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Fiscal Federalism - An International Comparison

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1. Introduction

In federal systems, the powers and responsibilities must be divided up between central government and individual states in such a way as to enable the center effectively to carry out its duties for the nation as a whole, while allowing the lower levels of government to pursue their own regional goals at the same time. Thus, the main challenge is to find the best way to combine the advantages and disadvantages of centralization and decentralization respectively.

In principle, there are two opposing normative models of organizing domestic fiscal relations. The first of these models is primarily inspired by distributive goals. Accordingly, revenue sharing is used as a tool to adjust "unequal" living conditions. This approach is exemplified by Germany, where the federal division of labor allows the lower levels of government very little discretion with regard to generating revenue. On the expenditure side, the system is characterized by an elaborate framework of domestic fiscal relations. Frequently, powers and responsibilities are shared by various levels of government, which regularly results in lengthy negotiations before the necessary broad-based consensus can be reached. There are many responsibilities that cannot be discharged independently. Equally, the extent of leveling is considerable.

The second model centers on allocative considerations. "Uniform living conditions" are not to be achieved by correcting the outcome of market forces, but by letting each region compete on the basis of its own comparative advantage. This approach is governed by the idea of "competitive" rather than "cooperative" federalism. The principles of subsidiarity and benefits received provide an intellectual background for this approach. Above all, the goal is to enable individual regions to shoulder more responsibility for their own affairs by giving them sufficient access to independent sources of revenue. If regions are less dependent on external funds they have a stronger incentive to use their resources economically and to improve their own tax base, because any resulting budget surplus will not be offset by corresponding cuts in the transfers they receive through revenue sharing. This approach has been adopted in the United States. As opposed to the situation in Germany, individual states can choose their own tax policy in the U.S.A. There is no coordinated taxation, such as Germany's "joint taxes" (*Gemeinschaftssteuern*). Some considerable differences can also be found with regard to the division of responsibilities.

2. U.S.A

2.1 Division of Responsibilities

The relatively great independence of individual states is not reflected in financial flows at the various levels of budgeting (Table 1). Thus, the federal level carries relatively much weight in numerical terms as a result of, above all, high military expenditures and interest payments. Transfer payments from the federal government to state and local governments are also pretty substantial. They reflect health-related and unemployment benefits. Unemployment insurance is administered by the states and topped up with grants from the federal government. The states determine the level of contributions to unemployment insurance as well as the criteria of eligibility for benefits. As a result, the various parameters of the system, such as the levels of taxable income, contributions and benefits, vary considerably between some of the states (Committee on Ways and Means 1998). The level of federal grants for these programs is determined by the states' economic strength and capacity to generate revenue.

Unlike the situation in Germany, for example, public education is financed mainly at the local level. Individual school districts decide on matters of school policy. However, state governments pay for some of the costs of public schooling. At the postsecondary level, state governments bear immediate responsibility for state universities and colleges, even though a significant share of education costs is paid for privately. Local governments are responsible for the police and the fire department. Again unlike the situation in Germany, costs for the administration of public finance are incurred at all levels of budgeting in the U.S.A., including local governments.

Federal grants account for approximately one fifth of state and local expenditures. Most of these funds are earmarked for specific purposes, while others are made available as general, or unspecified, grants. These transfers take the form either of block grants for particular areas, such as education, health, and welfare, or of grants targeted at specific projects that must be applied for on a case-by-case basis (Stotsky, Sunley 1997). The criteria for the horizontal distribution of grants usually includes the size of the local population, local economic strength as well as local efforts to raise taxes, or the cost of providing public services. The federal share of state expenditures varies from 50 to 80%, while the state share of financing local projects and services is clearly smaller than 50%.

State governments determine their own fiscal policies. However, they are freqently bound by their own state constitutions to balance their budgets. This does not necessarily mean that budget plans are actually carried out as originally adopted. Thus, some states allow budget deficits to be carried over to the next fiscal year. Others only insist on balancing the budget for administrative expenditures, while investments, or the "assets side" of the budget, can be financed by issuing debt. Similar rules apply to local governments. The debts of state governments are not secured by federal guarantees. Instead, rating agencies determine the creditworthiness of individual states, and thus the interest rates they have to pay on their bonds. The federal government exerts some influence in this area, however, by exempting interest earned on state and municipal bonds from the federal income tax, which makes these securities more attractive to investors (Stotsky, Sunley 1997, p. 375).

2.2 Tax Policy

In the U.S.A. individual states determine their own tax policy. There are no shared taxes, and tax rates as well as the levels of taxable income vary significantly from state to state. This is also true at the local level.

Apart from the federal government, most states and many local governments raise income taxes. However, income taxes paid at the lower levels of government are deductible from the amount of income subject to the federal income tax. Only a few states have no income tax at all, while the levels of taxable income vary considerably throughout the states. Thus, in some states profits and interest earnings are totally or partly exempt. Likewise, there are huge differences in the treatment of pensions and unemployment benefits. Tax rates, deductions and tax brackets vary substantially between some of the states. In the "high-tax" group of states, rates range from 5% to 11% of taxable income (ACIR 1995a, p. 49ff.). Local income taxes amount to 1% or 2% of taxable income.

In the U.S.A. corporate income taxes are also imposed by both the federal government and many state governments. As in the case of individual income taxes, it is very hard to calculate the differences in the effective burden that coporate income taxes at the regional level impose on companies. State-by-state comparisons show that the higher rates range from 4% to 12% (ACIR 1995a, p. 74ff.).

In the American tax system, there is no value-added tax with uniform rates at the federal level. Instead, many states impose so-called general sales taxes which are collected in the form of a certain surcharge on the purchasing price of those goods that are subject to the tax. To this, local sales taxes must be added in many states. Rates vary from 3% to 7% across the states, while local rates range from 1% to 4%.

2.3 Revenues and Expenditures by State

In view of the variety of taxes, rates, levels of taxable income, and the independence of the various levels of government with regard to tax policy, it should come as no surprise that revenue levels differ so much between the states and their localities. Northeastern and Mid-Atlantic states generate the most revenue, while southeastern and southwestern states form the bottom of the list (Table 2). Huge differences can also be found within those regions. In 1994, the most recent year for which data are available, the states with the strongest capacity to tax collected three times as much revenue as those with the weakest capcity to tax. Without the two strongest states in terms of tax collection, however, the gap narrows considerably: Revenue in the stronger regions is then roughly twice as high as in the weaker regions.

A comparison of state and local revenue with transfer payments from the federal government shows that federal grants play only a minor role in the financial position of lower-level units of government. As a result, these grants contribute only very little to making the distribution of fiscal resources more equal. At the same time, they do not really correspond to the regional distribution of income, even though payments per person vary substantially from state to state. States where revenue from taxes is lowest tend also to receive the smallest grants from the federal government, while tax-rich states get the biggest grants from the U.S. government. This appears to be an effect of the system of matching funds, under which states and localities have to match the federal grants they receive, usually dollar for dollar. No federal money, however, is available specifically for compensating regions which are economically weak and therefore unable to generate much revenue from taxes. Thus, there is very little in the way of vertical fiscal equalization between the federal and lower levels of government, and nothing at all in the way of horizontal equalization between the states. On the other hand, some revenue sharing takes place at the local level, although its extent is very limited.

Unlike the situation in Germany, for instance, in the U.S.A. no adjustment is made for the huge differences that exist between state and local governments with regard to their capacity to tax. Therefore, the differences with regard to the ability to spend are also huge. States where income per person is low also generate little revenue from taxes, while high-income states rake in much bigger amounts of revenue. The regional distribution of the capacity to tax also determines the regional distribution of expenditures. High-income states spend significantly more per person than states that are economically and fiscally weak (Table 3). Just under a third of state and local expenditures are devoted to education. The level of expenditures per person is linked to a region's financial status: On balance, richer states spend more on education than poorer ones. However, it is important in this connection to take into account the considerable disparity in input costs. Thus, teacher salaries vary in tandem with the differences in overall income levels. The connection between economic strength and public welfare is surprisingly weak. The higher-income states of the Northeast and the Mid-Atlantic region (for example, some states in New England, as well as New York) spend quite a lot. The higher cost of living in these states plays only a minor role in this connection, while two other factors are much more important. First, these states can afford higher levels of welfare. And second, average incomes are higher there, but so are their poverty rates, that is to say incomes are more unequal there than elsewhere (ACIR 1995b, p. 13).

2.4 Summary

There is no horizontal revenue sharing in the U.S.A. Also, vertical transfer payments do not produce any noticeable horizontal equalization. Many federal grants to the lower level depend on co-financing by state and local governments (matching funds). This tends to increase the fiscal resources of richer states, while it does nothing for making the distribution of resources more equal. Government policy does not aim to bring about "uniform living conditions".

Individual states pursue their own tax policy. Usually, local governments can also impose their own taxes. Substantial differences do exist between the regions with regard to revenue as well as expenditure. Higher income levels produce more revenue, and make it therefore possible for states and localities to supply a wider range of public services. Obviously, the population accepts the huge variation in the provision of such services.

It remains an open question, whether the significant regional imbalance in the U.S.A. has led to higher allocative efficiency and enhanced overall economic growth. Likewise, it is not clear, whether the far-reaching tax-policy independence of the states has actually increased their competition with regard to taxation. Policies to boost economic growth may actually benefit from the reduction of differences in regional economic development. Fiscal equalization that channels more resources into economically weaker regions for infrastructure improvements can spur economic growth if the capital earmarked for such investments promises a higher marginal rate of return in poor regions than in rich ones. Still, it is also possible that the diversion of resources from rich regions to poor ones weakens economic growth in rich regions so severely as to reduce overall growth in the economy as a whole.

3. Germany

3.1 Division of Responsibilities

In Germany the distribution of responsibilities among the federal, state (*Bundesländer*) and local level follows the principle of subsidiarity. This principle means that the federal level has the authority to carry out only those tasks that have to be regulated uniformly because of their general character. In keeping with the principle of subsidiarity, the states and local authorities are expected to take care of their own structural problems. Not only do state and local authorities have the best knowledge of local strengths and weaknesses. They also bear the political responsibility for regional and local developments. According to the Basic Law, Germany's constitution, the federal government and the states are independent of each other as far as the management of their budgets is concerned. Federal and state governments draw up separate budgets und bear individual responsibility for the implementation of their own budget plans. But the various forms of revenue sharing in Germany provide economically and fiscally weaker regions with the financial means to carry out their policy tasks.

