reform have on average higher CGI scores (5.2) than Countries requiring LMP reform (5.0 respectively 4.5 on average).

The outcomes of the GCI scores of the individual EU member states show that the Scandinavian countries have the most developed economies. Two Continental countries, the Netherlands and Germany, as well as the United Kingdom closely follow the Scandinavian countries with regards to their levels of economic development. These latter countries however, show mixed results when taking the performance of the labour market regimes into account.

Most Continental countries score moderately in the GCI ranking. Both the Southern European and CEE countries have relatively low scores in terms of the GCI ranking. Countries with a noticeable positive score are the Czech Republic and Spain, while the level of economic development in Greece is striking in a negative sense.

Key indicators

Negative employment growth in the EU throughout 2009

Employment growth, i.e. the change in percentage from one period to another of the total number of employed persons, was still positive for the EU 27 as a whole in 2008. Growth rates in individual Member States however, show considerable differences for that year. In Hungary, Ireland, Lithuania and Spain employment growth started to deteriorate dramatically in 2008 and even further throughout 2009. Early signs for this decline where already visible in Hungary in 2007.

Employment growth was very modest in 2008 in Estonia, Romania, Italy and Portugal. Here the growth rate was close to zero percent. Some EU Member States still showed positive growth rates in 2008. Employment growth amounted in 2008 in Luxembourg and Poland almost 4% or more, while employment growth in Bulgaria increased to 3.3%. Growth was also achieved in Slovenia and Slovakia. In the larger Member States, employment growth rates where predominantly stabile in 2008, whereas Germany still managed to achieve a growth of 1.4%.

Employment growth was negative for the first quarter of 2009 onwards in all Member States. Labour markets in the Baltic States have been particularly hit by the economic crisis as these countries demonstrate the highest rates of decline. Also employment growth in Scandinavian countries - Denmark and Finland- showed four subsequent quarters of relatively high decline in 2009.

Table 5.3 Employment growth in EU Member States 2007-2009 (%)

	2007	2008	2009q01	2009q02	2009q03	2009q04
Forerunner countries						
Austria (AT)	1.8	1.8	-0.9	-0.1	0	0.1
Denmark (DK)	2.9	1.4	-1.9	-0.7	-1.6	-1.7
Finland (FI)	2.2	1.6	-0.9	-1.5	-1.1	-0.7
the Netherlands (NL)	2.6	1.4	-0.4	-0.6	-0.5	:
Average	2.45	1.6	-1.0	-0.7	-0.8	-0.8
Countries requiring flexibility						
Germany (DE)	1.7	1.4	-0.1	-0.2	-0.1	0
Spain (ES)	3	-0.6	-2.5	-1.3	-1.5	-0.8
France (FR)	1.4	0.5	-0.4	-0.4	-0.2	-0.1
Luxembourg (LU)	4.4	4.7	-0.2	-0.1	0	:
Average	2.6	1.5	-0.8	-0.5	-0.5	-0.3
Countries requiring LMP reform						
Cyprus (CY)	3.3	2.6	:	:	:	:
Czech Republic (CZ)	2.7	1.2	-0.7	-1	-0.4	0.2
Estonia (EE)	0.7	0.2	-2.8	-3.3	-3	-3.4
Italy (IT)	1.2	0.3	-0.6	-0.4	-0.6	-0.1

	2007	2008	2009q01	2009q02	2009q03	2009q04
Average	2.0	1.1	-1.4	-1.6	-1.3	-1.1
Countries requiring social security reform						
Ireland (IE)	3.7	-1.1	-3.7	-1.5	-2	:
Sweden (SE)	2.2	0.9	:	:	:	:
Average	3.0	-0.1	-3.7	-1.5	-2	:
Laggard countries						
Belgium (BE)	1.6	1.9	-0.4	-0.3	-0.3	-0.3
Bulgaria (BG)	2.8	3.3	:	:	:	:
Greece (EL)	1.4	0.1	-0.6	-0.2	-0.5	-0.8
Hungary (HU)	-0.1	-1.2	-1.6	-1.5	-0.1	-0.5
Lithuania (LT)	2.8	-0.5	-4	-1.5	-0.4	-2.3
Latvia (LV)	3.5	0.8	-3.6	-4.9	-4.9	-4
Malta (MT)	3.2	2.5	:	:	:	:
Poland (PL)	4.4	3.8	-0.5	0.3	0.1	-0.4
Portugal (PT)	0	0.4	-1.1	-1	-0.8	0
Romania (RO)	0.4	0.3	:	:	:	:
Slovenia (SI)	3	2.8	-0.8	-1	-1.1	-1
Slovakia (SK)	2.1	2.8	-1.8	-0.7	-0.8	-0.6
United Kingdom (UK)	0.7	0.1	-0.6	-0.8	0	0
Average	2.0	1.3	-1.5	-1.2	-0.9	-1.0
EU-27	1.8	0.9	-0.8	-0.6	-0.5	-0.3

Source: Eurostat (LFS)

Lisbon targets on employment unlikely to be reached

The employment rate of the working-age population (those aged between 15 and 64 years) reached for the EU 27 as a whole 65.9% in 2008. While this figure represents an increase of 0.5% compared with the preceding year, the figure for 2009 was less positive. The total employment rate for the EU 27 decreased to 64.4% in the first quarter from 2009 (cf. Weiler, A.). The Lisbon target of 70% is herewith unlikely to be reached in 2010 (ibid.).

Employment rates vary considerably between EU Member States. Denmark and the Netherlands had the highest employment rates in 2008 of the whole EU 27, respectively 78.1% and 77.2%. Northern Western Member States in general have higher employment rates than elsewhere in the EU as total employment is also high in Sweden (74.3%), the UK (71.5%), Finland (71.1%) and Germany (70.7%). The lowest total employment rates on the contrary, can be found in new Member States like Poland (59.2%), Romania (59.0%), Hungary (56.7%) and Malta (55.3%). Italy however, is still present in the list of low performers, with an employment rate of 58.7%.

Female employment rates have been increasing throughout the EU with more than 5 percentage points since 2000 (Employment in Europe, 2009). Yet, female employment remains much lower than the male employment rate. In EU_27 on average is the employment rate of female 13.7%

lower than that of male. This gender gap in employment is particular substantial in Mediterranean countries like Malta (35.1%), Spain (26.3%) and Italy (23.1%). This gap is the narrowest in Sweden (4.9%) and Finland (4.1%).

Table 5.4 Employment rate 15-64 years 2008 in EU Member States (%)

	Total	Male	Female
Forerunner countries			
Austria (AT)	72.1	78.5	65.8
Denmark (DK)	78.1	81.9	74.3
Finland (FI)	71.1	73.1	69
the Netherlands (NL)	77.2	83.2	71.1
Average	75.5	79.4	71.5
Countries requiring flexibility			
Germany (DE)	70.7	75.9	65.4
Spain (ES)	64.3	73.5	54.9
France (FR)	64.9	69.6	60.4
Luxembourg (LU)	63.4	71.5	55.1
Average	65.8	72.6	59.0
Countries requiring LMP reform			
Cyprus (CY)	70.9	79.2	62.9
Czech Republic (CZ)	66.6	75.4	57.6
Estonia (EE)	69.8	73.6	66.3
Italy (IT)	58.7	70.3	47.2
Average	66.5	74.6	58.5
Countries requiring social security reform			
Ireland (IE)	67.6	74.9	60.2
Sweden (SE)	74.3	76.7	71.8
Average	71.0	75.8	66
Laggard countries			
Belgium (BE)	62.4	68.6	56.2
Bulgaria (BG)	64	68.5	59.5
Greece (EL)	61.9	75	48.7
Hungary (HU)	56.7	63	50.6
Lithuania (LT)	64.3	67.1	61.8
Latvia (LV)	68.6	72.1	65.4
Malta (MT)	55.3	72.5	37.4
Poland (PL)	59.2	66.3	52.4
Portugal (PT)	68.2	74	62.5
Romania (RO)	59	65.7	52.5

	Total	Male	Female
Slovenia (SI)	68.6	72.7	64.2
Slovakia (SK)	62.3	70	54.6
United Kingdom (UK)	71.5	77.3	65.8
Average	63.2	70.2	56.3
EU-27	65.9	72.8	59.1

Source: Eurostat (LFS).

Increase of unemployment

In 2009 the unemployment rate for the EU 27 amounted to 8.9% on average. Spain had the highest unemployment rate of 18%, followed by Latvia where unemployment summed up to 9.5%. Other EU Member States where unemployment was higher than the average include Lithuania (14.0%), Estonia (13.8%), Slovakia (11.9%), Ireland (11.8%), Hungary (10%), Portugal (9.6%) and France (9.4%). Countries with low unemployment of less than 4% in 2009 were Netherlands (3.5%).

In those countries where unemployment sharply increased throughout 2009, the turning point had been reached already in 2007. All of the countries had the highest share of total gross value added in the construction sector (cf. Weiler, A. 2009).

In January 2010, the Member States with the largest announced cuts in employment were Romania (6380 jobs), the UK (4423 jobs), Germany (4280), and the Czech Republic (2640) (cf. EU employment situation and social outlook), most of the job losses were recorded in the manufacturing sector, the transport, storage and communications sector, retail and financial intermediation.

Men are generally more strongly hit by the current crisis. This is not so much a result of successful policies to promote female employment, but rather of the fact that male-dominated sectors, such as the automotive sector, have been severely hit by the crisis. As a result, in almost half of the EU-27 countries in 2009, the male unemployment rate was higher than the female unemployment rate, such as Lithuania (the male unemployment rate was 6.9% higher than female), Ireland (6.8%), Estonia (6.3%) and Latvia (6.2%).

Table 5.5 Unemployment rate 15-64 years 2009 in EU Member States (%)

	Total	Male	Female
Forerunner countries			
Austria (AT)	5.0	5.2	4.7
Denmark (DK)	6.0	6.5	5.4
Finland (FI)	8.2	8.9	7.6
the Netherlands (NL)	3.5	3.4	3.5
Average	5.9	6.3	5.5

	Total	Male	Female
Countries requiring flexibility			
Germany (DE)	7.5	8.0	6.9
Spain (ES)	18.0	17.7	18.4
France (FR)	9.4	9.1	9.8
Luxembourg (LU)	5.7	5.3	6.2
Average	10.2	10.0	10.3
Countries requiring LMP reform			
Cyprus (CY)	5.3	5.1	5.5
Czech Republic (CZ)	6.8	6.0	7.8
Estonia (EE)	13.8	16.9	10.6
Italy (IT)	:	:	:
Average	8.6	9.3	8.0
Countries requiring social security reform			
Ireland (IE)	11.8	14.8	8.0
Sweden (SE)	8.3	8.6	8.0
Average	10.1	11.7	8.0
Laggard countries			
Belgium (BE)	7.9	7.7	8.2
Bulgaria (BG)	6.7	6.9	6.6
Greece (EL)	:	:	:
Hungary (HU)	10.0	10.3	9.7
Lithuania (LT)	14.0	17.4	10.5
Latvia (LV)	17.6	20.6	14.4
Malta (MT)	7.0	6.6	7.7
Poland (PL)	8.2	7.8	8.7
Portugal (PT)	9.6	9.0	10.3
Romania (RO)	:	:	:
Slovenia (SI)	6.0	6.1	5.9
Slovakia (SK)	11.9	11.2	12.6
United Kingdom (UK)	7.6	8.6	6.4
Average	9.7	10.2	9.2
EU-27	8.9	9.0	8.8

Source: Eurostat (LFS).

Age

There exists a significant difference in recent labour market trends for elderly workers (55-64) and workers in the age group of 15 – 24 years. While the situation on the labour market for the latter group of young employees worsened with the current economic crisis, developments have been positive for the former age group. On average for the EU 27, the employment rate for elderly workers (55-64) increased 8.7% from 2000 to 2008. The increase was the largest in Bulgaria (25.2%) and Latvia (23.4%), followed by Slovakia (17.9%), Germany (16.2%) and Estonia (16.1%). Denmark, Malta and Portugal developed relatively slow with regard to labour market participation for elderly workers (55-64) and the employment rate for elderly workers only

increased 1.3%, 0.7% and 0.1% respectively from 2000 to 2008. Contrary to all other Member States, Romania is the only one with a decreased employment rate for elderly workers (-6.4%) from 2000 to 2008.

Table 5.6 Employment rate 55-64 years 2000, 2005, 2008 In EU Member States (%)

	2000	2005	2008
Forerunner countries			
Austria (AT)	28.8	31.8	41
Denmark (DK)	55.7	59.5	57
Finland (FI)	41.6	52.7	56.5
the Netherlands (NL)	38.2	46.1	53
Average	41.1	47.5	51.9
Countries requiring flexibility			
Germany (DE)	37.6	45.4	53.8
Spain (ES)	37	43.1	45.6
France (FR)	29.9	38.5	38.2
Luxembourg (LU)	26.7	31.7	34.1
Average	32.8	39.7	42.9
Countries requiring LMP reform			
Cyprus (CY)	49.4	50.6	54.8
Czech Republic (CZ)	36.3	44.5	47.6
Estonia (EE)	46.3	56.1	62.4
Italy (IT)	27.7	31.4	34.4
Average	39.9	45.7	49.8
Countries requiring social security reform			
Ireland (IE)	45.3	51.6	53.7
Sweden (SE)	64.9	69.4	70.1
Average	55.1	60.5	61.9
Laggard countries			
Belgium (BE)	26.3	31.8	34.5
Bulgaria (BG)	20.8	34.7	46
Greece (EL)	39	41.6	42.8
Hungary (HU)	22.2	33	31.4
Lithuania (LT)	40.4	49.2	53.1
Latvia (LV)	36	49.5	59.4
Malta (MT)	28.5	30.8	29.2
Poland (PL)	28.4	27.2	31.6
Portugal (PT)	50.7	50.5	50.8
Romania (RO)	49.5	39.4	43.1
Slovenia (SI)	22.7	30.7	32.8
Slovakia (SK)	21.3	30.3	39.2
United Kingdom (UK)	50.7	56.8	58
Average	33.6	38.9	42.5
EU-27	36.9	42.3	45.6

Source: Eurostat

Migrants

Almost as a rule, the unemployment rate for nationals is lower than for non nationals (both non nationals but citizens of other EU-27 countries and citizens of countries outside the EU-27) in 2008. The biggest differences between nationals and citizens from countries outside the EU-27 can be found in Luxembourg and Belgium. In both countries was the unemployment rate of the latter much higher than the former, 43.8% and 21.2% respectively.

