

# Towards Establishing a Research Institute for Asian Integration: Introducing European Experiences 〈The case of the European University Institute〉

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## **Summary**

This case study starts with the history of the origin, conception and negotiation of the EUI. Furthermore it deals with some of the important issues which had to be addressed in the recent years, resulting from the meta forces such as growth in the education sector and developments in the labour market. The demands generated by the enlargement of the European Union were solved partly by the increased efficiency of the doctoral programme and the creation of a large scale postdoctoral initiative.

## **1. Introduction**

The European University Institute was created 30 years ago as an institution exclusively dedicated to doctoral education. It provides doctoral training in the social sciences, such as economics, history, law and social and political science. It is located in Florence, it has the legal structure of an inter-governmental organization funded by the European Union member states, currently 20. Extension with the remaining 5 new EU member states is being negotiated so that there should soon be 25 Contracting States at the EUI.

The Institute's objective for 2006 is 600 doctoral research students, 100 postdocs and over 50 full-time professors supported by 150 administrative and technical staff, all working in various historical buildings on the hills of Fiesole just north of Florence, Italy.

## **2. Genesis and creation of the EUI of Florence**

(based on an extract from Jean-Marie PALAYRET, "A great school in the Service of a great Idea". The Creation and development of the European university Institute in Florence, in EUI Review, Summer 1997 pp.1-3 and "Prehistory of the European Institute in Florence (1948-1976)")

The idea of a European Institution, complementing the construction of Europe in the field of higher education, appeared early on in the philosophies of the "founding fathers". It was already put forward in the programmes of the pro-European movements Congress of the Hague (May 1948) and during the European Cultural Conference (December 1949). The project however only took shape at governmental level on the occasion of the "relaunch" of Europe initiated by the Messina Conference (1955). Walter Hallstein, German Secretary of State for External Affairs, was then the promoter of a full-scale European University, to be inserted in the future Euratom treaty. In his initial conception, the University was to offer a training centre for nuclear sciences and was to be a direct emanation of the Community. Conceived as a fundamental instrument of integration, it would educate the elite of the up and coming generations in a spirit remote from nationalist views.

However, in spite of determined action on the part of the Italian government (G. Martino, A. Fanfani) and by the interim committee set up by the European Commission (chaired by Etienne Hirsch) as well as the support given by the European Parliament, all attempts to realise the European university failed, due mainly to its rejection by General de Gaulle and to the drastic opposition of national academic circles.

Stubborn defender of the idea of "Europe des Patries", the French government wished to avoid a university institution under Community law and was anxious to preserve State prerogatives in the sphere of awarding degrees. Along the lines of the project drawn up by Gaston Berger (Director General for Higher Education), Paris preferred to concentrate on co-operation among existing Member states national universities and on special recognition for their "European vocation". In particular, Charles de Gaulle launched the Fouchet Plan, which had an important cultural facet. It was the occasion for the French Head of State to re-examine the question (Pescatore

Commission) outside the framework of Euratom and in connection with cultural co-operation among the Six. The reluctance of academics was the second obstacle to the European university project. The fear of German, Italian and Belgian universities was that the European University would lack adequate cultural roots to grow, attract the best students and drain public funds.

