

## ACCRUAL ACCOUNTING BETWEEN DYNAMISM AND PRUDENCE

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[mihaelat@seap.usv.ro](mailto:mihaelat@seap.usv.ro)**Abstract**

*Economic environment and the behavior of the economic entity is in continuous transformation. A determined value today may be outdated tomorrow. Consequently, maintaining a balance in the activity of the economic entity requires corrective actions. The purpose of this article is to highlight the connection between the accrual accounting, the dynamic accounting theory and the accounting prudence. Establishing the optimal timing for recognition of expenses, revenues and outcome, dynamic accounting theory gives managers quality information in order to make the best decisions. Adopting a prudent behavior is necessary in a reasonable measure in order to avoid serious repercussions caused by an exaggerated optimism.*

**Key words:** *dynamic accounting theory, the neutrality of the information, prudence, risk, uncertainty.*

**JEL Classification:** M21, M40, M41.

**I. INTRODUCTION**

The decision to analyze accrual accounting in conjunction with the dynamic accounting theory and the prudence principle has two main reasons. One of the reasons concerns identifying the optimal timing for the recognition of expenses, revenues and economic – financial result. A second reason concerns the controversies in international rules on prudence. In the General Conceptual Framework for Financial Reporting issued by the IASB in 2010, the concept of prudence has been removed. Removing this qualitative characteristic of the accounting information led to a major debate following which the IASB has reintroduced the concept of prudence in the general conceptual framework from January 2015. Prudence can be considered along with other concepts such as credibility and uncertainty in the implementation process of accounting standards. We plan to see to what extent prudence allows the integration of uncertainty in accounting assessing and whether it affects performance. By accounting prudence we do not understand an exaggerate conservatism but a way of protecting creditors and of attenuating a too optimistic vision of managers. The conceptual general framework describes, from January 2015, prudence as a precaution in carrying judgments in situations of uncertainty. Applying prudence should not affect the neutrality, relevance and transparency of the information provided.

In the article, we try to answer the following questions: Is there an optimum moment to recognize expenses, income and results? Accrual accounting allows forecasting in conditions of risk and uncertainty? Accounting prudence allows the integration of uncertainty in the financial statements? Dynamism and prudence must take into account a certain degree of caution in the accrual accounting?

**II. A REVIEW OF THE SPECIALIZED LITERATURE**

Managers want to have good information in order to diminish their uncertainty and to guide them in making the best decisions. The information provided by accounting is based on principles and conventions validated through their use in the economic practice. The content of accounting conventions and principles evolved over time and their role depends on the users demands regarding accounting information.

In a study published in 2007, authors Jack O. Hall și Richard Aldridge (Hall and Aldridge, 2007) emphasize that changes in accounting are inevitable and determine the main reasons that impose them. In a study made on 15 corporations from European countries between 1997 - 2011 and published in May 2014, the authors (Young and Zeng, 2014) show a significant decrease of errors in the accounting evaluation and estimation as a result of the international convergence in financial reporting.

Observing that in the specialized literature there is a debate regarding the static accounting theory and the dynamic accounting theory, we ask ourselves: Which of the two accounting theories provides managers the information that allows them to reduce uncertainty?

A safe response is difficult to find because both theories have progressively evolved over the past two centuries. The accuracy of the accounting evaluations is supported by the static accounting theory and the estimations uncertainty is specific for the dynamic accounting theory. (Săcărin, 2007) Even since the second half of the nineteenth century, the market value assimilated to the fair value formed the basis of the static accounting theory. (Richard, 2005) The followers of this theory claimed that the company is a fragile entity and, therefore, it can be subjected to a sudden disappearance at any time. In fact, they believed that in accounting assessing it must be taken into account, at any time, the possible bankruptcy of the company and, consequently, the assessment

must be made as if the company would be liquidated. This liquidation requires the assessment of each asset at fair value, recording in accounting both potential gains and losses.