Exceptions to this rule can be found in Czech Republic, Greece and United Kingdom. In the Czech Republic, the unemployment rate for nationals was 0.8% higher than non nationals but citizens of other EU-27 countries and 1.2% higher than citizens of countries outside the EU-27. The unemployment rate of Greek nationals is 1% lower than migrant workers from other EU-27 countries but 0.9% higher than those from countries outside the EU-27. In the UK on the contrary, the unemployment rate of nationals is higher (1.0%) than non national workers from other EU-27 countries but lower (-2.7%) than those from countries outside the EU-27.

Table 5.7 Unemployment rate 15-64 years 2008 in EU Member States (%) by nationality

	Nationals	Non nationals but citizens of other EU-27 countries	Citizens of countries outside the EU-27
Forerunner countries			
Austria (AT)	3.4	6.2	9.6
Denmark (DK)	3.2	:	11.9
Finland (FI)	5.8	11.0	17.9
the Netherlands (NL)	2.4	3.9	9.0
Average	3.7	7.0	12.1
Countries requiring flexibility			
Germany (DE)	6.2	8.0	17.3
Spain (ES)	12.5	18.0	22.6
France (FR)	7.6	6.3	20.4
Luxembourg (LU)	2.9	4.8	46.7
Average	7.3	9.3	26.8
Countries requiring LMP reform			
Cyprus (CY)	2.7	7.2	4.7
Czech Republic (CZ)	4.4	3.6	3.2
Estonia (EE)	6.1	:	14.1
Italy (IT)	6.9	7.9	9.1
Average	5.0	6.2	7.8

	Nationals	Non nationals but citizens of other EU-27 countries	Citizens of countries outside the EU-27
Countries requiring social security reform			
Ireland (IE)	7.1	9.5	9.2
Sweden (SE)	5.7	6.4	24.1
Average	6.4	8.0	16.7
Laggard countries			
Belgium (BE)	6.1	8.6	27.3
Bulgaria (BG)	5.0	:	:
Greece (EL)	8.0	9.0	7.1
Hungary (HU)	8.0	8.7	:
Lithuania (LT)	7.9	:	:
Latvia (LV)	9.0	:	14.7
Malta (MT)	6.3	:	:
Poland (PL)	6.7	:	:
Portugal (PT)	7.6	:	13.5
Romania (RO)	5.8	:	:
Slovenia (SI)	4.3	:	:
Slovakia (SK)	8.7	:	:
United Kingdom (UK)	6.1	5.1	8.8
Average	6.9	7.9	14.3
EU-27	6.8	8.8	15.7

Source: Eurostat.

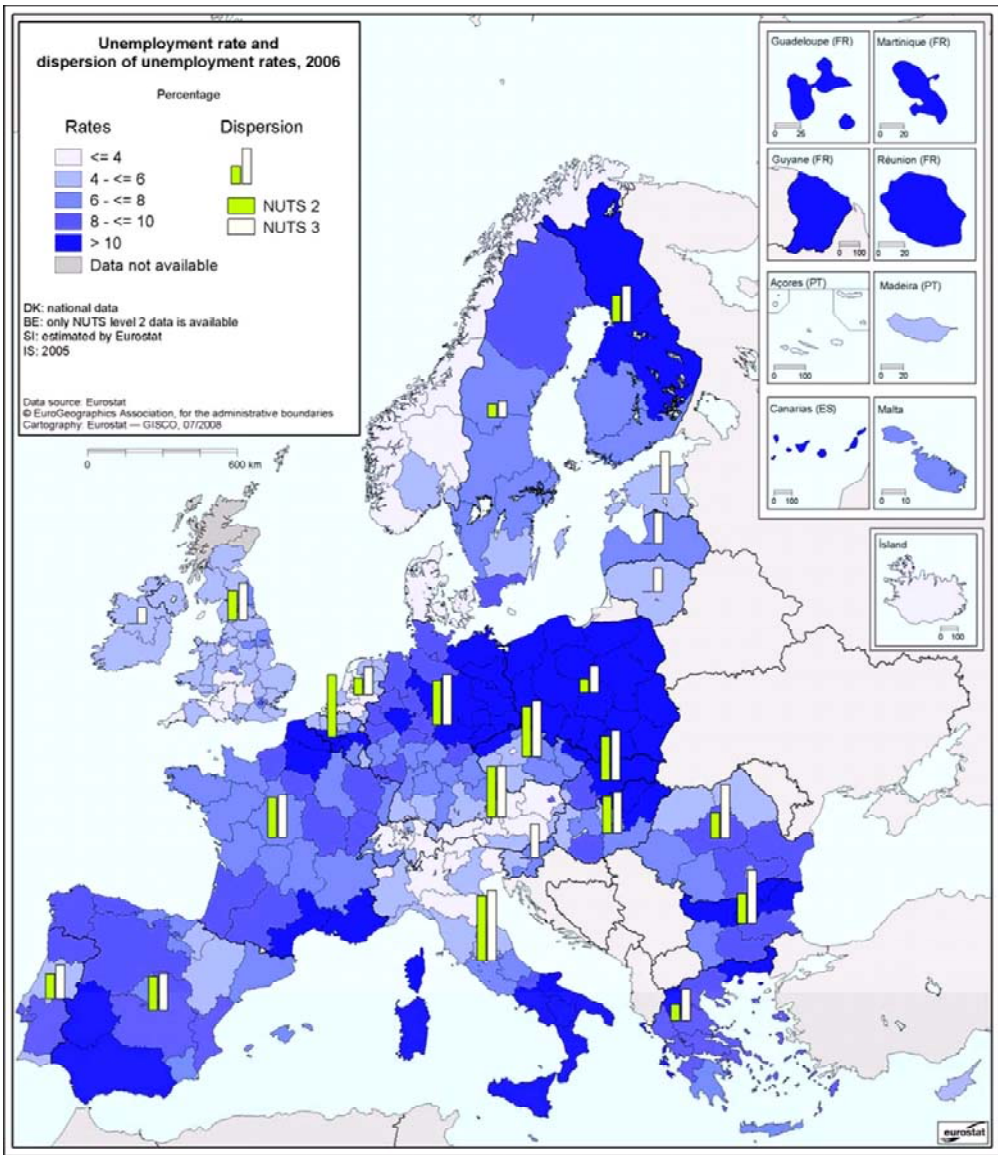
Regional variance

While there is considerable variation in labour market outcomes between EU Member States, there exists also profound regional disparities in terms employment and unemployment. While some EU Member States show large differences in unemployment rates between regions, others display a more equal distribution of their regional unemployment rates.

Regions with high levels of unemployment can be found especially in north-eastern Europe: Polish regions, eastern German regions, and eastern Slovakian regions. Regions with high unemployment rates however, also include the French overseas departments, the region of Extremadura in Spain and the southern regions in Italy.

According to Eurostat (2008), the disparity of unemployment rates between regions has been reduced in the period 2002- 2006. In 2006, the dispersion of regional unemployment rates at NUTS level 2 in the EU-27 was 45.6% and at NUTS level 3 it was slightly bigger: 50.2%. These figures show that the distribution of regional unemployment rates has shrunk in comparison with 2002, with drops of more than 17 percentage points, for both NUTS level 2 and 3.

Figure 5.2 Regional variance in unemployment across the EU



5.3.3 Labour market policy mix in EU-Member States

National policy mixes across the EU

The specific national policy mix varies among EU Member States. For the purpose of this study, the differences with regards to the involvement of sub national authorities as well as to the level of policy integration will be highlighted in the following section. The specific national policy mixes also vary over time. The section below provides an overview of the factors that have been taken into account when determining the current national policy mixes across the EU.

The position of individual EU Member States with regards to the involvement of national, regional and local authorities is based on categories that have been identified by the EU working Group on multilevel governance and modified in the ESPON project43. These categories on the interplay between national, regional and local levels of governance differ by the degree of autonomy at regional and local level and by the mode of transfer of powers. The following categories have been identified:

- Centralised unitary states: States with a strong central government to which regional and local administrations are subordinated (BG, CYP, EE, EL, HU, IE, LT, LU, PT, RO, SL);
- Decentralised unitary states: Central states that have been reformed to establish elected regional authorities above the local level (CZ, DK, FI, FR, LV, SK, SE, NL);
- Regionalised unitary states: States with elected regional governments that have a constitutional status guaranteeing legislative powers and a high degree of autonomy (IT,MT, PL, ES, UK);
- Federal states: States where power sharing is guaranteed by the constitution (AT, BE, DE).

Among these different territorial government systems, divergence exists in the competencies of the various levels of governance. While it is clear that the competence to design and implement labour market policies in centralised unitary states lies exclusively at the level of the central government, the distribution of such powers in federal states is much less clear. The Autonomous Communities in Spain have a much greater saying in the field of (active) labour market policy than the German Länder for example.

In addition, even though the majority of new Member States (NMS) are considered as centralised unitary states, many of these countries recently initiated decentralisation reforms, albeit to a different extent (cf. Nemec, 2007). Some of them can be considered as 'decentralisation frontrunners', e.g. Hungary and Poland, while others (Bulgaria for example)lag behind.

When identifying the level of integration in individual EU member States, attention has also been paid to the following factors:

- Whether labour market policy is limited to passive measures such as unemployment benefits and basic services for job seekers;
- To the extent to which active labour market policies are pursued, and/ or;
- Whether labour market policies are linked to economic development policies (e.g. at local level).

During the last decade, labour market policies across the EU have been redirected towards the activation agenda, reflected for example in the EES. This redirection basically implied a shift from benefit provision to active labour market policies. Such active labour market policies are generally more integrated. They involve a number of policy domains from outside the immediate scope of the labour market (e.g. education and welfare) and require close coordination between policies and services in employment and welfare.

The redirection towards such policies however, has occurred in the EU at a variety of paces. These differences are for example mirrored in the varying levels of expenditure on ALMPs (as % of

43 Cf. CoR (2009). Investing in people and modernising labour markets. Study undertaken by METIS GmbH.

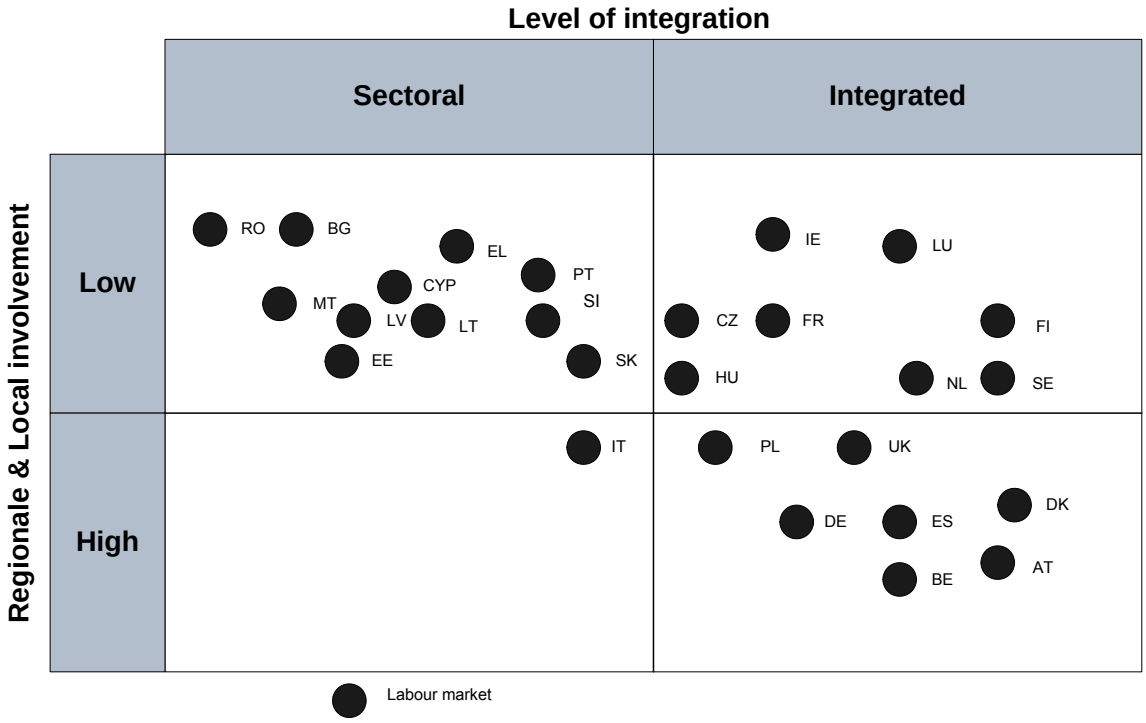
GDP, see Table 5.10). In terms of expenditure, the levels in 'old' EU Member States are mostly above the EU average, while the level in new EU Member States as well as in some Mediterranean Member States (EL, IT, PT) is mostly below EU average. In those countries were expenditure is low, it can be assumed to labour market policies are still geared towards passive measures and are therewith rather sectoral.

The level of integration however, does not entirely depend on factors like expenditure levels on ALMPs. Labour market policies are also to different extents linked to economic development policies at local, regional and national level. The comparative little funding for ALMPs in some EU Member States can therewith be offset by their comparatively intensive efforts to invest in local employment pacts for example. This is for example the case in many New Member States that have to cope with a significant restructuring of their local and regional economies.