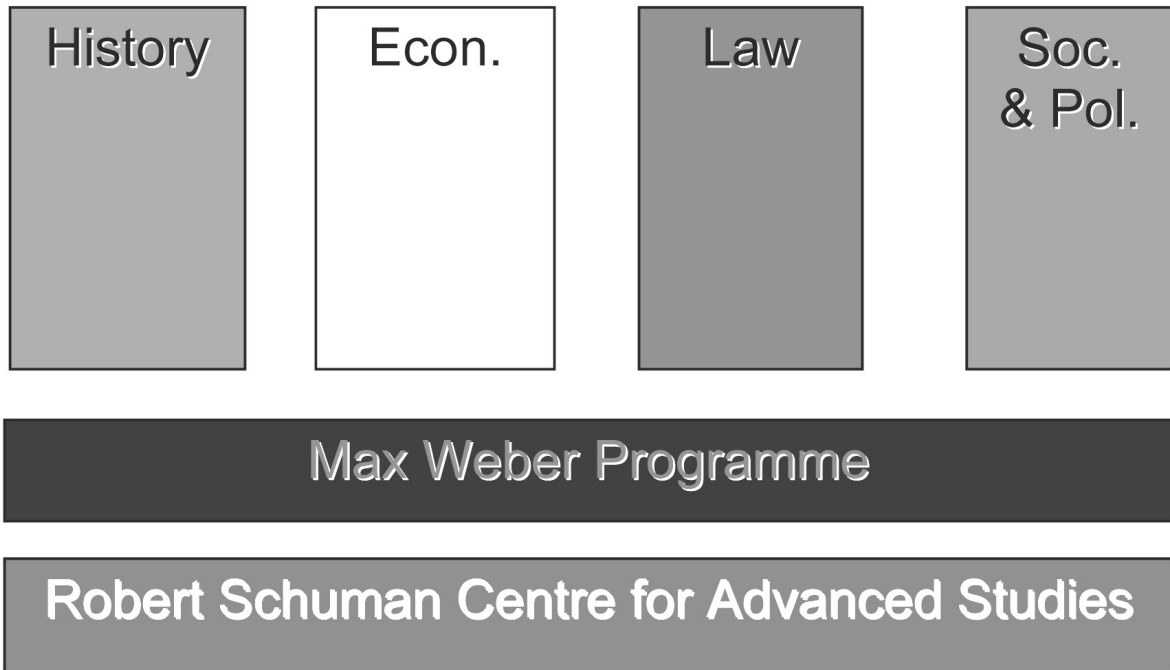
It was therefore in an inter-governmental framework that the Heads of State and of government met in Bonn on 18 July 1961, then -after an interruption due to the "empty chair crisis" and a second relaunch, motivated by the university crisis in 1968 at the Hague on the 1st and 2nd December 1969, brought the project under study again, recording their resolve to consecrate through a solemn commitment their participation in funding a "European University Institute in Florence". The two conferences which followed in 1970-71 in Florence and Rome, on the initiative of the Italian government, led to a project that both in size and content was more modest than the initial ambitions, as it would no longer have an institutional place within the Communities and the Institute to be created would only be reserved for post-graduate studies. The first attempts to tackle the education issue inside the European Commission oriented the difficult negotiations that followed and led to the signing by the Six in 1972 of a Convention creating a "European University Institute" on which the Ministers for Education had marked their agreement in principle during their first meeting within the Council of the Communities in November 1971. The three New Member States (United Kingdom, Ireland and Denmark) had in the meantime applied to join the Institute and participated in the work of the preparatory Committee set up to put in place the administration, the staff and a profile definition to be conferred on the Institute. The Institute eventually opened its doors in November 1976 to its first 70 research students.

### 3. The model

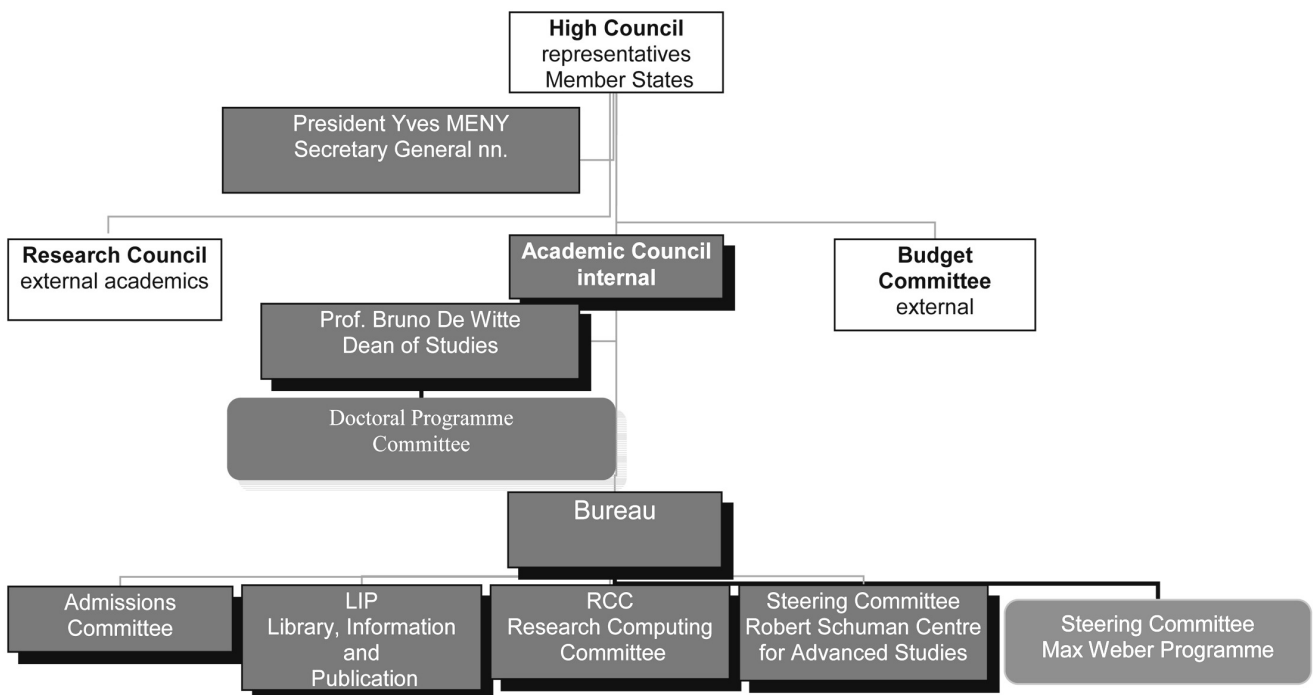
As a result the European University would not be a full fledged university, so what was the inspiration and what example to follow. During the early phase and due to the links to Euratom the hard sciences remained on the agenda for a long time. The training of nuclear experts was high on the agenda of the French authorities. Due to the substantive investment needed, a cyclotron was mentioned as a minimum requirement, the disciplines were reduced to theoretical physics and mathematics and the disciplines to study the construction/integration of Europe: law, economics, social and political sciences, history and civilization. Indeed during the visit of the presidents of the three communities in June 1959, Etienne Hirsch among them, a discussion took place at the Institute for Advanced Studies in Princeton. The Europeans were both surprised but also assured that Oppenheimer and Lilienthal stressed the importance to look beyond the traditional scope of the university. The object of the university ought to be discovery and education. Also limiting the number of students, it is striking if one compares student numbers between the US the EU: also today, top universities are rather small by comparison, but then almost by definition a real elite institution should be small. Furthermore the Americans convinced the three presidents of the primordial importance of the human sciences to European integration. The European university became a European University Institute of a postgraduate nature dedicated in the disciplines of major importance in the European construction: law, economics, and the social and political sciences and history and civilization. These disciplines would be hosted by four departments and not four faculties. This to enhance the importance of interdisciplinary contacts but also as result of the wave of new ideas emanating from 68.

