Federal-Cantonal Equalisation in Switzerland:
An Overview of the Present System and Reform in Progress

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Contents

1. Introduction

2. Federal structure and main political institutions in Switzerland
   2.1. Federal structure
   2.2. Fiscal democracy
      2.2.1. The vertical division of power
      2.2.2. Direct democracy
      2.2.3. Initiative and referendum
   2.3. Cooperative federalism

3. Differences and disparities in Switzerland: a few facts
   3.1. Population, languages, religion
   3.2. National Income in the Cantons
   3.3. Cantonal public finance and importance of transfer payments
   3.4. Tax burden in the Cantons

4. The present equalisation system
   4.1. Financial capacity of the Cantons
   4.2. Federal equalisation programs
      4.2.1. Conditional federal grants-in-aid
      4.2.2. Revenue sharing
      4.2.3. Cantonal contributions to social security
   4.3. A critical appraisal of the present system

5. Reform of the equalisation system
   5.1. The way to reform: a painful process
   5.2. A general presentation of the proposed equalisation system
   5.3. What's new with regard to equalisation stricto sensu?
      5.3.1. Revenue equalisation
      5.3.2. Costs equalisation
      5.3.3. Compensation for political cohesion
      5.3.4. Finance

References
Official documents and laws
Appendix I

Tables
1. General indicators about the Swiss Cantons
2. Financial dependence of the Cantons on federal grants, 2000, in 1000 SFr.
3. Transfer payments in 2000 and equalisation incidence
4. Indices of tax burden in the Cantons and Communes, 2000

Figures
2. Present equalisation scheme between the Confederation and the Cantons
3. New equalisation scheme between the Confederation and the Cantons
4. Concept of revenue equalisation
1. Introduction

This paper deals principally with the federal-cantonal equalisation problematic in Switzerland. It is divided in four sections. Starting in section 2 with a short description of the federal structure, the paper presents in section 3 a few facts on socio-economic and fiscal disparities in Switzerland. It provides then, in section 4, a general overview and an appraisal of the present equalisation system that has been developed to address these disparities. Introduced in 1959, this system has not reached his objectives. It has not succeeded in reducing cantonal disparities and has become more and more entangled and opaque over the year. In 1994, a reform of the equalisation policy, coupled with a reassignment of responsibilities and functions between the Confederation and the Cantons was initiated. After seven years of hard work and intense negotiations, a final reform project was officially presented by the federal government in December 2001 and is presently discussed by the federal parliament. This project is described and analysed in section five.

2. Federal structure and main political institutions in Switzerland

2.1. Federal structure

Switzerland is a small heterogeneous country, located at the heart of Europe without being member of the European Union. It has been a multi-lingual and multi-confessional federal state since 1848. Switzerland has a federal structure with three different political levels: the Confederation, Cantons (26) and Communes (2880).

The Confederation has authority in all areas in which it is empowered by the Federal Constitution, such as foreign and security policies, customs duties and nationally applicable legislation. Tasks which do not expressly fall within the domain of the Confederation are matters for the Cantons. The federal executive authority is called the “Federal Council”. It consists of a seven members cabinet elected by the federal parliament for a four-year term. The President of the Confederation is one of the members of the Federal Council. He is elected for just one year and is regarded as “Primus inter pares”, or first among equals, during that time. He chairs the sessions of the Federal Council and undertakes special ceremonial duties but has no extra additional power. The federal legislative authority is called the “Federal Assembly”. It has two chambers: the “National Council” with 200 members and the “Council of States” with 46 representatives of the Cantons. The members of both chambers are directly elected by the people. The National Council is elected in accordance with federal rules (proportional to the number of inhabitants of each canton) and the Council of States according to rules differing from Canton to Canton (two for each Canton and one for each half-canton).

Since the creation of Canton Jura in 1978, Switzerland consisted of 20 Cantons and six Half-cantons. Swiss people don’t usually make any distinction in the discussion between Cantons and Half-cantons and consider that there are 26 Cantons in the country. We will do the same in this paper. Except Jura, which was created later, the Cantons are the States which joined together in

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2 Three original Cantons, namely Unterwald, Appenzell and Basel, have, for historical reasons, been divided into six Half-cantons (Unterwald → Nidwald und Obwald; Appenzell → Appenzell Ausser-Rhoden and Appenzell Inner-Rhoden; Basle → Basle-Town and Basle-Land). Half-cantons have broadly the same rights and obligations than Cantons, except the fact that they only have one representative in the Council of States, while the Cantons have two representatives, whatever their population, surface, economic and financial powers.
1848 to form the Confederation to which they ceded part of sovereignty. Each Canton has its own constitution, parliament, government and courts. The size of the cantonal parliaments varies between 58 and 200 seats, while the cantonal governments have 5, 7 or 9 members.

All Cantons are divided into Communes. There are currently 2880 (end 2000) Communes in Switzerland. Their number is slowly declining due to amalgamation, especially in the Cantons Fribourg and Tessin. Around one-fifth of the Communes have their own parliament; in the other fourth-fifths, decisions are made by a process of direct democracy in the local assembly. Each citizen is invited to participate to the local assembly (at least two annual sessions) where he can ask questions, make propositions and vote on various subjects. In addition to the tasks entrusted to them by the Confederation and the Canton – such as the population register and civil protection – the Communes also have their own competencies in the areas of education and social affairs, energy supply, road building, local planning, taxation, etc. To a large extent, these powers are self-regulated. The degree of autonomy granted to the Communes is determined by the individual Cantons and therefore varies considerably from one Canton to the other.

2.2. Fiscal democracy

This section gives a few pieces of information on the working of the institutions in Switzerland, particularly on the rules and principles which govern the assignment of functions and revenue sources to decentralised jurisdictions. Three essential institutional characteristics are discussed here: the vertical division of power in the federal and cantonal constitutions (2.2.1), direct democracy (2.2.2), initiatives and referenda (2.2.3). Another main institutional characteristic, cooperative federalism, is discussed in the next section (2.3).

2.2.1. The vertical division of power

The Swiss federal system emphasises the sovereignty of subcentral jurisdictions, i.e. Cantons and Communes. This sovereignty is derived from the federal and cantonal constitutions, which list not only the tasks of each government level, but also fix their right to levy some sorts of taxes. Thus, the assignment of competencies and revenue sources is guaranteed at each level of government. The vertical division of power, intended to prevent stable majorities from being able to exploit minorities, is strongly safeguarded in the Constitution (Knapp, 1986; Zimmermann, 1987).

Article 3 of the new Federal Constitution of April 18th 1999 guarantees the Cantons’ sovereignty in all the spheres in which the Constitution does not explicitly provide for the federal government’s competence. Article 42 Cst. defines in a restrictive manner the assignment of functions to the Confederation: “it shall accomplish the tasks which are attributed to it by the Constitution”. Each competence of the centre requires therefore a constitutional amendment, which necessitates the consent of a majority of the voters and a majority of the Cantons. In contrast, article 43 Cst. stipulates that “the Cantons shall define the tasks which they shall accomplish within the framework of their powers”. At cantonal level, there is no need for a constitutional clarification. The autonomy of the Cantons is also guaranteed by the fact that the legislative power has two chambers with equal power (art. 148 Cst.).

3 Title 3, chapter 2 of the 1999 Federal Constitution provides the enumeration of federal competencies. The constitutional articles also fix the role of the Cantons for those functions. It follows that for a large number of public expenditures, the Cantons have only residual autonomy and act rather as “agencies” for the center.
Up to now, fiscal and financial arrangements have been discussed either at the federal-cantonal levels or at the cantonal-local levels. The federal government addresses itself always and exclusively to the Cantons. It could not by-pass cantonal governments to address local governments either to impose or to negotiate fiscal or financial matters or the provision of public services. The inverse is also true: local governments could not by-pass cantonal authorities; they have no direct access to federal bureaux or institutions. In this way, federal decisions concern the canton only and each Canton organises communal competencies on its own. This vertical division of power leaves a high degree of autonomy to the Cantons, which are able to set their own tax rates and to decide on the provision of public goods and services on their own.

Large urban Communes and urban agglomerations have protested for years against this vertical division of power and asked for a direct access to the federal government and administration. They argue that their problems are of national interest and should be considered as such. They think that these problems cannot be addressed correctly within the cantonal borders. The agglomeration of Zurich, for example, has alone more residents than the five neighbouring Cantons, create spillovers over cantonal boundaries, but does not have the ability to negotiate directly over those limits. The Commune of Zurich must ask the cantonal authorities, which can have other political priorities, to do it for the municipality. The urban agglomeration topic is currently very popular in Switzerland and a difficult matter (Dafflon and Ruegg, 2001). Although they have been statistically defined for a long time and their economic importance has strongly grown during the last decades, agglomeration had not any institutional recognition before the 1999 Federal Constitution. Agglomerations’ specific problems, and specially the additional charges due to their socio-demographic structure, are taken into account in the equalisation reform project discussed in section 5. Furthermore, the Federal Government has recently initiated a federal agglomeration policy which should be progressively developed (CF, 2001b).

2.2.2. Direct democracy

Direct democracy participation is provided in most cantonal constitutions for the Communes so that citizens themselves may take an active part in the decision-making process on all important political and economic issues. In local public finance, this competence concerns: current budget, individual investment items of the capital budget, annual tax coefficients, user charges regulations (taxation according to the benefit-principle in general), local public property sale or purchase, horizontal co-operation in the form of inter-communal association or special purpose district for the joint production of public facilities, and the amalgamation of Communes.

In addition to participation, control and audit competencies of some sort exist in all direct democracy. The communal assembly of citizens, or the communal “parliament” where it exists, elects a finance committee for the length of the political term of office. This committee has not only traditional audit competencies, but also the duty to report to the assembly about the financial aspects of capital expenditures and changes in taxation. In addition, it has the power to

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4 The new Federal Constitution contains for the first time an explicit reference to the Communes and to cities and urban agglomerations. Art. 50 says: “(1) The autonomy of the communes is guaranteed within the limits fixed by cantonal law. (2) In its activity, the Confederation shall take into account the possible consequences for the communes. (3) In particular, it shall take into account the special situation of cities, agglomerations and mountainous regions.”
investigate financial matters without warning, if necessary. In some Cantons, it may lodge a complaint against individual members of the local authorities for misuses of public funds.

2.2.3. Initiative and referendum

When democracy is representative, which is the case in a large majority of the Cantons and in large Communes, voters express their preference about political and economic issues mainly via referenda, which may be brought up for several times during the year. Together with popular initiatives, theses institutions play a role of moderator for cantonal and local governments, as usually all important public decisions are subject to the voters’ approval. At the local level, the most common items which might be included in the initiative or the referendum procedure are: individual investment items of the capital budget, taxation, user charges regulations, property sales, co-operation and inter-communal associations or special purpose districts, and the amalgamation of Communes.

