



Munich Personal RePEc Archive

Romanian accrual accounting experience in public higher education sector

Adriana Tiron Tudor and Rodica Blidisel

Babes Bolyai University, West University of Timisoara

19. December 2007

Online at <http://mpra.ub.uni-muenchen.de/6691/>

MPRA Paper No. 6691, posted 13. January 2008 14:56 UTC

ROMANIAN ACCRUAL ACCOUNTING EXPERIENCE IN PUBLIC HIGHER EDUCATION SECTOR

INTRODUCTION

During the last decade the public sector has been affected by the introduction of significant reforms in the public accounting system in the international context. The aim of the public sector reforms is to overcome bureaucratic obstacles so that managers can use their limited resources more efficiently (Pina and Torres, 2003, p. 334). Accounting played a crucial role in the public management development once the autonomy in public service organisations increased.

The use of the cash or accrual basis of budgeting and accounting was seen as a great divide between the public and private sector with the public sector practising cash accounting and budgeting, and the private sector using accrual methods. The better the financial information, the increase in the cost transparency and the valuation of public sector assets (Graham, 2005, p.3) have persuaded many countries to adopt the accountancy system to their own needs. During the reform process they have put into practice numerous intermediate variants between the extremes of cash and accrual budgeting and accounting. The reasons for the different national systems may be due to the culture, the historical background or the structural elements of these countries. Also the specific objectives and the principal users of the financial reporting, the financial resource suppliers and the influence of public accounting regulatory bodies imply different national accounting systems.

Several studies show the status of accrual accounting and budgeting in some countries, revealing that most countries have introduced aspects of accrual accounting and more are intent to do so in the future (OECD, 2000; Lüder and Jones, 2003; Paulsson, 2006). Although there is a wide acceptance of the application of the accrual systems for the elaboration of accounting statements, there is no consensus with regard to the elaboration of the budgetary statements. The tendency of most countries is to produce budgets according to the accrual criterion, producing a forecast statement of revenues and expenses, cash flows and the financial situation (Brusca and Condor, 2002, p. 139). The use of alternative criteria in public accounting systems leads to different results concerning the financial statements, the income and expenditure statements and the balance sheet.

In spite of these, public accounting harmonisation is taking its first steps through the efforts of INTOSAI (International Organisation of Supreme Audit Institutions) and IFAC (International Federation of Accountants) at global level.

The standards of INTOSAI have mainly focused on the elaboration of a conceptual framework for public accounting information. The IFAC standards entered into more detailed recommendations on accounting practices adapting the International Accounting Standards for public entities under the influence of the Anglo-Saxon Model and passing

over the importance of the budget from the Continental European Model or of the features of public sector accounting (Brusca and Condor, 2002, p. 159).

Although some international organisations (OCDE and European Union Institutions) have adapted the International Public Sector Accounting Standards (IPSAS), different countries, especially from the Continental European area, are not very interested in adopting them because of the difference to the continental accounting tradition (Brusca and Condor, 2002, p. 157-160).

In the international context, several researchers have studied the implementation of the accrual accounting, some of them questioning the usefulness of business-like accounting techniques in public organisations (e.g. Bromwich and Lapsley, 1997; Guthrie, 1998; Monsen, 2002). Many researchers (e.g. Mellet, 1997; Barton, 1999) have criticised the alleged superiority of accrual accounting over cash accounting in the public sector. Implementing private sector accounting techniques within the public sector may not only be inappropriate but may also be faced with many obstacles, the so far findings being still inconclusive. This lack of consensus may be due to the fact that the theoretical framework for the public sector is still undeveloped.

Some researchers (Barton, 1999) are reluctant in supporting the introduction of accrual accounting into the public sector because of the fundamental difference between the public and private sector regarding their objectives and system of resource allocation. Other researchers (e.g. Lapsley, 1986; Pallot, 1992; Mellet, 1997) are concerned regarding the feasibility of implementing an accrual-based accounting system, being reserved over the cost of the identification and valuing of assets.

Despite the rapidly growing literature in these areas (e.g. accrual-based accounting), there is a shortage of empirical literature in the views of practicing accountants in public sector departments on the applicability of accrual accounting to the public sector. Besides, these studies have been conducted mainly in the United States or in the Western part of Europe and, thus, their findings may not be readily generalised to other environments such as developing countries where the culture differences and environmental practices may be of particular importance.