Another important issue was the truly European and International character of the Institute. As Etienne Hirsch observed in his speech on April 4<sup>th</sup> 1960, "there would be neither hosts nor guests, with every one on equal footing, learning from each other what could be garnered from sharing of cultures, traditions and differing, perhaps complementary, mentalities." Also today this aspect is one of the truly unique characteristics of the EUI. With the increasing student mobility, due to programmes like Erasmus but also as long standing traditions many major universities have an ever increasing number of international students but there is always a host which is responsible for the "toile de fond" against which the activities develop. The Sorbonne is above all a French institution, the London School of Economics (and Politics) and Oxbridge are English and Harvard, Stanford and Princeton are American. The EUI has no dominating nationality in its teaching staff or in its doctoral or postdoc population. The groups reflect in size about the same proportion as their national population inside the European Union.

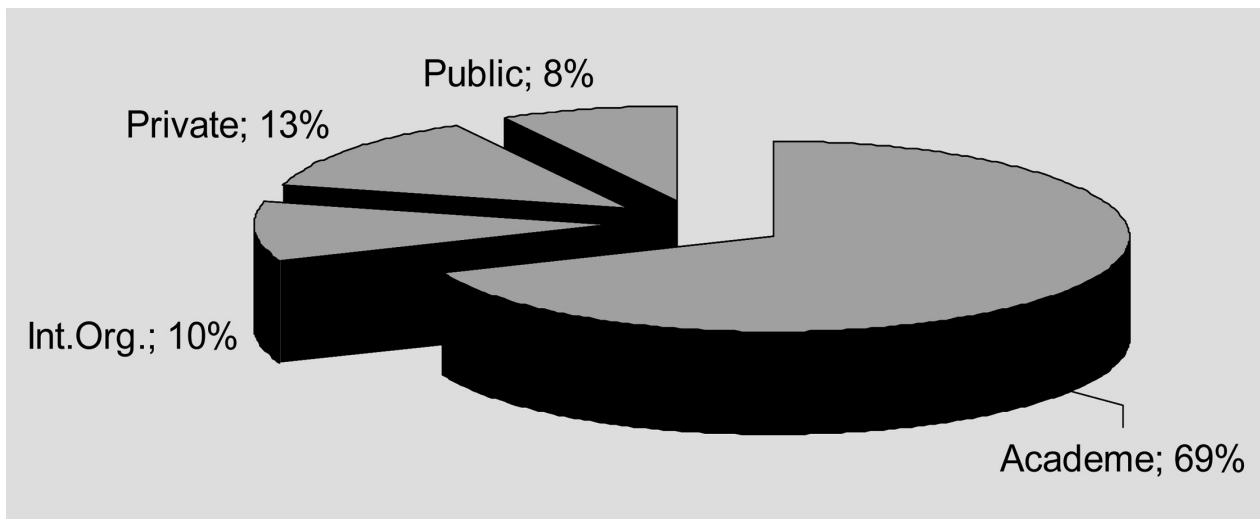
4. The European University Institute's main activities



5. Governance



What do our PhDs do ?



### 6. The changing doctoral landscape

During the nineties changes took place at an increasing speed that can be characterized by five distinctive aspects:

1. Growth
2. Diversification
3. Substitution
4. Professionalization
5. Competition

#### 6.1. Growth

Although in the seventies the literature in the United States predicted a decline in postgraduate education - also in Europe based on demographic assumptions - a considerable growth took place in both the United States and in Europe. In the U.S. the number of doctorates went from 33000 per year to over 45000. In Europe some countries had a more than tenfold development in the wider postgraduate educational sector now producing 70.000 PhDs per year.

