

# les Cahiers de l'Observatoire

**Higher Education in Switzerland.  
Update and reflection on current trends  
and likely futures**

Juan-Francisco Perellon

**N° 14 (2006)**

**Editeur responsable**

Prof. Jean-Philippe Leresche

**Comité éditorial**

Prof. Dietmar Braun, Dr Fabienne Crettaz von Roten, Dr Olivier Glassey  
Dr Gaële Goastellec, Prof. Jean-Philippe Leresche

Observatoire Science, Politique et Société

Université de Lausanne

Rue de Bassenges 4 • CH-1024 Ecublens

<http://www.unil.ch/osps> • [wwwosps@unil.ch](mailto:wwwosps@unil.ch)

© OSPS, 2006

Les Cahiers de l'Observatoire sont ouverts à toute personne souhaitant proposer une réflexion, une analyse ou un point de vue sur l'enseignement supérieur et la recherche. Les Cahiers accueillent à la fois des textes de travail, des pré-publications ou des documents finaux. Le contenu des contributions n'engage que leur auteur.

---

## Table of Content

---

RESUMÉ .....	4
ABSTRACT .....	4
INTRODUCTION .....	6
THE SYSTEM AS IT IS .....	7
FUNDING ALLOCATION AND INSTITUTIONAL BUDGET STRUCTURE .....	10
THE CANTONAL UNIVERSITIES .....	10
THE FEDERAL INSTITUTES OF TECHNOLOGY .....	13
THE UNIVERSITIES OF APPLIED SCIENCES .....	14
SPECIFIC FUNDING OF RESEARCH ACTIVITIES .....	16
DISCUSSION .....	17
RE-ARRANGING MULTI-LEVEL GOVERNANCE STRUCTURES .....	20
CONCLUSIONS .....	23
BIBLIOGRAPHY .....	25

---

## Tables

---

TABLE 1 — MULTI-LEVEL GOVERNANCE OF THE SWISS HE&R SYSTEM .....	8
TABLE 2 — FUNDS ALLOCATED TO CANTONAL UNIVERSITIES THROUGH THE INTERCANTONAL AGREEMENT ...	13
TABLE 3 — FEES IN SWISS HE (IN SWISS FRANCS) .....	13
TABLE 4 — RESOURCES OF THE EPF SECTOR (X 1'000) .....	14
TABLE 5 — WHO FUNDS THE SWISS UNIVERSITIES OF APPLIED SCIENCES (2001) .....	15
TABLE 6 — FUNDING OF CHARGES OF THE UAS BY ORIGIN AND TYPE OF ACTIVITY (2001 IN SFR MIO) .....	15

---

# Higher Education in Switzerland. Update and reflection on current trends and likely futures<sup>1</sup>

---

Juan F. Perellon, Ph.D.<sup>2</sup>

## Résumé

Le système suisse d'enseignement supérieur et de recherche traverse d'importantes transformations depuis le début des années 1980. Celles-ci se sont intensifiées ces dernières années, notamment à travers la création d'un secteur de formation tertiaire à orientation professionnalisante, les Hautes écoles spécialisées (HES), les modifications des cadres légaux qui régissent le système tant au niveau fédéral qu'à celui des cantons, ainsi que par la modification des modalités de financement des Hautes écoles, les structures de leur gouvernance et de celles du système dans son ensemble.

En se fondant sur des analyses antérieures, le présent article présente un état des lieux des principaux débats sur l'enseignement supérieur en Suisse et discute certains des effets possibles des réformes en cours. Ces derniers s'organisent autour de deux processus parallèles et interdépendants. Le premier concerne la révision des articles de la Constitution fédérale relatifs à l'éducation, le second, lui, porte sur la révision de la Loi fédérale sur l'aide aux universités et la coopération dans le domaine des hautes écoles (LAU) et sa transformation en une loi-cadre régissant le système d'enseignement supérieur dans son ensemble. Ces deux processus mettent en avant, entre autres éléments, des questions relatives au financement du système et à sa gouvernance, thématiques qui sont traitées en détail dans l'article.

## Abstract

The Swiss Higher Education and Research system has undergone important structural transformations over the last two decades. Alongside the creation of a vocational higher education sector and the revision of most legal frameworks on higher education at the federal and cantonal

---

<sup>1</sup> This working paper is part of an international research project "SUN – The Steering of Universities" funded under the 6<sup>th</sup> EU Framework programme.

The views expressed in this working paper do not necessarily reflect those of my organisation.

<sup>2</sup> Chef d'unité de recherche à l'Observatoire Science, Politique et Société jusqu'au 31 mars 2005. Depuis, il est adjoint scientifique à la Direction des affaires universitaires, Département de la formation et de la jeunesse, Etat de Vaud, Rue de la Barre 8, 1014 Lausanne - Suisse, E-mail: Juan-Francisco.Perellon@dfj.vd.ch

levels, these transformations have affected the funding patterns, the governance of the system as a whole and the quality assurance regime. Building up on former analyses, the present article provides an update on current reforms and discuss their potential impact on the higher education and research system. Current reforms in Swiss HE are framed within two major processes : the revision of articles of the Federal Constitution related to education and training with the inclusion of a new article on higher education, and the preparation of a new framework Federal Act on higher education, on the other. These two interrelated processes bring forward important suggestions for the future governance and funding of the Swiss higher education and research system, which are discussed in detail in the paper.

---

## Introduction

---

The paper looks into the current debates on the re-organisation of the Swiss Higher education and research (HE&R) by discussing two particular domains : the funding allocation procedures and the institutional budget structures of the HE&R institutions, on the one hand, and the overall governance of the system, on the other. Its main objective is to highlight the transformations that have taken place in recent years in these domains, and identify recent evolutions and their potential impact on the system. Recent reforms in Swiss HE are framed within two major ongoing processes : the revision of the Federal Constitution as regards education with the inclusion of a new article on higher education, and the preparation of a new framework Federal Act on higher education, on the other. Both are discussed below. For the moment, it suffices to say that if implemented, the proposed reforms will not only put an end to the allocation of university budgets based on historical considerations and introduce a new governance of the overall system, but also increase institutional autonomy and change universities institutions into “public knowledge enterprises”, as stated by the Secretary of State for science and research Charles Kleiber (Kleiber in *Le Temps* 2004).