In Romania, accrual accounting was put into practice both in the local government and in the central government starting with the 1st of January 2006, after three years of empirical application parallel with the existing stipulations (cash accounting) by a certain number of public institutions. The introduction of accrual accounting in all of the public sector was part of a wider reform agenda. According to the European Union objectives, the Romanian mission was to orientate the whole government accounts system to an accrual accounting system by the adoption of some General Accepted Accounting Principles (GAAP) which had to be in concordance with the present European rules, but which had to be, at the same time, adequate to the country's circumstances and to its public sector (Hurduzeu and Morariu, 2002). Therefore, all the organisation standards were worked out according to International Public Sector Accounting Standards (IPSAS).

Higher education institutions, as a part of the local government in Romania, were also affected by the global budgeting and accounting reform. The expansion of the student numbers and the limited resources earmarked for the higher education sector lead to a reorganisation of the higher education institutions, stimulating universities to pursue an entrepreneurial policy. The diverse sources of income and the destination of higher education expenditure determine certain characteristic features in the public higher education institutions' accounting and budgeting.

The purpose of this paper is to present experiences from the use of accrual accounting information in the public higher education sector in Romania and, thus, to contribute to our understanding of the prospects for using that kind of accounting in public organisations.

FRAMEWORK

The transition from cash accounting to accrual accounting implies, as a matter of fact, not only an accounting system change but also a change of conception (OECD, 2002). This is why the role of human resource from the financial-accounting departments of public higher education institutions is primordial. In this context, we tried to find out especially the answer of the question: 'How well the finance and accounting specialized staff is prepared to transpose the accrual accounting tasks in Romanian public higher education institutions?'

The main objective of the paper is to examine the accounting and finance officers' perceptions from the Romanian public higher education institutions regarding the implementation of the accrual accounting in this sector. This objective derives from the fact that little evidence is known about the views of practicing accountants and finance officers regarding this initiative.

At the international level we point out the empirical case study of the accounting reform implementation in Flemish universities (Christiaens and Els de Wielemaker, 2003). The study emphasizes the lack of success of the mix between the traditional budgetary accounting system and the new accounting system.

Another approach (Venieris and Cohen, 2004), which has as a framework the survey questionnaire, emphasizes the accounting practice of the accruals adopted for the implementation of the higher education reform in Greece and points out that, after six years from its conception, the reform didn't make any seriously progress.

The Italian universities case study (Arnaboldi and Azzone, 2004) investigates the implementation of the new managerial techniques in the public higher education sector following the introduction of a new managerial accounting system, pointing out the implementation difficulties.

The New Zealand universities are undertaken from the relation between political power and universities accounting organisation point of view through the interpretation and

analysis of the financial and accounting officers of the resource allocation and accounting registration (Coy and Pratt, 1998).

The accounting changes regarding the yearly financial reports of the UK universities are studied and explained taking into account the point of view of the internal and external users of the financial-accounting information (Gray and Haslam, 1990).

In Romania there is a little evidence regarding the empirical case studies about the difficulties met in the higher education accounting practice. Because of the recent implementation of the accrual accounting, the Romanian literature deal with the accrual accounting approach more from theoretical than from practical point of view. The overall findings of previous studies do not provide any conclusive evidence for the perception of the procedures and users of Romanian public higher education accounts toward the implementation of accrual accounting to the higher education sector.

HYPOTHESIS DEVELOPMENT

The principal area of investigation is concentrated on the views of accounting and finance officers working within the Romanian public higher education accounting and finance departments, emphasizing the difficulties that hamper its application and the usefulness of accrual accounting in providing more relevant information and reporting system for decision-making purposes. The first area of investigation focuses on the respondents' choice between the two alternative bases of accounting (cash- or accrual-based accounting), the feasibility of accrual accounting implementation and difficulties of its implementation. The second area of investigation examines the respondents' perception of the usefulness of financial information provided by accrual-based accounting system to decision-making.

The literature reviewed suggests that accountants and finance officers working in public sector departments that employed accrual accounting are less opposed to its implementation (Lapsley, 1986; Jones and Puglisi, 1997). Jones and Puglisi (1997) also suggested that the officers who employed accrual accounting rated more highly its relevance for providing information for internal decision-making than officers who employed only cash-based accounting. Therefore, the first two hypotheses are:

H1: Accounting and finance officers working during their professional career in accrual-based accounting system are more likely to prefer accrual accounting in their departments.

