

French research reforms (II)

Less Control, More Efficiency?

According to those involved, earthquakes have been hitting French research and higher education over the last couple of years. Jeremy Garwood takes a good look at the ongoing struggle for reforms and presents his analysis in two parts. Part one explained the reason why everyone agrees that reform is needed and deals with the major points of the 2006 'Law On Research'. This second part deals with current French president Sarkozy and his 'Law on Universities'.

ANR-funded industrial co-operation

In an attempt to broaden its emphasis on finalised research projects, the French national research agency, the Agence Nationale de la Recherche (ANR), finances new collaborative industrial research initiatives through its 71 *pôles de compétitivité* (competitive clusters). Each *pôle* has its own research theme and is intended to encourage local industries and public researchers to get together and develop research projects that address pressing industrial challenges. Alas, in practice, difficulties in assessing the significance of such projects have tended to favour the research interests of large companies, despite the ANR's originally declared intention of helping smaller enterprises that lack the means to conduct their own research.

AERES: Defining excellence in finalised research

The new 'Agency for the Evaluation of Research and Higher Education' (AERES), directly answerable to the minister responsible, is now the ultimate judge of the quality of science and higher education in France, its authority exceeding that of the research institutions' own governing committees. All AERES personnel are appointed, a departure from the usual principle of elected representation (researchers elect half the members of the CNRS's governing committee, for example). AERES' task is huge: it is responsible for evaluating French public research institutions and

their individual departments, universities, *grandes écoles*, the ANR, and all other research structures (including the Pasteur Institute and the *pôles de compétitivité*). Apparently even Jean-François Dhainaut, President of AERES, isn't sure of all he has to evaluate: on the AERES website he provides two long lists of research organisations that end in question marks).

Criteria for evaluating research are decided by the AERES committees themselves but are based on *bibliométrie* (a tally of research publications and citations) and economic significance. Indeed, the law establishing AERES clearly states that when evaluating research, AERES will 'take into account results obtained' and implies that particular attention will be paid to the development of results 'by companies domiciled in the European Union and employing less than 250 staff'.

Tax breaks for industrial research

In 2000, the Lisbon strategy set a target of 3% of GDP for research and development (R&D), to be reached by 2010 (since pushed back to 2012 by the European Council, based on their mid-term review in 2005, which showed a lack of enthusiasm amongst member states). In France, R&D accounted for 2.13% of GDP in 2004, with around 1% coming from public funds, the rest from private sources. To attain 3%, the government has stated that it does not want to increase the public research budget. Rather, it expects French industry to do more private research, something it has so

far been reluctant to do. Therefore, to encourage industry, the government has fallen back on the old ruse of subsidising private research with public funds.

The most flagrant example of this is a tax credit for research, the *crédit d'impôt recherche* (CIR). The CIR has been around for years but has seen a huge rise in uptake since the proportion of tax subsidy was increased to cover 50% of expenditure and its upper limits were raised. From credits worth €500 million in 2005, the CIR rose to €1.6 billion in 2007 and is expected to continue growing, exceeding €2 billion in 2008. The key argument for justifying this largesse comes from a controversial report claiming that one euro of CIR will have a multiplier effect of 2.4 over ten years (i.e. one euro of CIR will be worth 2.4 euros to R&D), a claim vigorously disputed by *Sauvons la Recherche*. It has also been argued that most of this money simply ends up in the pockets of the largest companies and does nothing to stimulate research by smaller enterprises, or to improve the recruitment of researchers leaving the university system.

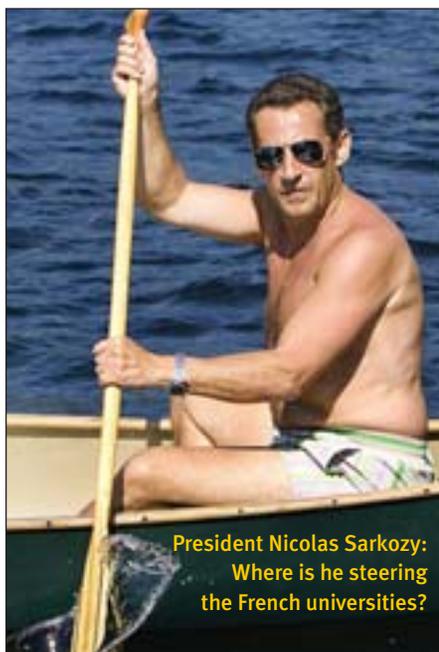
To address this last problem, a programme (*Conventions Industrielles de Formation par la Recherche*, or CIFRE) has been established to co-finance PhD projects of industrial interest. Of the 10,000 PhDs awarded each year in France, some 1,200 are now financed by CIFRE, with 70% of the €24,000 annual studentship coming from public funds.