The remainder of the paper is organised as follows. In Section 2, the current features of the HE&R system are briefly sketched out, with emphasis placed on the ternary structure of the system and its multi-level governance nature. Against this background, Section 2 moves to the procedures of funding allocation and institutional budget structures. Here, the discussion stresses the variety of funding channels and how these have evolved in recent years to incorporate more incentive-oriented mechanisms alongside more traditional ones, based on historical agreements and input-oriented indicators. Then, in Section 3, the paper looks more in detail into the governance of the system *per se*. Attention is primarily paid to proposals for reform and the landscape that could emerge when – and if – implemented. The Conclusions will sum up the main arguments of the paper and reflect on potential consequences of the reforms, especially as regards the division of tasks among federal agencies and deliberative arenas.

---

## The system as it is

---

In Switzerland, HE&R policy is a shared prerogative of the cantonal and the federal levels (Confederation or central government). At the Federal level, two ministries currently share the prerogatives for HE&R, namely the Federal Department of Home Affairs (DFI – *Département fédéral de l'intérieur*), in charge for academic higher education and fundamental research, through the Swiss National Research Foundation, and the Federal Department of Economic Affairs (DFE – *Département fédéral de l'économie*), which is responsible for vocational higher education and applied research (Benninghoff and Leresche 2003).

The revision of the articles of the Federal Constitution on education and training (see below) has brought the pertinence of such a separation of competencies back to the forefront. In this context, members of the Federal Department and experts in the field of HE&R proposed, once again, to integrate vocational and academic higher education and research and innovation under a single Federal Department. Should it be the Department of Home Affairs? That for Economic Affairs? Or a brand new Education and Science Department? Much is at stake, which goes well beyond HE *stricto sensu* and touches upon realpolitik “made in Switzerland”. Officially, the discussions – more than actual negotiations – have come to a standstill, the Federal Council having decided that the status quo would prevail, at least in the near future. No revolution ahead, then. To a substantial extent such a position is highly counter-productive and hinders the harmonisation of the HE&R system as a whole. It thus goes against all the signals indicating that what is needed, now certainly more than ever, is more co-ordination and integration and the concomitant reduction of the multi-level governance structure. Nevertheless, the reunion of tertiary academic and vocational education, research and innovation in a single Federal Department is a matter of *when* it will happen, not *if* it will happen. A reunion would, in fact, mirror what has taken place in most cantons (23 out of 26) where education issues – secondary and tertiary, vocational and academic – are now dealt with in a single Education Department.

The cantonal Education Departments have responsibilities also for HE policy. The cantons and the Confederation own, fund and control the three sectors that compose the system, although the modalities of this ownership, funding and control varies not only between the two political levels but also among the cantons themselves. This makes the Swiss HE&R system a paradigmatic case of multi-level HE governance.

Characterising the Swiss HE&R system in terms of a ternary structure is not a simple a question of wording, or an attempt to create some sort of artificial distinction. On the contrary, arguing that Swiss HE&R system is composed of three components not only helps to overcome the traditional

distinction between vocational and academic education – generally characterised by the idea of “binary systems” – but also to introduce the political variable at play in the organisation of HE&R systems, notably, though not solely, through the steering of the different sectors that compose such a system. Consequently, a full appreciation of the different types of relationships with the respective authorities responsible for each type of institution in the Swiss context calls for an approach in terms of ternary and not binary structure. The distribution of competencies among stakeholders means that there are several legal frameworks at play as indicated in Table 1.

*Table 1: Multi-level governance of the Swiss HE&R system*

	<b>Legislation</b>	<b>Funding HE</b>	<b>Funding research</b>
<b>Federal institutes of technology</b>	Confederation	Confederation	Confederation
<b>Cantonal universities</b>	Home canton & Confederation	Home canton, other cantons & Confederation	Confederation & Home cantons
<b>Universities of applied sciences</b>	Confederation & cantons	Confederation, home canton & other cantons	Confederation & cantons

Source : OECD 2003

The multi-level governance of the HE&R system is, to some extent, a “natural” echo to the diversified institutional landscape. This landscape is based on a three-tier structure of ten cantonal universities, two Federal Institutes of technology and attached institutes (EPF – *Ecoles polytechniques fédérales*) and a network of 7 public and one private Universities of Applied Sciences (HES – *Hautes écoles spécialisées*). To these institutions, one can add a dozen of research institutes that are affiliated neither to a cantonal university nor to the EPFs. These institutes carry out research in very specific areas, which are not addressed by the other HE&R institutions. They are jointly funded by their home canton, the Confederation and private sources.

Teaching and research are part of the general missions of all HE&R institutions. The recently created HES are no exception to this rule, although their vocational orientation, combined with their position within the HE&R system, orients them towards applied research only (Perellon 2003, LHES 2004). As a result, Switzerland also lacks the existence of research-intensive institutes like the Max Planck Institutes in Germany. Research activities are an integral part of Swiss academics’ activities, which, it is argued, helps them improve and inform their teaching.

The interrelation of teaching and research has an important consequences. It concerns the funding structure and the modalities through which it is allocated to the different types of HE&R institutions. In effect, the financial contributions of the cantons or the Confederation are allocated for the joint realisation of teaching/training and research. It is almost impossible to identify, at the institutional level, which part of the funds allocated to the HE&R institutions are used for which type of activity. Special funding for research activities *stricto sensu* does indeed exist, as further discussed below, and is provided by two main agencies, the Swiss National Science Foundation and the Innovation Technology Agency.



---

## Funding allocation and institutional budget structure

---

Swiss HE&R institutions are funded through different channels. In general, they receive their allocations directly from their respective authorities. These funds are allocated to allow the institutions to carry out their fundamental missions of teaching, research and service to society. It is very difficult, not to say impossible, to identify how the funds are used among the different tasks, although it is assumed that academic staff pursue the ideal of the unity of teaching and research. Later in this section, the modalities through which the different HE&R institutions receive their funds will be dealt with in more detail. For the moment, it suffices to say that in addition to this core funding, HE&R institutions can receive additional funds for research, either from public or private sources.