When positioning individual member states along both axes (level of integration and the extent to which sub national authorities are involved), labour market policy in the majority of the NMS and in Portugal and Greece is mainly of a sectoral nature. The involvement of regional and local authorities in these countries is also low. Countries with 'advanced' labour market policies in terms of activation and local development measures on the contrary, pursue more integrated policies and involve regional and local authorities to a much larger extent. These are particular AT, BE, DE, DK, ES, UK, but also Poland. Countries with integrated labour market policies but with a relatively low involvement of regional and local authorities are CZ, FI, FR, IE, HU, LU, NL and SE. In Italy regional and local authorities are more involved in labour market policies, but the policies are still largely sectoral.

The position of individual Member States is depicted in Figure 5.3. below.

Figure 5.3 National labour market policy mixes in EU Member States

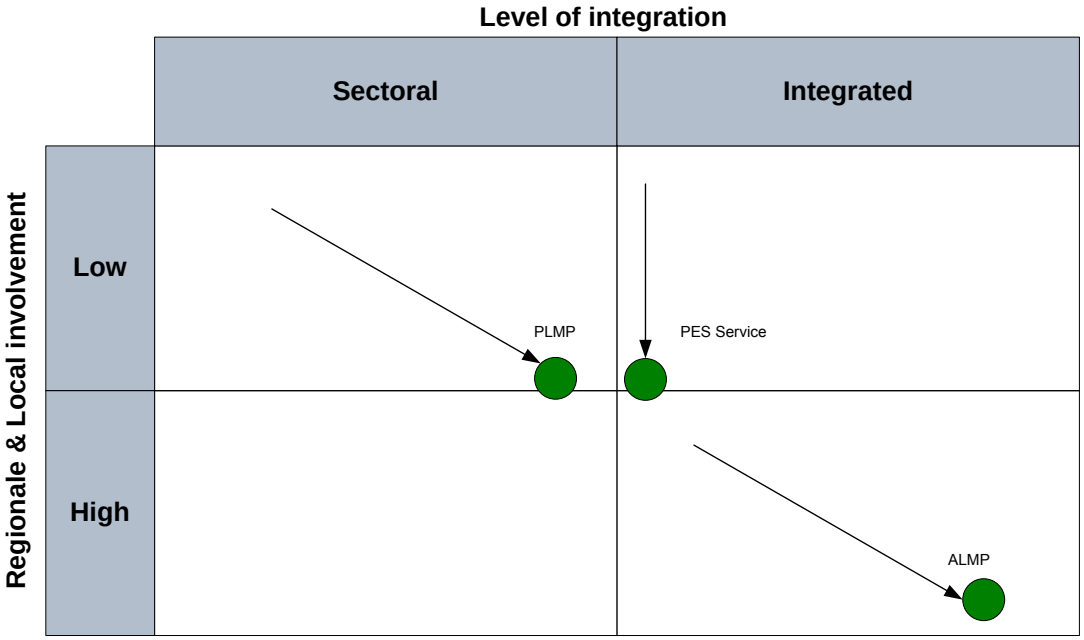


With the spread of the activation agenda, the policy mix in each EU Member State has been subject to change during the last decade and is still changing. When looking at the EU-wide developments in passive and active labour market policies as well as in Public Employment Services in general, there seems to exist a clear trend towards policy integration and an increased involvement of regional and local authorities.

Figure 5.4 depicts the trends in the various types of labour market policies and labour market service of the PES:

- There exists a general tendency across the EU to decentralise Public Employment Services. In addition, labour market policies tend to become more integrated with other policies, as these decentralised Public Employment Services are increasingly working together with local and/ or regional actors from various policy and societal domains,
- Passive policies are a classical example of sectoral policies that are designed and implemented at national level. Because of the recent 'activation turn' in labour market policy, passive policies are increasingly encapsulated in broader activating policies and tend therefore to become more integrated;
- Active labour market policies finally, are examples of integrated policies because they often touch upon issues that are closely connected with the labour market but do not form an intrinsic part of it, such as education or economic development. In addition, competencies to design and implement active labour market policies are increasingly shifted to sub national level in order to create policies that fit in the local and/ or regional context.

Figure 5.4 Generalised positioning and tendencies in the main labour market policy areas



5.3.4 Labour market challenges and the Flexicurity response

All flexicurity regimes essentially contain responses to similar endogenous and exogenous challenges such as population ageing or economic internationalisation. The precise manner such challenges influence the labour market and which consequences they bring along for labour market policies, depends on the specific characteristics of the labour market in each EU Member State. Challenges are always 'institutionally filtered'.

With challenges varying per Member State, there also exists considerable variance in their responses. Flexicurity responses are prime examples of recent activation measures that aim to simultaneously enhance the flexibility and the security of labour markets. The flexicurity regimes mirror the variety of such responses. In the following sections it will be shown how certain EU Member States have been grouped in the different regimes on the basis of their scoring on indicators on the four components of flexicurity policy44.

Flexible contractual arrangements

A flexible labour market requires working arrangements that enable employees to switch from one job to another easily and employers to hire and fire workers without high costs. The indicators in this area are therefore primarily related to the level of strictness of Employment Protection Legislation and to the shares of employees with working contracts of a limited duration.

44 Cf. European Commission (2007). Commission Staff Working Document. Towards Common Principles of Flexicurity: More and better jobs through flexibility and security.

The OECD employment protection index ranges from a scale from one to six and refers to rules on the protection of permanent workers against (individual) dismissal, regulations on temporary forms of employment and specific requirements for collective dismissal. The lower end (one) of the scale implies the existence of a flexible labour market, while the upper end (six) implies a rigid labour market. Labour markets are the most flexible in Anglo-Saxon countries and in the 'flexicurity champion' Denmark. Countries with suboptimal scores on solely this component have been grouped in regime type 2 on flexible labour markets. These are Germany, Spain, France and Luxembourg. The following table shows the scoring per regime.

Table 5.8 Employment Protection in OECD EU Member States, 2008

Countries	OECD employment protection index
Forerunner countries	
Austria (AT)	2.41
Denmark (DK)	1.91
Finland (FI)	2.29
the Netherlands (NL)	2.23
Average score	2.21
Countries requiring flexibility	
Germany (DE)	2.63
Spain (ES)	3.11
France (FR)	2.9
Luxembourg (LU)	3.39
Average score	3.0
Countries requiring LMP reform	
Cyprus (CY)	-
Czech Republic (CZ)	2.32
Estonia (EE)	2.39
Italy (IT)	2.58
Average score	2.4
Countries requiring social security reform	
Ireland (IE)	1.39
Sweden (SE)	2.06
Average score	1.7
Laggard countries	
Belgium (BE)	2.61
Bulgaria (BG)	-
Greece (EL)	2.97
Hungary (HU)	2.11
Lithuania (LT)	-
Latvia (LV)	-
Malta (MT)	-
Romania (RO)	-
Poland (PL)	2.41

Countries	OECD employment protection index
Portugal (PT)	2.84
Slovenia (SI)	2.76
Slovakia (SK)	2.13
United Kingdom (UK)	1.09
Average score	2.4

1=very flexible; 6=very rigid.

Some EU Member States, in particular the New Member States, have flexible labour markets but do not produce efficient outcomes on their labour markets. Already in 2004, Cazes and Nesporova45 found out that high levels of employment legislation in transition countries do not necessarily obstruct employment growth. Flexible labour markets in these countries still show high levels of unemployment. Higher levels of protection may ultimately improve income security and higher confidence in labour market institutions among the workforce, which could stimulate employees to accept a job in the formal labour market. These insights hint at the fact that employment creation does not solely depend on flexible labour markets, but in various factors represented in the concept of flexicurity.

Comprehensive lifelong learning strategies

A well-educated workforce is imperative for a well-functioning labour market. Table 5.9 shows the percentage of the adult population aged 25 to 64 years that is engaged in participating in education and training across the EU 2746. In all countries the percentage increased between 2000 and 2008. Yet, the precise share differs greatly between countries. Participation is the highest in Scandinavian countries, as well as in Austria, the UK and the Netherlands. New EU Member States are generally catching up.

Countries requiring LMP reform or Laggard countries generally have the lowest number of participants in education and training.

Table 5.9 Percentage of the adult population aged 25 to 64 years that is engaged in participating in education and training

Countries	Participation in lifelong learning (education and training)
Forerunner countries	
Austria (AT)	13.2
Denmark (DK)	30.2
Finland (FI)	23.1
the Netherlands (NL)	17.0
Average score	20.88
Countries requiring flexibility	
Germany (DE)	7.9
Spain (ES)	10.4

45 Cazes & Nesporova (2004). Labour markets in transition: Balancing flexibility and security in Central and Eastern Europe. These figures refer to the percentage of persons who received education or training in the four weeks preceding the Labour Force Survey. This can be either regular education or 'other taught activities'. It doesn't cover self learning activities.

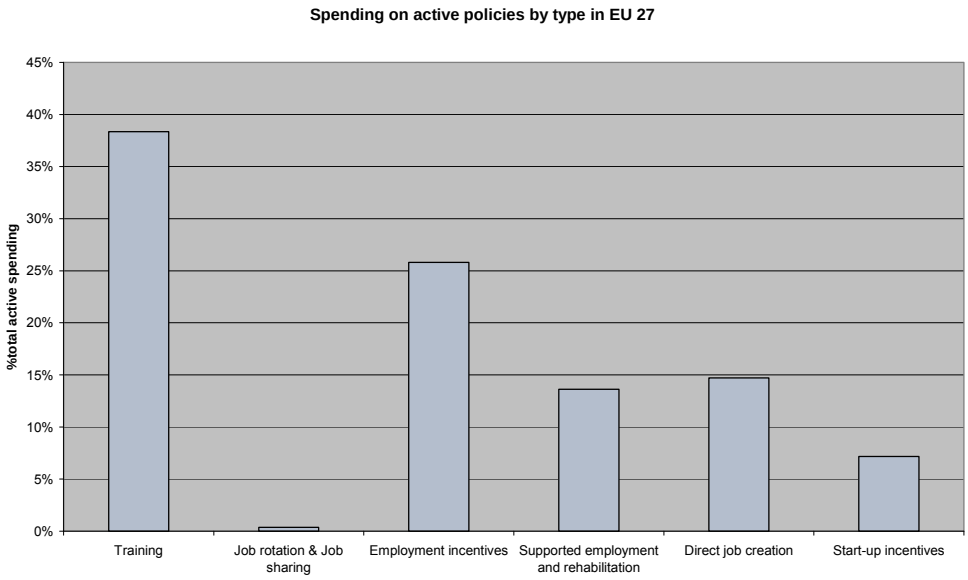
Countries	Participation in lifelong learning (education and training)
France (FR)	7.3
Luxembourg (LU)	8.5
Average score	8.5
Countries requiring LMP reform	
Cyprus (CY)	8.5
Czech Republic (CZ)	7.8
Estonia (EE)	9.8
Italy (IT)	6.3
Average score	8.1
Countries requiring social security reform	
Ireland (IE)	7.1
Sweden (SE)	:
Average score	7.1
Laggard countries	
Belgium (BE)	6.8
Bulgaria (BG)	1.4
Greece (EL)	2.9
Hungary (HU)	3.1
Lithuania (LT)	4.9
Latvia (LV)	6.8
Malta (MT)	6.2
Romania (RO)	1.5
Poland (PL)	4.7
Portugal (PT)	5.3
Slovenia (SI)	13.9
Slovakia (SK)	3.3
United Kingdom (UK)	19.9
Average score	6.6

Source: Eurostat (2010).

Effective labour market policies

Active labour market policies (ALMPs) play a key role when it comes to increasing the employability of job seekers. Such policies usually comprise different measures, ranging from training to direct job creation. In 2007 EU Member States have spent quite a high budget on training and employment incentives. A smaller percentage of available funding for active labour market policies went to direct job creation, to support for the employment of disabled and to start up incentives. Only a minor part of available funding was reserved for job rotation and job sharing. Spending on the various types of active measures in 2007 is depicted in Figure 5.5.

Figure 5.5 EU Member State spending on ALMPs



Source: Eurostat (2010).

EU Member States vary significantly in their spending on ALMPs. While Scandinavian countries traditionally have spent a relatively large share of their GDP on ALMPs, other countries like Belgium, France, the Netherlands, Spain, Austria and Germany spent above EU average on active policies.

For the purpose of this study, countries have been clustered into Countries requiring LMP reform if spending on ALMPs (and/ or participation in education and training) was significantly below EU average. These are CY, CZ, EE, IT. Some Member States among Laggard countries also score very low on this indicator. In various cases (HU, LT, LV), scores on both ALMP spending and participation in LLL is low. This is not a coincidence as LLL activities are often a type of ALMP. The other types of regimes generally show a high level of expenditure on ALMPs.

Table 5.10 Total spending on ALMPS in 2007

Countries	Total spending on ALMPs in 2007 (%of GDP)
Forerunner countries	
Austria (AT)	0.514
Denmark (DK)	1.023
Finland (FI)	0.696
the Netherlands (NL)	0.679
Average score	0.73
Countries requiring flexibility	
Germany (DE)	0.507
Spain (ES)	0.629
France (FR)	0.691

Countries	Total spending on ALMPs in 2007 (%of GDP)
Luxembourg (LU)	0.387
Average score	0.6
Countries requiring LMP reform	
Cyprus (CY)	0.088
Czech Republic (CZ)	0.121
Estonia (EE)	0.029
Italy (IT)	0.37
Average score	0.2
Countries requiring social security reform	
Ireland (IE)	0.469
Sweden (SE)	0.907
Average score	0.7
Laggard countries	
Belgium (BE)	1.081
Bulgaria (BG)	0.305
Greece (EL)	0.142
Hungary (HU)	0.205
Lithuania (LT)	0.23
Latvia (LV)	0.098
Malta (MT)	0.032
Romania (RO)	0.083
Poland (PL)	0.405
Portugal (PT)	0.386
Slovenia (SI)	0.111
Slovakia (SK)	0.117
United Kingdom (UK)	0.048
Average score	0.2

The types of ALMPs with the highest number of participants across the EU mirror the variance in spending. Jobseekers are particularly engaged in training in AT, DE, EE, FI, IE, EL, FR, LT, while in BE, ES, IT, CY, LV, LU, HU, (MT), PL, PT, RO, SE, UK they make especially use of Employment incentives. Supported employment and rehabilitation, mainly for the disabled and injured, are the most popular in CZ, DK, and NL. Direct job creation, finally is the type with highest number of participants only in BG, SI, SK.