In addition to the ANR, two other agencies were created in 2005 specifically to

fund industrial research: the 'Agency for Industrial Innovation' (AII) with a budget of €730 million in 2006 and OSEO, which will allocate €220 million euros in 2008. AII was dissolved in January 2008 and its work incorporated into the remit of OSEO Innovation, an arm of OSEO.

Scientists' hopes raised by 2007 presidential election

The stunned reaction of French researchers to the radical changes made by the 2005 research *pacte* was accompanied by their hope that political change was in the air. President Chirac and his govern-



President Nicolas Sarkozy:
Where is he steering
the French universities?

ments were increasingly unpopular and the presidential election in May 2007 was the moment for action.

Ségolène Royal, the Socialist Party candidate, adopted the recommendations from the researchers' *États généraux* as the basis for her election manifesto on research. Alas for the researchers, it was not to be. Nicolas Sarkozy, candidate for the UMP ('Union for a Popular Movement'), had spent the year before the election publicly dissociating himself from Jacques Chirac's putrid reputation (even though Sarkozy himself had been a controversial minister under Chirac, making incendiary comments that sparked nationwide rioting in 2005).

Promising extensive reforms of French society, Sarkozy won the 2007 election.

As a presidential candidate, Sarkozy showed little sympathy for research or the universities. Within days of his election, Valérie Pécresse, his Minister for Research

and Higher Education, announced a new law, the *loi Pécresse* or LRU ('University Freedoms and Responsibilities Act') introducing radical changes to the structure of the French university system. Contrary to the tight political control that the Law on Research had introduced, the key element of this law is that universities will no longer be under the direct financial and administrative control of central government.

Instead, universities will become the owners of their own buildings and equipment and are expected to manage themselves as independent entities, in the spirit of efficient commercial enterprises. The employment of teaching and research staff also becomes the responsibility of each university. Although most existing university staff are *fonctionnaires* with jobs for life, the president of a university (in the future not necessarily an academic) will now be able to appoint staff on fixed-term contracts, pay salaries outside civil service pay scales and exercise a veto rejecting appointments recommended by elected selection committees.

Financially, universities can now seek to obtain money from private sources, including tax-deductible donations from individuals and companies. Moreover, newly responsible for their own infrastructure, they will be able to rent out university buildings as a source of revenue.

Last but not least, universities are now required by law to provide students with information to help them decide in advance what subjects they could, or should, study, and the consequences that their choices may have upon their future employment prospects. University careers advisors are also required to help students find professional training positions and employers.

Mixed reactions to the LRU

Around half of France's university presidents are in favour of adopting their new powers, pointing to the opportunities that financial and administrative independence create for improving the quality of research and teaching. For example, Axel Kahn, a prominent geneticist, recently became President of Paris V University precisely because of the new opportunities that the LRU offers him.

However, some universities are better able to take advantage of the law than others. For example, the University of Strasbourg, split into three separate universities in 1970, can now reunite and form a single, large institution with 43,000 stu-

dents, a good infrastructure and an extensive research base. However, other universities, such as those in Rouen, Perpignan and Reims, have buildings that are in an appalling condition, few resources and are acutely aware of their lack of appeal to private partners.

A common criticism of the LRU has been the absence of extra jobs and funds to implement these changes. For example, where will those careers advisors come from and who will pay for them? In autumn 2007, due to a variety of grievances, student groups revolted in faculties around France, blocking 55 of them at the height of their protests. Acutely aware of his good public image, President Sarkozy instructed Valérie Pécresse, to make concessions to bring the over-publicised protests to a stop. In mid-December, she defused the student protests with promises of a gigantic injection of extra cash for universities (an extra 50%, or five billion euros a year over five years) to appoint careers advisors, introduce obligatory professional training periods, provide more lectures and lecturers, and to offer English lessons. She also told the university presidents that students' subject choices when starting university should not be used as a hidden form of entrance selection. To finance these measures without further unbalancing the budget, the government will sell 3% of its stake in EDF (the electricity provider).

