

## Interview with Rafael Pardo, director of the BBVA Foundation



**Please describe briefly the selected private research foundation, including its position in the overall national landscape for research and innovation funding, as a background for the following questions.**

The BBVA Foundation (FBBVA) is the body that carries out the corporate social responsibility tasks of Banco Bilbao Vizcaya Argentaria (BBVA). Rafael Pardo, director of the FBBVA, stressed that the foundation works solely in supporting the generation of knowledge and its projection to society, the recognition of excellence in science through different families of awards, fine arts, audiovisual creation, and music. Other aspects of social action (aid to disadvantaged groups and other social programs) are dealt with directly by the bank, through the Department of Corporate Social Responsibility.

Specifically, the FBBVA focuses on science and culture and pays special attention to analysing emerging issues in five strategic areas:

- Environment (Ecology and Conservation Biology, Climate Change)
- Biomedicine and Health
- Economics and Society
- Basic Sciences and Technology
- Humanities and Art

Its activity in these areas includes:

- design, development and funding of research projects
- fostering specialist training through grants, courses and seminars
- awarding prizes to researchers and professionals who contribute significantly to advancing knowledge
- organising the communication and dissemination of knowledge (mainly publications, debates, lectures, and videos)

With regard to research projects funded by the FBBVA, Rafael Pardo explained that **there are two types of competitive grant awards: those aimed at research groups and, since 2014, individual grants**, aimed at professionals from ten areas of knowledge that are in intermediate stages of their career, to carry out a personal project for one year

(covering with maximum flexibility various sides of a project, from equipment, hiring assistants, research internships, etc.). The 2014 budget for competitive research project funding, for both teams and individuals, rose to EUR 6 million.

As well as these competitive grant awards, Pardo pointed out that they also directly fund other projects that are the foundation's strategic lines of action. These are **directly funded recurring projects**, which include a Chair of Biomedicine in the Spanish National Cancer Research Centre (EUR 2,500,000), three Biomedical and Nanotechnology Engineering Chairs at the Universidad Politécnica de Madrid (Technical University of Madrid) (EUR 2,500,000) or projects that fund centres such as the Hospital Clínic (EUR 600,000), the Institute for Research in Biomedicine (EUR 400,000) and the Vall d'Hebron Research Institute (EUR 500,000), all three in Barcelona. Investment in these programmes varies from year to year.

Another FBBVA activity highlighted by its director due to its major impact is the annual **FBBVA Frontiers of Knowledge Awards**. These are international profile awards that recognise and encourage research and cultural creation of the highest level and with a far-reaching impact thanks to its originality, theoretical significance and the progress it represents in one of eight categories: Basic Science (Physics, Chemistry and Maths), Biomedicine, Ecology and Conservation Biology, Information and Communication Technologies, Contemporary Music, Economics, Climate Change and Development Cooperation. An idea of the profile of the winners is that two or three years later, four of the "Frontiers of Knowledge" winners would obtain the Nobel Prize.

The FBBVA also awards other prizes, either on its own or jointly with other organisations, such as the **FBBVA Awards for Biodiversity Conservation**, the **Spanish Royal Society of Physics - BBVA Foundation Physics Awards** and the **Francisco Giner de los Ríos Awards for Improvements in Educational Quality** (in conjunction with the Ministry of Education). And the Awards-Grants in collaboration with the Royal Spanish Mathematical Society.

In Rafael Pardo's opinion,

"This type of awards, besides being a recognition of scientists and their disciplines, contribute to the scientific culture of the society. They raise awareness of the researchers's biographies, the way they work ("methodics of science") and the achieved results ("content")."

The FBBVA also carries out important work in disseminating scientific and technological knowledge to society through **publications, talks and other events**. Among these activities, Pardo highlighted the astrophysics, medicine and ecology cycles organised every year and the series of talks that the foundation organised in 2014 to commemorate the 60th anniversary of CERN with the participation of national and international researchers from the centre, with the participation of the CERN Director General, its scientific director and other leading scientists.