Whether active labour market policies are effective has been subject of intense debates in many countries and at EU level. It can be questioned whether they indeed lead to an improved functioning of the labour markets and against what costs47. Already in 2004 the European Commission pointed to a series of negative consequences of ALMPs, including for example the 'carousel-effect': In this case participants in ALMPs mainly become eligible for a new period of benefits instead of real labour market entry. Recent evaluations of ALMPs show that policies that

47 Cf.Furåker, B. (2002),

include sanctions to prohibit adverse behaviour, achieve much better results on the labour market48.

Modern Social Security Systems

A modern social security system provides a sufficient level of replacement income in the case of unemployment. At the same time, the system should include 'checks and balances' (Forslund & Frederiksson, 2009) in order to avoid undesirable behaviour of claimants that result in adverse employment effects. Such 'checks and balances' include for example a finite duration of benefit receipt or the support with the search for a new job of claimants49.

Table 5.11 below presents the replacement Rates of unemployment insurance benefits for six family types at the level of 100% average wage during the initial phase of unemployment. The data entails that the level of benefit (in percentage of the average wage) is not necessarily higher in the old EU Member States than in new Member States. Luxembourg, Latvia and Portugal provide the highest replacement rates for all family types.

Table 5.11 Replacement rates in old and new EU Member States

Country	Net Replacement Rates for six family types: initial phase of unemployment					
	No children			2 children		
	Single person	One-earner married couple	Two-earner married couple	Lone parent	One-earner married couple	Two-earner married couple
Forerunner countries						
Austria (AT)	55.0	56.0	77.0	66.0	67.0	81.0
Denmark (DK)	61.0	63.0	74.0	76.0	73.0	77.0
Finland (FI)	51.0	61.0	72.0	75.0	73.0	76.0
the Netherlands (NL)	73.0	74.0	82.0	70.0	75.0	81.0
Average score	60.0	63.5	76.3	71.8	72.0	78.8
Countries requiring flexibility						
Germany (DE)	60.0	59.0	85.0	70.0	72.0	89.0
Spain (ES)	61.0	61.0	77.0	76.0	75.0	87.0
France (FR)	66.0	67.0	80.0	71.0	71.0	81.0
Luxembourg (LU)	85.0	82.0	89.0	91.0	89.0	92.0
Average score	68.0	67.3	82.8	77.0	76.8	87.3
Countries requiring LMP reform						
Cyprus (CY)	:	:	:	:	:	:
Czech Republic (CZ)	53.0	58.0	74.0	67.0	61.0	78.0
Estonia (EE)	54.0	56.0	72.0	61.0	57.0	75.0
Italy (IT)	60.0	62.0	78.0	71.0	69.0	79.0
Average score	55.7	58.7	74.7	66.3	62.3	77.3

48 Kolne-Seidl, R. (2005). Lessons Learned. Internationale Evaluaierungsergebnisse zu Wirkingen aktiver und aktivierender Arbeitsmarktpolitik. See also: Kluve, J. (2006); Card et al. (2009). ./
Cf. Forslund & Frederiksson, 2009. Income support systems, labour supply incentives and employment – some cross-country evidence.

Country	Net Replacement Rates for six family types: initial phase of unemployment					
	No children			2 children		
	Single person	One-earner married couple	Two-earner married couple	Lone parent	One-earner married couple	Two-earner married couple
Countries requiring social security reform						
Ireland (IE)	31.0	48.0	59.0	56.0	59.0	64.0
Sweden (SE)	50.0	50.0	71.0	68.0	60.0	72.0
Average score	40.5	49.0	65.0	62.0	59.5	68.0
Laggard countries						
Belgium (BE)	59.0	51.0	70.0	62.0	56.0	73.0
Bulgaria (BG)	50.0	50.0	70.0	55.0	55.0	72.0
Greece (EL)	40.0	42.0	58.0	50.0	52.0	68.0
Hungary (HU)	59.0	61.0	77.0	70.0	70.0	80.0
Lithuania (LT)	61.0	61.0	77.0	62.0	63.0	78.0
Latvia (LV)	83.0	80.0	92.0	78.0	75.0	93.0
Malta (MT)	36.0	49.0	60.0	58.0	58.0	65.0
Romania (RO)	42.0	42.0	66.0	44.0	44.0	68.0
Poland (PL)	45.0	46.0	58.0	64.0	46.0	62.0
Portugal (PT)	84.0	78.0	92.0	82.0	78.0	92.0
Slovenia (SI)	64.0	73.0	79.0	86.0	86.0	81.0
Slovakia (SK)	65.0	59.0	82.0	66.0	61.0	84.0
United Kingdom (UK)	38.0	45.0	48.0	63.0	69.0	56.0
Average score	55.8	56.7	71.5	64.6	62.5	74.8

Source: Eurostat (2010)

Countries requiring social security reform have been identified on the basis of the replacement rates of unemployment insurance benefits in two situations: one earner married couple, no children and two-earner married couple, 2 children. Member states were grouped in this type if the replacement rates for claimants in both situations simultaneously are significantly below EU. This is the case in IE and SE. Member States entering multiple pathways with suboptimal replacement rates are BG, MT, UK. The following table presents the average scores the regimes.

Table 5.12 Regime averages UI replacement rates in two situations

Flexicurity regime	UI RR I- one earner married couple. no children	UI RR II - Two-earner married couple. 2 children
Forerunner countries	63.5	78.8
Countries requiring flexibility	67.3	87.3
Countries requiring LMP reform	58.7	77.3
Countries requiring social security reform	49.0	68.0
Laggard countries	56.7	74.8

Source: Eurostat (2010)

5.4 Evidence from case studies

5.4.1 Selected case-studies

Case studies have been selected to explore the conditions under which sectoral/ national or integrated/ sub national policies are most effective and efficient. The selection mirrors the heterogeneity of EU Member States in their specific answers to labour market challenges. To be able to formulate evidence-based conclusions the following criteria for case study-selection have been applied:

- Coverage of types of policy instruments in order to balance as much as possible sectoral versus integrated and national versus sub-national;
- Coverage of the different Flexicurity regimes and geographical spread;
- Coverage of countries with different levels of economic development;
- Coverage of different types of labour market policies (active versus passive) and inclusion of innovative policy trends.

The selection finally includes a balanced mix of the various types of labour market policies across the different EU Member States. In practice it proved difficult to assign the correct type to a given policy since policies are continuously in flux, they become part of an integrated approach for example, and the fact that different stages of the policy process take place at different levels of governance.

5.4.2 Denmark: "Golden Triangle" of Flexicurity

The Danish case study is an example of an integrated approach of which policy objectives are largely sectorally defined, even though other domains can be taken into consideration, while policy instruments may stem also from other policy domains. Policies are conceived at national level (sometimes at local level), managed at regional level and implemented at local level.

Flexicurity has become a popular activation approach in labour market policies across the EU. The "Golden Triangle" model examined in this case study is an example of the combination of an integrated and sub-national labour market policy. By using three different angles of the labour market to achieve one common goal, the Danish Flexicurity model has been attributed to be successful in the way it stimulates economic growth while maintaining a social balance.

Box 5.1 Golden Triangle of Flexicurity - Denmark

The Golden Triangle of Flexicurity approach in Denmark has the following characteristics:
A. Sectoral/integrated: integrated approach with largely sectoral goals;
B. Centralised/decentralised: mainly centrally conceived, but regionally managed and implemented

In order to stimulate economic growth while maintaining a social balance, the Danish version of Flexicurity includes:

- active labour market policies to increase the rate of employment;
- a high level of social security to maintain a decent level of welfare;
- a flexible labour market to allow employers to respond to changes in the market.

Local and regional authorities are able to respond precisely to local labour market needs and can amend policies and measure accordingly as competencies with regard to active labour market policies largely have been decentralized. These authorities also cooperate closely with social partners in order to stimulate social dialogue and provide efficient solutions via collective agreements.

With regard to the key questions of this study, we can conclude:

a. Current balance in policies

The Danish labour market model is an integrated approach consisting of integrated and sectoral policies that originated at national level but is now implemented at regional and local level.

b. Arguments to justify policies

In the Danish case, the balance between the sectoral and integrated approach is essential to the success of the model. Without labour market flexibility, employers are less able to respond to the changes in the economy, without social security employees would not be able to maintain their life as established through employment and without the active measures the government has an expensive bill to pay to keep both sides functioning.

c. How can impact of each type of policy be judged

The model has worked very well for Denmark, which has seen a low level of unemployment since introducing the Golden Triangle. The model has helped not only the level of unemployment low and the labour market flexible, but it has also helped the economy in general by retraining the unemployed to meet the demands of the changing markets.

d. Has the balance shifted over time?

The shift to more active labour market policies in the mid 1990s was the push that created labour market policies into the “Golden Triangle” and gave the model the reputation that flexicurity can work.

e. Arguments to support the shift

The additional shift from central to decentralised organisation of the model, enables the model to be applied to the needs of the local economies and labour markets. Specifically, the type of active labour market policies provided has become more targeted to the type of education and training needed for the situation of the local economy. This shift occurred in the context of broader administrative reforms.

f. Balance top performers

Denmark belongs together with The Netherlands to the top performers in terms of high employment levels and low rates of unemployment. Both approaches are to be considered as integrated, while the involvement of sub national authorities is to a lesser extent the case in the Netherlands. A partnership approach however, is present in both countries. Yet, given the historical specificities that largely influenced the outcomes in both countries, the scope for transferability is rather limited.

5.4.3 Germany: Promotion of self-employment for unemployed

The German case study reflects a primarily sectoral approach, in particular with regard to the policy objectives. Instruments of other policy domains may be taken on board, for example stakeholder consultation. The policy is conceived and managed at national level but delivered at local level by the Public Employment Service (often in cooperation with municipalities).

The promotion of self-employment for the unemployed is a specific kind of an active labour market policy. This case study focuses on three types of sectoral measures to promote self-employment of benefit recipients who are unemployment. Two of the instruments are intended for unemployment insurance benefit receivers (Überbrückungsgeld and Existenzgründungszuschuss) and one instrument focuses on beneficiaries of social assistance (Einstiegsgeld). Such measures have been rather successful in stimulating sustainable self-employment among the unemployed.

Box 5.2 Promotion of self-employment for unemployed - Germany

This programme has the following characteristics:
A. Sectoral/integrated: mainly sectoral;
B. Centralised/decentralised: conceived and managed nationally, local delivery

Various measures aim to promote self-employment of unemployed benefit recipients in order to:

- Reduce unemployment and increase employment opportunities;
- Reduce benefit expenditures;
- Improve the local business environment.

While the Federal government determines the broader policy framework, active labour measures are in practice implemented by local Employment Agencies or consortia of such agencies and municipalities, depending on the category of benefit recipients (unemployment insurance versus social assistance). Flanking measures, such as coaching for future self-employed persons is also provided by these institutions.

The case study offers the following insights:

a. Current balance in policies

Competencies in the area of active labour market policy have recently been decentralised, but the Federal government continues to shape the broader policy framework. The measures at stake are solely intended to increase self-employment among unemployed benefit recipients and count therefore as 'sectoral'.

b. Arguments to justify policies

Local employment agencies now have the competencies to deploy active labour measures that are in line with local labour market needs. In those locations were self-employment is promoted, the success of individual start-ups seems to depend decisively on the local network of the PES office. Despite the involvement of different actors, the promotion of self-employment remains mainly sectoral because of its aim to reduce unemployment.

c. How can impact of each type of policy be judged?

The number of start-ups from unemployed persons increased over the last years. A significant share of these start-ups also seems to be sustainable. These positive results follow from the introduction of self-employment programmes. Similar results can be found in the Netherlands were the governments also introduced measures to promote start-ups for unemployed persons.

d. Has the balance shifted over time?

Labour market policies in Germany used to be solely issued at national level. These policies were also limited to passive measures, unemployment insurance and unemployment assistance. Since the beginning of the 21st century, there has been a clear shift towards integrated (active) labour market policies that are (partially) designed and implemented at sub national level.

e. Arguments to support the shift

Arguments for this shift predominantly stem from the continuing high levels of unemployment and the seemingly incapability of existing institutions to alter this. Local and regional employment agencies have become responsible for their own performance, often because of new styles of public management. In addition, the Federal states became increasingly involved in the design and implementation of labour market policies in the light of discussions on their legitimacy of their existence. These discussions focused on the added value of Federal states and their inability to counteract increasing unemployment rates.

f. Balance top performers

Germany applies one of the largest budgets on the promotion of self-employment among unemployed world wide. It also has one the largest number of participants in these specific programmes. Recent research shows that the survival rate of start-ups in Germany is rather high, also in international comparison. The sectoral decentralised approach therewith seems to pay off. In the Netherlands, where a similar albeit smaller approach is undertaken, similar positive results have been witnessed.

5.4.4 Hungary: Regional employment promotion in West Pannonia

The Hungarian case study is an example of an integrated approach to boost regional development. The policy is conceived and managed at national level, but delivered at regional level.

The West Pannon region has become the second most developed region of Hungary after Central Hungary (that includes also the capital). The case study focuses on labour market development in West Pannonia is supported by a combination of sectoral and integrated approaches. These approaches have been predominantly funded with EU social funds (ESF and ERDF).

The projects supported significantly contributed to the improvement of employment in the region. The proportional value of indicators related to the number of workplaces created as result of the implementation of the supported projects was judged as satisfactory.