In addition, German politics is dominated by a consensual approach to policy, which holds that the federal government should adress those problems of regional development that state and local governments cannot solve on their own. Federal intervention is also considered to be justified, because seriously negative developments at the regional level may ultimately threaten the stability of the overall economy. Hence, there are some important supranational tasks that are planned and financed jointly by the federal government and the states.

In order to understand the distribution of responsibilities in Germany, it is necessary to know how the various levels of government share the power to make laws. The German constitution distinguishes between three different catagories of legislative power: exclusive jurisdiction, concurrent jurisdiction, and the power to determine the overall framework of policy. Areas of exclusive legislative power include foreign affairs, defense policy, air-traffic regulation, monetary matters, and most aspects of tax policy. In the case of concurrent legislation, the states can fill in any gaps left by federal legislation, or deal with areas not specified in the Basic Law. Where the federal government has the power to establish the overall framework of policy, the states have a certain amount of legislative latitude with regard to the concrete details of policy. This category includes, for example, higher education as well as regional and landscape planning.

The distribution of law-making powers does not necessarily match the distribution of administrative responsibilities. The federal level executes laws only when proper federal agencies have been established for this purpose (for example, in foreign affairs and social security). In many cases, the states act as agents on behalf of the federal government, as with the collection of taxes or the operation and maintenance of federal highways (*Bundesstraßen*) and freeways (*Autobahnen*).

As mentioned above, some important supranational tasks are planned and financed jointly by the federal government and the states. These so-called "joint tasks" cover improvements in the regional structure of the economy and the structure of agriculture, as well as the protection of the coasts and the construction of university buildings. The federal government may also participate in particularly important investment projects of state and local governments by making grants-in-aid available for specific purposes, such as

- the avoidance or the removal of threats to overall economic stability,
- the equalization of regional differences in economic development, and
- the promotion of economic growth.

All decisions on joint tasks require the support of the ferderal government and the majority of the states. In fact, decisions have never been taken over a minority of dissenting states. As far as grants-in-aid are concerned, the federal government and all states must agree on the allocation of federal money to the states. The reason is that these funds should be allocated according to uniform standards and the states' own priorities. It should be obvious that the system of taking decisions jointly imposes strict requirements for reaching a consensus. This approach is therefore prone to produce decisions that carefully skirt all areas of conflict. In terms of economic efficiency, the solutions will often seem less than optimal, as there can be no guarantee that the money is put to its most productive use.

Joint tasks, however, are not the only area where states can make themselves heard in the federal system. Although the federal parliament is the most important legislative body in Germany, the states as a whole exert substantial influence through the *Bundesrat*, because all bills affecting state interests must be approved by this body, which functions as the upper house in Germany`s parliamentary system.

The states' independence with regard to budgetary matters entails their ability to borrow money. The Treaty of Maastricht does not allow governments to borrow directly from the central bank. Instead, they must raise the funds they need exclusively in the markets for capital. Borrowing by state governments, as well as by the federal government, must not exceed public investment expenditures. Debt issues by local governments are limited even more strongly, as they are tied to their cash flow. In addition, they are subject to overall state control.

The Basic Law gives cities and communities the right to manage their own affairs independently. Specific functions of local government are not listed in the Basic Law, but they may be enumerated in state constitutions. In particular, local authorities are in charge of constructing local roads, supplying electricity, water and gas, maintaining the sewers and engaging in town-planning. They are also responsible for the building and maintenance of schools, as well as for theaters, museums, hospitals, sport facilities and public swimming pools. Social assistance is another important task of local government.

Table 4 shows the distribution of public expenditures among federal, state and local governments. However, the division of responsibilities is not fully reflected in the distribution of expenditures, because a rather wide range of tasks is carried out at all levels of government. Moreover, as mentioned above, the higher levels of government tend to delegate the implementation of responsiblities to their lower-level counterparts.

3.2 Tax Policy and Distribution of Tax Revenues

Germany has a federally organized structure, but a rather centralized tax system. The states have virtually no power to set tax rates, which are normally fixed by the federal government. The only exemption is the rate of the local business tax, which can be set at the local level. However, the states participate in tax legislation through voting in the *Bundesrat*. This means that they can influence tax policy collectively, while none of them has any individual influence on tax rates. Apart from this, the states as a whole and the federal government negotiate how revenue from the so-called "joint taxes" is to be shared. That is to say, these revenues are distributed between the federal government and the states according to a specific formula, which is renegotiated periodically as the responsibilities of the different levels of government tend to change over time. To give an example: The integration of the East German states into the system of intergovernmental fiscal relations in 1995 required that the states' share of the value-added tax (VAT) be raised from 37% to 44%. In 1996 the states became responsible for managing the regional railway system. In this case, it was not their share of the VAT that was renegotiated, but the petrol tax, which had become the means for redistributing public money between the federal and the state level.

The joint taxes comprise the most important revenue sources of the German tax system. These are: the wage tax, the assessed-income tax, the corporation tax, the non-assessed income tax on dividends and interest earnings, as well as the VAT. Part of the revenue from the income tax, as well as from the VAT, goes to the local level. By way of compensation, the local governments cede a portion of the local business tax to both the federal government and the states. Table 5 shows the distribution of joint taxes among federal, state and local authorities.

Other taxes apply only to one level of government. The federal government obtains revenue from all excise taxes (for example, those on petrol and tabacco), while the states receive the revenue from the motor vehicle tax, inheritance tax, as well as some other taxes of minor importance. Local governments generate revenue through the local business tax, the real-property tax and local excise taxes.

An important aspect of the German arrangement of sharing taxes is the horizontal distribution of revenue from taxes. Revenues from income taxes are distributed among the states according to the regional yield of these taxes, while the states` share of the VAT is distributed mainly on a per-capita basis, although up to 25% of this share is reserved for explicit equalization measures. The per-capita element in sharing the VAT produces implicit horizontal equalization effects. The same is true for the local share of individual income taxes: The distribution among local governments depends only in part on the local yield. Tax revenues from income above a certain threshold, as defined by the tax schedule, are not used in this formula.

3.3 Horizontal Equalization among the States

The financial situation of the states varies considerably, because their economic structure and development does so, too. Thus, economically and financially stronger states such as Baden-Württemberg, Bavaria and Hesse have substantial financial resources at their disposal, whereas the economically and financially weaker states, especially in East Germany, do not. These disparities are mitigated by the regional distribution of joint taxes. Despite this fact, the revenues of the financially weaker states are not big enough for them to provide a similar range of public services as economically and financially stronger states.

According to the Constitution, fiscal policy in Germany has to create and maintain uniform living conditions throughout the country. A nationwide regime of horizontal fiscal equalization has therefore been established. This horizontal equalization system is based on defining a measure of each state's regional capacity to tax, which is related to an equalization yardstick for this state.

A state's capacity to tax (determined by state and local tax revenue per person) is brought into line with the average capacity to tax of all the states considered together. The weaker states are guaranteed 95% of all the states' average capacity to tax. Payments given by the stronger states stem from their tax revenues including VAT. As mentioned above, 75% of the states` share of the VAT is distributed to the individual states on a per-capita basis. The remaining 25% is assigned to those states whose per-capita revenue from direct state taxes, as well as from income and corporation taxes, is below the average of all states. Payments are made by those states whose taxing capacity exceeds the average (100%). Transfers from the richer states are staggered progressively. In other words, transfer quotas rise with a state's ability to tax. If this ability amounts to between 100% and 110% of the average, a marginal rate of 66.6% is applied. If the capacity to tax exceeds 110% of the average, the marginal rate is 80%.

Table 6 shows the different steps in the system of horizontal equalization. The first column gives the "original" taxing power of each state. This is revenue from state taxes proper as well as the states' share of income and corporation taxes. The second column shows the distribution of the remaining 25% of VAT, which is assigned to the poorer states. The third column features the equalization yardstick of each state, while the fourth column shows the regional capacities to tax. The fifth column describes the shortfall in the poorer states as well as the surplus in the richer states. The last column presents the states` financial position after horizontal equalization has taken place.

Despite this system of financial equalization, some states still remain "weak". They receive supplementary grants from the federal level, designed to "push" them up to at least 99.5% of all the states' average capacity to tax. Additionally, the federal government provides grants for special needs, such as payments that help the states meet their higher "political management costs", or bear the burden imposed on them by the process of unification.

As a final result of this redistribution among the states, the formerly weak states are mostly better off than the formerly strong states. Overall, more than DM 80 billion, or almost 21.5% of GDP (and almost 5% of total public expenditure), are redistributed between the federal and the state level, or between the richer and the poorer states:

- about DM 13 billion are redistributed by allocating the remaining 25%-share of VAT to the financially weaker states;
- almost DM 12 billion are redistributed through the horizontal system of equalization;
- more than DM 31 billion are given as supplementary federal grants and specific grants to the new states;
- about DM 25 billion are devoted to joint tasks.

Table 7 illustrates the regional distribution of financial payments from the federal government to the states. Table 8 shows that the high degree of financial equalization and federal support enables the new states to provide more public services than the old states. This result is politically desirable, because policy-makers originally aimed at higher levels of public expenditures in East Germany. Such higher expenditures were thought to be necessary for the new states to catch up with regard to public infrastructure, and to meet higher social needs as well as to face higher administrative costs. The reason is that the new state and local governments had to take over almost the whole administrative apparatus of the former GDR. It should be clear that it will take time, as well as huge amounts of money, to adjust the old structures of East Germany to the new situation. Table 9 shows that the scheme of horizontal equalization leads to a rather strong degree of equalization of state expenditures in both West and East Germany.

3.4 Fiscal Equalization at the Local Level

Vertical financial equalization also takes place between state and local governments. The revenues of local governments from taxes and other sources are inadequate for them to carry out their tasks. They therefore depend on grants from the states. Some of these grants are tied to specific purposes, while others can freely be disposed of. The aim of this scheme to equalize fiscal resources at the local level is to reduce the disparities that exist in each state between localities with high and low revenues from taxes. Table 10 provides some results with regard to tax revenues and state grants for the larger cities in Germany.

It is important to know that the financial needs of local governments are calculated according to population size: the bigger the city, the higher the fiscal worth of each resident. The underlying rationale is that the financial needs of metropolitan areas rise with the degree of agglomeration. In addition, the grants given to local governments also depend on a state's revenue from taxes. The local shares of state revenues from taxation vary from state to state. On average, the share is about 25% in West Germany and 30% in East Germany.