The funding allocations have moved in the direction of new public management principles by integrating notions like performance, evaluation and assessment – customer-oriented, target based) and a more precise differentiation of tasks and their costs (Benninghoff, Perellon and Leresche 2005). One has also witnessed a “professionalisation” of the techniques of accounting, through which the entire tasks are described, prescribed and accounted for through the introduction of cost accounting. By turning to cost accounting, decision-making bodies have provided themselves with a potentially powerful tool to look into the HE& R institutions’ activities, assess their cost and steer them. Cost accounting is implemented in the HES. For the moment, it is not yet widely used at cantonal universities. However, a working group under leadership of the Swiss University Conference has been working on it for quite some time and proposals have been formulated to integrate these new techniques in the future. Whether the use of cost accounting will be generalised is still an open debate.

### The cantonal universities

The budgets of cantonal universities integrate three different sources: the resources allocated by the respective university cantons, those allocated by the Confederation through the Federal Act on financial assistance to cantonal universities (LAU – *Loi sur l’aide aux universités*), and the inter-cantonal allocations. These are public funds and constitute the biggest proportion of university finances. Other sources originate from private contributions by the students, through tuition fees, although very limited.

The proportion of these three principal sources of university funding varies considerably from one institution to the other. The reasons of these differences lie not only in the size of the institutions (a large institution like Zürich would receive more funds from extra-cantonal students than a smaller one like, say, Neuchâtel) but also in terms of the wealth of the different university cantons. The Federal contributions, an instrument that dates back only to 1968, has been a mean to reduce these inequalities, although it is far from evident that it might have succeeded. The following pages discuss the three sources of funding allocation to cantonal universities and consider the most significant changes that have been experienced.

Cantonal financial allocations to university budgets have been most sensibly affected by the new public management rhetoric. It is so because cantonal university budgets are established on the basis of the cantonal university acts. And these have been, in all cantons, revised during the 1990s and have suffered from the influence of the new public management (NPM) ideologies imposed on HE&R institutions. Although differences have prevailed from case to case, the NPM influence on funding has resulted, among other things, in the university budgets being allocated on a global basis (lump sum) rather than on a tightly itemised one. In parallel, performance-oriented mechanisms have, in some cases, been introduced, notably as regards the duration of study. Performance-oriented funding remains limited in most cases and input-oriented mechanisms – the number of students, existing members of staff and existing infrastructure – are still predominant in the way cantons fund their universities. An important question remains the extent to which these changes in the funding mechanisms have been accompanied by changes in the governance of the individual institutions. During the late-1990s, the transformation of the internal governance structures of the universities was high on the agenda in Switzerland, as in most European countries. It was the period of the so called strong Rectorate, which, at the institutional level, meant a reinforcement of the decision-making prerogative of the Rector and his team (no women have yet been elected to such a prestigious position in Swiss universities), while the participatory structure inherited from the 1960s and 1980s were progressively reshuffled - rather than simply abandoned. These changes, though common throughout the system, have not led to a reduction of cross-cantonal variety. Rather, one has observed re-appropriation in each canton of the principles of institutional autonomy and of the type of relations to be maintained between the individual university and its political mentor. In some cases, internal transformations did, indeed, take place and led to substantial changes in the governance of the institution – for instance in the Swiss German universities of St-Gallen or Basel.

The funds allocated by the federal level to support the activities and missions of the cantonal universities have also witnessed a strengthening of NPM-like mechanisms. This is especially true since the revision in 1999 of the LAU, which regulates, among other elements, the amounts to be allocated by the Confederation to the universities as well as the modalities of this allocation. Like

the different cantonal acts on universities, the sums allocated through the LAU incorporate both teaching and research activities. An innovation of the revision is that since 1999, the sums are divided at a rate of 70% for teaching and 30% for research. It is important to note that this distinction does not mean that 70% of the funds allocated to the universities are targeted for teaching activities *only* and 30% for research activities *only*. Rather, the ratio serves as a means for calculating the total amounts to be allocated to each individual institution. In other words, 70% of the federal contribution for a particular university is based on indicators related to “teaching” activities – like the number of students – and 30% on indicators related to “research” activities – like the number of research projects being carried out at the particular university. In both areas, one has observed an increased of performance-oriented mechanisms, for instance by limiting the number of semesters funded by the Confederation or, in research, by taking into consideration the amounts of external funds the universities have been able to gather from other sources, notably the international funding agencies or other European projects, to determine the federal subsidy for this activity. More importantly in terms of the role to be played by the Confederation in the steering of the HE&R system is the fact that the revised LAU has introduced a new funding instrument aiming at funding priority projects that address the concerns – promoted at the highest levels of the federal administration – of cross-cantonal co-ordination and inter-institutional co-operation.

The intercantonal agreement is the third funding mechanism for the cantonal universities. It dates back to 1981 and was revised in the late 1990s. The *raison d'être* of this agreement lies in the necessity to integrate all cantons in the financing of universities. For that, each canton that does not own a university pays a given amount of money to the university cantons that accommodate one of its students. This agreement also applies to university cantons whose students attend another university. Over the years, not only the amount but also the modalities of allocations have changed. The amount has generally increased in the same direction as inflation. In 1995, a decision was made to differentiate the type of disciplines to better adjust the allocations to the actual costs. This led to a 3-tier system distinguishing between Humanities and social sciences (Group I), Natural and technical sciences (Group II) and Medical studies (Group III), which indicates that a more accurate mechanism was applied to this part of the funding allocation.

Table 2 : Funds allocated to cantonal universities through the intercantonal agreement

	Group I	Group II	Group III
1999	SFr. 9'500	SFr. 17'700	SFr 22'700
2000	SFr. 9'500	SFr 19'467	SFr 30'467
2001	SFr. 9'500	SFr 21'233	SFr 38'233
2002	SFr. 9'500	SFr 23'000	SFr 46'000
2003	SFr. 9'500	SFr 23'000	SFr 46'000

Another important element in the organisation of the funding structure and budget allocation, is the increasingly hotter debates about the introduction of higher tuition fees. Nowadays, access to university education or the EPFs is open to every holder of a Federal *maturité* degree (upper secondary). Fees are low, compared to other countries. The current structure is as follows.