Box 5.3 EU funded integrated regional development policies in West Pannonia – Hungary

This programme has the following characteristics:
A. Sectoral/integrated: integrated approach;
B. Centralised/decentralised: conceived and managend centrally, but regional delivery

In the programme period 2004-2006 only one joint Regional Operational Programme has been developed which covered all seven statistical planning regions of the country. The Human Resources Development Operational Programme included an integrated regional development approach combined with a sectoral approach.

The Government's agency charged with the planning and implementation of the programme is the National Development Agency. Intermediate Bodies are responsible for administrative, financial and technical tasks of implementation delegated by the Managing Authority.

From this case study the following conclusions can be drawn with respect to the key questions for this study:

a. Current balance in policies

The integrated approach in regional planning and development proves to be successful in West Pannonia. In order to develop the regional labour market in West Pannonia, integrated development measures that target increasing economic activity and employment of the region in an indirect way, e.g. by creating new workplaces in the business sector, in tourism, in environment protection or through improving services offered by the public sector. Labour market development programmes moreover, target special problems or needs of certain well defined disadvantaged target groups, for example how to increase employment amongst low qualified people, or people, with outdated qualifications, people with disabilities, or people living in remote rural areas.

b. Arguments to justify policies

The argument used to justify this approach is that there are common problems that hamper employment growth all over the country, indifferently of the exact geographical location; therefore a national solution shall be found to solve these. The tools to address these nation-wide problems are the sectoral development programmes. In case of labour market and employment this nation-wide problem in Hungary is how to increase employment in remote rural areas with bad accessibility and infrastructure and amongst high number of low qualified people, or people with outdated qualifications who mostly live in these rural areas.

c. How can impact of each type of policy be judged

The impact of both sectoral and integrated policies is judged based on evaluation of the implementation of the development programmes (mid-term or final). The evaluation is based on comparison of the results achieved with the values of the pre-set indicators of the development programmes. In general, the impact of these development measures is considered to be successful.

d. Has the balance shifted over time?

If we consider the period between 1990 and 2010 it can be stated that there is a definite shift towards an integrated policy approach and stronger regional local involvement during the period. At the same time, an increase in the decentralisation of strategic planning and also implementation can also be witnessed. By 2006, with the second programme period of EU Structural Funds 2007-2013, this shift reached its apex. Much of the decentralisation and the integrated approaches have thus been introduced through EU integration.

e. Arguments to support the shift

Further attention has to be paid to strengthening planning and management capacities in less developed micro-regions in order to reduce discrepancies within the region; to strengthen the employment creation capacities of SMEs by further reducing burden on labour and improving sustainability of workplaces created by integrated regional and sectoral development programmes.

f. Balance top performers

The Hungarian approach has been compared with a policy practice in Poland that is performing relatively well. Here a more decentralised approach is used. Regional and local authorities can more autonomously decide on policies.

5.4.5 Italy: Extension of coverage of passive arrangements

The Italian case study is a prime example of an entirely sectoral passive labour market policy. The policy is conceived, managed and implemented at national level.

The Italian government recently launched an anticrisis package in order to combat the negative effects of the current financial and economic crisis. With the help of the benefits 'in deroga' the government extended income protection for the unemployed and for those who are threatened by unemployment.

This anticrisis package however, seems insufficient to counteract the structural challenges on the labour market. While this package mainly includes passive labour market measures, the structural challenges require measures that involve the complete regulatory framework, especially when the employment problem in the Southern part of Italy is to be addressed.

In addition, the anticrisis package includes measures that are of temporary nature. It is therefore likely that the lack of an adequate income protection scheme for all types of workers continues to exist in the future.

Box 5.4 Extension of coverage of passive arrangements –Italy

This programme has the following characteristics:
A. Sectoral/integrated: sectoral;
B. Centralised/decentralised: Fully centralised

In order to anticipate on the negative employment effects of the current economic and financial crisis, the Italian government extended the scope of workers eligible for unemployment benefits. In Italy, a wide array of unemployment benefits exists for different categories of workers. This system has traditionally been beneficiary for full-time workers in industry, especially in the North.

Yet, the recent adjustments prove insufficient to create a healthy regulatory framework for the Italian labour market as this framework remains characterised through:

- Lack of adequate income protection for all types of workers;
- A large variety of employment contracts has come into existence over the last years;
- Several unemployment benefits exist simultaneously, yet none of these covers all types of workers.
- Lack of sufficient stimuli to promote (formal) employment in the South:
- Southern regions lag behind in implementing active labour policies;
- "National wages" are out of line with comparatively low level of productivity in the South.

The case study offers the following insights regarding the key questions for this study:

a. Current balance in policies

The Italian labour market is still largely governed by sectoral policies at national level. Reforms in the 1990s transferred competencies in the area of active labour market policies to the regional level. Many regions have only recently begun to make use of these competencies. As a response to the current economic crisis, the amortizzatori sociali in deroga extended discretionary powers to regional authorities in the area of passive policies. They may now define (some) eligibility criteria for example.

b. Arguments to justify policies

In the Italian institutional model, the regions have obtained the role of legislation, administrative organisation, planning, assessment and control of employment services, while the Provinces were assigned the role of "managing hub" for services and liaison with other local authorities. Italy has herewith a separate 'Regional Employment System' for each region in order to respond most adequate on regional labour market needs.

c. How can impact of each type of policy be judged?

Recent innovations in the types of employment relationships now allow for more flexible contracts. This has increased employment in the South. Until the current crisis however, the vast majority of workers who do not have a unlimited full-time contract are not protected against a loss of income when they become unemployed. Even though the temporal extension of the access and scope of CIG schemes led to a vast increase in its application, it basically leaves the fragmented system in tact and workers with a-typical contracts less protected against a loss of income in case of unemployment.

d. Has the balance shifted over time?

Passive schemes had already been extensively subject to reforms in the 1990s In addition, regional authorities only recently started to play a more dominant role in the design and implementation of labour market policies.

e. Arguments to support the shift

Drivers for reform included especially the prospective EMU membership. Generous benefit arrangements used to contribute heavily to the increasing public debt. In addition, regional authorities sought to increase their power vis-à-vis the national government by claiming exclusive competencies in the area of active labour market policies.

f. Balance top performers

Countries, like Germany, that performs better than Italy (both in terms of equity and efficiency) apply a similar sectoral and centralised approach. Unemployment insurance in Germany however, is organised in a much less fragmented way and equally available for different types of workers. This is predominantly a result of a different policy design.

5.4.6 Poland: Employment promotion in Upper Silesia

The case study in Poland is an example of a fully integrated policy that is conceived and managed at regional level and delivered by local authorities in the region of Upper Silesia.

With an economy in transition and a high level of unemployment, Polish labour market policies have been designed to support the provision of labour market services and the demand side of the labour market. By focusing on the areas of potential economic growth, the integrated approach focused on flexibility and adaptability in the labour market.

While the Polish economy has improved in general, the region's policies seems to have been more successful than comparable regions. According to the research, the success can be linked to the gradual process rather than abrupt transformation found in less successful regions.

Box 5.5 Regional restructuring and employment promotion – Poland

This programme has the following characteristics:
A. Sectoral/integrated: fully integrated;
B. Centralised/decentralised: Regionally conceived and managed, and local delivery.

By focusing on the areas of potential economic growth, the integrated approach focused on flexibility and adaptability in the labour market. The three key themes of the Polish approach are:

- enhancing governance structures
- increasing active labour market policies
- promoting entrepreneurship

The approach includes a wide range of targeted active labour market policies and is implemented by local authorities together with local stakeholders such as employers and labour market agencies.

The case study allows drawing the following conclusions in relation to the key questions for this study:

a. Current balance in policies

Promoting employment in Upper Silesia is an example of an integrated and local approach towards approaches to labour market. The decentralised approach to the provision of local employment services took place from the 1990s onwards, enabling regionally and locally based institutional structures to tackle problems of the local economy.

b. Arguments to justify policies

The region of Upper Silesia has undergone a process of economic transformation since the early 1990s with the decline of heavy industry (notably coal mining) and the loss of jobs and job opportunities. The region has sought to adapt a strategic approach to development with the identification of potential growth sectors and business clusters in part building on the strengths of the region's universities and higher education capacity. This has included a major focus on

employment and labour market issues, including retraining for redundant workers, training and employment opportunities for young people and training and development at enterprise level. Partnership working has aimed to ensure that training and labour market actions reflect the needs and priorities of the enterprise sector.

c. How can impact of each type of policy be judged?

The relatively un-developed service sector, which is usually employment intensive, has proved an important source of new jobs. Schemes to encourage self-employment and micro enterprise have also been successful.

d. Has the balance shifted over time?

The case study concerns a new balance of various policy types which seems not to be comparable with the prior situation under Communist times.

e. Arguments to support the shift

In Poland the devolution of labour market policy competences occurred in line with a broader transformation of post-Communist states to strengthen local democracy. Here the involvement of local authorities and social partners became indispensable for effective delivery of labour market policies as local PES offices increased and employers obtained a stake in financing ALMPs as soon as significant regional differences in economic and labour potential became more apparent.

f. Balance top performers

The institutional structure has helped to ensure that the impact of the re-structuring process has not been so severe as in other comparable regions in new and indeed some old Member States. The transferability of the model used is specific to regions where the capacity of local or regional employment services is limited.

5.4.7 Spain: Decentralisation of PES to increase effectiveness of ALMPs in Catalonia

The case study in Spain is an example of an integrated policy, at least with regard to the inclusion of policy instruments, which is primarily conceived at national level, managed at regional level and implemented at local level. The Spanish Constitution however, enables regional authorities (i.e. Autonomous Communities) to design their own ALMPs.

The study found that the local partnership element has been central to the reorganization of the strategy for public employment services both for integrated and sectoral approaches.

Since the introduction of the new decentralised structure, Catalonia maintained the highest level of employment in Spain and those participating in the training provided through active labour market policies were better able to find employment than those who did not.

Box 5.6 Decentralisation of PES to increase effectiveness of ALMPs - Catalonia

This programme has the following characteristics:
A. Sectoral/integrated: integrated
B. Centralised/decentralised: Conceived nationally, managed regionally, local delivery

The Law on Employment from 2003 encourages decentralization and emphasizes active labour market policies in Spain, this case study examines this process in a regional setting, namely in Catalonia. The policy method in Catalonia combines integrated and sectoral approaches, such as:

- Local partnerships via Territorial Employment Pacts to encourage economic growth
- Active labour market policies focused on training and re-training of the unemployed

The decentralization process of the public employment services in Catalonia served as one of the pilots for transferring competencies related to active labour market policies before the introduction of the 2003 Law. It is therefore possible to look at the effectiveness of this process over a longer time period than other areas in Spain.

The case study offers the following insights regarding the key questions for this study:

a. Current balance in policies

The case study in Spain is an example of an integrated policy, at least with regard to the inclusion of policy instruments, which is primarily conceived at national level, managed at regional level and implemented at local level. The Spanish Constitution however, enables Regions (i.e. Autonomous Communities) to design their own ALMPs.

b. Arguments to justify policies

The national PES proved to be unable to deliver effective ALMPs. Regional and local PES on the contrary, are considered more appropriate levels to manage and deliver such policies.

c. How can impact of each type of policy be judged

The case study shows that the approach has been successful, through the evaluations identified, for example with notably better outcomes for those participating in training and employment schemes that those who did not take part. However, other elements were less successful (for example training of long term unemployed). There is therefore a suggestion from the evaluation materials that elements of the program with a more integrated approach (though focus also on the demand side) were more successful than those which were more sectoral – or supply side focused.

d. Has the balance shifted over time?

The decentralisation of PES functions, especially ALMP, reflects national constitutional, political and governance dynamics as well as newly perceived needs of the labour market. The pilot action in Catalonia (and Galicia) helped to streamline the approach to PES and ALMPs and has enhanced the focus on ALMPs in contrast with passive approaches. It has also assisted in the development of further partnerships (especially Territorial Employment Pacts) which allowed for a shift towards a more holistic and integrated approaches.

e. Arguments to support the shift

The failure of the national PES to deliver effective active labour market policies triggered a wide public debate that resulted in a shift of competencies from the national level to the level of the Autonomous Communities.

f. Balance top performers

The policy implementation of the PES in Catalonia has been compared with ALMP practices elsewhere in Spain. Catalonia was substantially better performing with regard to the registration rate, which reached almost 40% in 2002. However, from 2005 onwards there has been a significant decrease in this indicator to 22%, bringing the Autonomous Community closer to the country average of about 15%. On the other hand, the success ratio for Catalonia is significantly below (ca. 20 percentage points) the average for Spain in the period 1998-2003, and only after 2003 there is a strong upwards trend and equalization of the indicators.

5.4.8 United Kingdom - Employment promotion in the West Midlands

The case study in the United Kingdom is an example an entirely integrated approach to regional development. The policy is both conceived and managed at regional level and delivered at local level.

The West Midlands region is a typical example of a former industrial region (especially found in a number of new Member States) that is characterised through significant mismatches between the demand and supply of labour. From the 1980s onward, there it has been increasingly recognised that labour market policies led by national sectoral approaches focusing on labour supply needed to be replaced by integrated approaches. Such approaches focused on the demand side of the labour market through business involvement and on target certain groups within the population linked to concerns about unemployment, social inclusion and welfare benefits.

New institutional structures and processes were subsequently put in place. Measurable levels of success can be identified in terms of absolute reductions in unemployment / creation of employment opportunities, in terms of relative region comparisons and in terms of diversification and development of new sectors.

Box 5.7 Creating advantage in the West Midlands – United Kingdom

This programme has the following characteristics:
A. Sectoral/integrated: fully integrated;
B Centralised/decentralised: Conceived and managed regionally, local delivery

The West Midlands region of the UK is typical of former industrial regions within EU member states (especially found in a number of new member states) characterised by significant mismatches between the demand and supply of labour which have wider implications for the economy and for social cohesion.