3.5 Summary

A main characteristic of the German arrangement of intergovernmental fiscal relations is its increasing tendency to distribute resources uniformly among the states. The system of taking decisions jointly has made possible high transfers to the needy East German states, without reducing the absolute level of funds received by the West German states. The requirement that decisions must be based on a broad consensus has obviously led to a pattern of decisions that tend to avoid controversial issues between the federal level and all the states taken together, as well as between individual states. This implies a reluctance to allocate funds more selectively in terms of priorities or posteriorities.

All in all, German fiscal federalism has created a high degree of homogeneity with regard to the regional provision of public services. For reasons of regional development, this has been an appropriate approach, as the decision to set up the German monetary union implied at the same time that massive transfer payments would have to be made by West Germany to East Germany. These transfers have enabled East Germany to catch up by extending and modernizing its public infrastructure and by promoting business activities. They have also been necessary in order to stabilize the social conditions in the East. On the other hand, the West German states have substantially benefited from unification, and they have not suffered any financial loss from the 1995 reform of the system of fiscal equalization.

If the economically stronger states, whose infrastucture endowment remains far superior, were given more resources at the expense of the poorer states, this would imply a loss of welfare at the macro-economic level, as the marginal return on capital invested in infrastructure can be expected to be higher in East Germany than in the richer West German states. If the system of fiscal equalization were reformed so as to generate more competition between the states, the highly unequal distribution of initial endowments would not be the only problem. Rather, it seems very likely that some states would almost certainly lose such a race because of the lack of fiscal competition at the regional level. What is even more serious is that the supply of public services would surely be cut back.

On the other hand, the system of financial equalization creates some questionable incentives. They result from the strict interpretation of the Basic Law's stipulation that uniform living conditions must be achieved throughout the country. This results in a very awkward fact: States that succeed in expanding their tax base by attracting more business have to transfer a considerable share of their revenue increase to financially weaker states. Economically stronger states, therefore, have little incentive to strengthen their tax base, or to prosecute tax evasion.

The principle of uniform living conditions, as well as the uniform system of taxation all over the country, is thought to prevent public spending from becoming more efficient. The ability to impose taxes at the state and local levels independently would strengthen fiscal responsibility with regard to both revenue and expenditure. Uniform living conditions may, in fact, encourage the waste of tax money, because the authorities have no incentive to provide public services in accordance with regional or local needs of the citizenry. Because they also have no incentive to use financial resources as economically as possible, fiscal discipline may be much weaker than it should be.

4. Canada

4.1 Division of Responsibilities

Canada's fiscal federalism features elements of both the U.S. system and the German version of intergovernmental fiscal relations. On the one hand, there is a high degree of decentralization insofar as eminently important powers have been assigned to the provinces, which roughly correspond to the states in the U.S.A. and the *Bundesländer*, or states, in Germany. Thus, the provinces have the power to pass laws concerning all regional and local matters. And, what is more, they are free to determine their own tax policy in a way that is completely unknown in Germany. On the other hand, distributive considerations play an important part in the Canadian model of fiscal federalism. As in Germany, but unlike the situation in the U.S.A., the national government and the provinces are explicitly called upon to make sure that people everywhere enjoy
equal opportunities of economic advancement, and to provide for the adequate quantity and quality of public services necessary to reduce regional variations in economic development (Leslie 1993).

Compared to Germany, Canada's revenues from taxes and expenditures are similarly big as a share of GDP. In Canada, however, the government's role has become markedly smaller in recent years, because, among other things, its economy has performed better than Germany's (Table 11).

The composition of vertical fiscal flows is noticeably different, for Canadian provinces and localities are much more influential in quantitative terms than their German counterparts. Whereas state and local governments account for well over 40% of all public expenditure in Germany, the corresponding share for Canada is just under two thirds. The difference is particularly big with regard to government consumption. In Canada, government at the provincial and local level accounts for 15%, while the share of German states and localities is only 9%. The budgets of lower-level government in Canada are also burdened with much higher interest payments. Yet, transfer payments from the central government to the provinces do not betray the relatively strong position of the latter in Canada's federal system, as the extent of such transfers is smaller than in Germany. Instead, transfers from the provinces to the local level are more important, which shows that the independence of local jurisdictions is limited in Canada.

As far as legislation is concerned, the Canadian provinces enjoy much wider latitude than the German states. In this respect, the Canadian system is similar to that in the U.S.A., whereas the German states ultimately participate in legislation only collectively through the *Bundesrat*. With regard to the budgetary responsibilities of the various levels of government, the differences between Canada and Germany appear to be rather small, however. Thus, Canada's central government is, of course, also in charge of foreign relations, national defense, research and, above all, social security (including unemployment benefits, old-age pensions, health insurance and the support of indigent families). As the goal of providing as uniform a level of public services as possible in all the provinces has become more important politically over time, the national government has given ever bigger grants to the provinces for this purpose, and particularly for health care and education. But most of all, this goal is pursued by means of direct federal grants to economically and fiscally weak provinces.

Due to the transfer payments from the central level, there is no clear-cut division of responsibilities between the national government and the provinces in the areas of health care and social services, as well as some parts of the education system. Grants from the national government in these areas do not necessarily mean that it also has the power to legislate on these matters. Thus, the central government originally intended to have the provinces participate in the implementation of its plans for a basic system of old-age pensions as well as mandatory health insurance. Yet, some of the provinces refused to participate, and the national government ultimately had to shoulder the responsibility for these programs alone.

Grants from the central government to the provinces are either general or earmarked for a specified purpose. Transfers intended to improve the financial resources of fiscally weak provinces, the so-called "equalization payments", take the form of general, that is nonspecific, grants. By contrast, the payments for health care and social services are specified grants, some of which are based on uniform amounts per person, with the provinces bearing half the cost (Krelove, Stotsky, and Verhorn 1997). Equalization payments go to the seven provinces that qualify as "have-nots": Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Manitoba, and Saskatchewan. The yardstick of eligibility is the extent to which the provinces' own fiscal resources fall short of the national average. As opposed to the German system of horizontal revenue sharing, the financial resources of fiscally strong provinces are not directly impaired, because the compensatory transfers are paid for by the national government. Of course, equalization occurs indirectly insofar as the national government takes the necessary funds out of "its" revenue in the rich provinces (Broadway and Hobson 1993). However, the degree of equalization is much smaller than in Germany.

4.2 Tax Policy

At the federal level, the most important Canadian taxes are the individual and coporate income tax as well as the value-added tax (VAT). But the provinces also have the right to collect individual and coporate income taxes of their own. To this must be added the retail sales tax and the tax on the, in some cases, considerable wealth of natural resources. Local governments are entitled to revenue from real-property taxes.

Individual income taxes at the federal and provincial level are collected by the same agency, except in Quebec, which collects and administers its own income tax. The other provinces receive a certain percentage of the federal income tax collected on their territory, after their share has been standardized, that is to say, adjusted for any tax exemptions. The provincial income tax consists of several elements: first, a basic rate of between 45% and 69% of the standardized ferderal tax in the various regions; next, a flat tax that is raised by three provinces; and third, a surcharge based on the amount owed under the respective regional income tax (Table 12). The basis of assessment is the same for both federal and provincial income taxes. Taxpayers therefore have to fill in only one income-tax return.

In the case of corporate income taxes, regional arrangements also vary substantially. Three provinces impose corporate income taxes of their own and administer them independently. The rules that determine the basis of assessment are similar to those enforced at the federal level. The national government grants provinces a ten-percent tax credit in order to give them some latitude with regard to taxing companies on their own. Currently, the general rate of the federal corporate income tax is 28% (after adjusting for the tax credit in favor of the provinces). To this must be added a three-percent surcharge on the amount of taxes owed. The effective rate is therefore 28.84%. Lower special rates are available for capital-investment companies (investment trusts), mortgage banks, pension funds, and similar legal entities, as well as for profits from production and processing activities in Canada. Corporate provincial rates range from 14% to 17%, except for Quebec where the rate is 8.9% (Krelove, Stotsky, and Verhorn 1997). At the regional level, too, special rates are offered for certain types of firms, such as small companies, as well as for certain industries, such as manufacturing, processing activities, mining, forestry and fisheries. If a corporation has facilities in several provinces, its overall corporate tax load is split among the provinces according to their share of the firm's sales and payroll, a procedure that is similar to the German approach.

At the beginning of the 1990s, the value-added tax was introduced at the federal level. The reform aimed at bringing provincial sales taxes into this system, but the provinces rejected these plans, because they were afraid that they might lose their independence with regard to tax policy (Krelove, Stotsky, and Verhorn 1997). The sales tax is imposed on retail sales, with provincial rates varying from 6% to 12%. Alberta is the only province that does not have a sales tax. The tax base is not defined uniformly everywhere. And in some of the provinces the tax is also imposed on the federal sales tax. This results in a confusing maze of rules and procedures. The following rates are valid in the various provinces:

	Provincial rates (without federal tax) (as %)	Overall rates (including federal rate of 7%) (as %)
Alberta	0	7
British Colombia	7	14
Saskatchewan	9	16
Manitoba	7	14
Ontario	8	15
Quebec[1]	8/4[2]	15.56/11.28[2]
New Brunswick	11	18.77
Nova Scotia[1]	11	18.77
Prince-Edward Island[1]	10	17.7
Newfoundland	12	19.84
[1]Federal sales tax is included in basis of assessment for provincial tax.- [2]Lower rate applies to services and selected activities		

In 1996 the provinces of Newfoundland, Nova Scotia and New Brunswick decided to bring their sales taxes into line with the federal tax. With a rate of 15%, the harmonized tax is implemented by a newly established and jointly operated agency.

Generally, taxes imposed on natural resources, such as oil, natural gas and minerals, play only a minor role. The provinces receive the proceeds from these taxes. However, their importance varies considerably by region, because the resources themselves are also spread out rather unevenly. Thus, such taxes account for a quarter of all revenue in Alberta, but only for a tenth in Saskatchewan (McMillan 1991). The federal government collects the proceeds from excise taxes imposed on tobacco, alcohol and petrol. In the case of the petrol tax, the provinces are also entitled to some of the proceeds, but their tax rates vary.

4.3 Revenues and Expenditures by Provinces

As in the U.S.A., revenues from taxes are distributed much more unevenly in Canada than in Germany. This is true for all of the various kinds of taxes (Table 13). In case of the individual income tax, which yields the most revenue, Quebec, at $ 1925, receives the highest amount per person, while Nova Scotia, at $ 994, is at the bottom of the scale. In other words, Quebec's revenue is almost twice as high as Nova Scotia's. The discrepancy is even bigger in the case of provincial corporate income taxes as well as property taxes. In Newfoundland, the provincial corporate income tax yielded as little as $ 88 per person, while the corresponding figure for British Columbia was $ 382. But revenue from excise taxes is also spread out very unevenly between the provinces: just $ 318 per person in Alberta, as opposed to $ 1320 on Prince Edward Island.