The FBBVA also takes part in educational programmes such as the cycle **CSIC y FBBVA en la Escuela (CSIC and FBBVA in Schools)**, organised by the Spanish National Research Council, the main multidisciplinary public organization in Science and Technology in Spain.

Sources, apart from the interview:

Principles and goals: <http://www.fbbva.es/TLFU/tlfu/esp/sobre/principios/index.jsp>

Report: <http://www.fbbva.es/TLFU/tlfu/esp/sobre/memorias/index.jsp>

Frontiers of Knowledge Awards:

<http://www.fbbva.es/TLFU/tlfu/esp/microsites/premios/fronteras/bases/index.jsp>

**Does the foundation explicitly target RRI in any of its funding instruments or strategies? If so, please describe the RRI issues that are addressed and the scale and organization of specific initiatives and mechanisms employed.**

RRI does not figure explicitly in the FBBVA's documents and instruments. For example, it does not appear in the Frontiers of Knowledge or any other of the foundation's awards. Nor is the concept present in the conditions for the foundation's competitive grant awards for research or the FBBVA's strategic documents.

With regard to the concept of RRI, FBBVA's director, also a renowned sociologist specialising in the study of relations between science and society, explained:

**'I see the term RRI more as a label than as a powerful conceptual framework or as a concept with a precise denotation. As usually happens in Europe, an idea based on intuition, but still poorly defined is introduced in decision making. In some countries, us included, without a robust structure in the area of science (such as parliamentary offices of science and technology, POST), policy-makers decide to incorporate this idea. In other countries with a more extensive or sophisticated scientific and institutional tradition, these inputs are received with doubts, and may not affect the conceptual core of public policies.'**

In any case, it is worth noting that the teams and researchers who benefit from FBBVA funding are also governed by the strategic lines of their centre or university, where the concept of RRI might be more fully integrated into their instruments.

**Does the foundation implicitly address RRI in its funding instruments or strategies? If so, please consider the following:**

- **Which are the implicit dimensions of RRI that can be identified (including, but not limited to, the RRI aspects that we identified in 1<sup>st</sup> round – see MoRRI website)?**
- **Which initiatives and mechanisms are used to enhance RRI (including, but not limited to, the policy instruments that we identified in 1<sup>st</sup> round – see MoRRI website)?**
- **Are RRI consideration related to specific techno-scientific areas, and if so, which?**

Although the FBBVA does not draw upon the general concept of RRI as it is accepted by the European Commission, it does approach some of the so-called ‘6 key dimensions of RRI’. To start with, as stated in the foundation’s public documents (see below), the public has a central place in the organisation’s objectives:

- ‘Promoting interdisciplinary research into emerging issues of the 21st century, which represent the fundamental concerns and aspirations of society and could mark the future course.’
- The organisation has a ‘desire to tackle the global issues, with no geographical limits, facing the globalised society at the turn of the century.’

### Science and society

Documents stating the FBBVA’s objectives indicate:

‘The promotion of knowledge, in society’s current condition, is one of the most effective ways of tackling the problems it faces.’

It is interesting to note that one of the foundation’s main strategies is to share research and society’s needs. During the interview, Rafael Pardo gave the example of what is going in the field of ecology and conservation biology. In this highly specific area, which the FBBVA has funded since the beginning, they saw that there were two highly involved communities, but with weak communication between them: conservationist organisations and the scientific community. Although there are points of contact between them, the foundation noted that they were not very close and decided to bring them together through its grant programme.

**‘The projects submitted must explain how cooperation with conservationist organisations or public agencies is coordinated to create applicable knowledge, on environmental topics.’**

This example is the equivalent to public engagement with stakeholders as preached by Europe.

To strengthen this aspect, the FBBVA includes representatives of these organisations on the project assessment committees. Furthermore, among its objectives, the foundation is committed to directly communicating to society the results of the research and innovative projects it promotes. The grant awards also consider dissemination criteria, explained Pardo, although he admitted that their weighting in external evaluators (“peer review”) in awarding grants is low compared to other factors.

