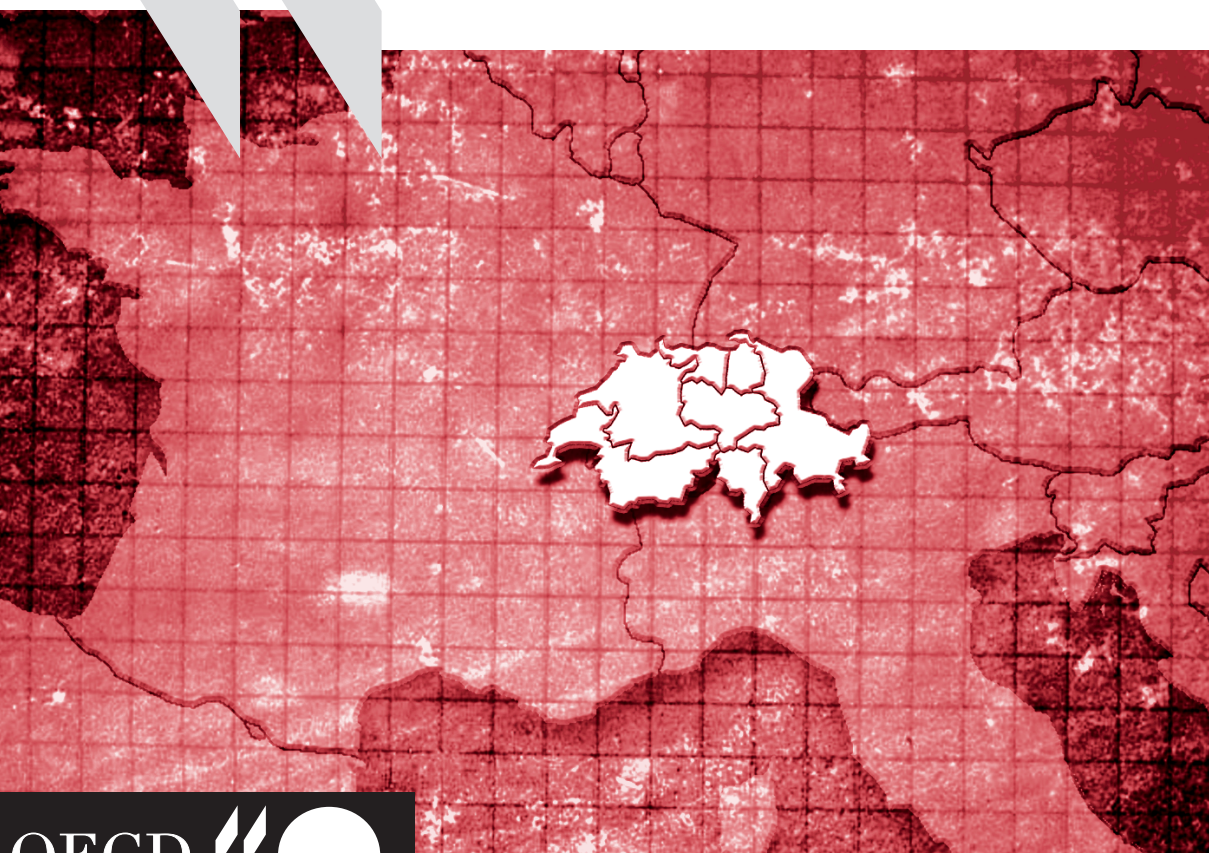


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Foreword

The globalisation of trade and economic activity is increasingly testing the ability of regional economies to adapt and exploit or maintain their competitive edge. There is a tendency for performance gaps to widen between regions, and the cost of maintaining cohesion is increasing. On the other hand rapid technological change, extended markets and greater use of knowledge are offering new opportunities for local and regional development but demand further investment from enterprises, reorganisation of labour and production, skills upgrading and improvements in the local environment.

Amid this change and turbulence, regions continue to follow very different paths. Some regions are doing well in the current phase of the growth cycle and are driving growth. Others are less successful at capturing trade and additional economic activities. Many territories with poor links to the sources of prosperity, afflicted by migration, notably of young people, and lagging behind with respect to infrastructure and private investment are finding it difficult to keep up with the general trend. At the same time central governments are no longer the sole provider of territorial policy. The vertical distribution of power between the different tiers of government needs to be reassessed as well as the decentralisation of fiscal resources in order to better respond to the expectations of the public and improve policy efficiency. All these trends are leading public authorities to rethink their policies and strategies.

The Territorial Development Policy Committee (TDPC) was created at the beginning of 1999 to assist governments with a forum for discussing the above issues. Within this framework, the TDPC has adopted a programme of work that puts its main focus on reviewing Member countries' territorial policies and on evaluating their impact at regional level. The objectives of Territorial reviews are: *a*) identify the nature and scale of territorial challenges using a common analytical framework; *b*) assist governments in the assessment and improvement of their territorial policy, using comparative policy analysis; *c*) assess the distribution of competencies and resources among the different levels of governments; and *d*) identify and disseminate information on best practices regarding territorial policy.

The Committee produces two types of reviews:

Territorial reviews at the national level. Requested by national authorities, they analyse trends in regional performances and institutional settings, focus on policies to reduce territorial disparities and to assist regions in developing competitive advantages. They also concentrate on the governance framework, on the impact of national non-territorial policies on subnational entities and on specific aspects of fiscal federalism. The final report proposes territorial policy recommendations.

Territorial Reviews at the regional level. Requested by subnational authorities (local or regional) with the agreement of national ones, they concentrate on strategies for development of the respective entity. They in particular identify the role of key demographic, socio-economic, environmental, technological and institutional factors in explaining the performance of regions. Comparative analysis with regions of the same type is undertaken using the typology elaborated by the Secretariat. The final report proposes development policy recommendations.

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Assessment and Recommendations

While disparities are low and stable over time, they increasingly follow the language split.

Switzerland's internal disparities, *i.e.*, differences in cantonal economic performance, are relatively low in the OECD context, and they changed little during the economic crisis of the 1990s. Disparities of per capita cantonal household income decreased until the 1970s and then increased again slightly, being by 1997 still below their 1965 levels. Other indicators such as fiscal capacity or trends in internal migration confirm the overall picture of low and stable differences. Despite their long-term stability, territorial disparities have changed in nature and increasingly follow the language split. Since the 1990s, French and Italian speaking Switzerland have twice the unemployment rate of German-speaking Switzerland, while the gap between the Swiss border regions and the adjacent German, French and Italian regions has narrowed. Within each language region, urban areas and areas close to urban centres have slightly higher growth rates than rural areas. Rural areas have to face constant decline of agriculture and have a low capacity to extract value added from tourism; moreover, they depend disproportionately on a declining construction sector and on public (federal) administration jobs. As such, the rural areas are expected to be more affected by deregulation. Further rapprochement towards the European Union will improve performance of all Swiss regions, but will make internal cohesion more vulnerable to asynchronous business cycles of the neighbouring countries.

Low disparities are due to a number of policies that emphasise interregional equity.

The relative stability of disparities can be ascribed to a number of territorial policies that emphasise interregional equity. Agriculture policy after 1950 became the predominant federal policy to support agriculture-dependent rural and remote areas, preventing rapid structural change and income decline. Fiscal equalisation, introduced at the

beginning of the 1960s, tries to redirect financial resources from richer to poorer cantons through a sophisticated set of shared taxes and conditional transfers. Public utilities, often monopolies like railways and postal service, are supplying services and employment to very remote areas, cross subsidised through revenues earned in economically stronger regions. Investment of cantonal road infrastructure, which is partially financed by the federal fuel tax, contains a strong element of redistribution towards rural and mountainous areas. Public procurement by the federal administration has a strong bias towards economically disadvantaged regions. Territorial organisation aims at maintaining a polycentric settlement structure. Finally, regional policy supports infrastructure investment in mountain areas and enterprises in economically disfavoured areas through targeted individual support. Since policy tools remained remarkably stable over time and external asymmetric shocks were few, the federation succeeded in maintaining a high standard of living across the whole country.

Inter-cantonal tax competition has led to high public services level across the country.

Federal territorial policies are set in a highly decentralised framework that promotes fiscal competition between the cantons. Swiss sub national governments have wide discretion to use the fiscal system as a tool for economic promotion. Cantons and municipalities compete for tax revenue and can actively influence the behaviour of firms and residents. Tax rates differ considerably among cantons and municipalities, which has led to spatial income differentiation and a correlation between tax rates and the percentage of high-income earners. Tax competition does not appear to increase differences in public service delivery, however, and may even reduce disparities between urban and rural areas. Concern about their tax revenue leads cantonal governments to follow closely citizens' demands and to provide good service levels even in remote areas. Moreover, growing tax competition did not affect "vulnerable" public services such as social assistance. In fact, redistribution at the subnational level has increased. In general, tax competition appears to be beneficial in terms of public service quality across the whole country.

However existing territorial policies come under pressure.

The carefully balanced system of territorial policies and policy tools to address disparities has, however, come under pressure. Given the dwindling significance of agriculture, agricultural subsidies are an increasingly ineffectual tool for the support of rural areas. Moreover, the high level of agricultural support strains the federal budget as well as the environment and conflicts with international trade agreements. Fiscal equalisation and financial transfers, while cumbersome and prone to financial waste, currently do little to reduce territorial disparities among the cantons. The bias of transport investment towards rural and remote areas has led to infrastructure shortages in urban areas. Public utilities such as the railways or the postal service have embarked on regulatory reform and stronger market exposure; the liberalisation of the electricity market is probably soon to follow. Liberalisation and deregulation of these public utilities are supposed to entail large cost savings and increased service quality, but they will also reduce the administrations' discretion to use them for equalisation purposes and territorial cross-subsidisation. The opening of Switzerland towards the European Union is likely to accelerate further some policy reforms, such as public procurement, triggering again possible redistributive and employment effects in more remote areas. Finally, the strong fiscal competition between the cantons and the federally supported use of tax concessions in lagging regions has come under closer supervision by the international community, particularly the European Union. The combined pressure during the 1990s of emerging territorial trends, of budget cuts due to the economic crisis, and of regulatory reforms in various sectoral policy areas led the government to thoroughly rethink territorial policies.

Frictions have emerged between political and functional regions.

A particular challenge for territorial policies is the increasing mismatch between functional and political regions. Fragmentation and variety are the most striking features of the Swiss federation. Despite its small size, a large number of economic, geographic, linguistic and ethnic lines cut the country into many distinct spheres. Sub national jurisdictions, *i.e.*, cantons and municipalities, enjoy extended fiscal and regulatory competencies, making Switzerland the most decentralised country of the OECD. In

fact, economic and social life of the 21st century rests on a late 19th century territorial structure. The functional organisation of the country overlaps with its politico-territorial structure, creating various gaps and inconsistencies in political decision making. This is particularly apparent in urban areas where the growth of the cities across the political borders of various independent jurisdictions has created numerous territorial spillovers, external costs of land use and fiscal imbalances, resulting in intra-metropolitan frictions. In reaction to these territorial trends, in 1996 the federal government created seven “Great regions” (Grossregionen/grandes régions) that grouped together several cantons, reflecting a more appropriate functional organisation of the country. However, this initiative was purely statistical and gives the federal government no additional tools to address the increasing tension between local autonomy and national cohesion and the need for more collaboration between the cantons.

The “New Fiscal Equalisation” (NFE) is an appropriate reform proposal to tackle fragmentation and disparities.

As a reaction to the various territorial trends, the federal government since the early 1990s has been elaborating an encompassing reform project called “New fiscal equalisation” (NFE). The NFE’s main scope is on the weaknesses of the current fiscal federal structure. The NFE aims to revive “true” federalism in Switzerland and thus covers a vast array of policy fields. The principal measures would be to disentangle competencies for heretofore federal-cantonal joint tasks, to introduce programme contracts and negotiations between the federation and the cantons for remaining joint tasks, and to introduce obligatory inter-cantonal burden sharing in specific policy areas. The crucial reform to reduce inter-cantonal disparities would be a horizontal and a vertical equalisation fund, which would provide all cantons with a minimum tax raising capacity of around 90% of the national average. The proposal, subject to parliamentary and popular approval in the next years, is likely to bring to an end current distortions and unfairness in inter-cantonal tax competition. It will bring clarity to the specific roles of the three government levels, simplify inter-governmental relations, harmonise decision-making in functional regions, and provide all cantons with adequate and unconditional financial resources. The NFE proposal

would be financially neutral, *i.e.*, neither the federation nor the cantons would bear any additional cost. The tax system would remain unchanged. In terms of both efficiency and fiscal equity, the reform proposal deserves general approval. However, with respect to balanced territorial development, two issues should be addressed. To maintain the fiscal balance between the federation and the cantons, the “hardship fund” proposed to cushion adverse effects of the transition period, should be phased out gradually. And secondly, to ensure long-term financial sustainability to all cantons, numerical cornerstones such as the granted minimum tax raising capacity or the leverage factor (the “tax rate”) for horizontal equalisation should be inserted in the constitution.

An intensified inter-cantonal burden sharing is necessary, with regulatory and financial support from the federation.

The NFE puts particular emphasis on inter-cantonal burden sharing and fiscal equivalence (fiscal correspondence) within fragmented functional regions. Many cantons currently deliver public services to the population of other cantons for which they are not or not sufficiently compensated. Inter-cantonal free riding is common, and attempts to reach voluntary cost sharing agreements often meet with resistance. Joint service delivery across cantonal borders is thus not yet widespread, and is restricted to cases, such as tertiary education, where the benefits, *e.g.*, large cost savings or quality improvements, are evenly spread across the cantons. Reluctance or outright refusal of cantons to participate in burden sharing reflects the difficulties in harmonising beneficiaries and taxpayers of local public services. The NFE proposal would allow the federation to oblige cantons to collaborate in nine selected areas where territorial spillovers are considered particularly significant. The proposal would be flanked with various control and accountability mechanisms. While the NFE approach allows for flexible intra-regional solutions without federal financial involvement, more incentive-compatible mechanisms could also be useful, such as a “mark up” on the remaining conditional subsidies if cantons agree to collaborate across borders. Such a federal lubricant could overcome transaction and co-ordination costs, and it could prevent legal disputes between cantons.

Federal-cantonal programme contracts could bring more efficiency into local public service delivery.

The NFE would also introduce new collaboration mechanisms for federal-cantonal joint tasks, called “programme contracts”, that aim at achieving higher quality and cost-effectiveness of federally supported local and regional public services. Through the use of these contracts, the federal and cantonal administrations can make use of past experiences and knowledge gained from a number of pilot projects. Since the end of the 1990s, the federation, cantons and private subcontractors fund regional public transport on the basis of programme contracts, which brought about significant efficiency gains. Some pilot projects are set up in forest management where the federation and cantons determine a common objective such as natural disaster prevention or promotion of biodiversity, leaving cantonal administrations extensive managerial flexibility. The NFE is supposed to extend the idea of programme contracts to other policy areas and joint tasks. These are yet to be determined, however, leaving this issue open for a next step in the reform process. Moreover, while the NFE emphasises the federal-cantonal relationship, it says relatively little about involving third parties into programme contracts. Since subcontractors have proven to deliver public services efficiently, the next NFE steps should include establishing a number of principles for third party inclusion, *e.g.*, the obligation to tender out any public service covered by a programme contract. With this, programme contracts could extend to areas where public monopolies currently deliver and subsidise services, such as postal services, electricity or telecommunication.

Federal regional policy should be reoriented towards raising regional competitiveness.

Although the federal government in 1996 published a regional policy vision that focused more on regional competitiveness and innovation capacity instead of disparity reduction, policy tools have remained largely the same, and objectives became even more rather than less opaque. The NFE reform would allow putting the 1996 regional policy visions into practice. Since the NFE would improve the fiscal status of poorer cantons, allowing them to pursue their own development trajectories, the current federal support for local infrastructure or local businesses would be redundant. Refocusing regional policy would include two aspects. First, instead of dealing with moun-

tainous and economically disfavoured areas only, federal regional policy should cover all types of regions, in particular urban ones. Second, rather than supporting individual activities or sectors, regional policy should focus on indirect support that benefits a whole region. The present individual support measures, particularly tax concessions, should be abolished. They appear to be little relevant for firms' locational decisions, and they would trigger frictions with EU competition policy once the Sectoral Agreements are signed. Finally, regional policy and spatial planning should focus on a sustainable rural development strategy based on the richness of natural and cultural amenities.

Spatial planning should put emphasis on efficient land use.

Given the high value Switzerland attaches to the preservation of rural areas, federal spatial development policy should foster efficient land use. The overall spatial strategy thus should be to reduce external cost of land use and give priority to activities on land that is already built and transformed. Planning tools should be adapted accordingly. Moreover, land use patterns and the level of external costs much depends on sectoral activities and policies with a strong spatial impact, namely transport of people and goods. Spatial planning and transport policy should thus be well co-ordinated, and market-based policy instruments should be developed in order to promote transport modes, which favour concentrated settlement structures. Finally, political fragmentation of functional areas requires a stronger horizontal co-ordination of cantonal spatial development planning. The federation should thus help cantons to develop a more coherent spatial structure across their territories. Put together, spatial visions and planning tools should be better harmonised with sectoral development plans.

An amenity-based strategy for rural areas should be developed.

The federal level, together with the cantons, should elaborate an amenity-based development strategy for rural areas, and provide the financial means needed to protect and preserve amenities. Different instruments, such as financial support of national parks, co-operation with cantons to foster regional nature parks, promotion of protected local brand names or setting up of amenity markets have been successfully tested in other countries. Particular

attention should be paid to mountain areas. The Alpine Convention, which was signed by all Alpine countries and which tries to establish an equilibrium between economic development in and protection of Alpine areas, could be a “pilot project” for a territorial approach towards sustainable development in rural areas. The federal government might also find it useful to open up agricultural funds for amenity producers in general, not only farmers, and to replace sectoral by a territorial, place-based approach. This would back up amenity-based strategies and simultaneously give rural regions more leeway in the use of financial funds. Gradually, a development fund for sustainable development in rural areas could replace current agricultural support.

Regions negatively affected by regulatory reform should get targeted support.

With various reforms in fiscal, sectoral and regional policies ahead, there could be a trade-off between more efficiency and maintaining regional equity, although regulatory reform, *e.g.*, in telecommunication, has hitherto proven beneficial even to the most remote areas. The federal government should thus consider compensation mechanisms for affected regions, financed through the overall efficiency gains of reforms. Swiss regulatory reform could hit regions in two ways, which are service standard reduction and a loss of regional employment opportunities. The political answer should thus be twofold. First, public service reduction can be prevented if the federation defines explicit minimum standards for certain public services that cantons have to reach and that would be co-financed through the programme-contract mechanism of the NFE project. Such a procedure would combine equal access to regional public services with a market-based delivery. Second, employment losses could be caught up by financial transfers such as the NFE equalisation funds or a yet to-be-defined special “cohesion” fund. Regions may then use these funds to create their own economic development opportunities. Such a procedure could possibly raise political assent for further reform and allow the government to remain firmly on the path of deregulation.

Switzerland's metropolitan areas are threatened by a vicious circle of outmigration, fiscal imbalances, social problem concentration, subsidised transport and environmental degradation.

Metropolitan areas, the first special topic of this review, are growing across traditional borders into the countryside, and they reveal signs of social segregation following the outmigration of the middle and upper income classes into the suburbs. Such trends are common to many OECD countries, but the specific federal arrangements turn the trends into a vicious circle in Switzerland. While the central cities lose income tax revenue, which are their most important financial resource, due to social segregation, they are obliged to bear increasing cost for supporting the less privileged strata of the population. The resulting financial imbalance leads the cities either to increase tax rates or to reduce public service standards, likely to fuel further middle-class outmigration. Environmental degradation in the city centres, land use regulation in the suburbs favouring low density construction, and subsidised public and private transport further exacerbate centrifugal trends. The incentive to leave the city centres and to settle in ever more distant places uses up ever more open space in the rural countryside, counteracting the objectives of spatial planning. Faced with these trends, the federal government has recently embarked on specific urban issues by publishing, in 1999, the "report on the central cities" and, in 2001, the "report on the agglomerations". These reports state that any federal policy responses to metropolitan development should integrate fiscal, transport, environmental, and social policy and should co-ordinate with forward-looking strategies of spatial organisation.

Policies addressed to metropolitan areas have to be multi-sectoral.

The federal government proposes a number of policy approaches to address urban issues. The amendment of the constitution in 2000 gives the federation more scope for policy action in urban regions. With respect to fiscal policy, the NFE project contains a number of proposals, such as a specific burden equalisation, that would relieve cantons whose population depends disproportionately on social assistance or related public services. Still, the NFE scheme applies to the federal-cantonal relationship and does not take the municipal (city) level into account. Municipalities would depend on their "home" canton, since the latter decides how the NFE fund will be distributed locally. The

federation should thus consider taking up additional requirements; cantons should be asked to pass a part of NFE funds to the cities, or to set up equalisation systems where cities' needs are explicitly recognised. With respect to social policy, the current "social assistance tourism", whose favourite destinations are the cities, should be reduced. The federal government is currently proposing to take over responsibility for family allowances, thereby relieving the cities from this burden. In the medium and long run, the federation should introduce and co-finance a guaranteed subsistence minimum that is independent from the place of residence of the claimant. With respect to transport policy, the Confederation should support metropolitan public transport systems and introduce road-pricing mechanisms for road infrastructure. These mechanisms could not only relieve metropolitan areas from infrastructure bottlenecks, they would also provide a link to the objectives of spatial planning, by targeting more effectively suburbanisation and urban sprawl.

"Tripartite" decision making and vertical policy co-ordination should be strengthened.

The current lack of policy co-ordination between the federal, the cantonal and the municipal level creates various incoherences that boil down to the city level. Although the need to improve co-ordination is widely recognised, direct access of municipalities to the federation meets with some cantonal resistance. Yet, in 2001 the three government levels created the "Commission Tripartite" to promote vertical co-operation in policy fields relevant for metropolitan areas. For the first time, strictly horizontal Swiss federalism gave way to a partnership across all three levels of government. Given the many shared responsibilities – transport, spatial planning, environment, social welfare, health care, etc. – and the strong impact federal policies have on metropolitan areas, such a permanent forum should be given more weight. The "Commission Tripartite" should be given a priority role as a platform for policy co-ordination in urban areas. The Commission could host a contact forum for the different government levels and help the federation to co-ordinate the different metropolitan initiatives and policy measures. It would thereby complete the existing co-ordination structures: whereas the existing inter-ministerial bodies on territorial organisation ("ROK"

and “ROR”) would continue co-ordinating policies across ministries, the “Commission Tripartite” would co-ordinate them across levels of government.

The newly created Colleges of Higher Education could be the pivotal point for strengthening more traditional sectors and rural areas.

Traditional industries in Switzerland are mainly located in rural regions and intermediate regions. Their modernisation, the second special topic of this review, is key for employment creation and growth at the territorial level. In many cases, non-urban clusters can be successful whether based on new specialised industries and labour markets or historically rooted industrial districts. The crucial condition is permanent upgrading of skills, products and processes. Policies towards education and knowledge creation at all levels have usually facilitated this evolution. These policies concentrate on both individual and organisational learning, *i.e.*, the circulation of knowledge and skills between firms and institutions. Post secondary local educational and technical institutions are just as important since they favour the emergence of firm networks and try to forge links with local industries. In this context, the cornerstone of regional education strategy in Switzerland has been the recent creation of seven Colleges of Higher Education [Hautes écoles spécialisées (HES)/Fachhochschulen (FHS)]. These schools, emerged out of upgraded cantonal schools, offer a combination of practical and theoretical education and transfer technology to small and medium-sized enterprises.

However federal and cantonal policies are not targeting clusters of firms.

The links between education and knowledge transfers are not yet well established in Swiss regions. Social capital in many areas is not favourable to co-operation behaviours among firms or between schools and firms. Support going to small firms often fails to address the problems of co-operation among firms, up-grading of products and processes, and diffusion of innovations. The federal government introduced specific funds to foster technology transfer from institutions to firms (CTI funds), but inter-firm collaboration is largely ignored. Given the strong competition between cantons for new firms, inter-cantonal co-operation only takes place under federal pressure. The HES, the most interesting initiative taken in the recent years to stimulate innovation and favour skills enhancement, have the potential to break the Swiss dilemma of having a good record in

terms of research spending and innovation, but a weak record in transforming knowledge and innovation into marketable products. There is a need to emphasise the customer orientation of research and training spending in HES, and participation of industrialists on HES governing boards and with regard to curriculum design should be considered. Incentives should also be given to the schools so that they not only develop their training function but also supply economic and technological services to firms. Spin-offs, *i.e.*, new enterprise creation by students, should be explicitly encouraged. Finally, much attention needs to be given to performance assessments, teaching the teachers programmes, setting norms for student exchanges and international networking of HES.

Promoting the HES is a part of a broader regional technology policy, which should be reinforced.

The learning region approach should not be based only on the HES. Given the weakness of Switzerland's high tech sector, and its size and relative isolation from centres of advanced research in Europe, steps should be taken to broaden the scope of federal regional technology policy. As a start, a technology programme review should be launched to assess the efficiency of present support policies. Programmes to support research projects, technological entrepreneurship, incubators, and technopolies or technical centres should be the first targets for such a review. Evaluation should be conducted using a learning region lens and lead to concrete proposals so as to strengthen links between HES and local companies.

Towards reforms of territorial policy.

Summing up, Switzerland has succeeded in maintaining a balanced territorial development over the last decades. This balance and the policies to maintain it have increasingly come under pressure. Traditional regional policies have become less effective in responding to new territorial challenges. Switzerland is now about to undertake significant reforms of fiscal, sectoral and regional policies that will – besides their effect on the country as a whole – affect regional development in various ways. These reforms should allow the federal government to redirect regional policy towards more focused objectives, particularly balanced development of urban areas, the promotion of regional learning and knowledge transfer and the

promotion of rural amenities. While the federal government should firmly strive for further public service regulatory reform, which are beneficial for almost all regions, it should take into account possible undesired territorial redistributive effects and address them accordingly. While the NFE would already be a major achievement for more efficiency and at the same time more regional equity, some specific regional compensation may be necessary, such as service minimal standards or transitional compensation for job losses. This would enable Switzerland to raise the efficiency of territorial policies while maintaining its high level of national cohesion.

Territorial Trends and Disparities

The Swiss federation is marked by great territorial variety. Despite its smallness, a number of significant dividing lines cut the country into mountain and plain, urban and rural, central and remote areas with distinctly different development prospects. Territorial fragmentation lies at the heart of many problems such as low interregional labour mobility, intra-metropolitan imbalances or the increasing mismatch between functional and political regions. Territorial disparities are low in an international perspective, and they did not grow during the last decade. Short distances and a well-built infrastructure, which provides good connections from remote to centre regions, have kept most regions on track with the national average. However, disparities have changed in nature, show a coarser pattern and increasingly follow the linguistic divides. Reinforcing national cohesion against centrifugal forces as well as internal imbalances is thus a major concern.

A new dynamic of territorial trends will affect Switzerland in the future. Closer ties with the European Union will be beneficial for income and employment as a whole, but it will change the pattern of territorial advantages and disadvantages. The gap between rural regions and metropolitan areas, which are already growing slightly faster than the national average, will increase. Several reforms of sectoral policies, particularly agriculture and certain public services, will affect the country's economic structure and further change the position of rural regions. Regional competitiveness will increasingly depend on rapid adaptation to such structural trends. This chapter explores present territorial trends and disparities in Switzerland, analyses them from different angles and, using different indicators, compares them to other OECD countries. It also provides an outlook for territorial dynamics in different parts of Switzerland and examines the policy issues that are involved.

Territorial fragmentation

Main territorial divides

Territorial fragmentation and strong internal spatial dichotomies are a central feature of the Swiss federation. To a certain degree, structural and spatial divisions

are the essential ingredient of the Swiss variant of federalism and stay at the heart of the significant power of subnational entities. Differences in basic cultural values and behaviours are in many cases more marked than economic disparities. In some cases, spatial differences in cantonal and federal voting behaviour, particularly in areas such as ecological and social issues, or openness towards Europe, cannot be attributed to general framework conditions but to cultural differences only. Although the Swiss federation has until today succeeded in reconciling decentralised decision making with national cohesion, the concern for a territorial equilibrium and the mastering of centrifugal forces is and will be one of the most preoccupying aspects of Swiss policy making. The concern for national cohesion and spatially balanced development has probably prevented large territorial reforms: Switzerland took part neither in the regionalisation movement in Southern Europe, nor in the reforms at local level that redesigned municipal structures in Central and Northern Europe.

Historically, the evolution of the federation over the past centuries was accompanied by four important territorial divides. Each of these divides cuts the country into two to four areas, which intersect each other and do not have the same geographical delimitation. Taken together, the four divisions are, to different degrees, constitutive of Switzerland.

- The contrast between the Alps and the Plain formed the very essence of the Confederation created in the 14th century from Switzerland's eight cantons. At that time, the number of Alpine cantons was practically equal to the number of cantons situated in the Plain and, likewise, urban cantons were practically equal in number to rural cantons. Although this near-parity was never rationally conceived, it represented important political material. The 16th century Reformation partially modelled itself on these structures. There were, however, exceptions to the urban = Protestant and rural = Catholic equation (Glarus and Appenzell are rural and of mixed confessions; Lucerne, Fribourg and Solothurn are urban but Catholic).
- The confessional divide has not created territorial blocks, but Protestants and Catholics clashed in several armed conflicts up until 1847, and these violent disputes were not properly settled until the end of the 19th century. Several regions have had a mixed religious population for a very long time. Migratory movements in Switzerland have contributed to this intermingling of the population, particularly in the urban Protestant cantons, and predominantly Catholic immigration from abroad has reinforced the trend. The importance of the confessional divide is tending to disappear due to the secularisation of society.
- The linguistic divide dates back to the very beginning of the Confederation when the founding cantons extended towards Ticino. Today the country is

divided into German, French, Italian and Romanche speaking parts, forming more or less homogenous territorial areas, which, nevertheless, do not coincide with cantonal borders. Linguistic borders are determined by territories that correspond to municipalities. Each municipality has one official language. This principle, although not enshrined in the constitution, strongly stabilises linguistic borders and protects minority languages. It also means that entirely bilingual areas are rare, except along linguistic borders; people of different languages do not usually live on the same territory.

- In the past, the town-country dimension constituted a major dividing line emphasising differences in political power, in the legal situation of inhabitants and companies, and in lifestyles. Since the middle of the 19th century, processes of industrialisation and urbanisation have led to a profound transformation of these differences. Even if Switzerland's main political, economic and social centres have never contrasted sharply with their outskirts, the demographic and economic deficit of rural areas has become more pronounced, particularly between 1950 and 1970. Recently, the split between urban and rural areas has again somewhat deepened.

Given that the different splits overlap each other and intersect in a multitude of ways, no single territorial blocks or a stable majority population has emerged that would dominate other minority groups through federal policy making. It is therefore not the heterogeneity of the country itself but rather the multitude of divisions that in one way or another puts each individual in a territorial minority position. Any population group seeking political success at the federal level therefore needs other groups in changing composition. This facilitates consensus at the constitutional level as well as in the political process (Buchanan, 1991) and a balanced representation of all interests. It is only recently that the linguistic split has somewhat hardened, revealed by a number of votes on issues such as EU accession or social policy reforms. The term "national cohesion" which is intended to cover cultural, social and economic aspects, was chosen by the Confederation as the main theme for the 1995-1999 legislature. This theme refers first and foremost to the relationship between linguistic regions, given that during the last decade all multi-cultural and multi-lingual countries have had to deal with significant tensions. The urban-rural divide has also somewhat widened, demonstrated by problems in metropolitan areas and certain tensions between rural and urban areas of the same canton.

Toward functional areas

Although spatial development processes have accelerated over the years and transportation infrastructures have been extended, the territorial institutions have largely remained the same. There is thus an increasing mismatch between politi-

cal division and socio-economic reality, particularly in metropolitan areas. The need to adequately represent the scope and evolution of functional regions has led the Swiss government in 1999 to group the 26 cantons into seven so-called *grandes régions* (Figure 1.1). These give an indication of the functional regions that have emerged in Switzerland over the years, created by strong inter-cantonal functional links or collaborations. They also reflect the centre-periphery dichotomy of the urban network, and the growing prominence of metropolitan areas at the heart of the *grandes régions*. At the same time, the seven new regions incorporate the larger linguistic and geographic divides that mark the country.

The *grandes régions*, however, are neither a new level between the cantons and the federation, nor do they play any role in political decision making at federal level. They are currently a purely statistical concept in order to: present some subnational socio-economic features at a level beyond the cantons; discern demographic, economic and social trends at the macro-regional level; and allow for easier comparisons with European regional statistics, particularly with regions bordering the country. In the following chapters references will often be made to the *grandes régions*, and many of the ideas that are developed – especially those involving horizontal partnerships – will concern functional areas spanning several cantons. The classification of the *grandes régions* follows the European NUTS (*Nomenclature des unités territoriales statistiques*) classification; they are the equivalent of the NUTS 2 level.

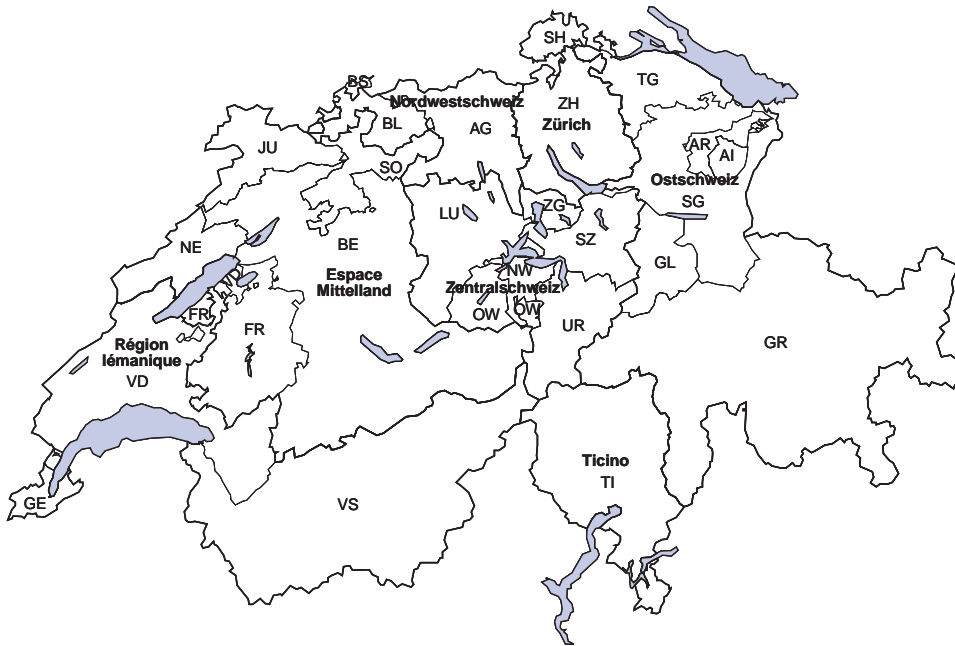
Territorial disparities

Since cantons exert considerable influence on decision making at the federal level, territorial disparities play a more important role in Swiss politics than in other OECD countries. Cantons can veto constitutional changes and the introduction of new laws (but not the modification of existing laws) which gives them the power to veto political reforms. Cantons may block decisions that could increase disparities among them or push forward equalising reforms if they think that disparities have gone too far. Even a minority of the population can prevent political reforms if it considers that they will weaken its position relative to the national average. Generally speaking, the public debate is more concerned with territorial disparities (*i.e.*, differences across subnational units) than with social disparities (*i.e.*, differences across individuals). The following section will focus on an analysis of territorial disparities using several indicators, and try to assess the current state and the long-term evolution of spatial differences across the country.

Value added

Switzerland has some of the highest value added per capita of all OECD countries, reflected in an average GDP per capita of CHF 57 000 in 1999

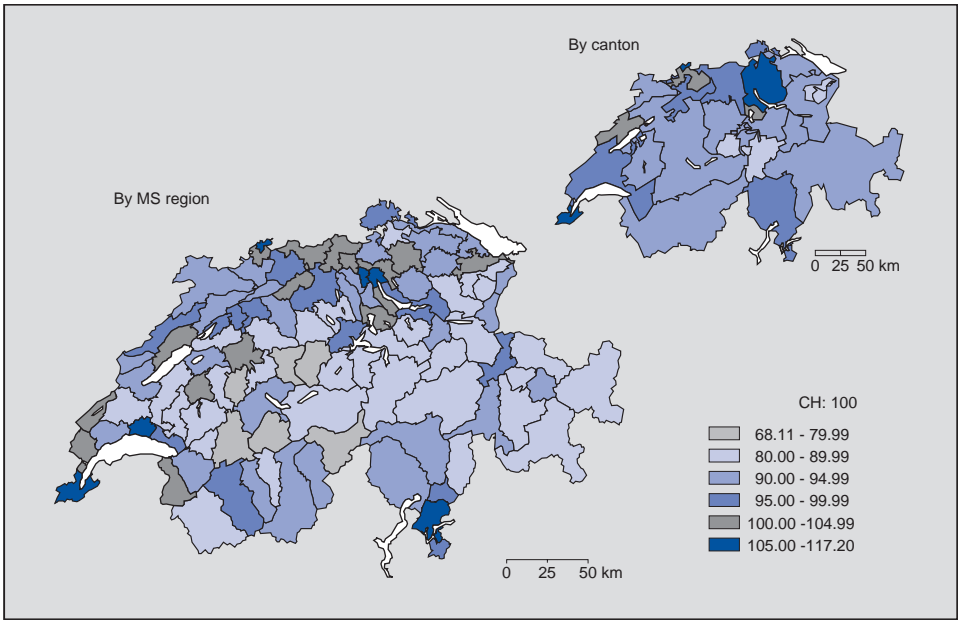
Figure 1.1. The seven grandes régions in Switzerland



Source: Swiss Federal Statistical Office, 1999.

(OECD, 2000b). However, value added per capita is unevenly distributed across the different cantons (Figure 1.2) and varies between 68 and 117, with the national average set at 100.¹ Moreover, since productivity in a sector tends to be higher in central than in remote areas, applying national averages to the regional industrial structure underestimates regional productivity differences. The differences are mainly due to the uneven distribution of the three economic sectors within the country, and to the uneven distribution of high and low-productive industries within the same sector. The Swiss value-added indicator, as in other countries, reveals a strong correlation between centrality (*i.e.*, closeness to metropolitan areas) and value added per capita. It is basically the service industries – especially in finance, insurance and trade – and the chemicals industry located in the big metropolitan centres that create the highest value added. The highest GDP per capita can therefore be observed in the urban centres of Zurich, Basel, Geneva and Lugano. On the other hand, Northeastern Switzerland (mostly textile industry) and the rural agricultural areas in Western central Switzerland have a weak industrial structure. A particularly important feature is the low value added per capita in the

Figure 1.2. Value added by region, 1991



Source: Swiss Federal Statistical Office, 1997.

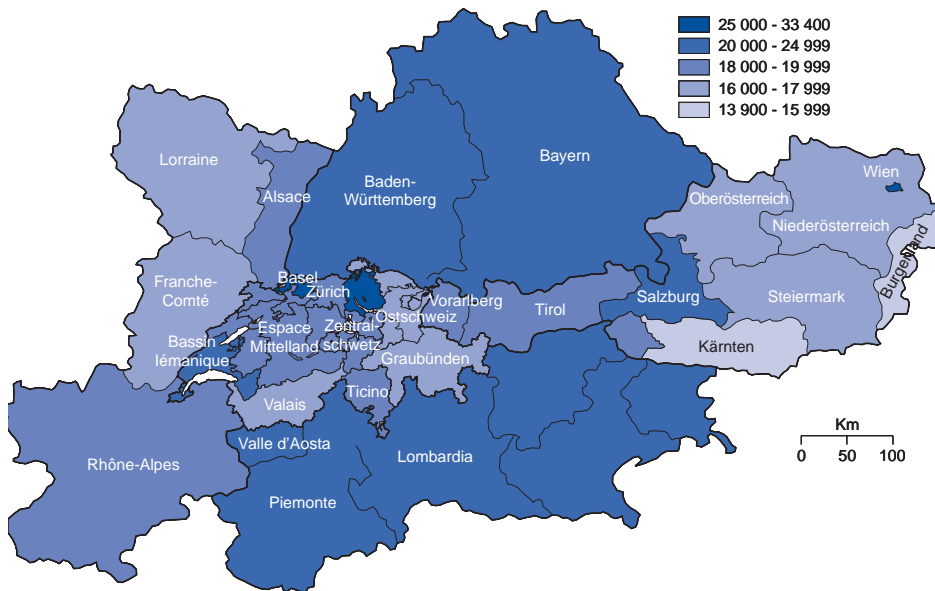
Alpine regions. Given that these regions are highly dependent on tourism (*e.g.*, the Grisons), this reveals that the tourism service sector, despite its importance for the Swiss economy and its importance for employment in these areas, produces relatively little value added compared to other sectors.

Border regions

From a European perspective, many Swiss regions show a lower GDP per capita than their neighbouring countries (Figure 1.3). The map reveals that to the North as well as to the South, PPP-corrected GDP per capita in the foreign bordering region is higher than in the adjacent Swiss bordering region, and that GDP distribution in Northern Italy as well as in Southern Germany is more equal than within Switzerland. PPP-corrected GDP per capita of some Swiss regions equals only half of that of its neighbours. The map reveals that geographically Switzerland is located in the growth pole of the Alpine arc, but that its performance lies beneath the average of this region. Despite the caveats with respect to the use of PPP-corrected data for border regions,² the map shows a picture that should raise

Figure 1.3. GDP per capita in regions bordering Switzerland, 1999

In USD



Source: BAK Basel Economics, 2000.

concern. Since average growth rates in Switzerland tend to be below those of its Southern and Northern neighbours, there is a danger that Switzerland will in the long run fall behind the development of the surrounding regions.