Obviously these institutions of the federal system do not have a unique purpose of (economic) efficiency in the performance of expenditures and taxation. The more direct and democratic the institutions are, the better is their general capacity to strengthen the system of checks and balances, by both dividing and sharing political decisions-making power. They give citizens/voters/taxpayers multiple access to government, increase their capacity to control the budget and reduce political and bureaucratic leeway in rent-seeking behaviour. In Hirschman’s terminology (1970), they not only have the “exit” (Tiebout-style mobility), but also the “voice” solution.

2.3. Cooperative federalism

The federal and cantonal constitutions permit intensive horizontal co-operation at the cantonal and communal levels of government. This horizontal co-operation is important for the principle of fiscal equivalence (Olson, 1969), so that the circles of deciders, beneficiaries and payers coincide. The Cantons and Communes are free to conclude agreement with one another on co-operation in the most varied areas and so establish themselves the optimal size of area necessary for the performance of government tasks, for example the provision of certain public goods, from University (inter-cantonal co-operation) to school districts and water provision (inter-communal co-operation). Whereas inter-cantonal agreements, often called “concordats”, are quite a success for many cantonal public policies and functions (financing the Universities is a

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5 At federal level, referenda entitled the people to pronounce on Parliamentary decisions after the event. Every federal bill can be submitted to a referendum if 50,000 citizens or 8 Cantons request it (optional referendum, art. 141 Cst). Any constitutional change and participation to an international treaty is automatically submitted to a compulsory referendum and can be implemented only if a majority of voters and a majority of Cantons accepts it (art. 140 and 142 Cst). By submitting an initiative, which must be supported by at least 100,000 valid signatures (art. 139 Cst), the citizens can propose a constitutional change.

Referendums and initiatives also exist at the cantonal and local levels, though with regulations which vary from one Canton to another. In most Cantons, constitutional or legislative initiatives are possible on taxation, current or capital expenditures, which require a minimum number of citizens’ signatures. Referenda against capital expenditures (unique or recurrent) are also possible. The institutional and legal conditions about the distinctions between compulsory or facultative referendum, unique and recurrent expenditure, capital or current expenditure, the number of signatures required, the allowed for collecting signatures, differ widely from one canton to another. The influence of the detailed cantonal referendum conditions, as a measure of budget orthodoxy, on public deficit and the indebtedness of the Cantons is treated in two recent studies (Pujol, 2000; Novaresi, 2001). See also Kirchgässner, Feld and Savioz (1999) on the subject.
good example), they have failed with regard to damaging competitive taxation, left widely unrespected or without real content under the motive of tax efficiency or the argument of regional growth policy. Also, at the cantonal level, cantonal parliaments are complaining that they are dispossessed of their competences because inter-cantonal agreements are negotiated by the Cantons' executive: they are left with a take-it-or-leave-it decision which, so they say, is frustrating and endangering democracy.

Horizontal “face-to-face” co-operation between the Cantons has taken another form which was not foreseen in the Constitution. When the need for a nation-wide steering policy arises, the theory of fiscal federalism suggests that this should be realised at the centre, by the federal government. This is not always the case in Switzerland where the Cantons have organized themselves horizontally in a set of powerful Committees, the so-called “Conferences of Cantonal Ministers”, one for each department in the administrative division of government executives, of which the Conference of the Cantonal Ministers of Finance (CCMF) is the most influential.

From a constitutional point of view, fiscal/financial relations between the federal government and the Cantons cannot be tailored according to individual cantonal particularities or wishes. Equality of treatment applies, except within the equalisation law. Although each Canton could challenge or negotiate individually fiscal/financial arrangements with the federal government, no single Canton would have much chance to succeed in modifying fiscal/financial arrangements for its own objectives, since any change applies (and indeed should be acceptable) to the other cantons. Within the Conferences, the Cantons negotiate common policies without interference from the centre, then present a common package to the federal government. The objective of the CCMF is to discuss fiscal/financial matters which are of common interest to all or a large number of the Cantons. It has been organized not so much to co-ordinate and harmonize fiscal and financial affairs of the Cantons (horizontal relations), as to intervene more persuasively in federal-cantonal relations and to interfere in federal-only fiscal and financial matters. Although the Conference is not a constitutional institution, fiscal matter cannot be decided today at the federal level without previous consultation of the CCMF. It is a powerful pressure group, regularly consulted by the Federal Finance Administration. It has been successful in negotiating global financial packages in which the point of view of the Cantons differs from the point of view of the federal government. It has played an important role in shaping federal finance, the federal tax system and tax harmonisation, which was to remain “formal”, and has a dominant position in federal equalisation policies (Dafflon, 1995).

The Conference of the Cantons (CdC), bringing together the presidents of the cantonal governments, also exerts a powerful balance against federal policy proposal. The whole process of the fiscal equalisation reform, presented in section 5, is for instance a common venture of the Federal Ministry of Finance and the CdC.
3. Differences and disparities in Switzerland: a few facts

Some general disparities indicators for Switzerland are given in Table 1 and discussed in this third section that deals in particular with the differences in population, languages, religions (3.1), National income in the Cantons (3.2), cantonal public finance (3.3) and cantonal fiscal burden (3.4).

3.1. Population, languages, religions

- Switzerland's population is 7.2 millions, unevenly distributed in the 26 Cantons. The least populous Canton is Appenzell Rh. Int. with 15 021 residents, that is 1.24 percent of the inhabitants in the most populous canton, Zurich with 1 211 647 inhabitants.

- There are big differences in the geographical size of the Cantons. The area of the smallest Canton (Basle-Town, 37 km²) is 0.52 per cent of the area of the largest (Grisons, 7 105 km²).

- Swiss Communes median size is 867 inhabitants and their mean size is 2 501 inhabitants. The biggest Commune, Zurich, has a population of 337 900 inhabitants, the smallest, Corippo (Tessin), a population of 23 inhabitants. The number of Communes varies strongly between the Cantons (the extreme values are 400 in Bern and 3 in Basle-Town).

- Contrary to a common opinion, Switzerland is a rather strongly urbanised country. 68 percent of the population, more than 75 percent of the jobs and 28 percent of the Communes are localized in "urban areas" (which include 48 "agglomerations" and 9 "isolated cities").

- There are four official national languages, German (65 %), French (20 %), Italian (8 %), Romanche (1 %); other languages count for about 6 % of the population.

- Religion is divided into 47 % Roman Catholic, 41 % Protestant; 12 % belong to other religions or have no declared religious affiliation.

3.2. National Income in the Cantons

- In 1999, the Canton with the highest NIC was Zurich, with a total 72 997 millions SFr., that is 22 percent of the total national income for 16.8 per cent of the population. Variations in per capita NIC are rather large: from 78 913 SFr in Basle-Town to 30 504 SFr. in Obwald, that is a ratio of 2.6 between the two Cantons with the highest and the lowest per capita NIC (or a range from 157 points to 65 points, for an average 100 points = 46 620 SFr. NIC per capita).

- There are also marked differences in the growth of NIC per capita (in real values) between 1980 and 1999. In 12 of the 26 Cantons, the rate of growth over the period has been higher than the average 19 per cent (around 1 percent annual average only for the 19-years period), with a maximum at 48 percent in Schwyz. In 13 Cantons, the rate of growth has been lower than the average, with a minimum at 4 percent in Jura. Obwald is the only Canton in which the NIC per capita has decreased (-4 percent) between 1980 and 1999.
Figure 1 presents the relative position of the Cantons in comparing the 1999 NIC per capita (in nominal values; national average: 46,620 SFr.) and the growth of NIC per capita (in real value) between 1980 and 1999 (Table 1, columns 7 and 8). The graph shows that, despite some thirty years of national fiscal equalisation policy and as many years of regional development policies, the eight richest Cantons (top right hand box) are also ahead in term of growth. The Canton Geneva is the only exception with higher-than-average NIC per capita, but a lower-than-average rate of growth (bottom right hand box). Twelve Cantons have remained in the bottom left-hand box over the period, a bad stagnant position with at the same time a NIC per capita and a rate of growth below national average.

Referring to the performance illustrated by Figure 1, one cannot say that equalisation and regional development policies have been very successful for the last two decades. Yet it must also be remembered that the federal equalisation policy has never had a total "gap-filling" objective in developing revenue sharing formulas or equalizing grants (discussed in section 4).

3.3. Cantonal public finance and importance of the transfer payments

The 2000 results of the Cantons' public finance are given in Table 1, column 9 to 12. The overall result for the current and capital accounts is a surplus of 2,666 millions SFr. Twenty-one Cantons have a net annual surplus in their total account; five Cantons end with a deficit.

The size of the cantonal public sector (without municipal public finance) measured in relation to the NIC varies widely from one Canton to another (Table 1, column 12): from 11 percent in Zoug and Schwyz to 33 percent in Uri.

Financial transfers between the Confederation and the Cantons are given in Table 2 for federal grants-in-aid and in Table 3 for the three groups of equalisation programs with an equalizing component. Total federal conditional grants-in-aid paid to the Cantons represented on average 16 percent of the Cantons' public revenues. In European comparison, this result does not represent a too high degree of dependence of cantonal finance from the centre. But, once again, the individual position of the Cantons is much contrasted: whereas the dependence of Geneva, Basle-Town, Basle-Land, Zoug and Zurich is very low with a ratio below 10 percent, at the other end, the finances of the Cantons Jura, Grisons and Obwald depend for 38 per cent or more on federal grants. Canton Uri at the end of the scale receives almost half of its revenues from the federal centre.

Payments from the federal government to the Cantons with an equalisation component are given in Table 3. They are divided in three groups of equalization programs: federal grants, revenue sharing and cantonal contributions to social security expenditures.

- Total equalisation transfers payments from the Confederation to the Cantons amounted to 8,916 millions SFr or 18 percent of total federal expenditures in 2000. This amount represented 14 percent of total cantonal revenues.
- Only 3,487 millions SFr out of 10,311 millions SFr of grant payments, that is about 1/3, contain an equalisation component.
- In addition, the Cantons receive round 9 percent of their total budget from revenue sharing. However, only parts of these payments include equalisation, given in Table 3, column 3. On the whole, they represent 3,163 millions SFr. or 35 percent of total transfer payments from the federal government to the Cantons.
• Cantonal contributions to the three mentioned programs of federal social security expenditures amounted to 2 141 millions SFr. or 3 per cent of the Cantons' total expenditures. But only 8 percent of total cantonal contributions to federal social security expenditures enter directly the equalisation policy.

• For the 26 Cantons, net transfer payments which concern equalisation (conditional matching grants for specific purpose + revenue sharing - contributions to social security expenditures) amount to 6 774 millions SFr. and correspond to 10.8 per cent of total cantonal revenues.