Communication and dissemination actions described in the projects ‘contribute to the final assessment but are not essential. They undoubtedly need to be formalised further, we have to put a metric that requires evaluators give them a special weighting factor.’

Another aspect highlighted by Pardo with regard to initiatives for strengthening links between science and society are dissemination activities. For example, the FBBVA organises or pays for the indirect costs of various communication actions, such as publications and presentations, related to the research projects it funds. In addition, it

holds lecture cycles and dissemination activities unrelated to the projects. They also do this in conjunction with other bodies, such as Forum Clinic, the interactive health portal developed together with Barcelona's Hospital Clínic to foster patient empowerment.

## Ethics

Ethics in research practice figure as a condition *sine qua non* for awarding grants and prizes in certain lines of research. Thus, in a complex line such as biomedicine, the foundation demands an ethics protocol for all projects involving human or animal experimentation. This is required for both prizes and grants.

“This has produced a degree of reticence. We ask for an ethics committee report, but we've seen how this poses significant difficulties for some researchers. In some centres such committees do not exist or if they do, then they don't meet regularly. Many ethics reports are insufficient. We do not want just a committee that tells us that research is in compliance with an ethical protocol, we want to know the detailed assessment that the ethics committee has carried out in connection with a particular project. Furthermore these protocols should not be confined to cases of human experimentation, but also animal experimentation.”

The foundation places great importance on the written ethics report. Indeed, in the last assessment, according to its director, around 20% of projects were excluded for this reason.

“We don't want an ethics committee to tell us that the project meets the ethical requirements. We want a report. There'll be an ethical assessment, in the same way as there's a scientific assessment. **Our objective is to make the researchers themselves become ethically aware in their work.**”

## Environmental responsibility

One of the dimensions that Rafael Pardo thinks should be considered in RRI is sustainability and environmental issues. Indeed, research lines in some of these fields are the FBBVA's biggest commitments, as its director states:

‘We have invested in the toughest environmental area, which is ecology and biology of conservation. One thing that we're still lacking is for this research community to have greater weight in society and in the scientific community itself. The researchers in the field and climate change can help create a culture of greater self-restraint in other subsets of the scientific community, whose values are quite out of step with the awareness of the environment that exists in society. Our grant awards are an instrument to achieve this.’

In this context, as well as supporting research, the foundation also awards prizes for environmental dissemination and awareness-raising activities. The end goal is to get these conservationist organisations to transmit to the scientific community what their concerns and priorities are, while, in turn, the scientific community transmits its knowledge. In short, a more continuous between the two sectors (scientific and conservation organisations), so that results are transferred to conservationist practice and research lines and, through them, to society as a whole.

## Gender, education, open access and governance

Other dimensions of RRI not explicitly considered in FBBVA's instruments are the issues of gender and science, open access, boosting scientific vocations and science governance.

For examples, the conditions for grants do not explicitly mention gender issues. However, there is a clear awareness of a lack of female representation among the people nominated for awards, for example. And the Foundation has organised meetings -one of them was published- on the issue of "women and science", a question that remains on the program of socio-economic analysis of the Foundation.

The desire to help foster scientific vocations among young children is not one of the organisation's main objectives, although it is an aspect in some of its actions, the most striking being the so-called CSIC y BBVA en la Escuela campaign, mentioned in the previous section. Also in prizes to young researchers in physics in the experimental and theoretical aspects.

Scientific governance is considered to a certain extent in the FBBVA's objectives. Although not explicitly mentioned, one of its goals is to 'create meeting points between the research and decision-making worlds, in both private and public spheres'.

Finally, the foundation has no policy for open access, but gives to researchers the freedom to choose their publication media. In cases in which publications are derived under the imprint of funded research, books or other materials are provided free to download through the website.

## What are considered the structural hindrances (including inertial) to stimulating RRI in funding decisions in the foundation?