#### 6.2. Diversification

In reality the postgraduate education sector grew much more if one looks beyond the doctoral education sector. Where doctoral education was the core activity in the postgraduate education market 25 years ago, today it only represents 10% of the market. So if one extrapolates the real growth in doctoral education representing only 10% of the market one can get an idea of the explosion of postgraduate activities in the U.S. and in Europe. This development is mainly caused by the exponential creation of new degrees for a non-academic market.

#### 6.3. Substitution effect

By introducing the Bologna model governments have tried to limit the time spent on the first degree, but obviously this will result in a large spill-over in a newly created postgraduate education sector which was formerly covered by traditional longer first degree education. This substitution effect will lead to an increased demand for mid-level postgraduate education training of a professional or academic character.

#### 6.4. Professionalization

Doctoral education in the past was very much a type of "in-house, master-disciple" training and a start in a career for a professorial job, particularly in the social sciences and humanities. Most of those who started an academic career 25 years ago were appointed in assistant, or assistant professor jobs that made them a

university employee. On average in the first 6-10 years one dedicated part of one's time working under the wings of a supervisor but at the same time started to teach, to organize practica and to carry out some research alongside the normal doctoral work. There were no or very few structured courses or structured training programmes. After the first ten years generally a doctorate was delivered that provided the requisites for the first appointment as assistant/associate professor.

In the mid-eighties this tradition was abolished in a number of European countries and a number of appropriate structures for doctoral education, following the American model of the graduate schools in various formats (Ecole Doctorale, Graduate School, Graduiertenkolleg, Onderzoekscholen) were created. In some countries the legal position of the doctorandus changed fundamentally: from a normal university employee position one became a grant holder.

### **6.5. Competition**

Dramatic changes in the labour market in the late nineties resulted in a decreasing interest for doctoral training positions, especially in areas such as economics. Universities are in competition with each other for the best graduate students, resulting in concrete measures taken by the LSE, with its policy to stimulate the undergraduates to continue at the LSE, "Warwick offers cash bonus to keep graduates at the University" headline in the THES and the Max Planck Society offers special grants to attract foreign students to come to Germany, etc. The US still attracts several thousand doctoral students per year. Other countries such as the Netherlands provide additional funds related to PhD numbers and also provide attractive 4-year grants.

## **7. The European University Institute 1990-2005**

After 15 years of existence the EUI had reached the following situation as summarised by the first strategic report: 40 full-time professors, 300 doctoral/research students and 40 postdoc fellows. The committee set up by the High Council (Board of Governors) stated that: ..... the changes in the Institute's environment in terms of higher education systems of member States and the upheavals in Eastern Europe offer an occasion to ask what the Institute's future should look like over the coming decades. Highlighting the major issues from the above mentioned report will provide insight in this changing European landscape. It must be added that a pilot role was also being played by the ESRC in the UK which was obliged, under pressure of the government, to review their postgraduate training practices.

### **7.1. The first strategic review 1992: Beyond Maintenance**

The major problems which were observed by the early 1990s review group can be summarized as follows. Completion rates were too low, time-to-degree was too long, there was an insufficiently clear profile/character of the European University Institute, and the governance structure of the Institute was no longer suitable since its establishment in 1976.

#### **7.1.1. The profile: supervision fit and competitive recruitment**

This issue might be more relevant to the EUI than to other graduate schools, but nevertheless in this case it had to do with the typically European debate about subsidiarity: a European initiative should not double what is already ongoing in the various national universities. A distinct profile of the Institute, which for many meant a kind of European-ness, then became rather difficult to define. There was also a debate about whether there should be a policy component, dealing with issues related to the European agenda. A lot of resistance existed at that particular time within the Institute itself as regards policy research, but this was a more generic and widespread issue in academia at the end of the eighties in Europe. Policy research had a kind of negative stigma, it was considered to be linked too much to contract research money, also referred to as 'soft money', and Europe was not yet considered to be an academic topic of interest - for many wrong reasons, of course.

Rather than put emphasis on this debate, the Institute in an additional effort decided to create a special Centre, called the Robert Schuman Centre for Advanced Studies, which would get its own professors and attract people who would work in the various disciplines at the Institute but would be more interested in policy issues. The development of the Centre became an immense success and with this the EUI built up its

reputation as being active in the foremost areas of discussion on the European agenda. At the same time, the quality of the research carried out in the Robert Schuman Centre also made the whole issue whether it would be second rate disappear. Simultaneously there was a strong development of the profile of research carried out within the departments, which was of direct relevance to the European agenda. A lot of comparative work was done both in the political and social science department and in the Law department, which actually developed over the years as the cradle of European law.

The relevance of a clear profile was immediately reflected in a redistribution of the applications to the different departments, those with a clear profile saw their share increasing significantly.