Table 3 : Fees in Swiss HE (in Swiss francs)

	EPFL	ETHZ	BS	BE	FR	GE	LA	LU	NE	SG	ZH	USI
Tuition fees	592	550	700	600	500	500	500	715	500	800	640	2000
Other taxes	50	57	-	55	105	-	60	-	-	120	42	-
<b>Total semester</b>	<b>642</b>	<b>607</b>	<b>700</b>	<b>655</b>	<b>605</b>	<b>500</b>	<b>560</b>	<b>715</b>	<b>500</b>	<b>920</b>	<b>682</b>	<b>2000</b>
Added fee for foreign students	--	--	--	-----	150	-	-	-	275	150	100	2000
Total semester for foreign students	642	607	700	655	755	500	560	715	775	1070	782	4000
Year total for foreign students	1284	1214	1400	1310	1510	1000	1120	1430	1550	2140	1564	8000

Source : CRUS 2004

## The Federal institutes of technology

The two Federal institutes of technology and attached research institutes receive their funding directly through the Confederation. The funds are allocated as a lump sum for the entire EPF sector (i.e. the two EPFs and the 5 attached research institutes) and is included in the performance contract signed between the Federal council and the Council of the EPFs, as the body responsible for they co-ordination of this sector. For the period between 2004 and 2007, the contract indicated the following amounts

Table 4 : Resources of the EPF sector (x 1'000)

2004	2005	2006	2007	2004-2007
1'844	1'907	2'005	2'074	7'830
+ 4 %	+ 3.4%	+ 5.1%	+ 3.4%	Variation + 4%

Source : Conseil fédéral 2003

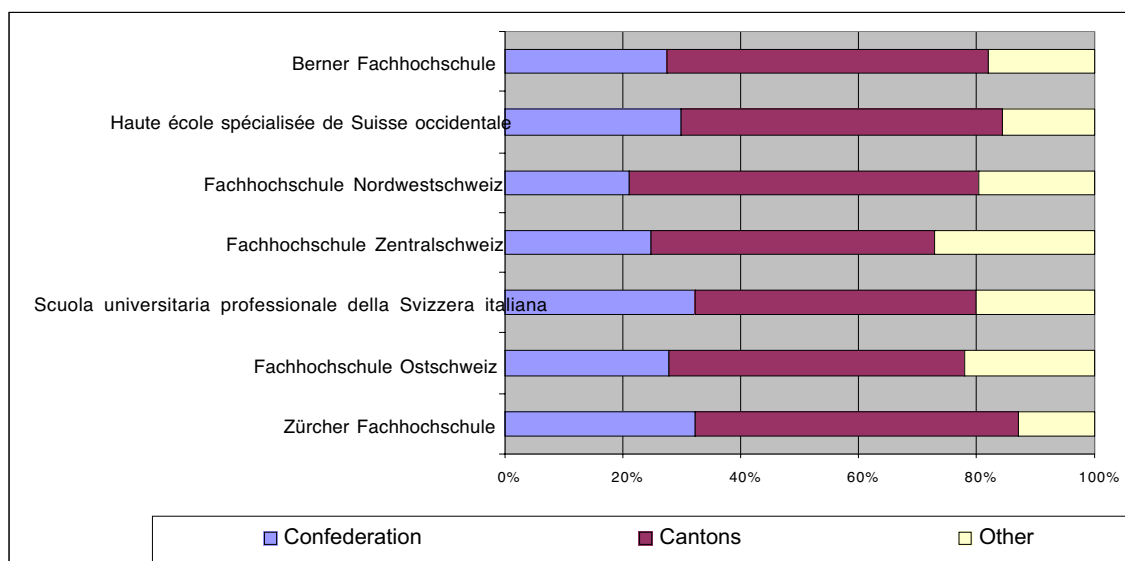
The amounts are allocated for a four-year period. However, the Federal Parliament votes annually on the yearly amounts. As a result, variations can be introduced, especially if cutbacks have to be imposed on the institutions. This situation is currently characterising the whole sector and affects, in fact, the entire HE&R system.

The modalities of funding allocation seem to correspond rather clearly to the NPM rhetoric. In effect, seven general goals are identified together with more precise objectives indicating with more precision the modalities through which the goals can be achieved. Indicators have been devised and allow to ensure that the objectives will be met and, by extension, the seven general goals.

## The Universities of applied sciences

As for the cantonal universities, the public Universities of applied sciences (HES – *Hautes écoles spécialisées*) also receive most of their funds from the Confederation and the cantons. According to the Federal Act on the Universities of Applied Sciences, 1/3 of the overall running cost of these institutions have to be covered by the Federal government, which is a matter of bitter discussions. The cantons that host a HES or that have a college that is integrated in one networked HES also allocate funds for the functioning of these institutions. Finally, an intercantonal agreement states the amounts to be allocated by each canton for each of its students. This agreement applies only to the study fields that were accredited by the Federal government or that were in the process of getting such recognition. This agreement distinguishes between five different categories of disciplines, whose cost vary from SFr. 5'000.- to SFr. 25'000 (CDIP 1998).

Table 5 : Who funds the Swiss Universities of applied sciences (2001)



Source OFS 2003b

The HES operate in three main areas: a) undergraduate teaching; b) applied research and development and service to society and c) post-graduate teaching through, mainly, continuing education. The origins of the funds for each of these three activities vary, as shown below.

Table 6 : Funding of charges of the UAS by origin and type of activity (2001 in SFr mio)

	Total		Confederation		Cantons		Others	
	Amount	%	Amount	%	Amount	%	Amount	%
Undergraduate teaching	553.1	72	177	83.06	336.6	81.01	39.3	28.33
Continuing education (post-graduate)	51.1	6.65	5.3	2.5	12.7	3.04	33.1	23.86
R&D et services	163.2	21.35	30.8	14.44	66.2	15.95	66.3	47.81
<b>Total</b>	<b>767.4</b>	<b>100</b>	<b>213.1</b>	<b>100</b>	<b>415.5</b>	<b>100</b>	<b>138.7</b>	<b>100</b>

Source : OFS 2003b, percentages are own calculations.

## Specific funding of research activities

We have noted earlier that Swiss HE&R institutions operate with the tradition of unity of teaching and research and receive their funding accordingly. In addition, they can also receive specific public or private funding exclusively for research activities, private support being very modest (Benninghoff et al. 2004; OFS 2002; Lepori 2002).