As made clear in the interview, one of the main limitations to fully developing RRI might be that it is not conceived as a powerful concept, supported by a well-founded analytic literature, as stated in previous answers. In his dual role of director of the foundation and sociologist specialising in science and society, Rafael Pardo believes that for RRI to become a truly solid concept it requires a much more sophisticated analytical or scientific work than has so far been done. Moreover, according to Pardo, the dimensions on this label are unequal and they should have differential weighting factors. Furthermore, in his opinion, the dimensions in RRI could go further than the six described in European policies, depending on the area of research in question.

"There are too many things included in the concept of RRI, when it is clear not all of them have the same level of importance or conceptual development. In addition, other things are possibly lacking. For example, the R&D&I environmental responsibility should clearly be part of RRI but it is not explicitly included in the current definition used by the EC".

"The first thing that needs to be done is to detect the areas in which RRI can be well implemented and, once identified, see which mechanism ensures dialogue or partnership from the start."

Rafael Pardo understands that what is intended is to raise awareness of the importance of bringing research closer to some of the social challenges and problems among the agents in the science, technology and innovation system. Without minimizing the value and the degrees of freedom of research in general, it is clear that more broad consensus goals should be transferred and directly or indirectly, taken into account in the research lines. But despite this, the FBBVA director considers RRI as a label 'that attempts to transfer a degree of sensitisation to the system's agents, but in a lowly differentiated manner'. In any event, he clearly sees that 'most of what we do in the foundation is compatible with the sense of this label', but it is not inspired by it, but for more specific analysis and considerations that take into account the values of our society and the scientific community.

According to Rafael Pardo, one of hurdles to aspirations of RRI is the fact that the aim of **solving society's problems or challenges is not among the mindset of the scientific community.**

Internal and largely external rewards are for most of the scientific community to advance knowledge that would, at some point, mean an increased welfare. This might be true globally, but means giving up the generation of knowledge to the solution of problems and satisfaction of widely shared demands. It is perceived that the "invisible hand " (the market) will bring beneficial effects, whereas the "visible hand " (the policy) is ineffective and, at best, something to pay "lip service" to raise funds, but without really affecting the lines of research.

'For example, some biomedical researchers feel satisfaction because they know that, in one way or another, what they study ends up reaching people. But the system of rewards and incentives for most of the scientists is motivated because what they do is theoretically or intellectually interesting. In many cases, this type of motivation is what stimulates the scientist, in a similar way to artistic inspiration. There are artistic creators that wish to transform the world and others who wish to transform artistic, theoretical or intellectual creation. It is a difficult issue, in which the calibration of motivations and incentives should be done very carefully, distinguishing between areas of science "

Another obstacle to RRI or social responsibility in R&D&I in a more conventional sense is the assessment system for projects, awards and so on. According to Rafael Pardo, what assessment panels really look at, including those involved in the foundation's initiatives, is scientific excellence. 'Scientific excellence has a 99% weighting', he stated, while the rest, at the end of the day, is somewhat of very limited effectiveness. Maybe in this sense, RRI should be reviewed to see if it could constitute an intrinsic value for this excellence, currently assessed mostly through literature scoring indicators.

Ethics is a further aspect that still needs strengthening, according to Pardo. Ethical codes cannot be outlined for research involving biomedical or genetic aspects, or good environmental actions, for instance, without including all the groups and agents involved throughout the process. To illustrate this observation, the FBBVA's director gave the example of the reintroduction of the wolf into a given region. This has to take into account biological and ecological aspects, but the social and economic action impact is equally important.

‘We must provide more robustness to all aspects that have to do with ethics dimension and above it, the values of a pluralistic society. The key to engagement and dissemination is to overcome these challenges.’

To conclude, Rafael Pardo also stressed the need to highlight RRI, or some of its dimensions, in terms of governance. This need requires **seeking mechanisms that truly transform and facilitate a more authentic dialogue between science policy-makers, the scientific community and agents representing the public, especially in periods between elections.** In this context, Pardo considers essential ‘the existence of an engagement strategy, which should be undertaken in these communities’.