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Funding Research, Development and Innovation in Spain Via Socially Responsible Investing

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Abstract

The current debt and growth crisis in Europe has led in Spain to policies of austerity with cutbacks in public spending and private-sector deleveraging. This has made it harder to secure funding in areas such as scientific research and development, where there have been major cuts in both direct funding and government subsidies. Altruistic movements have emerged as a way of offsetting the shortfall. This paper analyses the current situation as regards savings and collective saving instruments in Spain, with the aim of designing alternative ways of channelling socially responsible investing towards scientific R&D.

Keywords:

R&D, Research and Developmenty, Financing, Mutual Funds, Altruism.

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O16, O31, G20.

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Financiación de la investigación, desarrollo e innovación **en España a través de una inversión socialmente responsable**

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Resumen

La actual crisis de deuda y crecimiento en Europa está generando en España políticas de austeridad con recortes de gasto público y desapalancamiento en el sector privado. Estos hechos dificultan todavía más la captación de financiación para el desarrollo y la investigación científica, área donde el recorte de subvenciones y financiación pública ha sido especialmente alto. En este complejo entorno se ha desarrollado movimientos altruístas como alternativa. Este documento analiza la actual situación, buscando alternativas a través de fondos de inversión e instrumentos de ahorro para favorecer la financiación de la I+D en España.

Palabras clave:

I+D, Investigación y desarrollo, Financiación, Fondos de inversión, Altruismo.

1. Introduction

Spain is one of the countries hit hardest by the crisis of over-indebtedness prevailing in the "Eurozone" in 2011 and 2012. This year it is expected to need to finance a deficit equivalent to 5.3% of its Gross Domestic Product (GDP) in a context of negative economic growth. Spain's debt ratio is expected to rise by 10% to 78.5% of GDP. This is still lower than the average ratio of debt to GDP in the Eurozone (which stood at 87.4% in 2011) but it reveals that Spain continues to increase its net leveraging, which in turn implies that further public spending cuts will have to be made in the coming years if the country is to meet the targets set in the so-called "European Fiscal Compact" (Treaty on Stability, Co-ordination and Governance in the Economic and Monetary Union, drawn up in January 2012). Under this treaty Spain is required to bring its deficit down to 3% and its debt to GDP ratio to 60%. The treaty also establishes a "golden rule" under which countries are obliged to include a permanent, binding commitment in their legislation or their constitutions to limit their annual structural deficits (not including cyclical spending and revenues) to 0.5% of GDP.

From the long period of economic expansion that Spain underwent prior to the banking crisis in the US (starting with the failure of Lehman Brothers in 2008 and leading to the financial and real-estate crisis and the first reductions in growth in Spain and in Europe as a whole) to the crisis of growth and debt that has marked 2011 and 2012, there was heavy borrowing. This was the case not just in the public sector (where the debt to GDP ratio was just 36.10% in 2007) but especially in the private sector, where the debt ratio increased from 193% (McKinsey Global Institute, 2009) in 2000 to 366% in 2009. This led to increases in debt from 45% to 87% for households, from 74% to 141% for companies and from 11% to 82% for banks.

National savings proved insufficient to finance the rapid increase in debt (and in national growth) so funds were borrowed from external sources which are now reluctant to renew the resulting debt (the same is happening in neighbouring countries such as Italy). As a result financing in Spain, especially the financing of the country's banks, is sustained largely by the European Central Bank (ECB) through open market operations. The most significant of these are the two long-term (36-month) operations concluded in December 2011 and February 2012.

Against this complex background, the Spanish economy has been forced in 2011 and 2012 to reduce its public-sector deficit (as a preliminary step towards reducing its debt level in the coming years) through programmes of cutbacks in spending and investment and through more aggressive fiscal policies.

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The research, development and innovation (R&D&i) sector has been hit hard by the drop in funding from banks and the public sector. Budget allocations have been decreasing since 2009 (when pubic-sector funding totalled €9.662,000,000). In 2011 alone there was a €600 million cut, leaving the total at €8.586,000,000 (€5.2 billion in loans and €3.4 billion in subsidies and transfers). In 2012 it stands at €6.4 billion, down 25.5% on 2011 and 34% on 2009.

To judge from the national budget for 2012 it is going to be a difficult year for Spanish science. The need to cut spending at state and public administration levels has led to considerable reductions in funding and aid for R&D.

Direct subsidies total just €2,461,900,000 euros and the allocation for loans to research organisations stands at just €3.171,000,000 (41% down on the previous figure of €4.175,000,000).

"Spontaneous" movements have arisen in society that seek to offset this drop in funding and aid for science and research in Spain. They include the following:

"Tick the box for science"

In January 2012 Spanish physicist Francisco J. Hernández put forward the idea in his blog Resistencia Numantina that a new box should be added to the personal income tax return form (IRPF) along the lines of the existing boxes that taxpayers can tick to indicate whether they prefer 0.7% of taxes collected to be used to fund the Catholic Church, other organisations of social interest (NGOs) or both.