### **7.1.2. Time-to-degree and completion rates**

The completion rates in the early nineties were only around 40% (up from 25% in the mid-eighties), but still considered too low by the review group. Also time-to-degree was too long. The review group therefore wanted to set the objective for the end of the decade at 75%, with a medium time-to-degree of 5 years. In order to achieve this, the structured first year was introduced, very much modelled on the first year in an American graduate school: a curriculum was developed with the necessary research skills and advanced training in the field, so that the young researcher acquired the proper tools for the future. Supervision was also considered a major issue and the spirit of the moment is best illustrated by the following phrase from the report, '... the teaching should not only be done by excellent professors, but it should also be excellent'.

As a result the EUI introduced a two-fold system of seminars/teaching and supervision assessment. Since its introduction this was a permanent topic of fierce debate. The main questions became the anonymity of the assessor and the low response rate and validation of the result. This debate continues and needs further reflection.

## **8. The second strategic review 2000: Enhancing and Enlarging - The Future EUI**

Earlier than foreseen the Institute reached the main objective of the Beyond Maintenance report. The Robert Schuman Centre for Advanced Studies (RSCAS) developed to a very successful research centre of advanced studies, with a large postdoctoral component, and the TTD was reduced to 4.1 year with a completion rate of 76%. Due to a number of significant changes in the PGE landscape as mentioned above (see section 3.) the need was felt by the High Council for a new strategic plan and which served a major objective.

The major objective (the first of the recommendations) was ... to further develop its mission to be a top ranking doctoral programme and centre of excellence for European research. Issues addressed in this review were caused by new developments such as the generalised introduction of doctoral schools, the Bologna declarations and the approaching accession of 10 new members to the European Union.

### **8.1. Time-to-degree**

Although the objective of the Beyond Maintenance report had been reached (75% completion rate in 5 years) the report found that - the medium time to degree not being an average - it allowed people to exceed far beyond four years. Also, some people were leaving in the last year of study due to a lack of funding and therefore a solution had to be found to further increase the efficiency of the doctoral programme. The solution was fourth-year funding which should significantly speed up the completion of the thesis. Indeed, while the funding stopped after 3 years and only occasional 3-6 months grants were available for a limited number of people for writing up the thesis, a significant number of researchers were obliged to take up all kinds of small jobs of limited employment which in this crucial phase of writing the thesis is not an optimal solution. This was also recognized in England where the research councils fund a 1 + 3 scheme.

This proposal encountered very stiff opposition from some of the member states but was finally introduced in the academic year 2004-5.

### **8.2. Conditional funding of the 4<sup>th</sup> year and the introduction of a time limit**

A further step was taken by introducing a maximum time to be spent on the PhD. After closely analyzing all data of completion at the EUI (we have a complete data set on all our research students from day-one) we realized that the attrition rate after 5 years increases dramatically. Therefore a maximum time for defending the thesis of 5 years was introduced which is now operational at the EUI.



Not only employment reasons influence attrition, but also a declining interest in the subject, a decision to switch interest/supervisor contributes to significant unpredictable outcome.

Deadlines are crucial ingredients in getting jobs done. In doctoral research a 4-5 year time horizon is fatal for most young researchers. Breaking down the whole process into a realistic set of short-term objectives contributes to increased completion. As a result, the structure of the four years was further fine-tuned in the sense that after each year, a clear objective in writing and in research was defined and only when those conditions were fulfilled, passage to the next year would follow.

For example, at the end of the first year a number of papers, written exams and a final "June-paper" allow an exam committee to decide on passage to second year. At the end of the 2nd year, one quarter of the thesis in research and writing needs to be accomplished. Finally, the funding of the fourth year is conditional on the progress at the end of the third year: 2/3rds of the thesis work, in writing (condition 1) plus the supervisor's statement that there is sufficient evidence that the thesis will be finished (in first draft) in a further 6 months. If, after 3 years + 6 months a first draft of the thesis is submitted, then the remaining 6 months are paid.

Furthermore, if the 36 months deadline for delivering 2/3rds is not met by the end of the 3rd year, no first instalment is paid at the start of the fourth year. So if someone finishes in 37 months, s/he loses the entire chance of receiving the first instalment of the fourth-year payment. On the other hand, if the person reaches the 36 month objective, which we consider a very important criterion and is paid the first instalment, but if the first draft is delayed up to the 42nd, 43rd or 44th month s/he might still get funding but it will be reduced by 1 month at the time in accordance with exceeding the time limit.

### 8.3. Enlargement

One of the major challenges the Institute was confronted with is the issue of enlargement. In May 2004 the EU was enlarged with 10 additional member states which meant that the Union's population increased by 350 to 475 million inhabitants. Estimates made by the Institute showed that this would lead to an increase of about 40% in students in the years to come. This immediately revealed a number of financial problems. Firstly, because the GDPs in the new member states are significantly lower than the current member states, in the range from 1:10 to 1:4. From the general negotiations with the member states it resulted that the maximum increase of contribution that the Institute would receive from these member states was at that time only 4.6% while it should result in a 40% increase in the number of students - clearly a huge discrepancy would result.

