

EXPANDED ABSTRACT

Measuring the social and economic impact of public policies on entrepreneurship in Andalusia

The purpose of this study was to examine the need to assess public policies and to establish that it is possible, by measuring the economic and social impact of public programs, to establish the returns to society from public investment. Taking the example of the regional government of Andalusia, it examined the return on public investment in entrepreneurship through the Andalusian public foundation Andalucía Emprende.

In recent years, Spain has suffered an economic crisis that has intensified the concern of different levels of government to verify how effectively and efficiently public funds are being used. This situation is explained (Wiesner, 2000), among other reasons, by a greater need for accountability and transparency, owing to the high political cost when public opinion considers that public programmes are lacking in effectiveness and efficiency and to the importance of ensuring that fiscal adjustments or corrections are rational.

According to Awasthi & Sebastián (1996), the need to assess business development programmes is justified by the large sums of money devoted to implementing them.

However, despite the existence of sophisticated methods to measure the financial situation of a company that make it possible to compare different companies and estimate their financial risks, there is no method with similar characteristics to measure social and environmental aspects (Reeder & Colantonio, 2013; Retolaza et al., 2016). Social methods make it possible to measure the impact of business activities in society, complementing financial methods, but this impact is usually ignored by companies and is not usually valued at market prices, presenting organisations with a tremendous challenge (Lamberton, 2005; Grieco, 2015).

For this purpose, an effective way of measuring the non-financial benefits of a particular programme or organisation is to analyse its social and economic impact. In spite of the theoretical and practical importance of measuring social impact, no system has been developed to classify the measurement methods. There are various reasons for this (Maas y Liket, 2011):

- Its qualitative nature makes objective evaluation difficult
- Ascertaining the positive and negative environmental, economic and social impact of the organisations or programmes under study
- Ascertaining the short and long term effects of the organisation on society.

In addition to the foregoing, there is a lack of consensus in the literature on the terminology to be used and on the design of evaluation methods and measurement systems (Reeder & Colantonio, 2013). The result is that researchers are currently faced with a fuzzy set of terms, tools and techniques, designed for different purposes to those for which these impacts and long-term goals are measured.

Because of this, the literature reflects a wide variety of measurement methods, depending on the characteristics, activities and objectives of different organisations and the aspects to be assessed (Grieco, 2015). Retolaza et al. (2016) classify these methods into five main categories: impact analysis, evaluation of externalities, economic evaluation, management improvements and rating systems.

Given the stated objective of examining the Andalusian regional government's policies on entrepreneurship, implemented through Andalucía Empeñe to foster entrepreneurship in a particular year, the authors believe that of the methods listed in Table 1 (see the Spanish text), those best suited to this purpose are economic (monetary) valuation ones for cost-benefit analysis. This is a traditional economics tool for performance management, adapted to include impacts on society by expressing the social costs and impacts of an investment in monetary terms.

In terms of the literature generated (Retolaza et al., 2016), 700 high-impact published works included "cost-benefit" among their keywords in 2014.

This method was applied to the Andalusian public foundation Andalucía Empeñe, a non-profit public organisation, financed exclusively by public funding, through which the Andalusian regional government channels a large part of its entrepreneurship policies. It manages the Andalusian entrepreneurship centres (Centros Andaluces de Emprendimiento or CADEs), which have the mission of promoting Andalusian economic activity by developing an entrepreneurial culture, with the aim of increasing the creation of competitive companies and stable employment in the region.

Its origins go back to 1990 and the programme for a Business School for Youth Cooperatives, composed of under 25-year-olds (Mozas & Bernal, 2007; De Pablo & Uribe, 2009; De Pablo et al., 2010; Martí-Costa, 2010). A number of entrepreneurship-related programmes are currently underway. The foundation has an annual budget of nearly €40 million, manages 217 centres throughout Andalusia, employs a professional staff numbering 950 and has over 800 spaces in which to accommodate companies.

The cost-benefit method highlights the benefits obtained by society as a result of the free services to promote entrepreneurship provided by this public organisation to fulfil its founding objectives, and the savings and returns obtained in this way by the administration itself. The year examined was 2015, based on the information provided by this organisation's accounts and management report for that year.

For this purpose, Hehenberger et al. (2013) established a frame of reference, common to practically all the methods employed to measure social impact, which consists of five steps: establishing the objectives, identifying the stakeholders, measuring the results, verifying and valuing the impact and, finally, monitoring and presenting the results in the form of a report.

An analysis of the stakeholders of the foundation was therefore conducted, taking into account the benefits they receive through the activities of Andalucía Emprende and the value assigned to the outcomes. These are shown in Table 3 (see the Spanish text), with the benefits received through the activities of the organisation (the outcomes), their valuation and the weighting applied to obtain the impact.

A value was then placed on each of the outcomes generated by the stakeholders as a result of the organisation's activity. This valuation presented a considerable challenge, as there is no defined value for each of the outcomes and each stakeholder could apportion a different value to the benefits received. Therefore, reference values were taken from the statistics provided by the Andalusian statistics institute (Instituto de Estadística de Andalucía, IEA), the annual Spanish tax revenue report (Agencia Tributaria, 2016) and companies providing similar services to those offered by Andalucía Emprende.

After applying different weightings, the calculations resulted in the figures shown in Table 4 (see the Spanish text). These results indicate that the public investment of €40.2 million generated a return of €271.39 million, distributed as follows:

- Direct returns to Andalucía Emprende were €0.36 for each €1 invested.
- The return generated by companies formed in the year 2015 was €1.04 for each €1 invested.
- In terms of the higher survival rate of companies assisted by Andalucía Emprende compared to the mean rate for Andalusia, the return was €4.16 for each €1 invested.
- Indirect returns from free services and unemployment benefit savings generated €1.18 for each €1 invested.

In short, each €1 invested in Andalucía Emprende gave society a return of €6.75. It should also be mentioned that the effect of the foundation's activity in years subsequent to 2015 was not taken into account and that many services provided by this organisation could not be valued in financial terms, so the return on the investment would in fact be greater. Consequently, the value calculated in this study is less than the real value.

A priori, this indicates good management of public funds, as the figure generated is much higher than that invested, without entering into any valuation of the opportunity cost of investing these funds in a different project.

The main limitation on this study lies in the characteristics of the method employed, owing to the difficulty of placing a value on certain outcomes generated by the organisation's activities and to the existence of intangibles that could not be monetised.

Future lines of research should focus on methodological improvements that would contribute to reaching consensus on a method that companies can use in a generic and systematic way, as in accountancy, with a series of accepted international standards that would allow all the social and environmental value that companies generate to be shown on their balance sheets.

KEYWORDS: Project evaluation, cost-benefit, public policy, social value, monetization, Andalucía Emprende, regional development.