3.4. Tax burden in the Cantons

Regarding taxation, Switzerland is among the most decentralised federations. Tax sovereignty lies primarily in the Cantons and secondarily in the Confederation. The Confederation's taxing powers are stated in article 128 to 134 of the Federal Constitution. Since 2001, the Cantons' sovereignty in designing their own direct taxation is limited by a federal law on the harmonisation of cantonal direct taxation which "fixes the rules of the game", in particular regarding the definition of the tax base, tax deductions and tax allowances. But the Cantons are largely free to decide the amount of tax deductions/allowances and the tax rate schedules. They are also free to frame their tax system in designing the combination of the various tax sources and decide their respective weights in the total tax burden. This freedom is restricted only by the Federal Court's jurisprudence that prohibits double taxation and unjustified tax rebates (a practice which has never been truly eradicated). In addition, the Cantons are bound by two articles of the Federal Constitution which allocate indirect taxation (VAT in art. 130 and special consumption taxes in article 131) exclusively to the federal level and another (art. 133) that forbid taxes in the form of tariff barriers which could impede the free movement of goods between the Cantons.\footnote{Direct taxation on individual income and corporate profits is a joint taxation of the Confederation, the Cantons and the Communes (for the Cantons and Communes: + individual wealth and corporate capital). For the Cantons and the Communes, direct taxation is the major source of revenues (43 and 48 percent in 2000). For the Confederation, it is the second most important source of revenues (40 percent). As concern consumption and expenditures taxes, VAT (actual normal rate: 7.6 percent) belongs exclusively to the Confederation and represents 49 percent of its revenues. 
Cantons are responsible for taxation on motor vehicles (3 percent of their revenues). Communes can levy minor taxes on dogs, entertainment and games (less than 1 percent of their revenues). 
User fees are particularly important at the local level, where they are levied mainly to finance water distribution, sewage and purification plants and garbage collection. In 2000, user fees and indemnities represented 27 percent of total communal revenues and 17 percent for the Cantons. For a detailed description of the distribution of taxing powers between the three level of government, see Dafflon, 2002b: 82-86 and 90-99.} There remains also the other constraint not given by law but arising through tax competition.

The tax burdens in the Cantons differ substantially from one jurisdiction to another for at least four reasons:

1) Significant differences in the NIC per capita (Table 1, column 7) weight on the cantonal tax capacities and tax rates, owing to their expenditure needs and, in most Cantons, the requirement of a balance current budget and account.

2) The Cantons have different views about their tax system, that is the combination of the ability-to-pay and the benefit principles, the relative use of different amounts of tax and non-
tax revenues (user charges), and borrowing. There are also different choices in the progressiveness of the direct tax rate schedules.

(3) They provide varying levels of public services (the "choice" model).

(4) There are significant differences in the unit cost of providing public services at comparable minimum standards, often for reasons that are outside control of cantonal authorities such as geography and topography, population density or scattering, and distance between domicile and the point of public provision.

Table 4 gives the indices of tax burden for five categories of taxes in the Cantons and the Communes, which together amount to about 90 per cent of total cantonal and communal tax revenues. The minimax ratio are high in relative index terms, with a national weighted average at 100 points. For the individual income tax, for example, it is 2.35 fold, ranging from 54.6 points in Zoug to 128.5 points in Canton Jura. More surprising, in some neighbouring places, such as Obwald and Nidwald, the income tax indices are wide apart, from 72 points (Nidwald) to 111.8 points (Obwald). Moving from one place to the other a few kilometres away, would save about 34 per cent of income tax. Yet such a difference seems not to affect much on the choice of residence for the bulk of the taxpayers, except perhaps at the margin for very rich ones, which means either that mobility responds to other characteristics or that zoning is a strong deterrence.

Reliable measures of the relative cantonal and communal tax burden are needed for several reasons. First, the Cantons and the Communes must know how much revenue they are capable of raising without too heavy a tax burden in comparison with one another. Comparability and competition are twins in decentralised tax policies. Second, it is also important to have an idea of the ability and willingness of the Cantons and the Communes to raise revenue and to develop warning-systems of financial stress in relation to the requisite of a current balanced budget. Third, if equalisation is needed, the recipient governments should not receive financial aid without a minimum effort in taxation. This last argument is fiercely debated among academics and practitioners. One can consider that it is strictly of political nature and not economically founded (Dafflon, 1995: 79-82).

It is in the nature of fiscal federalism that the use of non-benefit taxation by decentralised levels of government, differences in the choices and in public provision (arguments 2 and 3 above) introduce differences in the tax burden of individual Cantons and, with it, some inequalities. This is to be expected and can be accepted as far as "efficiency" is not "economic" only but refers to the general capacity of federal institutions to strengthen the system of checks and balances as, for example, against autonomy (Wiseman, 1990:120) and as far as those differences are not too blunt and remain within politically acceptable limits. Yet on the other hand, significantly higher tax rates (and maybe inferior public services) resulting from wide variations in NIC per capita (argument 1) or from differences in the costs of providing public services, when these cost differences are outside the command of the jurisdiction (argument 4), lead to the need for substantial equalisation payments.
4. The present equalisation system

The differences in the Cantons in terms of size, geography, population and economic potential are so great that, without correcting measures, fiscal federalism would perform under regional disparities which would be intolerable. Therefore, the federal government intervenes to correct resources between the Cantons with four main policy measures aiming at strengthening structurally weak regions: 1) fiscal equalisation, 2) agricultural policy in general and support to structural evolution in rural areas (REGIO PLUS) in particular, 3) investment aid in mountain areas (LIM) and 4) assistance to restructuring economic areas (previously called assistance to industrial depressed areas or “Bonny’s decree”). This paper focalizes on the first measure.

The first equalisation policy program was implemented in Switzerland in 1938, through conditional grants with rates graded according to the tax capacity of the Cantons (Dafflon, 1995: 223). But one has to wait until 1958 for a constitutional article providing the federal government with the power to equalize disparities. Here it is necessary to underline the fact that there are no quantitative objective and no claim in the present federal constitution that equalisation measures should compensate up to a given level (or totally ?) for the differences in the revenue raising capacities of the Cantons or in the costs of public services provision in order to obtain identical economic or fiscal conditions throughout the country. The pragmatic objective is to render cantonal disparities politically acceptable so that remaining differences do not endanger the cohesion of the Confederation.

The federal law on intercantonal fiscal equalisation, which implements this constitutional article, was adopted on June 19, 1959. According to this law, the original objective was to enable the Cantons to provide minimum acceptable levels of certain public services without much heavier tax burdens in some Cantons than in others. At the outset, equalisation related to policies aimed at correcting fiscal imbalance, whether it resulted from differences in the revenue-raising capacities of the Cantons or because, in some jurisdictions, the relative unit cost of providing some defined levels of services was above the national average. With time, the fiscal capacity approach dominated the other question of cost equalisation, in particular because of difficulties in defining needs, average versus minimum provision and relative costs, a state of affairs which induced strategic behaviour of recipient governments. As a result, three out of four arguments in the formula for computing the financial capacity of the Cantons (see below) now refer to revenue-raising capacities.

From the very beginning, equalisation has excluded differences in cantonal outlays for services other than or above minimum standards (the "choice" argument), differences in the progressiveness of the tax rate schedules that reflect the concept of income redistribution or the

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7 Without entering into much details, we can note here that the main measure linked to agricultural policy takes the form of direct payments to farmers respecting a row of pre-established conditions. Investment aid in mountains areas consists mainly of no-interest loans to Communes joining together to realise a project of regional interest. Through the assistance to restructuring economic areas program, the Confederation helps private firms to realise their projects in devastated economic zones by according bank guarantees, contributing to the interests’ payment and according tax relieves.

Following Blöchliger and Frey (1993: 231), one must however note that there is no overall co-ordination of regional policy (2 to 4) and equalisation measures. There are also a number of measures with indirect redistributive effects which exacerbate regional disparities. For example, though central government procurements are not intended to be redistributive in nature, they benefit mainly industrialised Cantons with already higher-than-average NIC (Jeannenaud, 1985).

8 See appendix I for the 1999 federal constitutional provisions concerning equalisation.
mix between benefit tax and ability-to-pay tax at cantonal level. At the local level, many Cantons have introduced inter-communal equalisation, with similar ends and means.

The present system is illustrated in Figure 2. For reducing cantonal disparities, fiscal equalisation measures have used traditionally payments from the federal government to the Cantons with the purpose of reducing differences in fiscal capacity. There are, today, in Switzerland, three sets of policies that include equalisation components. Two are flowing from the centre to the Cantons: conditional federal grants-in-aid and revenue sharing; one flow is reversed, from the Cantons to the federal government in the form of cantonal contributions to social security. In the three categories, the indicator of financial capacity of the Cantons plays a central role.

4.1. Financial capacity of the Cantons

All equalisation programs have in common the fact that they relate to the financial capacity of the Cantons. The formula for the calculation of the financial capacity of the Cantons has always focused much attention of both the federal and the cantonal authorities. Many changes have been introduced in the formulas, the computation itself, the weight of the various elements in the formulas or even the upper or lower limits of certain statistical series. These changes are partly due to technical progresses in the statistics, but above all respond to the pressure of some Cantons, not always the same, whose authorities were dissatisfied at one point of time or another with (part of) the formula (Dafflon, 1995: 63-78).

The actual formula for computing the financial capacity of the Cantons is dated 1986 and has four components, which values are given in Table 5:

\[
E_i = \frac{1}{5} \times [(1.5 \times \frac{\text{NIC}_i}{\text{H}_i}) + \left( \frac{100}{\text{B}_i} \times 100 \right) + \left( \frac{\text{T}_i + \sum \text{T}_{mi}}{\text{H}_i} \times \frac{100}{\text{B}_i} \right) + \left( \frac{1}{2} \times \left( \frac{\text{U}_i}{\text{H}_i} + \frac{\text{P}_i}{\text{km}_i} \right) \right]
\]

### Table 5

| Column 2 | national income per canton (NIC), per capita (H for inhabitant), as a measure of Canton "i" financial resources. This component is weighted 1.5 in the total indicator |
| Column 3 | inverse of the global index of tax burden (B) in Canton "i" as computed in Table 4; |
| Column 4 | tax revenues (T) in Canton "i" and in the municipalities "m" of that canton, per capita (H); this per capita tax yield is weighted by the inverse of the global index of cantonal tax burden so that the results can be compared between the Cantons on the basis of an average tax burden at 100 points; weighted 1.5 in the total indicator; |
| Column 5 | this fourth component is an approximation of the costs of public provision in general. It has two elements, weighted half each. The first one concerns especially the mountainous Cantons, which face additional costs in |

9 Other regional measures are not discussed here. They take the form of conditional grants paid to individual or private firms within delimited regions or to the regions for themselves or for the Communes within the regional limits. Regions do not necessarily coincide with cantonal frontiers but usually group a number of neighbouring communes with some geographic similarities (all the municipalities in a valley, or alongside the same border of a river, for example). Some regions are intercantonal, which creates co-ordination problems when the respective cantonal Constitutions or laws do not contain identical rules. There is no automatic supra-cantonal rules to observe, so that co-operative federalism is negotiated from case to case.
public provision due to their geographical situation. Taking in a direct relation the proportion of agricultural land in the plain region to total agricultural land results in a ratio that is less favourable to the Canton with a large plain zone.

