

CONCEPTUAL AND THEORETICAL DIMENSIONS REGARDING THE RECOGNITION OF STOCKS IN PUBLIC INSTITUTIONS

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Abstract: *The process of normalization leads to harmonization and accounting convergence by formalizing and materializing the objectives, concepts, methods, rules and procedures for the production and use of accounting information. The purpose of this study is to analyze the evolution of Romanian accounting and accounting harmonization and convergence with IPSAS 12 "Inventories". Also, a comparison of the main features related to current national and international regulations, presenting similarities and differences related to the recognition of stocks to identify the set of converging or diverging elements.*

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JEL classification: M41

1. Elements of convergence in recognizing and accounting of inventories in Romania with IPSAS 12 "Inventories"

The need to harmonize accounting necessary to adopt a common language for financial reporting, goal that is achieved through the normalization accounts. It seeks possible, improving and reducing disparities between national practices and international accounting regulations aimed at developing principles and norms of a general, leading to comparable information content provided by the public sector entities' financial statements.

This paper is intended as an analysis of the convergence and harmonization of national accounting rules on the recognition and accounting for inventories with International Accounting Standard Public Sector IPSAS 12 "Inventories".

1.1. Conceptual dimensions of inventories recognized by public institutions

Recognition and measurement of inventories is addressed by accounting regulations, both in the Romanian accounting regulations as well as international level. Analyzing the two definitions in mind that there is a total convergence between the two rules as follows:

O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
Inventories are assets: - Held to be sold in the ordinary course of business; - Under production for sales in the ordinary course of business, or - In the form of raw materials and other supplies to be used in the current activity of the institution, in production or services.	Inventories are assets: - In the form of raw materials or materials that are consumed in the production process; - In the form of raw materials or materials that will be consumed or distributed services; - Held for sale or distribution in the ordinary course of business, or - In production for sale or distribution

The two definitions contain enumerations possible for this type of activity, but their nature is not sufficient to consider them stock. Also these definitions make no reference to criteria relating to amount and duration of use [Țenovici, C. 2013, p.148]. Thus, stocks that can be held in public institutions are:

O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
Raw materials; Consumables; Materials of such inventory items; Packaging materials and state reserve and mobilization; Other stocks needed for defense, public order and national	Ammunition; Raw material supplies; Maintenance equipment; Tangible parts other than those covered by IPSAS 17, "Property,

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O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
security and other specific stocks; Products blanks, finished products, scrap, waste and recoverable materials, production in progress; Goods seized or brought under the law, private property of the state or territorial administrative units; Stocks held by third parties; Livestock and poultry; Product; Packaging.	Plant and Equipment", Stocks; Stocks of currency not issued; Postal reserves held for sale; Production in progress, including materials for educational courses / training and customer service; Land / property held for sale.

To recognize an item inventories, check recognition criteria. According O.M.F.P. nr.1917/2005 and standard IPSAS 12 "Inventories", to be recognized a stock, it must meet the criteria for recognition of an asset. „ An asset "must represent a resource controlled by an entity as a result of past events and from which the entity expects to enter into future economic benefits or service potential" [IFAC, 2009, vol p 33], and the possibility of setting values can be measured reliably. The concept of probability refers to the degree of certainty or uncertainty of achieving future economic benefits associated with an item. In this context, assessing the degree is based on the information available when the financial statements.

The economic benefit is the potential to contribute, directly or indirectly, to the flow of cash or cash equivalents to the entity. This contribution is reflected by increased cash inflows or reducing cash outflows as, for example, by reducing production costs. The potential may be a productive one when the asset is used alone or with other assets for the provision of services or production of goods for sale by public institution. The potential may take the form of convertibility into cash or cash equivalents.

An asset, or stock, is not recognized in the balance sheet if it is impossible to generate benefits / future economic benefits for the public institution. Under this specification, supply stock items provide future economic benefits and as such, are recognized in the balance sheet, while the supply of material items are not stored or utilities that do not produce benefits / economic benefits and as such, are not recognized as inventory on the balance sheet, but as operational expense item.

Recognition of an asset or stock of an item of the balance sheet is linked to the existence of a cost or value that must be determined reliably. Recognition means in these conditions, the estimation of a cost or value. If these estimates are reasonable, that is reasonable, they do not affect the credibility of accounting information and financial statements. The recognition process involves the description in words of that element and the combination of a lump, and the inclusion of the amount in the balance sheet total.

Given that, by applying professional judgment, that a certain operations subject to the provisions of the principle of substance over form, it is necessary to recognize that active stocks according to this principle. When it is impossible to estimate future economic benefits, the stock is not recognized but is recognized expense for the period. In this situation you are buying stocks fall occasionally or those stocked.