H2: There are differences between the perceptions of accountants and finance officers who employed accrual accounting during their professional career and those who are not, regarding the reasons for choosing accrual accounting.

The international literature reviewed state that the implementation of accrual accounting comes up against difficulties as following: the identification of assets held, the determination of the cost and useful life of assets, the identification and measurement of

public sector assets at market value (Lapsley, 1986; Pallot, 1990). This leads to the following hypothesis:

H3: Accounting and finance officers who employed accrual accounting during their professional career perceive fewer difficulties with the new system than those who were working only in government entities which employed cash-based accounting.

One of the reasons behind the Romanian government's initiative to introduce accrual accounting within the whole public sector is the relevance of information produced by accrual accounting to decision-makers in regards to programming, appraisal of performance and comparing outputs among departments. Performance evaluation, as one of the main decisions within public sector, has attracted attention of several researchers (e.g. Lapsley, 1986; Guthrie, 1990; Jones and Puglisi, 1997; Jones and Pendlebury, 2000). This leads to the forth hypothesis:

H4: Accountants and finance officers who employed accrual accounting are more likely to perceive the usefulness of the new system in providing relevant financial information to decision-makers than those who employed only cash accounting.

METHODOLOGY

Research methodology is used for the purpose of gathering information which helps in answering research questions. The paper relies mainly upon hypothesis testing by logical empiricism, a positivist approach. The quantitative data was collected through the survey questionnaire. This methodology is adopted particularly in response to the critic of CIGAR which points out that the research attention must be paid also to the behavioural variables not only to the contextual variables (Chan et. al., 1996, p. 11). The assessment of the accounting system and the need for budgeting reform together with accounting reform is studied using the qualitative methodology by using interviews with the senior management in the Romanian public higher education sector.

Quantitative Methodology

The population of the study consisted of all public higher education institutions employees working at the accounting and finance units within all the 49 Romanian public higher education institutions. Like other Romanian public entities, the public higher education institutions adopted the accrual-based accounting system starting with the 1st of January 2006 (MPF, 2005). A convenience sample of 25 universities was chosen from the 49 Romanian public higher education institutions, covering all the regions of the country. The questionnaire went through a careful process to assure a degree of validity prior to distribution. The questionnaire included two question format: (1) two-answer questions such as "feasible" or "not feasible" and (2) follow-up questions in which the respondents were instructed to show the extent of their agreement or disagreement on a five-point Likert scale ranging from 5 for "strongly agree" to 1 for "strongly disagree". The questionnaire was sent individually or by e-mail to 67 accounting and financial officers of the 24 selected higher education institutions. Out of 67 distributed

questionnaires, 64 were returned. However, three of these were disregarded because they were either incomplete or unclear making the usable responses 61 (91%). In order to analyse the data collected via the survey questionnaire, SPSS version 13, as the most common statistical package, was used. The data collected were analysed as regards both validity and reliability.

Qualitative Methodology

The qualitatively oriented methodology includes the interviews with the senior management in the Romanian public higher education sector in order to gain more perspectives regarding management's view toward the implementation of accrual-based accounting system and to examine the rationale behind such a reform.

The semi-structured interviews are used to delve beyond the respondents' answers to the survey questionnaire. These interviews were designed to supplement the survey approach in examining the four hypotheses. Both the interviews and the survey questionnaire were used as part of the empirical work of this research for the purpose of exploring and gathering the relevant information to answer the research question.

The five interviewees were persons holding a managerial position in accounting and finance departments from five different public universities.

RESULTS

Questionnaire Results

The descriptive data for various dimensions used to examine the perception of accountants and finance officers revealed the findings of the views of accountants who employed accrual-based accounting during their professional career before the 1st of January 2006 compared with those who work in public departments which do not, for the purpose of determining whether there are any significant differences between the two groups in regards to their choice of preference amongst the two accounting bases, the reasons for their choice of preference, the difficulties of implementing accrual-based accounting and the usefulness of accrual financial information for the decision making process.

In order to test the first hypothesis, the respondents were asked to indicate the preference between the two cash and accrual accounting. Then, a comparison between the views of accountants and finance officers who employed the accrual accounting during their professional career before the 1st of January 2006 (Users) and those in departments which do not (Non-users) regarding their preference between the two alternative bases was made. Hypothesis 1 predicts that non-users will less prefer to use accrual-based accounting in their departments than the users group. To test this, a Chi-square test was used to compare the frequency of respondent's preference to use accrual accounting in the two sample groups. The descriptive statistics and Chi-square results are shown in Table 1.