The level of a province's revenue per person, excluding grants from the central government, correlates relatively strongly with regional economic strength. The economically strong provinces of Alberta, British Columbia and Saskatchewan generate the highest revenues per person. Ontario, with its notably smaller level of revenue per person, is an exception in this regard. At the same time, the economically weak provinces of Newfoundland, Nova Scotia and Prince Edward Island also generate only low levels of revenue per person. Yet, grants from the national government more than compensate for the paucity of their revenue. On balance, the weak provinces do, after all, receive similarly high revenues per person as the economically strong provinces, which enables the former to maintain a corresponding level of expenditures.

At the local level, huge regional differences also exist with regard to revenues and expenditures. Here, too, a certain correlation can be found between revenue levels and economic strength, although the division of responsibilities and of fiscal resources varies from province to province. The fact that fiscally weak localities also receive only limited transfer payments from their respective provinces shows that grants often require local governments to provide matching funds of their own.

4.4 Summary

Canadian federalism contains both German and U.S. elements. Similar to the states of their southern neighbor, Canada's provinces enjoy a rather high degree of independence with regard to tax policy. At the same time, the notion of distributive equity plays an important role, although there is no horizontal revenue sharing. Instead, the national government uses equalization payments to the same effect. But the degree of equalization is not as high as under the German system of revenue sharing. More recently, however, the central government has reduced its grants to the provinces, whose financial problems have become considerably worse as a result. The provinces have, in turn, tried to pass the increased financial pressure down to the local level.

5. Switzerland: New Trends in Fiscal Federalism

5.1. Institutional framework

Since long time Switzerland is organised in a federal system which originally dates back to the Middle Ages and was constitutionally confirmed in the 19th century. 26 cantons form the confederation, six of them are half cantons. About 3000 municipalities can be found within the cantons. With respect to the geographical situation, size (area and pupulation) and economic potential there are remarkable discrepancies between the cantons. All in all, three groups of cantons could be distinguished: agglomeration cantons, mountain cantons, and others. Each group of cantons has typical problems of its own.

The cantons dispose of a high degree of sovereignty, limited partly by the constitution. As in Germany, the municipalites have much less legal sovereignty and are under control of the cantons. Nevertheless, with respect to public services, the municipalities are of great importance, because they carry out state functions on the basis of own responsibilities as well as on behalf of the cantons. However, that differs much between the cantons.

The cantons are represented on the confederation level in the Council of States, which is an upper house of parliament. In regard of decision making each canton dispose of one vote, independent of its size and economic power. Based on the Constitution there is a strict definition of responsibilities of each tier of government, and this is reflected, too, in the arrangement of public finances, leading to separate power of taxing between the confederation and the cantons. According to the Constitution, the confederation is exclusively responsible mainly for defence, external relations, social insurance, protection and use of property, monetary and macroeconomic policy, national transportation systems and telecommunications and energy policy. In some fields like concerns of citizenship and foreigners' status, environmental policy as well as support of culture and mass media cooperation with the cantons is required. On the other side, the cantons are exclusively responsible mainly for public welfare, education, health infrastructure, regional and local planning of land use, as well as usage of water and other resources. Most of the other government functions, i.e. health, culture, universities, vocational training, support of R&D, are associated with the cantons, if federal laws do not provide for a responsibility of the confederation. In this case, normally the functions are delegated to the regional and local governments, which implement the policies on the basis of the confederation's guidelines.

Each level of government collects its own taxes. The main federal taxes are (1998):

· personal and business income tax,
· tax on exemption from military service,
· stamp-duties,
· value-added tax,
· excises on tobacco, beer, spirits and mineral oils,
· motor car tax,
· transportation duties, and
· custom duties.

About 40 % of the tax income of the confederation stem from taxes on income, the great bulk of 60 % is coming from taxes on private consumption, which are exclusively federal taxes.

On the contrary, in the case of the 26 cantons as well as the 3000 municipalities nearly the whole tax revenue results of taxes on income and wealth. The main sources are:

· cantonal personal income and wealth tax,
· cantonal business income and wealth tax,
· taxes at death and on gifts,
· tax on capital gains (mainly on private immovables), and
· other real taxes.

Taxes of minor importance for the cantons are the following:

· motor vehicles tax,
· dog licence fees,
· entertainment tax,
· stamp tax and others.

The municipalities dispose over taxes on entertainment and on stamp and fees for dog licences, too. The consequence of far reaching autonomy for taxing powers is a very complex and intransparent tax system, which shows remarkable differences between the regions not only with respect to the taxes levied, but also regarding the tax base and the tax rates of similar taxes. That led to tax competition between cantons and municipalities. Moreover, the problem of double taxation arose. Because the need for more tax coordination and harmonisation was felt, a federal law for tax harmonisation of direct taxes in cantons and municipalities is in act since 1.2.1994. Since then formal aspects like tax liability, tax base, taxing period, tax penal law and legal proceedings are harmonised. The cantons and municipalities are still responsible for the determination of tax rates and tax deductions.

Additionally to the own tax resources the cantons are provided with grants by the federal government. One main, but not the single purpose of this grants is to equalise regional revenues caused by discrepancies in the regional tax potentials. This enables poorer cantons to offer public services in a comparable extent without straining the taxpayers much more than elsewhere. The equalisation works on different ways. First, the cantons were reimbursed out of custom duties for fuels. These reimbursements are related to the cantonal expenditures for construction and maintenance of national roads. Second, the confederation shares its revenue out of the federal taxes on income and profits, of the withholding tax on capital return as well as of the tax on exemption from the compulsory military service with the cantons. These shares are distributed according to different rules, only partly taking into account the objective of equalising cantonal financial resources. Strictly taken, the equalisation effect is reched not only by vertical transfers from the center to the cantons, but a kind of horizontal equalisation could be worked out in the rules of distributing the regions' share between the cantons. Third, the confederation tranfers conditional grants-in-aid to the cantons. These grants are distributed among the regions very differently. There is a basic grant to each region, defined as a percentage of the federation's contribution to the cantonal expenditure for the purposes in question. The basic contributions differ according to the task. In the year 1996, the minimum ranked from 10 % (e.g. monument care, homeland protection) up to 60 % (protection of landscape and nature). The corresponding maximums were 35 % and 75 %. For other purposes, the maximum federal contribution were even higher (e.g. 80 % for main roads in mountain regions). Additionally, the confederation grants specific surpluses to the basic financial contribution, called financial resources bonus („Finanzkraftzuschlag“), which amounted 1996 on average up to 65 % of the total grant for the special purpose. These bonuses differ remarkably according to the fiscal potential of the regions. In 1996, the five wealthiest regions (Zug, Zurich, Genève, Basle centre and region) got extra pay as compensation for the regional transportation system, only. On the contrary, in the financially weak regions (as Jura, Valais, Appenzell i. Rh., Obwalden) the bonuses amount from 50 to 60 % of the total grants. Last but not least, the obligation of the cantons to contribute to the federal social institutions differs according to the fiscal potential. As a consequence, the scheme for fiscal equalisation is quite complex.

However, the extent of equalisation is quite restricted. Measured on the basis of the fiscal potential of the cantons, regional discrepancies are large. While canton Zug as the most wealthy canton showed 1996 an index value of 228, far above the average, canton Jura as one of the weakest pointed to 30. Even with the help of the federal grants related to fiscal equalisation the differences remain large. On the basis of the actual system, that is decided to be reformed, the fiscal potential after redistribution amounts to just under 200 on the top and on the bottom to nearly 60. The standard deviation of the unweighted potential values per canton, which originally amounts to roughly 44, has been reduced by equalisation measures by about one quarter to 33. Compared to the German example, the discrepancies in the original fiscal potential are quite larger and the equalisation goes less far as well. Over time the situation does not seem to change very much. From 1993 to 1996, a period for which comparable indicators for the fiscal potential do exist, the spread and the individual ranking of the cantons have not changed significantly; only the cantons Luzern and Uri had bettered their position remarkably.

5.2. Experiences and Problems

At the end of the eighties a discussion began about the intention, effectiveness and transparency of the fiscal equalisation scheme. The federal fiscal administration worked out a report which results in the conclusion that the distribution of financial needs do not reach the aim of fiscal equalisation sufficiently. In 1992, the council of directors of the financial administration claimed, that the financial relations between the confederation and the cantons should be reorganised, and ordered a scientific expertise for elaborating shortcomings and recommendations for improvements. This expertise was available in 1994 and focused on three main shortcomings of the system:

· First, the system seemed to be too much centralised for the confederation is the main actor in respect of paying transfers to the cantons. It lacks a system of horizontal equalisation between the cantons.

· Second, different tasks are linked together. On the one hand, the confederation gives incentives for cantonal activities, on the other hand, it intends to give support to financially weak regions. Linked together, transfers could fail their objective and would get inefficient.

· Third, the equalisation is based on too much different kinds of transfers, therefore its elaboration and execution are inefficient and intransparent.

A working group of the Swiss confederation and the cantons was formed and developed, based on the expertise, the framework of a reform of fiscal federalism until the end of 1995, which was broadly supported. In various project groups the framework was filled with detailed regulations. The results have been presented to the public in the end of 1998 giving advice for a new system of fiscal equalisation.

5.3. New Fiscal Equalization

The main intention for the new system is to revitalise the fiscal federalism in Switzerland. For this end, different aspects have to be considered:

· To disconnect the joints tasks and joint financing procedures of the confederation and the cantons,

· to foster the cooperaton between cantons on the basis of burden sharing,

· to develop new forms of cooperation and financing between confederation and cantons in the remaining fields of joint tasks, and

· to create a flexible equalisation of financial resources between the richer and the poorer cantons.

5.3.1 Disconnection of task and financing procedures

Intertwining of responsibilities has caused a lot of inefficiencies, parallel administrations on both levels of government, costly coordination procedures and unclear competecies and responsibilities. Moreover, in the case of conflicts between the confederation and the cantons, the danger is given that decisions were postponed because of the blockage of the different levels of government. Clear responsibilities, on the other side, create transparency, enables effective control by the citizens and support the acceptance of public activities which the citizen is paying for. Therefore, the claim is, that the confederation would concentrate more on its core activities, as the distribution of welfare within the community, strengthening the cohesion of the confederation and care of the international relations. Moreover, it is seen as important that the federal government would fix common standards and procedures in fields of common interest like in the field of environmental protection, of national road and railway infrastructure, of the national defence system and of the old-age and disability pensions.