The second element is the population density per square kilometre. The idea is that high density areas can benefit from economies of scales in the provision of public services; a contrario since this component is put in direct relation with the global index of financial capacity, a Canton with scarcely populated mountainous regions obtains a lower score and benefits from the formula.

These two components compensate for each other in a rather large measure, so that the max/min ratio in column 5 is by far the lowest.

The average value of each component for the 26 Cantons is given 100 points; the individual cantonal indices are proportionally calculated. Then each series is converted so that the lowest value equals 70 points, with the formula

\[
(2) \quad \text{actual value} \times \frac{30}{100 - \text{lowest cantonal value}} + 100.
\]

The weighted average value \(E_i\) is then calculated for each Canton (Table 5, column 6). The series of \(E_i\) cantonal values are then proportionally corrected in such a way that the lowest single indicator is given the value of 30 points (Table 5, column 7). This is obtained through an "extension factor" of 2.7 with the formula:

\[
(3) \quad E_i^* = 100 + [ (E_i - 100) \times 2.7 ], \text{min} 30.
\]

The Cantons are distributed in three groups: those with more that 120 points are considered as having high financial capacity; the Cantons with 60 points and less have low financial capacity. The medium-capacity Cantons stand between 61 and 119 points.

With this formula, the min/max ratio is 7.27 points in 2000/2001, from the Canton Valais with 30 points to the Canton Zoug with 218 points. The formula results in a relative expansion of the financial capacity scale in which the Cantons are positioned comparatively to their relative place with regard to per capita NIC (Table 5, column 2), where the min/max ratio is 2.26 points (between Zoug and Jura) and the ratio between Zoug and Valais is 2.13. In consequence, the equalizing effects of equalisation payments are reinforced.

The present formula of the Cantons' financial capacity is a mixture of three concepts of measurement. Three arguments in equation 1 (NIC, B and T) relate to revenue equalisation; two arguments relate to cost equalisation (U and population density), with two ideas of what the production function of public services could be. For revenue equalisation, the NIC per capita is a macroeconomic measure; in contrast, the two other measures, B and T, and more specially T weighted by the B inverse belong to RTS (representative tax system). Despite these combinations and other limits (or manipulations) such as in equations 2 or 3, the total indicator (Table 5, column 7) has moved closer to NIC per capita through successive changes (Dafflon, 1995: 63-64). In addition, \(E_i\) is used in an ad hoc manner, that is through negotiation at the time each law which implies financial capacity of the Cantons is debated in parliament – without a general concept. This will become apparent in the next section where we present the main equalisation programs.
4.2. Federal equalisation programs

Three groups of federal equalisation programs have been developed since 1959: (1) conditional federal grants-in-aid to the Cantons, (2) revenue sharing of certain federal tax revenues, and (3) contributions of the Cantons to certain federal social security expenditures (figure 3).

4.2.1. Conditional (specific) federal grants-in-aid

Many items of cantonal expenditures benefit from federal specific grants; about 1/3 of federal grants contains an additional equalisation component. The system is organized in the following way:

(i) a basic rate, $S_{j\text{min}}$ such as in equation 4 which may be said to represent the federal interest in minimum standard requirements for cantonal public services and which varies according to incentive or some other technical criteria (economies of scale, spillovers, congestion costs);

(ii) an equalisation supplement, the second part [...] of equation (4), inversely related to the index of financial capacity of the recipient Canton.

This type of fiscal equalisation is mainly vertical, from federal to lower levels of government. It is regulated by many special laws concerning the provision of public services at decentralised levels.

The general grant formula for most granted functions\(^{10}\) is:

\[
S^i_j = S_{j\text{min}} + [(120-E^*_{i})/60 \times (S_{j\text{max}} - S_{j\text{min}})]
\]

\(S\) rate of grant  \\
\(j\)  aided function  \\
\(i\)  Canton  \(i = 1\ldots26\)  \\
\(E^*\)  indicator of financial capacity  \\
\(\text{max}\)  maximal rate of grant  \\
\(\text{min}\)  minimal rate of grant  \\
\(E^*_i\)  120 for \(E^*_i \geq 120\)  \\
\(E^*_i\)  60 for \(30 \leq E^*_i \leq 60\)

Example:
Consider a basic rate of grant of 30 % for a function "j" and a maximum rate of 45 %. This means that a Canton with a low financial capacity would be entitled to receive an additional part of maximum 15 % to the basic rate for equalizing its position. The exact additional rate of grant is proportional to the difference between the two rates, 15 percent in this example, weighted by the relative position of the cantonal indicator of financial capacity between 120 and 60 points. A Canton with 100 points would receive \((120 - 100)/60 \times (45 - 30) = 5\%\) in addition to the basic rate of 30 %, in all 35 % of the recognised matching expenditure for the particular project in function "j". For \(E^*_i = 120\), the rate of grant is \(S_{\text{min}}\); for \(E^*_i = 60\), the rate of grant is \(S_{\text{max}}\).

First introduced in 1974, equation (4) has been generalized as much as possible for those cantonal responsibilities that obtain federal conditional grants. Yet the basic rate and the equalisation supplement vary for each granted function; there is no general rule. But some

\(^{10}\) Note that federal grants do not only concern mandated functions and, inversely, mandated functions are not fully funded through grants.
programs remain with the old system: three rates of grant are applied according to the group of financial capacity to which a Canton is attributed:

<table>
<thead>
<tr>
<th></th>
<th>low</th>
<th>medium</th>
<th>high</th>
</tr>
</thead>
<tbody>
<tr>
<td>E&lt;sub&gt;*&lt;/sub&gt;, ≤ 60</td>
<td>maximum rate</td>
<td>60 &lt; E&lt;sub&gt;*&lt;/sub&gt;, &lt; 120</td>
<td>E&lt;sub&gt;*&lt;/sub&gt;, ≥ 120</td>
</tr>
<tr>
<td></td>
<td>mean rate</td>
<td></td>
<td>minimum rate</td>
</tr>
</tbody>
</table>

In 1995, a new exponential formula was introduced for the distribution of the federal subvention to the Cantons aimed at reducing the illness and accident insurance premium for persons of modest economic condition. It takes the general form:

\[
(5) \quad \text{SUBV}_{\text{insurance}} = 2.71828^{0.00503 \times E<sub>*</sub> - 0.0192104 \times \text{CONT}_{\text{insurance}}} \times K
\]

\[
\text{SUBV} \quad \text{amount of federal subvention attributed to Canton "i"}
\]
\[
\text{CONT} \quad \text{total federal contribution for reducing insurance premium}
\]
\[
K \quad \text{adjustment coefficients chosen so that the total amount attributed to the Cantons exactly corresponds to the available sum.}
\]

This program is not analysed in further details here.\textsuperscript{11}

4.2.2. Revenue sharing

The Cantons' share in federal tax revenues derives from several sources, but three revenue sharing programs only have equalisation components: the federal direct tax (FDT), the withholding tax (WT) and part of the customs duties on petrol and motor fuel (DC). Historically, revenue sharing was implemented either in order to compensate for fiscal imbalance when a previously cantonal revenue source was centralized (customs, alcohol monopoly, coinage, stamp duties) or because newly introduced federal taxes were concurrent to cantonal taxation (the federal direct tax and the withholding tax). The main revenue sharing programs have been connected with equalisation repayments.

**Federal direct tax**

The Cantons receive 30 percent of the federal direct tax (FDT: income, corporate profits and capital). 17 percent is allocated on the basis of origin, defined as the residence of the taxpayers, and 13 percent according to financial capacity. The repartition take the form of an exponential formula:

\[
(6) \quad P_{\text{FDT}} = 0.17 \times \text{FDT} + \left[ 0.13 \times \frac{1000}{1000000} \times \frac{\text{H}_{i}}{1000} \times 2.71828^{-0.0192104 \times E<sub>*</sub> + 0.00503 \times \text{FDT}_{i}} \times K \right]
\]

\[
P \quad \text{the revenue sharing part of Canton "i"},
\]
\[
E<sub>*</sub> \quad \text{the indicator of financial capacity, with the population (H<sub>i</sub>) serving as a multiplicand;}
\]
\[
K \quad \text{an adjustment coefficient chosen so that the total amount shared exactly corresponds to the available sum (since the formula is given for 1 millions SFr).}
\]

\textsuperscript{11} This is a rather complex problem which is discussed in Dafflon, 2002a.
**Withholding tax**

The Cantons also receive 10 percent of the *withholding tax* (WT), net of collection costs. 5 percent is allocated according to population, and 5 percent is reserved to the Cantons with indices of capacity $E^*_i < 100$. The formula takes the double form $[100 - E^*_i]$ simple and quadratic, the number of population serving as a multiplicand:

\[
(7) \ P_{WT}^i = 0.05 \ WT \times \frac{H_j}{\sum H_i} + \left[ 0.05 \ WT \times \sum \frac{H_j \times (100-E^*_j)}{2} \right]
\]

**Customs duties and excises on petrol and motor fuel**

The federal government reimburses to the Cantons part of its revenue from *customs duties and excises on petrol and motor fuel* (CD). Half of the receipts from the "normal" duties and the total yield of the so-called "supplementary" duties are exclusively attributed to expenditures for the highways and the main roads. Twelve percent of this amount is reimbursed to the Cantons: for international Alpine roads for 7/100th and as general payments for 93/100th. Out of the 93/100th, 42/100th is allocated to equalisation, for the cantons with indices of capacity $E^*_i < 100$. The formula takes the form $[(100 - E^*_i)^{1.4}]$ with total cantonal expenditures on roads $R_i$ serving as a multiplicand.

\[
(8) \ P_{CD}^i = 0.93 \ CD \times 0.42 \times \left[ \sum R_i \times (100-E^*_i)^{1.4} \right]
\]

But, even though road expenditures serve as a multiplicand, there is no obligation to spend this equalisation share on road building or maintenance: its real nature is that of a general unconditional block grants.