Table1. Chi-square results of respondents' preference amongst the two basis of accounting (measured on scale 1=cash 2=accrual)

Bases of accounting:	Users n=9		Non-users n=52	
	n	%	n	%
cash	2	22.2%	18	34.6%
accrual	7	77.8%	34	65.4%
<i>Chi-square</i>	7.230			
df	1			
<i>Asymp.Sig.</i> (two-sided)	0.007			

The descriptive results revealed that both groups preferred to use accrual accounting. However, the users' group preference for accrual accounting exceeded the non-users group's preference by 12.4% (e.g. 77.8% as compared to 65.4%). Table 1 reveals that there are significant differences (0.007) between the two groups, which may suggest that the non-users group prefer to use accrual accounting less in their departments. Accordingly, these findings support hypothesis 1 at the $p < 0.05$ level of significance. The result may be attributed to the fact that users group have gained familiarity and experience with accrual-based accounting due to the utilisation of the accounting system.

To examine if there are any differences in the reasons for preferring accrual accounting between the users and non-users (the second hypothesis), both groups were asked to indicate the extent of their support to three reasons. It was anticipated that there would not be any differences between the users and non-users regarding the reasons for preferring accrual-based accounting. T-test and ANOVA measure for unrelated means were used to compare the respondent's rating and the difference between the means of the groups the regarding reasons for preferring accrual accounting. The results are shown in Table 2.

Table2. Results of respondents' perception regarding the reasons for preferring accrual accounting (Measured on scale 1=Strongly Disagree to 5=Strongly Agree)

Reasons	Group	Users n=7	Non-users n=34	F-Statistic	P-Value
Reason 1. Accrual accounting provides enough financial data to facilitate the control process.		Mean=2.71	Mean=2.21	0.824	0.369
		Standard deviation=1.380	Standard deviation=1.343		
Reason 2. Accrual accounting provides enough financial information to present accurate financial position.		Mean=3.00	Mean=2.53	0.608	0.440
		Standard deviation=1.633	Standard deviation=1.419		
Reason 3. Accrual accounting facilitates the follow up of the cost of long-term projects.		Mean=2.43	Mean=2.24	0.125	0.726
		Standard deviation=1.512	Standard deviation=1.281		

The more the group means differ in value, the greater will the group variation be; the more a variation within the groups is relatively smaller, the greater the F-test statistics will be, thus showing that the null hypothesis could be rejected (Jaba and Grama, 2004). In this study the means are not very different, the F-test statistics is relatively reduced for all reasons, with a contingency coefficient (P) of more than 0.05, emphasising that the equality hypothesis of the group means is not rejected, therefore the two groups are not significantly different in the reasons for selecting the utilisation of the accrual accounting. So, in this case, the second hypothesis concerning the reasons for preferring to use the accrual accounting is not supported.

The respondents were asked to indicate the extent of agreement to which they would anticipate problems in the various aspects of implementation of accrual accounting. The aim here is to examine the perception of users and non-users of the difficulties in applying accrual accounting to the Romanian public higher education sector in order to confirm the third hypothesis.

T-test measure for two unrelated means was used to compare the respondents rating and the difference between the means of the users and non-users group regarding the difficulties anticipated in implementing accrual accounting. The results are shown in Table 3.

Table3. Results of respondents' perceptions regarding problems of applying accrual accounting. ((Measured on scale 1=Strongly Disagree to 5=Strongly Agree)

Difficulty	Users n=9	Non-users n=51	F-Statistic	P-Value
1. Difficulty to measure and determine revenue and expense accurately	Mean=3.00	Mean =2.71	0.328	0.569
	Standard deviation=1.500	Standard deviation=1.377		
2. Difficulty to value fixed assets with the absence of market prices.	Mean=2.56	Mean =2.96	0.792	0.377
	Standard deviation=1.014	Standard deviation=1.298		
3. The absence of clear valuation policy for fixed assets.	Mean=1.78	Mean =2.69	3.834	0.555
	Standard deviation=0.833	Standard deviation=1.351		
4. Lack of additional resources and manpower needed for assets evaluation.	Mean=3.00	Mean =2.50	0.891	0.349
	Standard deviation=1.225	Standard deviation=1.502		