A variety of strategies have been developed in order to create employment opportunities. Several institutions have been involved, including:

- Regional Development Agency Advantage West Midlands
- Government Office West Midlands
- Job Centre +

From the case study the following conclusions can be drawn with respect to the key questions for this study:

a. Current balance in policies

The case study provides an example of a regional integrated approach. This increasingly integrated approach has evolved from a national framework focusing on national and sectoral policies.

b. Arguments to justify policies

The move to integration reflected the need to tackle poverty and social inclusion, deal with welfare and unemployment issues and also ensure greater reflection of the demand side of the labour market through the engagement of the private sector within a regional context. It also has been increasingly realised that a partnership approach was needed to ensure that solutions were designed and delivered to reflect these needs at least in part at regional or local level.

c. How can impact of each type of policy be judged

Only from the 1980s did this problem come to be addressed following major economic restructuring and employment loss and the balance between national / regional and between sectoral and integrated approaches changed. This led to a gradual (1980s) and then more rapid (1990s) shift to an integrated approach through which training and education were addressed through a common framework for development which also encompassed business and economic development with the aim of enhancing productivity and competitiveness.

d. Has the balance shifted over time?

A decentralised approach also developed from the 1990s onward towards a stronger regional emphasis (as opposed to national) with setting up of regional institutions (such as the RDA) and preparing of a regional economic strategy and more generally development of partnership working approaches. The role of the Learning and Skills Councils / Skills and Sector Skills Councils is also important. The role of regional in contrast to sub regional and local bodies is also a significant issue here. An example being the audio visual sector.

e. Arguments to support the shift

At the same time, the need to integrate labour market and employment interventions within a strategy that encompasses social inclusion also became important with significant numbers of people either not participating in employment or only in marginal jobs. This was reflected at national level by Job Centre + with the City Strategy Programme aiming to relate national aims to locally / regionally driven priorities and circumstances and reflects a further shift in the mix of policies between sectoral and integrated and regional. This is reflected in the recent evaluation of the City Strategy programme by the University of Warwick.

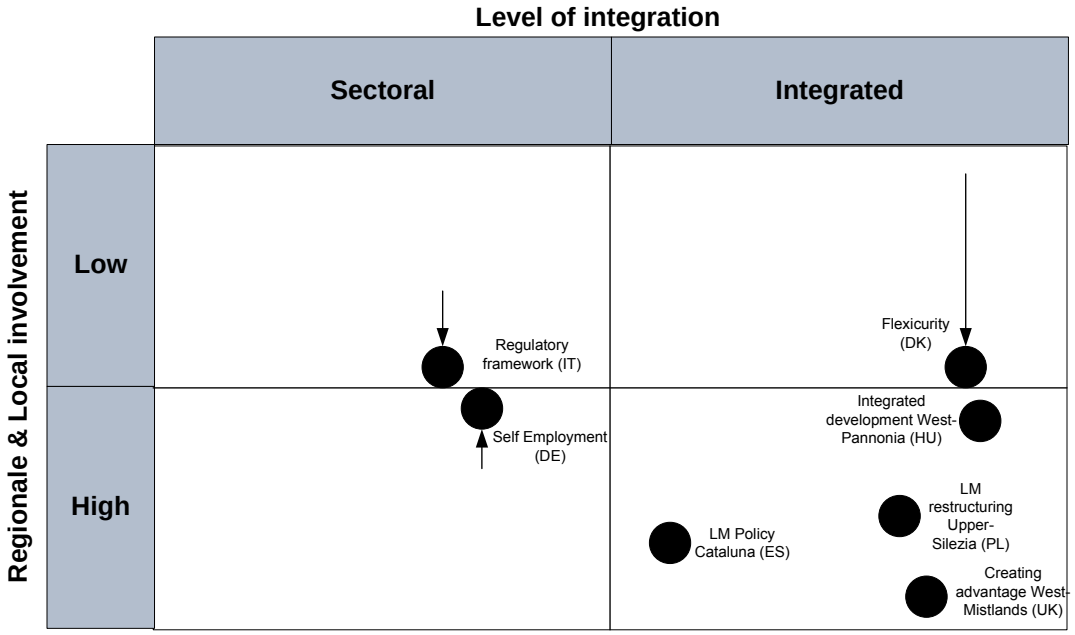
f. Balance top performers

In terms of assessing the impact of the policy mix now in place, the West Midlands example can be said to be successful insofar as levels of unemployment were significantly reduced, skills gaps and training and education provision was improved in comparison with other regions and institutional structures reflecting a partnership approach and bringing in the private sector were put in place and functioned

5.4.9 Positioning of and tendencies in the selected case studies

Figure 5.16 provides the positioning and tendencies in the selected labour market case studies.

Figure 5.6 Generalised positioning and tendencies in the selected labour market case studies



The different case studies mirror the complex country-specific configuration of labour market governance currently existing across the EU. Whether the labour market is governed by national, regional and local authorities through more or less sectoral and integrated policies differs considerably between EU Member States. Labour market policies are products of specific historical processes and continuously subject to change with regard to the level of integration with other policy domains and the level of governance at which they are conceived, managed and implemented.

5.5 Conclusions

The following more general conclusions can be drawn regarding the key questions for this study in the labour market policy domain:

a. Current balance between different types of policies

Labour market policies in EU Member States range from entirely sectoral policies to more or less integrated policies. Sectoral labour market policies include the 'traditional' passive policies like unemployment insurance, whereas active labour market policies (ALMPs) are predominantly integrated policies. ALMPs are integrated with regards to the policy instruments involved.

Few -if any- examples of entirely sectoral approaches can be found across the EU. Fully integrated policies often refer to regional development policies. Such policies are integrated with regard to both policy objectives and policy instruments that exceed the domain of labour market policy.

But even if policies are integrated, they still can include sectoral elements. Policy objectives of ALMPs for example are predominantly sectoral, i.e. focused on the labour market, as they aim to reduce unemployment by increasing the employability of the unemployed.

Policy approaches often involve local and/ or regional authorities in some way, in terms of management and implementation for example. Sectoral policies are mostly conceived, managed and implemented at the national level. Integrated policies on the contrary, increasingly involve sub-national authorities at the various stages of the policy process. In some cases, such policies are even conceived at sub-national level.

b. Arguments to justify each type of policy

Arguments that justify the different policy types vary strongly. Passive policies are governed at national level to ensure equal rights for all insured workers. Competencies in this policy domain are therefore seldom decentralised, which has also to do with political legitimacy of national governments.

In order to be effective, ALMP should ideally be tailored to the needs of the unemployed (and eventually also to the needs of employers). ALMPs may therefore be conceived at national level, which is often the case, but managed and/ or implemented at regional/ local level. This enables local authorities and local branches of the Public Employment Services to decide which ALMPs are the most appropriate in the light of local circumstances. Likewise, fully integrated policies, local development plans for example, are often entirely decentralised so local and/or regional

needs can be taken into account optimally. Integrated approaches anticipate challenges that exceed the domain of the labour market per se.

Arguments may reflect changes in the political and economic context. Fiscal pressures for example lead to a greater linkage between welfare reform and labour market policies in activation strategies. In addition, political concerns about social cohesion and the exclusion of certain groups has lead to a focus on the integration of policies related to social inclusion and anti poverty with labour market policies.

c. Judgement of the impact of each type of policy

Performance in terms of efficiency and equity varies significantly per type of policy. In addition, policy performance depends on contextual factors in each EU member state. Finally, flanking measures may influence policy performance.

Labour market performance of those EU Member States with an extended array of integrated approaches and where local and regional authorities are extensively involved outpaces that of countries where labour market policies are mainly of a sectoral kind and where local and regional authorities are hardly involved.

Labour markets in Scandinavian countries perform very well in terms of efficiency and equity. Also the labour market in the Netherlands, which relies strongly on a flexicurity approach, performs very well. All of those well performing countries have also economies that belong to the most developed in the world.

The fact that flanking measures can be also of importance, has been illustrated by the starter-subsidy for unemployed persons in Germany. The success of this policy depends strongly on the training measures provided to the potential starters and the network of the local Public Employment Service. These are measures that fall outside the scope of the policy per se.

d. Shifts in the balance between types of policies over time

The balance between types of policies reflected in the particular national policy mix in EU Member States shifted in particular during the last two decades. In the vast majority of EU Member States there has been a clear shift towards decentralisation of implementing agencies, such as the Public Employment Services. The management of such policies moreover, now often takes place at regional level. As a result, the national level authorities play a less dominant role in the overall policy process.

Such shifts often resulted out of the introduction of new policies like ALMPs or regional development initiatives. With the introduction of ALMPs a preliminary shift in the policy mix towards more integrated policies – at least with regards to policy instruments – can be witnessed. Reducing unemployment belongs traditionally to the objectives of LMPs and these remain the same.

Those EU Member States with regions that are heavily affected by economic downturn and/ or restructuring turned to even more integrated policies (also with regard to policy objectives) to

respond to a wider range of challenges. This is likely to lead to further changes in the policy mix in the coming years. This shift came along with new actors at the local/ regional level such as regional development agencies, which are more (Hungary) or less (Poland, UK) under control of national government.

e. Arguments for this shift

Regional and local authorities started to play an increasingly important role in the governance of labour markets with the 'activation turn' in labour market policy, The shift towards integrated active measures and decentralisation is often justified with the conviction that empowering local and regional authorities improves responses to local labour market needs more precisely. Sub-national authorities are herewith considered to be the best positioned to deploy active labour market policies. In addition, such shifts were also forced by existing arrangements, as for example social assistance is in many EU Member States a local (municipality) affair. In Italy, regional authorities obtained (temporarily) some responsibilities in the area of wage supplements 'in deroga', and are able to influence eligibility criteria for benefit receipt for example.

f. Balance of top performers

Top performing countries have much of their labour market policies decentralised, in particular with regard to the management and implementation of active labour market policies. In most cases the top performers have undergone a shift towards an increased involvement of sub national authorities and towards integrated approaches. At the same time, they retained sectoral policies at national level. Passive polices (unemployment benefit) are still predominantly dealt with at national level as they guarantee equal coverage for all workers in the country. Such policies score therefore generally well with regard to equity (with Italy is an exception).

Integrated active policies already for a long time belong to the competence of local and regional authorities of best performing countries such as Denmark. The successful flexicurity approach in Denmark however, also shows that labour market performance depends on more factors than the level of integration and the degree of decentralisation per se. At minimum, local PES should be able to autonomously decide upon the precise policy to reduce unemployment. This possibility enables authorities to take into account local/ regional needs as much as possible.
With regards to fully integrated measures such as local development plans, top performers envisage a large role for local authorities with regards to the design, management and implementation of policies and the involvement of other local stakeholders.

6 Synthesis

6.1 Introduction

The general analyses (see Chapters 3-5) and the case studies (see separate case studies report) have resulted in a wealth of information regarding various policy approaches in each of the three policy domains. The material allows us to answer in a more general way the key questions for this study, as formulated in Chapter 1.

We will establish first the outline of our conceptual framework that has been derived from both the literature and evidence based outcomes from the study (section 6.2). In section 6.3 we will present the general conclusions and lessons from our study. More specific conclusions will be drawn in section 6.4, while best practices from the case studies will be listed in section 6.5.

6.2 Underlying determinants of policy choices

Drawing conclusions and lessons from the policy approaches in various parts of Europe requires taking account of essential factors that determine why certain policy approaches have been followed in one country and others in another country. From our analysis the following determinants are deemed important in that perspective:

1. **Stage of economic development**
   Over the last decades the economies of various EU-Member States have evolved from a factor-driven through an efficiency-driven economy into an innovation-driven services society. Most Western European Member States have already entered the stage where the main part of the productive sector can only sustain its position when their companies are continuously innovating and upgrading their products, production processes and market approach. Although also other parts of Europe are gradually entering a similar stage, still quite a considerable part of their productive sector is in the stage of a factor- and an efficiency-driven economy and are therefore more vulnerable to competition from other parts of the world that are in a position to offer low(-er) tech products at much cheaper costs. In other words, the stage of development of a country determines in part which policy choices are available. This is also linked to the fact that certain policies require sophisticated institutional and administrative capacity to deal with the integration of different policy objectives, which is not yet present in several parts of Europe.

2. **Socio-cultural situation**
   Europe offers a diversity of socio-cultural situations, which originate from different developments in the past. One of the main dominating differences in relation to economic development is the fact that most countries in Central and Eastern Europe have been governed for quite some time by communist regimes, while (most) other parts of Europe were governed by democratic, free market oriented governments. These different socio-cultural situations

have had serious implications for the economic development of the respective countries and the capacities to influence this development.

3. **Institutional capacity**
   Institutional capacity is needed to make decentralization and integration tendencies a success. Since institutional capacity is usually heavily correlated with the economic development and socio-cultural situation of a country, both factors are important determinants for policy choices.

4. **Country size and administrative set-up**
   Europe has several big countries and quite a number of smaller countries, with different administrative set-ups. Both the size of a country and administrative set-up matter for debates on how policies have been organised and the mix of policies. For various policy fields the geographical scope and administrative organisation are relevant aspects that determine how countries feel they should organise their policies. What can be seen as a centralised policy approach in The Netherlands could be easily classified as a decentralized approach in Germany, of course all other things being equal. So before claiming that e.g. centralized or decentralized is the preferred policy mode a critical view on the country size is needed. Moreover, some countries have more regional differences or autonomy than others (compare e.g. The Netherlands with Belgium).

5. **Subsidiarity and fiscal federalism**
   The subsidiarity principle indicates that a matter has to be assigned to the lowest public authority level that can effectively deal with it. The outcome of the application of this principle depends on the balance between the arguments that plead for centralization and those that plead for decentralization of government tasks. Table 6.1 lists the main arguments for centralization and decentralization based on the fiscal federalism theory (ECORYS 2008, Molle 2010).