**Benefit of the Swiss National Bank**

There is one additional revenue source with equalisation addition, yet not paid out of the federal budget. In addition to a payment of 0.80 SFr per inhabitant, the Cantons receive 2/3 of the net *benefit of the Swiss National Bank* (NB), 5/8th of which are distributed proportionally to the number of inhabitants and 3/8th according to the indicators of financial capacity, the number of inhabitants serving as multiplicand. The formula is:

\[
(9) \ NB^i = (0.80 \ SFr \times H_i) + \frac{2}{3} \ NB \left[ \frac{5}{8} \ \frac{H_i}{\sum H_i} + \frac{3}{8} \ \frac{H_i}{1000000} \times K \times 2.71828^{0.02946 \times E^*_i} \right]
\]

4.2.3. **Cantonal contributions to social security**

The third category of transfer payments which include equalizing components concerns the Cantons' contributions to three federal social security programs: the old-age and survivors
insurance (AVS), the disabled pension scheme (AI) and the family allowances in agriculture (AFA). The shares of the public sector are the following:

<table>
<thead>
<tr>
<th>Program</th>
<th>Contribution of the Public Sector</th>
<th>Federal</th>
<th>Cantonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS</td>
<td>20% of total expenditures</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>AI</td>
<td>50% of total expenditures</td>
<td>37.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>AFA</td>
<td>Total annual deficit</td>
<td>2/3</td>
<td>1/3</td>
</tr>
</tbody>
</table>

**AVS and AI contributions**

For the AVS, the formula for the cantonal contributions (CONT) is based on the total amount of old-age pensions (AVS) paid in Canton “i”, weighted by the financial capacity of the Canton in the form:

\[
\text{CONT}^{AVS}_i = 0.03 \sum AVS_i \times \frac{\frac{5}{7}(E^*_i - 100) + 100}{\sum AVS_i \times \frac{5}{7}(E^*_i - 100) + 100}
\]

(10) where if \(\frac{5}{7}(E^*_i - 100) + 100\) > 120, then \(\left[\ldots\right] = 120\).

The transformation \(\frac{5}{7}(E^*_i - 100) + 100\) in formula (10) results in that the minimum value of the capacity indicator, which is 30 (Table 5), is raised to 50. With formula (11) the Cantons with an indicator of financial capacity higher than 120 points automatically benefit from a reduced indicator fixed at a maximum of 120. Indicators between 50 and 120 are proportionally corrected. The consequence is that the equalizing performance is considerably reduced.

The method and formula are exactly the same for the Cantons' contributions to the AI (the only changes are that the proportion shared is 0.125 for AI instead of 0.03 for AVS).

**Family allowances in agriculture**

For the Cantons' contributions to family allowances in agriculture, the indicator of the cantonal financial capacity is replaced with an indicator of tax capacity (Table 5, column 4). Cantons with a FDT per capita lower that \(4/5\)th of the national average benefit from a reduction (R) of their contribution proportional to the difference between this average and their own score \(\text{FDT}_i / \text{H}_i\):

\[
R_i = \frac{4}{5} (\text{FDT}_i / \text{H}_i)^{\text{average}} - \frac{\text{FDT}_i}{\text{H}_i}
\]

(12)
4.3. **A critical appraisal of the present system**

The present system of equalisation focuses essentially on revenues rather than on the costs of public provision. Whether it is efficient or not depends for each program on the combination of three elements:

1) the amount available for funding the equalizing proportion in each program;
2) the indicator of financial capacity;
3) the equalisation formula itself.

- The budget available for each individual program refers to the sums of conditional grants at disposition, the amount of revenue sharing and the contributions required from the Cantons for social security. These "equalizing proportions" (Table 3, column 3) are fixed in the Constitution or in specific laws. At the time of the budget discussion, there is no room of manoeuvre for modifying these proportions of revenue sharing or cantonal contributions to social security expenditures. This can be done only following the general legislative process. For conditional grants, there is a certain room of manoeuvre since the specific laws funding subsidised functions prescribe the general rule of calculation only, but do not fix the allocated annual amounts.

- There are about one third conditional grants programs with an equalizing element using various formulas. In addition, each of the four revenue sharing programs and the three schemes of cantonal contributions to social security expenditures presented above use specific equalisation formulas. Thus, the federal equalisation policy is complex and not particularly transparent. The cornerstone of the system is the fiscal capacity indicator.

In the computation of the cantonal indicators, there are a number of factors that deserve careful scrutiny:
- the choice of the components in equation (1): they are five at the moment, but the present debate casts doubts on whether they are the most suitable to reveal cantonal disparities;
- the weight given to each component in the calculation of the average;
- the limits in the calculation of each component and their transformation into the series of indices (equation 2), including the choice of an extension factor (equation 3).

Setting a formula is a delicate process: from 1959 up to now, there has been 23 changes, sometimes following a technical improvement in the calculation of available statistical series, but more often as the result of the partial dissatisfaction of one canton or another. A change in the formula is never straightforward; it is the result of a subtle negotiation first between the Cantons themselves, then between the Confederation and the Cantons.

- Though always much debated by the Cantons, the calculation of the capacity indicator is not the whole story of fiscal equalisation in Switzerland. In the policy implementation through the three groups of programs, and indeed with each particular program, specific factors have been introduced in the formulas that influence the results, both qualitatively and quantitatively.

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14 Six changes in the choice of the components of the formula; nine in the general form of equation 1; six in the limits for the calculation if individual series of indices, in equations 2 and 3; and twice in setting the limits between low, medium and high financial capacity of the Cantons (Dafflon, 1995: 64 and 191).
• The proportions of revenue sharing subject to equalisation are: 13 out of 30 percent for the FDT; 5 out of 10 percent in WT; 42 percent out of 93 percent in CD, and 3/8 out of 8/8 for the benefit of the National Bank.

• The upper threshold in the Cantons' financial capacity is 120 points for grants (equation 4), but 100 points for revenue sharing for the WT and motor fuel CD (equations 7 and 8) and for the AVS and AI contributions (equation 10). But for the later, the difference is considered for 5/7 only (equation 11). With the introduction of maximum (and also minimum: see equation 12 where only 4/5 of the difference is considered) thresholds in the computation formulas (the equations above), the extent of equalisation as well as the results from the computation of the Cantons' financial capacity, is modified.

• The formulas themselves are disparate: exponential for equations 5, 6 and 9; linear for equation 7, raised to power 1.4 in equation 8 or quadratic in equation 7.

• The values of the exponent in equations 5, 6 and 9. With revenue sharing or with grants paid by the Confederation to the Cantons, the higher the negative value of the exponent, the better the equalizing effect. Thus, with –0.0192104, the equalisation formula with the FDT formula obtains a lower score than the NB program, with –0.02946. And with –0.00503, the equalizing incidence of the illness insurance premium program is much lower. The formula could also serve for the Cantons' contributions to federal expenditures. In this case, the exponent should be positive. The same line of reasoning applies.

➢ In addition to the 23 changes already mentioned in the computation of the capacity indicators, 22 changes have taken place since 1959 concerning the proportions of revenue sharing or the Cantons' contributions to social security expenditures, and 23 changes in equations 4 to 10, that is 68 changes in all (Dafflon, 1995: 190). But there has been no fundamental change since 1994, when the actual discussion for the reform of the system started (see next section).

➢ At the moment, equalisation is a rather complicated system because with three groups of programs, as much as 10 formulas apply: 3 for conditional grants, 4 for revenue sharing and 3 for the Cantons' contributions to social security expenditures. In addition, the share or the proportion of the amount to be distributed or contributed, together with the total sum in each program, are always different. In sum, equalisation is an ad hoc construction through time where it is difficult to discern a guideline and a dynamic process in which the Confederation and the Cantons continuously negotiate their own position. From a technical point of view, such as efficiency in the equalisation policy in a strict sense, it is difficult to understand why the most efficient equalisation formula is not systematically used. From a Public Choice perspective, this may be considered differently if the objective is to strengthen the system of check and balance between governments, as Wiseman advocates (1990: 120). Changes are discussed at the margin, so as to give satisfaction for a new acceptable consensus to all the Cantons and not in view of reforming the whole system. On the other hand, continuous changes in the policy toolkit, in response to particular interest, make it much more difficult to assess the results and to compare successive policy output. Officials admit that part of the result is due to hazard (AFF, 1991: 22).

Yet, despite these difficulties and with ten formulas at hand, the Swiss equalisation policy is a laboratory for analysing the most efficient process – that is the formula giving the best value (equalizing incidence) for money (the available sum in each program). This has been realised for various year by AFF (1991) for the years 1970, 76, 82 and 88, and Dafflon (1995, 2002c) for the

*Table 3*

column 3 indicates the equalizing proportion of the program which goes to equalisation; for example for the FDT 17 percent of the tax yield is returned to the Cantons on the basis of the origin principle (the domicile of the taxpayer) and 13 percent is allocated to equalisation; thus the equalizing proportion is $13/(17 + 13) = 43$ per cent.

column 5 gives the value of the correlation coefficient between the NIC per capita (as the independent variable) and the equalizing effect of the formula, calculated in SFr per inhabitant (as the dependent variable) in a linear formula: $y_{equalizing effect per capita in canton \ "i\" = a + bx$ where $x$ is the NIC per capita in Canton "i"

column 6 "b" value in the linear equation $y = a + bx$. This value corresponds to the sensitiveness of the equalisation formula (in the exponential function, how a change in the value of the exponent - for example changing -0.0192104 in equation 6 - also changes the equalizing amount received - or paid - by each canton).

The best result is obtained with the formula given in equation (6) for the FDT. The equalizing proportion is 43 percent, that is for each 1 SFr transferred to the Cantons, 43 centimes have an equalizing effect. But more important, if one considers the correlation between the per capita equalisation and the per capita NIC, the result is by far the highest, with $R = -0.919$ significant at the 5 percent level (with a confidence interval at 95 percent). This negative correlation means that the lower the NIC per capita in a Canton, the higher the amount it receives, which is exactly the policy objective. And last, but not least, the "b" value in the linear regression $y = a + b(x)$, where $y$ is the per capita amount of equalisation received in each Canton and $x$ the NIC per capita, is the highest with the FDT revenue sharing formula. "b" is a good indicator of the quality performance of equalisation, called sensitiveness.

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15 The methods of evaluation are detailed in AFF (1991) and Dafflon (1995). Since the sums available and the proportions allocated to equalisation differ from one programme to another, Dafflon proposed a simulation with 1 million SFr. Since the formulas have not changed since 1994, the estimation for 1996 and 1998 is extrapolated from the previous results.
5. **Reform of the equalisation system**

5.1. **The way to reform: a painful process**

In 1994, the Confederation and the Cantons initiated a reform of the equalisation policy, coupled with a re-assignment of responsibilities and functions between the Confederation and the Cantons, under the head "New Financial Equalisation". A group of experts, commissioned for presenting a report on the past performance of the equalisation policy (Frey and al., 1994) stated the main reasons for the changes as follows:

- The actual system of equalisation has not succeeded in reducing cantonal disparities.
- Over the years, the system has become more and more entangled, blurring the actual responsibilities of the two layers, with too much centralization.
- Part of the revenue equalisation policy, specially the Cantons' contributions to social security expenditures, is inefficient.
- The conditional grant system advantages the rich Cantons rather than the poor ones. Although the rates of matching grants are the higher the poorer the Canton, Cantons with low financial capacity have not been able to take advantage of this grant system because of their difficulty to fund their own part of the expenditure. Clearly stated, it does not make sense giving a 60 per cent grant to a canton for a specified function if it cannot find money for the remaining 40 per cent.
- There is a general confusion in the present system between incentive, efficiency and equalisation.

