ASSESSMENT OF INFLUENCE INFLATION STOCKS

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Abstract

Inflation, one of the most complex and controversial issues of economy, was in some countries and periods what put in danger the development and progress of the economy. Not negligible at all when it comes to its influence upon the financial position and the economic entities high standards, inflation is a problem for accounting. A research regarding inflation influences on accounting involves an analysis of the negative and positive effects of infl ation on the economic items evaluation. In this context, it must be highlighted the limits of using the historical costs and the advantages of using the fair values for evaluation as basis for evaluation. Regarding the property elements, stocks are those that fallow fix assets in term of degree of liquidity. In practice, we often encounter situations when, from a period to another, sensitive growth of stocks prices are registered with considerable influence in terms of resumption of production and future production costs. In the paper it is outlined the inflation's impact upon the stock evaluation in two different moments: when stocks exit administration and when the financial year closes. The comparative study regarding application the accounting methods a dapted to stock inflation highlights both the advantages and disadvantages of each method. The assessment model of inflation influence on stocks presented in the paper it is being analyzed in conjunction with the stocks speed rotation.

Key words: inflation, evaluation, stocks, prices, stocks speed rotation.

JEL Classification: M41

INTRODUCTION

Inflation is a growing, sustainable and general ised process regarding economy prices in conditions of declining the purchasing strength of monetary unit. The p aper purpose is to establish the inflation influence on stock assessment and the comparative analysis of stocks inflation adjustments methods.

The reason for choosing stocks as analysis object that derives from the need to modernise stocks accounting. We must have in mind the fact that the feat improvement of a company involves operational and as accurate as it can be measurement of the efforts and effects, the efficient use of the company's available resources and also the identification of the ways to re duce consumption, under which stocks occupies a significant position.

Quantifying the influence of inflation on stock assessment involves, first of all, knowledge of the inflationary phenomenon, of the factors that affect it directly, the forms of acting and its effects, and secondly, the possession of evaluation tools used to evaluate the issues presented above.

MAIN FEATURES OF INFLATION

Inflation is an economical - financial process which has as effect the national monetary purchasing power erosion in time. It is a consequence of the persistent price growth in economy and of the decreasing power of monetary purchasing. Inflation is a remarkable tranquilizer which turns every thing in pink. If appearance are being taken into account, the beneficiary's margin increases, the capital rotation increases due to the growth of the turnover and the balance sheet grows at a lower rate than inflation, and the capital efficiency (which is equal to the multiplied margin by capital rotation) increases as well. But t his tranquilizer is dangerous because it affects the self enterprise ability.

The market functioning mechanism and the inflationist causes are the main criteria used to classify inflation (ugui, 2000). The functioning mechanism of the market can cause on open inflation and a restricted one. An open inflation allows the economic system to function as a

mechanism where prices are steady. This type of inflation is directly connected to the goods, services and human resources scarcity in economy, so that specu lations can occur. Quell inflation is the result of government intervention in the growth of prices and wages. By this intervention, the request of goods and services is forced reduced.

Depending on inflationist causes there can exist cost inflation and demand inflation. Cost inflation is characterized by the fact that its release has as a prime cause the costs growth in condition of week competition. The growth of costs appears because of wages demands or because of certain situations of the raw material s price, the energy price etc. So, the price – wages spiral appears and the tendency to transfer the cost growth influence to the final consumer or business partner in downstream. The inflation by demand it is motivated by the existence of an excessive demand at the output of the national economy in condition of full employment of the human resources, which will cause higher prices. This finds its monetary coverage in the existence of a high amount of money in the economy which will lead to a increased dema nd of goods and services.

Inflation is expressed by the rate of inflation starting from the consumption price index. Analyzing the inflation evolution between 2002 and 2008, published in the National Bank of Romania report a significant decrease of the in flation rate is being outlined, from 25,03% in January 2002 to 6,7% in December 2008. During the analysed period, the strongest decrease of the inflation rate was registered in 2002 from 25,03% in January to 16,05% in December. The inflation rate decreasing continued also in the following years, reaching in 2003 to13,36% , at the end of 2004 8,27% and the end of 2005 5,88%. In 2006 inflation rate fell significantly reaching in December 2006 2,95%. The lowest inflation rate registered in Romania during the analysed period was 1,95% in May 2007. After this significant decreasing of inflation, an increasing evolution of the inflation rate was registered in the second half of 2007, reaching in December 2007 a rate of 7,52%. During 2008, after a slight increase of the inflation rate until it reached 9,54% in June, a decrease of the rate until 6,7% is being noticed in December 2008. The evolution of inflation rate in 2008 and its perspective for the following two years are presented in Table 1.