5.3.2 Cooperation between cantons

Cantonal activities often have spill over effects because citizen of neighbouring cantons make use of services offered to citizens by other cantons. Therefore, costs and benefits should be distributed fairly between the cantons in question so to avoid free rider conduct. Moreover, cooperation between cantons could be used to gain economies of scale so to offer public services as efficient as possible. The precondition is that the cantons would be prepared to cooperate and not to habe an incentive for blocking each other, each trying to be a free rider on the cost of the other. It should be avoided, too, that powerful rich cantons would dominate the poorer and weaker ones. Therefore, the principles for the cantonal cooperation should be layed down in a basic agreement, while the concrete concept and procedures of the single cooperation projects will be based on special treaties between the cantons involved. The federal level should support the cooperation of the cantons by declaring these basic agreements as obligatory in general and by obliging single cantons to join to existing treaties for intercantonal cooperation - this under certain conditions. The typical fields for intercantonal cooperation were mainly seen in transport systems in agglomerations, in waste and sewage supply, transregional cultural infrastructure and high quality health infrastructure. The same is true with respect to universities and professional colleges („Fachhochschulen“) as well as in the execution of sentence, however, in these cases the confederation would be responsible, too.

5.3.3 New forms of vertical relations between confederation and cantons

A serie of tasks is seen to be realised in joint responsibilites of the federal and cantonal level. However, strict division of competences would be useful, too. The strategic role should be played by the confederation, while the responsibility for the organisation and supply should be beared by the cantons. In contrast to previous procedures the confederation would not grant further fixed parts of the costs but would pay global transfers or lump sums related to the result, not to the input for the measure. Instead of single projects, coherent pluriannual programs should be cofinanced. These programs have to be the result of negotiations beween the confederation and the single cantons, containing all needed details of objectives, means, federal grant, and evaluation procedures to control the efficiency of the realisation.

5.3.4 Equalization of financial resources

One main element of the new fiscal federalism should be the provision of adequate financial resources for each canton. That is seen as supposition to make the reform work, which is based on more responsiblity on the cantonal level. It will be reached by a horizontal equalisation between richer and poorer cantons on one side, by additional vertical transfers from the confederation to cantons, which are still weak even after the horizontal equalisation, on the other side. It is proposed, that the financial resources should be equalised according to an index, which is measuring strictly the potential of collecting revenue. The former index took into account aspects of revenue collecting as well as aspects of special burdens for the cantons (e.g. mountain regions). The indicator for the financial resources is the potential out of personal income and wealth taxes, the business income and wealth taxes and the motor vehicle tax. It is measured on an unique tax base which is oriented at the federal tax and average tax tariffs. More than 90% of the cantonal and municipal tax income is grasped by this method. The equalisation of financial resources intends to garantuee each canton more responsibility to use these means. Therefore, the transfers have to be granted whithout any binding to special uses. Distributional aspects are strictly separated from incentives to develop public activities to make the canton attractive for new citizens and to new firms. Insofar, competition between cantons is forced, without the effect that weak regions would not stand a competition with cantons of great economic potential. It was proposed to garantuee financial resources up to 87 % of the cantonal average, calculated on a per capita base.

Therefore, the proposed procedure to equalise financial resources by horizontal and vertical transfers to economically and financially weaker regions seems to lead to a greater equalisation effect in comparison to the actual rules (see table). However, two main differences exist between the current formula and the proposed new regulation. The index of fiscal strength, which takes into account not only the revenue capacity but also the individual burden of the cantons, shows much more discrepancies than the new resources index, which focusses only on the financial resources, i.e. the tax capacities. While with respect to fiscal strength the weakest regions rank to roughly 30 % of the cantonal average (Uri, Jura, Valais), the index of financial resources shows remarkably higher values for the weaker regions, e.g. for Jura 61 % and for Valais 65 %, for Uri even 79 % of the cantonal average. As a consequence, to garantuee a minimum of financial resources up to 87 % of the cantonal average , in many sases less transfers are needed than based on the actual scheme. Therefore, the question remains open, if under the new regulation the cantons will be better of than before from the budgetary point of view. In any case, they will get much more flexibility and responsibility to act independently from the influence of the confederation. The expectation is, that the saving of transaction costs, which are effected by the current procedures of coordination and adjustment between the different levels of government, will compensate eventual loss of transfers under the new formula of equalization.

6. Conclusion

A number of differences notwithstanding, the systems of fiscal federalism adopted by the Western countries reviewed in this paper share certain characteristics that hold some useful lessons for developing fiscal relations between center and region in the Russian federation:

- Responsibilities should be divided among the various levels in such a way as to prevent their powers from overlapping. The level of government in charge of particular tasks must also provide adequate financial resources. To the extent that authorities at the lower level carry out certain tasks on behalf of higher-level governments, they must be given the necessary means to do the job.

- The sharing of responsibilities and the corresponding sharing of financial arrangements should be pared back to a minimum. In practice, web-like relationships have, of course, evolved over time. As a result, the various levels of government try to influence each other's decisions and to coordinate their activities, which often leads to cumbersome administrative procedures and mutual policy blockades. Here, it is necessary to disentangle political and administrative relationships in order to re-establish clear lines of authority and financial responsibility.

- The power to tax and to design tax policy should allow the various levels of government to receive their fair share of the benefits of economic development. At the same time, they must be able to create incentives for companies and people to locate within their jurisdiction. On the one hand, this requires that government at all levels can tap comparably productive sources of tax revenue. On the other hand, individual units of government should have the power to determine themselves how big a burden they want to impose on taxpayers in their jurisdiction. But in order to improve transparency, and thus to facilitate fair competition, a federal law that pays adequate attention to regional concerns should make the basis of assessment as uniform as possible throughout the federation. Regional differentiation could then be achieved by varying tax rates accordingly.

- It should, by all means, be understood that the notion of giving all levels of government access to uniformly productive sources of revenue is also an argument in favor of joint taxes. They are the best way to make sure that individual levels are not solely dependent on revenue flows that are very uneven over the course of the business cycle. Neither should they depend on sources whose yield does not keep up with economic development, or on sources that dry up, because that particular tax is used to pursue certain goals of economic policy. Regional variations of the tax burden could still be achieved by varying individual jurisdictions' percentage shares of joint taxes accordingly. Another advantage of joint taxes that should not be dismissed too lightly is the fact that they help avoid intergovernmental conflicts of interest over the development and the exploitation of revenue sources.

- Efficiency considerations call for the uniform administration of taxes throughout the federation. This requires mutual trust in the just distribution of revenue, and, at the same time, adequate checks and control mechanisms. It is particularly important that the tax authorities are visible and active at the local level. This is why government at the regional level should be in charge of collecting taxes. Central government should, in turn, oversee the regional agencies in order to ensure adequate control.

- In all countries, the regional capacity to tax varies greatly. Most federal systems therefore use some form of revenue sharing in order to facilitate fair competition between locations. Another reason is to help government agencies provide business, as well as the general population, with adequate public services. Such schemes usually contain both horizontal and vertical elements. The resulting transfer payments should be general rather than specific. Thus, the recipients will still be able to carry out their tasks independently.

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Table 1

USA: Revenues and Expenditures of Federal, State and Local Government

in % of Gross Domestic Product

	Total		Federal		States and Local Authorities	
	1992	1996	1992	1996	1992	1996
Direct taxes	12,5	14,4	9,9	11,7	2,6	2,7
Indirect taxes	8,4	8,2	1,4	1,3	7,0	6,9
Social security contributions	7,5	7,5	-	-	-	-
Fees, fines and penalties	0,4	0,4	0,0	0,0	0,4	0,4
Transfers from other government subsectors	-	-	0,2	0,1	2,9	3,0
Other	2,2	1,9	1,3	1,2	0,9	0,7
Total Receipts	31,0	32,4	12,7	14,3	13,8	13,6
Final consumption expenditures	16,4	14,8	7,3	5,9	9,1	8,9
Interest	4,0	4,5	3,8	3,6	1,1	0,9
Current transfers	13,8	13,7	6,6	6,6	2,8	2,9
Subsidies	0,5	0,5	0,5	0,4	0,0	0,0
Social security benefits	12,9	12,9	2,2	2,2	2,8	2,9
Transfers to other government subsectors	-	-	3,6	3,7	-	-
Other	0,4	0,3	0,4	0,3	-	-
Gross fixed capital formation	1,8	1,7	0,3	0,3	1,6	1,5
Capital transfers	1,8	0,9	0,2	0,2	0,8	0,8
Total Expenditures	37,7	35,6	18,1	16,5	15,2	14,9

Source: OECD: National Accounts, 1984 - 1996.

Table 2

USA: Personal Income and State and Local Revenues by Character 1994[1)]