Unemployment

After Switzerland entered a period of rapid unemployment growth³ in the 1990s, the spatial distribution of unemployment has shown marked regional disparities (Table 1.1). The most obvious pattern is manifest when one looks at linguistic borders; the French-speaking Swiss regions and Ticino host twice as many unemployed as the German-speaking areas. In this case, economic disparities clearly follow the linguistic split. These disparities reflect in part the structure of neighbouring countries and regions. German-speaking regions in Switzerland have slightly lower rates of unemployment than the southern part of Germany, while the rates in French-speaking areas are slightly higher than the national average, and significantly lower than rates in neighbouring French regions. Particularly striking is the fact that there is no difference between the rates in Ticino and those in the Italian region of Lombardia. A less important difference can be seen between metropolitan areas – city centres have higher levels of unemployment – and the rural areas of the country.

Table 1.1. **Evolution of unemployment at cantonal and *grande région* level**
1991-2000

Grande région	Unemployment rates		
	1991	1995	2000
Leman Region	2.0	6.9	3.4
Espace Mittelland	0.8	3.5	1.4
Northwest Switzerland	0.9	3.4	1.6
Zurich	0.7	4.0	2.0
Eastern Switzerland	0.7	2.5	1.4
Central Switzerland	0.6	2.7	1.2
Ticino	2.4	6.7	3.3
Switzerland	1.0	4.1	1.9

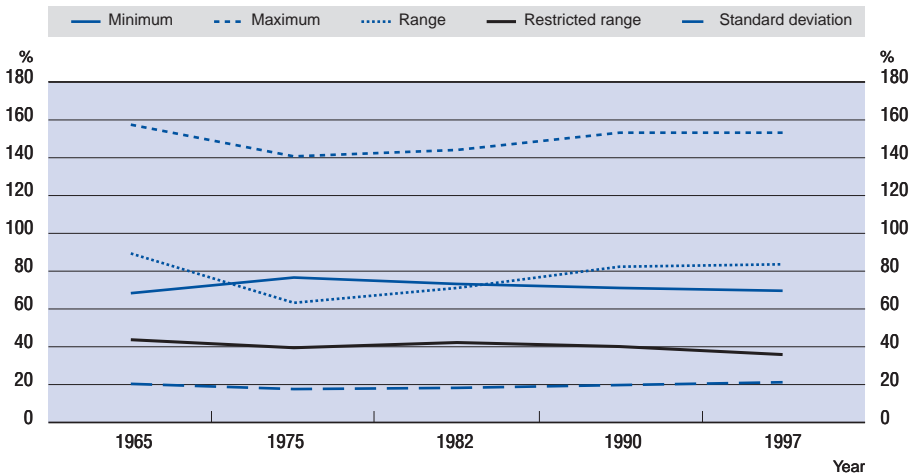
Source: Swiss Federal Statistical Office (various years).

The strong spatial differentiation along the linguistic borders of the country might be due to a number of factors. *First*, the language borders constitute an important obstacle to labour mobility, and the Swiss labour market is not integrated with Europe. Interregional exchange beyond the different linguistic regions is still limited, and open mainly for highly skilled people. The smaller French and Italian-speaking parts of the country are thus structurally disadvantaged compared to the much larger labour market of the German-speaking part. *Second*, at the beginning of the 1990s, the economic situation was much less favourable in France than in Germany, which had a negative impact on exports of the neighbouring French and German-speaking Swiss regions. *Third*, the economic structure of German-speaking Switzerland is more diversified; the service sector in the French-speaking part, for example, shows some polarisation between a highly qualified workforce and a workforce that is not qualified at all. The proportion of categories exposed to business cycles is thus higher in French than in German-speaking Switzerland. *Finally*, unemployment insurance regulation differs across cantons, leading to different attitudes towards applying for unemployment insurance. These interregional differences slightly diminished between 1997 and 2000 (not shown in Table 1.1), when unemployment decreased dramatically. On the other hand, differences between male and female unemployment and between Swiss and foreign workers have grown larger.

Household income

The indicator “household income” is a substitute for GDP data and, contrary to the latter, has been available at the cantonal level since 1965.⁴ Using different statistical measures, the evolution of cantonal revenues reveals that revenue disparities from 1965 to 1997 have narrowed or remained stable (Figure 1.4). The range (*i.e.*, the difference between the highest and the lowest value of the cantonal

Figure 1.4. Change of cantonal household income disparities



Note: The national average is set at 100 for every year. The restricted range excludes the three highest and the three lowest values for every distribution.

Source: Swiss Federal Statistical Office (various years).

revenue distribution) fell dramatically between 1965 and 1975, but has been slowly increasing since then, being by 1997 within five percentage points of its value in 1965. The restricted range, which excludes the three richest and the three poorest cantons to avoid distortions by statistical outliers, fell from 43.9 in 1965 to 35.7 in 1997. The standard deviation shows that after a period of increased equality between 1965 and 1975, the distribution of cantonal incomes has been becoming steadily less equal; in 1997, distribution income equality was actually slightly less than its value in 1965. Putting the three indicators together, the data reveal that the non-convergence of disparities is mainly due to a few extremes; *i.e.*, the lagging behind of cantons like Jura and Obwalden and the rapid development of Zug. The differences between the remaining cantons, however, have narrowed.

The calculations at the level of the *grandes régions* (*i.e.*, grouping of several cantons) show that the economic divide increasingly follows the language divide (Table 1.2). In 1997 Switzerland could be divided into a rich (Zurich), some intermediate (Northwest and Central Switzerland, Geneva-Lausanne), and three clearly below-average regions (Eastern Switzerland, Mittelland, Ticino). The evolution since 1965 shows a clear movement of economic strength from Western towards Central and Eastern Switzerland, particularly in favour of the Greater Zurich area and its neighbours. The more industrial Mittelland and Basel areas show a long-standing relative decline, after having caught up during the 1990s. The *grande*

Table 1.2. **Household income disparities at *grande région* level**
National average household income per capita = 1 000

	1965	1970	1975	1980	1985	1990	1997
Leman Region	1 026	1 025	1 026	1 017	1 037	1 008	980
Espace Mittelland	919	901	895	897	884	863	866
Northwest Switzerland	1 140	1 119	1 103	1 091	1 085	1 078	1 103
Zürich	1 159	1 189	1 206	1 210	1 207	1 254	1 261
Eastern Switzerland	894	901	893	901	898	884	885
Central Switzerland	882	899	912	934	957	1 024	1 006
Ticino	859	839	831	816	831	863	836

Source: Swiss Federal Statistical Office (various years).

région of Geneva-Lausanne saw its position improve during 1970-1980, but then fell back in the 1990s. Ticino is fluctuating at a low level. Generally, at the *grande région* level, income disparities have decreased slightly. It is mainly the large metropolitan areas such as Zurich that have grown, while older industrial areas, located rather in intermediate regions in the west, are losing ground.

Comparing growth rates with respect to type of regions show that rural, urban and intermediate cantons⁵ had almost identical nominal growth rates for the period 1965 to 1998, with rural and intermediate cantons showing a slightly higher growth (Table 1.3). Growth for urban regions was higher than for rural and intermediate regions from the mid-1970s to the mid-1990s, but then fell below the national average. Rural cantons close to urban centres (*e.g.*, Uri) and to intermediate regions grew faster than remote rural cantons (*e.g.*, Valais). Intermediate cantons, which in Switzerland often coincide with old industrial areas, made up their losses of the mid-1970s and grew faster than the national average in the 1990s. Again, intermediate cantons close to metropolitan areas (such as Schwyz or Nidwalden which are in commuting distance from Zurich) grew faster than more remote or isolated intermediate cantons (such as Ticino). Although income per

Table 1.3. **Nominal GDP change by type of region**
Annual growth rates, %

	1965/ 1970	1970/ 1975	1975/ 1980	1980/ 1985	1985/ 1990	1990/ 1994	1994/ 1998	1995/ 1998
Predominantly urban cantons	7.4	8.7	4.3	6.1	3.8	4.4	1.2	5.2
Predominantly rural cantons	7.7	9.6	4.3	5.4	4.3	3.9	1.6	5.3
Intermediate regions	7.4	9.1	4.2	6.3	4.0	4.2	1.2	5.3
Switzerland	7.3	9.0	4.3	6.0	4.0	3.9	1.0	5.2

Note: For the years 1965-1970, 1970-1975 and 1975-1980, the canton of Jura is not included in the calculation.

Source: Swiss Federal Statistical Office (various years).

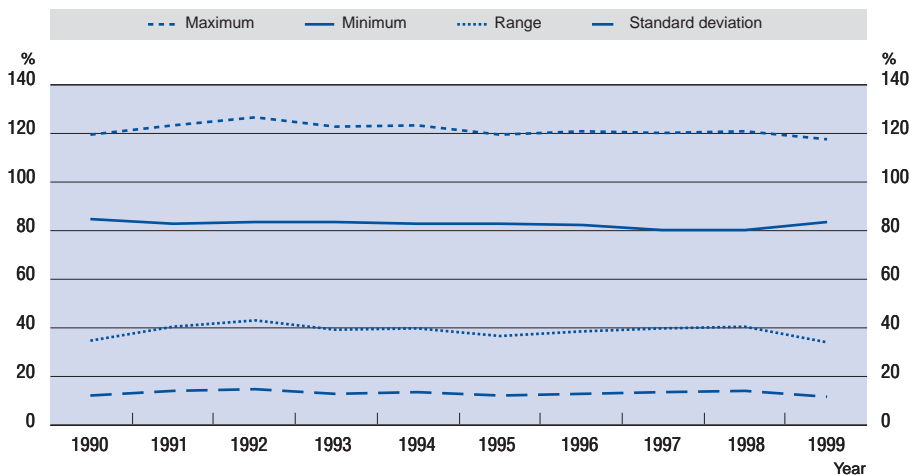
capita remains clearly higher in urban than in rural and intermediate areas, in relative terms this difference has slightly diminished during the last decades. A clear and growing urban-rural divide can thus not be discerned in Switzerland.

Tax burden

The Swiss fiscal system is marked by great differences of tax rates charged between cantons and even municipalities. This both reflects the differences in GDP per capita, shown above, and the decentralised fiscal system, particularly the extended power of cantonal and municipal governments to set their own tax base and tax rates. Only recently a “formal” harmonisation of tax bases and deductions was put through. To measure effective tax burden disparities, the Swiss Federal Tax Office has developed a global tax burden index, encompassing a set of taxes collected at the subnational level, mainly taxes on income and wealth plus some less important cantonal consumption taxes and corporate taxes (taxes on profits and capital). To assess overall cantonal tax burden disparities, again the range, the restricted range and the variation coefficient are used.

Disparities relative to local tax burden remain rather constant in the long run (Figure 1.5). The range witnesses an important rise in the second half of the 1980s, going from 63 in 1985 to 100.9 in 1988, but then never ceases to drop, declining to 66.6 in 1999, which represents approximately its value in 1983. Concerning the

Figure 1.5. Change of cantonal tax burden disparities



Source: Swiss Federal Statistical Office (various years).

restricted range, it is interesting to note its relative stable evolution with a slight growing trend, except for the period 1987-1992, which experienced a significant increase from 40.2 to 47.9. This shows the large impact of the high tax rates of cantons such as Jura, Valais, Neuchatel, Uri or Fribourg – which simultaneously show a weak fiscal capacity – and Zug, the canton with the lowest fiscal burden index, which even declined from 70.7 in 1983 to 58.7 in 1999. The standard deviation – or, since the average is fixed at 100, the coefficient of variation – indicates that except for a period of increased inequality between 1987 and 1992, its values of 1983 and 1999 are almost similar with coefficients of respectively 16.7 and 16.8. At the *grandes régions* level, the disparities seem to have remained invariable in the last ten years. On the whole, tax burden disparities appear to have remained quite constant over a very long time.

Cantonal tax burden disparities do not fully reflect local tax burden differences in Switzerland. On the level of the municipalities, the tax burden range is around 1 to 4. However, when considering local tax disparities, one should not lose sight of the fact that a federal income tax exists, which, by definition, is the same across the whole country. It can thus have a moderating influence on such disparities, especially since its share in total income and wealth taxation has increased from around 21% to 30% since 1980. From a global perspective, total tax burden disparities have probably slightly decreased, yet the differences in tax burden still tend to affect taxpayers' choice of residential location. Moreover, improved transportation infrastructure has increased spatial mobility and thereby the potential for tax competition among cantons. Tax burden disparities and tax competition between jurisdictions have therefore become major concerns in Swiss politics.

Disparities in an international context

Comparative data for all OECD countries show that Switzerland in almost every respect belongs to the group of countries with the lowest disparities and lowest regional concentration (Table I.4). The coefficient of variation of regional per capita GDP is 14 per cent which puts the country in the group with small disparities, only surmounted by Sweden, the Netherlands and Greece and well beneath the OECD (unweighted) average. Of all Federal countries, which in general show smaller regional disparities than Unitarian ones, Switzerland has the weakest disparities⁶ among its subnational entities. The largest region accounts for 21 per cent of total national GDP, which sets the country below the OECD average. These statistics reveal the territorially decentralised character of the Swiss federation with no single centre of gravity. The fact that the political capital (Bern) is distinct from the economic capital (Zurich) may partially explain lower disparity and low regional economic concentration.

Table 1.4. Regional concentration of GDP¹ in OECD countries

	Share of first region ²	Share of first 5 regions ³	Coefficient of variation of per capita GDP ¹
	1997 ⁴		
Hungary	42.2	60.9	35.9
Ireland	39.0	64.1	23.8
Greece	37.4	60.9	12.9
Finland	37.3	60.2	22.6
Denmark	32.8	51.8	27.3
Japan	30.8	49.4	30.0
Portugal	30.4	59.0	32.2
Norway	30.0	53.1	33.0
France	29.5	39.5	45.2
Austria	29.1	51.8	30.6
Sweden	25.2	63.0	10.9
Australia	25.0	65.7	18.6
Mexico	23.1	50.9	56.0
The Netherlands	22.3	55.3	11.3
Czech Republic	22.1	44.1	33.0
Switzerland	21.0	58.7	14.0
Italy	20.0	57.0	26.6
Belgium	20.0	46.6	23.1
Poland	19.7	43.6	23.6
Canada	18.5	45.1	14.1
United Kingdom	17.2	26.1	45.9
Spain	16.9	43.9	22.3
United States	10.2	26.6	20.0
Germany	9.0	35.0	26.3
OECD	25.4	50.2	31.0

1. For Australia, Canada, the United States and Switzerland, the total household income includes social transfer income.

2. For some countries, the regions identified have been grouped into functional metropolitan regions to determine the share of aggregate GDP (or aggregate household income) that comes from the largest region.

3. Only the first three regions for Belgium, Denmark, Greece, Ireland, the Netherlands, Poland, Switzerland and the Czech Republic.

4. 1995 data for Japan, Mexico and Norway; 1996 data for Australia, Canada and Germany.

Source: OECD (2001g).

Internal migration

Internal migration (*i.e.*, population movements between different regions and the resulting population growth or decline) has been quite high in international comparison, even between the different linguistic regions (Rees and Kupiszewski, 1999). However, it has been declining since the 1970s (Table 1.5). During 1980-1990, internal migration came close to reaching an equilibrium in almost all regions. Over the years there have nonetheless been distinct migratory trends that can be divided into four periods: 1965-1970, when migration favoured urban areas at the expense of rural areas; 1975-1980, when people left not only rural areas but also

Table 1.5. **Migration balance at *grande région* level, 1965-1995**
In % of resident population

	1965/1970	1975/1980	1985/1990	1995/1999
Leman Region	1.24	1.13	0.18	-0.19
Espace Mittelland	-0.68	-0.75	0.21	0.10
Northwest Switzerland	0.12	-0.34	0.14	-0.28
Zurich	1.63	1.25	-0.15	-0.18
Eastern Switzerland	-2.16	-1.18	-0.37	-0.14
Central Switzerland	-1.28	-0.75	-0.12	0.80
Ticino	1.72	1.06	-0.26	0.55

Source: Swiss Federal Statistical Office (various years).

the old industrial areas of the Jura and central Switzerland, where migration has now generally slowed down; 1985-1990, when internal migration almost reached an equilibrium and some former migratory trends were reversed; and 1995-1999, when the urban regions of Zurich, Geneva and of North-Western Switzerland started to lose out to Central Switzerland. At present, the influence of internal migration on the demographic evolution of the *grandes régions* is almost negligible.

The rather weak internal migration between different regions stands in contrast to the persistent regional differences in value added and in salary per working hour, the latter of which varied between CHF 25 and CHF 33 in 1995. Inter-regional economic gaps, particularly between centre and periphery or between urban and rural areas, have not induced large internal migration flows towards the metropolitan areas; demography does not follow the economic centre-periphery model. This may have different reasons, one of which is that people, due to the smallness of the country, good infrastructure and easy accessibility, commute instead of migrate. The net migration balance also hides some selectivity effects: it is mainly the young, the foreigners, and the well-educated who tend to migrate towards the urban areas, whereas families and retired people tend to move towards rural regions. These may balance each other. Low migration may also be due to a multitude of obstacles, such as the multilingualism of the country, which makes migration more costly. Low internal migration however is a political issue as it somewhat prevents and slows down structural change in a labour market that is already small. The opening of this market due in 2002 after approval of the Sectoral EU-Switzerland agreements will probably have a stimulating effect on interregional migration in Switzerland.

Advantages and challenges faced by regions

Economic and social performance of regions can be traced back to their different potentials, and to the success or failure in making use of them. Identification

of untapped growth potentials is thus the first step for regional development. In this section, territorial advantages and disadvantages as factors of socio-economic performance are analysed from different aspects: location, territorial structure, demographic structure and geographical distribution of population, human capital, industrial structure and the capability to exchange information and to communicate. The types of regions (predominantly urban, intermediate and predominantly rural regions) are examined in comparison with the relevant regions in other OECD countries.

Geographical features

Centrality

Switzerland occupies a central position in Europe. It is located next to the richest area in the EU, a triangle extending from Yorkshire in the UK to Franche-Comté in France and Hamburg in Germany. This area, which has the highest concentration of European economic activity, accounts for 14% of the surface area, one-third of the population and 47% of GDP in Europe (European Commission, 2001). The distance from the Swiss border to large cities in the neighbouring countries (Italy, France, Germany and Austria) never exceeds 100 km. All Swiss neighbouring areas have rather homogeneously high levels of European centrality, and Switzerland has benefited from European centrality and the proximity to its neighbours. At the same time, however, the centrality and high accessibility of Switzerland imply that it shares the burden of environmental pressures, such as traffic congestion.

Land use

Swiss territory is characterised by compact size (41 400 km²) and structure. Despite the small surface area, territorial management and infrastructure development in Switzerland are no easy tasks due to its mountainous territory and large water surface, which are the country's major tourist attractions (Table 1.6). Around half of Swiss territory is classified as mountain regions, which is above the EU average and only little below Austria or Japan. Due to topographical constraints, Switzerland has relatively little arable land, with grasslands occupying two to three times more area than farmland and forests areas, which cover one-third of the territory. Questions related to the efficient use and management of land are thus of crucial significance for Switzerland.

The territorial structure of Switzerland is more diverse than that of any other European country. Within a small territory, there are major differences dictated by topography: its main ecosystems are forests, grasslands, Alpine mountain systems, inland waters and wetlands. Due to Switzerland's location, geomorphology,

Table 1.6. Territorial structure of Switzerland in comparison

	Surface area (1 000 km ²)	Arable and permanent crop land (%)	Permanent grasslands (%)	Forests and other wooded land (%)	Other areas (%)	Mountain regions (%)
Switzerland	41	11.8	28.2	31.6	28.4	55.0
Austria	84	17.9	23.5	47.6	11.0	56.8
France	549	34.6	22.3	31.4	11.7	17.7
Germany	357	34.5	15.1	30.1	20.3	1.8
Italy	301	37.2	15.5	23.3	24.1	31.5
Slovakia		33.3	17.5	41.5	7.7	–
Japan	378	11.4	1.7	66.8	20.1	59.3
Korea	99	19.5	0.9	65.2	14.4	–
Norway	324	2.9	0.4	39.2	57.4	–
Finland	338	8.1	22.3	75.5	16.1	–
Greece	132	30.4	40.5	22.8	6.3	60.9
OECD	34 728	13.3	25.5	33.8	27.4	–
EU-15		27.6	18.6	37.9	15.9	19.5
World		11.6	26.1	32.0	30.3	

Note: EU: mountain areas in the cultivated agricultural rural area; Switzerland: LIM region; Japan: Special mountain agricultural villages.

Source: OECD (1999b).

variety of climate and wide range of vegetation and ecosystem, it is rich in biodiversity of fauna and flora. The differences in size and land use pattern among cantons are significant. On the one hand, cantons such as Basel-City and Geneva are well urbanised, whilst more than half of the surface area in five cantons (Fribourg, Appenzell A. Rh, Appenzell I Rh., Thurgau and Luzern) is covered with agricultural land, and in two cantons (Valais and Uri) with unproductive land. Such territorial diversity can be to a country's advantage, but the distribution of responsibilities and resources among heterogeneous cantons can become a sensitive policy issue, especially when this is linked to institutional fragmentation.

Transport infrastructure

Despite topographical constraints, infrastructures supporting the Swiss territory across urban and rural areas are highly developed compared to other countries, and investment in transport infrastructure is higher than the OECD average (European Conference of Ministers of Transport, 1999). Transport infrastructure is so well developed that even very remote areas are easy to reach. The three international airports in Switzerland (Geneva, Basel and Zurich) – albeit relatively small compared with those in the four neighbouring countries – have good international access. Such well-developed transport infrastructure may however raise environmental concerns, as all areas are put under increased environmental pressure, particularly by private transportation. Another factor that might negatively

affect internal transport as well as international accessibility is the relatively high transport costs in Switzerland (Table 1.7). More efforts, such as further deregulation in the railway sector, will be necessary to remedy this situation and ensure that the comparative advantage of high accessibility is reinforced. Finally, a strong emphasis on transport investment in rural areas has created some infrastructure shortages in urban areas (Blöchliger *et al*, 2000).

Table 1.7. **Transport and communication price levels in selected countries, 1996**
European Union = 1

	Switzerland	Germany	France	Italy	Austria
Traffic, communication	1.23	1.04	1.06	0.88	1.17

Source: Swiss Federal Office for Transports (2001).

Demographic structure and geographical distribution of population

In Switzerland, 60% of the total population of 7.2 million live on 20% of the surface area, in an arc of metropolitan regions between the Jura and Alps, extending from Geneva-Lausanne in the west through Bern to the major northern cities of Basel and the Zurich agglomeration. More than half of the Swiss territory is classified as *intermediate region* (IN regions) and one-third as *predominantly urban region* (PU regions), while *predominantly rural regions* (PR regions) occupy less than one-third of the territory (Table 1.8).⁷ This can be explained by the proximity of urban and rural

Table 1.8. **Population by type of region in OECD countries**

	Area			Population		
	Predominantly urban regions	Intermediate regions	Predominantly rural regions	Predominantly urban regions	Intermediate regions	Predominantly rural regions
Switzerland	16.2	53.6	30.2	43.6	50.0	6.4
Austria	1.4	20.2	78.5	23.0	30.8	46.2
France	4.5	34.4	61.1	28.6	41.4	30.0
Germany	39.7	31.4	28.9	63.6	23.8	12.6
Italy	22.3	50.4	27.4	49.4	41.0	9.6
Denmark	1.4	30.8	67.7	22.0	38.0	39.0
Netherlands	59.7	40.3	–	85.2	14.8	–
Belgium	57.2	28.2	14.5	79.9	17.7	2.4
Norway	0.1	15.6	84.2	11.3	39.1	49.6
Slovak republic	3.3	78.3	18.4	11.5	76.2	12.3
Japan	7.7	33.1	59.2	43.7	34.3	21.9
Korea	15.5	48.7	35.8	67.1	23.7	9.2

Source: OECD Secretariat.

regions and an interwoven network of cities and rural areas. According to the above classifications, more than 90% of the Swiss population live in PU or IN regions, which is a higher percentage than in most OECD countries. Very few people live in remote areas, and Switzerland can indeed be considered to be a highly urbanised country.

Industrial structure

Owing to its strong tourism and financial sectors, Switzerland has one of the most developed service industries among OECD countries. With 66% of the workforce employed by the service sector, the employment share of that sector in Switzerland is the largest and that of manufacturing the lowest among its neighbours (Table 1.9). Major branches of the service sector in Switzerland include banking, insurance, transport, and communication. The agricultural sector has been in general decline across regions, including in rural areas.

Table 1.9. **Industrial structure of Switzerland and of Swiss neighbours**

	GDP per capita in USD 1999	GDP share in % 1998			Employment share in % 2000			SME share of employment 1995
		I	II	III	I	II	III	
Switzerland	27 902	3	33.5	63.5	4.7	24.8	70.5	71.5
Austria	24 746	2.3	31.3	66.3	6.1	30	63.9	64.5
France	21 988	3.2	24.5	72.3	4.2	26.3	69.5	65.9
Germany	23 669	1.2	30.9	67.9	2.6	33.5	63.8	57.7
Italy	22 140	2.7	31.1	66.3	5.2	31.8	63	79.9
Norway	28 133	2.4	32.4	65.2	4.3	21.8	74	–
Japan	24 628	1.7	34.5	63.8	5	31.2	63.7	–
Korea	–	4.9	43.4	51.7	–	–	–	–
EU	22 191	4.3	31.2	72.9	4.3	29	66.8	65.7

Source: OECD Secretariat.

Swiss industry is essentially made up of small firms. Of 300 000 private firms, 99.7% are SMEs,⁸ of which 88% are micro-firms.⁹ They constitute the main pillar of the national economy with an employment share of 75% (31.2% for micro-firms and 40% for SMEs). On the whole this situation is similar to that of EU countries, but compared to its neighbours the share of SME employment in Switzerland is relatively higher than in Germany (57.7%), Austria (64.5%) and France (65.9%). Large firms in Switzerland belong mainly to the chemicals industry, telecommunications, banking and finance, and transport, while small firms are dominant in the service sector (in particular micro-firms, 92.1%) and in manufacturing (80.3% are micro-firms). A typical Swiss enterprise would be a service oriented micro-firm

(seven firms out of ten), on which Swiss economic performance depends considerably. The potential of small firms should be addressed as a territorial policy target.

Industrial structure by regions and cantons

The service sector has not developed uniformly across the country (Table 1.10). It accounts for 75% of employment for the region of Zurich and 56% for the region of Eastern Switzerland, whereas the industrial sector varies between 34% for Eastern Switzerland and 20% for the Zurich and Geneva-Lausanne regions. The agricultural sector never reaches more than 9%, and rural cantons have lost their economic dynamism due partly to the decline of agriculture. Tertiary specialisation in some rural areas reveals the importance of tourism; approximately one-eleventh of the working population is directly or indirectly involved in tourism related activities. The construction industry accounts for an average of 12.7% of employment, which suggests a weak local economy significantly dependent on public works. The share of employment in public administration is also relatively large in some rural and intermediate areas compared to the national average (3.4%).

Large firms are mainly located in PU regions. The region of Zurich hosts one-quarter of the largest firms of the country. As a result, the employment share of SMEs is relatively less important in agglomerations than in less urbanised

Table 1.10. Employment shares by cantons, 1998

Cantons	PR	PU	IN
Regional shares in total employment	12.9	46.0	41.1
Share of national revenue at factor prices (1999)	7.2	51.1	41.7
Employment shares by type of sector			
I	9.3	3.2	9.1
II	24.6	26.6	29.7
III	66.1	70.2	61.3
Employment shares by type of activity			
Manufacturing	20.5	20.1	22.2
Trade/repairation/hotel trade	29.2	22.7	23.9
Transportation/communications	6.3	7.4	6.2
Finance/banking/insurance	3.0	7.2	6.1
Real estate/IT	6.1	11.7	8.5
Construction	12.2	7.4	8.9
Public administration	4.1	3.3	4.8
Education	4.8	6.0	6.3
Health and social services	10.1	10.1	11.3
Other services	3.8	4.1	4.1

Note: PR: Predominantly Rural; PU: Predominantly Urban IN: Intermediate.

Source: OECD Secretariat, based on Swiss Federal Statistical Office (2001).

cantons: Central Switzerland (80%); Ticino (85%); Zurich (60%); and Basel-City (42%). At the same time, micro-firms are largely dominant in urban cantons, since 92.1% of service sector firms are micro-firms. Measures for the revitalisation of agglomerations should thus include both large firms and SMEs.

Trade exchange patterns

Trade is essential for the Swiss economy as the export/import volume per capita is one of the highest in the world. Trade exchanges with neighbouring countries accounted for 90% of Swiss imports and 79% of Swiss exports in 1999. Export destination statistics broken down according to intra-Swiss location of the exporting firm reveal that exporters concentrate most of their activities in the markets of neighbouring countries sharing the same language (Table 1.11). Firms in German-speaking regions of Switzerland trade more with Germany or with Austria (33%) than with firms in other foreign countries, while the French and the Italian-speaking regions trade mainly with their French (19.3%) and Italian partners (21.1%). Global statistics show Germany with a total share of 23% of exports of Switzerland, France with 9% and Italy with 8%. The attitude of Swiss firms to avoid the language barrier constitutes a certain territorial disadvantage for the country, particularly in promoting internal integration. It may also materialise in uneven internal growth rates since every region depends on the growth rates of its linguistic neighbour.

Table 1.11. **Trade with neighbouring countries**

	In percentage		
	Germany/Austria	France	Italy
German-speaking regions	32.9	11.3	7.2
French-speaking regions	19.3	15.1	9.6
Italian-speaking regions	19.8	11.0	21.1

Source: OECD Secretariat.

Despite Switzerland's reputation of being mostly an exporting country, exporter firms there represent only one firm out of nine (33 000 out of 300 000 Swiss firms). Among these firms, approximately 8 000 can be regarded as export-oriented firms, with exports representing at least two-thirds of their total turnover. Three-quarters of the 8 000 export firms are micro-firms. It should also be noted that 86% of Swiss SMEs have no intention to export and 79% have no intention to import.

Two-thirds of the cantons in Switzerland are border cantons. As opportunities for international trade and exchange increase – *i.e.*, through globalisation – and

demand for border regions grows, border location can become a local advantage. Many of the border cantons have mountainous character, which is generally regarded as a physical disadvantage for promoting exchanges. However, neighbouring regions across the border from Switzerland are often also characterised by mountainous territory and have similar territorial advantages and disadvantages. The potential to use these to further growth is dependent not only on locational advantage, physical infrastructure and human resources, but also on the capability to develop a stimulating environment and provide the necessary support. As for the non-border, inland cantons, most are non-urban, with the exception of Lucerne.

Tourism

Every year, more than 30 million foreign visitors come to Switzerland. Most of the foreigners who visit Switzerland and its neighbours are from the EU, but those who come to Switzerland are more diversified (83.9% from the EU) than those going to Italy (93.8% from the EU), France (90.7% from the EU), or Austria (88.7% from the EU) (Table 1.12). These variations may be partly attributed to the large number of international organisations that have their headquarters in Switzerland, and the many international conferences that are held there.

Table 1.12. **Tourism, foreign visitors, 1999**

	Switzerland	Austria	France	Germany	Italy
	In millions				
Number of foreign visitors	31	17	73	17	59
	In %				
European tourists	84.0	91.0	89.0	73.0	94.0
<i>Coming from</i>					
Switzerland	–	4.0	4.9	5.8	19.6
Austria	1.3	–	0.5	4.3	10.7
France	5.5	2.6	–	5.0	17.0
Germany	43.2	56.4	20.8	–	22.8
Italy	4.3	5.5	8.6	6.1	–

Note: The definitions of foreign visitors or tourists vary country by country: Switzerland: overnight stays of non-resident tourists in all types of tourism accommodation establishments; Austria: non-resident tourists staying in all types of tourism accommodation establishments; France: international tourist arrival; Germany: non-resident tourists staying in all types of tourism accommodation establishments; Italy: international visitor arrivals at national borders by country of nationality.

Source: World Tourism Organisation (2001).

Territorial dynamics in the future

Comparative advantages can rapidly change as the advantages and disadvantages that regions possess are partly determined by external demands and socio-

economic changes. Major factors that may define the preconditions for the growth potential of a region in the future include physical territorial changes such as land use and planned infrastructure development, demographic trends and the restructuring of industries.

Population projection

According to population projections, the Swiss population is likely to increase by 0.5-0.6% annually until 2004, and then will start to decrease in 2005 (Council of Europe, 1998). Over the next decades, economic performance and succeeding emigration/immigration trends may lead to population growth resulting in a total population of 8.4 million, or in a population decrease with fewer than 6 million people in 2050. Currently immigration accounts for two-thirds of Swiss demographic changes and natural increase for one-third. In general, the impact of demographic development on Switzerland will be much smaller than in the last century when its population doubled. However, further demographic concentration and polarisation may significantly affect the territorial balance of the country. On average, the annual population growth rate of Swiss agglomerations and isolated cities is 0.4% but this can vary: in the 1990s, the annual population growth rate for cities in the surrounding regions of Zurich was more than 1%, while the population decreased in rural areas such as Jura.

Changes in physical territorial structure

In the 19th and 20th centuries, Switzerland underwent considerable territorial transformation through urbanisation and transport development. Future land use changes will be determined by two major factors: the urbanisation of areas beyond present construction zones, and the abandoning of remote farming areas. From 1979/85 to 1992/97, urbanised areas increased by 13.2% and constructed areas by 16.5%. Agricultural areas decreased by 2.8% and this decline will continue. One of the major issues facing rural areas today is the implementation of a policy to preserve, develop and promote rural amenities. The revitalisation of former industrial sites is being promoted, particularly in the proximity of city centres; in urban areas, more than 300 industrial sites larger than one hectare are presently unused or derelict. Industrial restructuring and urban renewal will bring about further changes in urban landscapes, and increased demographic concentration in agglomerations will affect the structure of large cities.

Transport infrastructure development

Switzerland plays a central role for transport flows across Europe, in particular along the North-South axis. In addition to the construction of two new transalpine major transport infrastructure projects include improving rail links with France

(TGV Strasbourg-Paris) and with Germany (ICE Frankfurt-Karlsruhe-Basel). Swiss-Italian rail links (Lugano-Milan) are also expected to be improved in the long term, which will shorten the Zurich–Milan journey by two hours. All these projects will create new commuting possibilities and new interregional relationships by improving the accessibility and physical linkages between Swiss regions and the rest of Europe. However, some projects are not very advanced, such as better rail links between Geneva and Paris or between Zürich and Munich. Moreover, physical infrastructure investment might not be sufficient; there is also a need to increase rail cargo transport speed on existing infrastructure. Given that Swiss authorities want transfer transport from road to rail, competitiveness of the railways, which is still a strongly regulated service, has to be considerably improved.

Changes in industrial structure

Recent structural change has affected regions differently. This is because both the most promising economic sectors and those with the poorest development prospects are distributed unevenly across Switzerland. The gaps in economic growth between urban centres and rural areas are persistent. In regions where agriculture plays a dominant role, revenue and the number of firms are likely to sink further, especially in areas depending on agriculture, some mountainous and rural tourism-dependent cantons. Particularly noteworthy is a decline in value added service employment in the more peripheral and tourism-dependent cantons during the late 1990s. Competition has exposed the structural weaknesses of small trade and industrial sectors in different regions. Service sectors in rural areas may also lose jobs, in particular if the less profitable branches of service companies, such as banks, are closed down. The future of rural areas is increasingly determined by the medium-sized and large towns which are nearby and provide employment and services. By contrast, the prospects for job creation are best in the urbanised “Mittelland” areas. As in the 1990s, economic growth will be driven by the major metropolitan areas due to their concentration of Information and Communication Technologies and skills needed by knowledge economy sectors and jobs.

EU integration

Closer links between Switzerland and the EU will have positive and negative impacts on Swiss territory. The EU expects that the spatial pattern of economic activities in Europe will remain concentrated in relatively small core areas (European Commission, 2001). This supports the trends of demographic and economic polarisation of Switzerland. In the long term, the evolution in Central and Eastern Europe, as well as future enlargements of the European Union, will have impacts on the current spatial pattern in the EU and on Swiss centrality in Europe; this

centrality could move eastwards. These changes will affect the relative importance of major hubs; for example, Berlin is certainly gaining in relation to Paris. As Zurich does not belong to the same size category as Paris, London or Berlin, the evolution of its hub functions will depend much more on its positioning in relation to other hubs such as Munich, Vienna or Milan.

Conclusions

International comparison and an analysis over time reveal that subnational disparities are low, and that Swiss jurisdictions are not drifting apart. It is only a reduced number of smaller cantons that are either lagging behind or running ahead of the national average of some selected indicators. National cohesion, measured in terms of economic indicators, has thus been maintained during the 1990s. Some concerns, however, remain. The former small scale disparities have gradually been replaced by a larger and coarser pattern, revealing that social and economic life is more and more organised in larger functional areas. Territorial fragmentation has led to an increasing mismatch between political and functional areas. Territorial advantages have shifted from rural to urban areas. An increasing polarisation between the German-speaking parts of Switzerland and the rest of the country can be observed, while the urban-rural gap did not widen. The convergence of disparities into larger territorial blocks that coincide with historical divides – such as the linguistic or the rural-urban divide – should be carefully observed in the future. Under the pressure of EU integration, globalisation and a geographically polarising economy, territorial advantages and disadvantages of Swiss regions should thus be re-assessed.

Notes

1. Actually, Switzerland, along with most European countries, disposes of no regionalised GDP statistics, since this would require a complete regionalised input-output matrix for all firms in all regions. As a surrogate, data of the industrial structure of each region (known through employment data) are used, and then transformed into regionalised statistics using the national average of productivity of each sector, under the assumption that each industrial sector has the same productivity (or value added) in all regions.
2. The underlying GDP per capital is corrected with national PPP-data. These data overstate differences in border regions somewhat, since people make use of existing differences and thereby tend to reduce them, *e.g.*, through commuting or purchases across the border.
3. Compared to the rest of Europe, unemployment rates have always been low in Switzerland, even since the beginning of the 1990s when they started climbing. With a rate of 4.1% in 1995, unemployment in Switzerland was less than half the average of the European Union (10.7%). Only Luxembourg (with 2.8%) and Austria (with 3.9%) had lower rates (OECD, 2001e).
4. National income on factor costs basis is calculated from: payrolls, income of independent contractors, unearned household income, real estate rents, corporate and government savings, corporate income taxes, as well as unearned government incomes.
5. Urban cantons: Zurich, Zug, Solothurn, Basel, Aargau, Neuchatel, Geneva. Intermediate cantons: Freiburg, Bern, Luzern, Schaffhausen, Appenzell AR, Nidwalden, St. Gallen, Schwyz, Thurgau, Ticino, Vaud. Rural cantons: Graubünden, Uri, Appenzell IR, Obwalden, Glarus, Valais, Jura.
6. A caveat for disparity comparison among countries of different size or number of regions has to be applied. A greater number of regions in general lead to a higher variation coefficient. Therefore, countries like the United States or Germany that show a much larger number of subnational units, tend to show larger disparities, other things equal. If the subnational units for the larger countries were grouped in order to make their number equal to the small countries, disparities in the large countries would probably show lower values.
7. On the level of cantons, eight cantons are classified as predominantly urban regions, 11 as intermediate regions and seven as predominantly rural regions.
8. A SME is defined as a firm with less than 250 full-time employees.
9. A micro-firm is a firm with less than ten full-time employees.

Chapter 2

Fiscal Federalism and Financial Equalisation

Swiss fiscal federalism is shaped by the large institutional and fiscal competencies that cantons and municipalities enjoy. Constitutional prerogatives make the country one of the most decentralised within the OECD. Extended responsibility and fiscal power enable the cantons to determine and pursue their own development trajectories. Cantons and, to some extent municipalities, are entitled to their own fiscal system (*i.e.*, to set tax rates and, to some extent, tax bases) which has resulted in inter-jurisdictional tax competition. Vertical intergovernmental policy co-operation, combined with an elaborated system of financial transfers, acts as a counterpart to this competitive environment and has prevented disparities from becoming excessive. In some policy areas, cantons and particularly municipalities are involved in functional partnerships for providing public services over larger areas. Many national sectoral policies have a wide regional impact, trying to guarantee minimal standards of service delivery in all parts of the country.

The sophisticated balance of Swiss federalism, however, has come under strain. Increasing responsibility sharing between the Confederation and cantons, and strictly hierarchical procedures, have reduced subnational autonomy and the accountability of public action. The system of financial transfers is oversized, cumbersome, non-transparent and provokes outright waste of financial resources, without effectively reducing territorial spillovers and disparities. Living areas extend beyond political borders, creating a growing gap between the political and functional organisation of the country, which is only reluctantly compensated by horizontal co-operation. Since the mid-1990s, the federal and cantonal governments have thus embarked on different reforms of territorial governance in order to re-establish “true” federalism, and to adapt a fragmented society to the challenges posed by a spatially interconnected world. This chapter presents the main features of current intergovernmental relationships, presents and evaluates ongoing reforms and proposals for reform, and points to the need for further governance reform in territorially relevant policy areas.