Table 1: The evolution of inflation rate in 2008 and inflation perspective for 2009 and 2010

Quarter (T)	Inflation rate per quarter	Annual inflation target	Upper limit of the variation range	Lower limit of the variation range	Upper limit of the uncertainty range	Lower limit of the uncertainty range
			annual variation			
2008 T1	8,38%				8,38%	8,38%
2008 T2	8,61%				8,61%	8,61%
2008 T3	7,30%				7,30%	7,30%
2008 T4	6,70%	3,80%	4,80%	2,80%	7,18%	6,22%
2009 T1	6,03%				7,15%	4,90%
2009 T2	5,46%				6,96%	3,97%
2009 T3	5,09%				6,86%	3,33%
2009 T4	4,50%	3,50%	4,50%	2,50%	6,47%	2,53%
2010 T1	3,92%				6,06%	1,78%
2010 T2	3,23%				5,51%	0,95%
2010 T3	2,83%				5,23%	0,42%

The source: http://www.bnr.ro/Ro/pubs/

For 2009 it is forecasted a decreasing of inflation on the basis of the decline of the oil price and effects of the world economic crises. But the Romanian currency depreciation and the increasing food prices might put in difficulty the maintenance of the inflation within 2,5% and 4,5% range forecasted by the National Bank of Romania.

Demarcation of the main characteristics of inflation helps us understand inflation as an economic phenomenon. Inflation is a growth of the price level having the following characteristics (Frisch, 1997): it is anticipated with the lack of precision; by the increase of costs leads to new price increases; does not increase the employment rate on the actual production; acts as a monetary phenomenon; it is measured by net prices.

At the macroeconomic level, inflation manifested an a long time horizon, discourage productive investments and orientates monetary resources towards current speculative stocks, outlines exchanges rates oscillations and has negative effects on the national economy.

At microeconomic level, economic entity correlates a high level of inflation with uncertainty and with risk in economy. Efficiency and profitability calculations are being put in difficulty, companies meeting difficulties in forecasting expenditures and incomes. The forecast of the profit at microeconomic level involver products and service price determination and the fabrication costs evaluation. In term of inflation, production costs values and selling prices values have a particularly importance for the whole activity of the company. New inflationist prices increases sensitively the managerial activity regarding taking decisions upon what to produce, how much to produce, how to produce and for whom to produce. In the dynamic appreciation of economic efficiency indicators for an economic entity, a major problem is the income and cost actualization as an inflation effect, problem that consists in bringing au scattered values from the past or the future depending on the price growth at the value of a single moment.

INFLATION - A PROBLEM FOR ACCOUNTING

Inflation is one of the most controversial and complex phenomenon in economics. Not negligible at all regarding its influence on the financial position and economic entities high standards, inflation represents a problem for accounting. If there is to be credible, accounting information must respond to criteria of relevance, namely: faithful reflection of reality, objective, the possibility to obtain information in due time, being able to be published with regularity, the possibility to be easily controlled, being exposed to comparison in time and space, being measurable in monetary units, being useful in establishing forecast and being close to the concept of cash flow.

In most European countries, "the financial reports written in conformity with generally accepted accounting practices are based on the assumption that the purchasing strength of the currency used remains basically stable" (Rodriguez, 1999). For years, in order to solve the problems regarding the distortion caused by changes in the purchasing strength of currency and the changes of assets and liabilities values that occur after the date of acquisition or their occurrence, have been analysed the following two accounting alternatives: accounting in a constant purchasing strength and accounting in a current value.

Accounting in constant purchasing strength is based on the use of historical cost as a basis for evaluation. In terms of inflation in order to get an accurate picture of the balance sheet and the profit and loss account it is necessary to retreat balance sheets depending on the general fluctuation level of prices. The use of the historical cost is based on three qualities: reliability, the capacity to be defined and the possibility to be checked out. The reliability of the historical cost is general by its capacity to generate accurate information on time. From the moment that it was established, the historical cost remains fixed as long as goods remain in the unit. The use of the historical cost as a basis for evaluation allows the gain of some objective and verifiable information.