per Capita in US-$

	Personal Income	Revenues	Inter-govern-mental from Federal	Taxes Total	Sales Tax	Personal Income Tax	Corporate Tax	Property Tax	Other Taxes	Other Revenues	Revenues in % of Personal Income	Taxes in % of Personal Income
New England	*28.630*	*5.293*	*933*	*2.844*	*710*	*708*	*159*	*1.116*	*152*	*1.516*	*18,5*	*9,9*
Connecticut	33.191	5.513	865	3.443	1.012	683	215	1.338	195	1.205	16,6	10,4
Maine	20.831	4.637	950	2.355	721	497	74	946	117	1.333	22,3	11,3
Massachusetts	29.441	5.470	944	2.834	595	942	176	985	137	1.692	18,6	9,6
New Hampshire	26.462	4.356	836	2.193	427	32	127	1.445	163	1.327	16,5	8,3
Rhode Island	24.770	5.583	1.084	2.500	726	530	80	1.053	112	1.999	22,5	10,1
Vermont	22.112	4.947	1.091	2.480	693	493	60	1.051	183	1.376	22,4	11,2
Mideast	*27.955*	*6.160*	*983*	*3.179*	*867*	*843*	*198*	*1.061*	*211*	*1.997*	*22,0*	*11,4*
Delaware	27.616	5.681	747	2.488	301	814	219	371	784	2.446	20,6	9,0
District of Columbia	34.946	11.324	4.519	4.443	1.418	1.146	264	1.428	187	2.362	32,4	12,7
Maryland	27.218	4.870	665	2.660	701	982	64	724	190	1.545	17,9	9,8
New Jersey	31.053	5.777	663	3.216	881	569	137	1.483	145	1.899	18,6	10,4
New York	28.782	7.434	1.234	3.848	1.024	1.106	308	1.244	167	2.351	25,8	13,4
Pennsylvania	24.668	4.607	761	2.243	666	532	118	642	285	1.603	18,7	9,1
Great Lakes	*24.469*	*4.985*	*757*	*2.403*	*728*	*562*	*125*	*869*	*119*	*1.825*	*20,4*	*9,8*
Illinois	26.597	4.743	687	2.478	861	431	105	955	127	1.578	17,8	9,3
Indiana	22.438	4.316	760	2.120	590	590	139	740	61	1.436	19,2	9,4
Michigan	24.811	5.080	795	2.555	647	513	229	1.050	116	1.731	20,5	10,3
Ohio	23.536	5.242	803	2.205	717	659	59	629	142	2.234	22,3	9,4
Wisconsin	23.268	5.562	749	2.698	750	716	107	1.004	121	2.116	23,9	11,6
Plains	*23.450*	*4.805*	*773*	*2.253*	*810*	*516*	*80*	*676*	*171*	*1.778*	*20,5*	*9,6*
Iowa	22.558	4.777	771	2.294	721	540	62	790	182	1.713	21,2	10,2
Kansas	23.283	4.747	703	2.314	851	468	100	726	168	1.730	20,4	9,9
Minnesota	25.579	5.755	790	2.730	859	754	121	798	197	2.235	22,5	10,7
Missouri	22.863	3.923	738	1.866	791	451	48	437	139	1.319	17,2	8,2
Nebraska	23.076	5.362	726	2.287	800	440	70	843	135	2.349	23,2	9,9
North Dakota	20.695	4.816	1.121	2.025	824	214	112	584	291	1.671	23,3	9,8
South Dakota	21.527	4.271	981	1.811	852	0	51	722	186	1.480	19,8	8,4
Southeast	*21.880*	*4.416*	*741*	*1.970*	*885*	*321*	*70*	*520*	*174*	*1.705*	*20,2*	*9,0*
Alabama	20.056	4.187	783	1.603	831	339	52	196	185	1.801	20,9	8,0
Arkansas	18.927	3.728	815	1.678	853	391	75	254	106	1.235	19,7	8,9
Florida	24.104	4.612	582	2.184	1.113	0	68	788	215	1.846	19,1	9,1
Georgia	22.710	4.545	697	2.113	808	507	74	624	100	1.735	20,0	9,3
Kentucky	19.686	4.124	804	1.931	748	562	70	319	232	1.390	20,9	9,8
Louisiana	19.822	4.601	1.167	1.720	921	227	51	298	223	1.714	23,2	8,7
Mississippi	17.471	4.059	978	1.654	857	239	63	389	106	1.427	23,2	9,5
North Carolina	22.010	4.480	748	2.108	805	606	104	462	131	1.624	20,4	9,6
South Carolina	19.753	4.552	803	1.811	661	420	60	518	151	1.937	23,0	9,2
Tennessee	21.763	4.600	772	1.759	1.086	19	82	400	172	2.069	21,1	8,1
Virginia	24.927	4.165	498	2.162	675	582	47	670	189	1.505	16,7	8,7
West Virginia	18.442	4.449	1.094	1.839	779	368	101	360	232	1.516	24,1	10,0
Southwest	*21.374*	*4.345*	*691*	*2.027*	*989*	*120*	*21*	*657*	*239*	*1.627*	*20,3*	*9,5*
Arizona	20.990	4.629	691	2.169	970	344	74	666	114	1.770	22,1	10,3
New Mexico	18.774	4.950	872	2.096	1.100	348	74	262	311	1.983	26,4	11,2
Oklahoma	19.349	4.068	649	1.849	807	404	50	303	285	1.570	21,0	9,6
Texas	22.045	4.276	683	2.021	1.016	0	0	753	252	1.573	19,4	9,2
Rocky Mountain	*22.028*	*4.974*	*795*	*2.109*	*734*	*468*	*53*	*663*	*190*	*2.070*	*22,6*	*9,6*
Colorado	25.082	5.020	670	2.241	829	526	40	724	122	2.109	20,0	8,9
Idaho	19.543	4.362	674	1.953	678	496	79	511	189	1.735	22,3	10,0
Montana	19.055	4.816	1.043	1.951	283	404	80	834	350	1.822	25,3	10,2
Utah	19.160	4.833	764	1.918	796	484	66	491	82	2.151	25,2	10,0
Wyoming	21.264	6.937	1.727	2.515	704	0	0	940	871	2.696	32,6	11,8
Far West	*24.928*	*5.771*	*945*	*2.453*	*952*	*490*	*119*	*682*	*209*	*2.373*	*23,2*	*9,8*
Alaska	24.558	13.009	1.668	3.249	356	0	293	1.072	1.528	8.092	53,0	13,2
California	25.144	5.716	972	2.410	879	560	148	659	165	2.335	22,7	9,6
Hawaii	25.154	6.034	1.034	3.203	1.650	821	58	533	141	1.797	24,0	12,7
Nevada	25.453	4.951	550	2.343	1.478	0	0	511	353	2.058	19,4	9,2
Oregon	22.666	5.366	986	2.260	216	835	85	814	310	2.120	23,7	10,0
Washington	24.837	5.678	777	2.593	1.572	0	0	779	242	2.308	22,9	10,4
United States	*24.231*	*5.114*	*828*	*2.402*	*859*	*495*	*109*	*757*	*183*	*1.884*	*21,1*	*9,9*

1) Fiscal Year 1994/95.

Source: Facts & Figures On Government Finance, 32nd Edition.

Table 3

USA: Personal Income and State and Local Expenditures by Functions 1994

per Capita in US-$

	Personal Income	Expenditures Total	Education	Universities	Public Welfare	Health	Highways	Interest on General Debt	Other
New England	*28.630*	*5.352*	*1.010*	*263*	*928*	*331*	*317*	*286*	*2.218*
Connecticut	33.191	5.782	1.182	254	921	384	327	293	2.423
Maine	20.831	4.438	971	300	956	189	319	219	1.484
Massachusetts	29.441	5.578	936	226	937	412	315	284	2.468
New Hampshire	26.462	4.300	912	294	1.001	98	270	362	1.364
Rhode Island	24.770	5.309	1.021	309	872	233	260	334	2.280
Vermont	22.112	4.649	1.057	480	764	119	460	185	1.583
Mideast	*27.955*	*6.015*	*1.177*	*326*	*981*	*397*	*283*	*310*	*2.542*
Delaware	27.616	4.960	1.013	583	498	246	419	395	1.805
District of Columbia	34.946	10.655	1.126	179	1.902	928	278	533	5.709
Maryland	27.218	4.538	956	385	558	190	228	218	2.003
New Jersey	31.053	5.556	1.346	319	728	240	309	278	2.336
New York	28.782	7.451	1.348	323	1.315	617	313	361	3.174
Pennsylvania	24.668	4.411	912	302	802	237	235	276	1.648
Great Lakes	*24.469*	*4.530*	*962*	*382*	*700*	*331*	*263*	*171*	*1.720*
Illinois	26.597	4.461	862	300	604	261	293	226	1.915
Indiana	22.438	4.058	935	426	691	382	232	122	1.270
Michigan	24.811	4.724	1.072	472	733	417	227	152	1.651
Ohio	23.536	4.553	926	333	761	330	239	141	1.823
Wisconsin	23.268	4.815	1.096	465	739	276	351	205	1.683
Plains	*23.450*	*4.416*	*969*	*391*	*617*	*356*	*371*	*176*	*1.536*
Iowa	22.558	4.342	907	526	559	430	434	124	1.362
Kansas	23.283	4.325	980	458	439	353	429	189	1.477
Minnesota	25.579	5.446	1.155	398	907	469	375	262	1.880
Missouri	22.863	3.469	828	243	514	276	268	133	1.207
Nebraska	23.076	5.038	1.066	449	560	337	394	124	2.107
North Dakota	20.695	4.448	873	603	618	137	459	188	1.570
South Dakota	21.527	3.981	896	328	512	187	512	211	1.335
Southeast	*21.880*	*4.134*	*799*	*326*	*546*	*441*	*265*	*177*	*1.581*
Alabama	20.056	4.085	656	405	525	660	268	155	1.414
Arkansas	18.927	3.366	715	299	568	310	281	117	1.076
Florida	24.104	4.227	783	249	426	386	283	239	1.861
Georgia	22.710	4.237	910	282	600	526	216	130	1.573
Kentucky	19.686	3.783	717	335	665	228	257	268	1.313
Louisiana	19.822	4.381	805	313	661	559	270	262	1.511
Mississippi	17.471	3.611	713	366	548	483	274	123	1.104
North Carolina	22.010	4.126	804	420	531	453	259	103	1.556
South Carolina	19.753	4.495	846	368	634	711	195	134	1.608
Tennessee	21.763	4.324	706	328	604	432	250	116	1.888
Virginia	24.927	3.995	918	362	437	307	286	183	1.503
West Virginia	18.442	4.378	931	330	848	236	406	218	1.407
Southwest	*21.374*	*4.071*	*919*	*365*	*512*	*324*	*265*	*182*	*1.504*
Arizona	20.990	4.357	863	383	589	202	266	217	1.835
New Mexico	18.774	4.567	825	507	573	416	540	157	1.549
Oklahoma	19.349	3.812	899	344	469	351	241	149	1.358
Texas	22.045	4.009	944	353	496	338	244	183	1.452
Rocky Mountain	*22.028*	*4.595*	*929*	*460*	*455*	*298*	*334*	*219*	*1.900*
Colorado	25.082	4.838	885	451	462	275	308	288	2.170
Idaho	19.543	3.702	798	394	426	310	328	112	1.335
Montana	19.055	4.353	1.053	339	497	215	441	186	1.622
Utah	19.160	4.430	946	538	435	268	260	154	1.828
Wyoming	21.264	5.962	1.281	599	475	721	650	263	1.974
Far West	*24.928*	*5.619*	*913*	*350*	*709*	*434*	*247*	*207*	*2.759*
Alaska	24.558	11.706	1.844	500	907	394	1.081	941	6.040
California	25.144	5.544	860	323	746	455	197	192	2.772
Hawaii	25.154	6.362	757	502	614	439	367	336	3.348
Nevada	25.453	4.990	864	279	407	327	405	247	2.460
Oregon	22.666	4.888	1.023	423	540	330	308	195	2.070
Washington	24.837	5.807	1.102	438	673	402	338	186	2.668
United States	*24.231*	*4.856*	*949*	*349*	*691*	*386*	*277*	*211*	*1.994*

Source: Facts & Figures On Government Finance, 32nd Edition.