Resource and responsibility division

Institutional background

The Swiss federation combines strong decentralisation with an extended use of direct democracy. The federal institutions are shaped by the Constitution of 1848, which had adopted the structure of American federalism, a bicameral system and subnational entities exercising significant influence on federal decision making. The role of these entities is anchored in several ways. First, Article 3 of the Swiss Constitution defines that all competencies emanate from the cantons, except for those that the constitution assigns to the Confederation. Second, the bicameral system guarantees an adequate representation of the smaller entities since every canton is entitled to two senators in the Senate (*Ständerat/Conseil des États*). Third, amendments to the Constitution need to be approved by the majority of the population *and* the cantons. Any constitutional amendment or new law is subject to a popular vote. If a popular initiative collects more than 100 000 votes, citizens can ask for a constitutional amendment, and if a referendum collects more than 50 000 votes, they can veto parliamentary legal amendments. These instruments also exist at the cantonal level and in larger municipalities. Through both decentralisation and direct democracy, individual citizens can influence government decisions to a degree that is almost unparalleled in other OECD countries.

The country is divided into 26 cantons, 185 districts and around 3 000 municipalities. All cantons enjoy the republican status of statehood, and are endowed with a Constitution. Compared to the regional level in other countries, cantons have much autonomy. Cantons have extended fiscal rights, such as setting tax rates and, to some extent, the tax base. With the exception of the Federal Court, justice is under cantonal responsibility. The districts are purely administrative units, acting on behalf of the cantons in the fields of health, education and tax administration. The 3 000 municipalities are the smallest political units. They remain entirely under cantonal jurisdiction. There is no “Federal Act on Municipalities”, and the Confederation cannot intervene directly at the municipal level. Municipal autonomy varies greatly from canton to canton; usually it is greater in the Eastern and German-speaking parts of the country. In some cantons there are special local school districts or church authorities that, independently from the general-purpose municipalities, have their own responsibilities and fiscal resources.

Switzerland's internal structure varies widely with respect to surface and population (Table 2.1) with a variation coefficient higher than for any other country except much larger Canada. The difference between the largest and the smallest canton with respect to population is 1 to 85, with respect to surface 1 to 192. Despite their differences in size and population, all cantons and municipalities

Table 2.1. **Size and population differences in federal OECD countries**

	Territorial authorities	Surface (km ²)	Population (2000)
Australia	8 states	36.8	33.2
Austria	9 Bundesländer	82.9	12.3
Canada	12 provinces	573.5	350.2
Germany	16 Länder	27.5	26.9
Mexico	32 estados	164.8	30.9
United States	51 states	545.7	62.4
Switzerland	16 regions	17.2	11.0
	26 cantons	192.0	80.4

Source: OECD Secretariat.

have the same legal status, so there is no “asymmetric federalism”. Territorial shifts and modifications are rare. Apart from the creation of the canton of Jura in 1978 and some smaller area changes in 1994 and 1996, the territorial picture at the cantonal level has remained the same over the last 150 years. This is also true for municipalities whose number has decreased by barely 10% since 1848. The politico-territorial division of Switzerland still largely reflects the socio-economic reality of the mid-19th century. The only political reaction to territorial smallness has been an increase in the number of inter-municipal and inter-cantonal associations. No federal incentive schemes for territorial reorganisation or inter-jurisdictional collaboration exist, with the exception of the Law on investment aid in rural regions (LIM). Smallness, coupled with the high fiscal autonomy of cantons and municipalities, has triggered specific disparities and imbalances that in other federations are cushioned by the sheer size of subnational entities.

Division of responsibilities

The distribution of responsibilities, powers and functions is largely determined by the federal constitution. Assuming that expenditures roughly reflect responsibilities, scrutinising expenditures by policy area and government level (Table 2.2) can provide an appropriate picture of the distribution of functions. Although expenditure ratios somewhat underestimate the regulatory power of the Confederation, they do give a fair picture of how responsibilities are assigned. Table 2.2. demonstrates the extended responsibility that Swiss subnational entities have. Cantons and municipalities exert large regulatory and expenditure powers, especially in the fields of education and health care. The three levels of government share the task of economic development, while promoting social

Table 2.2. Expenditures by function and level of government, 1990-1999

Functions	1990				1999			
	% of total expenditure	% of expenditure by level of government			% of total expenditure	% of expenditure by level of government		
		Confederation	Cantons	Municipalities		Confederation	Cantons	Municipalities
Administration	7.6	17.5	34.7	47.8	7.4	23.1	32.7	44.2
Justice, police	4.7	9.1	64.2	26.7	4.4	11.5	68.5	19.9
Defense	9.6	91.8	3.5	4.7	6.2	94.0	3.1	2.9
Foreign affairs	2.3	100.0	0.0	0.0	2.2	100.0	0.0	0.0
Education	24.2	15.1	52.4	32.6	25.2	15.8	50.3	33.9
Leisure, cultural activities	4.3	8.2	30.7	61.1	3.9	14.9	32.6	52.5
Health	7.3	2.4	84.2	13.3	7.1	0.5	83.7	15.9
Social services	18.2	55.0	28.7	16.3	24.0	58.6	26.0	15.4
Transportation services	12.7	52.5	23.0	24.5	13.0	59.3	19.5	21.2
Environment	3.3	22.5	33.7	43.8	2.5	36.8	32.4	30.8
Public economy	5.8	85.7	19.1	-4.8	4.0	133.7	-20.0	-13.8
Total	100.0	39.5	36.5	24.0	100.0	42.9	34.4	22.8

Note: Total government expenditures reached CHF 83.1 billion in 1990, CHF 119.4 billion in 1999.

Source: Swiss Federal Administration of Finance (1990 and 1999).

welfare is mainly a municipal task, with strong involvement of the cantons through vertical and horizontal equalisation schemes.

Different levels of government are entangled to a striking degree. Apart from a few minor responsibilities that are exclusively federal, most are shared between two or even three levels. Over past decades, higher government levels have become increasingly involved in activities of lower government levels without, however, taking over full responsibility. The increase in shared responsibilities during the period 1988-1998 was paralleled by an increase in vertical financial transfers. This organisational and financial entanglement is partially due to the very uneven distribution of population, size and financial capacity of the cantons described above. Since asymmetric federalism (*i.e.*, differentiated allocation of tasks according to size or economic power) was never considered an option, the Confederation has often assumed responsibilities based on the needs of the weakest cantons. Stronger cantons, which are able to assume responsibilities themselves, have had to hand over some of them to the Confederation in order to be in line with the weaker cantons. While this may not be outright centralisation, the Confederation has assigned earmarked funds but kept control over cantonal execution. In some policy areas, cantons have thus become mere agencies of the Confederation (Dafflon, 1999).

Distribution of taxes

The federal constitution endows the three levels of government – federal, cantonal and municipal – with the right to levy taxes. Generally speaking, the Confederation relies on consumption (indirect) taxes, whereas cantons and municipalities rely more on income and wealth (direct) taxes (Table 2.3). The cantons have fiscal sovereignty where it is not the domain of the Confederation. Tax bases are separated between government levels, and intergovernmental tax sharing is – with the notable exception of the federal income tax – insignificant. Federal income tax on income and corporate benefits is shared between the Confederation (70%) and the cantons (30%), the cantonal part partially being used for inter-cantonal financial equalisation. Tax base and tax rates of the VAT and federal income tax are laid down in the constitution; any tax rate change requires constitutional change, and the Confederation may not levy taxes other than those provided for by the constitution. The municipalities have derived taxing power only; their main tax income stems from setting their own tax rates based on the cantonal taxes (“mark up” or “piggy backing”). Compared to other OECD countries, Swiss subnational governments rely strongly on personal income and wealth taxes (OECD, 2000b).

Tax revenues increased sharply between 1980 and 1999, especially those perceived by the Confederation, which have risen by 169% compared to their 1980's level. As for the cantons and municipalities, the rates of tax revenue growth are

Table 2.3. **Tax revenue by level of government and type of tax, 1998**
Percentage of total tax revenue

Type of taxes	Total	Confederation	Cantons	Municipalities
Direct taxes				
Personal income tax	43.0	16.4	44.2	39.4
Personal wealth tax	4.1		53.9	46.1
Corporate taxes	12.1	41.0	37.4	23.9
Withholding tax	6.3	100.0		
Other taxes (property related, death and gift duties, others)	4.5	1.0	64.0	35.0
Indirect taxes				
Value added tax	15.6	100.0		
Mineral oils tax	5.5	100.0		
Stamp duties	3.8	100.0		
Motor vehicle tax	2.2	15.4	84.6	
Other indirect taxes	3.9	96.0	2.2	1.8
Total	100.0	47.8	30.1	23.1

Note: Total tax revenue reached CHF 85.2 billion in 1998.

Source: Swiss Federal Administration of Finance (1999).

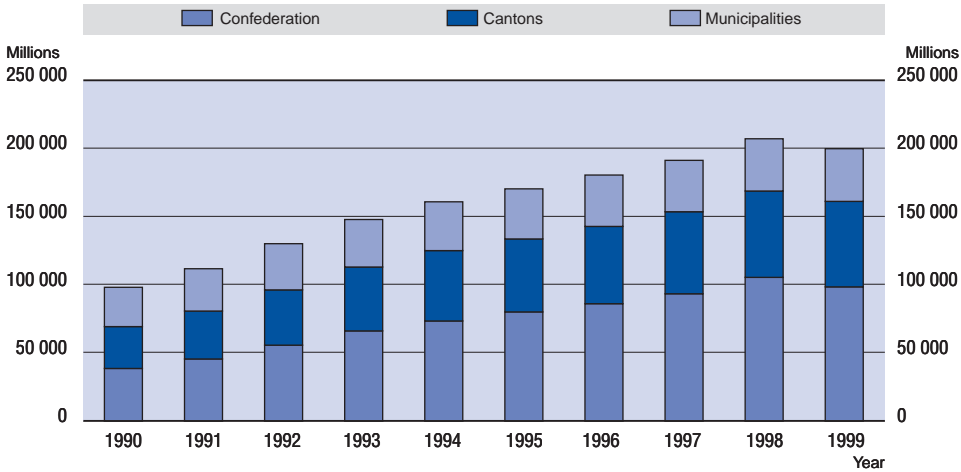
132% and 125% respectively. Fiscal revenues have more than doubled in almost 20 years. In the short run, this trend is expected to continue. Despite the strong and continuous increases at each level of government, the structural evolution of global fiscal revenues has been steady. The Confederation has always been the public authority receiving the largest share (40-47%) of fiscal income, while cantons usually got 30% to 34%, and the municipalities the rest (23-26%). Despite this stable trend, the cantons and municipalities are feeling the growing weight of the Confederation, whose tax share has been increasing slowly since 1993.

The OECD Secretariat has assessed and compared the fiscal autonomy of subnational governments and concluded that Swiss subnational governments have the most extended taxing powers of all OECD countries (OECD, 2000c). One of the important conclusions was that taxing power does not only depend on the percentage of tax revenue remaining at the local level, but also on local control over the tax base. Fiscal autonomy therefore consists of two variables: percentage of total tax revenue and discretion over the tax base. The Swiss federal Law on Tax Harmonisation, in effect since 1993, sets out formal principles that tax legislation in the cantons must respect, but neither tax rates nor tax schedules are harmonised between cantons. Municipalities still have the right to set tax rates as a per cent surcharge or mark up on cantonal taxes. Given that most utilities are municipally owned, municipalities also have wide discretion over fees and user charges. In sum, Swiss subnational governments have considerable scope to use the fiscal system as a tool for economic promotion; cantons and municipalities can actively influence the behaviour of actual and potential firms and residents, and may get involved in competition for tax revenue.

Local debt

Debt has distinctly more increased at higher levels of government (Figure 2.1) from 1990 to 1998. In 1990 the federal debt was 12.2% of GDP, which was only slightly higher than the cantonal debt (9.6%) and the municipal debt (9.1%). Unlike the subnational debt, the federal debt had soared to 27.7% of GDP by 1998. In 1990, the federal-to-total debt ratio was 39%, and rose to 51% in 1998. Interest payments accounted for 7.9% of gross expenditure at the federal level in 1998, whereas they accounted for 5.9% and 6.5% at the cantonal and municipal levels respectively. The increase of debt at the federal level was mainly rooted in higher deficits at that level; cantons and municipalities, for their part, showed lower deficit ratios. Given that tax revenue distribution across levels of government did not change much during this period, the evolution of deficit and debt is mainly due to expenditures. During the economic crisis of the 1990s, increasing expenditure demands, mainly for social policy, placed more strain on the federation than on the lower levels of government. Today, cantons and municipalities generally enjoy better financial health than the federation.

Figure 2.1. **Debt increase by level of government**
In millions CHF



Source: Swiss Federal Administration of Finance (1999).

Fiscal competition between subnational governments

Theoretical considerations

Theories on tax competition (or, more precisely, on fiscal competition, since this concerns not only revenue but also expenditure) are far from being conclusive. Models and theories, as well as empirical studies, show controversial results as to whether tax competition is favourable¹ or harmful. The outcome of tax competition models largely depends on the assumptions that are chosen. Early works favour tax competition. Following Tiebout's (1956) argumentation, fiscal autonomy is a precondition for an optimal allocation of public goods. Citizens choose their residences according to their preferred combination of tax burden and public good provision which leads to an optimal respect for individual preferences. The Tiebout models and their subsequent modifications assume that competition among independent governments is similar to competition in the private sector and thus enhances efficiency. However, the attempt to attract mobile tax bases through low tax levels may lead to public spending below levels for which marginal benefits equal marginal costs. Hence, tax competition could lead to outcomes where all participants are worse off. However, much of the criticism of Tiebout-like models is again based on assumptions that are often far from realistic.

Fiscal competition for mobile tax bases poses some risks to decentralised social welfare systems. If a jurisdiction chooses a high level of welfare services, it also has to impose higher taxes in order to finance them. A high level of social services will attract beneficiaries while driving taxpayers away. This will decrease the tax base and increase the needs for public spending. The mobility of both the poor and taxpayers will therefore make it difficult to sustain assistance to low-income households that is sub-centrally organised. More generally, fiscal competition can have severe negative effects on regional redistributive programmes. Studies based on data from the United States show that even only a perception of the poor's mobility might lead to a reluctance in providing above average social services on a subnational level (Brown and Oates, 1987). Hence, providing relief for the poor appears to be a prime responsibility of the central government. Other authors, however, are less pessimistic about decentralised welfare systems (Perrotti, 2001).

Tax competition and different tax rates might also have an impact on regional disparities. Locational decisions of firms and individuals depend on a large number of factors including agglomeration economies, *e.g.*, closeness to other businesses, to a large labour market or to high quality public services. If such agglomeration economies exist, central locations have advantages that more peripheral places are denied of. One of the most important means for peripheral places to attract businesses and compete with central places is on the level of taxation, *i.e.*, setting lower tax rates than the centres that have to finance a large amount of public services. Preventing tax competition and harmonising tax rates could thus go to the detriment of non-central, rural and remote areas. They would lose one of the most important devices to actively withstand the pressure from the large agglomerations. If one accepts this centre-periphery-model and its implications for tax rates (Baldwin/Krugman, 2000), tax competition may prevent polarisation, *i.e.*, economic and social concentration in a few large agglomerations, and may thus be considered a significant means against increasing territorial disparities and regional concentration.

Whether tax competition is seen as benefiting or hurting efficiency and equity greatly depends on how the functioning of government and the public sector is perceived. According to a classical public finance approach, public decision makers attempt to maximise social welfare. This view holds that local tax discretion and subsequent fiscal competition are detrimental, leading to fiscal externalities among subnational entities, to a distortion of corporate and residential locational choices, to fiscal unfairness and to a race to the bottom with respect to social or environmental standards. With more of a public choice approach, however, and assuming that the public sector is inherently overly expansive and inefficient, tax competition is seen as enhancing efficiency and keeping the "Leviathan" at socially acceptable levels. According to this view, tax harmonisation has similar consequences as cartels in the private sector. Harmonisation would increase tax

rates and lead to a less beneficial relation between taxes and local public goods. Extending local taxing rights and their use would be a means for keeping taxes low and their use efficient. In fact, there is no simple answer to the outcome of tax competition, but much depends on the institutional setting in which tax competition takes place.

The Swiss case

Switzerland, the United States and Canada are among the few countries where subnational jurisdictions have enough fiscal autonomy to enter tax competition. The small size of Switzerland and of its sub-federal units permits a high degree of factor mobility, thereby exacerbating this competition. Private and corporate taxpayers can easily move to places with low tax burdens. Switzerland's well-developed transport infrastructure, which encourages labour mobility and commuting, has probably increased competitive pressure over the last decades. Studies show that tax competition is stronger on the municipal level than on the cantonal level because transaction costs are lower between nearby jurisdictions (Feld and Kirchgässner, 2001). There is evidence that corporate and personal income taxation is an important factor in understanding the regional distribution of firms and regional differences in employment (Feld and Kirchgässner, 2001). The proportion of taxpayers with taxable income of more than CHF 100 000 is 9.4% in the most favourable canton, whereas it is 2.5% in the least favourable, with the Swiss average being 5.5%. Tax rates thus indeed appear to affect locational choices of firms and individuals; there is however no significant correlation – either positive or negative – between tax rates and tax revenue per capita (OECD, 1999a).

Disparities in the personal income tax burden seem to have remained relatively stable over time, and cantons have hardly changed their burden position over time, indicating that a “tax equilibrium” affecting locational choices might have been achieved. One explanation could be that tax rates and public services are in line with the preferences of the population, and so there is no need for people to change location, nor for cantons to change the fiscal system. Another explanation could be that locational decisions may be affected by factors other than tax rate differentials. This might partially offset competition on tax rates and stop a self-sustaining effect of increasing the tax burden and decreasing per capita tax income. Older studies (Frey, 1981) have found that tax rate differentials play no significant role in inter-cantonal migration. This has been confirmed by Hilber (2000) who found that tax differentials are capitalised, *i.e.*, offset by differentials in property values, reducing the incentive for tax-induced migration. In general, a race to the bottom with respect to social welfare expenditures cannot be observed, since their share in total government expenditures rose from 15.5% in 1990 to 20.6% in 1998, and subnational income redistribution increased during the

same period (Feld and Kirchgässner, 2001). The decentralised welfare system has thus not collapsed.

Tax competition thus appears to be beneficial with respect to public service delivery and fiscal health of subnational jurisdictions. Two aspects of tax competition deserve attention, however. First, cantons are increasingly shedding the burden for specific public services on other cantons, thereby creating fiscal externalities. It is mainly the central urban cantons that have to bear the additional burden of adjacent cantons and thus have to raise tax rates to finance them. This issue is tackled by the “New Fiscal Equalisation reforms” that are currently prepared. Second, cantonal fiscal systems – supported by the Confederation in areas eligible for regional assistance – offer tax concessions and special regimes on a case-to-case basis. Examples include granting newly created companies a partial or total tax exemption on profits and capital for a maximum period of ten years. These concessions may distort the structure of firms and their locational decisions. While impacts from tax exemption have not been systematically monitored or evaluated, anecdotal experience at the federal level suggests that they hardly affect firms’ locational decisions. Discretionary should at least be replaced by rule-based tax concessions, but actually any tax concession scheme should be abolished.

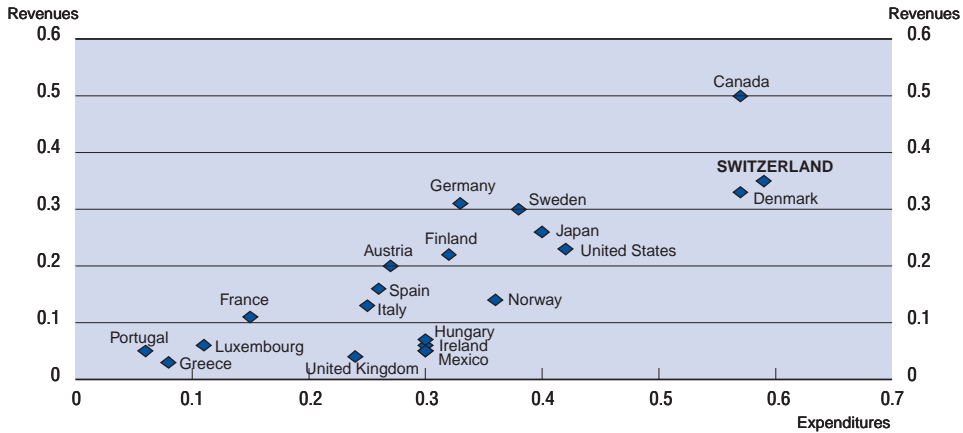
Financial equalisation

Fiscal gap and intergovernmental transfers

The fiscal gap, *i.e.*, the difference between subnational governments’ expenditures and own revenues, is quite significant in Switzerland compared to other OECD countries, particularly its Western European neighbours (Figure 2.2). Whereas subnational governments accounted for 75% of total public expenditures in Switzerland in 1998, the respective ratio for subnational tax revenue was 56%, leaving a fiscal gap of 19 percentage points. This gap has slightly grown in the last decade. Despite their considerable fiscal autonomy, the cantons depend extensively on intergovernmental transfers, which is but one example of how responsibilities and functions between cantons and the Confederation are becoming increasingly entangled.

The federal budget, with its expenditure of more than CHF 46 billion in 1997, is in fact a transfer budget. Approximately two-thirds of total federal expenditures are transfers to third parties, of which around one-third (34.1%) are transfers to cantons. Between 1970 and 1997, transfers grew from CHF 4 billion to over CHF 27 billion, or by 676%. This represents an annual increase of 7.3%, surpassing annual GDP (4.8%) or federal government expenditure growth (5.5%). Inversely, federal transfers make up, on average, some 23% of total cantonal revenue or

Figure 2.2. Fiscal decentralisation and fiscal gap in OECD countries, 1999



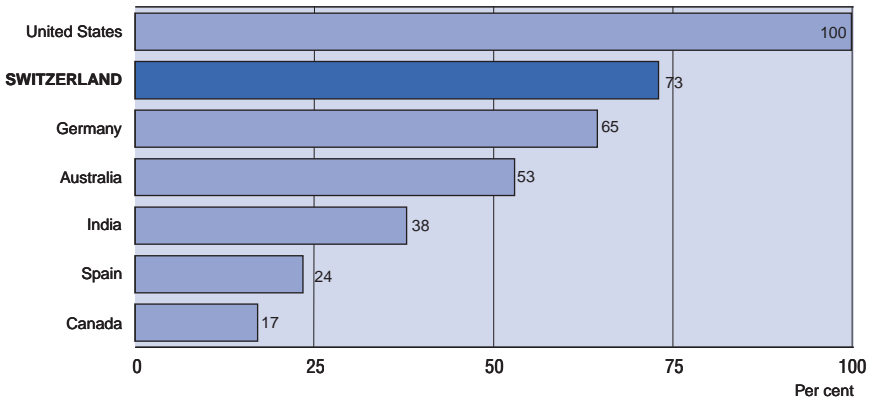
Source: OECD (2001d).

around 50% of tax revenue; for the financially weakest cantons, this amount rises to 52% and 152% respectively. Because of its size and importance, the federal transfer system has a significant impact on the fiscal health, expenditure autonomy, economic structure and administrative burden of cantons. Transfers between cantons and municipalities are less important (around 13% of municipal expenditures), illustrating that at lower government levels, the division of responsibilities is much better defined.

Earmarking and the agency role of cantons

Rather than the size of the transfer system, the discretion the receiving entity has for using the transferred funds has become an issue. Transfers can be either conditional (*i.e.*, earmarked), or they can be unconditional, letting the receiving entity decide how the transfers will be used; however, different degrees of “earmarking strength” exist. The financial autonomy of the receiving entity decreases as the percentage of earmarked transfers increases. In Switzerland, the ratio of earmarked to total transfers is comparatively high, over 70% (Figure 2.3). Most of the transfers are tightly linked to a certain purpose and based on project proposals that the cantons submit to the federal government. Earmarking and the right to provide or deny project funding give the federal government discretion over many policy areas that are formally under cantonal responsibility. Intergovernmental transfers reflect the importance that shared decision making has in Swiss federalism, and the tight steering power that the Confederation exerts over the cantons.

Figure 2.3. **Shares of conditional transfers**
In percentage of total transfers



Source: Statistics Canada (2001).

The strong conditionality of transfers illustrates the “agency role” that cantons and municipalities are increasingly assuming (Dafflon, 1999). In the last two decades, the federal government has confined itself to issuing framework laws, delegating implementation to the cantons. This “executive federalism” is very evident in the areas of environmental protection and health care, where the Confederation distributes tightly earmarked financial transfers and leaves policy implementation almost exclusively to the cantons. While direct federal expenditures may constitute only a small proportion of total expenditures in the respective policy areas (1% for health care), cantonal and municipal expenditures are nonetheless strongly influenced by federal legislation. The uprising against executive federalism and the agency role left for cantons and municipalities was thus one of the driving forces for the “New Fiscal Federalism” project.

Fiscal capacity equalisation

Until the late 1950s, Switzerland had no explicit system for reducing inter-cantonal fiscal capacity disparities. Neither vertical transfers from the Confederation to the cantons, nor the allocation of federal income tax to cantons, took into account regional income and financial capacity disparities. It was only through federal sectoral policies, such as providing support for agriculture or public infrastructure, that territorial disparity was implicitly reduced. The Law on Fiscal

Equalisation, introduced in 1959, was the first attempt to systematically reduce disparities and to lay down principles of federal-cantonal financial collaboration. The law introduced and defined “fiscal capacity”, which is basically a set of indices – comprising tax-raising capacity and structural factors that define the cost of certain public services – to become the crucial indicator for measuring and equalising territorial disparities. The law provided for four ways of fiscal equalisation:

- conditional transfers from the Confederation to the cantons, depending on fiscal capacity;
- sharing the federal income tax, of which a part (17%) is redistributed to the cantons, according to the inverse of fiscal capacity;
- sharing fuel duties and Swiss National Bank profits; and
- sharing cantonal contributions to federal expenditures for social security, according to the inverse of fiscal capacity.

Conditional transfers have become the major means of federal-cantonal financial collaboration and disparity reduction. Most transfers are a percentage of cantonal expenditure, *i.e.*, the more a canton spends on a certain project, the higher is the contribution it gets from the Confederation. All transfers are inversely related to cantonal fiscal capacity, which means that cantons with lower fiscal capacity get a higher matching rate. The federal matching rate is thus split into two: a “basic contribution” that ranges from 10% to 60% of cantonal expenditure, and the “financial mark up” that, depending of fiscal capacity of the canton, ranges from 0% to 35%. The federal contribution can thus represent up to 95% of individual project expenditures. Except for a few modifications, this system of financial equalisation linked to tax sharing and conditional transfers has remained unchanged.

Evaluation

An economic analysis of an intergovernmental transfer system will show the effect it has on economic efficiency and territorial equity. In order to promote efficiency, the transfer system should be transparent and accountable, and confined to policy areas with significant territorial spillovers. It should not reduce cantonal autonomy, not distort the cantonal economy, and not corrupt financial discipline. Territorial equity calls for a transfer system that can reduce fiscal capacity differences effectively. Fiscal federal theories point out that, in general, (at least) two carefully separated financial transfer systems are required: one that distributes subsidies reflecting shared tasks, and one that distributes resources more evenly across the country according to financial capacity (Box 2.1).

Several expert and government publications have revealed the weaknesses of the present transfer and equalisation system (Frey *et al.*, 1994, Swiss Federal

Box 2.1. Why intergovernmental transfers?

Depending on the specific institutional-territorial organisation and fiscal structure of a country, transfers have basically three objectives:

- to fill the aggregate fiscal gap between minimum expenditure responsibilities and own tax revenue;
- to reduce existing fiscal capacity disparities among subnational governments; and
- to deal with inter-jurisdictional spillovers, such as environmental degradation, cantonal high roads or higher education.

Meeting these three objectives calls for three distinct transfer systems with separated procedures. The fiscal gap has to be filled with tax sharing agreements or unconditional grants. Fiscal capacity disparities call for unconditional transfers, either from the central state or between subnational entities. Territorial spillovers call for conditional, specific subsidies either between subnational jurisdictions or between the national and the subnational level.

Council, 2001). They concluded that the system has achieved neither equity nor efficiency. While transfers have been growing at 7.3% annually for the past three decades, they have reduced fiscal disparities by not even 5%. This comes as no surprise. Given that cantonal expenditures on public services increase when fiscal capacity increases (positive income elasticity), a transfer system whose matching rates are proportional to spending will favour rich over poor cantons. This pro-rich bias may even be exacerbated by the fact that some subsidised facilities, *e.g.*, universities, do not exist in poor cantons. The inverse relation between fiscal capacity and matching rate (the “financial capacity mark up”) hardly offsets the perverse effect of the basic contribution. A higher matching rate should lower tax prices, thereby stimulating more expenditure in poorer cantons, but since tax price elasticity for public services is low, the “mark up” has little effect on reducing inequal public service provision.²

As for efficiency, the transfer system also shows severe shortcomings. Vertical transfers are likely to distort the behaviour of recipient cantons and increase subnational spending (Hines and Thaler, 1995; Schaltegger, 2001). By designing transfers proportional to expenditure with high contribution rates, transfers undermine cantonal budget discipline. The more a canton spends, the more transfers it obtains, triggering the perverse incentive to maximise expenditures for subsidised functions. Since transfers are mainly spent in the local economy, a canton is even able to earn additional tax income by rising subsidised expenditures.³ As most transfers support only capital but not current expenditures, cantons tend to

neglect facility maintenance in favour of new (subsidised) investment. Most transfers are based on project proposals made by the cantons, which gives the Confederation considerable discretion over what should be funded. Moreover, transfers are linked to very specific projects, thereby curtailing implementation flexibility, and the large number of grants – altogether more than 350 – renders political handling almost impossible. The administrative burden to Confederation and cantons combined may reach up to 9% of the amount of the subsidy (Frey *et al.*, 1994).

Most government officials admit that the transfer system has grown into a baroque machinery whose mechanics can hardly be overseen by financial specialists, let alone by politicians and the larger public. This machinery is difficult to handle and it has a multitude of undesired side effects. Both Confederation and cantons appear to be equally dissatisfied with the results. Officials admit freely that the system needs to be thoroughly reformed. In the mid-1990s both sides joined to launch a reform project, which soon became a major effort to re-establish federalism in Switzerland.

The “New Financial Equalisation” proposal

Overview

Since the beginning of the 1990s, the federation together with the cantons initiated a thorough reflexion on how to reform the grant and equalisation system. After much preliminary work, a project group consisting of the Ministry of Finance and the Conference of Cantonal Governments presented a project proposal in 1999. Soon the “New Financial Equalisation” (“*Neue Finanz- und Aufgabenverteilung/ Nouvelle péréquation financière et répartition des tâches*”) turned into a general reform of federalism in Switzerland and tried to revive the philosophy of a federal state. In autumn 2001, the government issued the official proposal to be submitted to the parliament. If parliament and popular vote approve this reform in 2002, it will mean reforming task allocation, the transfer system and territorial equalisation (Box 2.2). The reform is supposed to be implemented in 2006.

The NFE proposal is supposed to make the federal system more accurate, and increase cantonal autonomy as well as inter-cantonal equity. The disentanglement of responsibilities would let the Confederation concentrate on policies in the national interest and leave other responsibilities to the cantons. Wherever joint tasks remain, new forms of governance, such as programme contracts or pluri-annual global budgets, are likely to increase the efficiency and accountability of public services. Disentanglement is also supposed to reduce the fiscal gap, and augmenting unconditional grants from 30% to 50% will enhance cantonal budget flexibility. The introduction of horizontal and vertical equalisation funds is likely to reduce territorial disparities more effectively than the current earmarked grants,

Box 2.2. The New Financial Equalisation project

The “New Financial Equalisation” (NFE) is a proposal made jointly by the federal government and the cantons to replace the current system of financial, organisational and administrative relationships between the Confederation and cantons. Its main objective is to bring the subsidiarity principle back to life and to make fiscal equalisation more effective. The project consists of five major elements:

- *Disentanglement*: around 20 of 40 shared tasks will be reassigned entirely to either the cantons or the Confederation. Disentanglement is supposed to reduce intergovernmental transfers by around 40% or CHF 5 billion.
- *New forms of intergovernmental co-operation*: remaining shared tasks will follow new governance forms. The Confederation will concentrate on strategic planning, while operational responsibility will be left to the cantons. The Confederation and cantons will jointly define objectives and the budget frame. Programme contracts and negotiation will replace hierarchical structures. Transfers will be made in the form of global budgets and based on standard cost.
- *Horizontal and vertical financial equalisation*: the Confederation will introduce two new financial equalisation tools, totalling some CHF 2.4 billion. Horizontal equalisation aims to reduce disparities between cantons of high and of low tax raising capacity. Disparities in tax raising capacity will be reduced by around 20%. Vertical equalisation will subsidiarily support cantons that remain below the 85% level of the national average resource index. Both transfer funds will be unconditional.
- *Compensation for specific burden*: the Confederation will introduce two funds to compensate cantons that have to bear higher than average cost for provision of public services. One fund will compensate for topographical burden (mainly mountainous cantons with high per capita infrastructure cost) and the other will compensate for socio-demographic burden (highly urbanised cantons with high per capita social welfare costs). The funds will disburse around CHF 275 million each.
- *Horizontal collaboration*: collaboration between cantons will be enhanced. Through a legal act the Confederation may oblige cantons to share the costs of public services with strong territorial spillover, such as hospitals, schools or cultural institutions, in order to harmonise beneficiaries and taxpayers. No financial incentives will be given for inter-cantonal collaboration.

The NFE proposal will be financially neutral, *i.e.*, neither the Confederation nor the cantons will bear any additional cost. All resources will come from cancelling the old transfer system. Pivotal parameters, such as the size of the different funds, the “leverage factor” for horizontal equalisation or guaranteed minimum financial capacity, will be subject to parliamentary debate. The reform will require seven new constitutional articles and modification of around 20 articles, mostly concerning institutional and financial changes in sectoral policies. The tax system is to remain unchanged. The different stages of the proposal are expected to pass parliament and popular vote between 2002 and 2006.

and the two funds for topographic and socio-demographic burden would allow cantons to cope with above-average cost for certain public services. Simultaneously, cantonal budget discipline would be enhanced since transfers would no longer be linked to expenditure but based on standard cost or on programme contracts. Inter-cantonal collaboration, enforced by federal legislation, is expected to strengthen fiscal equivalence, *i.e.*, to allow for a fairer distribution of cost between taxpayers and beneficiaries of cantonal public services. The Swiss authorities estimate overall efficiency gains at around 20% of current transfers, or CHF 2 billion per year (Swiss Federal Administration of Finance, 1996).

Some problems

Some problems with the project remain to be resolved. First, although the reform aims at financial neutrality between the Confederation and the cantons, it will inevitably produce winners and losers among the cantons themselves. Some of them have already announced that they will oppose the reform proposal. In summer 2001, the federal government quickly proposed an additional “hardship fund” to alleviate undesired distributional effects. Although the introduction of this fund might increase political acceptance, parliament should limit this fund in time and phase it out gradually once cantons have adapted to the new financial framework.

Second, with the introduction of horizontal and vertical funds, redistribution between cantons will, unlike today, become a very powerful tool. Adjusting the percentage of redistributive transfers, which is comparable to changing tax rates, will have significant impacts on cantonal resources. To ensure long-term financial sustainability for all cantons, it might be useful to anchor the most important rates in the constitution, such as the “leverage” factor for horizontal equalisation or the minimum financial capacity a canton is entitled to. As the rates and schedules of all major taxes are enshrined in the constitution, fixing financial equalisation by numerical cornerstones would be in line with Swiss constitutional logic.

Third, the item “inter-cantonal collaboration” will allow the Confederation to oblige cantons to share the burden of providing public services and to tackle territorial spillovers. Although the underlying idea is correct, the tools might not be fully adequate. At present, the proposal contains only a coercion right. Coercion, however, might trigger litigation between the cantons, and collaboration may become an issue for the courts instead of being negotiated in the political sphere. The federal government might find it useful to use more incentive-based financial tools to support inter-cantonal co-operation. One possibility could be a mark-up on intergovernmental grants for cantons that collaborate and share cost and burden for specific public services. In any circumstances, the federation should

provide legal support, information sharing and harmonisation of contractual relationships.

Fiscal equalisation systems in international comparison

In order to assess procedures and outcomes of territorial redistribution through the fiscal system, the OECD started comparing financial equalisation systems in different countries. A comparison of the current Swiss equalisation with the NFE proposal and with other countries reveals that Switzerland would come closer to procedures and standards set by other federations such as Canada and Germany (Table 2.4).

Table 2.4. **Fiscal equalisation systems in international¹ comparison, 1999**

	Switzerland current system	Switzerland NFE proposal	Germany	Canada	USA
Structure and tools	Income tax shared inversely to financial capacity, earmarked transfers inversely related to financial capacity	Horizontal equalisation between cantons, vertical transfer to guarantee minimal fiscal capacity	Taxes shared inversely to financial capacity, horizontal equalisation between Länder, vertical transfers to guarantee minimum financial capacity	Vertical transfer to guarantee minimal financial capacity (average of the five poorest provinces)	Vertical transfers, inversely related to poverty indices or GDP per capita
Total transfer amount	CHF 2 billion	CHF 3 billion	DM 60 billion	CAD 11 billion	USD 221 billion
Minimum/maximum tax raising capacity before equalisation; average = 100	58/187	58/187	69/126	62/161	71/141
Minimum/maximum tax raising capacity after equalisation	70/162	88/150	99.5/106	96/161	71/141

1. For Switzerland, the OECD Secretariat calculated a hypothetical post-equalisation tax raising capacity index. "Vertical" means from federation to the states, "horizontal" means between states.

Source: OECD Secretariat.

Introducing a constitutionally guaranteed minimal fiscal capacity for all cantons, Switzerland adapts rules that are comparable to other federations. Equalisation mechanisms would become a combination of the German – horizontal equalisation – and the Canadian – vertical equalisation – system. As is the case for most other federations, earmarked subsidies and equalisation would be separated. Unlike other federations, tax sharing and financial equalisation would be completely separated, *i.e.*, tax sharing (*e.g.*, of the federal income tax) would no longer serve equalisation purposes, confirming the strong fiscal autonomy of Swiss subnational entities. Currently, disparities between Swiss cantons are larger than in the federations put under scrutiny, which may be partially the result of fragmentation, partially of the inappropriate equalisation system. Even after reform, fiscal capacity disparities would be higher than in the other federations. If the NFE is to be introduced, the transfer volume will lie between those of Germany and Canada. Whereas efficiency of the current equalisation with respect to disparity reduction per amount invested is very weak, the NFE would rise efficiency remarkably.

Contracts between the federation and cantons

In the last few years, the federal government started to modify the framework of federal-cantonal relations and introduced contract-based mechanisms into joint decision making. It is thus trying to overcome the current weaknesses of traditional hierarchical relationships, mainly their negative impact on efficiency and cantonal autonomy. Intergovernmental contracts for the provision of a number of public services are gradually replacing hierarchical structures. Such contracts are based on results and service delivery rather than on expenditures incurred. For a given public service, both the federal government and cantons agree voluntarily on specific projects and objectives. The cantons are then free to choose the appropriate procedures. Contractualisation entails a change in the management and provision of public services. Detailed prescriptions at the federal level and the subsequent duplication of work are giving way to a better division of tasks between setting strategic objectives and operational management. Procedural flexibility allows cantons and third parties to adapt to local preferences and idiosyncrasies. Contracts are established for a limited number of years, after which results are compared with the objectives that were set at the beginning.

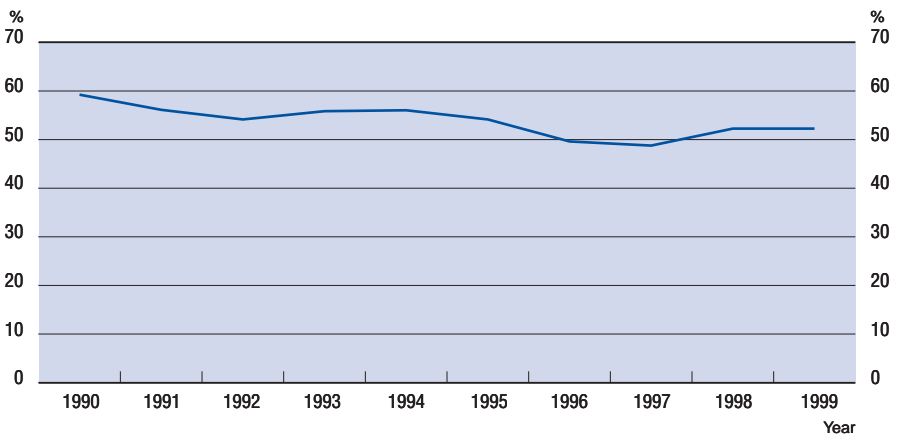
Programme contracts in regional public transport

The reform of the Railway Act in 1996 thoroughly modified intergovernmental procedures for funding regional public transport. The reform introduced contractual relationship between Confederation and the cantons, and the tendering out of transport service delivery to subcontractors. This replaced the former procedure where deficits were almost automatically covered by the cantons and the

Confederation. Today the transport companies elaborate a global transport offer and submit it to the cantons involved. The cantons may also submit lines to tendering. After the offer has been accepted by the canton, it is submitted to the Confederation. The Confederation, in negotiating with the canton and the transport company, may ask for modifications. If the Confederation accepts the transport company's offer, the Confederation, cantons and transport companies – which may be public or private – conclude a global contract for subsidising transport services. The subsidy is based on costs and takes into account a number of quality indicators and transport demand (*i.e.*, the number of passengers). The subsidy may not be renegotiated during the validity of the contract, with the entrepreneurial risk being assumed by the transport company. Cantons have choice in selecting different transport modes such as rail, bus or cable car, and have indeed chosen to replace trains by buses in several cases in the recent past.