Following the conclusions of this expertise, the Confederation and the Cantons appointed a federal-cantonal working party in charge of issuing proposals for reform. A first report was issued in 1996 for consultation (DFF, 1996). The results were rather lukewarm and controversial, specially with regard to the part of the report concerned with the re-assignment of functions. Too many vested interest were at stake.

Confronted to opposition, the federal-cantonal working party re-examined the reform and presented a second report, with more precise proposals in 1999 (DFF, 1999). Another procedure of consultation took place which ended on November 30, 1999: 217 answers were given, with 1891 proposals. The federal government and the Cantons were presented with the syntheses of the results on May 4, 2000. In the autumn 2000, the title of the reform was discreetly changed into "Reform of Equalisation and of Responsibilities Assignment". This could be understood as a first step towards the dissociation of the two parts of the reform, most probably because the proposals concerning the re-assignment of functions are too controversial to have a real chance of success (Bullinger, 2001), whereas the reform of the equalisation policy stricto sensu has a much better chance.

Again the political response to the re-assignment of responsibilities between the federal and the cantonal levels was very mixed and certainly not up to the expectations of the federal-cantonal working party, so that it mandated a new evaluation by an external expert (Frey, 2001). The direction of the project itself recognised that this part of the project has raised great scepticism and harsh opposition (Siegenthaler and Wettstein, 2001: 13) so that new compromises were needed. Huber (2001: 15) made a step further, arguing that the global reform package was
henceforth broken in two: equalisation stricto sensu and re-assignment of functions, with almost no chance for the latter to succeed.\(^\text{16}\)

At several occasions in 2000 and 2001, the Cantons have been discussing the following up of the reform process. The Conference of the Cantonal Ministers of Finance (CCMF) approved the reform on May 31, 2001 in Geneva (with the abstention of the Cantons Jura, Zoug and Zurich, and a negative vote from Geneva).\(^\text{17}\) At a later meeting on August 24, 2001 in Bern, the CCMF finally approved a compromise package. The Conference of the Cantonal Governments also accepted the principles of the reform package on June 21, 2001 (with the favourable vote of 20 cantons), but not yet its policy content. For revenue equalisation, the proposed indicator of the financial capacity of the Cantons must be studied anew.

On November 14, 2001 the Federal Government published a first "Message on the Reform of Equalisation and of Responsibilities Assignment between the Confederation and the Cantons" (CF, 2001a). This message presents the new equalisation system and proposes a first batch of necessary legal measures. It includes a federal decree, containing all the constitutional modifications due to the reform, and a totally revised federal equalisation law. The federal parliament began to discuss this long (270 pages) and rather complex message in September 2002. Considering the numerous and controversial articles published in the daily press since the publication of the message, one can reasonably expect a lively political debate.\(^\text{18}\) If the parliament accepts the first stage of the reform, Swiss citizens will have to vote on the decree (compulsory referendum on constitutional modifications), probably at the end of 2004. In case of a referendum (optional referendum on legal modifications), they could also have to vote on the new equalisation law.

If the federal decree and the new law are accepted by the majority of the citizens and the majority of the Cantons, a second message, addressing all the remaining necessary modifications of the federal legislation due to the equalisation reform, will be published by the federal government at the end of 2004 and discussed by the parliament in 2005. In case of a referendum, a new popular vote could took place in 2006. Following this "ideal" scenario, the new equalisation system could come into force at the end of 2006 or at the beginning of 2007.

\(^{16}\) Indeed, between the first report (DFF, 1996) and the second (DFF, 1999), then between the later and the message presenting the reform and the draft law (DF, 2001a), the platform concerning the re-assignment of functions has been considerably reduced so as to avoid any frontal opposition.

\(^{17}\) In this context it is important to remember that Zoug, Zurich and Geneva are three of the six Cantons with high financial capacity: see Table 5 and equation 4. The position of the canton Zurich has given raise to a polemic in the most influent national daily paper. See: C. HUBER (Minister of Finance of Canton Zurich), 2001 and the answer by P. Siegenthaler and G. Wettstein (Director of the Federal finance department, respect. Coordinator of the project: "Finanzausgleich"), 2001.

\(^{18}\) The Council of States’ special committee in charge of the analysis of the reform project has accepted the equalisation package almost without change on September 6, 2002. This may appears contradictory with the affirmation in the text that the reform is controversial. In fact, the committee’s members have had a strong debate but would not dare to change anything in the package for fear of completely disturbing the "subtle” balance reached in the proposal.
5.2. A general presentation of the proposed equalisation system

The proposed reform is rather ambitious because it aims, on the one hand, at re-assigning the responsibilities between the Confederation and the Cantons, and between the Cantons themselves (proposals 1 to 3 below) and, on the other hand, at a new revenue equalisation policy (proposals 4 and 5). From the very beginning, the federal government insisted that the two were not dissociable and that the primary goal was to foster efficiency, but not primarily to reduce federal expenditures. The 1999 reform package contains five proposals that one still can find in the message of November 14, 2001.

1. Disentangling of tasks and financing

Presently, the three levels of government share the responsibility, to some degree, in almost all fields of public intervention. Obviously, the Confederation is solely responsible for foreign affairs and to a less-than-full extend for national defence (around 90 percent). Other items, like education, culture, sports and recreation, health, environment, roads, generally are responsibilities of the Cantons and the Communes.\(^{19}\)

According to the reform project, Federal and cantonal tasks must be redefine more clearly and re-assigned on the basis of the subsidiarity principle. The fiscal-equivalence principle should also be considered in the assignment choices. There would be three categories of functions: exclusive (federal or cantonal), intercantonal for those cantonal tasks which have spillover effects, and joint federal-cantonal.\(^{20}\)

2. Joint tasks

Joint federal-cantonal tasks should be limited in number.\(^{21}\) For those tasks, the 1999 report stipulates that the Confederation will be in charge of strategic issues, while the Cantons will be in charge of operational issues in the form of funded mandate. This distinction between "strategic" and "operational" issues is no more mentioned in the 2001 message. It is explained by the difficulty to make a clear distinction between these two notions in practice and in the law (CF, 2001a: 54). Goals for joint federal-cantonal tasks will be fixed and described in an inter-governmental contract. Funding will take the form of conditional block grants: (i) "conditional" because it remains linked to the accomplishment of the specific task; (ii) "block", as opposed to the actual "matching" grants, because the sum will be based on the goals rather than costs; (iii) no equalizing supplement as in actual equation 4 because equalisation is performed through revenue sharing (see below).

3. Intercantonal co-operation and costs compensation

Cantonal tasks which have spillover effects (such as professional schools, universities, hospitals, specific medicare, public transportation in transcantonal agglomerations, sport and

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19 If we look at the respective shares of public expenditures of the three levels of government, the biggest spenders in single items were in 2000:
- the Communes: environment (62 %), culture, sports and recreation (54 %), administration (42 %);
- the Cantons: public order (67 %), health (56 %) and education (54 %);
- the Confederation: foreign affairs (100 %), defence (90 %), finance (58 %), economy (49 %), transportation (45 %) and social affairs (42 %)

20 The 1999 Report gives the exhaustive lists of the functions concerned by the reform in each of the three categories (DFF, 1999: 21, 22, 24, 25 and 27) for proposals 1 to 3 in the text.

21 The 2001 message mentions the following tasks (CF, 2001a: 47): measure, hunting and fishing, flood protection, forestry, nature and landscape protection, main roads, regional public transportation, aerodromes, agricultural structural improvements, help to reduce illness insurance premiums.
recreational facilities, cultural institutions, waste disposal plants, sewage purification plants, penitentiaries) must be performed in contractual co-operation (CF, 2001a: 48). Free rider behaviour will be banned: a Canton which benefit from services provided by another will have to pay compensation to the providing unit. According to the new equalisation law project (art. 14), the Confederation could oblige a reluctant Canton to participate to a co-operation if at least half of the co-operating Cantons ask for such an intervention.

The attribution of a coercive power to the Confederation in the matter has already generated vigorous reactions. It is quite problematic in a country where the cantons are used to a large autonomy in decision-making and want to maintain their particularities. Intercantonal co-operation, that already exist in several areas (although the Cantons have not proved to be very interested in co-operating yet), raise furthermore the issues of visibility and transparency of the decisions and of democratic control over the provision of public services (Bullinger, 2001: 22).

4. New revenue equalisation

Equalisation stricto sensu will concern financial resources only in the form of revenue sharing exclusively. It will aim at (i) making sure that each Canton has got the necessary means to assume by itself the tasks that has been entrusted to it, and at (ii) reducing cantonal financial disparities.22 Cantonal contributions to social security expenditures should be abolished and deducted from revenue sharing on a zero-sum basis. This will also be the case for the equalisation supplement of the actual matching grant system.

The Cantons will receive a constitutionally fixed amount of federal revenue sources (not yet exactly defined) paid into an equalisation fund. This amount should be distributed among the Cantons according to a new resources indicator, which excludes any macroeconomic base and elements linked to costs of service provision at the cantonal level and which is based only on a set of potential tax revenues of the Cantons, that is a RTS such as the Canadian one at present.

5. Costs equalisation

Proposals 1 to 4 above should allow the separation of incentive (through federal grants) and efficiency (in the assignment of functions and in the provision of public services) objectives on the one hand, from equalisation objectives on the other hand. Equalisation in proposal 4 eliminates elements of costs. But costs differentials in the provision of decentralised public service cannot be ignored in Switzerland and will be considered through a costs equalisation mechanism. According to the reform project, costs differentials are due to two categories of causes: 1) geo-topographic, oriented in favour of the mountainous areas; 2) socio-demographic, oriented in favour of the urban areas. Specific criteria are taken into account in the form of extra federal funding for Cantons facing additional costs due to these causes.

5.3. What is new with regard to equalisation stricto sensu?

In this section, we consider the stand of the reform at the end of September 2002, but only for equalisation strictly speaking, that is without the part concerning the re-assignment of functions between the Confederation and the Cantons. The new equalisation scheme and the amounts in discussion are presented in Figure 3. Six aspects of equalisation have been discussed within the

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22 In French: (i) "permettre à tous les cantons de disposer des moyens financiers nécessaires pour assumer de manière autonome les tâches qui leur sont confiées", (ii) "servir à réduire les inégalités entre les cantons sur le plan de la capacité financière" (CF, 2001a: 79).
last few years: 1) the concept of revenue equalisation; 2) a minimal tax revenue per capita; 3) a new indicator of the Cantons' financial resources; 4) costs equalisation due to geography and topography; 5) costs equalisation for socio-demographic reasons; and a newcomer, 6) the compensation of too rigorous consequences of the new system during a transitional period of time. Problems 1) to 3), which concern revenue equalisation are treated in section 5.3.1. Questions 4) and 5), regarding costs equalisation are discussed in section 5.3.2. Section 5.3.3. deals with aspect 6).