His idea is that there should be an option under which 0.7% of the taxes collected in the form of personal income tax can be used to fund science (in 2012 this would mean €200-250 million). With the support of various social networks and platforms, over 300,000 people have signed up to this idea and it has been submitted to the Ministry of the Treasury as a non-legislative motion.

"Project Paula"

This is a private initiative by a family with a daughter who is diabetic. Through the website http://proyectosolidariopaula.blogspot.com.es they are attempting to raise funds for diabetes research. Fundación Proyecto Paula is a foundation run with public and private funding through donations from corporate bodies and individuals. It was unveiled when the Centro de Investigación Príncipe Felipe research centre in Valencia (CIPF) announced in November 2010 that it was to lay off employees: in 2011 donations from the foundation enabled the centre to re-hire a researcher specialising in the study of the pancreas who had been made redundant.

2. Socially Responsible Investing In Spain

In 2011 CECU (the Spanish Confederation of Consumer Associations) published a report (RSE 2011) on socially responsible investing in Spain based on a survey of 500 individuals stratified by sex, age and habitat (CECU, 2011). The results enable some interesting conclusions to be drawn in terms of assessing the extent and importance of social movements in the financing of initiatives of public interest in Spain. The main conclusions are summed up below:

Awareness

54.9% of the individuals surveyed were able to identify the meaning of corporate social responsibility (CSR), though only around 27% were already familiar with the concept. The level of awareness and interest was greater in more heavily populated areas (and lower in towns with less than 10.000 inhabitants) and among more highly educated individuals. Slightly higher figures were obtained in regard to the concept of socially responsible investing (SRI) (investment decisions based on parameters or criteria – both positive and negative – concerned not only with profitability and risk but also with ethical, environmental or social issues).

The level of awareness of SRI was not only higher among more highly educated individuals but also among higher wage earners. 68% of those respondents who earned €1300 per month stated that they were a familiar with the concept.

Distribution

SRI has not been widely promoted as a form of investment by the Spanish financial sector. 80% of the respondents in the RSE2011 survey stated that they had never received any information on or proposals for such investment from their banks, though an average of 25% stated that they would sign up to such investments if offered the opportunity. The figure was highest (49.6%) among the youngest age group (interviewees aged between 18 and 24) and lowest (10.5%) among respondents aged over 65. The results are also correlated positively with education level and negatively with income.

From these two parameters it can be concluded that there is considerable scope for increase in SRI in Spain, since the most highly-educated, highest wage-earning and most dynamic (youngest) sectors of the population show the greatest degree of interest in the matter.

However, at present it is not just interest in SRI or spontaneous social movements that are the key to mobilising resources or savings towards this type of investment (and specifically towards science), but rather the fact that the economic climate is affecting such investments.

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According to a recent report (INVERCO, 2011) by INVERCO "Association of Collective Investment Organisations & Pension Funds" Spanish families continue to spend 80% of their savings on their homes, leaving just 20% in the form of financial savings. This reflects the preference in Spain for home ownership (83% of Spaniards own their homes, compared to the European average of 70%).

The savings rate rose from 10.4% in 2007 to 18.5% in 2009, but by the end of 2011 had fallen back to 11.5% in the wake of the major decrease in income suffered by families. This resulted in a fall of 4.1% (around €60 billion) in financial assets in 2011, to €1.7 trillion.

In 2011, 44.3% of investment by families in Spain went into bank deposits and 45.3% into collective investment organisations (6.9%), pension funds (5.4%), insurance (9.6%) and direct investment (23.4%). This differs considerably from the average breakdown of investment in Europe, where investment in pension plans and insurance is 3 times higher than in Spain and investment in deposits is 35% lower.

Specifically, equity to the tune of €201,728,000,000 was channelled through collective investment organisations in 2011. This represents a drop of 6.2% on 2012 and 38.6% on 2007, linked mainly to the poor performance of the financial markets over the past 5 years. The equity managed as savings by pension funds in 2011 stood at €82,992,000,000, just 3.2% down on the figure for 2007, showing these funds to be more stable than investment funds and SICAVs.

A comparison of investment funds alone (excluding investment in pension funds and insurance) reveals that, at 7.1% of total financial assets, Spain invests slightly less than neighbouring countries such as France (7.9%), the UK (8.0%) and Germany (11.9%) but not far from the European average of 8.4% and higher than in Italy (5.5%) and Portugal (3.9%).

The downturn in financial markets, especially as regards international variable interest securities, explains why investment in 2011 was channelled mainly into fixed-income or monetary assets (33%) and into guaranteed investment funds (27%). An examination of the data on the trends in equity managed together with the distribution of assets reveals that in recent years there has been a drop in the assets of collective investment organisations as investment has shifted towards more conservative options. This may explain the preference in Spain for investing in bank deposits. The decrease in wealth and savings among private individuals mentioned above is combined with a gradual reduction in the number of investors (stakeholders) in collective investment organisations. At the end of 2011 those organisations had 6,178,814 stakeholders, 36% fewer than in 2007 (in line with the decrease in the assets that they manage).