These new forms of governance have made regional public transport delivery more efficient (Figure 2.4). Between 1990 and 1997, cost recovery fell constantly from 59.21% in 1990 to 48.75% in 1997. Thereafter, the level of cost coverage starts to increase reaching 52.27% in 1999. This change could be explained by the modified legislation that reduced moral hazard and expenditure maximisation. Some evidence also suggests⁴ that subsidies per passenger-kilometer could be reduced. The present policy shows the beneficial effects of combining politically defined minimal standards with market-based service delivery in a competitive

Figure 2.4. **Cost recovery in regional public transport**
Revenues in % of expenditures



environment, where the cornerstones are set down in negotiations between the two government levels. However, possible efficiency gains are still not fully exploited. They could be enhanced if competition between railway service companies was introduced, or if the subsidy mechanism were changed to give the cantons more choice in selecting different transport modes, such as rail, bus or cable car.

Programme contracts in forest management

In 1998, the Swiss office for the environment, forests and landscape introduced a pilot project for programme contracts in the field of forest management. These pilot programme contracts (*contrats de programme*) are based on a multi-annual agreement between the federation and the respective canton. The contracts cover services such as the production of high quality woods, the protection against natural disasters or the conservation of biodiversity. While the federation and the canton jointly decide on objectives and indicators, the canton afterwards carries out the programme, *i.e.*, prepares, executes, manages and controls the different measures. The Confederation participates financially with a lump sum that is defined beforehand. Programme results are monitored by the Confederation, and if the canton reaches the objectives at lower cost, it may keep the government contribution; if the objectives are not met, the canton has to pursue the effort at its own cost.

First results of the new negotiation mechanisms have encouraged the Confederation and cantons to extend the pilot program. Cantonal autonomy has increased, and cantons have more managerial flexibility in implementing forest programmes. Some cantons have outsourced selected services, and lump sum subsidies have provided incentives for some owners of small forests to collaborate more in the effort to reduce costs. The quality of forest management appears to have improved. However, the administrative burden across levels of government has not yet diminished. Two major problems were identified during the pilot phase. *First*, a workable definition of “strategic objectives” and “operational management”, *i.e.*, a clear separation of tasks between the Confederation and cantons, is still missing. *Second*, the Confederation’s negotiating power, *i.e.*, to alter and modify proposals, and even to halt negotiations, may conflict with the principle of equal treatment. The Confederation’s discretion towards the cantons, coupled with unequal negotiation capabilities at cantonal level, might gradually lead to an unequal treatment of cantons within otherwise identical framework conditions. The Confederation should thus carefully elaborate uniform rules, particularly with respect to quality and pricing standards.

Evaluation

Contractualisation is supposed to increase the quality and lower the cost of federally subsidised public services, while maintaining equal access and politi-

cally defined minimal standards across the country. First assessments done by officials of both the federal and cantonal governments reveal that politically defined public services can be delivered using market-based instruments, thereby combining efficiency with equity. Contractualisation brings more flexibility, more focus and more efficiency into federal-cantonal relationships and local public service delivery. According to some officials, contractualisation has given a particular boost to learning and knowledge transfer. While negotiating, both levels of government, as well as private partners, exchange information and knowledge. Using experiences from prior negotiations, the federal government gradually builds upon a set of best results and practices. Cantonal governments, on the other hand, become more interested in sharing their experiences since this increases their negotiation potential. Contractualisation also unleashes creative potential. It could be useful to apply these new mechanisms in other policy areas, such as postal services, local radios or telecommunications.

The advantages and disadvantages of contractual over hierarchical relations should be carefully addressed in the future. Contracts imply voluntariness, *i.e.*, partners are able to choose between options, including saying “no”. The monopolistic environment of intergovernmental relations renders the search for alternatives difficult. In many cases the cantonal level does not yet dispose of the appropriate administrative and managerial skills to govern complex projects. Arbitrariness of contracts and the differences in cantonal negotiating power, resulting in unequal contracts for otherwise identical projects, may lead to vertical asymmetry. Finally, extended contractual relationships may give rise to new inefficiencies. Some apparently less successful cantonal negotiators have already bemoaned “good deals” that other cantons were able to strike out. Widely applied, contractualisation may lead to rent seeking, *i.e.* cantons will try to establish special relationships with the Confederation and to get advantageous contracts at the expense of the general public. These questions will have to be dealt with and carefully assessed in order to benefit from the advantages without the inconveniences.

Functional regions and horizontal collaboration

Since the founding of the Swiss Confederation in 1848, the size and shape of subnational entities have hardly changed. The number of municipalities has decreased by less than 10%, and with the creation of the canton of Jura in 1978, the number of cantons has even grown. Over the past 150 years, however, socio-economic life has organised itself in ever increasing functional areas, supported by the development of a transport infrastructure that encourages spatial mobility. This mismatch between the politico-institutional and functional organisation of the country has led cantons and municipalities to intensify co-operation with a view to harmonising political decision making. The starting point for horizontal collaboration was the idea that political borders would have to be overcome if

there was to be optimal service delivery. Horizontal co-operation, policy harmonisation, cost sharing and joint provision of public services across borders are all a common feature of Swiss policy making today. In the last decade, the issue of horizontal policy co-operation has again gained importance at cantonal level. Growing disagreement between cantons or between municipalities on certain issues, however, shows that horizontal collaboration is under strain.

Areas of horizontal co-operation and forms of collaboration

Swiss municipalities collaborate in dozens of special ways that cut across political borders. Areas of municipal collaboration include mainly public utilities, such as water treatment, water provision, waste disposal and others. Collaboration is organised into specialised associations (*syndicats* in French, *Zweckverbände* in German) whose members are usually the participating municipalities. Another solution, chosen mainly for social assistance, is regionalisation, *i.e.*, municipalities grouping together to improve service delivery. These specialised associations are very common in Swiss politics; there are more than 170 in the most populous canton, Zürich. They are usually single-purpose, and cover only the area for which they provide a specific service, resulting in functional (or catchment) areas that differ from service to service. Shown on a map, a colourful network of overlapping associations would cover any given geographic area, reflecting differing optimal territorial extensions for every public service. Each municipality is free to join such an association or to provide public services on its own. The decision to become a member is generally based on cost-benefit analysis, economies of scale or scope, and subsequent cost reductions.

Given their larger size, the cantons started collaboration later. The increase of the optimal geographical area for certain public services and of territorial spillovers forced cantons into horizontal agreements, mainly in the fields of education and health care. The agreement on the seven Colleges for Higher Education (*Fachhochschulen/Hautes écoles spécialisées*) (Chapter 5) is a very recent example. Cantons have also joined forces to provide specialised hospitals. With increasing spatial mobility and commuting flows cutting across cantonal borders, cantons and municipalities have jointly set up public transport associations that cover whole commuting regions (Box 2.3). Institutional and organisational solutions for collaboration may vary. In some cases cantons set up their own institutions for which other cantons provide compensation. In other cases, cantons together set up a common institution. Collaboration is particularly strong in Northwestern Switzerland where the borders of six cantons cut across a uniform metropolitan area.

Beyond the provision of public services, cantons are also collaborating more and more on the harmonisation of certain policies. One project is the *Espace Mittelland*, where eight cantons aim to harmonise their policies in economic promotion, edu-

Box 2.3. Public transport associations in functional areas

The large metropolitan areas in Switzerland (Zürich, Basel, Geneva, Bern) extend beyond municipal and cantonal borders; and the functional commuting zone does not correspond to the jurisdictional centre area. During the 1980s, the population increasingly demanded a coherent and user-friendly public transport network able to meet the needs of commuters and to reduce the environmental impact of the excessive use of private cars. Since no single political entity could be responsible for such a network, it had to be organised along functional lines and across political borders. Most Swiss urban transport associations created through the 1990s are the result of a sometimes strenuous horizontal collaboration endeavour between municipalities, cantons and transport companies to transform a good idea into a workable and financially sustainable transport network.

The *Tarifverbund Nordwestschweiz* (Tarif Association of Northwestern Switzerland) in the Basel conurbation is the oldest and institutionally most complicated transport association, founded in 1987. Today it covers around 160 municipalities, four cantons, six bus and two railway companies, and through cross border agreements, the two countries of Germany and France. The main features of the transport association are:

- Municipalities are free to join. The cantons pay member municipalities between 40% and 50% of their share of the deficit, providing them with an incentive to join. Many municipalities do not participate, particularly those lying outside the functional area.
- The association sets fares and defines the transport offer. The service itself is contracted out by tender or through negotiations among public entities and transport companies. The single private bus or rail company, and federal railways, remain independent.
- The user has to buy a single ticket even if several companies or transport means are used. Fares are set according to zones.
- The municipalities share the overall deficit according to a weighted key of users and transport kilometres on their territory. The cantons and, for some services, the Confederation pays some minor subsidies.

The association emerged basically out of a common interest of the central city and its surrounding municipalities in providing commuters with a rapid, inexpensive public transport system. However, upper level financial support, from cantons or even the federal government, proved to be an important glue for holding the association together. At present, some financial strain and infrastructure shortages rest upon the association. Cantons and municipalities are thus asking for additional resources, and the federal government in 2001 proposed investment support to urban transport.

cation, transport, infrastructure, health and the environment. Cantonal governments are currently establishing action plans to be presented in 2002. Stronger intergovernmental collaboration is evident in Central Switzerland as well, where

cantons have set up a common secretariat to develop common projects. Cantons generally collaborate on a project basis and according to individual interest, leading to a *géométrie variable* of different intensity and different spatial extension. Vaud, the largest canton of French speaking Switzerland, has some 160 collaboration agreements (*concordats*) with other cantons, but the total number for Switzerland is difficult to establish. It is sometimes said that intensified horizontal collaboration has in many cases prevented centralisation.

Scope and limits to horizontal co-operation

Horizontal collaboration is driven by two strongly inter-related factors. The first is economies of scale and scope, *i.e.*, cantons extend the perimeter of a certain public service to make cost savings or quality improvements. The second is compensation of territorial spillovers⁵ and readjustment of fiscal equivalence or fiscal equity, *i.e.*, to ensure fairness to taxpayers, beneficiaries and decision-makers and prevent interregional free-riding in the use of local public services). Horizontal co-operation is based on voluntariness, and jurisdictions will get involved only if this creates a net advantage for them. This is why horizontal collaboration is mainly confined to economies of scale and scope, but becomes strenuous when fiscal equity and territorial spillovers enter the game. The smallness of Swiss cantons has created innumerable spillovers, and their internalisation is likely to fail when there is non-symmetric interest – *i.e.*, when compensation of a territorial spillover would make one canton win and another lose. Furthermore, high transaction costs and political ambitions may prevent intergovernmental agreement, even if all participants would potentially benefit. The frequent reluctance or outright refusal of jurisdictions to co-operate reflects the difficulties in providing public services across political borders.

A specific problem concerns democratic accountability. Horizontal collaboration usually means a transfer of responsibility from a government to a new intergovernmental body or special agency. Citizens would no longer be in direct control over the provision of public services; more steps lie between the citizens' preferences and the management that finally executes the respective task. Given that the delegates of many intergovernmental bodies are not elected by the population, politicians and the bureaucracy tend to take precedence over citizen demand and become less accountable. With time, an intransparent entanglement of special bodies with different legal backgrounds and differing territorial coverage leaves the citizen with little influence on local and regional public services.

The role of the federal government

Federal and cantonal government levels agree on the significance of horizontal collaboration and have provided some tools in the NFE reform. If the NFE comes true,

rules for partnerships will be established. The cantons will basically be free to organise collaboration where they think this is appropriate. The NFE proposal set up a model contract, containing minimal standards with respect to cost transparency, rights and obligations of the partners, and overall democratic accountability. The federal government will have the right to coerce cantons into horizontal collaboration in a number of policy areas enumerated in the law. This, however, may trigger legal disputes, shedding a shadow on the philosophy of horizontal partnerships. It may also lead to moral hazard since cantons could be tempted to increase expenditures and then ask for compensation. Coercion is thus considered the *ultima ratio* for the federal government, and several compensation mechanisms such as legal protection for concerned cantons, preceding mediation and arbitration mechanisms will be provided. Although federal coercion contradicts somewhat the idea of partnership, this is supposed to be necessary in order to restore inter-cantonal fiscal equivalence.

Reforms of federal transfers and subsidies will probably spur horizontal partnerships among cantons and municipalities indirectly. Hitherto, federal transfers have been based on expenditure matching grants. This does not make the cantons feel like setting up common institutions since any saving in expenditures reduces federal transfers, particularly when the Confederation grants high matching rates. The NFE move towards standard cost-based transfers will provide more incentives since collaborating cantons may fully benefit from any cost saving resulting from common endeavours. Decentralisation also puts pressure on sub-national governments to co-operate. In the canton of Lucerne, new public services are about to be assigned to municipalities. This has already spurred the municipalities to co-operate more closely and to set up common bodies, such as in fire protection and in fiscal administration where large cost savings can be obtained. The idea of collaboration on functional grounds has triggered even more radical thoughts on the institutional organisation of decentralised countries (Box 2.4).

The use of supplementary financial incentives to spur horizontal collaboration is still uncommon in Switzerland. This has sometimes prevented the set up of successful horizontal partnerships. The Confederation, in order to spur horizontal collaboration and restore fiscal equivalence, might find it useful to introduce additional funds to support cantons that are willing to co-operate but reluctant to do so. A fund could be set aside for the purpose of concluding development pacts and programme contracts across several cantons, with agreed objectives and performance targets for horizontal collaboration. This would supplement the right for coercion provided by the new NFE law. Financial incentives, although somewhat alien to Swiss federalism, could be used as a lubricant to overcome barriers for horizontal collaboration. The fund could target development projects and programmes across political borders on which cantons left on their own would be unable to find consensus. With time, the fund would support projects of various size and geographical extension, opening up new ways for inter-cantonal partnerships.

**Box 2.4. A radical rethinking of territorial organisation:
Functional, Overlapping, and Competing Jurisdictions**

Functional federalism has given birth to more radical thoughts on the politico-territorial organisation of a country. The concept of FOCJ (the acronym of Functional, Overlapping, and Competing Jurisdictions) allows for the emergence of a political body whose size corresponds to the tasks to be fulfilled. Examples are functions such as education, public transport, wastewater treatment, refuse collection or public security. The geographic extension of FOCJ is driven by the present and future physical extension of a service rather than by historical, more or less randomly established, boundaries.

FOCJ are characterised by four properties:

1. FOCJ are determined by the goal or function to be fulfilled. Their size has to match their tasks.
2. FOCJ are overlapping, that is, each function requires a corresponding geographical extension.
3. FOCJ compete for municipalities and citizens, and they are subject to democratic political competition. Popular referenda, and possibly citizens' meetings, may be used for that purpose in addition to the normal representative political institutions.
4. FOCJ are jurisdictions with the power to raise taxes with which they finance the expenditures needed to fulfil their functions.

FOCJ may emerge because they are desired by the citizens and they can be monitored and controlled by them. The concept is based on ideas received from public choice, constitutional economics, and various elements of the economic theory of federalism. It differs from the existing federalism of the European Union and from various reform concepts, in particular, the principle of subsidiarity. Institutions similar to FOCJ have been successful in European history at the local level and play an important role in the United States and Switzerland (Frey and Eichenberger, 1999).

Jurisdictional mergers and amalgamations

Amalgamations and mergers of hitherto politically independent jurisdictions represent a kind of terminal form of horizontal partnership. Municipal and cantonal mergers are currently discussed as an alternative to horizontal collaboration for solving the institutional-functional mismatch at territorial level or to reach a critical mass. Municipal mergers were a common policy measure in the 1930s – mainly when poor suburban areas amalgamated with richer central cities – but they have not been common since. Although amalgamation today has its adepts, it also meets with strong resistance, in urban as well as in rural areas.

Recent and current mergers and merger proposals

Jurisdictional mergers have to be seen in the context of Swiss federalism where municipalities and cantons do not give up independence easily. Many initiatives are thus bottom up. Merger initiatives at regional/cantonal level are rare. The cantons of Geneva and Vaud had a popular initiative to merge, explicitly allowing for other cantons to join. The initiative was put to a vote and rejected in 2002. Other planned cantonal mergers have been without success, particularly the repeated attempts to merge Basel-Stadt and Basel-Landschaft. Economic, political and cultural arguments are considered to be the reason for failure. Also, the extended fiscal autonomy of the cantons severely limits the attractiveness of voluntary mergers since sharing taxes and expenditures in a new and larger entity almost inevitably produces winners and losers.

At the municipal level, mergers are more common and apparently more urgent, and some cantons actively promote them. Fribourg, the canton with some of the smallest municipalities in Switzerland, has been debating municipality mergers since the 1960s. After failed attempts for coerced mergers, the canton used incentives. Since 1967, around 90 municipalities have merged; merger cost was borne by the canton (70%) and the municipalities (30%). Thurgau is working on a project to reorganise its municipalities. The aim is to abolish the current overlapping special districts (*Munizipal-* and *Ortsgemeinde*) and supplant them with a general-purpose political municipality, which will require numerous mergers. Mergers were in part achieved by coercion; one of the unwilling municipalities lost its case in the Federal Court of Justice. Lucerne would like to reform its municipalities through a constitutional vote. The cantonal government will hand additional responsibilities over to the municipalities which, it is hoped, will act as an incentive for municipalities to merge. In Ticino, it took a Federal Court decision to make three independent municipalities merge.

Scope and limits of jurisdictional mergers

The rationale for merging political jurisdictions is much the same as for functional collaboration. Its main idea is to re-align the institutional structure with functional areas so that: service delivery for the whole functional area is easier; costs can be saved thanks to economies of scale and scope; a critical mass for competition with other jurisdictions can be reached; and duplicated and oversized administrations can be reduced. Furthermore, mergers may balance intra-regional disparities in tax income and public goods provision, thereby restoring fiscal equivalence. Mergers may in some cases strengthen the lower level of government since they reduce the need for the upper government level to take care of services for undersized and overtaxed units. Mergers can therefore act as a

measure against over-centralisation. They may also be justified if a number of different public services cover the same functional area.

However, amalgamation might not always bring about the expected benefits. For around 80% of local public services, economies of scale and scope appear to be insignificant, *i.e.*, enlarging the area which they cover does not necessarily reduce cost or increase service quality (Bish, 2001). This view is somewhat supported by an expenditure analysis of all Swiss municipalities which shows increasing per capita cost for all public functions above 10 000 inhabitants (Swiss Federal Administration of Finance, several years). Moreover, cost or quality of many public services depends on physical and territorial features such as population density or settlement structure, which cannot be modified by redrawing borders.⁶ Optimal perimeters vary grossly between different public services – which is also the case for private markets – so no single “optimal” area division can ever exist. The same holds true for fiscal equity since the spatial extension of beneficiaries, taxpayers and decision makers varies among services provided. In practice, private and public service providers in Switzerland follow dozens of different divides, each overlapping with others. Since form should follow function, no redesigning of borders will ever encompass the “right” area for service provision.

Political legitimacy should also be carefully considered in the case of amalgamation. Local and regional territorial units create cultural identity, which is an essential aspect of civil society. Small local governments, being “close” to the citizens, are more democratic and more responsive than larger ones. The probability that citizens will control, influence and shape political processes and outcomes is larger in smaller local units. Smaller units usually show a more homogenous population and more social consensus than larger ones. In culturally diverse Switzerland, decentralisation and the smallness of political units contribute to solving minority problems and absorbing internal conflicts. Amalgamation would make political preferences more divergent, intra-jurisdictional decision making more complex, and it could intensify hitherto unknown minority problems. Since interests often diverge between adjacent territorial units, amalgamation would simply shift conflict potential from the inter-jurisdictional to the intra-jurisdictional level. The economic and social organisation of a territory changes constantly. The federal government’s strategy for mergers and territorial reorganisation should thus support flexible and polycentric co-operation at the level of *grandes régions*, rather than focus too strongly on amalgamations.

Cross-border collaboration

Cross-border collaboration is a particular form of horizontal partnership. Swiss regions have become more involved in cross-border co-operation, and Switzerland actively participates in INTERREG (International Regions) projects. There is

greater awareness that the country is not an island, that 18 cantons border on a foreign country and that the majority of the population lives within commuting distance of the border. The recent increase in the number of cross-border co-operation (CBC) initiatives raises the question of a new level of governance. A terrain for transnational actors is emerging, opening new spatial strategies for local authorities. Dynamic use of borderland is however hampered by the lack of institutional empowerment on the regional level. Between new strategies for peripheral areas and institutional rigidity, cross-border co-operation has met with both success and difficulties. The example of the *Regio Insubrica*, on the Swiss-Italian border, can illustrate what happens when the dynamic strategies of CBC are confronted with the actual feasibility of the projects.

The Regio Insubrica Association

Initiatives for cross-border partnerships usually stem from local impetus. The will to promote a “coherent” economic area across national borders, combined with the interest in maximising mutual advantages, is often the starting spark for horizontal CBC. The *Regio Insubrica*, created in 1995, covers three Italian provinces (Verbano-Cusio Ossola, Varese, Como) and the Swiss canton of Ticino (Box 2.5). It is a private law based association, set up under the Agreement on Trans-frontier co-operation of 21 May 1980 (the “Madrid Agreement”) of the European Council. This status gives no legal competence to the *Regio Insubrica*. Its powers are limited to discussing and presenting projects to the competent authority in each country. Its first goal is to “*foster trans-frontier co-operation and the awareness of belonging to a territory with the same social and cultural identity*” (Regio Insubrica, 2001). This goal is common to most CBC initiatives, and can be achieved by developing horizontal and vertical partnerships with actors and institutions from different levels of government.

Box 2.5. **Regio Insubrica: Geographical particularities**

The *Regio Insubrica* spreads over three Italian provinces (Verbano-Cusio Ossola, Varese, Como) and the Swiss canton of Ticino. The national border cuts across a culturally and geographically homogenous territory. The region is peripheral for both countries, but it is an essential pole of communication between Northern and Southern Europe. The region itself is very accessible. The road and rail network is particularly dense, contributing to high trans-frontier flows of people. Lugano, a major city situated at the centre of the *Regio Insubrica*, is accessible within an hour and a half by more than 5.8 million people.

The leading positions of the *Regio Insubrica* are held by provincial presidents or municipal mayors.

The *Regio Insubrica* acts mainly as a forum for discussion. Several *ad hoc* working groups examine the issues where CBC is needed. The fields of environmental protection, tourism, trans-frontier labour migration, education and transport are under particular scrutiny. Among the current projects are the purification of the lakes Maggiore and Lugano, and a better integration of professional *curriculae* in the two countries *via* the association of professional institutes on both sides of the border. One of the most important projects is co-operation in the field of transportation, with the Alptransit (fast merchandise train connecting Lugano-Como-Chiasso), and the Stabio-Arcisate railway (a key axis for the 30 000 cross-border workers). Exchanges between elementary schools have been set up so that the children of both countries can get better acquainted. The *Regio Insubrica* has been particularly active in organising sponsorships to promote cultural and sports competition events locally. The private sector participates through round tables organised by the chambers of commerce of the four *Regio Insubrica* members, various labour unions, and many economic associations, including foundations and banks.

For CBC within the European community, the Commission can grant financial help. The INTERREG (International Regions) initiative was created by the European Commission in 1990, and was re-confirmed in 1994 and 2001 with INTERREG II and III (Box 2.6) and extended to non-EU countries. INTERREG countries apply for the funding themselves, which implies that the funds are handled by national authorities and not by cross-border bodies. Specific projects of the *Regio Insubrica* requiring substantial investment can receive INTERREG funding. For example, a project to improve tourism promotion received funding from INTERREG III to build a Website promoting the *Regio Insubrica* and open a tourist information office. The *Regio Insubrica* has its own budget (around CHF 250 000 per year), of which 55% comes from the membership fees. Associate members (47 municipalities, four chambers of commerce, trade unions and economic associations) contribute 45%.

Difficulties encountered by CBC initiatives

Inadequate institutional correspondence is a major obstacle for most CBC efforts. CBC initiators have to adapt to the different structures of governance on each side of the border. The higher level of centralisation in Italy compared to Switzerland, differing policy objectives and unequal standards set on both sides of the border – concerning, for instance, transportation and environmental protection – are examples of such discrepancies. Contrasting with the frequent lack of institutional correspondence, the flexible structure of CBC (*ad hoc* groups meeting periodically in the case of the *Regio Insubrica*) allows for a considerably free

Box 2.6. INTERREG programme for Italy and Switzerland

In September 2001 the European Commission adopted a programme of cross-border co-operation between Italy and Switzerland, which will be financed by the INTERREG III Initiative. Its main goals are the sustainable development of the economies of both countries and preservation of the natural and cultural heritage. The total amount available between now and 2006 is EUR 74.4 million, of which about EUR 25.6 million will come from the EU. A further EUR 48.8 million will come from national and regional budgets and the private sector. Implementation of the programme is based on three priorities, plus technical assistance:

- *Economic development and co-operation.* The first priority seeks the balanced and sustainable development of the economy of the cross-border area, in particular through support for the joint development of the rural areas, systems of production and tourism (Community contribution: EUR 13.5 million).
- *Environment.* Because of the peculiar environmental situation of this area, the second priority concerns co-operation in the management of the territory and the preservation of the natural and cultural heritage (Community contribution: EUR 9 million).
- *Co-operation in culture and social affairs.* The third priority seeks co-operation in cultural, social and institutional affairs. The participation of the citizens in communication and their identification with their region constitute the main aim of the activities (Community contribution: EUR 2.7 million).

mode of action. A change in governments can also pose a problem, as their turnover can put at risk the completion of long-term projects.

CBC organisations have neither the power nor the resources to implement trans-border projects. Being non-institutional and acting mainly as a forum for the discussion of possible projects, they are largely dependent on the quality of trans-border relationships and the goodwill of the participating countries. A key component of effective CBC partnerships is sharing accurate and up-to-date information. The flexibility of CBC can be an advantage when it allows for non-bureaucratic communication – and also a disadvantage when it means too little predictability. Cross-border co-operation can generate new impetus for border regions within the larger framework of the European Community and its neighbouring countries. In many cases, CBC is a way to give peripheral areas new momentum, which are often located in border areas. Whether cross-border co-operation concerns geographic entities with few common cultural links (South East England and Northern France, for instance), or regions with greater similarities (like the Italian-Swiss border), CBC nonetheless faces several structural difficulties. To a large extent, the success of CBC depends on harmonised policy making at the national level of the two

“home” countries. It is hoped that the bilateral treaties between Switzerland and the European Union will provide fresh air to many CBC activities, facilitate exchange and strengthen functional collaboration.

Conclusions

Switzerland is facing the challenge of adapting federalism and intergovernmental relationships to the needs of a globalised world. This requires more autonomy for subnational political units, more flexibility in intergovernmental relations, and also more co-operation between the same or different levels of government when policies affect all government levels. It also requires a sounder fiscal equalisation system as territorial insurance against increasing asymmetric economic shocks. The ongoing NFE reforms are a crucial step towards modernising Swiss institutions. Cantons would regain responsibilities on policy issues that concern them, and they would have more discretion over financial resources. The Confederation would be able to reduce unnecessary administrative work and concentrate more on core issues of national interest. Vertical relationships would become more contractual, and an overall financial equalisation of financial resources would enable the cantons to guarantee minimal standards for public services in all parts of the country.

Particular attention should be given to the promotion of inter-cantonal horizontal collaboration. The Swiss experience shows that there is no “one size fits all” territorial division for a country. Functional areas overlap in various ways, so any territorial reshuffling will necessarily produce new gaps between functional and political organisation. In order to address the problem of increasing interconnectivity and functional overlapping, much governance flexibility will be required. The focus should be on the role of governments when providing public services rather than on the size and structure of jurisdictions *per se*. This calls for prudence when considering jurisdictional mergers. The “form follows function” approach of horizontal partnerships appears to be more promising, since it tends to be more efficient and more democratic. Private markets are spatially flexible, and so should be territorial organisation. Once reforms such as NFE have been introduced, the federal government should focus on horizontal partnerships – through information, legal support and financial incentives – in order to cope with the ever changing spatial pattern of economic and social organisation.

Notes

1. The terms “favourable” or “harmful” have in this context several notions such as efficiency, social or regional equity, or growth enhancement.
2. The Canadian and United States transfer systems, which were also based on matching expenditures, reveal the same result (Baker and Payne, 1999).
3. Consider local road construction for which cantons get an expenditure contribution rate of up to 85%, leaving the canton with a minor fraction of the total investment expenditure. The huge bulk of federal and cantonal transfers goes to local construction firms that pay taxes to the cantons. If the cantonal expenditure contribution rate is only little below cantonal tax rates, a canton can earn additional tax revenue if it increases its (federally subsidised) road expenditures. Employment and income multipliers exacerbate this effect.
4. The change of the subsidisation system also changed financial accounting, which makes comparisons before and after the reforms awkward.
5. Territorial spillovers (or territorial externalities) are created when a jurisdiction's provision of public services affects the citizens of other jurisdictions. The politically most debated territorial spillover is when public services and facilities are used by citizens from other jurisdictions without compensation (taxes, prices, user fees, etc.).
6. Building or maintaining an inter-municipal road in a mountain area does not become structurally cheaper by merging the two municipalities.

Chapter 3

Strategies and Policies for Territorial Development

Up to the 1970s, Switzerland disposed of no explicit strategies and policies to address territorial issues. Influencing territorial trends was an implicit task of sectoral policies such as agriculture, public investment (*i.e.*, roads) or subsidised services of federal monopolies (*i.e.*, railways or postal services). It was not until the late 1960s and early 1970s that regional policy and spatial planning were separately introduced through constitutional amendments. Spatial planning was initially supposed to organise urban areas and to protect rural areas from urban sprawl, whereas regional policy aimed at infrastructure support for remote mountain regions. With time, the objectives of spatial planning were geared towards territorial co-ordination of infrastructure development, whereas regional policy was extended towards economically disfavoured regions in general. The scope of territorial policies changed again when in the 1990s the competitiveness of regions rather than disparity reduction became an issue. Spatial planning and regional policy were then more closely co-ordinated to reach the objective of balanced territorial organisation.

The coming years will pose a major challenge to territorial policies. Deregulation of public services such as railways, telecommunications, electricity and postal services is likely to provide large gains for the whole country, but narrows the Confederation's scope to shape sectoral policies for specific territorial means. Agriculture, still the main sectoral policy for rural areas, has started a thorough reform which, if implemented correctly, will put more emphasis on the market and the environment and will no longer constitute a targeted support for rural regions. The fiscal equalisation reforms heading "NFE" are supposed to take over the disparity-reducing task of territorial policies. New issues have emerged, such as growth of and internal imbalances within metropolitan areas or the search for sustainable development strategies in rural, particularly Alpine areas. Finally, the gradual opening of Switzerland to Europe, which is becoming a reality with the Sectoral Agreements, will have direct effects on territorial organisation as well as on territorial policies. This chapter examines present federal territorial policies, assesses their impact on the territory, considers their compatibility with rules set

at the European level, and explores their future role to guarantee a coherent and balanced development of the Swiss territory.

Spatial planning and territorial strategy

Overview

The Federal Law on Spatial Planning was introduced in 1979. The primary purpose of this legislation was the separation of built and non-built areas, and limiting the expansion of urban sprawl into scarce open land. The leading philosophy of spatial planning has become “decentralised concentration”, *i.e.*, a territorial organisation pattern where population and economic activities are evenly distributed across the entire country, but where development is concentrated in the settlements, thereby keeping settlements and open space clearly separated and preserving open space. The Federal Office of Spatial Planning was put in charge of federal spatial planning policy, and took responsibility for the co-ordination and approval of cantonal spatial planning, and for setting objectives for municipal and regional planning. Initially, spatial planning was restricted to physical land use, but soon became a more encompassing policy dealing with all aspects of life that had a territorial impact. Spatial planning now involves aspects of environmental protection, infrastructure, tourism development and land use, thus spatial planning today can be described as a cross-sectional task.

The Swiss spatial planning system was thus established under a single law with a three-tier hierarchical framework. Spatial planning is primarily the responsibility of individual cantons; the Confederation has relatively little power to put its objectives through at the subnational level. The federal government undertakes basic studies and establishes frameworks and principles, with the cantons sharing federal principles in formulating their plans. The federal government also takes responsibility for establishing sectoral plans and for co-ordinating sectoral policies (Table 3.1). A variety of sectoral policies, particularly those accompanied by infrastructure investments, relate to spatial planning, although some federal sectoral plans are still under preparation. There is no law specifically concerning rural area planning but some rules are set out in the Spatial Planning Law to control building outside of construction zones (Table 3.2).

On the subnational level, the Law on spatial planning requires two levels of planning: the cantonal structural plan that defines the principles of a canton's spatial development and the municipal land use plan for the purpose of zoning. Cantonal structural plans are binding on administrative authorities and land use plans on landowners and administrative authorities. The cantonal structural plan (*Plan directeur*), which is revised every ten years, defines goals and strategies for spatial development. It also co-ordinates plans for urbanisation as well as for transport

Table 3.1. Sectoral plans related to territorial development

Name	Responsible federal body	Status	Process of formulation			Remarks
			Co-operation with cantons	Public participation	Federal Council resolution	
Sectoral plan on crop rotation (FFF)	ARE, BLW	Closed	Closed	Closed	8.4.1992	Assessment being conducted, possible adaptations
Landscape concept for Switzerland	BUWAL	Closed	Closed	Closed	19.12.1997	
Sectoral plan Alp Transit	BAV	Closed	Closed	Closed	15.3.1999	Follow-up to Alp Transit
Sectoral plan Rail Transport	BAV	Planned	As of 2000	Open	Open	
Sectoral plan Road transport	ASTRA	Planned	As of 2000	Open	Open	Hearing on methodology in the Winter 2000-2001
Sectoral plan Air transport infrastructure Part i-III B	BAZL	Closed	Closed	Closed	18.10.2000	
Part III C, 1st step		Being prepared	2000-2001	2001	2001	Part III C, 2nd step
Part III C, 2nd step		Planned	As of 2001	2001-2002	2002	
Sectoral plan Transmission lines	BFE	Being prepared (conflict group fed/cant/ org)	Since 1998	Early 2000	Spring 2001	Follow-up to sectoral plan shooting ranges
Sectoral plan Shooting ranges	BABHE	Closed	Closed	Closed	19.8.1998	
Adaptation 1999		Closed	Closed	Closed	15.9.1999	Adaptation 2000
Adaptation 2000		Closed	Closed	Closed	31.5.2000	
Sectoral plan Military including military airfields	GS VBS BABLW	Being prepared	First hearing Spring 2000	Summer 2000	Spring 2001	Follow-up to sectoral plan shooting ranges
National concept Sports installations (NASAK)	BASPO	Closed	Closed	Closed	23.10.1996	
Sectoral plan Expo	UVEK	Closed	Running	Closed	1.7.1998	Sectoral plan Waterways
Sectoral plan Waterways	BWG	Suspended	Open	Open	Open	

Source: OECD Secretariat, based on data from the Swiss Federal Office for Spatial Planning.

Table 3.2. **Laws related to land use**

Type of land use	Federal laws	Cantonal laws
Framework law for land use	Federal Spatial Planning Law (a framework law)	
Zone for construction (urban area)	No detailed rules on urban planning or construction code exist.	Individual cantons have cantonal law on urban planning, construction codes, etc.
Agricultural zone	Law on Agriculture	No general cantonal law or regulations exist.
Forest areas	Federal Law on Forestry, 1991	
Zone for environmental protection	Federal Law for Preservation of Nature and Landscape	Individual cantons also establish nature conservation areas.

Source: OECD/TDS.

and infrastructure development. It is formulated with cartography on a scale of 1:50 000. Cantons need to take into account federal plans, and the Federal Council approves cantonal plans after considering the national situation and that of neighbouring regions. Potentially conflicting interests between federal and cantonal authorities are resolved through this process. At the municipal level, municipal land use zoning plans define the zones for construction, agriculture and environmental conservation. Currently, almost all the municipalities, except for very small villages, have formulated land use zoning plans based on the federal law.

Nature of Swiss planning system

The Swiss Spatial Planning Law is an integrated framework law that covers all types of territory. It is not simply an urban planning tool, but aims at harmonised spatial development across the country. However, the policy tools provided under the law apply for the most part to urban areas. This may be explained by the implicit geographical distribution of responsibilities among authorities of regional policy (mountainous regions), of agricultural policy (farming areas) and of spatial planning (urban areas). The significant decline in agriculture has created the problem of non-agricultural use of agricultural areas. In 1996, federal authorities stated more precisely a series of exceptions concerning the non-agricultural use of existing buildings for agriculture. While the law provides a basic framework for land use policy to classify three territorial zones and to distribute responsibilities, it does not contain specific tools for rural development, in contrast to regional development laws. Moreover, it does not sufficiently address the significant changes of land use that occurred after the 1980s with the dwindling significance of agriculture. The absence of targeted spatial development instruments for rural areas will either hamper their economic development or lead to increasing urban sprawl.

The cantonal structural plans include more ambitious strategies. As the federal law prescribes that cantonal plans should define how activities with territorial effects should be co-ordinated, all infrastructure projects can be incorporated into the plan. Recently, some of the cantons have successfully intensified links with financial plans and with regional policy tools. After 20 years of experience, cantonal plans are now gradually being used for purposes that go beyond pure spatial planning. Over time, cantons have been able to determine and work out how and to which extent cantonal plans can be used as harmonising tools for territorial development. It could be useful if the federal government were to allocate territorially sensitive subsidies more in line with cantonal plans. So far, federal authorities have not refused to allocate subsidies and grants for reasons of incompatibility with cantonal plans. It might also be useful to better integrate non-physical investments, such as regional economic policy, with infrastructure development projects.

In short, the Swiss spatial planning system is based on a single law but uses a mixture of plans of different natures. Federal authorities provide the basic principles on spatial planning issues; economic strategy, however, is beyond their scope. Cantonal plans are more forward looking and can involve regional development strategies with financial implications. Municipal plans, on the contrary, are purely land use plans for zoning. In the face of decentralisation and globalisation trends, a territorial vision was lacking as a starting point for discussions to ensure flexible policy making by regions and through interregional co-operation. The formulation of conceptual guidelines at the national level and more strategic planning, was thus an important step to be taken, and in 1996 led to the “Swiss Spatial Planning Guidelines”.

The 1996 Guidelines

In 1996, federal authorities published the Swiss Spatial Planning Guidelines, which were the first federal policy guidelines for territorial organisation. This was followed by the “Realisation Programme: Federal Measures for Territorial Organisation 2000-2003”, which sets out individual measures to be taken by sectoral authorities. The Guidelines are of a broad and conceptual nature. They also stress the impact of Switzerland building up closer ties with Europe. Their main objective is to show a long-term spatial vision for Switzerland and the main challenges on the road to efficient land use and a balanced development of all parts of the country.

Urban areas. The Guidelines propose renovating urban centres and stress more rational land use, limiting disordered urban sprawl and establishing urban-rural networks for effective burden sharing with surrounding small and medium-sized cities. So far, the federal government has intervened little in urban issues although there is growing concern that problems linked to agglomerations are becoming a national issue. The federal government is currently elaborating

strategies for urban agglomerations that are provided in the Guidelines. By the end of 2001, the federal administration published the “report on the agglomerations”. The draft report proposes wide-ranging policy measures targeting agglomerations, including spatial, transport, environmental and social policies, as well as institutional arrangements for policy co-ordination beyond municipalities. Total financial demand is estimated to be CHF 5-7 billion for 10 years, 3 000 million of which the federal government could finance by increasing the mineral oil tax. The draft report also proposes the “Agglomeration Project”, a plan indicating the financial implications of individual projects, which will be used as a basis for allocating subsidies. These proposals aim at expanding the functions of spatial planning from being a physical planning tool to include more integrated policy measures. The Guidelines focus mainly on environmental and traffic burden problems while the reforms proposed by the report stress more integrated measures involving institutional arrangements as a fundamental solution for agglomeration problems that cannot be resolved by physical planning (see Chapter 4).

Rural areas. The guidelines propose roles for four types of rural regions (Table 3.3). The emphasis here is clearly on sustainable development, particularly on the harmonisation of agricultural and economic activities, and on the

Table 3.3. **Strategies for individual rural areas based on the Guidelines**

Rural areas	Characteristics	Policy objectives
Mittelland	Concentration of trade and industry in rural areas with good railway access. Suffering from sprawl and intensive farming.	Maximise the growth potential of villages as rural habitats. Maintain the quality of life. Stop scattering and sprawling.
Jura region	Based on small and medium-sized industries and trade as well as attractive country landscapes.	Limit further development. Use its advantage of scenic beauty for tourism and natural leisure activities.
Pre-Alps	Agricultural area but under pressure of development for industrial, residential and tourism purposes due to its proximity to agglomerations.	Preserve biological diversity. Provide facilities for leisure in nature. Improve infrastructure in regional centres. Improve public transport and telecommunication infrastructure.
Alps	Rich natural diversity, cultural heritage, and traditional landscapes. Highly developed winter tourism. Large internal gap between tourist zones and other small villages.	Improve living conditions in mountain villages by centralised supply systems and regrouping small villages. Maintain mountain agriculture and the landscape. Limit further urban sprawl in tourist resorts, reduce traffic burden by tourism.

Source: Swiss Federal Office for Spatial Planning (1998).

conservation of natural landscape. The Guidelines point out the role that rural regions have in preserving landscape and stress the importance of limiting further sprawl. Swiss rural regions located in the proximity of cities have been put under increasing pressure from suburbanisation. In addition, 25% of buildings (mainly buildings for agricultural use) in Switzerland are located outside of construction zones in rural areas. The use of these buildings was initially limited to agricultural purposes, but the decline in agriculture and population in rural areas has led to a growing number of them to be transformed for non-agricultural purposes, such as secondary housing, tourism, commercial and light manufacturing activities related to agriculture. As a result, 30% of secondary housing is now located outside of construction zones. While the principal mission of spatial planning authorities was to limit excessive suburbanisation, spatial planners after 1996 introduced a series of exceptions allowing – under strict regulation – the use of abandoned agricultural buildings for non-agricultural purposes. However, beyond these regulations, which tend to limit economic development in rural areas, there are no specific policy tools that combine development with protection of these areas.