Public funding for research is allocated through several channels among which the most important are the Swiss National Science Foundation (FNRS – *Fonds national de la recherche scientifique*), the Innovation Promotion Agency (CTI – *Commission pour la technologie et l'innovation*) and the recently established Secretariat for Education and Research (SER – *Secretariat à l'éducation et la recherche*), which, as noted, brings together the former Federal Office for Education and Science (OFES – *Office fédéral de l'éducation et de la science*) and the Swiss Science Agency (GSR – *Groupement de la science et de la recherche*). The FNRS deals exclusively with fundamental research, whereas the CTI is more oriented towards the financing of practice oriented research projects, notably in the Universities of Applied Science. Until its merger with the GSR, the OFES was a key player in the formulation and implementation of HE&R policy. It allocated the funds to the national agencies responsible for subsidising research activities – like the FNRS – and directly funded the participation of Swiss universities in international programmes - the European framework programmes, the COST programme, etc – as well as the non-university research institutes. From January 1<sup>st</sup> 2005, this task now rests with the SER.

New funding mechanisms for research have been implemented in recent years aiming principally at a concentration of research capacities on a limited number of locations. Among these new mechanisms, the programme *National Centres of Competence in Research* (NCCR) is of particular importance. First launched in January 1999, it led to the creation of fourteen such Centres. A second round was launched in 2003 with a specific orientation towards social sciences and humanities, disciplines that were highly underrepresented in the first round.

The importance of this new mechanism in the funding of research has to be understood in line with the two main theoretical frames taken into consideration here. The NCCRs combine both elements of the *governance theory* and the *NPM rhetoric*. In effect, this new mechanism links together the contributions from the federal government and those from the cantons and the universities. More precisely, only those projects that have received an official support from the institution are eligible for becoming NCCRs. This forces the institution's Rectorate to make a strong commitment in favour of one particular line of research, which implies to be able to formulate a strategic goal as to which domains should become the priority of the institution and, in the longer run, form one of its core lines of research activity. The governance element is also present in the fact the lines of research

that are supported are decided by the Confederation, according to their social and political relevance. As stated by Benninghoff and Ramuz, the idea is to develop a context within which research can be *steered but not constrained* towards a particular orientation (2002: 45 – my emphasis).

The introduction of the NCCR as a new mechanism for funding research in the universities and the EPFs shows also some of the signs that can be identified as being part of the NPM rhetoric (Benninghoff and Leresche 2003). This is particularly true as regards the contractualisation of the activities and the overall management of the project. The entrepreneurial spirit is indeed entering the research arena, as indicated in the documents accompanying the projects selected in 2001: *“The NCCR allocate on average 10 percent of resources for management, knowledge and technology transfer and education/training. An NCCR is thus like a small business with management, staff, budget and rules of procedure – with corresponding autonomy and responsibility for its own research”* (FNRS 2001: 6).

The philosophy accompanying the introduction of this mechanism goes along a concentration of power in the hands of the Confederation. If this is traditional in research activities, it has been less evident as far as teaching/learning is concerned. But in both areas, one has observed over the last decade the increasing predominance of the Confederation (Perellon 2001).

As a new mechanism of research funding, the NCCRs mirror similar developments in other areas of activity. In effect, the principle of concentrating research power and competencies by developing networks of institutions carrying out research on the same topic is also seen in the new instrument for allocating part of the federal contributions to the cantonal universities (LAU 1999 § 20, 21). This funding allocation is based on the principle of increasing inter-institutional collaboration rather than competition for scarce financial – and human – resources. It implies a strict(er) redefinition of the core activities of each particular institution and forces, in some cases, the abandonment of some areas where students’ demand is insufficient. The concentration of research and teaching capacities is a hot point in current Swiss HE&R policy debates. It will grow more intense in the years ahead.

## **Discussion**

Proposals have been made in the policy paper *Hochschullandschaft 2008* (see below) to modify funding allocations to and the overall budget structure of HE&R institutions. The objective is to increase the transparency regarding the actual cost of the different study programmes in different institutions by introducing the notion of “standard cost”. The introduction of a standard cost



method would imply that common criteria be developed and used by each political level having in charge a HE&R institution when allocating funds to them.

The objective of increased transparency of budget allocation comes together with an ongoing interest in developing cost accounting. This accounting technique has been in operation in some of the Universities of applied science, notably those involved in engineering. It has been possible for them to identify precisely how much a student costs in different study programmes. As far as the universities are concerned, the situation is different and certainly more complicated. The accounting techniques are much less clear and much diversity exists from one institution to another, something that has been criticised. Discussions have taken place to assess the possible generalisation of cost accounting in all universities. Something that could make the budget structures of the cantonal universities much more transparent and would allow for comparisons and benchmarking. In fact, the generalisation of this technique would offer a clear(er) picture of the cost of HE in the country, an issue that would certainly be of interest for policy-makers. In fact, one wonders how much the possible generalisation of standard costs as the principal mean for financial allocation to all HE&R institution could be used as an instrument to foster institutional or programmatic differentiation across the entire sector. Admittedly, all commentators agree on the need to increase differentiation and promote specialisation strategies from the institutions themselves. It seems that the combination of cost accounting techniques, standard costs and new accreditation mechanisms could fit such a purpose.

The discussion of the main mechanisms of funding allocation indicate that, in general, the management of budget allocation in the Swiss HE&R system is dealt within a structure of institutional governance that emphasises both institutional autonomy and strong leadership. The idea of institutional autonomy in an NPM-framed context can be interpreted as the autonomy to decide how things should be done, rather what things can be done. Admittedly, the question of institutional autonomy is an ambiguous one. It has to be understood within the policy paradigm governing the formulation and implementation of HE policy. In the Swiss context, this paradigm is characterised by an historic State-centred approach of organisation mixing Humboldtian and Napoleonic models of university. In both cases, the role of the State is predominant, though variable. Without entering the details we can say that the State has dealt with the overall organisation and ruling of university activities. The State, in line with the continental traditions, has taken the responsibility to control the three moments of university production process: the input (through the conditions of access; the condition of staff acceptability as civil servants, etc), the throughput (the study programmes – in a loose way admittedly), and the output (the conditions of examinations for state-recognised degrees). And the funds allocated for it. Within this context, the institutional autonomy was restricted to implementing the regulations.