Table 4

Germany: Revenues and Expenditures of Federal, State and Local Government

in % of Gross Domestic Product

	Total		Federal		States Authorities		Local Authorities	
	1992	1996	1992	1996	1992	1996	1992	1996
Direct taxes	11,9	10,4	5,2	4,7	5,3	4,6	1,3	1,1
Indirect taxes	12,7	12,8	7,8	6,9	3,3	4,3	1,6	1,5
Social security contributions	17,3	18,8	-	-	-	-	-	-
Fees, fines and penalties	0,8	0,7	0,2	0,0	0,3	0,4	0,2	0,3
Transfers from other government subsectors	-	-	0,2	0,3	2,4	1,6	2,4	2,4
Other	3,0	2,6	1,5	1,2	0,7	0,7	0,4	0,4
Total Receipts	45,6	45,3	14,9	13,1	12,0	11,6	5,9	5,7
Final consumption expenditures	19,3	19,1	2,7	2,2	5,9	6,0	3,7	3,4
Interest	3,2	3,7	2,1	2,4	0,8	1,0	0,3	0,3
Current transfers	21,6	23,0	9,9	9,1	4,7	4,9	1,3	1,6
Subsidies	1,9	2,0	1,1	1,1	0,5	0,6	0,1	0,2
Social security benefits	17,0	18,5	2,1	2,1	1,4	1,4	0,7	0,8
Transfers to other government subsectors	0,0	0,0	4,9	4,3	2,4	2,5	0,2	0,4
Other	2,7	2,6	1,8	1,6	0,4	0,4	0,2	0,3
Gross fixed capital formation	2,8	2,2	0,4	0,3	0,5	0,5	1,8	1,4
Capital transfers	-	-	0,7	0,7	0,9	0,8	0,0	0,0
Other	2,5	2,0	0,8	0,4	1,1	1,0	0,6	0,5
Total Expenditures	49,4	50,0	16,5	15,2	14,0	14,1	7,8	7,2

Source: OECD: National Accounts, 1984 - 1996.

Table 5

Germany: Distribution of Joint Taxes

in %

	Federal Government	States	Local Government
Wage tax, assessed income tax	42,5	42,5	15,0
Corporation tax, non assessed income tax on dividends and interest	50,0	50,0	-
Value-Added-Tax (VAT)	51,2	46,7	2,1
Local business tax[1)]	15,0	15,0	70,0

1) The local business tax is officially a joint tax. The shares of this tax are approximate.

Table 6

Germany: Horizontal Equalisation Process and Supplementary Grants from the Federal Level 1997

	Tax Revenues per capita before VAT Distribution in % of the Average	Distribution of Remaining 25% of VAT Mill. DM	Equalisation Yardstick Mill. DM	Regional Tax Capacity Mill. DM	Transfers (+ received, - payed) Mill. DM	Financial Position after Horizontal Equalisation in % of the Average	Supplementary Grants from the Federal Level Mill. DM
Nordrhein-Westfalen	113,7	-3.549	73.990	78.660	-2.981	102,3	-
Bayern	118,8	-2.382	49.250	53.812	-3.041	103,1	-
Baden-Württemberg	115,5	-2.054	42.470	46.136	-2.399	103,0	-
Niedersachsen	93,7	-1.548	32.061	30.260	+675	96,5	1.476
Hessen	129,1	-1.192	24.686	28.825	-3.122	104,1	-
Rheinland-Pfalz	96,0	-792	16.395	15.570	+309	96,9	1.118
Schleswig-Holstein	104,8	-543	11.214	11.268	-2	100,5	368
Saarland	84,9	-50	4.431	4.003	+206	95,0	2.024
Hamburg	165,1	-337	9.259	9.868	-334	103,0	-
Bremen	130,9	-134	3.635	3.227	+264	96,0	2.110
Berlin	97,4	-681	18.781	13.401	+4.441	95,0	4.761
Sachsen	40,6	+4.087	18.538	15.698	+1.914	95,0	6.216
Sachsen-Anhalt	35,0	+2.770	11.076	9.349	+1.173	95,0	3.747
Thüringen	35,3	+2.519	10.125	8.499	+1.119	95,0	3.609
Brandenburg	43,5	+2.151	10.433	8.927	+984	95,0	3.390
Mecklenburg-Vorpommern	38,0	+1.736	7.401	6.239	+791	95,0	2.509
Total	100,0	± 13.262	343.745	343.745	± 11.876	100,0	31.329
Source: DIW.							

Table 7

Germany: Federal Grants-in-Aid for Joint Tasks 1996

DM per Capita

	Construction of Universities	Improvement of Regional Economic Structures	Improvement of the Agrarian Structure and Coastel Protection	Cooperation in Educational Planning and Research	Local Investment, Urban Renewal, Housing Modernisation	Total	in %	memo item: Supplementary Grants
Baden Württemberg	28	-	20	2	103	153	48,0	-
Bayern	18	4	32	2	111	167	52,4	-
Hessen	16	1	18	2	104	141	44,2	-
Niedersachsen	21	10	40	3	99	173	54,2	168
Nordrhein-Westfalen	15	11	8	5	108	147	46,1	-
Rheinland-Pfalz	16	6	28	5	103	158	49,5	278
Saarland	29	40	13	1	117	200	62,7	1.872
Schleswig-Holstein	27	13	43	7	99	189	59,2	146
Bremen	28	7	5	4	107	151	47,3	3.118
Hamburg	30	100	11	3	113	257	80,6	-
Berlin	31	-	-	17	419	467	146,4	1.067
Brandenburg	31	240	117	11	640	1.039	325,7	1.029
Mecklenburg-Vorpommern	31	198	148	9	632	1.018	319,1	1.087
Sachsen	24	306	36	11	697	1.074	336,7	989
Sachsen-Anhalt	32	182	67	9	588	878	275,2	1.054
Thüringen	37	246	64	9	540	896	280,9	1.055
Total	22	52	30	5	210	319	100,0	

Sources: Federal Ministry of Finance; DIW.

Table 8

Germany: Revenues and Expenditures of State and Local Government in East Germany

DM per Capita

	1994	1995	1996	1997
Revenues	7.426	8.211	8.228	8.523
Taxes	2.977	3.964	3.792	3.884
Transfers from the Federation	3.046	2.093	2.292	2.301
Horizontal equalisation	-	553	600	597
Other	1.403	1.601	1.544	1.741
Expenditures	9.101	9.561	9.626	9.431
Personal costs	3.145	3.225	3.246	3.194
Current material costs	1.577	1.612	1.600	1.570
Interest payments	311	401	490	562
Social assistance	715	851	757	672
Investment	1.340	1.259	1.150	1.063
Capital Transfers	846	892	917	913
Other	1.167	1.321	1.466	1.457
	in % of West Germany			
Revenues	105,7	115,5	113,8	119,0
Taxes	61,4	80,1	75,2	77,8
Expenditures	122,7	124,8	125,2	123,9
Personal costs	106,3	106,0	106,3	104,4
Investment	165,8	162,6	157,5	149,4
Capital Transfers	310,8	319,3	328,5	335,3

Sources: Federal Ministry of Finance; DIW.

Table 9

Germany: Expenditures and Revenues of States and Local Authorities 1997

DM per Capita

	Baden-Württem-berg	Bayern	Branden-burg	Hessen	Mecklen-burg-Vor-pommern	Nieder-sachsen	Nordrhein-Westfalen	Rheinland-Pfalz	Saar-land	Sachsen	Sachsen-Anhalt	Schleswig-Holstein	Thü-ringen	Berlin	Bremen	Hamburg	Total
Personal costs	3.068	2.951	3.108	3.195	3.047	2.996	3.043	2.979	3.083	2.752	3.211	3.007	2.947	4.080	3.841	3.692	3.088
Current material costs	1.027	1.003	1.213	1.107	1.254	1.005	1.069	885	1.051	1.211	1.212	997	1.375	2.895	2.121	1.907	1.172
Interest	393	277	530	594	475	652	636	608	981	378	525	710	504	946	1.664	1.121	559
Current transfers	1.649	1.673	1.975	2.199	1.805	1.357	1.997	1.474	1.403	1.367	1.662	1.388	1.594	2.435	2.457	2.732	1.625
Investment	777	1.010	1.330	666	1.361	588	552	745	449	1.182	1.236	714	1.149	350	666	716	787
Capital transfers	328	630	989	480	1.200	421	480	437	466	1.369	1.358	324	1.038	1.444	873	578	642
Expenditures	7.241	7.544	9.146	8.241	9.141	7.019	7.777	7.128	7.433	8.260	9.204	7.139	8.607	12.150	11.620	10.748	7.873
Taxes	5.006	5.017	3.786	5.511	3.712	4.449	5.048	4.370	4.270	3.770	3.674	4.663	3.641	4.540	5.556	6.994	4.754
Fees	456	665	474	578	457	483	765	269	424	439	357	605	262	427	275	320	546
Other	1.564	1.488	4.129	1.688	4.031	1.659	1.344	1.840	3.143	3.592	3.905	1.383	3.704	5.987	5.929	2.488	2.026
Revenues	7.026	7.170	8.389	7.777	8.200	6.591	7.156	6.479	7.837	7.802	7.936	6.650	7.607	10.953	11.760	9.803	7.327

Sources: Federal Statistical Office; DIW.

Table 10

Germany: Revenues in Cities with more than 500 000 Inhabitants 1996

DM per Capita

	Total	Taxes	Current grants from States	Capital transfers from States
Frankfurt/Main	7.695	3.599	276	180
Düsseldorf	5.985	2.903	36	175
München	4.673	2.294	238	223
Stuttgart	5.145	2.276	920	67
Hannover	4.474	2.063	535	176
Köln	5.072	2.042	558	136
Essen	4.204	1.646	770	235
Dortmund	4.495	1.373	946	288
Duisburg	4.248	1.103	1.056	398
Leipzig	4.234	643	1.820	457

Source: Statistical Yearbook of German Municipalities 1997.