On the basis of different opinions presented in literature (Mati , 2003; Tugui, 2000) the disadvantages of the historical cost used as a method of evaluation can be summarised like this :

- the impossibility to express value correctly in conditions of long t erm assets and in condition of hyperinflation;
- the underestimation of the various items in the balance sheet in term of inflation;
- the underestimation of the unit's financial position at the end of the financial year;
- distribution of fictitious dividends and retreatment economic units;
- reduction of investments and avoidance of sales on credit;
- distortion of the overall examination of the development of business unit and comparable financial results due to the lack of uniformity in assessing the value of property items;
- the impossibility to provide real information both to usual users and management team, finally the decision making process being affected on the long term.

The disadvantages presented determine a decrease of the credible information provide d by accounting in historical costs and options in favour of inflation accounting which might provide tool for evaluation and decrease of the currency depreciation impact on property elements.

By law, a set of rules was developed that governs the inflatio n consequence on the property element evaluation. In this regard, Directive 4 of European code sets rules for preparation and submission of review documents in conditions of inflation. The Committee for International Accounting, analyzing the inflation inf luences adopted the Accounting International Standard 29"The Financial Report in Hyperinflationary Economies" and AIS 21"The Currency Fluctuations Effects".

Accounting in current value involves the use of the fair value. In the last years , International Financial Reporting Standards introduced in practice the fair value evaluation, starting with the financial tools, investments in real estate and then agricultural products. The fair value is "the sum for which an asset can be traded or a debt settled bet ween stakeholders, in good will, in a transaction carried out on purpose."(Popa and others, 2007)

By adopting the basic assessment of fair value is corrected permanent costs of buying assets at their market value, achieving to a re -evaluation of the items recognized in the balance sheet. Using fair value affects the performance and improves comparability of accounting information. Unlike the historical cost which is orientated towards the past, the fair value is oriented toward the future, allowing financi al analysts to make a better estimate of future cash -flow streams.

Using the fair value based assessment can not be generalized for all the assets. Valuation at fair value "would be warranted only for items that are for sale, while those to be preserved s hould be valued at historical cost (Ionascu, 2003). The main disadvantage of the fair value is the risk of manipulation of results. In the absence of market values for some active managers of economic entities could use the internal models of assessment th at would influence the outcome of the economic - financial.

In Romania, after the adoption of the accounting regulations harmonized with European Directives and with International Financial Reporting Standards, we witness a mixed evaluation model, characterized by the use of fair value and historical cost. At the level of individual, for the sake of tax it is being used the historical cost as basis for the evaluation . These companies may prepare two sets of financial statements: financial statements on the historical cost financial statements and the fair value model. In the group companies categories, consolidated financial reports use with predilection the fair value as evaluation basis, taking in consideration that this financial reports are addressed ex clusively to shareholders and managers.

The increase of the inflationist phenomenon in more and more countries led to the development and use of some methods, techniques and procedures to adapt accounting to inflation. The impact of inflation on assets is different for every property element. In conformity to IAS 29"Financial Reporting in Hyperinflationary Economies" property elements have been divided in two categories: non – monetary elements and monetary elements. Non-monetary items include those economic structures that are not expressed at their nominal value at the date of closure of the financial year. In this category we state inventory, fixed assets and capital. Monetary items include those items which are denominated assets at their face value at the date of closure of the financial

year. In this group are part claims, debts and liquidity. Monetary items are not restated because they are already expressed in relation to the monetary unit current at the balance sheet date. Some non - monetary items are recorded at current values at the balance sheet date, such as the achievable value and net market value, so they are not restated. All other non -monetary assets and liabilities are restated.

Worldwide we separate delimit three areas in which the practical methods adapted to inflation. These areas are: Continental Europe, Anglo -Saxon countries and Latin America.

In Continental Europe, particularly in France, there is a harmonization of legislation on the accounting impact of inflation with the European directives. Most laws that were developed relate mainly to fiscal measures and less about improving the financial – accounting image.

In countries which practice the Anglo-Saxon accounting system (United Kingdom, USA, Canada, Australia and New Zealand) the law was orientated towards the adaptation of an accounting expressed in units of general purchasing strength at the closing date of the financial year (Tugui, 2000). In Great Britain was introduced a assessment system of current costs. In the U.S.A. was chosen firstly the presentation of financial accounting information in units of general purchasing strength. Subsequently was introduced the replacement costs evaluation.