The changing atmosphere on the HE&R landscape experienced since the mid-, late 1990s has brought some modifications, though not as many as the rhetoric would suggest. The “state” – understood as the federal and cantonal administrations in charge of HE&R policy – has not really stepped down and the institutional autonomy has not increased that much either. Rather, what has been observed, one could argue, is the simple implementation of some NPM principles within a continental, mix of Humboldtian and Napoleonic traditions, i.e. the Swiss HE&R system with its cultural idiosyncrasies.

Resorting to contracts between public administrations and HE&R institutions, an element of the NPM panoply, implies to clearly specify the tasks to be carried out and the manners to do it. This way of proceeding is what Robert Berdahl named procedural vs. substantive forms of university autonomy (for instance, Berdahl 1999). In Switzerland, universities have not become more autonomous in defining the production process: they do not determine the access conditions of the students, or the eligibility of staff. They cannot offer their own degrees. Their study programmes need to be ratified by the cantonal ministry in charge of university matters, etc. In fact, the institutional autonomy granted to Swiss universities under an NPM context is limited to the definition of the means to be used in order to carry out a set of agreed tasks and to reach objectives attached to this.

In order to be effective, this way of doing requires a substantial shift in the governance of the institution. This is another aspect in which the NPM rhetoric has affected Swiss universities. To make a long story short, one can say that recent years have been characterised by a reinforcement of the so-called executive instances at the expenses of more deliberative ones. This has been observed both at the institution level and at the level of the system as a whole. At the institution level, we are familiar with the so-called “strong rectorate” (Perellon 1999). At the system level, it is more evident that a shift towards the strengthening of the executive and decision-making bodies has taken place with the new Swiss University Conference. The current situation in Switzerland shows that this is accompanied both by the creation of new agencies responsible for the implementation of decisions and by the restructuring of existing agencies to play that implementation role - the Rectors and Presidents’ Conference.

---

## Re-arranging multi-level governance structures

---

The governance of the Swiss HE&R system has undergone significant change over the last decade. These have accelerated in recent times, notably through an increased emphasis on reorganising the multi-level governance structures that characterise the way policies are formulated and implemented.

As a matter of fact, an intricate network of agencies, standing conferences, departments and other more or less consultative bodies constitute the different layers of the multi-level governance structure of the Swiss HE&R system. This network extends from the cantonal to the Federal level, and incorporates, at various degrees of responsibility, the most significant policy stakeholders. As from January 1<sup>st</sup> 2005, the State Secretariat for Education and Research, headed by the Secretary of State, which results from the merger of the Science Agency (GSR – *Groupement pour la science et la recherche*) and the Federal office for education and science (OFES – *Office fédéral de l'éducation et de la science*) – appears as a predominant actor, on the Federal scene. This merger confirms and reinforces trends that have taken place in recent years aiming at concentrating the federal prerogatives on HE&R in fewer agencies. To some extent, it also corresponds to a new management type of organisation in the sense that the new Secretariat will have a more professional structure and a clearer distribution of competencies among the actors involved. As such, the SER deals exclusively with academic higher education and research and falls under the responsibility of the Federal Department of Home Affairs. Vocational higher education – the HES sector – remains within the Federal Department of Economic Affairs, despite calls for a reunion in a single Federal Department of the entire HE&R domain.

In this respect, it is important to mention current debates on the revision of articles of the Federal Constitution regarding education and training. This revision has come a long way since a parliamentary initiative was launched in April 1997 asking for the elaboration of a constitutional norm that would provide for the creation of a “homogeneous Swiss education area”. After years of debates and slow progressions, a consensual project has finally been produced by the Commission on Science, Education and Culture of the Lower House of the Federal Parliament. The revised articles of Federal Constitution include a new article 63a regarding higher education exclusively, which, to a substantial extent, echoes the views and opinions expressed in the *Hochschullandschaft 2008* policy paper.

Published in November 2004, this policy paper brought forward crucial proposals for the governance of HE&R in Switzerland (GSR 2004). These proposals are part of the wider debate on the reorganisation of the Swiss HE&R system and have laid down the bases for the future Federal framework Act on higher education, which should replace the existing Federal Act on the funding of cantonal universities and co-operation in higher education (LAU) adopted in 1999. As such, they go beyond the governance of the system *stricto sensu* and address issues related to funding as noted above.

As regards the governance of the HE&R system, *Hochschullandschaft 2008* proposed a further integration of the system and its components together with the clarification of the joint contribution of the cantons and the Confederation to its steering. In this respect, it is worth mentioning that the 1999 LAU provided for the “refoundation” of the Swiss University Conference (CUS) as an agency jointly owned by the Confederation and the cantons with extended powers, notably as regards the length of study, the recognition of study programme and quality assurance and accreditation (Perellon 2001). What is important to bear in mind here, is that both the cantons and the Confederation decided to abandon some of their prerogatives in higher education policy – though limited to the cantonal universities and the Federal Institutes of Technology – in favour of the jointly owned Swiss University Conference. By so doing, the latter has come to occupy a central position in the constellation of agencies involved in HE&R policy in Switzerland. This position is likely to increase in the future, especially if we take into consideration the proposals made by *Hochschullandschaft 2008* as regards the governance of the HE&R system. Three main orientations are worth mentioning and open to debate.

The first relates to strategic decision-making and the steering of a reformed HE&R system. This task, the policy document suggested, could be left to a body to be created that would be composed of representatives of all public collectives currently responsible for an institution of higher education, indifferently of its type. This new jointly owned body would be responsible for the entire system. This is important, since it will consecrate the centralisation of policy-making decision into a single body for the first time in Switzerland. Concretely, this proposal implies to bring under a single, jointly owned agency the three sectors of higher education in Switzerland – cantonal universities, Federal institutes of technology and Universities of applied sciences. One clear advantage of such a scenario lies in the possibility to develop a more coherent strategic planning for the entire system, in terms of task-sharing between vocational-oriented and academic-oriented higher education – with the possible new training and learning avenues, this could lead to – and among the sectors – cantonal universities, Federal institutes of technology and Universities of applied sciences.