5.3.1. Revenue equalisation

The concept of revenue equalisation described in the 2001 message is presented in figure 4. In this figure, the Cantons are ranked on the horizontal line according to their financial capacity (an indicator of resources still to be defined). The vertical axe indicates cantonal tax revenues per capita in a RTS, with the average per capita amount given the value of 1.

![Figure 4 Concept of resource equalisation](image)

Sources: CF, 2001a: 92; Dafflon and Vaillancourt, 2002: 490

Revenue equalisation includes horizontal and vertical transfers and is based on the resources indicator described later on. Cantons with an indicator of financial capacity of 100 points (national mean) or more will have to finance horizontal equalisation (total amount in the message: 1 000 millions SFr.). Vertical equalisation will be financed by the Confederation (1 431 millions SFr. in the message). Cantons with an indicator lower than 100 will receive
equalisation payments. The sharing out of the total amount (2 431 millions SFr.) between these "poor" Cantons, will be made following a progressive formula, not precisely defined yet. The poorer a Canton, the bigger will be the amount per capita that it will get. The formula is however conceived in such a way that after equalisation, a beneficiary Canton cannot become "richer" than a Canton that originally had a higher resources indicator. Furthermore, a threshold system guarantees no nominal setback through the new equalization mechanism in comparison to the actual system.

Horizontal equalisation in Figure 4 would mean that EBC paid by "richer" Cantons in the equalisation fund would profit "poorer" Cantons for DEA. Vertical equalisation would add DFE. Yet, several constraints are added: (i) $EBC \leq 1\ 000\ \text{millions SFr}$; (ii) $DFE \leq 1\ 431\ \text{millions SFr}$; (iii) a Dalton-like criteria along function $FE$ for the position of individual beneficiary Cantons after equalisation. More recently the Council of State Commission in charge of the project added a fourth constraint, that (iv) $EBC = 0.75\ DFE$ (see below).

**Complementary endowments and minimal tax revenue per capita**

A novelty in the equalisation proposal is that certain Cantons, below a given value of the indicator of capacity will receive a complementary endowment so that they reach a minimal level of resources after equalisation. In figure 4, the “poorer” Cantons will receive additional unconditional payments such that the average financial resources at their disposal will be at least 85 percent or 0.85 of the national average, 1.0. The 1999 report fixed this minimum between 0.875 and 0.90; the Conference of the Cantonal Ministers of Finance (CCMF) proposed 0.85 on May 31, 2001. On August 24, 2001 it decided that this value is to be regarded as a general objective and not as a strict and absolute target. In the federal message of November 14, 2001, the value of 0.85 is mentioned as an example of reference value (DF, 2001a: 93). The text stipulates furthermore that one cannot exclude that this objective will not be reached each year. No doubt that these questions (a minimal tax revenue per capita and the necessity to reach this target every year) will still be debated by the federal parliament.

One of the external experts considered that the target of minimal revenue per capita and the idea of complementary endowments are federal political objectives and, as such, should be entirely financed by the Confederation (Frey, 2001: 16). According to the 2001 message, it seems however that it will be financed by the global equalisation fund, that means by the Confederation and the "richer" Cantons. Worried about the financial consequences of an eventual degradation of the intrinsic situation of the poorer Cantons in the future, the "richer" Cantons are now asking for a constitutional limit to their participation to financing equalisation. The Council of States’ special committee in charge of analysing the equalisation reform has recently proposed to fix this upper limit at 75 per cent of the federal contribution to the equalisation fund (NZZ, 07.09.2002). This proposition (that $ADE = 0.75\ DFE$ in Figure 4) has yet to be debated in the federal parliament.

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23 The revenue equalisation concept presented in figure 4 differs from the concept proposed in the 1999 report. This report mentioned a system in which only the Cantons with a resources indicator lower than 90 points would have received an equalisation payment. Only the Cantons with 100 points and more would have contributed to the equalisation fund. The system would have been neutral for those between 90 and 100 points. They would neither have to pay to, nor would they receive anything from the equalisation fund. The system was also built in such a way that each canton with a financial indicator lower than 85 points before equalisation would have had an indicator of 85 after.
A new indicator of the Cantons' resources

The cornerstone of the new equalisation system is the indicator of "financial resources" of the Cantons. Whereas the Confederation and the Cantons rapidly agreed that the actual indicator of financial capacity (equation 1) was no longer adequate, as indeed any other sort of macroeconomic indicator, and that the new ranking of the Cantons should be of a RTS sort (along the horizontal axe in Figure 4), it has been very difficult to find an agreement on a new "resource indicator".

At first, the 1999 report, which remained the reference until the end of 2000, proposed a measure of "potential tax capacity" based on the theoretical amount that direct taxation would produce in each canton corrected with the coefficient of tax burden. This is very similar to the third component of equation (1), with the elimination of the other components. Symbol "T" in this new formula would add the yields of taxation on personal income and wealth, on benefit and capital of legal entities, and on motor vehicles. It would also include the Cantons' share to the non-equalizing part of the FDT revenue sharing (actually 17 percent – see equation 6). This measure was much debated by cantonal representatives because it determines who is rich and who is poor, thus who will receive or pay: measurement and objectives are two faces of the same coin. The formula raised numerous criticisms and objection, technical and redistributive. It has been changed in the fall 2000 with a measure of "aggregated tax base" (Fischer, 2001), which appears in the 2001 message. This "aggregate tax base" adds three components: the total taxable income and wealth of individuals and the taxable benefit of legal entities in the Cantons, following the tax assessment rules for the FDT and not that of the individual cantons - because the FDT is the only tax system which is harmonized throughout Switzerland.

This opened the box for many other technical questions which are not yet answered. For example, the tax base for the taxation of individual wealth cannot be directly added to the tax base for income taxation. Wealth is a stock; income is a flow. That part of individual wealth which obtains payment, such as dividends or interests, is already included in the income tax base, which raises the problem of double computation (Fischer, 2001). One of the strongest objection is that the FDT on personal income is very progressive, letting out of taxation a large number of low-income residents at the federal level, but who are taxpayers at the cantonal level. In addition, the FDT is a big political stake in federal parliament: new tax allowances and deduction are actually discussed which, if accepted, would again eliminate a substantial part of actual FDT taxpayers. FDT on income is a biased measure. Furthermore a few important statistical data are lacking at the moment (CF, 2001a: 83-88). For example, there is no harmonized statistics at the federal level on the wealth taxation of individuals. There is a similar problem for the taxation deducted at source, that one should take into account in the income taxation, or for the taxation of holding companies, that one should take into account in the benefit taxation. Due to these lacking data, the cantonal resource indicators presented in the 2001 message are provisory ones, based on econometric extrapolations. The federal administration is now creating the data bases that will be necessary to calculate the real resources indicators. The needed information should be available in 2006.

5.3.2. Cost equalisation

Compensation for additional costs: geography and topography

Since revenue equalisation and costs equalisation are distinct in the new scheme, the question immediately arises of how to design the compensation for additional charges in the mountainous regions, due to altitude, ground declivity, low population density or to distance to service
delivery. Functions concerned with this kind of compensation include forestry, water control and embanking and the protection of main roads against natural danger. In the 1999 Report, an indicator was constructed with four components with different weight. National average for each series was given 100 points; Cantons with total average higher than 100 would receive compensation. This cost equalisation takes the form of conditional block grants: the Canton decides to which of the three functions it would allocate the total amount thus received. Additional charges in the domain of regional public transportation are not included in this scheme, but they are taken into account directly in the specific federal legislation.

Since the 1999 Report, the Cantons have obtained that another indicator would be taken into consideration, but only with the population density (the three other elements of calculation are abandoned): that part of their area which is above 1080 m. altitude, with a weight of 0.50. The consequence is that 18 Cantons instead of 8 are eligible for this compensation. The Canton of Zurich has vehemently protested against this change (Huber, 2001: 15). The external expert wrote: "One cannot avoid the suspicion that this element has been chosen in an ad hoc manner so as to advantage certain alpine cantons compared to the actual situation. We do not understand this criteria of cantonal area above 1080 m alt. with a weight of 0.50. ... It is not justified that the total area above this altitude be taken into consideration. What are the additional charges that glaciers and rocky mountains cost to these cantons?" (Frey, 2001: 17).

The 2001 message proposes a global indicator taking four elements into account. Population density remains, but with a lower weight and will be accompanied by three other measures.

### Summary: criteria for additional costs: geography and topography

<table>
<thead>
<tr>
<th>criteria</th>
<th>1999 Report</th>
<th>Cantons’ demand</th>
<th>2001 Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>population density</td>
<td>0.50</td>
<td>0.50</td>
<td>0.166</td>
</tr>
<tr>
<td>population above 800 m. alt.</td>
<td>-</td>
<td>-</td>
<td>0.33</td>
</tr>
<tr>
<td>population in Communes with less than 200 inhabitants</td>
<td>-</td>
<td>-</td>
<td>0.166</td>
</tr>
<tr>
<td>length of protected road</td>
<td>0.25</td>
<td>abandoned</td>
<td>abandoned</td>
</tr>
<tr>
<td>forest area</td>
<td>0.20</td>
<td>abandoned</td>
<td>abandoned</td>
</tr>
<tr>
<td>length of the rivers</td>
<td>0.05</td>
<td>abandoned</td>
<td>abandoned</td>
</tr>
<tr>
<td>area above 1080 m. alt.</td>
<td>-</td>
<td>0.50</td>
<td>0.33</td>
</tr>
</tbody>
</table>

A total annual amount of 275 millions SFr. is allowed for the compensation of additional costs due to geo-topographical reasons. This amount, totally financed by the Confederation, will be reconsidered every four year. According to the calculation presented in the message (CF, 2001a: 107) eighteen Cantons are eligible for this compensation.\(^{24}\)

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\(^{24}\) There are big differences in the amounts that would be paid to each Canton. Grisons alone would get more than 103.3 millions SFr., followed by Valais with 61.1 millions SFr and Neuchâtel with around 17.9 millions SFr. At the other extremity of the scale, Zoug would receive 67 000 Sfr. The other beneficiary Cantons are: Bern (14.7 millions SFr), Argovie (14.6 millions SFr), Fribourg (11.7 millions SFr), Tessin (10.7 millions SFr), Uri (8.9 millions SFr), Appenzell Rh.Int (6 millions SFr), Lucerne (5.7 millions SFr), Glaris (4 millions SFr), Obwald (3.8 millions SFr), Schwyz (3.4 millions SFr), Thurgovie (3.3 millions SFr), Jura (3 millions SFr), St.Gall (1.9 millions SFr), Nidwald (810 000 SFr.).
Compensation for additional charges: socio-demographic factors

Large urban Communes rapidly complained that specific problems of urban areas were not suitably taken into consideration. The 1999 report answered this question with this new category of transfer payments. Four criteria were taken into consideration. The cantonal percentage for each criteria is compared to the national average; differences are summed. Cantons with a positive result would receive compensation (proportional to population weighted by the summed differences).