Dynamic accounting has as a main purpose the measurement of the company effectiveness (Jianu, 2007, p. 52), represented mainly by the return on equity. The return on equity is given by the ratio of net income accruing to investors and the equity that belongs to them. Although in the Explanatory Dictionary of the Romanian Language "efficiency" and "effectiveness" are presented as synonymous in economic practice the two terms have different meanings. Effectiveness issues target achieving the aimed objectives and the obtained results. If we speak about effectiveness we encounter an accentuation of the purpose dimensions and the efforts negligence, but when it comes to efficiency the situation is reversed. While it is important to quantify the achieved objectives, there should not be neglected aspects regarding the engaged expenses in order to achieve objectives. While the effectiveness reflects the degree of fulfillment of the external environment expectations, efficiency is measured by the degree of fulfillment of the internal environment expectation of the company. (Bușe, 2005)

Within the dynamic accounting theory there can be differentiated two approaches (Jianu, 2007, p.52): an economic approach and a pragmatic approach. The economic approach means recognizing the result in the phase of production and assessment of production stocks in progress and finished goods at a sale price. The pragmatic approach suggests the recognition of the result when cashing becomes certain, at most likely.

Accounting prudence is a common theme in the specialized literature. The diversity of expressed opinions suggests that prudence is a controversial principle. In the article "The role of accounting principles in the evaluation process" (Gușe, 2011), the author Gina Raluca Gușe provides a synthesis of the benefits of information and criticism related to the prudence principle. Out of these we stop at study published in the series of articles devoted to the prudence principle by the European Accounting Review (Beja and Weisis, 2006). The mentioned study is based on the idea that if two estimates of the value to be collected or paid in the future are likely, prudence dictates using the least optimistic one. Criticism on the prudence principle have has a main argument the possibility of creating occult reserves through deliberate understatement of assets and income or by the overstatement of revenues or expenses.

Over time, many accounting professionals were concerned with identifying answers to the following questions: "What would be the dose of caution and the dose of optimism which should govern the behavior of entities in the preparation and reporting of financial information? What would be the solution to maintain a balance between prudence and optimism in order for the financial report to be realistic, so that it does not affect its users' interests?" (Mihalache, 2015)

Given the multitude of factors that can influence the activity of an entity it could not be identify a general answer to these questions, but opinions are divided between those who support the need for prudence in accounting and those that focus on optimism, considering the prudence concept conservative and easily to be manipulated. Advocates of prudence consider that "investigating the effects of excessive mistrust shown by managers is important because "excessive optimism can lead to the destruction of value, its early identification and necessary action being appropriate". (Ahmed and Duellman, 2012 )

Opponents of prudence say that incorporating a degree of conservatism in the financial statements leads to errors affecting the neutrality and credibility of accounting information, which is why prudence should be applied in accounting. (Karahana, 2013)

The principle of prudence has two different manifestations, known in the specialized literature as (Beaver and Ryan, 2005): unconditional prudence and conditional prudence. Unconditional prudence refers to aspects of the accounting process that occur at the same time with assets and liabilities and that determine the retention of the carrying amounts for the financial reporting that are lower than the market values. The recognition in the income statement of the internally generated intangible assets and the accelerated depreciation of tangible assets are two examples of unconditional prudential behavior.

Conditional prudence refers to differentiated behavior depending on the circumstances. In tight economic conditions, assets are undervalued, but in favorable economic conditions, assets are not overvalued. In this way the managers tendency to perform optimistic assessments under adverse conditions is counteracted. Stock assessment at the lower cost and net achievable value is an example of conditioning prudential behavior. Another example is accounting for impairment losses on tangible and intangible assets.

### **III. ACCRUAL ACCOUNTING – A CONSEQUENCE OF THE DYNAMICAL THEORY**

In the static theory the moment of achieving results is not important because all assets are obtained fictitious. In the dynamic theory, revenues from a certain management period are not limited to sales of finished products and goods, it also includes potential revenue from stored and in progress production. Consumption of engaged capital is called expenses depreciation and takes the form of amortization, consumed raw materials, received services and staff remuneration. Advocates of the dynamical theory asked themselves questions regarding the time when to recognized expenses, revenues and results: at the time of ordering, production, delivery and billing or collection. In order to find the best option we should consider connecting the revenues and expenses with the accrual accounting principle. To highlight the moment of recognition of expenses, revenues and result, we consider the following *example*:

An economic entity in September year N buys raw materials at a purchase cost of 600 m.u. (measurement units). In October the economic entity pays the supplier the equivalent value of the raw materials purchased. In November year N, the entity gives to consumption raw materials and obtains finished products at a cost of production of 1000 u.m. . In December of year N, the economic entity sells finished products to a sales price of 1200 m.u. and cashing the value of sold products is carried out in January year N + 1. In this analysis we do not take into account the tax components (VAT, income tax). We intend to analyze the result in three different ways of profit recognition: at the time of delivery according to accrual accounting, at the time of production and when cashing the claim.

a) Recognition of profit on delivering the finished products

**Table no. 1: Recognition of revenues, expenses and result according to accrual accounting**

	September N	October N	November N	December N	January N+1	Total
Revenues	-	-	1 000	1 200	-	2 200
Expenses	-	-	1 000	1 000	-	2 000
Result	-	-	0	200	-	200

In September year N they do not show any expenditure or revenue because the company only buys raw materials. The economic entity does not get richer because it registers a liability equal to the amount of incoming raw material in stock and the equity will not change. So the purchase of raw materials has no immediate effect on the result. The payment of the provider in October does not involve any expense or income. Equity does not change because the debt reduction involves diminishing the financial resources from the entity's bank account.

Knowing that, from an accounting perspective, the raw material consumption requires the accounting of expenditure with raw material, we are tempted to say that the raw material influences the result at the time of consumption, but instead the raw material place is taken by the production in progress or finished products. The value of raw material costs, salaries and depreciation recorded in November is offset by the revenue related to stocks of products costs, an income recorded at the production cost level of production at the time of obtaining the finished products. Cashing the value of sold finished products takes place in January and does not involve income accounting because they increase the money availabilities in exchange for short-term receivables.

b) Replacing the cost with the sale price at the end of production

**Table no. 2: Profit recognition at the end of production**

	September N	October N	November N	December N	January N+1	Total
Revenues	-	-	1 200	1 200	-	2 400
Expenses	-	-	1 000	1 200	-	2 200
Result	-	-	200	0	-	200

The situation shown in Table no. 2 requires recording in November, finished products obtained from the sale price and the related income at the manufacturing cost by substituting the production cost with the sales price. In the same month, are recorded expenses related to obtaining finished products.

In December, the receivable and income from the finished goods sale are stated at a retail price.

c) Replacing the cost with the selling price at the time of cashing the claim

**Table no. 3: Recognizing profit when receiving the claim in sale**

	September N	October N	November N	December N	January N+1	Total
Revenues	-	-	-	-	1 200	1 200
Expenses	-	-	-	-	1 000	1 000
Result	-	-	-	-	200	200

The situation shown in Table no. 3 involves recording in November consumption (raw materials, wages, depreciation) without recognizing, in accounting terms, expenditure. These inputs increase production in progress, which, upon completion, are recorded as finished products.

The sale of finished products in December implies the recognition of an income in advance at the selling price level and an upfront expenditure at a low production cost.

In January, upon receipt of the value of sold finished products, in accounting there is recognized the current income from the sale at the selling price and current related to sold products. So as a result of accrual accounting principle, income and expenses, related to a current period of income and expenses recorded in the account of a future period, are delimited.

Analyzing the three cases we see that the result at the end of an exploitation cycle (purchase - production - sales) is the same regardless of when the profit is recognized. Even if the results for each management period is different, the performance of the five management periods is the same regardless the approached method.

The analysis of the three options for recognizing expenses, income and results leads to the conclusion that the existence of the dynamic accounting theory generated the accrual accounting. Establishing the optimal timing for the recognition of expenses, revenues and result, the dynamic accounting theory gives managers quality information to make the best decisions.

#### IV. PRUDENCE AND UNCERTAINTY IN THE ACCOUNTING EVALUATION

Prudence accounting is dependent on the uncertainties accompanying the measurement process of values at which assets and liabilities will be recorded in the balance sheet and by the accrual accounting actions, income and expenses in the income statement. The asymmetry specific for the prudential behavior involves a faster recognition of bad news than good news in accounting. Investors and creditors, as users of financial statements, prefer a pessimism generated by probable loss over an optimism generated by uncertain earnings.