Initial recognition involves the presentation of an item such as stocks in the financial statements for the first time. Moments in which the initial recognition of stocks, provided both national regulations as in IPSAS 12 are: the acquisition (assessing initial acquisition cost) to obtain the production (initially assessing the cost of production), or receiving donations (are evaluated initially at fair value).

In addition, standard, unlike the national rules, also provides other useful items in the initial inventory, as follows:

a. current replacement cost, ie the cost of the entity pays to acquire the asset on the reporting date;

b. Costs acquired through a transaction that does not involve an exchange are valued at fair value at the acquisition date.

c. defining aspects of exchange transactions, ie transactions that do not involve changes:

- The transaction does not involve the exchange transaction means an entity either receives value from another entity without directly giving approximately equal value in exchange, or gives value to another entity without directly receiving approximately equal value in exchange;

- The exchange transaction means the transaction in which the entity receives assets or services or has liabilities extinguished, and directly gives approximately equal value to another entity in exchange.

I. Initial assessment at purchase cost:

O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
The acquisition cost of inventory purchased include: purchase price, import duties and other taxes (except those which the public body can recover from the taxing authorities), transport costs, handling and other expenses directly attributable to the acquisition of goods concerned. Trade discounts granted by the supplier is not part of the acquisition cost.	The acquisition cost includes the purchase price, import duties and other taxes (other than those subsequently recoverable from tax authorities), and transport, handling costs and other costs directly attributable to the acquisition of finished goods, materials and supplies. Trade discounts, rebates and other similar items are deducted when determining cost.

Example of determining the cost of acquisition: Determine the acquisition cost of material "X" will be recognized in the accounts of the public knowing the following: purchase price: 120.000 lei; trade discounts (rebate): 2% transport costs: 5.000 lei stock manipulation charges: 1.600 lei, VAT 24% [$24\% \times (120.000 - 2\% \times 120.000) = 28.224$ lei]; depreciation building where the headquarters of the public: 1.600.000 lei production costs illuminating sections: 1.800 lei.

Case I: public institution is not taxable

Acquisition cost = purchase price - trade discounts + shipping costs + handling + VAT costs (not taxable, it can not be recovered from the tax authorities)
 acquisition cost = $120.000 - 2\% \times 120.000 + 5.000 + 1.600 + 28.224 = 152.424$ lei

Not included in the cost of acquisition: depreciation of the building where the headquarters of the public (1.600.000 lei); the cost of production lighting sections (1,800 lei).

Case II: public institution is liable for VAT

Acquisition cost = purchase price - trade discounts + shipping costs + handling costs
 acquisition cost = $120.000 - 2\% \times 120.000 + 5.000 + 1.600 = 124.200$ lei

Not included in the cost of acquisition: depreciation of the building where the headquarters of the public (1.600.000 lei); the cost of production lighting sections (1.800 lei);

II. Initial evaluation of production cost:

International accounting standards for the public sector use the term conversion cost and no cost of production or processing as recounted in the Romanian accounting regulations. Their definition is as follows:

O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
Production cost includes: cost of acquisition of raw materials and production supplies and expenses directly attributable to the asset. Cost of production or processing of stocks includes direct costs associated with the production, namely: direct materials, energy used for technological purposes, direct labor and other direct production costs and indirect	The cost of conversion of inventories include costs directly related to production units. They also include a systematic allocation of fixed production overheads and variables that are involved in converting materials into finished goods. Fixed overhead costs are those indirect costs of production that remain relatively constant regardless of changes in production

O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
costs of production quota allocated rationally as relating to manufacturing thereof. Cost of inventories of a service includes labor and other costs of personnel directly engaged in providing the service, including supervisory personnel, and the overheads appropriate. Depending on the specific activity for the cost can be also used standard cost method, in production or retail method, the retail trade.	volume and cost of factory management and administration. Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production. The allocation of fixed overhead costs of processing costs is based on normal production capacity. Cost of inventories of a service provider consists primarily of labor costs and other costs of personnel directly engaged in providing the service, including supervisory personnel, plus overhead costs that may be awarded.

Allocation of indirect costs, called fixed overhead production cost is based on normal production capacity. Normal production capacity is the production expected to be achieved on average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity from planned maintenance of equipment.

Example of determining the cost of production: We produce product "X", for which we know the following: unit variable cost (cv): 1.000 lei/units; quantities of products produced each month (qi): 8.000 units in January; 10.000 units in February; 9000 units in Marc ; 11.000 units in April; fixed expenses 1.600.000 lei. What is the cost of production? It will discuss egg situation: the first does not take into account the variation in capacity utilization, the second considering the normal capacity of 10.000 units (pieces).