For this domain of compensation, some Cantons have argued that the special situation of urban areas around big cities should be taken even more into consideration. They pretend that the four chosen criteria are not specific to all agglomerations. A complementary project has then been evaluated for the agglomerations with a population of 100 000 inhabitants or more (Siegenthaler and Wettstein, 2001: 13). Important methodological and statistical problems have appeared that still have to be settled.

The 2001 message mentions a provisory global indicator based on six elements. The indicators are still under construction. The included elements will be checked and revised if necessary till 2005. At this time, all the needed statistical data should be available. The weight of each element in the global indicator has not been decided yet.

Summary: criteria for additional charges: socio-demographic factors

<table>
<thead>
<tr>
<th>criteria</th>
<th>1999 Report</th>
<th>Cantons' demand</th>
<th>2001 Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>population over 65 of age</td>
<td>1.5</td>
<td>X</td>
<td>over 80 of age</td>
</tr>
<tr>
<td>population below 64 receiving social aid</td>
<td>2.0</td>
<td>X</td>
<td>X but without age limit</td>
</tr>
<tr>
<td>foreign residents</td>
<td>0.5</td>
<td>X</td>
<td>adult foreigner</td>
</tr>
<tr>
<td>jobless</td>
<td>2.0</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>agglomeration with population over 100 000 inhabitants</td>
<td>-</td>
<td>to be determined</td>
<td>problems specific to central cities</td>
</tr>
<tr>
<td>population receiving education, below age 20</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>drug addicts</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

X means that the criteria is taken into account, but its weight not yet determined. A text signifies that the criteria still need to be determined so that it can be quantified.

A total annual amount of 275 millions SFr is allowed for the compensation of additional costs due to socio-demographic reasons. This amount, totally financed by the Confederation, will be reconsidered every four year. According to the provisory calculation (CF, 2001a: 119), that should be consider with precaution, 11 Cantons are eligible for this compensation.\(^{25}\)

5.3.3. Compensation for political cohesion

In November 2000, following the consultation of the 1999 Report, the project was augmented with a new and fifth component: a "compensation for the Cantons which suffer severe financial disadvantages through the change of the present to the new equalizing scheme", soon designated by "cohesion fund". What does this mean? A financial simulation of the new scheme of equalisation, with the application of the new indicator of the Cantons' financial resources,

\(^{25}\) Geneva (68.9 millions SFr.), Zurich (59.5 millions SFr) and Vaud (53.7 millions SFr) would get the main part of the payments. The other beneficiary Cantons are: Basle-Town (35.2 millions SFr), Tessin (25.1 millions SFr), Bern (9.9 millions), Neuchâtel (8.5 millions SFr), St-Gall (5.8 millions SFr), Lucerne (5.6 millions SFr), Schaffhouse (1.9 millions SFr) and Fribourg (780 924 SFr).
showed that eight Cantons would suffer from negative results which were politically unacceptable: Obwald, Fribourg, Appenzell Rh. Ext., Vaud, Neuchâtel and Jura, for those Cantons which presently benefit from equalisation, and Zurich and Nidwald, for those which pay. Yet, neither the simulation, nor the external expertise mandated by the direction of the project, could explain either logically or technically these negative incidence (Frey, 2001: 20 and the press release April 26, 2001). Of course, these Cantons strongly protested.

This new ad hoc fund was then invented so that the whole project would not be jeopardised. The given rule is that "no Canton with a weak financial capacity, which today benefits from equalisation, should suffer from worse condition with the new scheme" (Siegenthaler and Wettstein., 2001: 13). The total amount for this component of equalisation is discussed around 550 millions SFr. paid 2/3 by the Confederation and 1/3 by the Cantons. On May 31, 2001, the CCMF fixed the maximum sum at 430 millions SFr and proposed a restriction which limits payments to those Cantons with an indicator of financial capacity lower than 100.

The 2001 message also mentions a total amount of 430 millions SFr financed 2/3 by the Confederation and 1/3 by the Cantons. The sharing out between the Cantons of this part of the financing will be done according to their population. This fund is described as transitory and provisory. It will benefit only to Cantons with a resource indicator lower than 100 at the moment of the implementation of the new equalisation system. If the resources indicator of a beneficiary Canton subsequently grows over 100, the Canton will lose immediately is right to a payment. On the contrary, if a Canton is confronted to a decrease of his resources indicator after one or a few years and pass under the 100 limit, it won't get any payment. So the number of beneficiary Cantons should decrease in time. The total amount won't be indexed to inflation. The necessity of this "cohesion fund" will be evaluated by the federal parliament every 4 years. Furthermore, the special commission of the Council of State has recently proposed to limit the existence of this fund to a maximal period of 24 years (NZZ, 07.09.2002).

Whether this is the political price to pay for the reform or not, one can question with Huber (2001) a project, which is qualified as innovative and much more efficient than the present one, in which 2 431 millions SFr. are allocated to the objective of revenue equalisation, but which needs in parallel about 430 millions SFr just to correct incidences that further worsen the position of already financially weak Cantons. The corrective amount represents about 17.7 percent of the targeted sum for revenue equalisation and 12.6 percent of the total amount of the new equalisation system.

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26 Following Huber (2001: 15) this compromise has no scientific base and result from bazaar-like discussion. In German "Hinter den Kulissen fand aber ein eigentlicher finanzpolitischer Basar statt, der schliesslich zum neuen Instrument des Härteausgleichs führte." For Frey (2001: 20) and Siegenthaler and Wettstein (2001: 13) this is the acceptable political price to be paid for the reform.
5.3.4. Finance

At the moment of writing this paper, the total amount allocated to equalisation is 3 411 millions SFr, distributed in the following way between the five programmes:

<table>
<thead>
<tr>
<th>programme</th>
<th>1999 Report</th>
<th>2001 Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>revenue equalisation</td>
<td>1900*</td>
<td>2431</td>
</tr>
<tr>
<td>geo-topographic additional costs</td>
<td>210</td>
<td>275</td>
</tr>
<tr>
<td>regional public transport</td>
<td>164</td>
<td>?**</td>
</tr>
<tr>
<td>socio-demographic additional costs</td>
<td>210</td>
<td>275</td>
</tr>
<tr>
<td>political cohesion</td>
<td>0</td>
<td>430</td>
</tr>
<tr>
<td>Total</td>
<td>2484</td>
<td>3411</td>
</tr>
</tbody>
</table>

* revenue equalisation (900) + complementary endowments (1000); ** will be analysed in the 2nd federal message on the equalisation reform (CF, 2001a: 161)

If one does not take the cohesion fund into account, the financial result of the total reform, including the reassignment of tasks, should be neutral for the Confederation and the cantons in comparison to the actual system (CF, 2001a: 208). The suppression of the equalisation proportions of the federal grants and of the revenue sharing programs (see Table 3, column 4 for 2000) will be balanced by higher federal contributions to the revenue equalisation, by the additional costs compensation mechanisms (totally financed by the Confederation) and by the suppression of the equalisation proportion of the cantonal contributions to social insurances (Table 3, column 4 for 2000).
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RS 613.13 Ordonnance du 27 novembre 1999 réglant la péréquation financière au moyen de la quote-part cantonale au produit de l'impôt fédéral direct
RS 613.14 Ordonnance du 2 décembre 1985 réglant la péréquation financière au moyen de la part cantonale au produit de l'impôt anticipé
RS 725.116.25 Ordonnance du 9 décembre 1985 concernant la répartition des parts du produit de l'impôt sur les huiles minérales destinées au financement de mesures autre que techniques
RS 951.181 Ordonnance du 7 décembre 1992 sur la répartition des parts des cantons au bénéfice net de la Banque nationale suisse
Appendix I

**Articles on equalisation in the federal Constitution of April 18, 1999**

<table>
<thead>
<tr>
<th>Title 3</th>
<th>Confederation, Cantons and Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 2</td>
<td>Powers</td>
</tr>
<tr>
<td>Section 5</td>
<td>Public Works and Transportation</td>
</tr>
<tr>
<td>Article 86</td>
<td>Motor Fuels Consumption tax and other traffic charges</td>
</tr>
<tr>
<td>1</td>
<td>The Confederation may raise a consumption tax on motor fuels.</td>
</tr>
<tr>
<td>2</td>
<td>It shall levy a tax on the use of national highways by motor vehicles and trailers which are not subject to the heavy goods traffic charge.</td>
</tr>
<tr>
<td>3</td>
<td>It shall use half of the net revenue from the motor fuels consumption tax and the net revenue from the national highway tax for the following purposes and costs in connection with road traffic:</td>
</tr>
<tr>
<td>...</td>
<td>e. General participation in the financing by the Cantons of highways open to motor vehicles and to equalisation of financial charges in the field of roads;</td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Chapter 3</td>
<td>Finances</td>
</tr>
<tr>
<td>Article 128</td>
<td>Direct Taxes</td>
</tr>
<tr>
<td>1</td>
<td>The Confederation may raise a direct tax: a) on the income of natural persons; b) on the net profit of legal entities; c) on the capital and the reserves of legal entities.</td>
</tr>
<tr>
<td>2</td>
<td>...</td>
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<tr>
<td>3</td>
<td>...</td>
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<tr>
<td>4</td>
<td>Three tenths of the gross tax yield shall fall to the Cantons; at least one sixth of this amount shall be used for financial equalisation among the Cantons.</td>
</tr>
<tr>
<td>Article 135</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The Confederation shall promote financial equalisation among the Cantons.</td>
</tr>
<tr>
<td>2</td>
<td>When granting subsidies, it shall take into account the financial capacity of the Cantons and the special situation of the mountainous regions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title 6</th>
<th>Revision of the Federal Constitution and Transitory Provisions</th>
</tr>
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<tbody>
<tr>
<td>Chapter 2</td>
<td>Transitory Provisions</td>
</tr>
<tr>
<td>Article 196.16</td>
<td>Transitory Provision to art. 132 (Cantonal Share of Withholding Tax)</td>
</tr>
<tr>
<td>Until the financial equalisation among the Cantons shall be subjected to new regulations, the cantonal share of the yield of the withholding tax shall be 12 percent. If the rate of the withholding tax exceeds 30 percent, the share of the Cantons is 10 percent.</td>
<td></td>
</tr>
</tbody>
</table>