The recognition of expenses and revenues upon the finished products delivery is specific for the accrual accounting and corresponds to an average prudence in accounting. If it would be chosen the maximum prudence expenditure and revenue would be recognized upon receipt of the value of sold goods and services, meaning only when there is a certainty regarding the cash flow. If you would opt for extreme prudence, the replacement of the cost with the selling price and the recognition of income and expenses would be achieved at the end of production.

According to the principle of prudence introduced by Directive 2013/34 / EU Article 6, paragraph c, in the income statement can be included only the profit achieved at the balance sheet date. Revenues will be registered only after there is no longer an uncertainty regarding their achievement. For example, in retail the income from selling goods is recognized only when the merchandise is sold, although the sale price is known in advance. As a result of past events may result assets and income that can not be measured reliably and, although the assessment is credible, access to future economic benefits depends on a future event related to the balance sheet date and that can not be controlled by the entity. These assets and income can not be included in the balance sheet and in the income statement, but will be subjected to the presentation in the financial statements notes. For costs, there is an obligation of taking into account all losses even if they are likely. So, costs registration is not subjected to their actual achievement.

The prudence principle requires recognition of liabilities arising in the current financial year or in the previous year even though their certainty appears only between the balance sheet date and the date when it was drawn up. Simultaneously with the debt recognition it will be recognized the related expense. As a consequence of the principle of prudence in accounting are recognized impairments whether the financial year result is profit and loss.

While the risk is associated with a possible future situation to be achieved, uncertainty characterizes also a future situation but unlikely to be achieved. In the economic practice there are situations in which managers must make decisions without knowing all possible events because these refer to future achievements and not past or present ones. In order to get to the errors, information must be reliable and complete. The second half of the XXI century was characterized as “drainage of accounting information towards making decisions because the users field was extended more and more, taking into consideration the growth of the responsibility and the company’s role in society” (Berheci, 2010).

Provisions are not uncertain liabilities because obligations underlying it meet the criteria for liability recognition. The provisions term is uncertain because it depends on future events that escape the managers control. Besides the term uncertainty may relate to the amount of the provision. The obligation underlying a provision may have a known value, but may also have a value resulting from a process of estimation in condition of uncertainty.

Accounting estimation made under uncertainty can be found in the initial and subsequent recognition of provisions whose due term will occur in a period consisting of several financial periods and for which the value-time effect of money is significant. To illustrate the estimation of provisions we consider the following *example*:

An economic entity purchases in the beginning of year N a technological equipment at an acquisition price of 24 000 000 m.u.. Managers estimate a service life of 8 years. Managers estimate for the equipment a disposable cost, in end of the service life, of 200 000 m.u.. In order to get financing from a bank, the entity should bear an interest rate of 4%.

The question is: When must the retribution be recognized and at what value?

In the present situation, the retribution must be recognized when the technological equipment was purchased because the retribution is perceived as a debt due to 8 years, a debt that involves resources exit when the technological equipment is disposed. This debt is credible estimated at 200 000 m.u.. We can not recognize the retribution when the equipment is purchased, at 200 000 m.u. because this value involves costs that the entity will sustain in 8 years.

For the initial recognition of the retribution it has to be taken into consideration the value-time money effect. In consequence, when the equipment was purchased, the retribution is evaluated at the current value of estimated costs determined by the moment when the asset becomes disposable.

The retribution’s current value at the beginning of year N =  $200\,000 / (1 + 0,04)^8 = 146\,138,041$  m.u.

For one year to another, the debts value accounted as retribution will increase in the balance records by 4% compared to the last year’s value. So, on the 31.12.N+7, when the asset will become disposable, the debt’s estimated value will be 200 000 m.u.