The means of the two respondents groups are relative equal for the difficulties shown in Table 3, all the associated probabilities $P > 0.05$. The only difficulty for which the difference of the group means is significant with an F-test statistics of 3.834 is “The absence of a clear valuation policy for fixed assets”. This could happened because of a lack of enough training of the staff, especially of the officers who didn’t work before the 1st of January 2006 and perhaps they didn’t assimilate the concepts required by the new accounting system adopted by the public higher education institutions. Therefore, the third hypothesis is supported due to the difficulty “The absence of a clear valuation

policy for fixed assets”, but all the other difficulties are unanimously maintained by both respondents groups. The mentioned difficulties are found also in the international literature, they were met in the public sectors of other developed countries in the implementation of the accrual accounting.

In order to examine if there are differences between the perceptions of users and non-users sample groups regarding the usefulness of accrual accounting in producing adequate financial information for decision-making purposes, the respondents were asked to indicate the extent of their agreement with a number of statements. The findings are presented in Table 4.

Table4. The respondents’ perceptions regarding the usefulness of the financial information provided by accrual accounting for decision making

Benefits	Users n=9	Non-users n=51	F-Statistic	P-Value
1. Financial statements produced using the accrual-based accounting system disclose enough data for monitoring financial position.	Mean=2.00	Mean=2.54	1.851	1.179
	Standard deviation=1.00	Standard deviation=1.111		
2. Accrual-based accounting system discloses the economic and financial results for measuring programme performance.	Mean=2.22	Mean=2.25	0.003	0.954
	Standard deviation =1.202	Standard deviation=1.356		
3. Accrual-based accounting system is able to serve the basic financial information needs to achieve cost recovery.	Mean=3.11	Mean=2.37	2.311	0.134
	Standard deviation =1.364	Standard deviation=1.358		
4. The adoption of accrual accounting discloses the economic and financial results for the measurement of cash-flow position.	Mean=3.11	Mean=2.88	0.223	0.639
	Standard deviation =1.453	Standard deviation=1.308		
5. The adoption of accrual accounting would entertain the ability to compare outputs among departments.	Mean=2.67	Mean=2.44	0.235	0.629
	Standard deviation =1.225	Standard deviation=1.290		

The results indicate that the respondents from the users group stated that “*the adoption of accrual accounting discloses the economic and financial results for the measurement of cash-flow position*” and „*accrual-based accounting system is able to serve the basic financial information needs to achieve cost recovery*” represents the most important benefits, with a mean of 3.11 (standard deviation=1.453), respectively 3.11(standard deviation=1.364). On the other hand, the non-users group had fairly modest views regarding all the above statements. T-test measure for two unrelated means were used to compare the respondents’ ratings and the difference between the means of the users and non-users group regarding the usefulness of the financial information provided for accrual accounting for decision making process. Table 4 provides evidence which supports hypothesis 4. The results reveal that benefit 3 and benefit 1 are highly significant (F-stat=2.311, P=0.134, respectively F-stat=1.851, P=1.179), indicating that the users group tended to rate the usefulness of accrual accounting than those in the non-users group, suggesting the existence of an experience effect.

Interview Results

The majority of the interviewees have agreed that the difficulty of recognising public higher education receipts is the major drawback of using cash accounting. According to some interviewees, cash accounting failed to recognise receipts, until cash is received, which has an adverse effect on planning and budgeting decisions. Also, the majority of the interviewees were found to believe that accrual accounting is more relevant to the public higher education sector expenditures (Albeit reservations exist).

Many of the interviewees were concerned that the status quo of management and finance areas are generally not well prepared for the new financial management reform. General observations included the following: the financial responsibilities of managers were narrowly defined, leading to the provision of limited information. Little evidence was found of managers using available financial information for daily operations, strategic planning or performance management. Therefore, more training is required to assist managers to understand how to use accrual-based information to support the cost-effective achievement of outcomes. The interviewees outlined the importance of understanding by the managers and accountants of the information produced by accrual accounting for better decision-making. The use of accrual accounting information for managerial purposes has been considered to be a benefit in other countries, as well (see e.g., Likierman, 2002). The use of accrual accounting information for management purposes has been criticised, as well. For example, Robinson (1998) argues that accrual accounting in public sector organisations may have a more important role to play 'as a measure of the fiscal stance of the public sector, particularly, with respect to intergenerational equity' (p. 35–36).