The issue of the size and growth of the Institute came on the agenda. I will dedicate a separate section to this later on.

### 8.4. Size matters

Confronted with the issue of how many researchers from the new member states the EUI should host the issue of growth/size came on the agenda. The various components of the Institute were consulted and there was a clear reaction from the researcher body at the Institute who stated: don't grow too big because we are afraid of losing the special atmosphere that exists in the various departments. In order to analyze what would be a possible optimal size in a department and in graduate schools we analyzed the available statistics, discovering an interesting phenomenon in the NSF data published 1996. According to these data there is an optimal size for a graduate school. In other words, there is a convergence about the number of people in graduate schools, as the table below shows.

Observing the size of top graduate schools in the U.S., it became clear that they converged to 150. Based on this evidence, the EUI then decided that its total size should be limited to 600, with about 150 students in each of the departments.

Concentrating the minds: Quality (ranking) and Size(number of students)									
Quarter	Econ	Soc	Pol	Hist	Biochem	Phys	Math	Chem	
1	112	80	112	151	84	150	93	180	
2	68	65	68	67	45	74	51	88	
3	48	43	47	56	28	51	37	53	
4	48	31	47	30	18	27	22	31	
mean	70	55	69	76	44	75	50	88	
corr.	-0,91	-0,99	-0,91	-0,92	-0,96	-0,95	-0,96	-0,95	

Political Science		Sociology		History	
	students		students		students
Harvard	172	Chicago	155	Yale	188
UCLA	143	Madison-Wisconsin	221	UCLA	206
Yale	69	Berkeley	109	Princeton	68
Michigan	173	Michigan	163	Harvard	146
Stanford	89	UCLA	139	Columbia	334

source: "Research Doctorate Programs in the United States, Continuity and Change",  
NRC, Washington D.C. 1995.

### 8.5. Programme efficiency

How was the Institute going to deal with this increase, if there were already over 500 students at that time, taking into account all the years of study? As mentioned earlier, there were two ways for approaching the problem. First of all, the introduction of the fourth-year grant and conditional funding should significantly increase the programme's efficiency. Indeed following the reasoning of Bowen and Rudenstine<sup>1</sup> as to student year cost,

$$SYC = \frac{\sum \text{Student Years Invested}}{\text{Number of PhDs Earned}}$$

we wished to reduce the number of years invested in each doctorate, which is even used in the allocations of funding to the various departments. As a result two years ago, a component of output funding was introduced in order to stimulate the departments to further promote their students finishing within the foreseen limit of 4 years. At that particular moment there was a large number of 6th, 7th and sometimes even 8th-year students who were still using the infrastructure up to their defence date. Using the carrot of the 4th-year grant to stimulate the fast completion within 4 years, and secondly as a stick the 5-year limit was introduced. These two elements are expected to sufficiently reduce the number of students participating in the programme to free up positions for additional students from the new member states.

### 9. Postdoctoral Training

As observed in 6, the university landscape has undergone profound changes in Europe. To respond to these changes the EUI created a completely new postdoctoral programme. The programme, imbedded in an attractive research environment, offers training modules developing the additional necessary skills for a highly qualified young scientist with possibilities to compete on the highest level for academic and professional jobs.

<sup>1</sup> "In pursuit of the PhD", Bowen and Rudenstine, Princeton University Press, 1992. p.163



The comparison with the United States is both edifying (for the abyss that separates practice on either side of the Atlantic) and stimulating (we have to tackle the challenge of Europeanization). Whereas in the United States the education "market" is a well-rooted reality, it is still in its infancy in Europe. Additionally, the United States, thanks to their post-doctoral programmes, have again pushed back the frontiers by making their market into a world-wide one, to which potential candidates for teaching posts flock.

Europe still has a long way to go, and the natural obstacles resulting from the fragmentation and compartmentalization of this market are further complicated by cultural and linguistic diversities.

Due to the demographic structure of the current professorial staff, major replacements are to be foreseen in the next decade. Indeed due to the baby-boom generation and the parallel growth of the university population in the early seventies, most countries are confronted with an ageing professorial staff. In the next 6-8 years two-thirds of the full professors will need to be replaced, for a middle-sized country like the Netherlands this is the equivalent of 1600 full professors, on a total of 2500.

Considering the rapidly increasing annual output of doctorates in Europe (from 45.000 in 1996 to 75.000 in 2003), we are on the right track for reaching the Lisbon objectives. Unfortunately, "Europe is losing its science stars" and in a recent article, the American weekly *TIME* estimates that 400.000 researchers from European origin now work and live in the US, due to better conditions. Indeed the number of postdoc positions are about 60.000 compared with an annual doctoral US output of 45.000. Although no comprehensive statistical survey of postdoc positions has been made for Europe yet, a first rough approach does not indicate that we come anywhere near the number of positions in the States. Furthermore, only 13% of these scientists intend to return to Europe. It is clear that a special effort needs to be made to "plug" the brain-drain.

