



2nd GLOBAL CONFERENCE on BUSINESS, ECONOMICS, MANAGEMENT and  
TOURISM, 30-31 October 2014, Prague, Czech Republic

## The Impact of Accounting for Government Grants on Equity Capital

Jose Manuel Pereira<sup>a\*</sup>, Amelia Ferreira da Silva<sup>b</sup>, Maria Jose Dos-Santos<sup>c</sup>

<sup>a</sup>IPCA - Polytechnic Institute of Cávado and Ave, Campus do IPCA, 4750-810 Barcelos, Portugal

<sup>b</sup>IPP - Polytechnic Institute of Oporto, Rua Dr. Roberto Frias, 4200-465 Oporto, Portugal

<sup>c</sup>IPL - Polytechnic Institute of Lisbon, Campus de Benfica do IPL, 1549-014 Lisbon, Portugal

---

### Abstract

In Portugal, the general adoption of the International Accounting Standards was made under the SNC-Accounting Normalization System, in 2010. The SNC carried out new bookkeeping rules concerning the way government grants related to assets. While in the past these grants were treated as liabilities during the economic life of the asset, now the Accounting and Financial Reporting Standards n.º 22 (NCRF n.º 22) report them as an item of equity capital. This procedure is an exception to the rules stated in IAS. The aim of this study is to analyze whatever the accounting for government grants impact on equity capital and, consequently on financial ratios, of Portuguese companies in the agricultural sector. We collect financial information of 2009, from 124 enterprises operating in the agricultural sector, which had report subsidies for investment. The sample was draw from SABI data base. Our model used the amounts reported as “Accrued and deferred income - Income taxes - Subsidies for Investments” (old bookkeeping rules), at 31/12/2009, and estimates the values of the equity capital and financial ratios. We found a positive variation in equity capital, which corresponds to an increase of nearly 4.5%. Consequently it caused an increase of 4.7% in the indicator of financial autonomy, and also had a positive impact on the solvency ratio, with an average variation greater than 11%. Our research shows that the new bookkeeping rules have important implication in the values of some financial ratios of Portuguese companies. Even though the new bookkeeping procedures are different from those stated in IAS nº 20, Portugal opted by the same rules as those that Spain and France follow since long time ago and thus Portuguese companies are in equal competition condition to apply European Programs for financial support of investment projects, since it requires some minimum values at certain ratios.

© 2015 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Selection and/ peer-review under responsibility of Academic World Research and Education Center

*Keywords:* Grants; Equity; Financial Autonomy; Solvency; Agricultural Companies

---

---

\* Jose Manuel Pereira. Tel.: +351-963-621-955; fax: +351-253-821-111.  
E-mail address: [jpereira@ipca.pt](mailto:jpereira@ipca.pt)

## 1. Introduction

We have witnessed, in recent decades, a significant expansion of the world economy. The relocation of many companies has become a common phenomenon, instigating many negative aspects, despite having also benefited many multinational organizations. The development of financial markets enabled great capital mobility, significant liquidity and facilitated the access to an assortment of investors.

Given that financial information was prepared for different users according to a set of principles and procedures that differed from country to country, the comparability of the different financial statements was naturally a very difficult task. The consolidation of accounts was more complex, it increased the costs of accounting tasks and hindered control mechanisms. All these factors helped to facilitate the acceptance of International Accounting Standards (IAS). The convergence of accounting practices at the international level has become a reality and has been driven by several international bodies such as the International Accounting Standards Board (IASB), the International Organization of Securities Commissions (IOSCO), the European Union (EU) and the Securities and Exchange Commission (SEC). For Ding et al. (2005), the accounting harmonization process aims to convey quality information to its users in order to ensure market efficiency, reduce the cost of information production and convey a unique and reliable image for the market.

In Portugal, the first step toward accounting harmonization was marked by Decree-Law 47/77, which approved the first National Plan of Accounts (POC), heavily influenced by the French accounting standards, and culminated in the implementation of the Accounting Normalization System (SNC) approved by Decree-Law No. 158/2009, which was to take effect in January 2010. As can be read in the opening remarks, the SNC results from the adaptation of the IAS's, indicating that the national accounting standards should be as closely associated as possible to the new EU standards in order to align our country with EU's directives and regulations on accounting matters, without ignoring, however, the specific characteristics and needs of the Portuguese businesses. The current accounting model presents a set of new procedures, thus altering the information contained in the financial statements, and is based on principles rather than rules such as was the case in the POC.