Accounting needs to fit the particular circumstances of the country in which it is employed such that the social, economic and political environment present in the country should be reflected by accounting system adopted. The type of information required by the economic system and the information generated by the accounting system should match. The interviewees express concern about the efforts and the costs needed by the elaboration of the budget according to the financial information provided by the accrual accounting. They also concerned about the fact that accrual budgeting requires strong financial management skills it requires from public sector managers.

Also, the accrual accounting operates a system of depreciation on fixed assets by changing the full cost of an asset over its useful life rather than in one year. Hence, fixed assets are no longer free goods after the year of acquisition. The most important benefit of accrual accounting is the fact that it operates a fixed assets depreciation system. The interviewees expressed their viewpoints regarding the utility of accrual in treatment of capital assets from the public sector. Also, they were concerned about the difficulty of the capital assets valuation, how costly this process is and whether the public higher education institutions would reap all the benefits from it with the absence of market prices for such assets (parks, heritage assets).

One interesting observation is the negative association which apparently exist between the implementation of accrual accounting and the costs and benefits of such implementation, especially with regard to using different valuation bases and depreciation methods in the treatment of public higher education capital assets. Interviewees emphasised the relationship between the huge amount of resources needed (human and financial) to perform the valuation process of all capital assets held by public higher education departments on the one hand and the usefulness of such information for decision-making process.

The importance and the relevance of the current valuation of assets must be judged in terms of time, legal bases and efficiency. Public higher education institutions need information about assets, liabilities and depreciation of fixed assets to be used for management of resource and future planning. Accrual accounting represents a step forward regardless of the cost incurred; the benefits derived from such a system especially in the long run would for sure exceed the cost incurred.

The implementation of the accrual accounting is not a one-year project. It was always going to take five to ten years to fully implement the change. Changing the system does not automatically change the way people think and manage.

CONCLUSIONS

The public accounting reform aims at transferring the private sector accounting and managerial principles and techniques to the public sector. The above assertion is confirmed also in the Romanian public higher education sector.

The higher education institutions suffered changes imposed by a lot of transformations from the economic-social point of view. On one hand the universities were affected by the increase of financial and decisional decentralization process through which they received a relative autonomy developing a lot of complementary activities like university corporations with diverse private entities, professional consulting, etc. On the other hand, they were affected by the modification of the higher education institutions financing system through the weight increase of other extra budgetary funding sources which approach the higher education institutions activity more and more by the private entities.

On the basis of these changes in the higher education institutions and in the whole public sector, Romania had to implement a new public accounting system able to face a more realistic reflection of the elements generated by all these transformations. The transition poses more questions so, if the total renunciation to the cash accounting and budgeting seems simpler, the experience of other countries shows that the step by step adoption of the accrual techniques is more convenient because the risk of the whole public financial system destabilisation is not too big. Therefore, the paper examined the outcome of a survey and interviews regarding the perception of the specialized staff working in accounting and finance departments of Romanian public higher education institutions.

The survey revealed that the majority (65.4%) of the respondents prefer to use accrual accounting, while 34.6 % of the respondents would preferred to continue using cash accounting. A comparison of the results between the respondents who employed accrual accounting before its implementation in the public higher education sector and those who do not employed, reveals that:

- There was a considerable preference for accrual accounting in both groups, however, a significantly larger percentage (83%) of subjects from the sample units that employ accrual accounting were found to hold a stronger opinion for preferring accrual accounting over cash accounting;
- There is a clear significant difference of opinion between users and non-users regarding the reasons for preferring accrual accounting;
- Regardless of the preference for using accrual accounting amongst the majority of respondents from both groups, a number of difficulties have been identified in the implementation of accrual accounting within the Romanian public higher education sector.

Those accountants and finance officers who employed accrual-based accounting system during their professional career in private sector are more positive to the application of accrual accounting than those who are working in entities which employ cash accounting, which is consistent with prior studies (Lapsley, 1986; Puglisi, 1997).

The interviews indicate that the use of accrual accounting information may be lower than it otherwise would be, due to the fact that the budget system in Romania is still based upon a cash principle. This is consistent with the arguments put forward and the experiences and results presented in other papers and reports (Likierman, 2000; Hepworth, 2002; Christiaens and Vanhee, 2003). The separate introduction of accrual accounting while retaining a cash-based budgeting system creates many matching problems. Furthermore, IFAC PSC argues that one purpose of accrual accounting is to enable users to 'assess the entity's compliance with accrual budgets'. (IFAC PSC, 2000, p.59). That kind of assessment is of course not possible if the budget is based upon a cash principle.