Does the CNRS have a future?

The new-found autonomy of the self-governing universities, nevertheless, raises huge doubts over the future of public research institutes, particularly the CNRS. 90% of the 1,200 CNRS research units are 'mixed', incorporating university staff and CNRS personnel. In addition, their laboratories are situated on university campuses. What will happen to them when the universities acquire their independence? Will they remain CNRS units or be assimilated into the universities that host them? Who will be responsible for funding them? Will the CNRS have to pay rent to universities? Presently these 'mixed' units receive funding both from the universities and the CNRS but, in a spirit of rationalisation, it may be deemed easier to simplify their status.

SOS Research protests muted in the face of the Sarkozy media machine. Hope for the regional elections?

The research protest group, Sauvons la Recherche ('SOS Research'), formed in response to budget cuts in 2003, is still active but seems to have difficulty in rallying reform-shocked French researchers. It organised sparsely-attended protests in December 2007 and launched a petition calling for 'a different reform of public service research and higher education'. The main point of their protest is that the university system has seen its student numbers double over the last 20 years without any corresponding increase in resources, rendering it unable to deliver a satisfactory quali-



Up or down?
Where will the
reforms finally
lead to?

ty of education and research. Also the government has decided that the universities must run themselves like commercial organisations, substituting professional training for teaching and obliging them to do short-term "finalised" research rather than undertake risky, open-ended, long-term, investigative projects. The five key demands of the petition are:

- ▶ true scientific and educational autonomy not subject to direct political control;
- ▶ the strengthening of the partnership between universities and research institutions to maintain the local and national direction of mixed research units;
- ▶ the modification of the national research budget, with less money for the ANR and CIR but more for universities and research institutions;
- ▶ the *per capita* funding of university students to match that of students in preparatory classes and the *grandes écoles*;
- ▶ a co-ordinated recruitment plan to employ enough researchers, teacher-re-

searchers and engineers to allow universities to fulfil their teaching obligations, whilst giving teacher-researchers enough time for meaningful research.

The petition was launched at the beginning of December 2007. Since then, the 50% augmentation of the university budget announced in mid-December, which appears to go a long way towards fulfilling point 4, seems to have cut the campaign's momentum. Whilst so far over 20,000 signatures have been gathered, this is somewhat less than the 200,000 obtained in 2004. In addition to which, Sauvons la Recherche is now finding it increasingly difficult to get its message across.

For a start, President Sarkozy is a one-man media machine, monopolising television news. Whether shoe-horning himself into the domestic news agenda, explaining his determination to reform anything that moves, commenting on foreign affairs, or simply hogging the front page of *Paris Match* he is difficult to upstage.

With Sarkozy in the limelight, airtime for the analysis of serious debate is limited. Consider the French lawyers and magistrates, who have been protesting for months about legal reforms: they had to resort to violence to get decent TV coverage (images of riot police baton-charging well-groomed lawyers in black legal gowns made for great news). What can scientists do to top that?

Furthermore, the French public is increasingly worried about the economy and the effects of Sarkozy's other reforms upon their daily lives. Concerns include pension reform (meaning longer working lives), health service reform (more expensive healthcare) and changes to employment legislation (reduced job security and a longer working week). In this uncertain climate, it is harder to get people to listen to the woes of a minority group like scientists. The last glimmer of hope for an opportunity to reform the reforms is provided by signs of growing dissatisfaction that Sarkozy's law-making frenzy (which has been setting new records in the kinetics of legislative activity) may have gone too far too fast. In addition, many are feeling mounting irritation at what they view as Sarkozy's relentless self-aggrandisement. If the UMP experiences setbacks in March 2008's regional and municipal polls, the president and his government might be forced to take a second look at some of their more controversial laws. If not, in the view of your correspondent, the short-term future of France's traditional scientific research base seems decidedly finalised.