Table 11

Canada: Revenues and Expenditures of Federal, State and Local Government

in % of Gross Domestic Product

	Total		Federal		States Authorities		Local Authorities	
	1992	1996	1992	1996	1992	1996	1992	1996
Direct taxes	16,5	17,4	10,4	10,6	6,1	6,8	-	-
Indirect taxes	15,5	14,6	4,5	3,9	6,8	7,0	4,2	3,7
Social security contributions	5,8	5,5	3,0	2,7	1,1	1,0	-	-
Fees, fines and penalties	0,5	0,5	0,0	0,0	0,5	0,4	0,1	0,1
Transfers from other government subsectors	-	-	0,1	0,1	4,5	3,6	4,4	3,8
Other	5,5	5,4	1,9	1,9	2,4	2,6	0,3	0,3
Total Receipts	43,7	43,3	20,0	19,1	21,4	21,3	9,0	7,9
Final consumption expenditures	22,5	18,8	4,4	3,7	11,7	9,6	6,4	5,5
Interest	9,5	9,4	5,8	5,6	3,1	3,3	0,6	0,5
Current transfers	16,6	14,5	13,4	10,9	9,1	7,8	0,7	0,5
Subsidies	1,8	1,0	0,7	0,3	1,0	0,5	0,2	0,2
Social security benefits	13,6	12,4	7,2	6,1	3,5	3,3	0,5	0,4
Transfers to other government subsectors	-	-	4,6	3,6	4,5	3,8	0,0	0,0
Other	1,2	1,1	1,0	0,9	0,2	0,2	-	-
Gross fixed capital formation	2,7	2,4	0,5	0,4	1,1	0,9	1,2	1,1
Capital transfers	2,0	2,0	0,4	0,4	0,9	0,9	0,8	0,8
Total Expenditures	53,4	47,1	24,4	20,9	26,0	22,4	9,6	8,4

Source: OECD: National Accounts, 1984 - 1996.

Table 12

Canada: Provincial Personal Income Tax Rates in Effect for 1997

Province	Basic Personal Income Tax (in % of basic federal tax)	Flat Tax (in per cent of net income)	Surtaxes (in % of provincial tax payable)[1]
Newfoundland	69,0	—	10.0 on amount payable over Can$7,900
Prince Edward Island	59,5	—	10.0 on amount payable over Can$5,200
Nova Scotia	58,5	—	20.0 on amount payable over Can$10,000
New Brunswick	63,0	—	8.0 on amount payable over Can$13,500
Quebec	n.a.	n.a.	n.a.
Ontario	48,0	—	20.0 on amount payable between Can$4,555 and Can$6,180 46.0 on amount payable over Can$6,180
Manitoba	52,0	2,0	2.0 on net income over Can$30,000
Saskatchewan	50,0	2,0 2,0	10.0 on sum of basic provincial tax and flat tax less than Can$4,000 25,0 on sum of basic provincial tax and flat tax up to Can$4,000
Alberta	45,5	0.5[2]	8.0 on amount payable over Can$3,500
British Columbia	51,5	—	30.0 on amount between Can$5,300 and Can$8,745 54.5 on amount payable over Can$8,745
Northwest Territories	45,0	—	—
Yukon	50,0	—	5.0 on amount payable over Can$6,000

n.a. = not applicable.
[1]Except for Manitoba and Saskatchewan. - [2]As a percentage of taxable income.

Source: Treff and Perry (1997).

Table 13

Canada: Provincial and Local Government Revenues and Expenditures, Fiscal Year 1996-97

	New-found-land	Prince Edward Island	Nova Scotia	New Brun-swick	Quebec	Ontario	Manitoba	Sas-katche-wan	Alberta	British Columbia	Canada
	Canadian Dollars per Capita										
	Provincial Government										
Personal income tax	1.020	964	954	1.068	1.925	1.475	1.212	1.161	1.185	1.393	1.488
Corporate income tax	88	127	115	157	203	369	157	212	347	382	294
Property and related taxes	15	287	17	325	177	113	276	217	430	657	239
Consumption taxes	1.269	1.320	1.112	1.255	955	1.110	986	1.239	318	1.161	1.010
Transfers from federal government	2.618	2.171	1.966	2.113	912	544	1.491	973	481	511	849
Other	1.316	1.241	1.102	1.551	1.640	1.117	1.951	2.377	2.916	2.458	1.679
Total gross general revenues	6.327	6.112	5.265	6.471	5.812	4.729	6.073	6.179	5.678	6.562	5.560
Revenues without transfers from federal level	3.709	3.941	3.299	4.358	4.900	4.185	4.582	5.206	5.197	6.051	4.711
Total gross general expenditures	6.263	6.045	5.240	6.301	6.371	5.209	6.010	5.867	5.563	6.450	5.835
	Local Government[1]										
Total revenues	612	1.165	2.000	695	2.112	2.913	2.300	2.156	2.854	2.045	2.408
Transfers from other government	209	894	1.167	267	970	1.123	1.099	862	1.394	1.126	1.062
Total expenditures	667	1.142	2.062	706	2.259	2.897	2.198	2.175	2.882	2.197	2.461
Gross domestic product[2]	19.304	21.450	21.439	22.390	24.982	30.431	25.538	27.611	35.500	27.800	28.253
	in % of the Average										
	Provincial Government										
Personal income tax	68,5	64,8	64,1	71,8	129,3	99,1	81,4	78,0	79,6	93,6	100,0
Corporate income tax	30,0	43,2	39,2	53,5	68,8	125,4	53,3	72,1	117,9	129,8	100,0
Property and related taxes	6,4	120,3	7,0	136,0	73,9	47,1	115,6	91,0	179,9	274,7	100,0
Consumption taxes	125,7	130,7	110,0	124,3	94,6	109,9	97,6	122,6	31,5	114,9	100,0
Transfers from federal government	308,5	255,9	231,7	249,0	107,5	64,1	175,7	114,6	56,7	60,3	100,0
Other	78,4	73,9	65,6	92,4	97,7	66,5	116,2	141,5	173,7	146,4	100,0
Total gross general revenues	113,8	109,9	94,7	116,4	104,5	85,1	109,2	111,1	102,1	118,0	100,0
Revenues without transfers from federal level	78,7	83,6	70,0	92,5	104,0	88,8	97,3	110,5	110,3	128,4	100,0
Total gross general expenditure	107,3	103,6	89,8	108,0	109,2	89,3	103,0	100,5	95,3	110,5	100,0
	Local Government[1]										
Total revenues	25,4	48,4	83,1	28,9	87,7	121,0	95,5	89,5	118,5	84,9	100,0
Transfers from other government	19,7	84,2	109,9	25,2	91,4	105,7	103,5	81,2	131,3	106,0	100,0
Total expenditures	27,1	46,4	83,8	28,7	91,8	117,7	89,3	88,4	117,1	89,3	100,0
Gross domestic product[2]	68,3	75,9	75,9	79,2	88,4	107,7	90,4	97,7	125,7	98,4	100,0

[1]Local Government based on Fiscal Year 1994. - [2]Fiscal Year 1997.

Source: Authors' calculations based on data in Treff and Perry (1997), Statistics Canada.

Table 14

Switzerland: Revenues and Expenditures of Federal, State and Local Government

in % of Gross Domestic Product

	Total		Federal		States Authorities		Local Authorities	
	1992	1996	1992	1996	1992	1996	1992	1996
Direct taxes	14,3	14,7	3,7	3,5	6,1	6,3	4,6	4,9
Indirect taxes	6,1	7,0	5,4	6,2	0,5	0,5	0,3	0,3
Social security contributions	7,5	8,8	0,0	0,0	0,1	0,0	0,1	0,0
Fees, fines and penalties	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Transfers from other government subsectors	-	-	0,0	0,0	2,9	3,4	1,3	1,3
Other	2,8	3,3	0,4	0,6	1,0	1,1	0,9	1,0
Total Receipts	30,8	33,8	9,5	10,3	10,5	11,4	7,0	7,4
Final consumption expenditures	12,8	12,5	2,9	2,8	5,8	5,7	3,8	3,6
Interest	1,9	2,1	0,8	0,8	0,5	0,6	0,6	0,6
Current transfers	15,9	17,3	6,1	6,5	4,2	4,5	2,2	2,3
Subsidies	2,1	2,2	1,3	1,3	0,5	0,7	0,3	0,2
Social security benefits	10,0	11,5	0,0	0,0	0,6	0,6	0,1	0,1
Transfers to other government subsectors	0,0	0,0	3,5	4,4	1,7	1,7	1,0	1,0
Other	3,9	3,6	1,3	0,8	1,5	1,5	0,8	0,9
Gross fixed capital formation	3,6	2,8	0,6	0,2	1,4	1,3	1,6	1,3
Capital transfers	-	-	-	-	-	-	-	-
Other	3,6	3,5	0,4	0,4	1,3	1,3	1,0	1,0
Total Expenditures	37,7	38,2	10,8	10,7	13,3	13,5	9,2	8,9

Source: OECD: National Accounts, 1984 - 1996.

Table 15

Fiscal equalisation in Switzerland

Canton	Current procedure			Proposed procedure			
	Original fiscal strenght Index 1992/93	Transfers per inhabitant Swiss franc 1993	Fiscal strength redistributed Index 1992/93	Original financial resources Index 1992	Horizontal equalisation per inhabitant Swiss franc	Vertical equalisation per inhabitant Swiss franc	Financial resources redistributed Index 1992
Zug	210	-787	190	222	-1134	0	197
Basel-Stadt	172	-440	160	153	-496	0	143
Genève	157	-346	147	151	-470	0	140
Zürich	155	-288	146	131	-288	0	125
Nidwalden	96	52	96	115	-143	0	112
Glarus	79	165	81	113	-124	0	111
Basel-Land	103	-67	100	110	-91	0	108
Vaud	93	72	93	103	-25	0	102
Ticino	73	391	80	93	64	0	95
Aargau	92	46	91	90	97	0	92
Schwyz	78	208	81	88	112	0	90
Graubünden	67	641	80	86	131	0	89
Schaffhausen	91	89	91	85	139	0	88
Neuschâtel	53	889	71	83	162	41	87
Solothurn	83	166	85	82	166	56	87
Appenzell A. Rh.	69	361	76	81	175	93	87
St. Gallen	85	170	87	81	179	108	87
Uri	30	1606	64	79	195	171	87
Fribourg	64	542	74	78	201	197	87
Bern	71	393	78	78	208	222	87
Thurgau	90	100	91	76	220	270	87
Luzern	63	407	71	74	238	344	87
Obwalden	43	1053	65	73	255	411	87
Appenzell I. Rh.	41	732	56	69	292	559	87
Valais	34	1082	56	65	330	707	87
Jura	33	1470	64	61	359	821	87
Schweiz	100		100	100			100

Sources: Eidgenössische Finanzverwaltung, Finanzausgleichsbilanz 1993, EFV/FS 30/06/95 (Fiscal administration of the Swiss Confederation, Balance of fical equalisation, internal paper); Der Neue Finanzausgleich zwischen Bund und Kantonen, Grundzüge, Bern und Luzern 1996 (The new fiscal equalisation between confederation and cantons,Guidelines); DIW.