Table 6.1 Arguments for centralization and decentralization based on the fiscal decentralization theory

Arguments for centralization	Arguments for decentralization
• Economies of scale: the production of a public good may be subject to decreasing cost or increasing benefits with larger size; • Externalities: policies may have positive or negative external effects (also called spill-overs) on other jurisdictions; • Transaction costs: the diversity (heterogeneity) of national rules brings high extra cost to economic actors and loss of competitiveness, so limiting this diversity is welfare enhancing.	• Differences in needs and preferences will be better taken into account, implementation costs will be lower and the accountability of institutions will be higher; • Innovation and experiment will be given more latitude. Competition between jurisdictions will bring forward the best solutions

6. **External effects**
   Sectoral policies have benefits in terms of ease of organisation and thus speed of implementation. However if important externalities are eminent and are not captured by these sectoral policies, more integrated policies could be better options. Integrated policies are usually more complicated than sectoral policies as more policy fields are involved as well as different policy makers and stakeholders. The main reason to go for an integrated policy approach is to mitigate external effects and create commitment of a variety of interest groups.

   Table 6.2 summarizes these arguments.

Table 6.2 Arguments for sectoral and integrated policies

Arguments for sectoral policies	Arguments for integrated policies
• Lack of external effects: no need to integrate other domains in the policy; • Lack of institutional capacity: external effects are there, but no possibility to deal with adequately;	• Important external effects, failing to incorpated them into the policy will reduce welfare; • Institutional capacity is available to deal with the external effects;

Each of these factors will be taken into account when drawing conclusions and lessons.

6.3 General conclusions and lessons

From the analyses and literature review presented in the previous chapters we draw the following conclusions/lessons:

Lesson 1: Both sectoral and integrated policy practices can be found in most parts of the EU, with varying levels of regional and local involvement. For many policy fields, there is scope for choice both between sectoral/integrated and centralized/decentralized. In the vast majority of cases pure forms of these choices do not exist. There is always an element of central steer even in largely decentralized policies, or decentralized delivery in largely centralized policies. Equally so, there is often some overlap with other policy domains and rarely a fully integrated approach.

Lesson 2: Successful policies require a consistent long term vision, relatively uninfluenced by short term political or cyclical developments.

Lesson 3: For those policies where choice is possible there is a certain tendency towards more integrated and decentralized policies. Conditions that are needed for this tendency to emerge are an appropriate institutional capacity and the prevalence of external effects. Without important external effects an integrated policy is often too complicated and usually takes much more time compared to a sectoral approach.

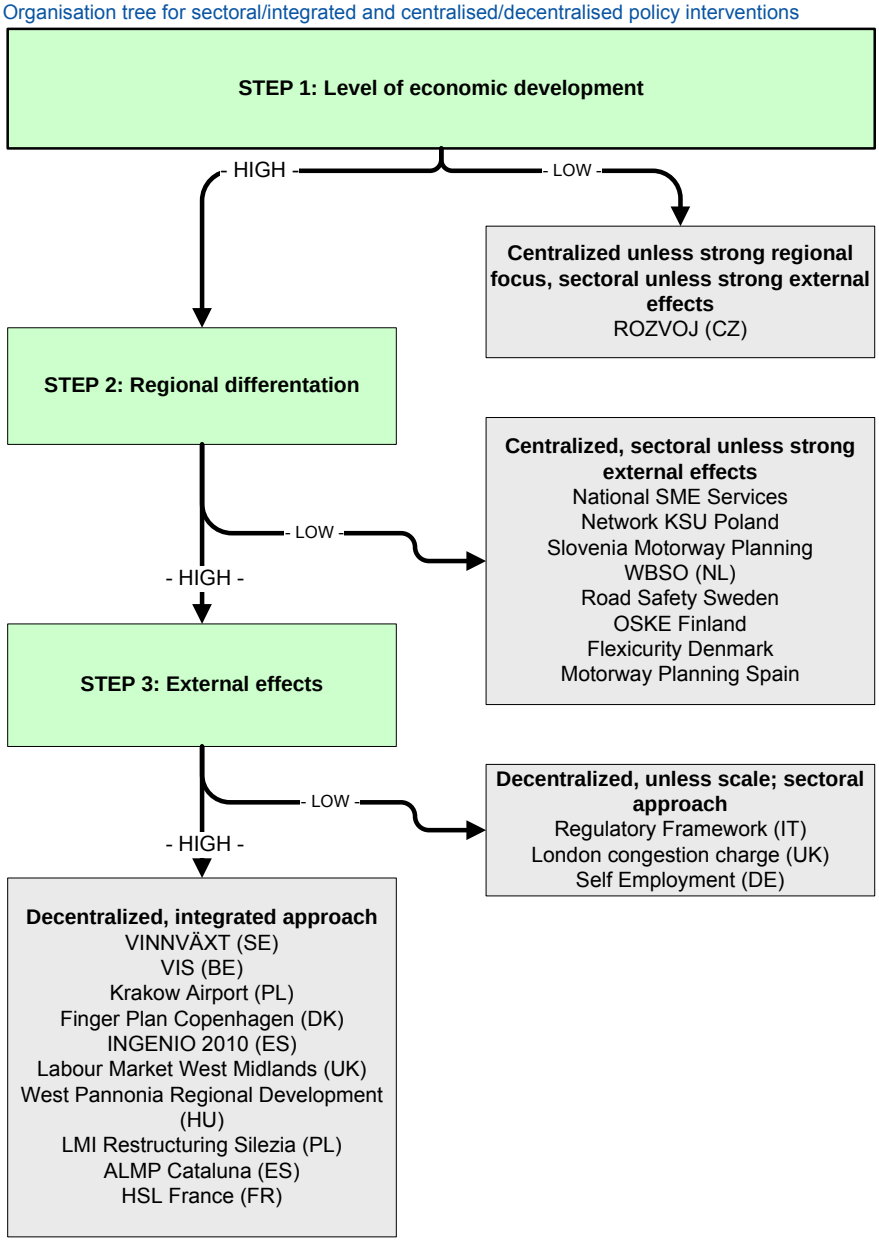
Lesson 4: For those policies that qualify (see point above), a more integrated and decentralized policy matters. The institutional capacity enables one to better coordinate across policy fields and policy layers, thus enhancing welfare.

Lesson 5: Building on the case studies that have been executed in the context of this study, a 'policy organisation' tree can be established, positioning by way of example all 21 case studies. Table 6.2 presents this policy organisation tree. A few comments have to be made in relation to this table, which directly links to some of the comments made above:

1. The policy organisation tree provides a tool on the basis of which policies can be indicatively organised best. Additional specific analysis will be necessary on a case-by-case basis in order to determine which type of policy would work best in a given situation;
2. Some comments could be made on the positioning of some of the cases, e.g. the London congestion charge and the HSL in France:
    - The London congestion charge has been introduced among others to reduce the external effects of road traffic. Although this charge contributes to lower external effects in the City of London, the external effects are certainly not zero (not in the City and also not in other parts of South-East England);
    - The HSL in France has been classified as a decentralised, integrated policy approach. Involvement of regional and local government levels in the planning of new High Speed Links in France has certainly increased, but still it is predominantly the central level that is responsible for planning and financing, with regional and local levels playing their part in influencing the location of HSL-stations and their service level, and stimulating real estate development around these stations.

Finally, ***lesson 6*** is a disclaimer. For some policy domains the development and socio-cultural aspects are relatively unimportant for the decision to centralize (or not). It is clear that e.g. key infrastructural decisions are often centralized, irrespective of the country size, culture or its development. A similar conclusion holds for the decision to integrate (or not). Lack of external effects make e.g. passive labour market policies by nature sectoral. For many policy fields however, there is scope for choice between both sectoral/integrated and centralized/decentralized policies.This feature makes it impossible to draw too general conclusions on the right policy mixes, i.e. our report can not end with a "one approach fits all" conclusion. Nevertheless one can notice a tendency towards more integrated and decentralized policies if the right conditions are in place. Conditions needed in that respect are appropriate institutional capacity and the prevalence of external effects.

Table 6.2 Organisation tree for sectoral/integrated and centralised/decentralised policy interventions



6.4 Specific conclusions

In Chapter 1 (section 1.2) the key questions have been specified that the study should address. In this section we will provide answers to each of these key questions:

a. What is the current balance between the different types of policies?

There is a variety of policy mixes in EU-Member States, even among the subset of well performing ones. EU-Member States that show a good performance in certain policy domains or specific areas within the, do not necessarily perform in the same way in other policy domains. The current balance varies per policy domain:

- In the domain of **innovation,** policies can be divided into Development (D), Research (R) and cooperation among different actors, the so-called Triple helix government-universities-business (3H), each with a different logic regarding the balance of policies. Both R- and D-policies have long been centrally and sectorally designed and managed policies, although tendencies towards more integration and decentralisation of especially implementation can be discovered, notably with respect to the D-policies. Triple helix policies have both centralized and decentralized features, but decentralised and integrated policy approaches dominate;
- The majority of **transport** policies, especially the 'grand projects' have been initially established with a clear national and sectoral focus, and should be placed in the timeframe and development stage of the respective countries. As such, they seem to have been effective: in addressing growing mobility needs and in structuring regional developments, though initially not explicitly with a regional focus. Explicit regional considerations were built in later, building from the then established national backbone. It seems less clear that real extra economic benefits were generated, as there is evidence that impacts became more distributional. Within transport one could discern 'hard' projects like infrastructural development, and more 'behavioural' projects (road safety). For the first some regionalisation might work, the latter seem more prone for a national, central approach;
- Successful **labour** market policies (Denmark, Germany) are often national in conception, and regional in delivery. Depending on the subject, labour market policies can both be integrated (active labour market policies) or sectoral (passive labour market policies), for more detail see below.

b. What are the arguments used to justify each type of policy?

The general arguments follow from Table 6.2 above. The often central approach in the R- and D-part of **innovation** policies is motivated by scale economies and the importance to provide a long term consistent central steer. The motivation of integration of Triple helix-policies comes from the inherent multi-level multi-stakeholder nature of the policies. For **transport** three arguments are used for national policies: to connect economic centres within the country (in which the capital plays – initially- an important role), to connect the country with its neighbours and EU-wide infrastructures, and to distribute economic welfare "fairly" over the country. The **labour** market policies are more culturally embedded in the respective countries, and shifts seem to be more related to political shifts in the countries, rather than based on purely evidence-based considerations.

Table 6.1: Typology of EU Member States practices in innovation, transport and labour market in terms of sectoral/integrated policies and high/low involvement of regional and local stakeholders

Policy domain and area	Central	Regional/local	Arguments for shift (if any)
INNOVATION			
Research policy	Almost exclusively central and mainly sectoral		No shift
Development/innovation	Creation of development/ innovation framework	Regional differentiation, sectoral and increasingly integrated	More efficiency and incorporation of externalities through clustering and innovation of regional/local economic systems
Triple helix policy	Creation of framework for cooperation	Mostly regionally organised, mainly integrated	More efficiency as it leads to involvement of all relevant actors at regional/local level
TRANSPORT			
Provision of infrastructure			
National Road and Rail networks	Mostly central and sectoral; in some cases (peripheral regions) central and integrated		A purely sectoral approach results in inequality. Integration of regional development objective
Regional/local roads		In the past regional roads were in many MS centrally managed, now this is almost completely regional/local; mostly sectoral	National government concentrate on core network; regional roads more efficiently managed by regions
National Airports	National airports highly centralised with increasingly regional/local consultation; predominantly integrated policy		More integration needed because of external effects of air traffic (in particular noise)
Regional airports		Was highly centralised in the past, but now mostly regional and integrated	Regions can ensure effective planning of land infrastructure, as well as business areas
Regional/Urban Public transport		Mostly regional, both sectoral and integrated	No shift
Optimising utilisation of infrastructure	Central, sector oriented for national roads	Decentral for regional roads, but only an issue in urban	No shift

Policy domain and area	Central	Regional/local	Arguments for shift (if any)
		areas	
Demand management			
Pricing measures	Central in so far it concerns the national network; mostly integrated as external costs are taken into account and fiscal measures used	Regional, both sectoral and integrated	Pricing increasingly takes into account not only road maintenance of roads but also external effects
Non-price measures	Mostly central and sector oriented in so far behaviour is involved	Local in case of prohibitive measures, time windows etc.	More local measures seen due to external effects
Market regulation	Central, both sectoral and integrated		No shift
Transport operations	Central, sector oriented		No shift, but larger role for regions to increase effectiveness of policy
LABOUR MARKET			
Passive LM-policy			
Unemployment insurance	Central, sectoral		No shift
Short-term wage replacement	Central, sectoral	May differ between regions and economic sectors	No shift, although situation may differ between regions and economic sectors (see e.g. Italy)
Active LM-policy			
Self-employment promotion	Centrally created framework, mainly integrated	Local/ regional differentiation exists, integrated in local/ regional context	Shift towards more integrated policy framework and regional/local involvement to increase effectiveness of policy
Training measures	Centrally created framework, mainly integrated	Local/ regional differentiation exists, integrated in local/ regional context	Shift towards more integrated policy framework and regional/local involvement to increase effectiveness of policy
Regulatory framework			
Wage-setting	Mainly central, sectoral	Local/ regional wage-setting exists, sectoral	Shift allows better targeting towards specific regional/local

Policy domain and area	Central	Regional/local	Arguments for shift (if any)
			situation
Employment conditions	Central, sectoral		No shift

c. How has the impact of each type of policy been judged?

We have used stricter criteria for determining whether policies can be called successful than those that have been applied in analysed policy evaluations. In several cases these evaluations were not too critical towards implemented policies. The fact that widely available and uncontroversial hard evidence on the relative merits of different policy approaches is not abundant, leads to more caution in drawing firm conclusions however. Nevertheless there are often other sources available (literature, softer evidence) that can be used to complement the existing evaluations, which allows us to make judgements on the various policy approaches. Despite the variety of policy mixes most countries in North-Western and Northern Europe perform well in most of the studied policy domains. Most countries in Southern Europe and especially in Central and Eastern Europe show a less favourable performance. This performance is strongly correlated with the level of economic development, measured by GDP per capita. Economic development of a country does not explain everything, however. There are remarkable regional differences within one country (e.g. between northern and southern Italy), while between countries with a more or less similar level of economic development stark differences exist (e.g. between Poland/Hungary and Latvia).

d. Has the balance between the different types of policies shifted over time?