The second orientation suggested in the policy document concerned the implementation of the decisions made by the jointly owned body. This task would be left to the reshaped *Conference of Rectors and Presidents*, which would also be composed of members from the three sectors. This way of doing could substantially improve the co-ordination of strategic orientations, especially if this Conference is able to formulate a single strategy for the different components of the system.

The third orientation concerns the construction of a form a public arena for critical debate on the directions the system of HE&R should be taking in the future. This task, the policy document suggests, should be left to a *Swiss Council for Higher Education*, to be set up, whose membership would reflect the different social and political opinions present in the country. Currently, the debate function within the system remains the prerogative of the Science and Technology Council. It is not clear yet if the future arena will adopt a similar profile or, on the contrary, would act as a real advisory body on higher education.

There is little doubt that these proposed orientations crystallise a clear-cut division of tasks between agencies where emphasis is placed on the definition of the objectives and the means through which these objectives can be achieved. In this context, the much needed institutional autonomy – admittedly, a notion always subjected to change – means an increase of the procedural autonomy and a reduction of the substantive autonomy (Berdahl 1999). In Switzerland, the organisation of these forms of autonomy is left to a series of organised agencies. These take up the responsibilities delegated to them by the state and/or state bureaucracies. The definition of the strategic orientation and, to a lesser extent, of the objectives will be left to the jointly owned body. The responsibility for the aspects related to the procedures and for the overall co-ordination of the implementation of the new measures will be left to the Conference of Rectors and Presidents.

It is too early to say whether the orientations suggested in *Hochschullandschaft 2008* will be implemented in the future framework Act on higher education. What is certain, however, is that a window has opened for important changes to be introduced in the HE&R system. Changes that will promote differentiation and, hopefully, reward institutional innovations and collaborations. To that end, it seems certain that new governance structures will be required for the entire HE&R system and for its steering at the Federal level.

---

## Conclusions

---

These new governance structures have been integrated in a draft of future Federal Act on higher education. At present, only preparatory documents have been discussed within informed circles and the positions of the different stakeholders are yet to be known. Independently of the decisions that will be eventually made and integrated in a future framework Act, what is at stake is the possibility to foster co-ordination within the overall HE&R system, through the integration of the different types of HE&R institutions and their respective political authorities. Strategic decisions are to be made in Swiss HE&R, especially as regards the much needed task-sharing among types of institutions and institutions themselves.

In an interview to a national newspaper, Charles Kleiber, Secretary of State for Education and Research, took a strong position in favour of the reforms proposed in the *Hochschullandschaft 2008* policy paper, reforms that himself has been promoting since its appointment in 1997 : “(...) *we have a very good project, accepted by the cantons and the Confederation. Whatever the modalities of its implementation, the goal is to create a real national area for higher education and research, with an international dimension. We will do it. (...) Before all, we need a single authority with competencies for all types of higher education institutions, that will have to increase their collaboration while, at the same time, compete with each other for the quality of their education*” (Charles Kleiber quoted in *Le Temps* 13.12.2004).

The creation of a “Swiss university” – to make a veiled reference to an old dream of some Swiss politicians – has, thus, to be achieved by a further concentration of prerogatives within the multilevel governance structure characterising the Swiss HE&R system. The recent history of Swiss HE&R policy, briefly sketched out in the previous sections, indicates that a decisive shift has taken place since the mid-1990s from the cantons, to the Confederation, broadly speaking. A more subtle analysis would, nevertheless, show that the role of the cantons and of the Confederation in the definition and implementation of policies of HE&R has changed for both with the revision of the Federal Act on Financial assistance to universities in 1999 and related the legislative frameworks. As a result, both the cantons and the Confederation have delegated parts of their historical prerogatives to new intermediary agencies, among which the reformed Swiss University Conference is of major importance.

A characteristic of the impact of NPM-style reforms is a redefinition of the relationships between parliaments and government or, in other words, between the legislative level and the executive level. In their evaluation of the impact of NPM-oriented reforms within the Swiss administrations both at cantonal and federal level, Rieder and Lehmann (2002), following Pollitt and Bouckaert’s

model (2000), note that changes have occurred in this relationship. These changes are threefold : a) reorganisation of the parliamentary process (new committees, notably); b) new relations between parliament and government agencies and c) new relations between the parliament and the government (Rieder and Lehmann 2002: 28).

What can be observed from the point of view of the HE&R policy domain – not considered in the study by Rieder and Lehmann – is that the ongoing redefinition of competencies between the cantons and the Confederation leads to the concentration of power within executive agencies and other bodies whereas the Parliaments, both cantonal and federal have lost some – maybe significant – importance. In fact, it is possible to argue that the control over HE&R activities seems to be slipping away from the parliamentary arenas, which are increasingly dependent on the information provided to them by federal agencies.

In contrast to what was found for other NPM-reforms, there is no evidence yet that would attest that changes have taken place in the work carried out by members of the Federal parliament or in the two Education committees dealing with HE&R policy. However, what has indeed occurred is a change in the way federal agencies responsible for HE policy – and to a lesser extent research – operate. In this respect, Schenker-Wicki (2001) recalls, however, that during the debates surrounding the adoption of the 1999 LAU Act, MPs called for the development of new instruments to allow them assessing the extent to which the objectives set within the Act were met. As a result, the then Federal Office for Education and Science established its own audit instrument. More significantly, she points to the changes that NPM-style reforms have had on the organisation of work within the Federal agencies responsible for HE&R. For her, the changes in the funding allocation introduced by the revised 1999 LAU Act required a more straightforward management of the data needed to inform members of the Federal parliament on the use of the public monies. This was done by “outsourcing” part of the job previously done within the then Federal Office for Education and Science to other agencies, especially the Federal statistical office (Schenker-Wicki 2002).

There is little doubt that the reforms encapsulated in the *Hochschullandschaft 2008* policy paper will further stress the necessity for such instruments to be set up. Not only to monitor the process of change in the system and the redistribution of competencies among HE&R institutions and between the policy levels but also help legitimate the changes before parliament and society and large.

---

## Bibliography

---

Benninghoff M. and Ramuz R. (2002), "Les transformations des systèmes de recherche publique suisse et français". *Politiques et Management Public*, 20(1) : 31-47.