## 2. Literature Review

After the publication of Regulation 1606/2002, which required listed companies of member countries to use IFRS, several authors have tried to understand the changes that emerged with the transition to the new accounting model. Of the various studies on the subject, we will briefly refer to those most cited in the literature.

Hung & Subramanyam (2004) studied the implications of the adoption of the IAS in Germany to replace the established Germany Accounting Rules, through the analysis of Financial Statements and key Ratios and concluded that the Total Assets and the book-value of the Equity, as well as the variations in the book-value and the results are significantly higher under IAS / IFRS than under German standards.

In Spain, Perramon & Amat (2006) conducted a study in which they carried out the first analysis of the IAS/IFRS implementation in the Financial Statements of Spanish listed and unlisted companies. The comparison between the Spanish standards and the IAS/IFRS led them to conclude that there are significant changes in Net Income.

Based on a group of UK companies, Stenka *et al.* (2008) attempted to study the impact of IAS/IFRS that country, trying to identify the changes in the company profitability, its heritage, as well as examine the reasons for these changes. The authors concluded that the Net Income had undergone significant changes, which are caused by accounting changes made at the goodwill level.

Armstrong *et al.* (2008) conducted a study where they observed the reaction of the European stock market to a set of sixteen events related to the adoption of IFRS. They observed generally positive results for companies whose head offices were located in continental countries.

Bianchi (2009) developed a study that sought to examine the effects of the adoption of the IAS/IFRS on the Financial Statements of unlisted Portuguese companies, while trying to identify, at the same time, if the effects of the adoption of the IAS/IFRS coincide with previous studies, as well as the motivations behind them, so as to induce the companies to initiate the process of changing to the new standard. In the literature it is also possible to find studies on the effects of the adoption of IAS/IFRS in the Financial Statements of unlisted Portuguese companies, as exemplified by the work of Pires and Rodrigues (2010); Costa and Teixeira (2013). Our work does not follow the

methodology of the aforementioned. The aim of this study is to consider the impact on equity of the accounting grants advocated in the new standards, using a sample of companies from the agricultural sector, where we do not intend to study the global implications of the transition to the new standards.

### 3. Accounting for Government Grants and Disclosure of Government Assistance

IAS 20 establishes the accounting procedure and disclosure of government grants and stipulates the disclosure requirements of Government support. This standard put into effect in November 1982 remained untouched for several years. In the current Portuguese Accounting Standards, FRS 22 was based on the corresponding IAS 20 adopted by the EU. Although identical as to the requirements for the recognition of a government grant, they diverge in the accounting treatment of the grants related to the acquisition of assets.

For the IAS 20, as a rule, government grants should be recognized as income, on a systematic basis, over the period of time necessary to match them with the related costs, which they are intended to compensate, in accordance with § 24, which states that “the government grants related to assets, including non-monetary grants at fair value, shall be presented in the balance sheet either by setting up the grant as deferred income or by deducting the grant in order to arrive at the carrying amount of the asset”.

In accordance with paragraph 12 of the FRS 22, non-refundable government grants with tangible and intangible fixed assets should be initially recognized in Equity. Later, they should be allocated, on a systematic basis, as income over the time period necessary to match them with related expenses intended to compensate them, if they relate to depreciable fixed assets and intangible assets with definite useful life. If they relate to non-depreciable intangible and tangible fixed assets with indefinite useful lives, they should be kept in equity, unless that amount is needed to compensate for any impairment loss.

The initial recognition of the grant as equity provides, in the year that the grant is acknowledged, an increase in equity which corresponds to the total value of the grant. As Grenha *et al.* (2009) claim, the accounting treatment adopted in the final version of FRS 22, for grants related to assets, will allow national authorities to evidence financial indicators which are effectively equivalent to that which are presented by entities from other countries, where the accounting treatment of such grants does not follow the current IAS 20.

### 4. Methodology and results

In order to reach our proposed aim, we collect financial information for the year 2009 of a sample of 150 companies in the agricultural sector, from the northern region of Portugal, extracted from the SABI database, and which had accounted investment grants in that year. From this sample we eliminated 26 companies, because only 124 had complete data.