European integration. Switzerland, not being an EU member, is not included in the “European Spatial Development Perspective” (ESDP). During the process of preparation Switzerland nonetheless commented on the first draft. The three main aims of the ESDP include “a polycentric urban development and a new relationship between urban and rural areas”, “equal access for all European regions to infrastructure and know-how”, and “prudent management of the natural and cultural heritage”. These ideas are shared by EU countries and Switzerland shares them as well. Following the ESDP idea of developing a polycentric network of urban and rural areas, the Guidelines propose that Swiss cities be linked with cities across the border and integrated into the European network. This means that Swiss cities and regions will need to be integrated into a wider network of economic activities, mutual supports and burden sharing between regions through cross-border co-operation and networking on various levels. Since a network of regions with little local advantages or specificity will not lead to regional development, individual regions should be encouraged to enhance local advantages.

Spatial planning approaches in other countries

National level

Many OECD Member countries including Swiss neighbours (Germany, Austria and France) have attempted to integrate social, economic and environmental goals into spatial planning on national and/or regional levels (Table 3.4). Insofar as spatial planning strategy on the national level is concerned, all Swiss neighbours but Italy have established national plans or policy guidelines. The functions of

Table 3.4. National and regional spatial plans in Switzerland and neighbouring countries

	Switzerland	Austria	France	Germany	Italy
Ministry in charge	Federal Office for Territorial Organisation, ARE	Federal Chancellery	Ministry of Infrastructure, Housing and transport is in charge of urban planning while DATAR is responsible for territorial development	Federal Ministry of Spatial Planning, Building and Urban Development	Ministry of Economy and Finance, Department of Development and cohesion policies
Legal basis	Loi fédéral sur aménagement du territoire (Spatial Planning Law, 1979)	No spatial planning law is established on federal level but on Länder level	La loi d'orientation pour l'aménagement et le développement durable de territoire du 25 juin 1999 (LOADDT) Planning Reform Act, 1982	Raumordnungs-gesetz, ROG (Federal Spatial Planning Act), 1965, modified in 1997	No spatial planning act to cover all the types of land exists on national level.
Responsibility of national government	<ul style="list-style-type: none"> • Undertake basic studies • Establish concepts and sectoral plans • Vertical and horizontal co-ordination • Approve cantonal guiding plans 	<ul style="list-style-type: none"> • Establish planning measures, and sectoral plans • Vertical and horizontal co-ordination <p>Federal government has no constitutional responsibility for spatial planning</p>	<ul style="list-style-type: none"> • Determine scope, goal, budget, etc. • Establish sectoral plans <p>Since 1982, territorial development has been a shared responsibility of the national and subnational governments.</p>	<ul style="list-style-type: none"> • Define framework of spatial planning • Publish a report on spatial planning • Establish a procedure to examine development projects and sectoral plans • Vertical and horizontal co-ordination • Set up guiding principles 	<ul style="list-style-type: none"> • Horizontal and co-ordination for public investment • Establish strategies for some depressed regions
National strategies for spatial planning	In 1996, the federal government published Swiss Planning Policy Guidelines.	The OROK published the Austrian Development Concept" in 1981 and 1991, a set of guidelines for administration, which has no legal basis.	The National Economic and Social Development Plan was abolished. National Infrastructure Plan (Schema directeurs d'infrastructure	<ul style="list-style-type: none"> • "The Guidelines for regional planning" in 1993 • "Framework of Action for Regional Planning" in 1995 • "Federal Spatial Planning Report " in 2000 	No single national territorial strategy is developed.

Table 3.4. National and regional spatial plans in Switzerland and neighbouring countries (cont.)

	Switzerland	Austria	France	Germany	Italy
Strategic plans at the level of Subnational government	<ul style="list-style-type: none"> • Cantons establish cantonal guiding plan (Plan for infrastructure development and land use) 	<p>Spatial planning is a responsibility of <i>Länder</i>. Each <i>Land</i> establishes spatial planning law, state development programme, regional programmes, etc. Regional plans are formulated for limited areas</p>	<ul style="list-style-type: none"> • Establish regional plan • Planning contract (Les contracts de plan état-région (CPEP)) <p>Regional physical planning exists in Ile-de-France, DOM, TOM and Corsica</p>	<p>The <i>Land</i> is principally responsible for spatial planning by preparing</p> <ul style="list-style-type: none"> • Spatial planing act under ROG • Spatial plans and programmes <p>Many <i>Länder</i> are subdivided into regions, which establish regional plans to group together all the sectoral plans and programmes.</p> <ul style="list-style-type: none"> • Establish F-plan (preparatory land use plan) for all the areas) and B plan (binding land use plan in building area) 	<p>In the 1970s, many regions introduced their urban planing law.</p> <p>Regions also establish sectoral plans, environment plans and basin plans. In the 1990s, at provincial level, territorial co-ordination plan has been introduced.</p>
Planning at municipal level	Municipalities establish land use plan	Communities have the legal responsibility to formulate zoning plan over the entire area	<ul style="list-style-type: none"> • Join the planning contracts • Establish framework plan building plan 		Municipalities establish regulatory plan for urban land use.
Interministerial body	The Federal Conference on Territorial Organisation (Raumordnungs-konferenzen des Bundes)	The Austrian Conference on Regional Planning (OROK) composed of <i>Bund</i> , <i>Länder</i> and relevant authorities prepares development concepts and makes recommendations	Comité interministériel d'aménagement et de développement du territoire (CIADT) FNADT	Standing conference of <i>Bund</i> and <i>Länder</i> ministers for spatial planning adopted in 1992 the "Guidelines for Spatial Planning"	Conferenza di servizi
Deliberative bodies/ Expert groups	The Advisory Council on Territorial Organisation		Conseil national d'aménagement et du développement du territoire, CNADT	The Spatial Planning Advisory Council	

Source: OECD Secretariat.

these policy documents vary while the substantial policy goals are defined largely along the same lines.

In Germany, spatial planning is mainly a responsibility of the *Länder*. The federal level sets out a frame and defines principles, but it is always obliged to take regional and even local planning into consideration. The regional and local governments formulate and develop their policies and planning within the framework of the Spatial Planning Law or *Raumordnungsgesetz* (ROG). Article 1 of the ROG gives a clear idea of this two-directional approach, called the “counter-current principle” (*Gegenstromprinzip*). The characterising feature is a mutual duty to respect and integrate the other levels’ policies; however, the German system cannot exactly be called a partnership approach. Austria, on the other hand, puts the emphasis mainly on consensus building. It has no particular ministry for spatial planning, and the Federal Chancellor is in charge of horizontal and vertical collaboration. However, a quasi-governmental co-ordinating body, the Austrian Conference on Territorial Development (OROK), plays an important role. It serves as a platform for co-ordination with ministries, regions (*Länder*) and other partners. While many of the proposals have yet to be realised, it is felt that this informal and “soft” approach – in line with a federal system – can contribute to widening the scope for spatial planning. The Austrian vision focuses on regional disparities and economic development, both of which may be addressed directly by regional policy.

Contrary to the two federal countries Germany and Austria, territorial development in France has been seen essentially as a matter for the national government and has been concentrated on the geographical distribution of economic activities. The core of French territorial development policy has thus been regional policy rather than physical planning. Even after the National Economic Development Plan was abolished, the national government has continued to determine the scope and goals of territorial development, the amount of money involved and the nature and content of planning contracts. These contracts, which were initially introduced to implement the National Economic Development Plan, now serve as an important tool for regional development. National territorial objectives have shifted over the years, with the Laws of 1995 and 1999 presenting distinct differences in priority setting: while the Law of 1995 favoured rural areas, the Law of 1999 is oriented more towards economic efficiency. In France, where the gap between the dominant capital region and other regions is wider, geographical decentralisation is another element that affects realisation of national territorial development goals.

The visions OECD Member countries have of territorial development tend to converge, as key words in the different documents indicate: sustainable development, economic efficiency and disparity reduction. National territorial goals are often defined in generic and vague terms, without determining explicit priorities

for regions, however. Particularly in federal countries, national level policy tools are basically non-binding and a simple manifestation of the national vision. Setting these broad goals can lead to national discussion and achieve general consensus on priorities regarding equity and efficiency objectives, urban and rural change, environmental and development issues. There is a significant variety of institutional means for making national territorial strategies, such as having a vision, policy, plan, programme, framework, and guidelines. These are more or less formally produced by inter-ministerial process and co-ordination with subnational entities. However, under decentralised systems (as the case of Austria illustrates), soft instruments can sometimes work more effectively for policy harmonisation than legally binding tools.

Subnational level

Effective use of subnational level planning is a key element of any policy mix for territorial development. In most cases, planning at the first subnational level covers not only land use but also aims to meet regional socio-economic development objectives. Various types of plans can exist on a level between national spatial planning and municipal land use planning, such as the Swiss cantonal structural plans. Strategic planning on the subnational level is a useful tool for integrated territorial development, since regulatory policy for zoning and physical development alone will not provide a future vision for regions. It may not always be easy for national planning authorities to motivate their colleagues on the subnational level to formulate multi-purpose strategic plans for the region in addition to land use planning on the municipal level, as the issues and merits accompanying regional planning are less apparent. Nevertheless, Swiss federal authorities have successfully encouraged all the cantons to formulate and strengthen cantonal structural plans. It would be useful if further efforts were applied to create institutional links between federal incentive measures and cantonal plans so that local actors could use cantonal plans as a real basis for territorial development that would include regional economic development.

Swiss spatial planning and land use

Much of Swiss spatial planning policy is – implicitly or explicitly – based on the notion of external costs of land use. Given the small size of the country and the relatively high population density, Swiss spatial planning policy puts much emphasis on the efficient use of the limited quantity of land and the reduction of external cost. This is reflected in the leading idea of separation of built and non-built areas, in order to preserve open space in a country that lacks large amounts thereof. The philosophy of preserving open rural spaces extends over different types of regions, such as areas close to the metropolitan areas and to be

preserved from urban sprawl, or remote areas to be protected from uncontrolled second home construction. Much of Swiss spatial planning policy is thus a search for a balance between the needs of regions to use land for individual economic development and the requirements to keep space open as a public good for wider society, and to minimise external cost of land use.

Swiss spatial planning policy is particularly concerned with two aspects of external costs (Swiss Federal Office for Spatial Planning, 2001). *First*, there is ample empirical evidence that urban sprawl increases per capita cost for infrastructure such as water, electricity or waste disposal. Since many of these costs are not covered by individual fees but paid by tax contributions, urban sprawl creates various externalities to the general public. The more firms and households would take the full cost of infrastructure into account, the more this would increase the attractiveness of concentrated settlement structures. *Second*, external cost of transport and settlement structure are closely related and influence each other. There is again ample evidence that private transport causes more external cost (pollution, etc.) and simultaneously leads to dispersed settlements, whereas public transport tends to mitigate such trends. Transport systems can be considered “hidden land use planners”, and spatial planning policy can do a lot to link transport infrastructure policy to the general objectives of territorial organisation (OECD, 2001h). Indeed, Swiss spatial planning is relatively well connected to transport policy, but it still lacks the proper instruments to tackle external costs of private transportation, which in turn reduces the ability to tackle urban sprawl efficiently.

Finally, political fragmentation of the Swiss territory is a major challenge to spatial planning. Many cantons are relatively small compared to the average size of planning regions, and political borders cut through homogenous functional regions. Since cantons usually elaborate spatial development plans based on their own needs – *e.g.*, to attract businesses in order to raise tax revenue – they do not effectively take into account territorial spillovers. This often leads to incoherent planning and a biased spatial distribution of economic activities across a functional region. For instance, cantons or municipalities may decide to build “greenfield” shopping malls whose negative externalities – increased pollution or traffic intensity – are felt in another jurisdiction, thereby distorting firms’ spatial activity pattern. Federal spatial planning policy has little power to organise economic activities across cantonal borders, and gives little incentives to cantons to do so on voluntary grounds. The same holds true for the municipal level where construction zones are often poorly co-ordinated across jurisdictions.

Spatial planning for a new territorial approach

With the Spatial Planning Guidelines, Switzerland has for the first time elaborated a national vision for the development of the different parts of the country.

The Guidelines indicate the main challenges these regions face, as well as the main strategies that could be used to tackle them. What is needed as a next step is some concrete manifestation of these spatial visions, and a set of instruments that would allow linking of the federal vision with policy implementation at the cantonal and municipal levels. A specific requirement will be closer links with the EU. Bringing Switzerland closer to the EU requires adopting specific instruments to harmonise European and Swiss spatial development. These include an assessment of the needs for additional physical infrastructure, such as transport for commuting flows across national borders. An analysis of territorial advantages and disadvantages and a careful assessment of economic and ecological impacts of European integration on Switzerland would also be useful.

Regional policy

Overview

Switzerland did not have an explicit regional policy until the beginning of the 1970s, although the federal constitution has long contained a commitment to equity and “*protecting the economically threatened regions*”. Disparity reduction was traditionally addressed through fiscal equalisation and indirectly through support of agriculture in rural areas. In the early 1970s the federation published the “General Plan for Economic Development of Mountain Regions”; “disfavoured” at that time was set equivalent to “mountainous”. The government deemed it necessary to provide the less favoured regions with infrastructure to attract businesses and to trigger a multiplier effect. In 1974, this Keynesian-inspired philosophy was condensed into the Law on Investment Assistance in Mountain Regions. A number of other policy measures were adopted in the following years, mainly to support economically distressed areas or certain economic sectors. The policy approaches of the 1970s and 1980s were called the “small-scale regional approaches” since their unit of analysis and policy action was the sub-cantonal (“MS region”) level.

Regional policy today covers a wide range of laws and approaches (Table 3.5). The most important pillar is the Federal Law on Investment Assistance in Mountain Regions [*Investitionshilfegesetz* (IHG) in German; *Loi fédérale sur l'aide à l'investissement dans les régions de montagne* (LIM) in French], which was passed in 1974 and has provided loans for infrastructure investment in mountain regions. Accompanying this support measure for infrastructure development, assistance for businesses in mountain areas was provided in the form of loan guarantees and interest subsidies for SMEs (*Gewährung von Bürgschaften und Zinskostenbeiträgen in Berggebieten*), and loans, guarantees and interest subsidies for hotels and health resort facilities (*Förderung des Hotel- und Kurortskredites*). The two latter laws were relatively small scale. Further regional aid was introduced in the late 1970s to address structural weaknesses which had become apparent in the 1975-1976 recession, especially in

Table 3.5. **Regional support measures in Switzerland**

Legislation	Aim	Area of application	Measures	Spatial extension	Duration	Remarks	Financial resources
IHG	Regionalisation infrastructural developm	Mountain regions and the Jura, the 54 IHG regions	Loans	Small	In force since 1974; in modified form since 1.1.1998	Subsidising regional organisations; promotion of infrastructure projects	Federal costs until 1995: 2 billion; generated volume of investments 13 billion
BWE	Promoting companies	Specific regions throughout Switzerland	Guarantees, interest cost contributions, tax relief new, financial assistance	Small	Limited to five years; in force since 1.7.1996	Impulse programme; will foreseeably be prolonged until 2006, follow up programme (BB) for economically challenged regions	Federal costs since 1979: 80 million; generated volume of investments 4.5 billion
Regio Plus	Cooperative projects at organisational, concept and institutional level to back structural changes	Mountain and rural regions	Financial assistance	Small	Limited to ten years; in force since 1.8.1997	Impulse programme	Total costs of programme; 70 million
BGB	Promoting production companies	Mountain regions	Guarantees Interest cost contributions	Small	In force since 1976 in modified form		Since 1977, 378 million guarantees granted, and approximately 10 million in interest cost contributions

Table 3.5. **Regional support measures in Switzerland** (*cont.*)

Legislation	Aim	Area of application	Measures	Spatial extension	Duration	Remarks	Financial resources
HKG	Promoting individual concerns in the hotel industry and in spas	Mountain and lake regions, spas	Guarantees interest cost contributions Loans	Small	In force since 1976		1980-1998, 324 million loans and 489 million guarantees
InnoTour	Cooperative projects at organisational, concept and institutional level	All of Switzerland	Financial assistance	Small	Limited to five years, in force since 1.2.1998	Impulse programme	Total costs of programme; 18 million
INTERREG III	Cooperative projects at organisational, concept and institutional level, promotion of cross-border co-operation	Newly all of Switzerland	Financial assistance	Extensive: border regions, cantons and groups of cantons	Limited to the 31.12.2006; in force since 1.3.2000	Cross-border, transnational and interregional co-operation follow up to INTERREG I+II	Total costs of programme; 39 million

Notes: IHG: Federal law on encouraging investment to develop mountain regions.

BWE: Federal decree on regions undergoing economic renewal.

Regio Plus: Federal decree relative to the promotion of structural change in rural areas.

BGB: Federal law on loan guarantees and interest cost contributions.

HKG: Federal law on enabling credits for hotels and health resorts.

InnoTour: Federal decree on promoting innovation and co-operation in the tourist industry.

INTERREG III: Federal law on fostering Swiss participation in the Community Initiative to promote cross-border, transnational and interregional co-operation.

Source: OECD Secretariat, based on Swiss State Secretariat for Economic Affairs.

the Jura. Under the federal decree establishing the *Finanzierungsbeihilfen zugunsten wirtschaftlich bedrohter Regionen* (BWE), support was provided in the form of guarantees, interest subsidies and tax concessions for new firms in economically distressed areas. During the 1990s, more innovation-oriented laws were introduced, comprising *Regio Plus* and *InnoTour*. Finally, authorities for regional policy have also been responsible for cross-border co-operation through the INTERREG Programme. None of these laws covers the same area.

Mountain regions

The Law on Investment Assistance in Mountain Regions (LIM) covers about two-thirds of the land area of Switzerland and about one-quarter of the population. Eligibility was originally determined by out-migration, income disparities, topography and settlement size. Some 54 areas in 20 cantons have been designated as mountain regions. Rural areas in the central plain and close to urban centres are excluded. This geographical distribution of responsibilities between agricultural and regional policy is an important feature of the Swiss system. Swiss mountain area policy is characterised by its broad focus on regional economic development and targeted investment. Each of the designated areas (canton/group of municipalities) has to prepare a regional development concept and a multi-annual development plan identifying development opportunities, goals, proposed measures and projects (Article 16, Article 17); these concepts then have to be approved by both the cantonal and federal governments. In order to develop and to implement projects, a new provision was introduced into the Law to establish regional secretariats. Apart from investment loans, the federal government also provides grants to support the activities of these secretariats.

Official figures show that since the law was passed over 25 years ago, some CHF 2.6 billion have been allocated to support 7 435 projects, which means that on average there were almost 300 new projects every year and each was granted CHF 350 000 in aid. However, this is less than other sectoral supports. On average per capita aid in designated areas is CHF 35, which is low for an infrastructure-based scheme. Considering the limited budget of each mountain region, the LIM has provided a relatively small but important amount of financial resources. This has helped local entities in both the private and public sectors to finance not only basic infrastructures but also those needed for economic development, such as tourism facilities, etc. A major part of the loans was spent on water, gas and public health facilities (27.1%), sport and leisure (15.9%) and transport and communication (14.2%). Loans by the LIM have been widely used jointly with other federal financial aides to realise complex and large investment projects.

Compared to other incentive measures, the LIM has a number of advantages. First, compared to sectoral policy grants for infrastructure, LIM gives regions a

broader choice over the use of funds. Second, LIM support can be allocated to both private and public actors. Third, since the loans have to be repaid, recipients will more carefully examine the cost and benefits of each individual project. With the help of LIM, mountain regions have been able to catch up with the rest of the country, and disparities in infrastructure have been largely evened out in the remotest areas. Finally, by establishing 54 areas that extend beyond municipal borders, LIM has provided small municipalities with the opportunity to work beyond the administrative unit and establish a successful culture of networks and inter-municipal co-operation. Rural regions appear to be more advanced in this respect than urban regions. Before LIM was introduced, the population in mountain regions had been decreasing; from 1975 to 1985, it increased by 1.7% and employment by 5.3%. From 1981 to 1987, demographic growth – although not exclusively attributable to LIM – was higher than the national average.

Reorientation of regional policy

Reflecting demands for a new look at federal policy and for structural changes, a review of Swiss regional policy was undertaken in 1996. Under the “New Orientation of Regional Policy” [*Neuorientierung der Regionalpolitik* (NOREP)], the focus of policy shifted from disparity reduction to promoting efficiency and increasing competitiveness. As a result of the reform, the objectives of the LIM were redefined. Whereas the Law in 1974 aimed at improving living conditions in mountain regions, in 1996 the goal was expanded and diversified. The new objectives comprised: establishing favourable conditions for economic development and increasing competitiveness in mountain regions; facilitating the exploration of regional potentials; contributing to maintain a decentralised territory and preserve the socio-cultural particularities and diversity of the country; ensuring sustainable development of the mountain regions; intensifying co-operation among municipalities, regions and subregions; and contributing to reduce socio-economic disparities. However, with this long list of objectives – which moreover still includes disparity reduction – the risk for the LIM of losing focus grew even bigger.

As a result of this reorientation, new instruments beyond infrastructure support were introduced such as the *Regio Plus* programme, which provides “pump-priming” assistance for ideas and concepts that are “innovative and co-operative”. The federal government provides direct grants to both public and private regional bodies to facilitate project formulation, co-ordination, feasibility studies, and public relation activities (*i.e.*, non-physical expenditure). Maximum eligibility is five years. Since 1996, 68 projects out of 102 applications have been approved, and provided with funding of CHF 23.4 million. Total project costs amount to CHF 65.3 million. Up until now, 90% of the new projects relate to tourism, although there have been some challenging projects for developing an IT-related technology industry in rural regions.

The NOREP has not abolished any existing support but has shifted more towards efficiency objectives.¹ New schemes such as *Regio Plus* and *InnoTour* were introduced to provide financial aid for innovation and co-operation projects. Numerous regional policy laws, however, still cover areas that in one way or another are “economically disadvantaged”, which means that objectives remain basically “disparity-oriented”. The shift in regional policy resulting from the NOREP has thus not yet boiled down to the level of policy tools. Many of these – such as investment grants or tax concessions – are still in the spirit of traditional regional assistance rather than an innovative support of regional competitiveness. Regional policy is opaque, and many of its instruments appear to be outdated. A more resolute shift of strategic policy objectives and tools should be followed if regional policy is to be distinct from sectoral policies and from financial and fiscal mechanisms contained in the NFE.

Regional policy in other OECD countries

Policy objectives

In most OECD countries, regional policy came into existence during the 1950s or 1960s to address the lagging position of industrial, rural, peripheral or upland areas. As in Switzerland, the objectives of policy were conceived in terms of reducing spatial disparities. Over the past 15-20 years, there has been a shift in these traditional policy goals, with regional policy now increasingly concerned with optimising the contribution of regional resources to the creation of national economic growth. It can be argued that the past 15 years form part of a transition process towards a new type of regional policy. Today, regional policy is supposed to meet the widespread and on-going requirement for regional restructuring, enhancement of competitiveness and productivity, continuous innovation and internationalisation. This is particularly true of smaller EU countries where regional differences are comparatively small and where the international competitive position of the national economy has been a primary policy concern in recent years, subordinating regional equalisation to efficiency goals and the need for continuous economic growth.

Nevertheless, the equity goals of regional policy have by no means disappeared. The main aim of regional policy in Norway is to “*maintain the existing settlement pattern and to ensure equality in living condition in all parts of the country*”. Finland defines balanced regional development, along with independent development within the regions and job creation, as one of the three main objectives of policy; while in Sweden the objective of regional policy has been to create regions that are “*economically, ecologically, industrially and socially equal*”. The 1995 framework law for regional development in France specified that, within an overall aim of contributing to national unity and solidarity, the objectives of regional development were

to achieve balanced national development. In Germany, the “*equalisation of living and working conditions in all parts of the country*” is enshrined in the Basic Law of the Federal Republic. In Japan, under the fundamental territorial goal of harmonised territorial development, a variety of regional policy tools, such as strategic investment, have been developed. In Korea, where regional disparity still remains a central political concern, attempts have also been made to introduce strategic investments for regional innovation.

Policy instruments

Among Western European countries, regional incentive instruments are of six distinct types: capital grants, interest or loan-related subsidies, tax concessions, depreciation allowances, labour-related subsidies and transport concessions (Table 3.6). In contrast to the situation in Switzerland, capital grants form the core of virtually all regional incentive packages. In some countries the only significant regional incentive that is available is a single capital grant scheme. Apart from Switzerland, regional interest-related subsidies or tax concessions are applied in only four countries and represent a relatively minor element of aid packages.

The types of support currently used across the EU reflect a shift towards simpler and more straightforward instruments. There has been a rationalisation of large-scale spending under regional incentive instruments, with the effective

Table 3.6. Regional incentive instruments in Western Europe

	Capital grant	Interest subsidy	Tax concession	Depreciation allowance	Labour subsidy	Transport concession	Maximum EC aid ceiling, ¹ %
Austria	•				•		40
Belgium	•	•			•		25
Denmark	•						25
Finland	•		•			•	35
France	•		•		•		30
Germany	•	•					35
Greece	•	•	•	•			75
Ireland	•				•		75
Italy	•		•				50
Luxembourg	•						25
Netherlands	•						25
Norway	•	•			•		30
Portugal	•	•					75
Spain	•						60
Sweden	•				•	•	35
Switzerland		•	•				Not available
United Kingdom	•	•			•		47

1. Ceilings given are maximum and apply only to certain designated areas. No regional aids are currently provided.

Source: Yuill, D., Bachtler, J. and Wishlade, F. (1999).

disappearance of automatic forms of regional aid. The present incentives are administered in a much more selective fashion. Policy administrators are exercising more discretion in the award of aid to firms, making aid conditional on the creation of specific numbers of jobs or level of investment. The focus on capital grants reflects, in part, the visibility and transparency of this type of aid instrument and the ease of administration. The policy shift also reflects the influence of EU competition policy. The EU Competition Policy Directorate in the last few years has kept a careful eye on regional assistance and has systematically controlled the types of incentive implemented by EU countries, enforcing the abolition of large-scale automatic assistance and operating aids. Very few EU member states are now in a position to grant operating aid to individual firms. The concessions operating in Italy, Sweden, Finland and Norway have all been challenged by the EU or are due to be phased out. Finally, the EU sets maximum ceilings for aids granted to individual firms for each category of designated area, which are reviewed periodically.

Assisted areas

In terms of the spatial coverage of regional assistance, countries vary considerably (Table 3.7). Western European countries can generally be compared in terms of the population coverage of their assisted areas. A clear distinction can be drawn between the traditionally less developed countries (Ireland, Italy, Portugal, Greece and Spain) and the remaining, essentially Northern countries. In the former group, areas holding more than half of the national population generally qualify for regional support and the entire population is eligible in countries like Ireland and Greece. In contrast, in nearly all of the other countries (including Switzerland), less than two-fifths of the national population can be found in designated problem regions. Germany and Austria employ two regional policy maps, one for industrial development, the other for tourism. Both Finland and Sweden have had economic development areas covering much of the country, as well as specialised and focused “structural change” areas. France, the United Kingdom, Japan and Korea, like Switzerland, have had several different maps for various policy measures, designated according to different criteria. Countries also differ in their approaches to area designation. Some states (*e.g.*, Germany) undertake area designation exercises on a regular basis. In other countries, like Greece or Spain, the redrawing of problem region boundaries takes place on a less frequent basis and with less explicit area designation systems.

“Regional problems” are reflected through a multitude of indicators which can be grouped together into six categories: unemployment, income per capita, industrial structure, economic prospects, demographic indicators and location criteria. In a wide range of countries, and particularly the more developed countries, rates of unemployment are viewed as a prime indicator of the existence of a regional

Table 3.7. **Spatial coverage of problem regions in Western Europe**
In percentage of the population in designated areas¹

	Designated area	1980	1998
Austria	Aid areas	–	35.2
Belgium	Development zones	39.5	35.0
Denmark	Development regions	27.0	20.2 ²
Finland	Development areas	–	41.6
France	PDR/PAT zones	38.2	40.9
Germany	GA areas	36.0	38.0
Greece	Regions B-D	65.0	58.0 (100) ¹
Ireland	Designated areas	28.0	28.0 (100) ¹
Italy	Law 488 areas	35.6	48.8
Luxembourg	Designated areas	100.0	42.5
Netherlands	IPR areas	27.4	15.6
Norway	Aid areas	–	26.0
Portugal	Designated areas	–	49.0 (100) ¹
Spain	Development zones	–	60.7
Sweden	Aid areas	28.6	13.5
Switzerland	IHG areas	25.0	25.0
United Kingdom	Assisted areas	45.5	36.8

1. Designated area is less than the area eligible (100%) under EU competition policy rules.

2. Incomplete data for 1980. No regional aids currently being provided.

Source: Yuill, D., Bachtler, J. and Wishlade, F. (1999).

problem. France, Germany, the Benelux countries, the United Kingdom and the Nordic countries all place considerable stress on unemployment in their area designation systems. GDP per capita, although extensively used by the EU Commission, poses some problems since appropriate statistics are not available at the regional level while, in others, GDP per head measures are not subject to significant regional variation. As in Switzerland, the Nordic countries, Japan and Korea emphasise geographical location in relation to markets and topography. In France, considerable emphasis is placed on geographical criteria like mountain regions and rural areas, as well as on levels of urbanisation. In Germany, a complex measure of regional infrastructure provision is included; in Portugal the “degree of accessibility” of each region is taken into account; and in the United Kingdom both peripherality and level of population density are considered. The Nordic countries also use demographic criteria, notably out-migration or population density, as area designation criteria. Japan and Korea also focus on geographic characteristics such as islands, mountains, as well as on demographic and economic indicators.

Expenditure

Expenditure on regional aid in Switzerland appears to be relatively low. Switzerland spends around CHF 35 (EUR 22) per head for regional policy

purposes. Although figures are not available for direct comparison with other countries, among EU member states, grant expenditure (under regional aid) per head of the regional population is highest in Germany, Ireland, Italy and Luxembourg where regional aid per head (in 1996 – latest date) ranged from EUR 100 to EUR 180 per year. In a second group of countries – Sweden, the United Kingdom and Norway – expenditure per head per year ranged between EUR 50 and EUR 90, while the remaining EU countries had very low expenditure figures of EUR 10-30 per head per year. Leaving aside the LIM (which is focused on infrastructure), it is probable that the regional aid spending in Switzerland would fall within the lower range of expenditure among EU countries. Moreover, there are different patterns and trends in expenditure on regional aid. In most developed countries, there has been a long-term trend of declining expenditure on regional incentive instruments over the past decade, following reduced aid ceilings and a shift away from automatic aid. By contrast in most of the cohesion countries, such as Germany and Italy, the trends have tended to fluctuate over the past decade, generally in an upward direction.

European aspects

While there is no immediate prospect of Switzerland joining the EU, it is worth considering the degree to which Swiss regional policy can be considered compatible with the legislative basis and operational principles of the EU approaches to regional policy. In this context, four points are worth noting.

Eligibility for EU support. It is unlikely that any Swiss regions would qualify for major EU support under the Structural Funds. With respect to the quantitative assessment criteria, GDP per capita levels are well above the Objective 1 threshold (75% of EU GDP per capita) and unemployment rates are well below the EU average. There is a possibility that some tourist, mountainous or peripheral regions might be able to make a case for Objective 2-type support, but it would be minimal. Moreover, the enlargement of the EU will lead to a significant shift in resources to the Candidate Countries of Central and Eastern Europe. There would nevertheless be the possibility of support under the Community Initiatives, which will be the main form of EU regional policy assistance in the richer countries after 2006, such as URBAN and LEADER. These initiatives are essentially local development programmes, focusing on community economic development and social exclusion. Cities such as Zurich and the remote, mountainous areas such as Graubünden, and the old-industrial areas of the Jura are similar in type to areas of EU countries that could qualify for support.

Competition policy. A key regulatory feature of the regional policy environment in the EU is competition policy. Under the EU's State aid rules, the Directorate-General for Competition in the EU has, over the past 20 years, increasingly

controlled the regional aid provided by Member States. This has influenced the spatial coverage of assisted areas, the area designation methodologies, the award ceilings for regional aid schemes, the transparency of the aid provided and the differentiation of award rates. Swiss regional aid schemes in general will probably have little problem with the EU competition framework since instruments are broadly similar to those applied in the EU. The spatial coverage of the Swiss regional aid schemes is not excessive by comparison, and the award rates are comparable to the aid maxima in the richer EU countries. Regional aid provided is not significant in value terms, mainly because there is little investment grant support under Swiss aid schemes. However, a difficult competition policy issue might relate to tax competition and “special assistance”. Swiss subnational authorities, supported by the federation, can provide special, one-off assistance in the form of cheap land, tax concessions and other forms of individual support. The EU has been making great efforts to identify and control such forms of assistance. While it has no powers to harmonise taxation levels, and while there is a “grey area” in determining when tax rates are deemed as subsidies, discretionary tax concessions and interest subsidies might come under its close supervision and might raise some problems for Swiss regional policy.

Partnerships. The principles of EU regional policy – notably programming, and partnership – are already partially established in Switzerland. The approach of the LIM, requiring the creation of regional development concepts and development plans, is similar to the requirements for regional development planning under the Structural Funds (indeed, the LIM approach predated the 1988 reform of the Structural Funds). The regional development secretariats created under LIM may share common features with the programme secretariats and management executives used for managing and delivering Structural Fund programmes. The partnership principle also features in Switzerland at local level within the LIM and at regional level under *RegioPlus*, although it is perhaps less formalised than is the practice in the EU. Moreover, today it is not clear to what extent the economic and social partners, the voluntary sectors and environmental bodies are involved in Swiss economic development programmes.

Decentralisation. In any discussion of Swiss-EU policy relationships, it is important to consider issues of “policy transfer” in both directions. In several key respects, Swiss regional policy has lessons for the EU, most notably the highly decentralised approach to local economic development and the significant levels of autonomy of subnational jurisdictions. Although the regional policies of EU countries are becoming more decentralised, local communities are not about to be engaged in the design or delivery of regional policies. There are undoubtedly lessons which the EU could learn from Switzerland by fostering more study and exchange of experience. More generally, it should be emphasised that the Swiss approach of bottom-up decision making fits in with modern thinking about

effective territorial policy. Indeed, these aspects of Swiss federalism are regarded positively by other countries that are progressively and sometimes painfully trying to devolve more economic development responsibilities downwards.

Territorial effects of sectoral policies

Overview

Sectoral policies can have an impact on territory in various ways; directly, through spatial changes and through fiscal transfers. Sectoral policies have transformed the physical appearance of territory in order to achieve individual objectives, such as designating spatial areas for nature protection or building infrastructures. Sectoral policies have economic effects as well by transferring significant amounts of national resources to regions. Irrespective of their original purpose, sectoral fiscal transfers change regional disparities by selecting some regions or entities as target recipients. Some sectoral policies have strategic effects to raise the economic capacity of certain regions or to enhance the sustainability of development. Although explicit federal industrial policy barely exists in Switzerland (*i.e.*, growth pole policies, support for strategic industries, etc.), some sectoral policies share with current regional policy the objectives of regional innovation and sustainable development.

Regulatory reforms have considerably affected the utility sector and sectoral policies. The trend of liberalisation of public utilities (*i.e.*, electricity or water) and other public services (*i.e.*, public transport or postal services) has reached Switzerland, although with some delay compared to the EU. Market liberalisation in Switzerland has proved to bring better service quality and/or lower prices and positive economic effects in general, but public services in remote regions could in some cases be negatively affected, and jobs could disappear. Regulatory reforms thus clearly have territorial impacts. Public authorities, particularly the Confederation, will have less control over the territorial effects of public service provision as these services will become increasingly detached from political considerations. While firmly remaining on the path of deregulation, the government should consider finding new tools with which to combine minimum public service access (universal services) in all parts of the country with efficient delivery.

Physical effects of sectoral policy

A broad range of sectoral policies had formed and transformed the Swiss territorial landscape through an accumulation of spatial effects long before spatial planning policy was developed in the 1970s. The comparative regional advantages and disadvantages described in Chapter 1 are partly attributable to these policy efforts.

Transport policy

Transport development has drastically transformed Swiss territory. The road transport network grew by about 160 km annually in the 1970s and by 960 km in the 1980s (Table 3.8). From 1987 to 1995, GDP share of Swiss inland transport investment was the highest among European countries (European Conference of Ministers of Transport, 1999). This development has raised the comparative advantages of regions by progressively improving their accessibility. Transport infrastructure occupied 2.1% of the Swiss territory in 1998. Transport development, however, has also accelerated further urbanisation and urban sprawl and has led to environmental degradation. Since differentiated road pricing and green taxes are not widely applied – apart from the heavy vehicle tax introduced in 2000 – transport and spatial policy lack strong tools to tackle pollution and urban sprawl. The recent policy shift from road to railway construction has redirected not only Swiss territorial development but also, indirectly, that of Europe. Switzerland appears to be a forerunner in this field: a current top priority issue in the EU's common transport policy is to revitalise railways and to raise the percentage of freight carried by rail, which was at only 14% in 1996.

Table 3.8. Road and rail investments in Switzerland

In millions of CHF

	1960		1980		1998	
	Millions CHF	%	Millions CHF	%	Millions CHF	%
Road investments ¹	490	78	2 576	83	3 815	61
Rail investments ²	140	22	519	17	2 408	39

1. Including renewal and maintenance.

2. Including improvements and maintenance.

Source: Swiss Federal Office for Transport (2001).

Growing concern over the external costs of road transport has led to a reorientation of Swiss transport policy and its closer link toward spatial organisation. As far back as the 1980s the Federal Council made the decision not to extend the national road network beyond the level that had then already been planned. In 1994, there was an important turning point for transport policy when the Swiss voted for the Alpine Initiative in order to protect the Alpine environment. The resulting constitutional amendment requires that all freight transit through the Alps be transferred from road to railway by 2005. In 2000 the kilometre-based Heavy Goods Vehicles Tax (HGV) was introduced. The tax is based on the “polluter pays principle” and levied on the basis of the number of kilometres a Swiss or foreign vehicle travels on Swiss territory. It is expected that the significant cost

increases of road transport will be an incentive to use railways. Two-thirds of the revenues from this tax will be used to finance NEAT rail tunnel projects and other public transport infrastructure investments, and a part will be channelled to the cantons. While these policies will affect transport throughout the country, their spatial effects on individual regions remain to be identified.

Until the 1990s, transport policy in Switzerland had been rather fragmented and on a sector-by-sector basis. In 1999, the overall objectives of a Swiss transport policy were defined as follows: protection of the natural environment based on the precaution principle and the polluter pays principle; economic efficiency by means of modern modes of service delivery, the application of market rules and contractual service agreements; and social solidarity in the sense of providing access to all parts of the country and to modern services for all strata of population and for all parts of the country. This was followed by a federal administrative reform, under which the authorities of transport and environment were merged into one organisation, the Federal Department of Environment, Transport, Energy and Communication. Moreover, the HGV tax was an important step toward achieving both economic and environmental objectives. However, in order to further harmonise transport policy with spatial, social and environmental development objectives, further steps towards sustainable transport will have to be taken.

Agricultural policy

Agricultural policy has spatially affected the territory in several ways. Its most important contribution has been to slow down the depopulation of rural areas and the decline in cultivated land; nonetheless, since the mid-1990s, total agricultural land has been decreasing, and the number of farms has fallen by 1% to 2% annually. Agricultural authorities have also supported infrastructure development (agricultural roads, irrigation, etc.) and farmland improvement. The proportion of resources allocated to infrastructure improvement is relatively smaller than other agricultural expenditures, but still an important amount has been invested in individual rural areas, the financial capacity of which is relatively modest (Table 3.9). The spatial effects of agricultural infrastructure development on rural areas are significant, as 87.2% of these expenditures were invested in hilly and mountainous areas.

Traditional Swiss agricultural policy was characterised by a strong focus on self-sufficiency and price support, which led to overproduction and environmental damage. While Swiss agricultural policy was broadly in line with EU policy, since the mid-1990s it has changed course and is moving slowly toward sustainability. The main objectives of the new agricultural law of 1999 are environmental sustainability and functioning markets for agricultural products. The principal policy tools are the separation of price and income policies and the introduction of direct

Table 3.9. **Agricultural expenditure in Switzerland in CHF**

	1992	1998	2000	2003
Market support	1 626	1 152		787
Direct payments	870	2 216		2 419
Improvement of infrastructure	148	118	340	272
Total	2 644	3 396		3 787

Source: Swiss Federal Office for Agriculture (2001).

payments for ecological services. Several types of direct payments to farmers were introduced in 1993 and in 1997. The emphasis on ecological services will reduce negative environmental effects and contribute to maintaining the landscape. In 1998, 84% of agricultural land was cultivated in conformity with ecological and biological standards, the highest percentage in Europe. Although agriculture is still heavily subsidised, exerting considerable pressure on the federal budget, the new policy tools conflict less with WTO rules and are more targeted towards environmental services and amenities.

Environmental policy and amenity protection

Environmental policy has reduced and prevented negative environmental effects on the territory through area designation, environmental regulations and investment in environmental management infrastructure. Switzerland has invested considerably in pollution control. In the past 20 years, around CHF 40 million were invested in wastewater infrastructures which ensure the good physical-chemical quality of many watercourses. Currently, 94% of the population is connected to wastewater treatment plants. Ninety per cent of waste is now incinerated in appropriate facilities. Land filling was totally banned in 2000. New attempts have been made to charge for waste collection, recovery and disposal by establishing the polluter pays principle. The high maintenance cost for environmental facilities, however, is a problem. Since many of these activities are considered local or regional public goods for which municipalities or cantons are responsible, the federation will gradually phase out financial support.