Benninghoff M. and Leresche J.-Ph. (2003), *La recherche : affaire d'Etat*. Lausanne : Presses polytechniques et universitaires romandes, ( coll. Le savoir suisse).

Benninghoff M., Perellon J.-F. and Leresche J.-Ph. (2005), "L'efficacité des mesures de financement dans le domaine de la formation, de la recherche et de la technologie. Perspectives européennes comparées et leçons pour la Suisse". *Les Cahiers de l'Observatoire*, 12. Ecublens, Observatoire Science, Politique et Société.

Berdahl R. (1999), "Universities and Governments in the 21<sup>st</sup> Century. The US Experience". In: D. Braun & F.-X. Merrien (Eds), *Towards a New Model of Governance for Universities. A Comparative View*. London : Jessica Kingsley, pp. 59-77.

CDIP (1998), *Accord intercantonal sur les hautes écoles spécialisées (AHES) pour les années 1999 à 2005*. Berne : Conférence suisse des directeurs cantonaux de l'instruction publique.

Conseil fédéral (2000), *Message relatif à l'encouragement de la formation, de la recherche et de la technologie pendant les années 2004–2007*. Berne : Administration fédérale.

CSST (2002), *Programme en neuf points d'encouragement de la science et de la technologie en Suisse*. Berne : Conseil suisse de la science et de la technologie.

FNRS (2001), *National Centres of Competence in Research. Profile*. Berne : Fonds national Suisse de la recherche scientifique.

GSR (2004), *Rapport sur la refondation du paysage suisse des hautes écoles*. Berne : Groupement pour la science et la recherche.

Lepori B. (2002), "Le financement public de la R&D en Suisse. 1968-1998". *Les Cahiers de l'Observatoire*, 5. Ecublens : Observatoire Science, Politique et Société.



*Le Temps* (2004), "Les universités seront incitées à attirer les étudiants en leur offrant la meilleure formation possible", 13 décembre.

Lévy, R., Gobat, P. and Roux, P. (1997), *La situation du corps intermédiaire dans les Hautes écoles suisses*. Berne: CUS, FNRS and CSS.

LHES (2004), *Loi fédérale sur les Hautes écoles spécialisées*. RS : 414.71.

OCDE (2003), *L'enseignement tertiaire en Suisse*. Paris: Author

OFS (2002), *Education et science. Indicateurs « Science et Technologie ». Indicateur financement de la R&D*. Neuchâtel : Office fédéral de la statistique.

OFS (2003b), *Financement des hautes écoles spécialisées*. Neuchâtel : Office fédéral de la statistique.

Perellon J. F. (1999), "Changing the Rules of the Game: the transformation of decision-making patterns in Swiss universities since the early 1990s". In : J. Brennan, J. Fedrowitz, M. Huber, T. Shah (Eds) *What Kind of University? International Perspectives on Knowledge, Participation and Governance*. Buckingham: The Society for Research into Higher Education & The Open University Press, pp. 144-59.

Perellon J. F. (2001), "The Governance of Higher Education in a Federal Country. The Case of Switzerland". *Tertiary Education and Management* 7: 2, 211-24.

Perellon J. F. (2003), "The Creation of a Vocational Sector in Swiss Higher Education: balancing trends of system differentiation and integration". *European Journal of Education*. 38(4): 357-370.

Pollitt C. and Bouckaert G. (2000), *Public Management Reform. A Comparative Analysis*. Oxford: Oxford University Press.

Rieder S. and Lehmann L. (2002), "Evaluation of New Public Management Reforms in Switzerland: Empirical Results and Reflections on Methodology". *International Public Management Review – Electronic journal*, 3: 2, 25-42.

Ruetschi P. (1998), "La Suisse oublie ses cerveaux exilés en Californie. Alors ils restent". *Tribune de Genève*, 7 April.

Schenker-Wicki A. (2001), "Assessing the Impact of Federal Funding to Swiss Universities: A New Performance Audit Concept". *International Public Management Review – Electronic Journal*, 2: 1, 70-87.



### **Autres publications de l'Observatoire**

#### **Collection «Les Cahiers de l'Observatoire»**

- 01/2000 **D. Braun**: Veränderung von Machtbalancen an Universtätén
- 02/2000 **J.-F. Perellon**: Differences and Similarities in Comparative Higher Education Studies
- 03/2001 **F. Crettaz von Roten, J.-P. Leresche**: Les Suisses face à la science et à la technique
- 04/2001 **J.-P. Antonietti, F. Crettaz von Roten, J.-P. Leresche**: Le public et les Hautes écoles en Suisse
- 05/2002 **B. Lepori**: Le financement public de la R&D en Suisse 1969-1998
- 06/2002 **D. Braun**: Shifts in Science & Technology Policy in Japan and Switzerland
- 07/2002 **M. Benninghoff, R. Ramuz**: Transformation de l'action de l'Etat dans le domaine de la recherche : les cas de la Suisse et de la France (1980-2000)
- 08/2003 **D. Braun**: The antinomy of funding policy
- 09/2003 **D. Urbach** : Overhead et financement de la recherche. Quelques éléments
- 10/2004 **F. Crettaz von Roten, J.-P. Leresche**: Science, technique et opinion publique en Suisse: approche comparative longitudinale et internationale
- 11/2005 **F. Crettaz von Roten, E. Alvarez** : Perception des biotechnologies en Suisse : perspectives longitudinale et de genre
- 12/2005 **M. Benninghoff, J.-F. Perellon, J.-P. Leresche**: L'efficacité des mesures de financement dans le domaine de la formation, de la recherche et de la technologie. Perspectives européennes comparées et leçons pour la Suisse
- 13/2005 **R. Felli, J.-P. Leresche, P. Gaillard**: Panorama des coopérations scientifiques franco-suissees. Enjeux, bilan et perspectives

#### **Collection «Travaux & Documents du cours postgrade»**

- 01/2002 **I. Portner** : La contribution de COST à la politique technologique suisse
- 02/2002 **F. Wyss** : La formation continue universitaire entre opportunités et difficultés. Bref état de la situation
- 03/2003 **M. Béguin-Knoepfler**: La recherche dans les Hautes écoles pédagogiques. Quelle niche dans le paysage de la recherche en éducation?

Toutes ces publications sont disponibles gratuitement sur <http://www.unil.ch/osps>