

The European Research Council – the key to consolidating European science

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The ERC has received enthusiastic support from the scientific community despite a frustratingly low success rate, especially in the first calls. At the same time we are starting to realise that after the initial accolade, politicians and science administrators at both the European and national level are showing reservations, and warning signs are being observed. The ERC is so important for European science and for research funding from the EU that we must not allow any threat to its operations.

To assess the initial success of the ERC properly, we must go some 20 years back and look more closely at developments in national research councils in Europe since then. And we must compare these developments with the situation in the US, which is the key driving force and benchmark in science funding and science organisation.

We are all familiar with the linear innovation model, which states that a discovery in basic science may later lead to applied research and, if this is successful, to innovation, for instance a new product. We also know how that the linear innovation model is used as an argument for funding basic research. Many examples from materials science and medicine demonstrate that discoveries from basic research find their way to sellable products and a good pay-off from the initial investment. This argument is relevant for large economies, like the US and China, but it is not a valid argument for support of basic science in a small or medium-sized European country. Important basic research results obtained in a university in a European country are unlikely to lead to industrial developments in the same country. So there is no return on investments in basic research for the national government.

When politicians and science administrators in European countries discovered this paradox some twenty years ago, they started to shift financial support for science in their countries towards the end of the innovation process, i.e. towards applied science. This has happened in most European countries, and just this year we have seen the conflict exposed in the UK. And the "EUROPE 2020" strategic documents and declarations by the European Commission are now also showing signs of this dangerous trend.

This is where the ERC is so important. It is not restricted by national borders and can therefore fund basic science throughout Europe. As the European market is comparable in size to US, we can be fairly sure that any innovation resulting from ERC-funded research will take place in Europe. I have spoken about basic research so far, although the ERC also funds applied, but curiosity-driven research, where the ideas and initiative come from the individual scientists.

Even though ERC is a success story in itself, we cannot expect it to become the sole remedy for the many current problems of the European research system. These must mainly be solved at local or

regional level, but of course the example and operations of the ERC may help to accelerate the recovery process, especially in the less rich countries and regions.

When the establishment of the ERC was proposed, it was hoped that adequate funding based only on excellence would reverse the brain drain from Europe to the US. This has only been partly successful. There are two further difficulties that should be remedied in a not too distant future. One is the lack of an established career path for scientists in most European countries. Hardly any European country has an equivalent to the US tenure track system. In addition, career conditions are different from country to country, and there is the problem of non-portability of social benefits. It is encouraging to hear from the new Commissioner for Research, Ms Quinn, that at least the second of these problems is in focus.

Moreover, there is an urgent need, especially in the countries undergoing systemic transition, either to upgrade or to develop good research institutions to stop the intra-European brain drain from East to West and from South to North. Again, we should look to the US. Its main scientific institutions and universities are located on east and west coasts, but nearly all US states have at least one leading academic institution recognised for its excellence in at least one discipline. We must create this kind of research environment in Europe as well. And the Community has a very powerful tool at its disposal, which has not yet been used for this purpose. This is the cohesion and regional policy, which has financial resources several times larger than those of the Framework Programmes. In order to improve the very uneven distribution of institutions with an excellent research infrastructure and of well equipped universities, it will be necessary to streamline structural funds strongly towards the Lisbon targets. The scale of this use of structural funds is up to multilateral negotiations, but cannot be smaller than the Framework Programme itself.

And only then the ERC may become what we, so eagerly battling for its existence, had hoped: the consolidator and enabler of a true science elite in Europe, and not only in exact sciences, but also in the humanities and social sciences.

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