To demonstrate that the prudence accounting principle allows uncertainty to integrate itself in the accounting assessment, we assume a situation where an entity about which we know the following information, at the end of financial year N: fixed assets 340 000 m.u., current assets 260 000 m.u., equity 350 000 m.u. and

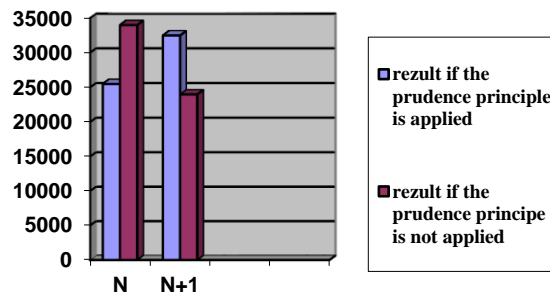
debts 250 000 m.u. . The entity has been sued by one of its customers that is claiming damages of 10 000 m.u.. Lawyers estimate that the company has 15% chance of winning. To reflect the influence of the prudence principle on the exercise outcome, we consider that both in the financial year N and in the financial year N + 1 the entity obtained a profit of 34 000 m.u. excluding expenses arising from losing the lawsuit and from the impact of recognition and derecognition of provision. Based on the presented data it is obvious that the entity does not have certain information to use to determine exactly the probable debts depreciation value.

At the end of year N, based on the available data, the entity estimates the debt after it was increased by 85% of the damage value:  $250\,000 + (10\,000 \times 85\%) = 258\,500$  m.u. At 31.12.N, the entity shall recognize a provision due to the likelihood of risk regarding losing the lawsuit, for a best estimation, amounting 8 500 m.u.. In the financial year N+1, the economic entity will operate derecognizing of provision and will pay damages amounting 10 000 m.u..

In Table no. 4 is systematized the data establishing the influence of the prudence principle on the financial performance, measured in this example by the financial year result.

**Table no. 4: The prudence principle and the financial year result**

Elements	Applying the prudence principle	Not applying the prudence principle
Result before provision recognition	34 000	34 000
Expenses related to provisions	(8 500)	-
The result of the financial year N	25 500	34 000
Result before derecognition of provision and recognition of expenses related to claims	34 000	34 000
Expenses generated by the loss of the lawsuit	(10 000)	(10 000)
Income from provisions	8 500	-
The result of the financial year N + 1	32 500	24 000
The result of the financial year N and N + 1	58 000	58 000



**Chart no.1 Evolution of the financial year result correlated with applying or not applying prudence**

From Chart no. 1 we observe that if the answer to the question "it is applied the prudence principle?" is yes, the profit for the year N is lower than the one for the year N + 1. If the prudence principle is not applied, the situation is reversed. This analysis shows that accounting prudence takes into account risk and uncertainty, preferring a lower profit in the present than a higher decrease in profit in the future.

Following the prudence principle led to a decrease by the estimated amount of the provision for litigation of the financial year N result. The financial year N+1 result was negatively affected by the difference between the expense caused by losing the lawsuit and the income generated by the release of the allowance. The difference in amount of 1500 m.u. is due to uncertainty in estimating the provision. If the company does not apply the prudence principle, it is observed that it is obtained a higher profit in the financial year N, followed by a smaller profit in the financial year N + 1. The entity performance is not affected because the cumulative result of exercise N and N + 1 is the same, regardless of whether the prudence principle is used or not.

**V. CONCLUSION**

Managers have to anticipate the moment when the balance between effort and effect is likely to be exceeded. They must quantify the effort made to reach the objective. All economic efforts can be expressed pecuniary which would involve accrual accounting. It provides information, on which managers can assess past, present and future events, can confirm or correct previous estimations.

By comparing the static accounting theory with the dynamic accounting theory, I noticed that the moment of the result achievement is interesting only for the dynamic accounting theory. In practice, by applying the accrual accounting and the prudence principle, profit is recognized upon delivery which coincides with the

engagement claim. The same logic applies to the expenses recognition when engaging debt and not when the cash flow occurs.

Even if accounting prudence is a controversial principle, all entities include in the financial reports a dose of prudence. Prudence is important to ensure the neutrality of the information presented in the financial statements because it can be considered a precautionary measure in the accounting judgments exercise in situations of uncertainty.

Accrual accounting allows forecasting in conditions of risk and uncertainty. Respecting the prudence principle in order to integrate uncertainty in the accounting assessment aims to avoid transfer risk in future periods of present uncertainties likely to strike the company.