However, the time lag between the introduction of accrual accounting and accrual budgeting in public sector organisations is not a Romanian phenomenon alone. On the contrary, several studies show that it is a common pattern in most countries which have introduced accrual accounting (OECD, 2000; and Lüder and Jones, 2003). In some countries, accrual accounting and cash based budgeting is considered to be a permanent solution, while in other countries accrual budgeting is viewed as a natural second step after the introduction of accrual accounting.

A comparison between the findings of the survey and those of the interviewees has revealed that public higher education accountants and finance officers share the preference of accounting and finance head departments to use accrual accounting. It is evident that implementation difficulties are perceived as barriers to the feasibility of its successful implementation within the Romanian public higher education sector.

However, long-term benefits would exceed the costs incurred in implementing the system.

The human element implication in the changing policy is very important for the success of any reform because the people are affected by such changes.

This conclusion goes parallel with those drawn from the experiences of other countries in the implementation of the accounting reform. For example, the UK experience revealed that not all private sector accounting techniques are suitable for use in the public sector and that it is dangerous to assume the superiority of private sector methods over public sector ones without critical assessment (Hodges and Mellet, 2003).

It must be emphasized that „accruals” is not a „magic solution” for improving the performance of the public sector. It is simply a tool for getting better information about the true cost of public sector institutions. It needs to be used effectively and in tandem with a number of other management reforms in order to achieve the desired improvement in decision-making in the public sector.

REFERENCES

- Arnaboldi, M and G. Azzone (2004), '*Benchmarking University Activities: An Italian Case Study*', Financial Accountability & Management, Vol. 20, No. 2, Blackwell Publishing Ltd, Oxford, United Kingdom, p. 205-220.
- Athukorala, S.L. and B. Reid (2003), '*Accrual Budgeting and Accounting in Government and its Relevance for Developing Member Countries*', Asian Development Bank, Regional and Sustainable Development Department, p. 22, available at: http://www.adb.org/Documents/Reports/Accrual_Budgeting_Accounting/Accrual_Budgeting_Accounting.pdf
- Barton, A.D. (1999), '*Public and Private Sector Accounting: The Non-Identical Twins*', Australian Accounting Review, Vol. 9, No. 2.
- Bromwich, M. and I. Lapsley (1997), '*Decentralisation and Management Accounting in Central Government: Recycling Old Ideas*', Financial Accountability & Management, Vol. 13, No. 2, p. 181–201.
- Brusca, I. and V. Condor (2002), '*Towards the Harmonisation of Local Accounting Systems in the International Context*', Financial Accountability & Management, Vol. 18 No. 2, p. 139.
- Chan, J.R. Jones and K. Lüder (1996), '*Modelling Governmental Accounting Innovations: An Assessment and Future Research Directions*', Research in Governmental and Non-Profit Accounting, Vol. 9, p. 1-19.
- Coy, D. and M. Pratt (1998), '*An Insight into Accountability and Politics in Universities: A Case Study*', Accounting, Auditing & Accountability Journal, Vol. 11, No. 5, MCB University Press, p. 540-561.
- Christiaens, J. and Els de Wielemaker (2003), '*Financial Accounting Reform in Flemish Universities: An Empirical Study of the Implementation*', Financial Accountability & Management, Vol. 19, No. 2, Blackwell Publishing Ltd, Oxford, United Kingdom, p. 185-204.