Natural amenity protection is a particularly sensitive policy field. In Switzerland, some 18.0% of the territory are classified as protected areas under the federal framework for nature and landscape protection. Spatial coverage of protected areas is higher in Switzerland than the OECD average (12.6% of the surface), lower than Austria (29.2%) and Germany (26.9%) and higher than France (10.1%) and Italy (7.3%) (OECD, 1999b). The federal inventories, based on the Law for Preservation of Nature and Landscape (NHG), are the core policy instrument of nature and

landscape preservation. The inventories are binding for federal authorities, but not for subnational entities. This means that protection of many sites is not entirely secured. Altogether, the levels of protection vary by canton but are relatively weak. Moreover, total federal grants for nature and landscape protection are relatively modest (CHF 43 million in 2000 and decreasing). The relatively low aid level has ecological as well as economic impacts in rural areas. Amenities such as vulnerable nature and landscape protection zones are under pressure due to urbanisation, and local authorities will not always favour protection. If they do, they often forego financial resources and development opportunities. Local authorities often feel a tension between development – which creates local revenue – and amenity protection – which does not. This tension exists even in tourist areas that generate revenue by exploiting their amenities since there is always a danger of overexploitation.

Disparity reducing effects of sectoral policies

Through sectoral transfers of financial resources to recipients at the territorial level, the Confederation exerts considerable influence on spatial disparity patterns and their evolution. The federal budget with its expenditure of over CHF 46 billion is an actual transfer budget. Approximately two-thirds of federal expenditure (CHF 28 billion) are transfers to third parties. The proportion of each sectoral policy transfer remains largely stable with the exception of the recent increase for education (Table 3.10). Transport, in particular road construction, and agricultural direct payments are two major sectoral transfers, accounting for 21.1% and 12.5% of the total, respectively. Subsidies and grants for education and basic research increased in 2000 totalling 11.4%. Compared to the amount of these sectoral transfers, expenditures for environment and for territorial development, that include various tasks such as aids for cantonal planning, regional secretariats or amenity protection, are much smaller. Compared to major subsidies, the amount of LIM loans is also negligible, amounting to about 0.3% of total subsidies.

Sectoral subsidies account for a share of 14.1% of cantonal budgets (Table 3.11). However, the proportion of subsidies in a cantonal budget varies among cantons: it is larger for predominantly rural cantons than for intermediate cantons, and for predominantly urban cantons it is half of what predominantly rural cantons receive, although the absolute amount that some urban cantons receive is substantial. In predominantly rural cantons, sectoral subsidies for agriculture and national roads totalled more than half of total subsidies allocated, while in predominantly urban cantons, a greater share of subsidies is devoted to social welfare and education. The most important sectoral subsidies – in particular those for agriculture and for local roads – are thus largely oriented by equity objectives to achieve urban-rural balance.

Table 3.10. Major sectoral grants and subsidies related to territorial development

	1990	1995	1999	2000
Billion CHF				
Grants and subsidies	16.8	22.7	26.5	28.1
%				
Transport	26.3	25.6	22.3	21.1
Roads	13.3	12.2	10.7	10.1
Agriculture	14.7	14.7	15.0	12.5
Direct payments	4.6	8.0	9.0	7.9
Education	7.8	8.0	6.6	11.4
Environment	2.4	2.0	2.4	2.2
Territorial development	0.4	0.3	1.0	0.6

Note: Fiscal transfer here include not only those for local governments but also those for the private sector, which are not always allocated by geographical criteria.

Source: Swiss Federal Administration of Finance (2000).

Table 3.11. Sectoral transfers by type of cantons

	Subsidies as % of total cantonal expenditures	% of total subsidies					
		Agriculture	National roads	Other roads	Social welfare	Education	For comparison: amount of LIM loans
Predominantly rural cantons	23.7	32.5	23.8	10.6	13.0	2.1	1.8
Intermediate cantons	16.2	29.4	17.2	7.7	21.6	6.5	0.9
Predominantly urban cantons	11.1	15.9	24.4	6.1	20.8	11.2	0.2
Average of all the cantons	14.1	26.1	21.2	8.0	19.0	6.8	–

Note: The figures include subsidies for cantons but not grants for the private sector.

Source: Swiss Federal Administration of Finance (2000).

The cumulative economic effects of all transfers are difficult to evaluate. Eligibility criteria for sectoral policies may overlap. In some cases, the accumulation of different sectoral grants can lead to over investment and opportunistic behaviour by the recipient (*i.e.*, windfall gain) who would have made the investment anyway. The NFE fiscal reform will reduce over-investment through sectoral policies since it will separate transfers from fiscal equalisation, thereby considerably increasing unconditional grants at the expense of earmarked grants. Cantons may then use hitherto sectorally defined grants according to their own priorities. Apart from reducing over-

investment, the implementation of the NFE will also allow the Confederation to make a strategic shift: it will be able to increasingly use sectoral policy strategies and associated transfers for national priorities and strategic objectives, such as sustainable development, instead of for regional distribution and equity.

Territorial advantages and sustainable development

In Switzerland, there is no real and encompassing economic policy to address regional development. Development policies are primarily the task of the cantons. However, the Confederation, through its sectoral policies, exerts considerable influence on certain territories. In the following section, transport, agriculture and environmental policy are presented and analysed, with a view to their contribution to sustainable economic development. Education, innovation and knowledge transfer (“learning regions”) are examined in Chapter 5.

Transport policy

Transport policy provides key policy instruments for cantonal spatial development. The transport industry has significant economic effects as well as disparity-reducing effects. Transport investment has an economic impact first through infrastructure construction in regions. Despite the budget cut in the 1990s, public works remains one of the two important building sectors together with housing. Compared to the national average, the proportion of employees in the construction sector is higher in predominantly rural cantons. In some areas this has maintained an oversized building sector which in the long run may not be economically viable. The economic effects of the construction of the two new tunnels will extend to neighbouring regions. In urban agglomerations, improving the urban transport system can regenerate the city centre and lead to regional economic growth. The subsequent economic effects of transport development should be carefully evaluated and incorporated into a region's territorial strategy so that it can be effectively linked with other policies.

Environmental and amenity policy

Environmental and amenity policy can be an advantage, particularly for rural regions, if they make use of the amenities that lie on their territory. Given their strong public goods characteristics, they require specific support from the public sector. Currently, investment into amenity protection is rather modest. Moreover, the Confederation has little regulatory power to create national parks or to support the creation of regional parks. Under *RegioPlus*, several initiatives have been launched to develop nature parks for sport and soft tourism purposes, but financial means are limited. Given that tourism is an important source of income for rural regions but may also threaten fragile areas, such initiatives could balance the

traditional tourism development projects. An interesting policy measure is the Swiss Landscape Fund that has specifically been designed to protect and develop man-made amenities in rural areas and to implement environmentally sustainable tourism projects. This Fund, given its explicit scope of job and revenue creation for sustainable projects, could be a key element in striving for balanced development in rural areas. In general, the federal level, together with the regions, should elaborate a sustainable amenity development strategy for rural areas, and provide the financial means needed to protect amenities while at the same time pricing them.²

Agricultural policy

Reforms of Swiss agricultural policy will bring agricultural support closer to the market and to environmental sustainability. The structure and tools of Swiss agricultural support, albeit higher than in EU countries (70% compared to 40% of producer income), will conform better to the requirements of international trade agreements. The new policy tools provide opportunities for rural regions, particularly those that are rich in amenities whose potential has not yet been fully exploited. However, if the often-stated policy objective of “multifunctionality” is to become true, this calls for a much clearer shift of agricultural support away from income support towards incentives for producing environmental and other public goods. The government should even consider opening agricultural support measures to any producer who provides land-related services such as landscape protection or amenity conservation. This could be a starting point for a general fund for the support of rural regions. It would not only allow people other than farmers to produce rural amenities, it would also give rural regions much more autonomy over the use and distribution of financial resources.

Territorial effects of regulatory reform

In 1993, soon after the Swiss rejected participation in the European Economic Area agreement, Switzerland launched an integrated effort of structural reform. The Revitalisation Programme proposed an extensive range of regulatory reforms, including for utilities and agriculture. In order to catch up with trends in the EU, a gradual opening of the Swiss market is being attempted for almost all public utilities. Regulatory reforms will, in general, lead to greater economic efficiency but may have asymmetric distributional impacts on the territory (Thierstein and Abegg, 2000) Reform gains in terms of efficiency and budget savings are likely to outweigh negative territorial effects, however. These gains will allow for the compensation of any negatively affected region.

Deregulation during the 1990s encompassed different sectors. In 1997, the Swiss postal and telecommunications monopoly PTT was split into two companies, the Swiss Post Office and Swisscom. In 1998, Swisscom was partly privatised and

freed from government control. With free market access to the cable and mobile markets from 2000 onward – which brought more than 100 private operators – prices sank to levels lower than the average prices in OECD countries. This holds true for all, even the remotest, regions in Switzerland. However, Swisscom continues to dominate the local telephone market which has resulted in high Internet access costs in Switzerland. Contrary to the dynamic changes that have taken place in the telecommunications market, reform of the postal services is slow. The Swiss Post Office, which is a 100% state-owned company, is still responsible for universal service. Although some services, such as parcel delivery and express mail, are already under intense competition, regular/ordinary mail services remain in the hands of the Swiss Post Office monopoly, and market opening has gone less far than in the EU. There is a proposal to reorganise the postal services and reduce the 3 600 post offices, but this has met with strong resistance, particularly from remote regions.

Railways are still heavily subsidised by the federal and cantonal governments and hardly exposed to competition. In 1998, the new federal act on railways and other legislation on their restructuring were passed by the Parliament and came into force in 1999. Third party access is warranted for freight but not for regular passenger services. Liberalisation has not yet occurred in the Swiss electricity industry, although the Swiss Electricity Market law (EMG), calling for gradual market opening, was passed in 2000 (in the wake of the 1997 EU directive). A popular vote on this issue is expected for autumn 2002. Electricity deregulation will have substantial territorial effects in Switzerland, where hydropower accounts for about 60% of total annual electricity production. The potential efficiency gains are expected to be very high, and the federal government should actively strive for approval in 2002. Potential loss to mountain areas in terms of lower electricity royalties could be caught up with specific funds that equalise to some extent and during a limited period the difference between current and future revenue from taxing electricity production and transport.

Elements of territorial policy reform

During the last decade, territorial policies have been reoriented towards the three main objectives of equity, economic efficiency and environmental conservation. The Spatial Planning Policy Guidelines of 1996 show an approach towards territorial organisation that would help reach these strategic objectives. During the 1990s, policy tools to enhance economic efficiency and environmental quality were introduced: deregulation in the public service industry to enable higher service quality and lower prices, and taxes based on the user pays and polluter pays principles in the transport sector. The objective of territorial equity, will be tackled by the NFE fiscal reform. An effective fiscal reform that provides all regions with sufficient resources to follow their own development trajectories

would increase local autonomy and make many direct policy interventions redundant. The NFE reform is therefore a good occasion to rethink and redefine various federal policies. The following policy proposals are thus based on the assumption that the NFE reform will pass.

Foster efficient land use

Given the high value Switzerland attaches to open space and the preservation of non-built zones, federal spatial development policy should foster the efficient use and management of land. The overall spatial strategy thus should be to reduce external cost of land use. Economic activities should be concentrated on land that is already built and transformed, and planning tools should be adapted accordingly. Moreover, land use patterns and the level of external costs depends greatly on sectoral activities and policies with a strong spatial impact, namely transport of people and goods. Spatial planning and transport policy should thus be co-ordinated, and market-based policy instruments (*e.g.*, road pricing or other demand-management schemes) should be developed in order to promote transport modes, which favour concentrated settlement structures. Finally, political fragmentation of functional areas requires a stronger horizontal co-ordination of cantonal spatial development planning. The federation should thus help cantons to develop a more coherent spatial structure across their territories.

Redefine territorial coverage and tools of regional policy

Although regional policy objectives were redefined in 1996 through the New Regional Policy reform (NOREP), policy tools have remained largely the same, and regional policy has become even more opaque. With the possible advent of the NFE reform, equity objectives may be entirely abandoned in favour of efficiency objectives. These would include first a coverage of the whole territory of the country, including rural areas other than mountains and particularly urban areas which currently face major challenges. Reorientation also includes the policy tools for regional support. The present support of single firms through tax concessions, interest subsidies and loan grants should be replaced by more indirect support from which all firms or other actors of a certain region may benefit. The type of federal action being provided under *RegioPlus*, stressing horizontal collaboration among jurisdictions, would seem to be a good example of how a future Swiss regional policy could be shaped.

Put more emphasis on sustainable development in rural areas

Territorial policy reform should include reforms that are based on advantages in rural areas other than agriculture and that can exploit these advantages in a sustainable way. At present, federal support of amenities in rural areas is relatively

weak. Given the public goods nature of rural amenities, regions may be responsible for their maintenance and preservation, but are deprived of the revenues generated by these resources. The Confederation should thus give priority to developing a rural amenity strategy and the policy tools associated with them. Different instruments, such as the creation and financial support of national parks, cooperation with cantons to foster regional nature parks, promotion of protected local brand names or setting up of amenity markets have been successfully tested in other countries. Particular attention should be paid to mountain areas. The Alpine Convention, which was signed by all Alpine countries and which tries to establish an equilibrium between economic development in and protection of Alpine areas, could be the first “pilot project” for a new encompassing, territorial approach towards sustainable development in rural areas.

Introduce minimal standards for public services

The deregulation of public services, such as public transportation, postal services, telecommunication or electricity, leads to more quality and lower prices. These efficiency gains will allow the federal government to compensate those regions, if any, that may be negatively affected by reforms. The federal government should act in two ways. First, eventual service level reduction may be prevented through an explicit definition and extension of minimum standards for crucial public services across the country, such as is the case today for public transport. Moreover, all public services should be subject to tendering. These politically defined services could then be handed over to cantons through the “programme contract” mechanism provided by the NFE. This way, subsidies for public universal services become transparent. Second, the loss of job opportunities and the need to restructure the local economy should be caught up by financial transfers such as the NFE or specific global funds for affected areas. These resources should be at the free disposal of the regions.

Notes

1. For example, the area designation criteria for the BWE shifted from industrial mono-structures to employment and labour market development.
2. For more details on problems of amenity protection and amenity-based rural development see OECD (2000a).

Metropolitan Areas

Introduction

Metropolitan areas play a key role in the economic and spatial development of Switzerland. Today more than two-thirds of the Swiss population live in urban or urbanised areas, making Switzerland one of the most urbanised countries within the OECD. Cities have since long crossed the old boundaries and today extend over a large number of independent jurisdictions. Structural changes have shifted the gravity of economic development towards the large urbanised areas, where economic growth rates lie above the national average. Development prospects of the Swiss economy thus depend more and more on functionally efficient metropolitan areas. The long-term urbanisation process has, however, created internal tensions and imbalances. Growth of agglomerations and outmigration towards the suburbs, motivated mainly by the search for less pollution and more adequate housing, led to functional separation between workplace and residence. Since it was mainly the middle and upper income classes that moved to the suburbs, functional separation was followed by social segregation. Today, suburban areas enjoy an increasing standard of living, whereas the central cities have to cope with decreasing tax revenue, increasing social welfare expenditures, unemployment, pollution and drug abuse.

Functional separation and social segregation are common trends in many OECD metropolitan areas. What makes the Swiss case somewhat particular is that the strong institutional and fiscal decentralisation of the country turns them into a vicious circle. Since the tax system is highly resident based, middle and upper classes leaving for the suburbs deprive the central cities of tax revenue. At the same time, since social assistance and welfare are essentially municipal, the higher concentration of population that depends on social welfare leaves the cities with increasing expenditures. The reaction of local governments to increasing budget deficits is to raise taxes or to reduce public services that benefit the middle classes, which leads to an even stronger exodus of the wealthier population. This self-sustainability of internal imbalances not only has a negative impact on living conditions for residents and the business community in the central cities.

Imbalances also interfere in various ways with the functioning of the whole metropolitan area. Problems associated with governing metropolitan areas in a fragmented framework will thus be the main issue of this chapter. The following sections identify some of the forces that shape metropolitan spatial and social structures, the specific internal problems of agglomerations, and it presents some arguments for a future agglomeration policy.

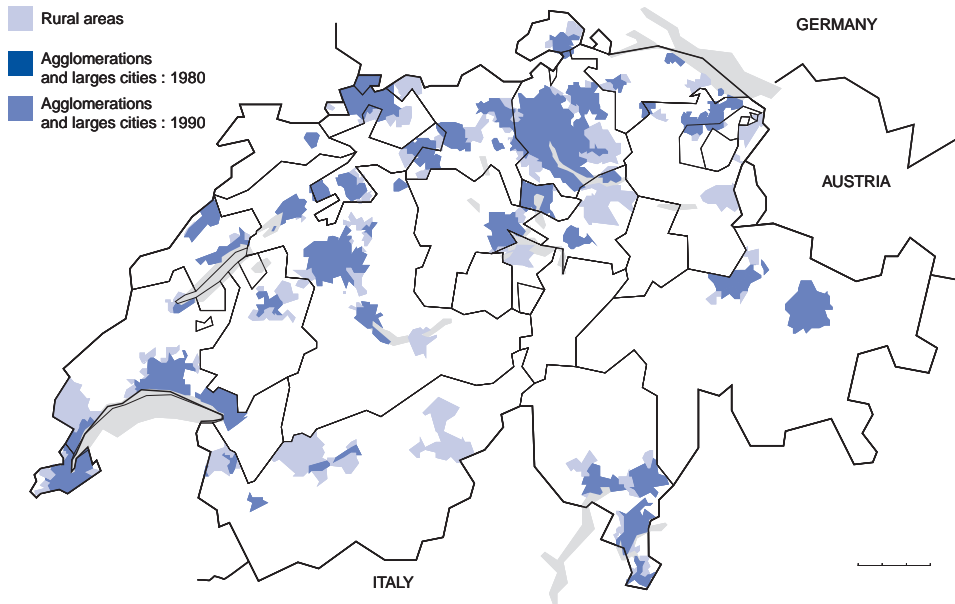
Functional separation and social segregation in metropolitan areas

Growth and suburbanisation

Swiss urban areas have grown during the last 30 years across the borders of the inner cities. Today they expand towards the fringe of the adjacent agglomeration municipalities, covering at least two cantons, and in the cases of Basel and Geneva agglomerations, also go across national borders (Figure 4.1). The extension of the cities into the countryside was led by a secular trend of urbanisation and agglomeration advantages mainly in the large cities of Zürich, Basel and Geneva that attracted an increasing number of specialised business sectors. Some of the larger agglomerations areas even merged into larger metropolitan areas, first identified in 1990, *i.e.*, complexes made up of several closely interconnected agglomerations: Zurich, Berne, Basel, Geneva-Lausanne and Ticino. The Zürich metropolitan area alone, consisting of several agglomerations, counts for more than one million people, one-sixth of the total Swiss population. This pattern confirms the general centre-periphery dichotomy that has evolved in the last decades in Switzerland (Swiss Federal Statistical office 1997). Whereas the canton of Zürich, for instance, had an annual GDP per capita growth rate of 2% between 1995 and 2000, the national economy grew by 1.1% only.

In 1990, 68.9% of the population lived in urban agglomerations, defined on grounds of spatial interconnectivity, population size and commuting patterns. This makes Switzerland one of the most urbanised countries of the OECD, as shown in Chapter 1. The emergence of large metropolitan areas has even further complicated the agglomeration structure. The strong dichotomy between the central city hosting the business district and the agglomeration embracing residential areas has given way to a more mixed structure of living and working. Smaller satellite areas within the agglomerations are increasingly transformed into workplace areas which reduces the strong dichotomy that existed hitherto; some of these smaller city centres today also have the function of a workplace hub. Switzerland's urban structure can therefore be described as a highly urbanised, hierarchically organised complex of large, medium and small towns, which are complementary in functions. This urban fabric of the country is for its greatest part made up of small to medium-sized agglomerations. The hierarchy of urban areas more or less mirrors population size.

Figure 4.1. The growth of metropolitan areas in Switzerland
1980-1990

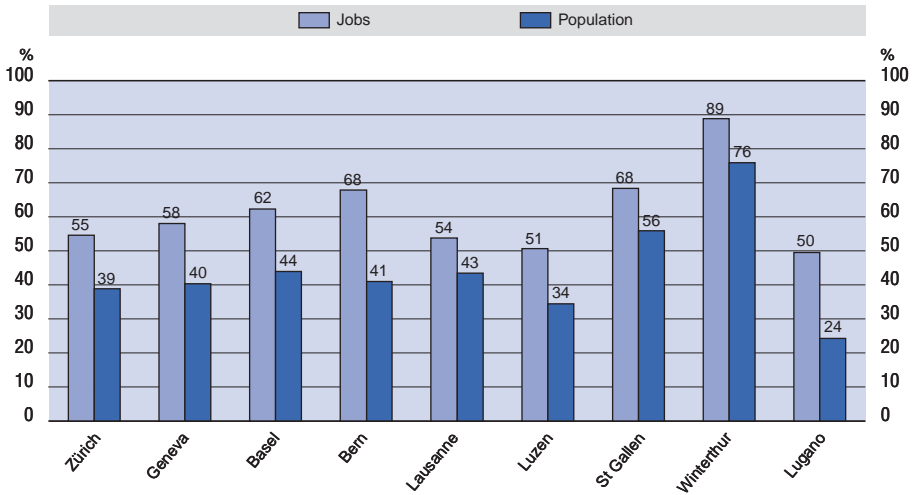


Source: Swiss Federal Statistical Office (1997).

The growth of agglomerations and their extension into the countryside has been accompanied by functional and social segregation. The term “functional separation” means spatial separation of residence and workplace, particularly the out-migration of the population to suburban areas. Agglomeration economies have led to a concentration of business in the city centres whereas the residential areas expanded into the suburbs. Since the 1960s, the largest cities of Switzerland have lost population although the agglomeration in total has grown larger. Today the central cities show a much higher residence to workplace ratio than the surrounding municipalities (Figure 4.2). In recent times, statistics also indicate that even employment growth is higher in some suburban areas than in the central cities, *i.e.*, jobs also have started to move outwards. Suburbanisation and functional separation increase pressure on rural areas, put a high burden on private and public transport networks, and deteriorate environmental quality, thereby counteracting stated spatial development objectives.

Functional separation is paralleled by social segregation, *i.e.*, a spatial differentiation in income categories. Suburban areas offer relatively better housing and

Figure 4.2. **Employment and population in metropolitan areas, 1990**
Share of jobs and residents in the central city



Source: Swiss State Secretariat of Economic Affairs (1999).

environmental quality than do the central cities. Middle and upper-income classes moved out of the city centres and took advantage of space and environmental quality in the suburbs. Given the short commuting distances, living in the suburbs can still be combined with using the facilities of central cities. Today, the suburbs account for a disproportionate percentage of high-income population. The city centres are left with the less privileged strata of the population whose freedom of choice to move to the suburbs is restricted. Those inhabitants are also attracted by downtown areas for a number of reasons such as anonymity, the larger number of social assistance centres available, and the fact that it is easier to qualify for social benefits than in smaller municipalities. A large proportion of the poor, trainees and apprentices, unemployed, foreigners and single persons today live in the inner cities. The city centres therefore concentrate a disproportionate percentage of people depending on some form of social assistance. Social segregation has become a spatial problem.

Decentralisation and urban governance

Functional separation and social segregation are not problems of Swiss cities alone. Suburbanisation of the metropolitan population is widespread and occurs in many countries. Locational choices of individual households and business enterprises are influenced by local taxes in relation to the mix of local public

services that can be obtained at a certain place. The resulting spatial pattern where a central business sector is surrounded by residential areas reflects relative scarcity of soil in the cities as well as preferences of citizens for a certain living environment, both of which are not detrimental to metropolitan areas *per se*. However, some aspects of the Swiss political and fiscal system exacerbate functional and social segregation.

Swiss subnational entities strongly depend on resident-based income taxation and attract residents through a good combination of tax rates and the quality of services. People leaving for the suburbs reduce the major tax base of the cities. At the same time, since cities are responsible for support of the less privileged strata of population, they have to cope with soaring social assistance expenditures, particularly in times of economic crisis. To balance municipal expenditure and revenue, cities have to raise tax rates or to lower quality of public services, both of which may fuel further outmigration to the suburbs. Land use regulation, which in Switzerland is under almost exclusively municipality responsibility, fuels social segregation even more. The favouring of single-flat constructions over multi-storey buildings limits access to property and/or renting in the suburbs for people that reach a certain income threshold only. This again forces the poor into the inner cities where cheaper apartments are offered. Commuting is directly or indirectly subsidised: public transport fares are regulated beneath full cost recovery, and private transportation, albeit fully covered through special fuel and vehicle taxes, causes external environmental costs. The resulting low transport prices make outmigration even more attractive. Finally, the resulting environmental degradation in the form of air pollution and noise in centre-close areas acts as the final trigger to live in ever more distant places.

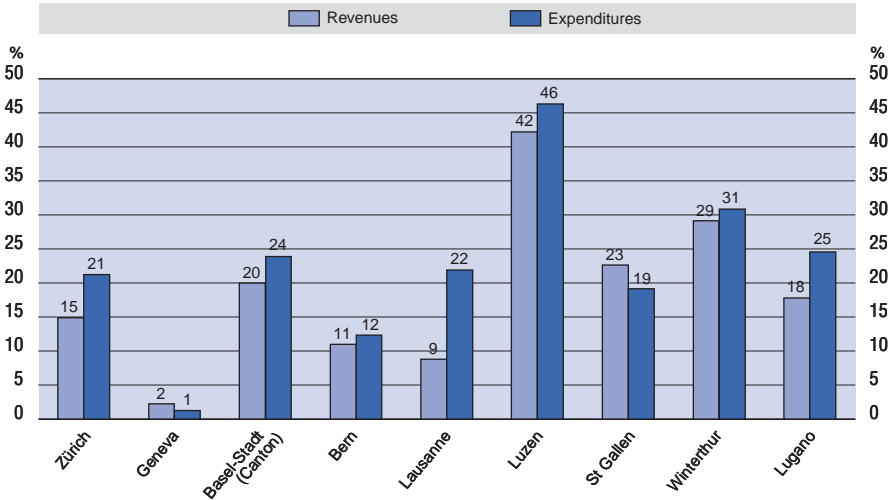
The processes described above are often self-sustaining, *i.e.*, they tend to enhance permanently functional separation and social segregation and the problems associated with them. Moreover, the problems of central cities have in the meantime also reached some suburban municipalities, which renders coherent policy responses even more difficult. The policy approach therefore has to be multi-dimensional, since it has to put an end to several vicious circles. It must integrate fiscal, transport, environmental and social policy together with well-adapted approaches towards the spatial organisation of metropolitan areas, as put forward by the federal government's "Report on the Agglomerations" of 2001.

Metropolitan public finances

The financial situation of central cities shows a clear revenue-expenditure gap (Figure 4.3). In more than half of central cities, expenditures have risen faster than revenues. The central cities during the 1990s thus had to bear increasing deficits reaching, in the case of some cities, more than 15% of the annual budget. The

Figure 4.3. **Evolution of revenues and expenditures in selected central cities, 1985-1995**

Real values, index 1982 = 100



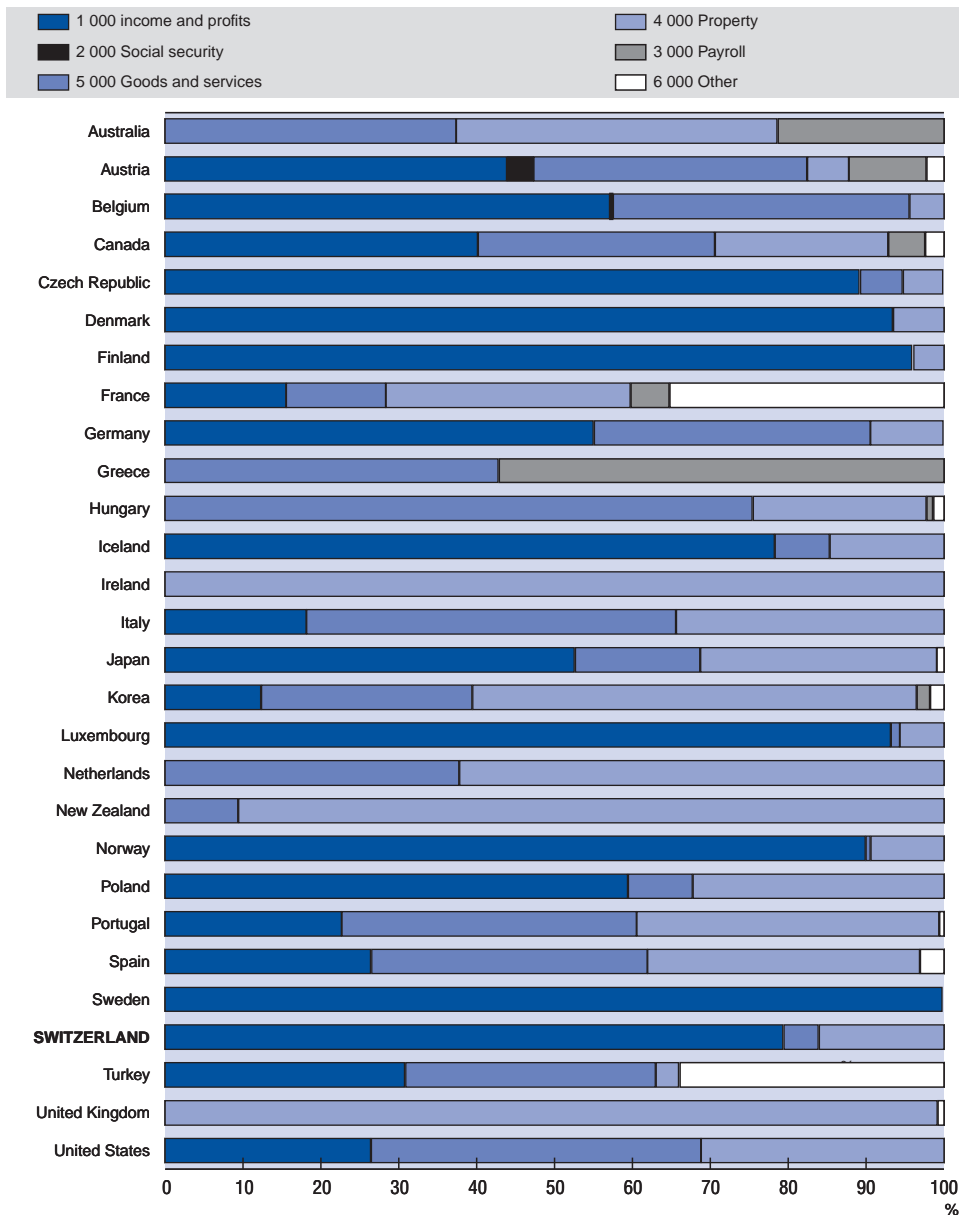
Source: Swiss State Secretariat of Economic Affairs (1999).

budget position of the large cities at the end of 1999 (newest available data) stands in stark contrast to the general municipal level, which actually returned to a balanced budget at the end of the 1990s. Severe budget constraints forced most of the cities to cut their budget and some of them to increase taxes, mainly in the middle of the 1990s. Cuts in public services and tax increases further deepened cost-benefit ratio differentials between suburban areas and central cities. The following paragraph goes into more detail of the financial health of the cities and tries to show that, although a part of the deficit may be imputable to inefficiencies in urban spending, there are some factors which are outside the control of the cities. These factors may jeopardise the long-term perspectives of urban development even in times of economic recovery.

Tax base erosion

Local governments in Switzerland rely on personal income and personal wealth taxes for almost 80% of their total tax revenues, while around 10% of tax revenue comes from both the wealth tax and the corporate profits tax. This contrasts with the tax structure of the majority of local governments in other countries (Figure 4.4). Although personal income taxes have a broad base that increases

Figure 4.4. Tax revenues of subnational governments in OECD countries



Source: OECD (2000b).

with economic development and causes little distortions among economic activities, its allocation at the subnational level runs somewhat counter to the recommendations of public finance economists. Both high-income households and capital are considered to be mobile, particularly within a metropolitan area and within commuting distance. This potential mobility suggests that both the importance of own-raised tax revenue by local governments in Switzerland, and the heavy reliance on taxes on mobile resources may make central cities particularly vulnerable to fiscal competition from their suburbs. Outmigration and subsequent loss of tax income from middle and high income layers has forced the central cities to raise tax rates to prevent tax income from falling too drastically. This however means that central city tax rates are clearly above the cantonal average and above the average of surrounding cantons. In the City of Zurich, for example, the tax rates are the highest of the whole canton and about 30% higher than in the rest of the Canton of Zurich.

Although outmigration and functional separation, *i.e.*, the spatial separation of workplaces and residential areas, is not *per se* detrimental to urban fiscal health, there are a number of additional peculiarities of the Swiss tax system that work against long-term urban fiscal health. Cantonal and municipal personal income and wealth taxes are purely resident-based. This means that with residents moving from the central city to the suburbs, the tax base is entirely shifting to the residence place. Some cantons such as Bern with a large central city have discussed the introduction of wage taxes or “commuters” taxes, or have, such as the canton of Geneva, tried to tax non-residents to counter the spatial effects of the tax system. The Federal Court however ruled out any non-resident taxation on several occasions, and this red light has brought to a halt any attempts for systems of shared taxes within metropolitan areas. The tax system prevents the central city from taking part of the tax income of the surrounding areas or from charging commuters and other beneficiaries of central cities’ services for the use of their infrastructures. The residence-base of the Swiss tax system is also at the origin of today’s cantonal financial equalisation schemes, which separate equalisation entirely from the tax system.

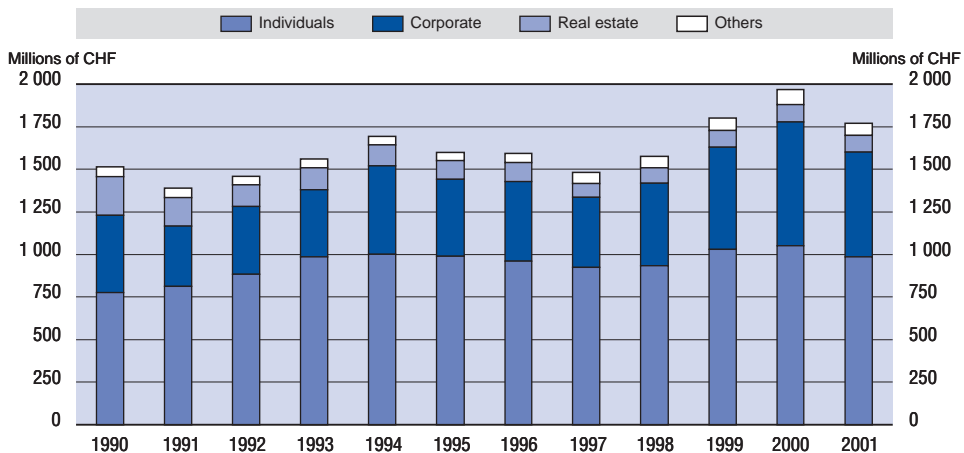
Property (or real estate) taxation, albeit lying above the OECD total and OECD Europe average, contributes relatively little to the total tax income of the cantons and municipalities. Although property taxes accrue entirely to the subnational level (the Confederation levies no property tax), some cantons and municipalities do not levy any property tax, such as the Canton of Zurich and its municipalities, depriving themselves entirely of any tax on non-mobile resources. Many central cities are therefore unable to tax property in their business districts and to benefit from the relatively high property values in their area.

Municipalities and cantons also levy corporate taxes based on profit and capital of resident firms. Given the higher concentration of firms in the central cities

compared to the suburbs, corporate taxation could counterweight the loss in personal income and wealth tax. Indeed, in large cities the percentage of corporate tax revenue is distinctively higher than in other municipalities (30% of total tax revenue of the city compared to 13% for an average municipality).¹ However, the strong reliance on corporate taxes is a double-edged sword for the central cities. First, given that corporate profits follow more closely economic up-and-down swings, the revenue out of corporate taxes is more volatile (Figure 4.5) than for personal income taxes. Whereas for the city of Zürich between 1990 and 2000 the coefficient of variation for the personal income tax revenue was 9%, the coefficient of variation of the corporate tax revenue was 22%. In the second half of the 1990s, within only three years the city lost about 17% of its corporate tax revenue. This high dependence on economic cycles renders financial planning awkward. Volatility of the tax base exacerbates pro-cyclical movements of the urban budget.

Second, the corporate tax base is losing significance compared to other tax bases. Whereas data indicate a stable significance of corporate taxation in OECD Member countries between 1990 and 1997, at the level of the Swiss cantons and municipalities the ratio of subnational corporate taxes to total tax income fell from 11.0% to 9.5% (OECD 2000b). During the 1990s several cantons performed tax reforms that often included reductions of corporate tax rates. They increasingly make use of tax concessions and tax breaks, which indicates somewhat increasing locational competition for firms on the ground of a favourable tax regime. This further weakens the corporate tax base. The relative loss of corporate tax income

Figure 4.5. Tax revenue structure of the city of Zürich, 1990-1999



Source: OECD Secretariat, based on statistics of the City of Zurich.

is a particular concern for the urbanised cantons and – since municipal taxes are a mark up on cantonal taxes – the central cities. The recent trend of new employment and business growth poles outside the old city centres has further slowed down the process of tax income recovery for the inner cities.

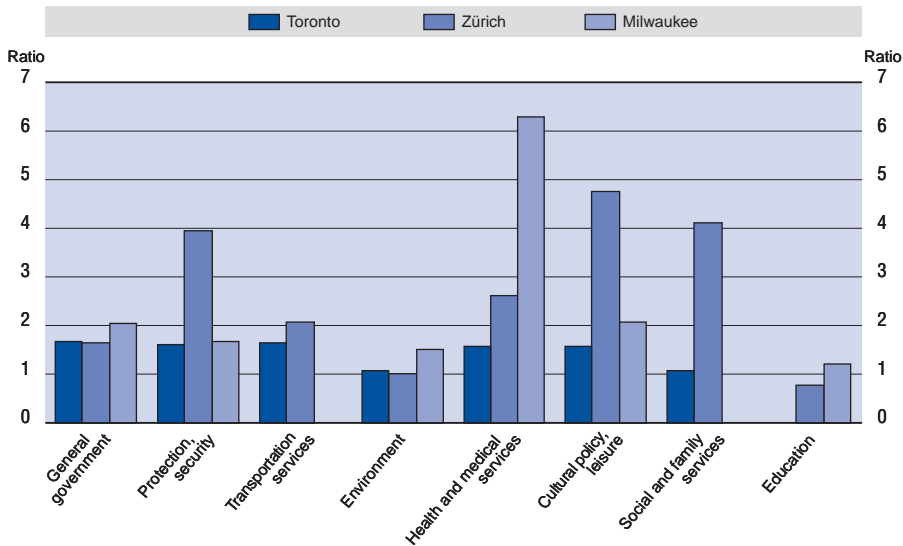
The decentralised Swiss tax system has its favourable effects for the cities, though. It means a strong incentive for urban renewal and high quality residential areas in order to find new solutions to handle urban crises and to attract middle and higher income classes. The conversion of old industrial into residential zones or construction of larger apartments have been fuelled mainly by the desire to bring taxpayers back. Given that through the tax system the city may largely benefit from a new influx of people, and given that cantonal or federal support for urban renewal is limited, the incentive at the local level for urban renewal is quite strong. During the second half of the 1990s, urban governments were challenged to adapt urban land use plans and to transform former abandoned industrial zones into mixed service business-cultural-residential zones.² Some of them have become fancy cultural hot spots, surrounded by new residential areas, and a major attraction also for non-resident and foreign visitors. The strong political motivation to bring people and business back to the cities not only favours central cities' tax income, it also works as a counterweight to outmigration and urban sprawl.

Public service cost

Large cities show higher total per capita expenditures than the average municipalities in Switzerland (Swiss Federal Statistical Office, several years). This holds particularly true if central cities are compared to their suburban fringe. The Canton of Zürich analysed metropolitan expenditure disparities and concluded that put all municipal services together, the expenditure ratio is around 1 to 1.8 in favour of the suburban municipalities. For some selected services like law enforcement, higher education, and some aspects of social welfare, the ratio may well be above 1 to 10.

Expenditure discrepancies within metropolitan areas are not confined to Switzerland alone but can be observed in countries with a similar institutional structure. A comparison of the three metropolitan areas of Zurich (Switzerland), Toronto (Canada) and Milwaukee (United States) reveals per capita expenditure differentials which are around 1 to 2 for all public services taken together. (Figure 4.6). Although ratios differ among countries, particularly high ratios can be found in police and law enforcement, and in health care. For social welfare the ratio is one to four, which shows the effect of the largely decentralised social assistance responsibility in Switzerland. Higher expenditures may be due to ineffective management or wasteful administrative structures; for some of the public services, the urban municipality may also have chosen a higher service quality than the

Figure 4.6. **Expenditure differentials between central city and suburbs**
Per capita expenditure ratios for selected public services



Note: Ratio of public expenditures per resident spent in the city compared to those spent in the suburbs.

Source: OECD Secretariat, based on statistics provided by the three cities.

suburbs reflected in higher expenditures. Inefficiencies and differing quality may not explain the striking ratios for some services, though. There is a minimum amount of money to be spent on certain public goods to be referred as cost; this cost may vary across communities for reasons the local municipal government has not under control.