The New Member States are even more vulnerable. Since academic salaries are in no way competitive with what is offered in the US or Western Europe it is important that special provisions need to be taken to create conditions that will keep young doctors from these countries in Europe and provide return grants.

The post-doctoral programme would be a natural extension of the already existing and successful Jean Monnet Fellowship programme at the EUI. The Robert Schuman Centre for Advanced Studies and the four departments are ideal hosts for this initiative as centres of excellence with the necessary critical mass in the field of social sciences with its unique European characteristics. The experience accumulated over the last decades will be a sound basis to offer a further elaborated programme aimed at creating highly qualified future academics and professionals for a European Research Area, both for academia and the business/public sector.

There are two main reasons why a post-doctoral programme in the Social Sciences needs increased support. Firstly, it deals with disciplines that are dealing directly with issues related to the EU agenda. Furthermore there will be a significant demand of experts in these fields from the New Member States. Traditionally these disciplines suffered a lack of development during the last decades. Secondly, in our objective to compete with the world economy and mainly the US, Europe is significantly lagging behind in the formation of researchers in the social sciences. Social Sciences represent 18% in the US but only 8% in Europe.

Compared with the current Marie Curie Fellowship Host driven action this programme differs in the sense that is addressed to researchers having defended their PhD, whereas the above-mentioned programme supports researchers in the early stage of their doctoral research. In this context it should be mentioned that EUI researchers are not eligible for this programme, as the objective is to offer these postdoc opportunities at the European University to a wider public.

### 9.1. Objectives

The broadest objective is defined by the Lisbon agenda: to become the world's most competitive and most dynamic economy. This "knowledge-driven economy" can be reached only through mobilization along all fronts, particularly in this field of education. In our effort to compete with the US we should be aware that

the post-docs "efforts account for a great deal on the extraordinary productivity of the United States' academic and engineering enterprise ... are critical to the health and productivity of future and current research", according to the American National Academy of Science.

The programme adopted by the European Council of Ministers in 2002 mentions five chief targets, four of them fully within the EUI's specific objectives:

1. the highest quality will be achieved in education and training and Europe will be recognized as a world-wide reference for the quality and relevance of its education and training systems and institutions;
2. education and training systems in Europe will be compatible enough to allow citizens to move between them and take advantage of their diversity;
3. holders of qualifications, knowledge and skills acquired anywhere in the EU will be able to get them effectively validated throughout the Union for the purpose of career and further learning;
4. Europe will be open to cooperation for mutual benefits with all other regions and should be the most-favoured destination of students, scholars and researchers from other world regions.

In the US, the postdoctoral experience is considered to have become virtually mandatory for obtaining a regular position in academia or the research sector. Also in Europe, due to the introduction of the Bologna process, new developments in the university world are stimulating profound changes in the formation of future university professors. In the past, post-graduate work was often done under an employment status/contract (assistant) where the supervisee was in a one-to-one relation with his supervisor and very often lasted up to 10 years (Belgium, Netherlands and Nordic countries). This period often included the first contacts with students during the organisation of practica, seminars and other teaching activities.

Nowadays with the development of the Graduate Schools, Ecoles doctorales, Graduierten Colleges etc., the doctorate is undertaken by a student, not as an employee, but with a grant, following a structured programme with coursework, exams, seminars and training in research and methodology with the objective is to reduce the Time-To-Degree (TTD) to under 4 years. So far these results were only obtained in the UK which introduced drastic funding sanctions in the eighties. Statistical evidence to prove that similar results exist across European are lacking. Recent reports for other countries showed that in reality the TDD was significantly above the 4 year objective and the attrition rate high or not known. A new situation is created by the generalised introduction of the Bologna objectives. For the comparable doctoral diploma this will translate in a 1 + 3 model, the first year from the (scientific masters degree).

It is obvious that these two, significantly diverse tracks for obtaining a doctorate have different outcomes. The new process produces younger doctors, more broadly trained, but less prepared for their future job.

This proposal will create the necessary complement in the form of a large-scale programme in the social sciences capable of competing on an international level. Indeed the provision of a wide range of additional training modules will be unique in its genre, offering opportunities to secure a balanced career development for young academics. Initiatives of this kind can efficiently counter the current brain-drain of young European scientists to the US.

The creation of an additional programme with postdoc positions embedded in the existing structure of the EUI has the additional benefit to rely on a successful programme. Indeed experience has shown that the existing Jean Monnet Fellowship programme attracts large numbers of applicants both from Europe and the US (American post-docs and many Europeans who obtained their PhD in the US). The 40 positions are a first adequate step up to a competitive number that can set a trend to convince other grant-awarding authorities to offer similar opportunities, and hence create a competitive research environment in Europe to stop the brain-drain caused by young doctors leaving for the US.