- Graham, A., (2005), 'Accrual Budgeting and Accounting', Financial Management in Canada's Public Sector, p. 3, available at: www.post.queensu.ca/grahma/SPS82704/SECTIONACCRUALBUDGETINGANDACCOUNTING.doc.
- Gray, R. and J. Haslam (1990), 'External Reporting by UK Universities: An Exploratory Study of Accounting Change', Financial Accountability & Management, Vol. 6, No. 1, Blackwell Publishing Ltd, Oxford, United Kingdom, p. 51-72.
- Guthrie, J. (1990), 'Current Developments in Public Sector Accounting and Auditing Standard Setting in Australia'. In J.L. Parker and J. Guthrie, ed. The Public Sector: Contemporary Reading in Accounting and Auditing. Sydney: Harcourt Brace Jovanovich.
- Guthrie, J. (1998), 'Application of Accrual Accounting in the Australian Public Sector – Rhetoric of Reality?', Financial Accountability & Management, Vol. 14, No. 1, p. 1–19.
- Hepworth, N. (2002), 'The European Experience of and Attitudes to the Development of International Accounting Standards', in Montesinos V. and J.M. Vela (eds.), Innovations in Governmental Accounting (Kluwer Academic Publishers, Dordrecht).
- Hodges R. and Mellet H. (2003), 'Reporting Public Sector Financial Results', Public Management Review, Vol. 14, No. 1.
- Hurduzeu M. and V. Morariu (2002), 'Ad-hoc Study no. B-4: Romanian Impact of the Accrual Accounting Introduction', Phare Project RO 9907-02-01: Impact Studies of Preadhering, Bucharest, p. 7, available at: <http://www.ier.ro/PAIS/PAIS1/RO/StudiuB-4.pdf>
- IFAC PSC (2000), 'Government Financial Reporting: Accounting Issues and Practices' (International Federation of Accountants, New York).
- IFAC PSC (2002), 'Handbook of International Public Sector Accounting Pronouncements' (2003 ed., International Federation of Accountants, New York).
- Jaba E. and A. Grama (2004), 'Statistical Analysis with SPSS in Windows', Polirom Publishing House, Bucharest, p. 223.
- Jones, R and M. Pendlebury (2000), 'Public Sector Accounting' (5th ed.) London: Pitman Publishing.
- Jones, S. And N. Puglisi (1997), 'The Relevance of AAS 29 to the Australian Public Sector: A Case for Doubt?' ABACUS, Vol. 33, No. 1, p. 1-18.
- Lapsley, I. (1986), 'Capital Assets Accounting in UK Non-Trading Organisations', Financial Accountability & Management, Vol. 2, p. 273-294.
- Likierman, A. (2000), 'Changes to Managerial Decision-taking in U.K. Central Government', Management Accounting Research, Vol. 11, pp. 253–61.
- Lüder, K. and R. Jones (2003), 'The Diffusion of Accrual Accounting and Budgeting in European Countries – A Cross-country Analysis', in K. Lüder and R. Jones (eds.), Reforming Governmental Accounting and Budgeting in Europe (Fachverlag Moderne Wirtschafts, Frankfurt am Main).
- Mellet, H. (1997), 'The Role of Resource Accounting in the UK Government's Quest for Better Accounting', Accounting and Business Research, Vol. 27, No. 2, p. 157-168.
- Monsen, N. (2002), 'The Case for Cameral Accounting', Financial Accountability & Management, Vol. 18, No. 1, p. 39–72.
- MPF (2005), Disposition of Ministry of Public Finance (MPF) no. 1917/2005 - Methodological standards regarding the organisation and accounting guidance of the

public entities, of the chart of accounts and of the application instructions (O.M. no. 1.186/29.12.2005).

OECD (2000), '*Accrual Accounting and Budgeting Practice in Member Countries – Overview*', Paper presented at the International Accrual Accounting and Budgeting Symposium in Paris (OECD Public Sector Committee, Paris).

OECD (2002), '*Models of Public Budgeting and Accounting Reform*', OECD Journal on Budgeting, Volume 2, Supplement 1.

Pallot, J. (1990), '*The Nature of Public Assets: A Response to Mautz*', Accounting Horizons, Vol. 4, No. 2, p. 79-85.

Pallot, J. (1992), '*Elements of a Theoretical Framework for Public Sector Accounting*', Auditing & Accountability Journal, Vol. 1, p. 38-59.

Paulson, G. (2006), '*Accrual Accounting in the Public Sector: Experiences from the Central Government in Sweden*', Financial Accountability & Management, Vol. 22, No. 1, p. 47-62.

Pina, V. and L. Torres (2003), '*Reshaping Public Sector Accounting: An International Comparative View*', Canadian Journal of Administrative Sciences, Vol. 20, No. 4, p. 334.

Robinson, M. (1998), '*Accrual Accounting and the Efficiency of the Core Public Sector*', Financial Accountability & Management, Vol. 14, No. 1, p. 21–37.

Venieris G. and S. Cohen (2004), '*Accounting Reform in Greek Universities: a Slow Moving Process*', Financial Accountability & Management, Vol. 20, No. 2, p. 183-204.