No encompassing empirical studies to assess different costs of providing municipal services have been officially published yet in Switzerland. An exception is the canton of Zurich that in the course of reforming its cantonal financial equalisation system tried to assess the “real” cost of its municipalities.³ It is therefore difficult to draw general conclusions as to what degree higher cost are actually the reason for higher expenditure, or whether disparities stem from a desire to offer higher service quality or simply financial waste. Empirical studies and information exchange among the cities would be very helpful if the political position of the cities and agglomerations is to be strengthened (see also Box 4.1).

Box 4.1. Institutional framework of urban governance in Switzerland and the United States

The situation of the Swiss metropolitan areas is quite comparable to those in the United States since the municipal level in both countries acts in a similar federal environment. Like the Swiss municipalities and unlike most other countries in the world, local governments in the United States are responsible for providing a wide range of services, with a tax system that is equally decentralised. Simultaneously, they face the challenge of a highly fragmented environment. The Chicago Metropolitan Area for instance comprises 262 separate municipal governments. Central cities often have to cope with metropolitan or even nation-wide problems such as concentration of the poor or drug addiction. At the same time, individuals and businesses can easily move to suburban communities that offer a more favourable fiscal climate. As a result, the residents of US central cities face above-average tax rates and at the same time below-average quality of public services, thereby somewhat reinforcing the process of urban outmigration. Like the cantons in Switzerland, the US states had to take over some public services from the financially riddled cities, mainly in the field of higher education and the courts.

There are some institutional and policy response differences between the countries, though, some in favour, some to the detriment of the Swiss cities. Whereas the Swiss municipalities hinge mostly on income and wealth taxes moving with people, American cities rely more on property taxes that mitigate somewhat the effect of outmigration. Social welfare assistance in the United States is predominantly the task of the states, funded partially by federal grants (although with welfare reforms those were rapidly falling during the 1990s), whereas in most Swiss cantons, the municipal level is responsible for social assistance. Co-operation across borders of American states and municipalities is even less common than across their Swiss counterparts (Reschovsky, 2001). Unlike the Swiss federation and most Swiss cantons, neither the US federation nor the states have introduced general tax raising or cost equalisation systems that could relieve the cities from their specific burden. The Swiss drug addiction policy is less repressive than the rather punitive policies in the United States, thereby avoiding the emergence of very distressed areas going hand in hand with the rise of black drug markets. Although the institutional environment is similar in both countries, the many differences in size, economic and social structure and policy approaches make it impossible to discern any trends for the Swiss cities based on US experience.

Metropolitan social problems

Being one of the richest countries in the OECD, Switzerland ranks third in terms of GDP (OECD, 2000b). Poverty rates are relatively low compared to other OECD countries, but they have increased somewhat during the last decade. The main groups hit by the economic crisis of the 1990s included one-person house-

holds and lone-parent families, young people, immigrants, and the long-term unemployed. The return to growth has brought a decrease in the number of unemployed, yet the number of social assistance claimants cannot be said to have fallen. Many groups are concentrated in urban areas, particularly the main cities in each canton. The cities of Geneva, Basel, Bern and above all Zurich are often considered to host the greatest number of people in social difficulties, but other, smaller towns are also facing the same problems, albeit to a lesser degree. In sum, although Switzerland cannot boast harmonised social statistics,⁴ available material reveals a clear territorial dimension to poverty and other social problems.

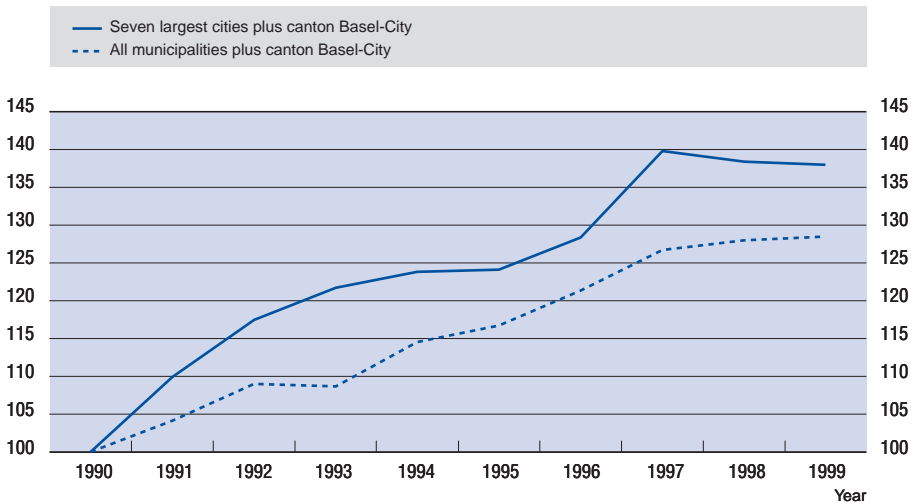
Social assistance expenditures

Swiss social insurance (social security) and social assistance responsibilities are placed at different levels of government. Whereas social insurance lies in the jurisdiction of the federal government, municipalities and cantons are responsible for social assistance. Social insurance comprises the whole system providing universal cover and is governed by federal law. Respective compulsory insurances cover invalidity, old age, unemployment and health care.⁵ Some cantons provide supplementary benefits, generally for people receiving old-age or invalidity pensions whose income is below an acceptable level. Social assistance programmes⁶ on the other hand, are administered by the cantons, and the latter set the payment rates. As most cantons follow the recommendations of the CSIAS (*Conférence suisse des institutions d'action sociale*), benefits in general are roughly equivalent throughout the country.⁷ A basic lump-sum payment is set for each category, topped by a variable payment based on regional variations with regard to living standards. While cantons retain sovereignty over social assistance policy, most have passed financial responsibility to their municipalities. Such is typical for most German-speaking cantons, where municipalities play a major role in financing and administering programmes. The system is more complex in reality as cantons and the Confederation also participate in the financing and sometimes the administering of some programmes for target groups such as the homeless, unemployed immigrants, drug addicts and refugees.

Social assistance expenditure in the cities

The financial responsibility for social assistance puts a significant strain on the municipal level and particularly on the large cities. For structural reasons, mainly a higher percentage of poor and immigrants, cities have more social assistance claimants. During the past decade, the increase of social expenditure in the large cities has risen much faster than in the rest of the country (Figure 4.7). In some cities, social assistance expenditure reaches 30% of the municipal budget compared to 12% for the average municipality.

Figure 4.7. **Social expenditure growth in large cities, 1990-1999**
Evolution by type of municipality, 1990 = 100



Source: Swiss Federal Administration of Finance (several years).

Poverty concentration in the large cities and the higher social assistance expenditures may be explained by institutional factors governing Swiss social assistance. Despite some rulings of the Federal Court, social assistance was not a constitutional right in Switzerland,⁸ and there is thus no unifying legal framework at federal level to govern social claims. The same holds true for the cantons. Although recommendations set at the inter-cantonal level such as those issued by the CSIAS exist, these have not grown into legal entitlements for welfare recipients. This has given social assistance a certain degree of arbitrariness since governments are basically free to accept or to reject social claims, to negotiate individually with claimants and to set solutions at the cantonal and municipal level which benefit their own community rather than recipients. Often local governments try mutually to shift social assistance burden upon each other. The main result of this decentralised and somewhat opaque system is unequal standards across the country and social claimants looking more or less actively for the most generous assistance benefits. “Social tourism”, which is a kind of socially induced internal migration, emerges.

In this environment, the cities become particularly vulnerable. First, big cities provide more social services, combined with less intensive control. Large cities

are like a magnet, attracting social assistance claimants from other areas, leading to higher workload for staff than would be expected on the basis of unemployment differentials with other cantons. In Zurich for example, the inflow of clients from other cantons is three times the outflow of clients based in Zurich to other cantons. About 30% of claimants have been living in the inner city for one year or less. Second, larger cities allow for larger anonymity. Applicants for social assistance who can not be sure that privacy is kept in small municipalities migrate to big cities. Third, social assistance payments are considered as debt, meaning they should be reimbursed. This provision is not strictly applied in all cantons as larger municipalities regard it as being too expensive to administer. Fourth, approval of benefit payments remains a case-to-case decision. This process, which aims at ensuring democratic legitimacy and preventing fraud, tends to be treated in favour of claimants in the larger cities.

In general, while Swiss social policy is governed by an overall inter-cantonal framework, there exists a wide range of special cantonal subsidies often implemented under local bye-laws. One example is the system of local or cantonal benefits that depend on the claimants' income or wealth. These vary widely from one canton or municipality to another. People wishing to move can benefit from widely differing arrangements, depending on where they go. It can be stated that whereas social security contains a number of factors leading to a balanced burden sharing across territorial units, social assistance triggers territorial dynamics that work against the long-term financial health of urban areas.

Social expenditure equalisation

Financial burden to the municipalities and particularly to the cities has brought municipalities and cantons to search for new forms of cost sharing. In the eyes of the Federal Office for Social Security, cantons fall into three groups: cantons where social assistance is highly centralised and the canton is closely involved in its funding and organisation (Geneva, Basel-City, Ticino); cantons where social assistance in practice lies fully in municipalities' hands, but with substantial funding from the canton, the latter keeping a fairly far-reaching authority (Bern, Jura, Grisons, Vaud); and a third group of highly decentralised cantons where cantonal authority is restricted and covers monitoring and inter-cantonal relations only (Eastern and Central Switzerland and Zurich). These distinctions have an obvious impact on the breakdown of financial expenditures between the municipalities in a given canton.

Cantons have followed different paths to share social expenditures with their municipalities. In the Canton of Bern, some 400 municipalities co-operate on social matters. Most benefits including family allowances, housing assistance and care for the disabled are shared between the canton and the municipalities

through a burden-equalisation system which partially depends on the fiscal capacity of the municipalities. In the Canton of Grisons, a scheme set up in 1995 combines vertical and horizontal equalisation, and so, helps to lighten the burden on Coire, the main city. One-third of the expenditure is borne by municipalities, 40% by the canton. In the Canton of Geneva, Geneva City runs its own services and the small municipalities make their own arrangements. Some centralisation does exist, but also delegation of social initiatives to local institutions. A slightly different approach was chosen in the Canton of Vaud where a fourth administrative layer was set up especially to manage social aid. The costs of the regional centre are spread across the municipalities according to their tax base. However, the regionalisation approach remains limited in Switzerland.

Overall, the structure of Swiss social policy is based upon the principle of subsidiarity. This system is more flexible in adapting to local needs, and financial responsibility at the local level may act as a powerful barrier against increasing social welfare expenditures. But it may create problems particularly in the larger cities where responsibilities are often mismatched with financial resources.

Other metropolitan social issues

Immigrants

Switzerland has attracted a large and steady flow of immigrants. In 2000, 19.3% of the Swiss population was of foreign nationality. Most immigrants are concentrated in big cities; the foreign population as a percentage of the total population of Geneva, Zurich and Bern is respectively 35%, 28% and 15%. Concentration of immigrants in urban areas is partially the result of national policy, which requires foreigners to live in the same municipality where they work. Immigrants are more vulnerable to unemployment, poverty and other social ills than Swiss nationals. One of the main problems for immigrants stems from their low standard of education and language problems. Since the introduction of the Act on the Integration of Foreigners, the federal government has been supporting language training for adults as well as for children. In 2001, the federal government released CHF 10 million to finance projects scheduled by the Act. However, most cantons and large cities have set up their own policies to integrate foreigners, which creates a disproportional burden.

Refugees and asylum seekers

Urban centres also have to cope with a constant influx of refugees and asylum seekers, Switzerland receiving some 25 000 applications a year. The figure rose to 50 000 during the war in Kosovo. It is the Confederation that defines and finances refugee policy, while programme execution and service provision fall to the cantons and municipalities. The federation is also in charge of implementing and financing

immigrant return programmes, such as the one set up for the Kosovo refugees. Although the Federal Office for Refugees seeks to implement a policy that spreads refugees evenly across the country, many of them end up in the major cities hoping to find work. Depending on their situation, they can expect to obtain a work permit three to six months after their arrival,⁹ but many claim social assistance. Although the subsequent cost is usually fully reimbursed by the Confederation, the cantons or municipalities finance other services related to refugee and asylum seekers such as education for children, legal and hospital costs.

Drug addicts

Drugs policy illustrates particularly well the intergovernmental tensions regarding how responsibilities are shared and funded and how the financial burden currently concentrates in the cities. Some cities, such as Zurich, are particularly attractive for drug addicts. Although the City of Zurich asks the home towns to reimburse the social assistance cost of non-urban citizens, many expenditures related to the drug market stick at the city level. Across the country as a whole, there is a national policy to combat drug addiction but the Confederation shoulders only a small proportion of the costs of drug addiction (Box 4.2). Its share amounts to 20%, with the remainder paid by the cantons, many of which shift responsibility towards cities. A new procedure has been set up for the allocation of federal funds to institutions, and the amount of funding will now depend on how the institutions perform.

By and large, responsibilities for drug addicts are shared as follows: institutions assisting drug addicts are funded and managed by cities, in some cases with cantonal or federal subsidies. Research programmes deemed to be in the national interest are co-funded by the Confederation, which, for instance, financed two-thirds of the initial research stage of a programme providing medically prescribed heroin. This subsequently led to regular treatment entirely funded by the cantons and municipalities, with health insurance funds shouldering some of the costs. Drug-addiction centres and institutions are funded by cantons, while social assistance is provided by local authorities (in some cases with cantonal funding, depending on the municipality). The federal government shoulders health care costs via the Federal Office for Social Security. In most observers' eyes, drug abuse just shows up on the local level but is in fact a national problem and therefore requires stronger action by the Confederation.

Working poor

Although the Swiss economy after 1997 returned virtually to full employment, the country finds itself facing the emergence of the working poor, *i.e.*, individuals

Box 4.2. Swiss policy on drug taking

It was Switzerland's cities – public authorities and players on the ground – who first claimed a new intergovernmental strategy to tackle the drug problem. Bern, Zurich, Basel, Geneva and other cities accordingly introduced a strategy for maintaining contact with users. The federal government confirmed this new policy thrust as early as 1991. It draws up national policy on drug taking and supports the initiatives launched by the cantons, municipalities and private institutions. It provides partners with general and scientific information and promotes the co-ordination and harmonisation of any policies or measures put in place by the cantons. While the federal government outlines the policy on drugs, implementing that policy falls largely to the cantons, working closely together with municipalities and institutions.

Switzerland follows a relatively liberal anti-drug policy, which consists of four pillars: drug prevention among the young; therapy for addicts attempting to give up their habit; risk reduction to safeguard health of addicts, even if they are still taking drugs; and a crackdown on drugs by stepping up the number of prosecutions for manufacturing, trading and using drugs. It can be said that the Swiss take a differentiated, balanced policy approach; shifting the emphasis of drug addiction policy away from repression and more towards public health. At the same time, there has been a considerable increase in the resources earmarked to target those who profit from the drugs trade. The cost of this four-pronged policy is as high as CHF 1 billion a year. The current policy on drugs has somewhat relieved pressure on the cities, but those still have to deal with a problem that is basically national in nature.

Source: Federal Office for Public Health (2000).

who earn wages but still require social assistance. According to the Federal Statistical Office, in 1999 almost 250 000 people were in work but poor, *i.e.*, 7.5% of the working population aged 20 to 59, compared with 5% in 1995. Households in urban areas, in particular single-parent families and young people, have been the hardest hit.¹⁰ Some cantons try to cope with this problem by developing their own solutions. One example is Ticino, which is attempting to cut the number of social assistance clients by extending the current system of supplementary benefits linked with old-age and invalidity insurance to households with children.¹¹ This has helped to reduce the rate of family poverty by 3.3% (Bauer, 2000). The Ticino model has been seen as a success and the federation plans to extend it country-wide. The advantage of the system is that it views the benefit as an entitlement, which carries less stigma and is less contingent on the discretion of social assistance offices. At the same time, the cantons see it as more equitable, since the benefits are paid by the Confederation.

New tools for supporting the working poor should also be considered. A number of European countries as well as the United States have introduced income supplements for low-wage earners. The idea behind is simple: families whose income remains under the poverty threshold receive a wage subsidy or a tax credit, if at least one family member is working. This subsidy is a percentage of work income, which is an incentive to get employed, and is calculated on the basis of the family income. The United States introduced this instrument mainly to reduce poverty of families with children. Earned income tax credits could therefore be one element of a national family policy. They could also complement and relieve existing social policy instruments, such as the social assistance or the social security system, and they could in the long run replace sectoral policies like social housing policies, thereby shifting assistance from low-cost housing provision towards direct individual support.

Problem neighbourhoods

While social disparities within metropolitan areas are less marked in Switzerland than in other OECD countries, some neighbourhoods in the centre or on the outskirts do have a high proportion of disadvantaged groups and show some signs of decline. The leading policy for deprived neighbourhoods focuses on housing. Here, the federal government grants subsidies and gives some guidance but makes no commitment as to policies or the areas to be targeted. In the past, some municipalities have introduced major policies to rehabilitate urban centres. The City of Zurich has outlined two main development axes, Zurich West and Zurich North, two former industrial areas, which it has focused upon since. Although this, in general, attracted new population layers and improved quality of the urban environment, it could in the long run lead to gentrification, pushing out more vulnerable resident groups to other parts of the city or to its outskirts. The housing policy currently being implemented by the Canton of Geneva puts more emphasis on a social mix. As land is scarce, there are plans to change the status of a 600 000 m² individual-housing zone and give space for the construction of apartment buildings.

Territorial spillovers and violation of fiscal equivalence

Functional separation within metropolitan areas creates another phenomenon that puts some strain on the cities. Suburban residents continue to use central city services and facilities, but since they live in the suburbs, they no longer provide the respective resources to finance them. Furthermore, increased commuting causes environmental problems and requires additional transport infrastructure partially funded by metropolitan areas. The spatial separation of residence and public service consumption thus creates territorial spillovers and a

violation of fiscal equivalence, *i.e.*, divergence of beneficiaries, taxpayers and decision makers of local public services.¹² Violation of fiscal equivalence is exacerbated by the small-scale structure of Swiss municipalities and cantons and the many boundaries that separate independent jurisdictions. Territorial spillovers pose a particular burden to the large cities.

Central city facilities

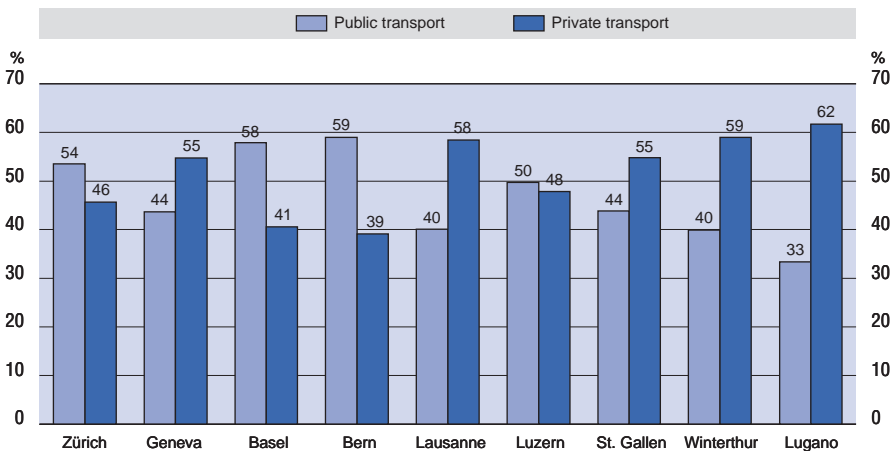
The federal government's report on central cities lists a number of policy fields where territorial spillovers and a lack of fiscal equivalence exist (Swiss State Secretariat of Economic Affairs, 1999). They include the (deficitary) cultural, leisure and sports services whose users stem largely from the wider metropolitan area. The theatres and music halls of the urban cantons of Basel-City and Geneva feature a prominent example. Urban municipalities co-fund and provide educational institutions such as technical schools to a much wider than their ownmunicipal population. With regard to health care in most cantons central cities are responsible for regional hospitals, homes for the elderly, external health care assistance and other health care services. Public transport is used by urban as well as the suburban population but funded at a disproportional rate by the cities. The municipal road network is, as mentioned above, used largely by commuters. For some facilities, the territorial spillover to be attributed to non-residents is supposed to reach 60% of urban expenditure.

Some services are even decided upon by cantonal or federal laws and are like unfunded mandates to the municipalities. Moreover, inter-cantonal agreements on cost sharing often explicitly exclude full cost recovery for the providing jurisdiction, leaving it with a block of unrefunded expenditures.¹³ Finally, most cities are reluctant to apply full cost recovery levels for user fees or to apply price differentiation towards non-residents for some of their services. Although provenance-based price differentiation might somewhat breathe the spirit of a shopkeepers' mentality, by not applying it, the cities forego the opportunity of covering the deficit of their central services.

Transport and environment

Functional separation has resulted in a large flow of commuters towards the city centre. Urban sprawl has made the car the dominant means of transport for daily commuting, again favouring a dispersed settlement structure (Figure 4.8). The sole exceptions are the agglomerations of Zurich, Basel, Berne and Lucerne, where public transport is given preferential treatment. In stark contrast to this, private means of transport are the most common in agglomerations with less than 50 000 inhabitants, where over 70% of commuters usually travel by car. Increased saturation causes traffic jams, which leads to calls for new roads, which again

Figure 4.8. **Means of transport for commuting to the city centres**
In % of total transport volume



Source: Swiss State Secretariat of Economic Affairs (1999).

lowers travel cost and travel time, which makes living in the suburbs more attractive and leads to even more scattered settlement patterns. Private transport thus creates a vicious circle of transport volume and urban sprawl into the rural countryside. Since commuting and spatial organisation are to a certain extent mutually reinforcing, Swiss spatial planners often call transport policy and transport infrastructure the “hidden land use planner”.

The use of the private car has a detrimental effect on the finances of the municipal budget as well as on the environment. First, per capita road expenditure is higher in the larger cities than in the smaller ones.¹⁴ These expenditures are largely related to commuters from outside the city boundaries. Some calculations for the canton/city of Basel and the city of Berne (Blöchliger *et al.*, 2000) show that between 20% and 50% of the costs for road construction and maintenance are related to commuters' use. Given that car ownership in the cities is lower than in the suburbs and inhabitants of the central city are commuting less, the use of suburban roads by citizens does not compensate the cost incurred by the central city. The territorial spillover with respect to public transport is somewhat less significant since central municipalities and cantons co-operate on a contractual basis with the surrounding municipalities. However, some of these contracts and the resulting burden-sharing between the different municipalities do not guarantee a balanced share of the expenditures.¹⁵ Unlike to rural areas, the Confederation pays almost no subsidies for public transport in urban areas.

Second, increased commuter traffic has deteriorated environmental quality in the central cities, notably in terms of air pollution and noise for which private transportation accounts for a large part. This has resulted in a considerable burden for the urban population. In a majority of the large central cities the environmental quality standards set in environmental laws are not met, although the situation has improved between 1990 and 2000 mainly due to the rapid introduction of catalytic converters. Again, the large Swiss metropolitan areas are the most concerned compared to the remaining areas. The lower environmental quality in the central parts of the agglomerations induces people to leave the central city, triggering again a vicious circle of urban sprawl, increased cost for transport infrastructures, and environmental cost to the population in the central city. To mitigate urban sprawl and environmental deterioration, new public transport infrastructures have to be built and funded, again mostly at the expense of the more urbanised cities and cantons.

An agenda for a future metropolitan policy

Up to the middle of the 1990s, Switzerland had not developed any specific approaches for urban and metropolitan areas. Even a term like “urban policy” did not exist. Areas eligible for regional support were mostly rural. The only exception applied to areas in economic distress, which covered also some urban areas, mainly old industrial regions that received support through the Law on Disfavoured Regions (BWE). Sectoral policies only marginally took metropolitan areas into account, such as some minor federal subsidies for the promotion of regional public transport in urban areas. Urban sprawl was at the origin of the Law on Spatial Planning in 1977, but since land use planning remained mostly under cantonal responsibility the latter limited the federal influence on urban development. To sum it up, metropolitan areas were not on the Confederation’s policy agenda. It was only the overall economic depression during the first half of the 1990s revealing cities’ financial stress that triggered political action at the federal level.

The amendment of the Constitution in 2001 opened the way for urban policies. The new Constitutional Article 50, stating that “*the government shall take into account the particular situation of the cities and the agglomerations*”, gave the Confederation more scope for agglomeration policies. After some preliminary work on metropolitan areas, the government identified four core areas for a future urban strategy. These are: taking better consideration of the agglomeration within federal sectoral policy making; increasing vertical co-operation between the three government levels where responsibilities for public service provision are shared; improving horizontal co-operation for the provision of metropolitan-wide services; and integrating the Swiss cities into the network of European cities. In 2001 the “Commission Tripartite” conference consisting of the three levels – federal, cantonal and municipal – was founded to promote vertical co-operation in policy fields relevant

for the metropolitan areas. Given the significance of metropolitan areas for economic development, the Confederation should support their efforts for spatial co-ordination of sectoral activities, particularly covering transport policy, and nurture platforms where the different partners of urban development can convene.

Include the cities in the New Fiscal Equalisation proposal

The government's New Financial Equalisation (NFE) programme (Chapter 3) contains – assumed its approval and gradual implementation in the next few years – a number of proposals of interest for cities. First, the introduction of a fund reflecting “socio-demographic burden” would recognise that cantons may have to bear additional costs over which they have no control. The fund may relieve those cantons that have a disproportionate ratio of population depending on public services, such as social assistance or education. Equalisation of cost through this fund will thus benefit cantons with a large urban population. Second, horizontal co-operation among cantons in urbanised areas would be placed on clear legal footing, and the Confederation would get a steering instrument in its hands. The objective is to ensure that cantons are duly compensated for providing public services that have benefits outside their own boundaries, and to put an end to interregional free-riding. Instead of coercion, as is the current proposal, it might be useful to introduce some financial incentives. Such incentives could reward cantons engaging in cross-border projects.

In general, the position of the large cities in the NFE proposal should be strengthened. The planned scheme applies to the federal-cantonal relationship, not taking the municipal level into account. Cantons cannot be forced to support their cities with additional NFE resources. The NFE therefore fits into the strict federal structure of the country. However, it means a drawback for municipalities as they depend on their “home” canton, since the latter decide how NFE funds will be distributed. The NFE may also lead to unequal treatment between cities that make up an urban canton – which fully benefit from NFE funds – and cities that are located in a larger rural canton, which depend on the goodwill of the cantonal government. The Confederation should evaluate whether to include additional requirements to the “socio-demographic” fund. Tensions between cantons and their large cities could be avoided this way. The cantons could be asked to pass a part of the fund to the cities, or to set up cantonal equalisation systems that recognize cities' needs explicitly.

Strengthen horizontal collaboration in metropolitan areas

Increased co-operation within metropolitan areas could restore fiscal equivalence, could produce large-scale public services more efficiently and could integrate metropolitan-wide externalities. In some cases, cantons and municipi-

palities already established some, albeit rare, horizontal collaboration. However, conflicting interests between central cities and their suburbs often exclude purely voluntary partnerships. Examples from other countries have shown that voluntary metropolitan co-operation, especially arrangements that are beneficial to the central cities, are unlikely to occur if governments do not provide special incentives to co-operate (Chernick and Reschovsky, 1997). The federal government might thus find it beneficial to use a special legal framework or financial tools to create metropolitan-wide partnerships. A “best practice” example could be the relevant Cantonal Law of Fribourg where some competencies and resources have been assigned to a new agglomeration body. Metropolitan partnerships should be functional in nature, *i.e.*, restricted to only one or a few public services, given that different services do not usually cover the same area. In particular, public and private metropolitan transportation associations could be subject to federal support.

Horizontal co-operation provides for solutions tailored to metropolitan problems and also for an adequate way of restoring fiscal equivalence. It is a smoother and more flexible substitute to direct federal intervention or municipal mergers. The federal government could use a carrot-and-stick policy towards horizontal collaboration. The stick could consist of a “Federal Act on Horizontal Partnerships” and or the obligation for cantons or municipalities to create or join metropolitan associations. The carrot could consist of basing intergovernmental transfers on the willingness of metropolitan municipalities to co-operate or of creating financial incentives for metropolitan-wide collaboration among cantons, among municipalities and between cantons and their cities.

Foster public transport infrastructure and introduce road pricing mechanisms

Growth of metropolitan areas and of transport networks is closely interrelated. The federal government should thus carefully evaluate new proposals to adapt transport infrastructure to the needs of metropolitan areas while avoiding further urban sprawl. Although Swiss metropolitan transportation systems work smoothly in general, it appears they will reach their physical limits in the next few years. New infrastructure in urban areas has therefore become a major concern for transport policy. A federal strategy towards more sustainable transport infrastructure should consist of two elements. *First*, additional means for public transportation should be allocated to specific projects in urban areas. A governmental expert group’s proposal in 2001 to finance new transport infrastructure could be pointing the way ahead. *Second*, the federal government should allow for road pricing and other user fees through a constitutional amendment. This would allow metropolitan areas to raise their own revenues, and it would allow more targeted traffic demand management and co-ordination with spatial planning. Moreover, following more closely the beneficiaries pay principle¹⁶ than funding

through taxes, road pricing would be more efficient and more equitable since funds would be raised where they are invested. Again, transport associations could be responsible for area-wide public and private transportation systems and the use of road-pricing revenues.

Redesign social policy

A variety of social problems in Switzerland have become increasingly concentrated in the large cities. Today many poverty aspects are urban rather than rural. Social burden or cost to the cities is reflected in high expenditures for social welfare. The cities often have to deal with policy issues, that are rather national by nature. Municipal social welfare responsibility contradicts somewhat the recommendations of fiscal federalism findings. The current responsibility allocation may, in the long run, increase fiscal disparities between cities and other areas, or trigger a race to the bottom in the sense of a “chase of the poor”. Financial responsibility is often shifted from one system to another and from one government level to another. On top of the recommendation list would be a comprehensive social policy strategy and a move towards a set of common standards at national level, drawn up in collaboration with stakeholders.

A stronger implication of the federal level could include several aspects. In the long term, a constitutional amendment on subsistence minima could be introduced, followed by a framework law that governs minimal entitlements for social assistance. This could follow the rulings already established by the Federal Court. In the short and medium term, particular emphasis should be put on better co-ordination between social security, social assistance, and family policy. More federal participation in social assistance benefits would prevent applicants moving into urban centres simply for financial reasons. Wage subsidies established at the federal level could replace part of the current instruments, thereby relieving national social security as well as social assistance in urban areas. Some urban local neighbourhood initiatives make it possible to take into consideration a broad range of situations and mobilise large networks of social stakeholders. Here, Switzerland could draw on the example of Canada, another federalist country, where the three tiers of government have formed a partnership, often in conjunction with the private sector and NGOs. Finally, an exchange of information on good practice at all levels of government should be further promoted.

Increase the significance of the “Commission Tripartite”

A forum for institutional debate between the federal authorities and the cities is essential. Through the establishment of the *Commission Tripartite* the different government levels in Switzerland have already taken an important step towards better

co-ordinating policies and their impact in metropolitan areas. For the first time, strictly horizontal Swiss federalism gave way to a partnership across all three levels of government. Given the many shared responsibilities and the strong and often asymmetric impact federal policies have on metropolitan areas, a permanent forum that provides the possibility to share and exchange policy views should be given more weight. Since the *Commission Tripartite* already exists, it should be given a priority role as a platform for co-ordinated urban policies. The Commission could on one hand host a contact forum for the different government levels and on the other hand help the Confederation to co-ordinate the different initiatives and policy measures that have an impact on metropolitan areas, as a kind of institutionalised intergovernmental consultation body. An upgraded *Commission Tripartite* will allow the Confederation to co-ordinate policies vertically across government levels, whereas the *Raumordnungskonferenz* (ROK) and the *Rat für Raumordnung* (ROR) would continue to co-ordinate policies horizontally across ministries.

Concluding remarks

The Swiss metropolitan areas are among the richest within the OECD, and are driven by economic growth that exceeds the national average. There is no general lack of financial resources in metropolitan areas, but rather an internal disequilibrium between specific geographical areas. Some of the financial disparities have their origin at the national level, some of them at the metropolitan area level, some of them at the municipal and central city level. Thus, the federal government has to follow a very careful approach towards metropolitan areas. In some cases it might relieve an overtaxed municipal and cantonal level, for example when it comes to social policy. In other cases it should develop a strategy for a more equal intra-metropolitan resource allocation, rather than distribute federal financial support, for example for metropolitan transport policy. In some cases, cities and urbanised cantons must find their own development strategies within their area. Any metropolitan jurisdiction, including central cities, by applying good policies and efficient city management, has to give businesses and residents adequate reasons to stay.

The main issues for a federal metropolitan policy are therefore of a more institutional than financial nature. Mainly, they relate to stronger support of metropolitan collaboration, through support of partnerships whose objective is to provide metropolitan-wide public services, with the respective legal and financial incentives. The federal government's main task should be to create incentives for a better distribution of metropolitan resources, and to better evaluate, in tripartite partnerships, its policies with respect to their specific impacts in the area. An important step towards a better appreciation of urban issues is the integration of the cities into the federal decision-making process and the establishment of a working federal-cantonal-municipal partnership following the "tripartite" idea.

Notes

1. For this comparison, the cities of Zürich, Geneve, Basel, Lausanne and Berne were included.
2. After long political debates during the 1990s, *e.g.*, the city government of Zurich opened large former industrial zones to the service sector and for residential construction.
3. Canton of Zurich (1997). After publication of the final report “*Analyse des Lastenausgleichs*”, the results were strongly challenged, and the government did not use them for policy purposes. Thus, cost is still not included in the cantonal financial equalisation system.
4. For the past five years the Federal Statistical Office has been trying to set up a national database on social assistance.
5. Health insurance is governed by federal legislation and is compulsory for everyone. It is financed by individuals who contribute to funds that may be private or public institutions. Premium levels are not uniform and vary from one town to another. They are higher in towns where costs are higher. The cantons are free to set premium levels and in return receive federal subsidies to offset the full or partial premium they pay on behalf of low-income households. Since the federal subsidies match with cantonal expenditure on health care assistance, this creates further disparities across cantons.
6. According to the CSIAS, “social assistance provides those in need with an income, fosters economic and personal independence and ensures social integration”. Rather than providing just a subsistence allowance, it seeks to provide a minimum social income enabling people to have a working and social life and encouraging responsibility and personal effort.
7. The CSIAS is an independent organisation that publishes guidelines on the setting of social assistance benefit rates. It is composed of experts from public social service institutions, with advice from municipalities and private sector organisations. The Federal Court has ruled that there is an unwritten constitutional right to receive support at subsistence level. Seventeen of the 26 cantons have adopted the guidelines. Two cantons have used their right to set basic benefit payments 10% below the level of the guidelines.
8. The new Constitution adopted in 2001 recognises the right to a subsistence level, however.
9. Initially, they are granted a residence permit by the cantons, but may subsequently receive a work permit depending on the quota set by the Confederation.
10. According to *Initiatives Villes*, one-third of those dependent on social assistance in Switzerland are under 18 years of age. In the Canton of Zurich, about 17% of social assistance beneficiaries are lone-parent families with children and 30% of the new claimants are under 30.

11. Besides the ordinary child allowances, households with low incomes and children under 15 receive supplementary benefits to cover children's basic needs. If the household includes children under 3 years of age, the supplementary benefits are increased to give the parents a basic minimum income. This system is fairly effective in protecting the lowest incomes.
12. The term dates back to Mancur Olson seminal paper (1969). The underlying idea has since also been used under "fiscal correspondence".
13. Agreements on tertiary education such as the *Hautes écoles spécialisées*, or agreements on municipal or cantonal co-funding of theatres and museums are usually based on marginal (or variable cost) and not average cost.
14. The higher road expenditure for the large cities exceeds the general tendency of higher expenditure in the large cities by a factor of roughly 1.3, reflecting somewhat the additional burden the central cities have to bear with respect to private transport infrastructures.
15. Most public transport cost sharing systems are supply based, *i.e.*, are based on the density of the network and other quality indicators in every municipality, usually not taking into account demand factors such as effective use or the geographical provenance of the users. This is a disadvantage to the central cities that offer a denser network used mostly by commuters. The city of Zurich for example, as a result carries two-thirds of the cost of the regional public transport system whereas it only counts one-third of the population.
16. Empirical evidence clearly indicates that the current fuel taxes underprice private transport in urban areas and overprice it in the rest of the country (Nash *et al.*, 2001). Road pricing could therefore much more efficiently contribute to urban traffic management than a rise in fuel taxes, as proposed by the federal government.

The Outlook for Learning Regions

Globalisation has brought increasing pressure for changes in productivity and innovation in the Swiss manufacturing industry. Up until now activities have tended to concentrate on a number of major urban agglomerations. However, much economic growth is also taking place in non-metropolitan clusters often based on traditional industries. While the Swiss strategy for territorial development has focussed for a long time mainly on conventional instruments and policies linked with infrastructure and spatial planning, it is now paying more attention to human resources and knowledge diffusion. The creation of HESs (*Hautes écoles spécialisées*) is a major step in that direction. HESs fill a gap between universities and the secondary level, between theoretical and technical knowledge training, between research and marketable technologies. While regrouping and upgrading existing educational institutions, the present strategy aims to link training with local needs and stimulate technology transfer. HESs could greatly help with the development of learning regions, *i.e.*, regions with a dense network of firms and significant capacities for innovation, throughout the country. Creating linkages between these higher educational institutions and clusters is particularly important in non-urban areas where business services, public goods and finally opportunities for development are often lacking. Federal policies and especially cantonal policies can do more to support these endeavours.

The Swiss background for learning region policies

Economic development

The Swiss economy contains both high value-added industries (mainly service industries, such as finance), and lower value-added manufacturing industries with relatively low productivity (such as mechanics and chemical industries). Success in these industrial sectors has been based on the generally liberal and stable socio-economic conditions in Switzerland, highly skilled Swiss workforce and the flexibility of the Swiss labour market. However, for decades, both the service and manufacturing industries have been relatively protected from international

competition. For example, the finance sector has benefited from the Swiss banking law by attracting considerable international investments, and some of the manufacturing industries (such as mechanics and machine tools) have depended upon labour flexibility and immigrant labour.

More and more, these economic activities are now coming under pressure. The debate over a revision of the Swiss banking laws notwithstanding, many Swiss manufacturing industries are now facing increasing international competition. For example, competition within the machine tool industry is becoming internationalised, with new entrants like Taiwan, Korea, China, and India pressuring producers on price. As Switzerland has few opportunities of protecting its industries through trade barriers, there is an urgent need to upgrade productivity levels and boost product innovations in some of the Swiss industries. While its importance may vary from one industry to another, the productivity growth issue is in fact a matter of concern for the economy as a whole.

Regional development

Generally, Switzerland has impressive regional equality of service levels and incomes. Reduction of disparities has been achieved through national infrastructure and redistribution programmes. To a growing degree, the major urban agglomerations account for the bulk of growth in economic activity, while the Alpine regions are experiencing decline and problems in upgrading their existing economic activities (mostly tourism), and other peripheral regions are experiencing industrial decline and depopulation. Most notably Zurich and Zug are expanding with new industries, like services and ICT, and Zurich is attracting a large inflow of foreign direct investment (FDI) as well as foreign corporate headquarters. Geneva is in the top range of urban agglomerations, while Bern and Lugano are growing more slowly; and Basel has recently begun to show new growth after restructuring its chemical cluster. Whereas many of the general public services are still accessible throughout most of Switzerland, more and more of the specialised business services and industrial support institutions are found only in the major cities. With the presence of airports and foreign corporate headquarters, big cities are also the points at which the Swiss economy is connected to global business, and some – such as Basel, Geneva, and Lugano – are even expanding their growth across Swiss national borders.

Hence, there is currently a strong “backwash” effect in the Swiss economy, with the concentration of new economic activity – and, consequently, population, and a range of environmental problems connected to congestion – in the major urban agglomerations. Some observers are of the opinion that this effect is inevitable and should not be countered politically; *i.e.*, that most economic activity (and, in particular, exporting industries) are being concentrated in the major

agglomerations, while medium-sized cities are serving as providers of only basic urban services for non-urban areas (facilitated by the revised NFE Financial Equalisation Scheme). Turning the Swiss economy into a functional system of connected urban agglomerations and having service centres functioning in a spatial “void” is, of course, politically controversial, as it would counter the Swiss tradition of local self-sufficiency and development, and hence jeopardise Switzerland’s political cohesion. There is also the danger that such an extremely agglomerated industrial structure would lead to tremendous problems of regional inequalities in income and public service levels and would not be economically viable. Experience in a variety of other OECD countries tells us that a large part of economic growth and export activity in a variety of sectors in fact takes place in clusters *outside* urban agglomerations (Lorenzen, 1998; Maskell *et al.*, 1998).