In Latin America, following an increase of inflation after 1970, accounting for inflation has grown very much. In Argentina, Chile and Mexico the focus is on financial accounting information expressed in purchasing strength. In Peru and Uruguay the option was made for revaluation of assets and facilities tax on tax. In Brazil, economic units re-establishes monthly their stock registration value on the basis of a general index or a specific one of price growth.

Rules, directives and national and international standards and practice of accounting reveal a large number of accounting models adapted to inflation. Depending on the methods used literature (Malciu, 2000; Boussard, 1989) grouped these patterns into three categories namely: methods based on the conversion methods based on assessment and combined or mixed methods.

COMPARATIVE STUDY ON THE APPLICATION METHODS ADAPTED FOR INFLATION IN THE CASE OF STOCKS

In terms of applying International Financial Reporting Standards, the stocks must be valued at the lower value of cost and net value achievable. It is necessary to emphasize that the achievable net value must not be confused with the fair value. Achievable net value relates to the net amount that an entity expects to realize from the sale of stock during the normal conduct of business, while the fair value reflects the amount for which the stock could be exchanged in the market between buyers and sellers interested and informed. Achievable net value is a specific entity value, while the fair value is market value - externally. Achievable net value stock may not be equal to the fair value less the costs to sell.

In conformity with the precautionary principle, the increase of the constant value at the end of the financial year is not being taken into account and the decrease is being taken into account. Therefore, if the feasible net cost is high, stocks will be reflected in the balance sheet at their cost. In the case of stocks with a low speed of rotation and which are recorded at their cost of entry, the issue with their retreatment methods adapted to inflation.

Methods based on conversion involve, in the case of stocks, a retreatment of value based on variations of the general level of prices. Thus, the restated value of an item will store the value obtained by multiplying the final balance of the element with the average index of prices. The main advantages of this method of stock assessment are: objectively quantifying the influence of inflation; the possibility of making comparisons between the accounting information of different periods; changing the unit of assessment, without changing the evaluation and cost. The main disadvantages of this method refers to the increasing cost of information and the fact that inflation does not act uniformly in all economic entities which manage different types of stocks.

Methods based on assessment consist in the periodic reassessment of the elements that are stored in order to minimise negative effects of inflation. These methods are based on three concepts: economic use value, market value and replacement costs.

Methods of assessment based on the use value involves that for each stored element the future value of the cash flow to be adapted is determined. This method involves a big volume of calculations and this is why it is rarely used.

Method of assessment based on market value is also little used because it implies that the same good material can be in different places and in different economic circumstances. Initial balances of the accounts are restated in stock market values, and stocks of inputs during the period should be constantly updated to market value according to the most recent price.

Method based on replacement cost is the most frequently used to adapt the accounting to inflation. Also, this method has a wide spread influence of inflation accounting in the assessment of stocks at the closing of the financial year. Replacement cost is determined from the actual cost of acquisition of an asset a like that which was new or reassessed with a good with potential for serving an equivalent. Practicing the method based on replacement cost ensures a better appreciation of the quality of management stocks, the results could be determinant in current values. The only disadvantage of this method is that due to technical progress for the cost of an identical replacement is difficult to determine.

Combined methods adapted to inflation are based on the conversion methods, as well as assessment methods. The main objective of the combined methods is to evaluate the material assets at replacement costs. By applying these methods we obtain a better basis for comparison and a richer informational content of the summary document.

Analyzing the advantages and disadvantages of the three methods adapted to inflation, we can conclude that, the method based on the evaluation is the most appropriate in the case of stocks.

A MODEL OF ASSESMENT OF STOCKS INFLUENCES INFLATION

To demonstrate the need for a model of inflation influence on stock assessment we must establish firstly, which are these influences divided in stock categories. If we analyse the stocks from procurement, the main inflation influences are:
- the reducing of the quantites of raw materials or goods supplied as a result of depreciation of the purchasing of monetary unit;
- the formation of raw materials and consumable materials stocks unjustified;
- the immobilization of funds in goods stocks hardly salable.

In the case of stocks obtained from own production, we identify a number of influences out of which we mention:
- the overlapping sheets in the cost of values calculation expressed in different purchasing power;
- the introduction to the actual cost of the products of values expressed in purchasing power scratchy according to the duration of the manufacturing process.