In this regard it is important to look at the trends over time in the returns on the various categories of investment funds. It is particularly noteworthy that the average return over the past 5 years on domestic variable income investment funds is -7.13% (2.10% at 10 years), on European international variable income funds it is -7.70% (-1.90% at 10 years) and on variable income funds on emerging markets it is -1.16% (6.86% at 10 years). These negative returns contrast with the average returns offered by monetary investment funds at 5 years (1.72%), by short-term fixed-income euro funds (1.33%) and by long-term fixed-income euro funds (1.68%).

The data published annually by ESADE (ESADE, 2011)show that analysing SRI in Europe is a complicated task, as the criteria under which investment is defined as socially responsible vary: it is possible to define two types of SRI in the strict sense of the term (with positive and negative selection criteria, exclusive selection criteria and environmental or sectoral criteria) but there is also a broader definition (with less stringent responsible investing criteria in terms of both number and categories). Eurosif (2010) lists around 10% of the assets managed in Europe in 2012 as made according to strict SRI criteria.

At the end of 2010 there were 79 ethically-based or socially responsible collective investment organisations registered in Spain, 16 run by managers based in Spain and 63 based abroad. This figure was down from 80 in 2009, because the crisis reduced the number of foreign-based management organisations working in Spain. The overall trend remained positive (in 2000 there were just 15 such organisations) though the number of locally managed funds remained largely similar (13 such funds existed in 2000). The pension funds registered in 2010 totalled 1504, managing assets worth €85,738,000,000 and with 10,855,528 stakeholders. Only 31 of these pension funds were managed according to more ore less socially responsible investing criteria.

These figures reveal that SRI accounts for less than 10% of the total assets managed through collective investment organisations. However, the number of SRI stakeholders rose to 10,705 in 2010, 21% up on the figure for 2009. This means that although they handle only 0.093% of the assets managed by collective investment organisations they account for almost 0.21% of the stakeholders.

3. Sri For Financing R&D&I

This document proposes that forms of investment such as ethically-based or socially responsible collective investment instruments, which are growing more popular in spite of the complex economic environment that currently prevails, could be used either in their private form (investment funds and SICAVs) or in their institutional form through pension funds, where there could be higher concentrations and fund monitoring committees can influence the way in which funds are invested. Part of the assets available could be invested according to sustainability-related, environmental, social or scientific criteria.

Investment for the good of scientific development and research could clearly be considered as socially responsible, given that it is society as a whole that reaps the present and future benefits of achievements in science and technology, not just in terms of medical or biological advances but also in other fields such as astronomy, weather forecasting and the development of clean energy sources.

For R&D&i to be an attractive destination for investment on the part of pension funds and collective investment organisations in general there needs to be a vehicle for investment that securitises all or part of the rights to exploit patents and scientific achievements. This would encourage a large number of organisations and funds to take small stakes in the development of projects. Channelling just 1% of the great volume of assets handled by collective investment organisations in Spain in 2011 (€201,728,000,000) into SRI in the form of funding for public- and private-sector bodies engaged in R&D&i would provide them with €2 billion: almost one third of their total national budget allocation for 2012.

The vehicle or fund to handle investment in the different projects should be designed to comply with Royal Decree 1309/2005, which governs the implementation of the Collective Investment Organisations Act [Ley de Instituciones de Inversión Colectiva], to ensure that the shares, stakes or bonds issued are recognised as investable assets for investment and pension funds, though the legal nature of those stakes or shares may vary depending on what type of investor is sought or considered appropriate. The same goes for the issuing of rights to patents for trading companies or venture capital funds

The process of investment, exploitation and management of the outcomes of the projects funded through the initial fund or vehicle can be configured with various risk profiles, but it must be taken into account that scientific development not only takes up resources but also entails long maturity periods. Investment time-frames of around 10 years therefore seem appropriate, either setting up exit windows for investors with guaranteed minimum returns (after the fashion of guaranteed investment products) or leaving the vehicle open to fluctuations with no guarantees as to capital but with more potential for investment growth, more along the lines of the risk/return profile of shares.

This type of vehicle should be supported by the state at various levels, not just through tax exemptions to encourage firms to access such investments but also through other means, perhaps even including the availability of bonds and debenture in debt issues that can be issued at a discount (STRIPs -separated trading interest and principal certificates - are already issued by the Spanish Treasury under the name *bonos segregados*). This would enable fixed-term investments to be made with some guarantees as regards capital since, for instance, a 10-year treasury debenture with a yield on maturity of 5.5% can be purchased on a discount basis for 58.5% of its principal. This would give rise to a structure with guaranteed capital on maturity in which a high percentage is available at the outset to cover structural and management costs and allow direct investment in scientific investment projects.

4. Conclusions

In the current situation of austerity and cost-cutting policies applied by the State and Public Administrations, are generated spontaneously financing alternatives, some so altruistic and wanted by other administrations. This paper discusses the difficulties in funding Research and Science Development in Spain and proposes alternatives through mutual funds and Collective Investment Vehicles, in order to get advantage from the increasing interest in Social and responsibility investments.

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