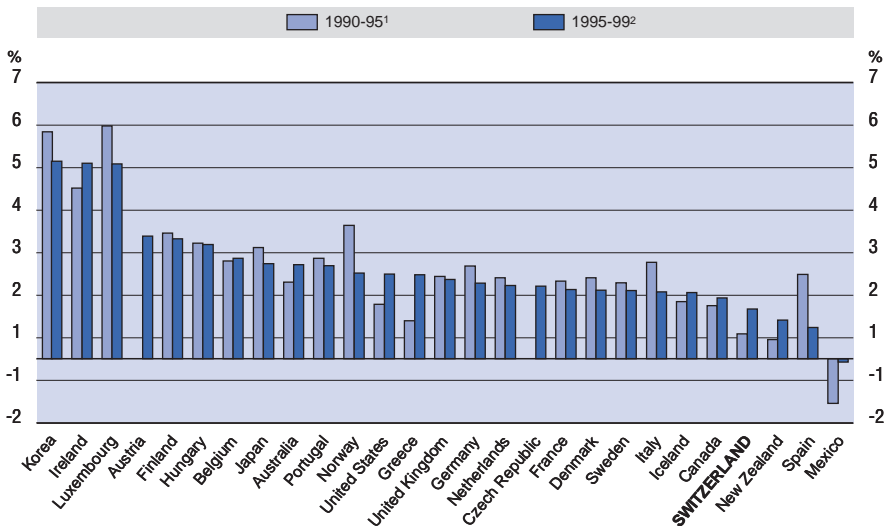
There are several reasons for the success of non-urban clusters in other OECD countries. First, in new industrial spaces, local industrialists, policy makers, and other agents succeed in building up not only specialised firms, but also specialised local labour markets and social institutions that are more tailored to accommodating particular economic activities than would be possible in urban and more diversified areas. In particular, such specialised economic and institutional environments have benefited emerging sectors. The classic example is Silicon Valley, but new industrial areas have also emerged in the EU during the last decades. Second, many existing industrial districts – *i.e.*, non-urban areas with long traditions of manufacturing – have succeeded in transforming their economic and institutional structures into a beneficial environment for new economic activities. Examples can be found in Baden-Württemberg in Germany or in the “Third Italy”, where local industrialists have succeeded in building upon existing skill resources and economic and institutional structures, upgrading and transforming seemingly traditional manufacturing areas into competitive and highly exporting industrial clusters. For both “new” and “old” industrial clusters, the central point is that those that are successful have been able to carry out a focused transformation through, for example education, training, and new directions in organisational learning, and through mobilisation of local agents and resources. Such mobilisation is largely non-urban. The policy of learning regions is an attempt to facilitate precisely such a transformation in particular regions, creating skill-based clusters.

Most of the traditional Swiss firms are found in non-urban areas – in the Jura region, and parts of the Mittelland. Many of these old industrial areas are now under heavy competitive pressure, and some have declined rapidly. However, others have potential for restructuring, and some are currently succeeding. For example, watch making in the Jura has undergone restructuring, and Neuchatel has become a rapidly growing industrial area. As mentioned above, the major Swiss policies for regional development are mainly infrastructural, and there is little focus on either regional specialisation or knowledge creation (*i.e.*, education and

research). Even if Switzerland is renowned for its high skill levels, the skills in general – and the educational system in particular – have not been used by either cantonal or national policy makers for industrial development purposes. While Swiss firms have high capital productivity, labour productivity is relatively low, suggesting that a better political focus on skills may indeed be relevant (Figure 5.1).

A key component of regional development lies in the ability of the Swiss government to give new momentum to the country's educational system. In that context, excellent co-ordination between research institutions and local firms is essential. The federal government has thus applied a new incentive structure for the cantons through the 1996 reform (implemented in 1999) of the advanced level technical schools and the creation of a system of Colleges of Higher Education [*Fachhochschulen* (FHS)/*Hautes écoles spécialisées* (HES)]. These are to upgrade the educational offer at the tertiary level (Box 5.1), facilitate technology transfer, answer the need for strengthening technical training, and be better adapted to local needs. The creation of HESS is a major landmark for the Swiss educational system.

Figure 5.1. Recent changes in productivity growth, 1990-1999
GDP per hour worked



1. Data for Germany, Hungary, Iceland, Mexico and Switzerland refer to 1991-1995.

2. Data for Austria refer to 1996-1999; data for France, Japan, Korea, Portugal and Switzerland refer to 1995-1998.

Source: OECD (2001f).

Box 5.1. Main characteristics of the Swiss educational system

Primary schools exist in most municipalities throughout Switzerland. They are exclusively the responsibility of the cantons, which have total freedom to design courses. Consequently, attainment and skills vary significantly between cantons. Secondary and higher secondary schools are also present in all cantons. These schools are primarily funded by the cantons, but their curricula have to respond to certain demands placed on them by national diplomas and federal assessments. Most advanced secondary level courses are non-specialised, and they can be taken at the secondary schools present in the cantons. In the case of universities – of which there are only nine, and they are in the major cities – federal funding plays a central role. This is partly because cantons cannot afford to fund university education (and research) on their own, and also because most cantons are reluctant to invest strategically in education, and even much less in higher education. Hence, university attainment levels vary considerably across cantons, and there is a sophisticated scheme of compensation between cantons with universities and those that send students. Some subjects (for example, those that are of importance for training high school teachers) are taught at virtually all of the Swiss universities, whereas some more specialised subjects are not. However, even with federal incentives in research, the universities are generally reluctant to increase their specialisation.

The apprenticeship system plays a central role in the educational system. It is a Swiss tradition to focus on education that is directly relevant for industry, giving preference to secondary and higher secondary education that is co-operating with industry through the apprenticeship system, rather than to university education. This creates many employment opportunities for young people by providing them with ready access to industry. Compared to EU countries, the good quality of secondary level skills (primarily at the lower-secondary level) in Switzerland is nevertheless coupled with a certain lack of flexibility as people tend to be averse to re-skilling (change of career) and up-skilling (*i.e.*, on-job training). The degree of “tunnel vision” is high, and the degree of lifelong learning low. Further, parts of the labour force – for example, immigrant labour – have for a long time had very low skill levels; it should be noted, however, that some immigrant labour is highly educated, lowering the risk that Switzerland could face a brain drain at the national level in the future.

In spite of efforts at the cantonal and federal levels, there is a growing lack in Switzerland of highly skilled people for R&D and other innovative functions in industry, which is also the case for many other OECD countries. For example, there are too few specialised engineers to meet the needs of the Swiss mechanical industry, and some large Swiss firms are trying to attract labour from abroad. As a consequence, Switzerland now faces the challenge not only of providing better access to university education and up-skilling opportunities for parts of the labour force that would otherwise risk exclusion, but also of providing a framework for continuing upgrading the skills of those with a secondary and upper-secondary level education. While these workers do not face immediate exclusion, their potential

Box 5.1. **Main characteristics of the Swiss educational system** (*cont.*)

for contributing to innovation (*i.e.*, organisational learning, in existing firms and through starting their own ventures) could be much higher if they had a mix of general and specific higher skills, and more flexibility between job categories and careers.

The federal government has taken on the challenge to boost specialised and general skill levels; this has meant, for example, increasing the flexibility of the educational market so that it can provide re-skilling opportunities. New experiments are taking place within that framework, such as long-distance learning (*e.g.*, eight “tele-teaching” projects in co-operation with the HES and universities). However, these experiments are focused on upgrading the general skill levels in remote areas and are very limited in scope. First and foremost the educational challenge must be met at the cantonal level since education is a policy area that operates mostly on that level.

The HES initiative

Origin and objectives of the HES project

The HESS are being created by reorganising, merging and upgrading existing educational institutions (technical, commercial and arts-orientated colleges). They are on equal footing with the university level, but stress vocational training and applied research. The standardisation of the curriculum of the seven HES gives the schools better visibility on the research scene and enables them to claim international recognition. HESS respond to both the need for easier technology transfer (*i.e.*, aligning fundamental and applied research with market mechanisms), and the ambition to give cantons and regions new weight within the dynamics of learning regions.

The HESs should be “practical” universities, funded partly by the federal government and the cantons, and partly by applied research and the provision of services to local industry (even if this latter source of income is smaller than hoped for in several HES). The HES system, which will supplement the existing university network with better geographical coverage, is made up of seven educational institutions, one in each of the seven Swiss *grandes régions*. Further, the HESs not only aim to provide higher quality education than the previous technical schools, but also to become more *specialised* to meet local needs. The seven institutions that

Box 5.2. Research and higher education in Switzerland

R&D originates mainly in the business sector. The rate of private R&D is relatively high, since much R&D takes place in large Swiss firms. However, the federal government is actively seeking to promote R&D in SMEs. The Commission for Technology and Innovation (CTI) is a relatively important public – and federal – tool for boosting private R&D, as the cantons traditionally provide little funding in this matter. Further, the federal government plays a large role in funding public R&D. Consequently, the bulk of public research is directed at applications in the business sector. The government funds the Federal Institutes of Technology in Lausanne and Zurich, and co-funds research in universities and HES.

In order to strengthen the Swiss level of research in certain areas, the federal government now supports ten national research networks or “Competence Centres”, each one focusing on a particular knowledge area. These networks, which are not fixed geographically, are constituted by the Federal Institutes of Technology, the universities, and the HES. The federal government is seeking to promote specialisation and co-operation of research institutes by raising the level of research quality necessary to obtain funding. co-operation between universities and other research institutions, however, is only progressing slowly. Also, even though establishing co-operation with research environments abroad is an objective for the Competence Centres, there are presently no federal policy initiatives to support this; in fact, there may be significant administrative problems attached to increasing formal research co-operation with universities in EU countries.

are currently candidates to become HES are upgrading their research and particularly educational capacities. The upgrading process will be evaluated for the first time in 2003. If the schools then meet particular criteria – including attaining certain quality levels as well as degrees of specialisation of their curricula – they will be authorised to become HES.

HESs are also designed to expand the role that technical schools can play in transferring technology from the Federal Institutes of Technology to SMEs. Until now, technical schools have done little to foster contacts with local industry or develop a strategy that would include it. There are few long-term R&D projects with firms, and generally local firms will call on technical schools only for finding the solution to an isolated technical problem. On average, only around 10% of the funding of HES come from applied research. There is also a challenge for the HES to spurring spin-offs or to provide targeted technological support for new local entrepreneurs, as technical schools have played a very limited role in this regard.

The testing period for the HES initiative will span 1996-2003. The goals to be achieved are listed in Article 3 of the Law on HES (LHES):

- courses and projects targeting practical fields;
- continuing education;
- applied research; and
- collaboration with international research and educational institutes.

The motivation behind the creation of HES is rooted in the political will to achieve better efficiency of local research, and a greater autonomy for regions and cantons. The federal government has expressed its will to take initiatives for research to be initiated not only in universities, but also in local schools targeting the needs of local industries (Swiss Secretary of State for Science and Research, 2001). The federal government also intends to introduce competition, evaluation and accountability in academic as well as practical and applied research. Until the HES initiative materialises, there is a profound need to upgrade existing institutions. Many of the existing technical schools have been very traditional and have rarely renewed their course offerings. Many of them have used part-time teachers to a large extent, who sometimes developed contacts with local industry, but rarely with research and educational networks – especially those outside the local area – and have often been reluctant to receive training. So far, technical schools have not put much effort into renewing their staff through retraining (there are currently no financial incentives for teachers to take courses at universities or go abroad) or attracting qualified teachers from outside the local area.

There is also a need to specialise the educational offer, as not all technical schools have tailored their curricula to local needs. Many have maintained a broad and traditional curriculum, offering for example architecture and other subjects that may not have direct relevance in some areas. As the HESs will be constituted by merging existing educational institutions, solutions to problems of teacher renewal and the specialisation of course offers can only be obtained gradually through both rationalisation and new investments, for example from cantons. Investing in tertiary education does not necessarily result in a brain drain, as graduates from technical schools typically are much less mobile than university students (they are older; and often employed in local industry while studying). Further, some of the Swiss HESs (for example, in Ticino) may actually be able to attract students from abroad; however, this requires resolving several problems linked with exchanging students from EU countries.

The development of networking and co-operation between the seven HESs is a central feature of the project. Each school will focus on a particular field of research, hence encouraging collaboration between them all, for instance through exchanging students. In comparison to the previous system, flexibility between schools will be an important asset of HESs. The standardisation of access require-

ments to HESs is also important in federal Switzerland, where differences between cantons have prevailed so far. The equivalence of HESs with the university level will have positive repercussions for the secondary school system. HESs embody the idea that apprenticeship can now lead to higher education. Hence, a positive stimulus should be provided for secondary level vocational training. Finally, HESs will revitalise not only tertiary education but also continuing education. Indeed, the more widespread the collaboration between local firms and HESs the bigger the incentive for the workforce to invest in continuing education will be. Re-skilling and up-skilling should both expand with the growth of HESs.

Summary and outlook

Within the next few years, the law on HES will be modified to prepare for an increase of the Confederation's authority. The Federal Chambers have already expressed their wish to broaden the scope of HES to health care, social work, arts and music. One of the problems raised by the development of HES is the risk of duplicating already existing programmes. The case of Ticino is quite telling: the schools which merged to form the canton's HES SUPSI (*Scuola universitaria professionale della Svizzera italiana*) have for many years had programmes in economics and architecture; however, in parallel to that, a chair for architecture and one for economics were recently created in the local university.

Even though it is difficult to make a definitive assessment of the results of HES, a few limited concluding remarks can be drawn from the first years. In particular curricula need to be improved and marketing efforts should be enhanced. So far most of the areas studied by the HES reiterate previously existing fields of research. In addition, many sections of HES do not reach the minimum of 15 students enrolled. One of the main goals of HES is better adaptation of research agendas to market requirements. Co-ordination between regional educational institutions and local industries is a key component in the creation of learning regions. Because of its geographical coverage and its emphasis on specialisation of regional educational and research institutions, this educational policy initiative nevertheless has tremendous potential as a regional policy tool. In short, if the HESs can be effective in supporting the non-urban clustering of firms in both existing and new knowledge fields, then the HES initiative can be considered to be a first step towards creating a learning region policy.

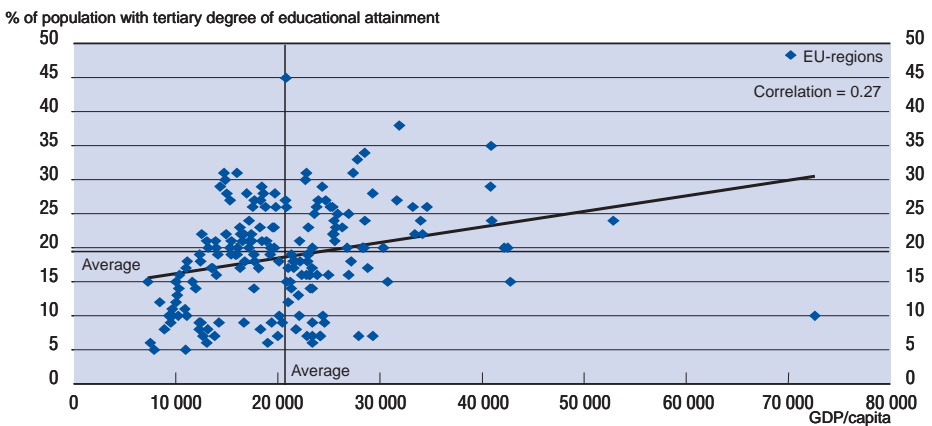
The potential of HES and higher education institutions for building learning regions

Regional economic growth potentials can be leveraged through education and other initiatives that promote firm-level innovation. As OECD research as well as many academic studies show, human resource development is key for

enhancing regional and national productivity and competitiveness (Figure 5.2) (OECD, 2001f). However it is not individual learning (personal acquisition of knowledge, skills and information) *per se* that matters for regional performance, but organisational learning that is the amplification of individual learning through an organisation (*e.g.*, R&D activities in a firm). The crucial problem here is to relate individual learning and organisational learning. In Switzerland the investment in R&D relative to its GDP is particularly high (close to the US performance) and the country ranks third in OECD countries for the number of patents per inhabitant. However, research results do not translate into outstanding innovation performances. Achieving a better transfer of research and knowledge into new product and processes is an important issue and a matter of organisational learning. HES that enhance both the potential of initial learning and the R&D capacity of higher education institutions are well positioned to bridge the gap. Universities also have an important role to play. Their ability to meet the challenge will be greatly improved if a good co-ordination between education policies and other policy initiatives for local and regional development is achieved. Moreover other educational institutions designed to upgrade adult skills, diffuse competencies on ICTs and implement continuous learning such as the Institute for Pedagogy and Vocational Training (ISFP) are contributing to the setting up of a more conducive environment for learning and innovation.

HES as specialised educational institutions can inject new knowledge into regions, while universities can provide skilled labour for some high-tech firms, and in particular, for regional research activities. Universities can also be central

Figure 5.2. Tertiary educational attainment and economic performance



research partners for local firms, facilitating the transfer of state-of-the-art technology, and even developing unique technologies in co-operation with regional firms. Further, universities may transfer knowledge to a region through spin-offs and provide technological support to new entrepreneurs.

Secondary educational institutions are also a key player in the development of learning regions (Box 5.3) because of their ability to counteract brain drain, and of their potential to transmit up-to-date skills. Because highly skilled workers are often very mobile and may move from the region where they were educated (brain drain), secondary educational institutions are often more important for local organisational learning than universities. However, while secondary educational activities are less subject to brain drain, they also typically have lower spin-off potential. Local educational institutions should not only provide the skills – and the research – that are needed today, but also ensure the development of “tomorrow’s skills” through upgrading teachers and curricula. This requires good access to other institutions (possibly large firms that are technology leaders), global networks, as well as mobility of staff.

Promoting learning regions has two goals: on the one hand, co-ordinating education and research with regional industrial activities and strengthening the capacity of regional educational institutions to offer specialised and innovative courses and, on the other, for regional universities to be able to offer research that is applicable to local industry. More specifically, to promote a learning region, co-ordination in four main areas is necessary (Lorenzen, 2001).

Box 5.3. Learning regions

“Learning regions” are regions with a dense network of firms interacting with higher education institutions and research facilities. Policies to promote learning regions focus on regional cluster structures and university/firm linkages, while also promoting social inclusion of labour through lifelong learning). The perspective of learning regions is not narrowly focused on initial education. It encompasses knowledge-creation at all levels of the regional economy – including appropriation of knowledge originating outside a region. An important aspect of this policy is that the emphasis is not only placed on individual learning, but also on learning which takes place within and between organisations (firms, research institutes, economic development agencies, etc.). While continuous innovation (in products, processes and wider work organisation) and successful networking between the organisations are essential for competitiveness, effective information exchange and wider social interaction inside organisations are critical to the success of learning region policy (OECD, 2001b).

First, co-ordination between regional educational institutions and industrialists is necessary for a more targeted local educational offer. This may be achieved through intensive networking between regional educational institutions and industry (acting as “critical customers”). Industrialists should participate in upgrading course offers through feedback and dialogue, and through investing in on-job training. Second, the development of learning regions demands co-ordination between industry, educational institutions, and the local labour force. The latter should be willing to apply for skilling and re-skilling (the latter often being problematic). Further, it is necessary that labour (to some degree) stays in the region if public investments in education are to be politically viable. Third, co-ordination among local firms (networking) is necessary. Promotion of vertical networks (value chains) should also be viewed as a skill-based policy. This leads to significant learning gains in the interface between specialised firms (user-producer learning), plus skill-deepening (what Adam Smith referred to as the greater “dexterity of labour”) within firms when they learn through trial-and-error and invest in on-the-job training. Horizontal networking (for example R&D alliances, but also other horizontal relations with technological spillover effects) also has great learning potential. Fourth, the co-ordination between policy-making units is necessary. Rigid boundaries between geographical and administrative units may make long-term investments difficult as each unit exhibits free rider behaviour resulting in risk-averse and static policies. For example, investment in education is limited by the brain drain perspective of the local units, each reluctant to subsidise the training of the labour pool used by others. This is short sighted as the upgrading of educational institutions may actually counter brain drain and attract new entrepreneurs. High-level education options is an asset that will encourage labour to stay within a region.

As a consequence, a long-term approach to educational policies requires linking these to other sectoral policies (*i.e.*, industrial development policies, spatial planning and housing policies) and entrepreneurship programmes, as well as co-ordination with national and regional policies. Customisation of a regional educational offer requires some freedom for regional educational institutions *vis-à-vis* national authorities to plan and customise. In Denmark, for example, the national planning system requires regional and municipal authorities to formulate detailed plans where they explain how land use, industrial development, education, etc., should be co-ordinated within their jurisdiction, and how this corresponds to higher and lower planning levels. The plans may sometimes be altered in the long run, but this process forces regional and local authorities to analyse their economic situation (including producing statistical documentation for it), to think strategically and to co-ordinate different policy areas. Germany provides another example of how the national government can supply a framework for regional learning region initiatives; the German government lets research networks created by regional public and private organisations compete for funding. This has spurred the

formation of some innovative regional networks and lasting partnerships between public research institutions and private firms (*e.g.*, *BioRegio*, based in the city of Jena (OECD, 2001b)).

While co-ordination between regional educational institutions, industrialists, and the local labour force is promoted by social capital – *i.e.*, networking at all levels of the regional economy – a learning region is better equipped for accumulating such capital. Most notably, education has a positive impact upon social capital through providing managers with networking competencies as well as personal relations, through boosting spin-offs, and through positively influencing the specialisation of firms, rendering their networking activities even more important.

Territorial aspects

The challenge of promoting non-urban clusters

The restructuring that is taking place within some of the old Swiss industrial areas seems to happen without much national political support in the guise of, *for example.*, provision of services and notably training services, and there is limited political attention being paid to promoting start-ups of new firms in new non-urban areas. There is little doubt that not only the regions in question, but also the Swiss national economy as a whole, would benefit from supplementing the economic growth taking place in urban agglomerations like Zurich with the employment of national policies to revitalise industrial districts in the Jura and Mittelland and promote new industrial spaces here and elsewhere. In fact, many of the Swiss regional problems can be said to be interconnected, as promoting non-urban clusters would indeed help to counter both depopulation of peripheral regions and congestion of the urban agglomerations.

Promoting Swiss non-urban clusters and stimulating new industry is a political challenge. Whereas earlier development of, *for example*, the mechanical industry in Swiss non-urban areas, did not require a similar degree of institutional support, with increased international competition and the importance of continuous technological innovation, there is now a role for the public sector in providing specialised public services and institutions. The political challenge for restructuring existing non-urban clusters as well as for stimulating new industry is to offer public services for industry and labour that are specialised to each case area. For example, the institutional and educational requirements for Swiss areas specialised in tourism are much different from those (potentially) specialised in micro-mechanics.

A few examples of vital policy tasks would be:

- Promoting a general upgrading of industrial firms to international standards. An important task is to undertake a strategic implementation of information and communications technologies (ICTs), as many Swiss firms have traditionally stuck to existing production technologies, and as some of the

firms that have incorporated ICTs in production have done it primarily to cut labour costs. Furthermore, there is a remarkable group of Swiss firms that have been very oriented towards the home market and consequently possess few export skills and skills in sourcing the international market for suppliers.

- Upgrading not only international networking skills, but also the networking skills (and willingness to network) between local firms. This is related to a general promotion of firms' emphasis on specialisation. Swiss firms are primarily SMEs, but the process of outsourcing, specialisation and the resulting deepening of skills (through internal learning or external on-the-job training) within the single firm is generally less advanced than in many other OECD countries. This may have impacts upon the use and qualifications of labour. Even if Switzerland is generally endowed with highly skilled personnel, on-the-job training and continuous education could be enhanced through increased firm-level specialisation (this of course necessitates that educational institutions can match the changing demands for education and training from local firms).
- Promotion of firm-level R&D. Even if Switzerland generally has a high level of patents, most R&D is carried out by the few large firms, localised in urban agglomerations.
- Fostering entrepreneurship. Many regions have a lack of entrepreneurs, and further, although enough venture capital is available in Switzerland (even for firms in peripheral regions), there are significant problems in co-ordinating entrepreneurs and venture capitalists.

Existing national policies for non-urban clustering

Swiss regional policies have hitherto viewed regional specialisation as problematic. Given that Swiss national policy making – and in particular, making of regional policies – is generally endowed with limited funding and coverage (apart from agricultural support, which for historical reasons enjoys a special status), there has been little national focus on providing specialised services for industrial clusters, or aid for restructuring existing clusters. Business services are cantonal matters, and the focus of national policies has for long been upon provision of (sometimes extremely costly) transport and communication services. The federal state has very modest industry, technology, and innovation programmes, very often as a part of general support for peripheral regions – for example in the guise of loan guarantees for single projects and firms. The Commission for Technology and Innovation (CTI), providing funding on a 50/50 basis to firms or consortia of firms and public research institutes for particular projects concerning new technology, is an example. However, there are limited policy tools for addressing the regional dimensions of industry, technology development, or entrepreneurship.

Box 5.4. Clustering and endogenous growth

Endogenous regional growth is based on tapping local resource endowment including clusters. It should not be viewed as isolated growth or as an inward looking strategy. Endogenous development means also forging links with external export markets and firms as well as with external sources of capital and knowledge. While clustering also rests upon external relations, it spurs the mobilisation and creation of endogenous regional resources. A high level of regional specialisation is often achieved through the presence of many small and medium-sized firms rather than a few conglomerates. Thus, start-ups – and hence, capital, entrepreneurial traditions, and infrastructure – play a central role for regional economic structure.

Most notably, local clustering may have the potential of mobilising specialised *knowledge and skills*. Contrary to mono-structural regions that are vulnerable to external economic shocks, knowledge-based clusters are specialised on the production side (skills), and not necessarily on the output side (products, markets). Experience from regions that have accumulated specialised skills within particular areas – such as mechanics in Baden-Wurtemberg (Germany) and Emilia-Romagna (Italy), electronics in Silicon Valley (United States), and radio communications in Aalborg (Denmark) – demonstrates that specialised knowledge can be a flexible resource undergoing constant change and new ways of application within industrial production. If high levels of specialisation, ongoing change, and re-application – *i.e., learning* – are achieved, regional clustering based on knowledge need not be risky in terms of lock-in of economic structures. Rather, public investments in knowledge specialisation often attract private investments in R&D and re-training related to the specialised knowledge area, sometimes supplementing public investments in pushing knowledge specialisation further and finding new economic applications for existing knowledge. Furthermore, knowledge specialisation often has spin-off effects, nurturing the growth of entirely new knowledge areas from existing ones, followed by new applications within industrial production.

Such knowledge and economic multiplier effects are recognised in regional policy in several OECD countries. Denmark, for example, does not (any longer) strive at levelling out regional differences in economic structures and knowledge bases. Rather, new planning tools focus upon local competencies that are defined through negotiations between national authorities and local public-private partnerships, and between municipalities/counties, employers' associations, industrial development councils, educational institutions and technology dissemination centres. The aim is to reinforce these competencies through setting up regional Competence Centres that provide education and research with particularly good national and local funding. Such centres are defined by their *knowledge area* – *e.g.*, there is a Danish Centre for “Wind Energy” and one for “Wood and Furniture Production” – and hence they constitute a much stronger regional specialisation in terms of skills than the Swiss HES. The United Kingdom also supports local Competence Centres in terms of co-operative networks between institutions. This has had a positive impact on the creation of new skill bases in old industrial regions, like Kent-Thameside (where public-private partnerships have also played a significant role) (OECD, 2001b). Like in Denmark, funding depends on the Competence Centers meeting evaluation criteria set by the national government.

Some Swiss national policies with impacts upon the restructuring of old manufacturing areas were the Law on Aid for Investment in Mountain Regions (LIM) in the 1970s and 1980s, aimed at Alpine areas, as well as the 1978 resolution, aimed at upgrading traditional manufacturing industry. Whereas the LIM programme has been designed mainly to supply physical infrastructure for peripheral regions, the other resolution has provided financial aid for firms in regions struck by economic recession. However, there is evidence that this aid has not led to restructuring on any major scale, as most firms that received aid have rationalised existing production in search of cost cutting, maintaining product lines, skill levels, and production technology. In other words, while it may have benefited some regions' performance in the short term, it has not spurred local clustering nor learning processes.

Most likely, the revision of the Financial Equalisation Scheme will spur further cuts in the Swiss sectoral policies, leaving even more initiative to the cantonal level.. Whether the cantons will use this leeway to substitute federal programmes with their own is difficult to establish.

Problems of Swiss policy making for learning regions: the governance gap

Promoting non-urban industrial clusters should comply well with the traditional Swiss political governance structure – federalism, efficient local administration and the great emphasis upon local initiative and co-ordination of local policy with local economic activity. In general, liberalisation and decentralised decision-making is viewed as the most reasonable political responses to growing international competition. The HES initiative is often seen as a liberalisation initiative as much as a competence initiative because it builds upon the cantons' power in educational matters, and has generally been well received by the cantons. However, when it comes to implementation, the initiative meets significant barriers. This is due to two main factors. First, the cantons have few traditions for co-ordination of policy areas internally or for long-term planning, which constitutes a barrier if the learning region potential of the HES initiative should be utilised for upgrading or stimulating non-urban clusters. Second, there are significant problems with inter-cantonal co-ordination and co-operation, which makes the very creation and functioning of HESs problematical.

Lack of cantonal long-term planning and internal co-ordination

The Swiss municipalities are generally too small to afford industrial policies, and many compete fiercely to attract citizens through low taxes. This leaves the cantons with a central role as policy makers. However, most Swiss cantons have a *laissez faire* philosophy, providing very little support to – and very few tools for or evaluations of – industrial or technological strategies, let alone policies. Since spatial planning is carried out at municipal level, federal regional funds are given

to municipalities, and some cantons have large internal political differences between their municipalities, the scope for cantonal policies is further hampered, and policy makers are extremely cost averse and reluctant to adopt long-term policy perspectives.

Hence, cantonal industrial support policies are virtually absent (with some cantons applying inward investment attraction as their main industrial policy), and many cantons leave investment to private investors. This lack of industrial policies (which also to a degree applies to the federal level) means that a systemic notion of industrial development – of clusters and networks in terms of vertical value chains or horizontal relations and alliances between firms – is not on the Swiss cantons' agenda to the same degree as is often seen throughout the EU. At any rate, there is a significant lack of statistical data or statistical projects addressing this systemic level. This means that if any modest industry support is given (mainly to SMEs), it is aimed solely at single firms (this is also true for most federal support for SMEs, which often goes to single firms in peripheral areas). Joint projects or networks fall between canton and federal SME support, and federal CTI support. It should also be mentioned that the federal technology policy does not seem to be based on an understanding of the interactive dimension of organisational learning (for example, user-producer innovation between firms). As CTI support emphasises technology transfer from university or institute of technology to firm, what goes on in relations between firms is not addressed. Similarly, federal entrepreneurship support programmes do not address the network dimension of firm spin-offs.

Another problem is that many cantons do not view education as an industrial nor regional development tool. In the public debate, education is viewed as a strategic resource, but there is also talk of the risk of brain drain connected to increased investments in education. This risk may, as mentioned above, be higher at regional than at national level. Even if upper-secondary education – like that provided by the HESs – seems to be generally less effected by brain drain, few cantons have incorporated investments connected to the HESs (such as funding for the HESs themselves, or provision of incentives for firms or labour to engage in on-the-job training courses) in their development plans. On the other hand, there are also few plans of countering brain drain through *e.g.*, spatial policies housing) and cultural policies. The result of this cantonal political stance for the HESs may be that it will limit investments in new fields of specialisation for HESs and ultimately limit access to new knowledge for local firms.

As there is little tradition for funding research at the canton level, the HESs cannot expect much public investments in creation of new research competencies. Further, cantons do traditionally not engage in entrepreneurship programmes and also ignore the role of HESs in this respect. This means that there is the danger that many cantons may lose other significant industrial development potentials of the HESs, such as boosting entrepreneurship.

Generally, spatial planning relates to physical problems (such as zoning of polluting industry out of housing areas and the re-use of land) rather than co-ordinating with industrial development plans and engaging in co-localising related industry activities in order to enhance clustering. This is of course due to a lack of political focus on systems and clusters, but also to the fact that spatial planning is undertaken by municipalities, even if cantons provide some directions and guidelines cantonal *Richtpläne*). Municipalities, however, are typically more concerned with transport planning than with economic development. Some potential synergies within particular policy areas are hence ignored at the cantonal level.

Lack of inter-cantonal co-operation and co-ordination

The two main concerns regarding non-urban clusters – upgrading existing manufacturing industry to international standards and facilitating the emergence of new industrial activities – could take more than liberal policies and a decentralised governance structure. With increasing international competition and the consequent need for marketing skills and distribution efficiency and, according to some experts, a growing need for rapid product and process innovation in all firms, regions that hope to promote local clustering must be able to help local firms specialise and network, implement ICT and continuously upgrade skill levels. According to experience from many successful OECD regions, this demands quite sophisticated regional policy tools that not only necessitate decentralised political power, but also political willingness to co-operate across administrative boundaries. In the Swiss case, some policies are so expensive that the cantons (and especially municipalities) cannot undertake them, and further, some industrial policies must address clusters of firms localised across cantonal geographical boundaries.

There are significant problems of co-operation between many Swiss cantons. A traditional “church tower” worldview dominates policy makers in many cantons, in particular the smaller ones (and, seemingly, some of the most prosperous ones). Some cantons have demonstrated better skills in co-operating with regions in other countries (such as Italy) than with neighbouring Swiss cantons. Inter-cantonal co-operation has traditionally been sparse, and in this field, policy makers are – for reasons of legitimacy – even more cost averse than when it comes to cantonal long-term planning. Some bilateral co-operation on infrastructure, labour mobility, landscape preservation, public services, cultural offers, and health care has been necessary for many years. However, when it comes to multilateral co-operation in more strategic fields, tremendous problems arise. For example, cantons compete intensely over FDI attraction, and developing common institutions becomes in this case highly problematic as the symbolic value – and the political power – of such institutions are considerable. Another example is education,

which tends to be a very touchy issue; the co-operation that is so vital to the HESs endeavour could only be initiated through strong national incentives.

Multilateral co-operation – such as is embodied in the creation of the HESs – is currently very much in a difficult trial-and-error phase. As few cantons formulated strategies beforehand for areas of co-operation and areas of competition, most new issues on the agenda are subject to hard and often futile negotiations; it should be mentioned that the *grand régions* compete hard as well, but as each of them has problems achieving internal consistency between cantons, competition is more diffuse. For example, the seven cantons in the Mittelland *grande région* have been largely unsuccessful co-ordinating even simple matters such as administering payments for rural support and spatial planning. The cantons in this *grande région* avoid all strategic areas and plan *ad hoc*, changing alliances for each co-operation area, and with some cantons not participating in certain projects.

Even if talk of cantonal mergers surfaces now and then in the Swiss media, this idea has so little legitimacy in most cantons (partly due to historical reasons, partly due to the fact that a merger would mean a loss of votes in the federal Council of States) that even federal planners dare not mention it. There is the co-operation Council of Ministers in the cantons, but this is a modest venture with only a few employees, and its purpose is more common lobbying in the federal Council of States than co-ordinating policies. Thus, not even the formulation of common inter-cantonal spatial planning directives (*Richtspläne*) seems to be viable in the foreseeable future.

This lack of inter-cantonal co-operation has two major impacts upon the HES initiative. First, it constitutes some barriers for the creation of efficient HESs. Political disputes may impede the very creation of a HES (there is one recent example of this), or may lead to a HES over-investing in some areas of expertise and under-investing in others. If the establishment of a HES simply means merging the administrations of different institutions localised in different cantons – such as a school of architecture in one and of engineering in another – there may be few co-operation problems. However, when this necessitates the concentration of activities (such as merging two schools of architecture), politicians in the cantons that will “lose” an educational institution often resist. The result may be that both institutions are included in the HES, even with a significant doubling of tasks and loss of efficiency. Further, there are problems of cost division and administration when a HES is formed, for which the NFE New Financial Equalisation Scheme would be of no help.

Second, the lack of inter-cantonal co-operation makes the specialisation of HESs difficult. Such specialisation means giving less priority to some areas of expertise and more to others. Because the participating institutions are in different cantons, closing some institutions and upscaling others, this constitutes a

political problem. Further, even in cases where the creation of a HES does not lead to closure, there is resistance to specialising each institution. To avoid increased dependence of some cantons on others as a consequence of the specialisation of cantonal educational institutions, some cantonal policy makers think the role of HESs should be to offer a broad variety of *non-specialised* courses, like the earlier technical schools, leaving specialisation to the ten national, cross-institutional (and hence “placeless” Competence Centre networks. Specialisation of a HES necessitates co-operation with other HESs, for example vertical co-operation through task division and exchanging students, and, in the best case scenario, also horizontal co-operation through common purchases, access to national Competence Centres and global research networks, exchange of personnel, etc. So far, however, the HESs seem to be embarking on a very competitive course. The cantons’ ministerial co-operation Council is limiting its influence to propagating informal exchanges of textbooks and ideas, while the emerging HESs are preparing to compete on research, price, and course offers. Clearly, such a strategy of inter-HES competition will limit their scope for specialisation. For example, it has been mentioned often that there ought to be a Swiss educational and research institution specialising in tourism at a grander scale (such institutions exist in, for example, Austria), but no Swiss institution has so far had the background to undertake such specialisation. Hefty competition on broad course offers between the HESs will effectively hinder the emergence of specialised educational initiatives, such as for tourism, in the future.

Clearly, there is a mismatch between the federal concept of using a “network of Colleges of Higher Education” as a skill-based regional development tool, and the cantons’ reluctance to incorporate HESs in their vision for economic and industrial development and, adding to this, the rising competition between HESs. According to the cantons’ ministerial co-operation Council, the HES initiative is regarded as an opportunity to upgrade the Swiss educational and applied research offer in general, and not as a means to regional specialisation or increasing inter-cantonal co-operation.

Conclusions

Regional development plays a significant role in national competitiveness – even if a country cannot create growth in all its regions. Furthermore, learning (education, and its impact on organisational learning in firms) is crucial for economic development in many successful OECD regions – even if all regions cannot be learning regions. For regional development to occur, a balance between market-driven private effort and market-complying policies is needed, and all the government levels – local, regional, and national – are important in formulating such policies.

HES is a major initiative in the field of education, innovation and regional development. It should help in bridging the gap between the high level of research in the country and the more modest level of innovation performance. HESs are training highly qualified professionals by offering a combination of practical and theoretical education within the framework of a short-term degree programme. Further, HESs are also promoting applied research and technology transfer to SMEs. The specialisation of these Colleges for Higher Education could have many potential economic applications; and if a certain level of quality of research and private R&D is obtained, continuing experimentation will ensure that specialised knowledge will evolve constantly and be applied in new ways. Further, public investments in specialising HES may be extremely cost efficient if local industrialists become involved and the HESs succeed in spurring private investments in training and R&D. Thus, a great political effort should be devoted not just to the specialisation of the HESs, but also to ensuring that local industrialists participate in the process.

In addition, HESs could function as local technology service providers. In co-operation with local authorities, some HESs could even take on the role of industrial development councils, arranging seminars and informal meetings about, for example, best technological practices, or new international, federal, and cantonal industry regulations. Such meetings also have a great potential for developing local networking cultures.

Cantons and HESs may have a central role to play in boosting cluster formation – not only through providing economic incentives to encourage networking, supplementing federal “network programmes”, but also through nurturing “network cultures” among local industrialists. Such “cultures” – meaning high levels of social trust and the existence of co-operation norms (as opposed to modernist or arm’s length management norms focusing rigidly on firm boundaries and internal scale economies) – are not esoteric phenomena; rather, with particular institutional preconditions, they may evolve over periods of 5-10 years in any local area. These institutional preconditions encompass means for inter-firm *governance* (lowering of opportunism) and for aligning beliefs of industrialists. While governance mechanisms may encompass reputation and retaliation mechanisms, belief aligning mechanisms are typically broad information exchanges between industrialists. Both reputation mechanisms and information exchanges depend upon personal interaction between industrialists, bilateral as well as through third parties – what sociologists often refer to as a mix of “strong and weak ties”. Such ties are created through local associations – boards, employers’ associations, guilds, sports clubs, etc. Hence, network cultures depend crucially upon the local level of social capital. A policy of creating and/or upgrading activities of local associations can thus foster networking cultures. For example, cantonal authorities could establish local industry development boards as fora where industrialists meet; such boards may also

provide supplier catalogues for local firms looking for new partners, or help in setting technological standards for use within local value chains. Local HESs also have a role to play in encouraging network cultures, through inspiring new management practices at courses, for instance, but more importantly through making local industrialists meet at courses, or at seminars dealing with technological issues, etc.

Federal SME, entrepreneurial, and technology support such as those granted by CTI are other tools that may be used for promoting clusters. This means that, for example, CTI grants could be increased considerably in size while designed with a *regional cluster dimension*, and become targeted at clusters and *networks* of firms (*e.g.*, through national competitions for CTI-type grants to outstanding joint university-firm projects). Furthermore, federal support for technological competence should be oriented at regional clusters. While the federal initiative to promote ten Competence Centres is bound to advance Swiss technological expertise, the challenge is to “pin down” this “placeless competence in space” – *i.e.*, in the Swiss regions.

With regard to learning region policies, Switzerland generally has highly efficient, decentralised administration, and possesses some policy tools for supporting peripheral areas (through regional policy initiatives, as well as the new Financial Equalisation Scheme NFE), and some tools for addressing urban issues (through the new Financial Equalisation Scheme, and through upgrading urban universities and developing connections between the metropolises and international networks). However, even with the high efficiency of Swiss local policy making and administration in the cantons, there are currently very few policy tools available for increasing non-urban growth of industrial clusters. The HES initiative, which could be a major step towards a learning region policy, is so far handicapped by a significant lack of industrial and educational strategies of cantons, as well as by great difficulties in inter-cantonal co-operation on economic and strategic issues. This leads to difficulties in establishing and specialising HESs and other public services, as well as in targeting emerging economic services.

While the overall conclusion of this review is that Swiss regional development policy has a role to play outside major urban agglomerations, it should also be noted that presently there are few policy tools available for promoting such development. The lack of such tools may not have been a major problem in earlier decades, but increased international competition and the ensuing larger role of regional industrial clustering and continuous firm-level innovation have made the need for regional public services much greater. The revised Financial Equalisation Scheme may make the transfer of funds between cantons easier, but in itself will not change the existing tendency of relegating economic development to urban agglomerations. Hence, relying on the Scheme alone may lead to political neglect

of non-urban clustering (including the restructuring needs of some existing industrial districts) – and of the growing internal differences within the cantons.

As merging or restructuring cantons is not currently politically feasible, the federal government may have a role to play in facilitating cantonal strategy formulation and inter-cantonal co-operation within the existing cantonal structure, through demonstrating best practices (*i.e.*, benchmarking) and providing further incentives.

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