Based on the companies' financial statements, we collect the value of the Equity, Assets and Liabilities. Given that in the previous normative grants were initially recognized as a liability, the amount not yet recorded is disclosed on the Grants Investments, which is a deferral account. Thus, the transition to the new standards, the Equity of the companies under analysis increases, corresponding to the amount of the assigned grants, not yet recognized. This variation may have implications on financial independence and solvency ratios.

Financial autonomy is measured by the ratio between the value of its equity and the value of its net assets at a given time. The financial autonomy ratio is calculated as a relation between the capital and the total of Assets. This concept represents a company or entity's ability (greater or lesser) to meet financial commitments through its own equity capital.

The solvency ratio is a relationship measure between a company's equity and borrowed capital. The lower the company's solvency ratio, the greater the probability that it will default on its debt obligations.

From our results we conclude that the equity of the companies under study suffered, on average, an increase of approximately 4.5%. Such a change in equity, considering the value of the asset, which remained unchanged, caused a positive change in the financial autonomy ratio that, on average, increased by 4.7%. The average variation, observed in this indicator, ranged between a minimum of 0 and a maximum of 16%. We observed that the ratio of financial autonomy of 38 companies in the study (about 30%) did not undergo any variation, which is mainly due to the reduced amount of grants received, in relation to a relatively high equity value.

In regards to the solvency ratio, the average growth of 4.5% in equity, considering the symmetric variation reflected in the liabilities, resulted in an average increase in ratio of over 11%. We found that five companies (4%) did not undergo any change in its solvency ratio and about 22% of the companies in the study experienced a greater than 15% positive variance.

## 5. Conclusion

Our research shows that the new bookkeeping rules have important implications on the values of some financial ratios of Portuguese companies.

Given that the study is based on just one year and that we ignored the implications of other changes that occurred simultaneously in bookkeeping rules, further research is needed.

Even though the new bookkeeping procedures are different from those stated in IAS 20, Portugal opted to follow the same rules that Spain and France have followed for a long time and, thus, Portuguese companies are in equal competitive condition to apply for European Programmes for financial support of investment projects, since it requires some minimum values at certain ratios.

## References

- Armstrong, C. S., Barth, M. E., Jagolinzer, A. D., Riedl, E. J. (2008). Market Reaction to the Adoption of IFRS in Europe. Working Paper. Harvard Business School.
- Bianchi, M. (2009). Processo Preparatorio de Transição POC para NCRF/SNC: Motivações e Impactes. Dissertacao de Mestrado. Faculdade de Economia da Universidade do Porto.
- Costa, P., Teixeira, A. (2013). O impacto da adoção do SNC no Capital Próprio das empresas Portuguesas. Working Paper , XIV Congresso Internacional de Contabilidade e Auditoria, Lisboa, Outubro.
- Ding, Y., Jeanjean, T., Stolowy, H. (2005). Why do the national GAAP differ from IAS? The role of culture. *Internacional Journal of Accounting*, 40 (4), 325-350.
- Grenha, C., Cravo, D., Baptista, L., Pontes, S. (2009). Anotações ao Sistema de Normalização Contabilística. Câmara dos Técnicos Oficiais de Contas, Lisboa.
- Hung, M., Subramanyam, K. R. (2004). Financial Statement Effects of Adopting International Accounting Standards: The case of Germany. Working Paper. University of Southern California.
- IASB, IAS 20. Jornal Oficial da União Europeia, L 261/178 de 13 de Outubro de 2003.
- Perramon, J., Amat O. (2006). IFRS Introduction And Its Effect On Listed Companies In Spain. Working Paper. Universitat Pompeu Fabra, Barcelona.
- Pires, A., Rodrigues, F. (2010). O efeito da aplicação do SNC no Capital Próprio: Evidência em 50 empresas sujeitas a Revisão Legal de Contas. XXII<sup>as</sup> Jornadas Luso-Espanholas de Gestão Científica. Sociedade, Territórios e Organizações: Inclusões e competitividade, Vila Real, 1 a 3 de Fevereiro.
- Stenka, I., Ormrod, P., Chan, A. (2008). Accounting for Business Combinations – The consequences of IFRS adoption for UK Listed Companies. Working Paper. Keele University and University of Liverpool.