The assessing of the influence of inflation on stock can be made knowing the number of rotations for stocks. The index of consumer prices or pricing increase is related to the specific number of rotations and it obtaines the index of a rotation. With this index the stock adjustment are determined.

To illustrate the influence of inflation on stock assessment, the following example is being considered:

A company has an initial stock of raw materials stock of 72 000 lei. The rotational speed (V) of raw materials stock is 15 days and the index of annual price increase (Igp) is 106%. At the end of the financial year, the final balance (Sf) of the stock of raw materials is 90 000 lei. Adjusting the stock to the inflation can be done through the following steps:
a) determining the number of rotations per month (No. rotations):

No. rotations = 30 days / V   (1)

No. rotations = 30 days / 15 days = 2 rotations / month

b) determining the average rate of inflation (Ri) on a rotating basis:

Annual Ri = (Igp – 1) x 100   (2)

Annual Ri = (1,06 – 1) x 100 = 6% per year

Ri monthly = Annual Ri / 12   (3)

Ri monthly = 6% / 12 = 0,5% per month

Ri per a rotation = Ri monthly / No. rotations   (4)

Ri per a rotation = 0,5 / 2 = 0,25% per rotation

c) determining the current value of the stock (Va):

Va = Sf + (Sf x Ri per a rotation)   (5)

Va = 90 000 + (90 000 x 0,25%) = 90 225 lei

d) the adjustment to inflation (Ai):

Ai = Va – Sf   (6)

Ai = 90 225 lei – 90 000 lei = 225 lei

The model of assessment of the influences of inflation on stocks presented in the above example must be examined in conjunction with the rotation speed of stocks. One can appreciate that in the case of stocks, the main problem is the possibility of renewal, in spite of increasing prices, as economic entity to bear a substantial loss. The accelerated the speed movement of stocks can be achieved in each phase of the operation. In the supply phase are necessary decisions and actions to ensure the elimination of the period of inactivity due to lack of supplies. In the production stage, the volume of inventories depends mostly on cost and manufacturing cycle. Any way to reduce them is a way to accelerate the stock speed of rotation. Reducing the period of settlement and the time of sorting and packing are the main ways to increase the speed movement of stocks during trading.

A significant influence of inflation influence on stocks occurs when assessing output from stocks fungible assets. International Accounting Standard IAS 2 "Stocks" allows the use of two evaluation methods: the weighted average cost method (CMP) and first in - first out method (FIFO). FIFO method allows assessment of consumption at a lower purchasing power in the past periods, and the final stock is valued at the latest. For these reasons, the FIFO method is recommended to be used in conditions of inflation because it allows a minimal influence in terms of value of stocks on the final inflation.

To preserve the same amount of physical stock, in case of price increases, firms must spend an additional amount of funding them. The use of additional funds should not be considered an investment but a benefit cost essential to avoid substantial losses.

CONCLUSIONS

The organization of accounting and stock management is increasingly based on knowledge of effective means and resources, on pursuit of operational movements of values, on scrutiny of the elements of structure and dynamics and especially on decipher trends in the evolution of phenomena that occurs the economic entity and its external environment. One of these phenomena is inflation. In the paper it is emphasized the idea that inflation is a problem for accounting because economic entities correlates of high inflation with uncertainty and risk in the economy, and the calculations of efficiency and profitability are difficult. The presentation of the main specific feature in constant purchasing power and current value accounting state the advantages and disadvantages of two different bases of evaluation: cost history, and fair value. Analyzing in comparison these two bases of assessment, we believe that fair value is more realistic, is oriented towards the future and allow financial analysts to make a better estimation of future cash-flow streams. However, the use of fair value can not be generalized for all the assets. Stocks should be measured at fair value between the lowest achievable cost and net value. It is necessary to emphasize that the achievable net value should not be confused with fair value.

The comparison study of methods adapted to inflation leads us to conclude that, regarding stocks the method based on assessment would find it's greatest opportunities for application, as

long as it ensures the productive capacity, helping to ensure business activities and growth nationally.

Analyzing the inflation influence on stock we concluded that, on leaving the assets it should be used first in - first out (FIFO) method of stock assessment because it allows final stock evaluation at the most recent values. The main way to reduce the negative effects of inflation on stocks is to increase their rotation speed. This can be done through the technical, organizational and financial practices applied at each stage of the operation.

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