### **9.2. Content of the Post-doc Programme**

As mentioned above, the post-doctoral programme, as it currently exists in an embryonic phase in Europe, is highly biased towards the further development of the research skills and research activities of the young

academic. Of course, these elements are crucial for any academic career in this phase of its development, but we wish to ensure thorough preparation for an Academic "metier" by putting the emphasis on pedagogical, teaching and transferable skills. A third component is constituted by the need to prepare young academics for a pan-European Education Space. Developing major co-operation between academic institutions inside and outside Europe is an important feature, both for teaching and research.

### *a) The scientific component*

The post-doc period is considered to be one of the most productive phases for a scientist. The post-thesis period allows for the preparation of major scientific journal contributions distilled from earlier work and reshaping the PhD into a publishable opus. The methodology and the techniques invented can be further developed to deal with a number of similar cases with other colleagues. This often leads to interesting cross-fertilization and scientific work which might reach out into other disciplines. The networks which have been developed by the scientist in this early phase of his career can be instrumental for this cross-fertilization.

Although different models for postdoctoral training exist, this project will recruit according to a specific theme, to be decided annually. This approach offers an interesting way of clustering a number of post-docs, reaching sufficient a critical mass of scientists from various national backgrounds trained in different traditions and working together on the same subject. This is particularly relevant in fields in the social sciences, where national differences are still strong, contrary to some of the hard sciences and bio sciences.

The approach would be to recruit scientists around specific themes, organising conferences and workshops with invited speakers, which would create a community of young scientists, developing new techniques and approaches and allowing potential breakthroughs in the field.

The faculty of the European University Institute will play a major role in mentoring groups organised around topics of European relevance and linked through the agenda of European integration.

### *b) Future Scientist: Academic or Professional*

The second component that we feel is lacking in the few post-doctoral programmes and initiatives that exist in Europe is the preparation for the future tasks of young academics, i.e. teaching, or other specific skills, related to this career.

The European University Institute hopes to contribute to building the European University Area by training future educators for European universities to the highest possible level of excellence in the Social Sciences, in the four disciplines it currently covers: Law, Political Sciences, Economics and History.

Specifically, it proposes to set up an ambitious professional and post-doctoral training programme aimed at future European teachers. The goal will be threefold:

- To create a common training platform for future teachers scientifically prepared to teach anywhere in Europe, not just their country of origin;
- To merge in a common crucible the university training of post-docs from all of the European countries;
- To help with repatriating European students who have taken their Ph.D.s in the US and need somewhere open to their reintegration into the European market.

Only very recently universities in Europe realised that doctoral and post-doctoral training needs to develop what is commonly called "non-thesis-related skills". This proposal aims to offer a further and wider range of additional choices which are essential to a successful young scientists in their further career. They are tailor-made to the need of the fellow, covering issues related to :

**Academic and Professional Job-market:** *far from being a European market, recruitment practices are still very different, from national exams to individual recruitment, including interviews. Publicity and information resources differ significantly according to countries and disciplines.*

**Career development:** *Developing a "10 year plan" with an objective and milestones can be very beneficial for the young academics, it allows for a much more focussed orientation and easier confrontation of important choices in careers.*

**Pedagogical Skills:** *traditionally a much neglected domain but of utmost importance for the increasing demands put on the university systems as regards to the efficiency checks in higher education.*

**Course design:** *the syllabus tends to survive scientific development and especially in the Bachelors-Master-Doctorate model a frequent updating of the taught material is decisive in the quality of the university teaching.*

**Curriculum development:** *rethinking the degree structure has put a high demand on the new ideas related to disciplinary components and the multi-disciplinary aspects.*

**Research Management:** *successful scientists working in teams need a more managerial approach than until recently was required.*

**Scientific Communication:** *transmission of results not only to the scientific community through the existing peer reviewed journals but also with the public at large do contribute to the reputation and therefore access to a wider range of funding resources.*

**Grant/Research Proposal writing:** *competition for adequate funding is becoming fierce with the traditional resources declining and the project related, non-public money taking it's place.*

**Budgeting and Financial reporting:** *the above-mentioned development requires that the researcher masters the financial techniques that will increase his efficiency and choices.*

This range of topics targeted to candidates for both an academic or a professional career will provide a broader base for alternative options in the career development.

The Institute proposes to contribute to these objectives thanks to the experience it has gained over the years in doctoral and post-doctoral training. Based on regular exit surveys of the EUI alumni the success of the existing approach is reflected in the following figures: 70% of our young doctors find employment in the academic sector across Europe including in the highly competitive United States, with peaks of 82 % in Sociology and Political Science. These jobs are for an important part in countries other than the country of origin, more than 50% of the economists and even 33% of the historians. The EUI is thus contributing to this Europeanization of careers, and hopes to expand on this mission by offering young doctors, trained in a national framework, a thoroughly European opportunity. Another important group has successfully competed for international jobs at the World bank, IMF, ECB and the European institutions.

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