There are several noticeable shifts over time, not all in the same direction:

- For **innovation** R- and D-policies became slightly more integrated over time but should still be called sectoral, while Triple Helix policies became even more integrated than they already were. There are not many clear-cut movements along the decentralisation-centralisation axis here. A certain form of centralisation can be discerned in those countries where regionalisation has led to lack of coordination (in e.g. Spain);
- For **transport** policies, some of the early sectoral and national approaches have later become more integrative in nature, and with more focus on regional/local involvement. This is the case in relation to motor road development in Spain and the development of the TGV-network in France. In other cases external effects (e.g. pollution) has prompted a more integrative approach;
- For **labour market** policies there exists a general tendency across the EU to decentralise Public Employment Services (PES). As they are working together with local/regional actors, policies tend to become increasingly integrated with other policies. Active labour market policies are examples of integrated policies. Competencies to design and implement active labour market policies are increasingly shifted to sub-national levels in order to create policies that fit in the local/ regional context. Finally, passive policies are a classical example of sectoral policies that are designed and implemented at national level. Passive policies are increasingly encapsulated in broader activating policies and tend therefore to become more integrated.

e. What are the arguments used to support this shift?

The arguments to support the various shifts vary. Sometimes the level of development prompts a shift, in other circumstances it is the increased importance of other policy domains (external effects) or political fashions or preferences (e.g. prompting decentralisation or centralisation).

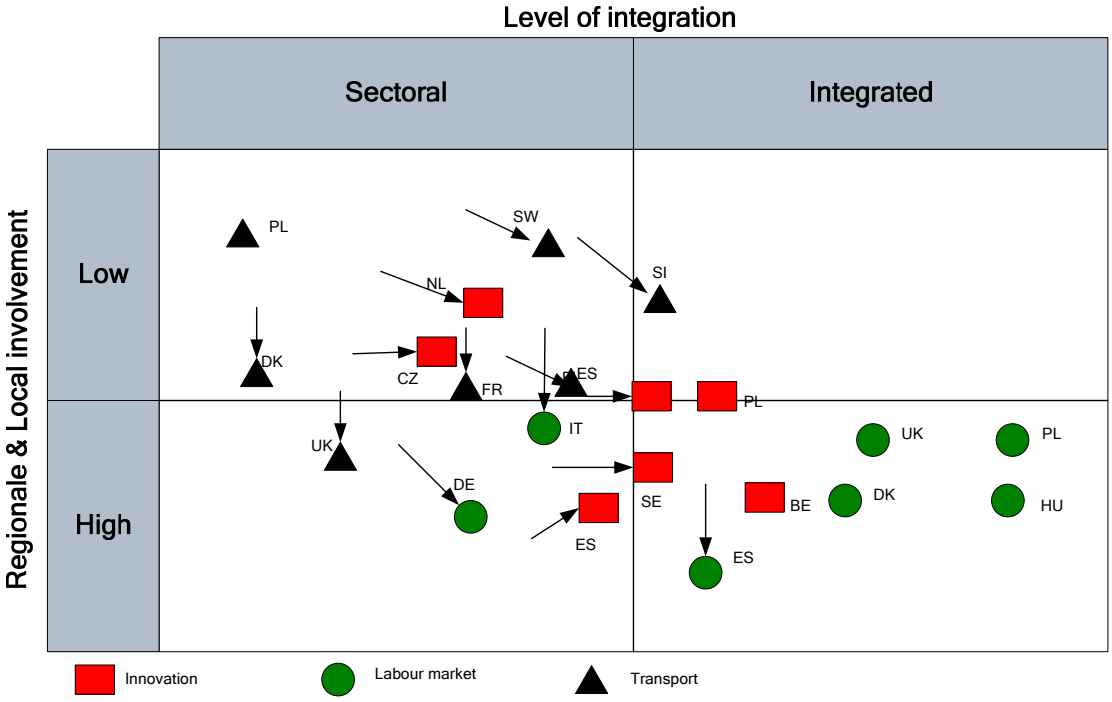
f. What balance is used by the Member States which are seen as the top performers in this domain?

The following patterns can be observed in each of the policy domains:

- Regarding **innovation** policies, good performing countries have a small number of innovation policy priorities, put a higher weight on policy measures directed at improving the R&D cooperation between firms and public research institutions, and better commercialisation and valorisation of knowledge. In most moderate innovator countries more importance is placed on measures directed at stimulating R&D at SMEs and increasing their absorptive capacity;
- With respect to **transport** policies Germany and France are among the top performers in transport policy. Both countries maintain a balance between central and regional policies, as well as between sectoral and integrated approaches. In transport the performance of Member States depends quite heavily on the level of development. As transport infrastructure policy requires substantial (public) investments, countries with higher per capita incomes are likely to perform better than those with lower per capita incomes, irrespective of the policy mix followed;
- Regarding **the labour market** policies top performing countries have often decentralised policies, certainly with regard to the management and implementation of active labour market policies. In most cases the top performers have shown a shift towards regional / local and towards integrated approaches but retaining elements of national and sectoral focus where appropriate. Sectoral passive polices are still predominantly dealt with at national level and guarantee adequate coverage for all workers. Integrated active policies traditionally belong to the competence of local/ regional authorities of best performing countries such as Denmark. Successful approaches, however, also show that labour market performance depends on more factors than the level of integration and decentralisation. At minimum, local PES-organizations should be able to autonomously decide upon the precise policy to reduce unemployment. This possibility enables authorities to take into account local/ regional needs as much as possible.

Table 6.3 presents the positioning and tendencies in policy mix in leading EU-Member States per policy domain:

Table 6.3 Positioning and tendencies in policy mix in leading EU-Member States per policy domain



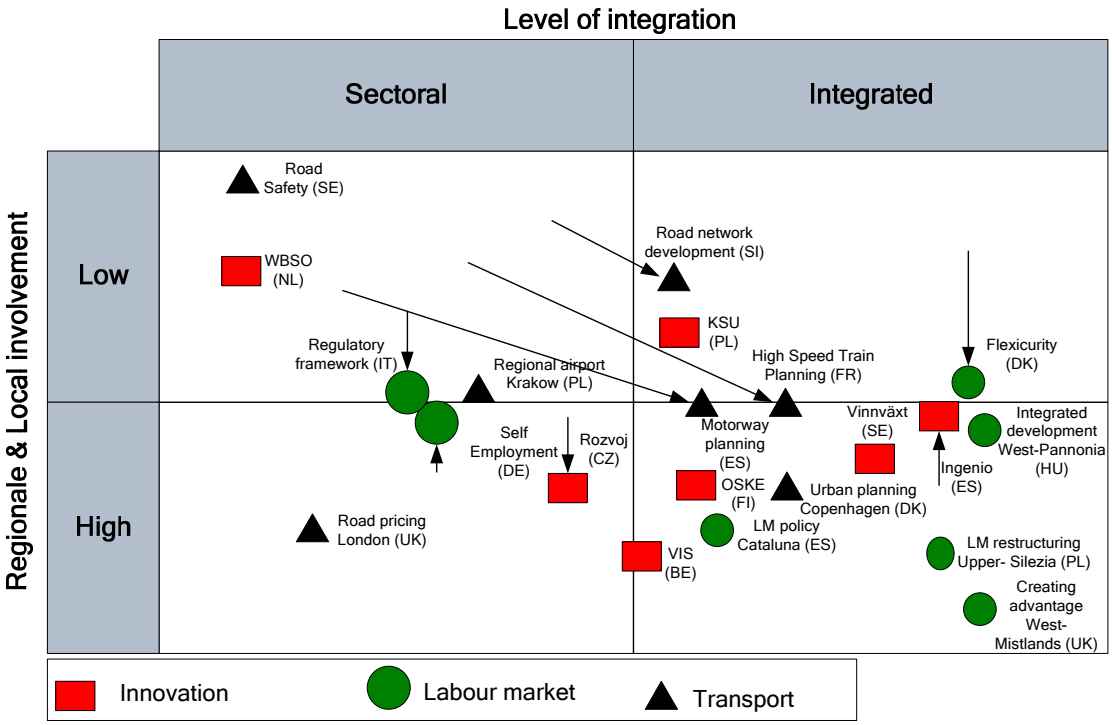
6.5 Best practices from the case studies

Table 6.4 presents a typology of the 21 case-studies that have been undertaken in the context of this INTRALAB-study, and the shifts in level of integration and regional/local involvement that can be noticed in these over time. Most of the case-studies are examples of successful policy practices, with for some exceptions.

The case-studies confirm largely the overall conclusions that have been presented above. Successful examples of sectoral and integrated policy practices in each of the respective policy domains can be found in different situations, each with both low and high regional and local involvement.

From the **innovation** case-studies the conclusion can be drawn that, relative to the other domains, there is not much movement in the policy mix. Some form of decentralization emerged (VINNVAXT in Sweden, and ROZVOJ in Czech Republic) of programs that were originally deemed to be centralistic in nature, not capturing important regional differences. In other cases (INGENIO in Spain) the build up was initially (and culturally driven) regional, missing important coordination effects so that a certain form of centralization too place there.

Table 6.4 Typology of selected case-studies in innovation, transport and labour market in terms of sectoral/integrated policies and high/low involvement of regional and local stakeholders



For **transport** policies the conclusions are also mixed. In the case of road development and implementation the central and sector oriented policy have been effective in both Spain and Slovenia. In Spain a shift towards a more integrated policy is seen, now that the core motorway network is quite developed. A similar shift may be expected in Slovenia. Also in other Member States in some stage of network development, transport links are developed which are not only meant to reduce congestion, but also to improve accessibility of peripheral regions. In such cases, the transport objective is combined with the regional development objective. A similar shift from a central, sector approach towards a more integrated policy is noticed in rail infrastructure development in France, where in recent years regional and local governments have strongly voiced their development objectives, thereby influencing the location of terminals and decisions on expansion of the TGV network.

From **the labour market** case-studies one can observe a shift towards more integrated and active policies that increasingly involve sub-national authorities. The move to integration reflected the need to tackle poverty and social inclusion, deal with welfare and unemployment issues and also ensure greater reflection of the demand side of the labour market through the engagement of the private sector within a regional context. It also has been increasingly realised that a partnership approach was needed to ensure that solutions were designed and delivered to reflect these needs at least in part at regional or local level. The stronger regional emphasis is exemplified by regional institutions (such as RDAs, Learning and Skills Councils, etc.), regional economic strategies and

the development of partnership working approaches. In almost all case studies one can see this type of developments, with tailored approaches that vary a bit from country to country. The Flexicurity approach in top performing countries as Denmark and The Netherlands has found follow-up in several EU-countries now. In addition to that the Job Centre + with the City Strategy Programme in the United Kingdom is a clear example of an approach that relates national aims to locally/regionally driven priorities in relation to labour market and employment interventions within a strategy that encompasses also social inclusion as significant numbers of people are either not participating in employment or are at most only in marginal jobs.

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ANNEX: Comparative analysis of the selected case studies in the policy domains innovation, transport and labour market[50]

[50] More details can be found in the case studies report that has been released as a separate report under the same name as this report.

Innovation

Name of case study	Level of country development (GDP/capita)	Regional differentiation within country	External effects of case study	Position of country innovation (EIS 2010)	Level of integration		Involvement of sub-national level			
					Sectoral	Integrated	centralised	Regional decisions	Regional impact	Regional implementation - process
Belgium: Flemish Innovation Cooperation (VIS)	H	H	H	Innovation follower		X		X	X	X
Czech Republic: ROZVOJ (Development) Programme	L	H	H	Moderate innovator	X		X	X	X	X
Finland: Centres of Expertise Programme	H	H	H	Innovation leader		X	X		X	X
The Netherlands: WBSO R&D tax subsidy	H	L	H	Innovation follower	X		X		X	X
Poland: National System of Services to SME's (KSU)	L	H	H	Moderate innovator		X	X	X	X	X
Spain: INGENIO 2010	M	H	H	Moderate innovator		X	X	X	X	X
Sweden: VINNVAXT	H	L	H	Innovation Leader		X		X	X	X

H-High
M-Medium
L-Low

Transport

Name of case study	Level of country development (GDP/capita)	Regional differentiation within country	External effects of case study	Level of integration		Involvement of sub-national level			
				Sectoral	Integrated	centralized	Regional decision	Regional impact	Regional implementation - process
Road safety policy in Sweden	H	H	H	X		X			X
Slovenia: Road Corridor Development	M	H	H	X		X		X	
United Kingdom: London congestion charging	H	H	H	X			X	X	X
France: High speed rail network planning	H	H	H		X	X		X	
Spain: Motorway development	M	H	H		X	X		X	
Denmark: Integrated urban planning in Denmark	H	L	H		X		X	X	X
Poland: Krakow Regional Airport Development	L	H	H		X	X	X	X	X

H-High
M-Medium
L-Low

Labour market

Name of case study	Level of country development (GDP/capita)	Regional differentiation within country	External effects of case study	Level of integration		Involvement of sub-national level			
				Sectoral	Integrated	centralized	Regional decision	Regional impact	Regional implementation - process
Poland: Employment promotion in Upper Silesia	L	H	H		X		X	X	X
Denmark: The Golden Triangle of Flexicurity	H	L	H		X	X	X	X	X
Hungary: Integrated regional development policies in West Pannonia	L	H	H		X	X	X	X	X
Spain - Decentralization of Public Employment Services and more effective ALMPs in Catalonia	M	H	H		X	X		X	X
Germany – Promotion of self-employment for unemployed	H	H	H		X	X	X	X	X
United Kingdom: Creating advantage in the West Midlands	H	H	H		X		X	X	X
Extension of coverage of passive arrangements - Italy	M	H	H		X	X	X	X	X

H-High
M-Medium
L-Low