## VI. REFERENCES

1. Ahmed, A, Duellman, S. (2012) *Managerial Overconfidence and Accounting Conservatism*, Journal of Accounting Research, vol. 51, nr. 1, pp. 1-30
2. Beaver, W. H., Ryan, S, G. (2005) *Conditional and Unconditional Conservatism: Concepts and Modelling*, Review of Accounting Studies, vol. 10, nr. 2-3, pp. 269 - 309
3. Beja, A., Weiss, D. (2006) *Some Informational Aspects of Conservatorism*, European Accounting Review, vol. 15, nr.4, pp. 585-604
4. Berheci, M. (2010) *Interdependența componentelor situațiilor financiare, finalitățile contabilității și decizia financiară*, Revista Contabilitatea, expertiza și Auditul Afacerilor nr. 11/2010, Editura CECCAR, București, 2010, p.12 - 15
5. Bușe, J. (2005) *Analiza economico-financiară*, Editura Economică, București, pp. 100 – 140
6. Gușe, G. R. (2011) *Rolul principiilor contabile în procesul de evaluare. Principiul prudenței*, Revista Contabilitatea, expertiza și auditul afacerilor, nr. 12, pp. 7-11
7. Hall, J.O., Aldridge, R. (2007) *Changes in Accounting for Changes*”, Journal of Accountancy, nr. 2, <http://www.journalofaccountancy.com/Issues/2007/Feb/ChangesInAccountingForChanges.htm> (accessed April, 10, 2016)
8. Horomnea, E. (2008) *Fundamentele științifice ale contabilității. Doctrină. Concepte. Lexicon*, Editura Tipo Moldova, Iași, pp. 85 – 106
9. Istrate, C. (2009) *Contabilitatea nu-i doar pentru contabili!*, Editura Universul Juridic, București, pp. 126 - 145
10. Jianu, I. (2007) *Evaluarea, prezentarea și analiza performanței întreprinderii*, Editura CECCAR, pp. 48 – 122
11. Karahan, Gökmen, M (2013) *Accounting Conservatism: A Literature Review*, Muhasebe ve Vergi Uygulamaları Dergisi (MUVU) / Journal of Accounting and Taxation Studies (JATS), vol. 6, nr. 2, pp. 1 – 21
12. Mihalache, S. (2015) *Conservatorism și optimism în contabilitate: prudența versus valoare justă*, Revista Contabilitatea, expertiza și auditul afacerilor, nr. 10/2015, pp. 11 – 21
13. Richard, Jacques (2009) *Fair value: Towards a third stage of the French accounting capitalism*, Cahier de recherche no. 2005-09, CEREG, Université Paris Dauphine
14. Săcărin, M. (2007) *Valoarea justă: istoric, adoptare, valențe și critici*, Revista Contabilitatea, Expertiza și Auditul Afacerilor nr. 3/2007, Editura CECCAR, București, pp. 15 – 21
15. Young Steven, Zeng Yachang , *Accounting Comparability and the Accuracy of Peer – Based Valuation Models*, May, 2014, <http://ssrn.com/abstract=2206190> (accessed April, 10, 2016)
16. xxx Directiva 2013/34/UE a Parlamentului European și a Consiliului din 26 iunie 2013 privind situațiile financiare anuale, situațiile financiare consolidate și rapoartele conexe ale anumitor tipuri de întreprinderi, publicată în Jurnalul Oficial L 182/29.06.2013
17. xxx Ghid practic de aplicare a reglementărilor contabile privind situațiile financiare anuale individuale și situațiile financiare anuale consolidate, Editura CECCAR, București, 2015, pp. 59 - 171
18. xxx IASB (2011), *Standardele Internaționale de Raportare financiară. Norme oficiale emise la 1 ianuarie 2011*, Traducere, Editura CECCAR, București
19. xxx OMFP 1802/ 2014 pentru aprobarea Reglementărilor contabile privind situațiile financiare anuale individuale și situațiile financiare consolidate, publicat în Monitorul Oficial nr. 963/30.12.2014