Table no 1. The cost of production in the case of not considering the variation of capacity utilization

Exercise	January	February	March	April
Elements				
Quantities of products (units)	8.000	10.000	9.000	11.000
Total variable costs (lei)	8.000.000	10.000.000	9.000.000	11.000.000
Total fixed costs (lei)	1.600.000	1.600.000	1.600.000	1.600.000
Total costs (lei)	9.600.000	11.600.000	10.600.000	12.600.000
Unit cost of production (lei /units)	1.200,00	1.160,00	1.177,77	1.145,45

Algorithms achieving calculations:

Total variable costs: $CV_i = cv_i \cdot xq_i$,

Total costs: $CT_i = CV_i + CF$, were CF mean total fixed costs

Unit cost of production: $cu_i = \frac{CT_i}{q_i}$

The analysis undertaken between January to April is observed variance with the unit cost of production output.

Table no 2. The cost of production in the event that take into account the changes in capacity utilization

Exercise	January	February	March	April
Elements				
Quantities of products (units)	8.000	10.000	9.000	11.000
Total variable costs (lei)	8.000.000	10.000.000	9.000.000	11.000.000
The degree of utilization of the production capacity (%)	80%	100%	90%	110%

Exercise	January	February	March	April
Fixed costs allocated according to the degree of utilization of the production capacity (lei)	1.280.000	1.600.000	1.440.000	1.760.000
Total costs (lei)	9.280.000	11.600.000	10.440.000	12.760.000
Unit cost of production (lei /units)	1.160	1.160	1.160	1.160

Algorithms achieving calculations:

The degree of utilization of the production capacity: $\eta_i = \frac{capacitate_efectiva}{capacitate_normala} \times 100$

Fixed costs allocated according to the degree of utilization of the production capacity:

$$CF_{rep_i} = CF_i \times \eta_i$$

Total costs, unit production cost and total variable costs are calculated similar to the first model.

Rationally allocating fixed costs based on utilization of production capacity avoid undue fluctuations in the cost of production, allowing the measurement of inventories at the balance sheet at fair value.

There are some elements of costs to be included in the cost of inventories, but should be recognized as expenses in the period in which they occurred, as follows:

O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
Not recognized in cost of production: - Loss of materials, labor or other production costs than normally permitted limits; - Storage costs, unless those costs are necessary in the production process, before passing into a new stage of manufacture; - Director (expenses) General administration not contribute to bringing inventories to final shape and location; - Selling costs	Not recognized in cost of conversion: - Unallocated overheads due to improper use of production capacity; - Abnormal amounts of waste, labor or other production costs; - Storage costs, unless the costs are necessary in the production process before another stage of production; - Administrative overheads that do not contribute to bringing inventories to their present location and condition; - Costs of sale.

III. Initial evaluation at fair value: Fair value is used for the initial recognition of inventories acquired free of charge.

O.M.F.P. nr.1917/2005	IPSAS 12 "Inventories"
Fair value is the amount for which an asset could be exchanged between two parties voluntarily, knowingly, in a transaction objectively determined price.	Fair value is the amount for which an asset could be exchanged, or a liability settled, voluntarily, between knowledgeable, willing parties concerned in an arm's length transaction objectives.

1.2. Inventory accounting entry operations of public institutions

In terms of accounting entries recorded in stocks, there are stocks that the recording features or unique to public institutions.

Recognition of small inventory materials at public institutions is at cost, being recognized stock in the warehouse, and the release into not recorded as an expense, but there will be using my material nature objects inventory into use, the expense will be recognized in their removal from service.

Example: sourcing maintenance and cleaning materials (materials of such inventory items) worth 2.000 lei, VAT 24% (institution is liable for VAT). Half of these materials are given in use. At the end of it out of the use of small inventory materials prior to use.

a . supply of material recorded as inventory objects:	%	=	401	<u>2.480 lei</u>
			"Suppliers"	
	3031			2.000 lei
"Materials as inventory objects in storage"				
	4426			480 lei
"VAT deductible"				
b. is released into nature materials inventory items:				
	3032	=	3031	1.000 lei
"Materials as inventory objects in use"			"Materials as inventory objects in storage"	
c. materials are removed from service as inventory objects:				
	603	=	3032	1.000 lei
"Expenditure on the nature of inventory items"			"Materials as inventory objects in use"	

Example of how Recognition of legal goods confiscated or entered the private property of the state or municipalities: General Directorate of Public Finance Valcea seized following an inspection at one of the district's assets for which no found in documents of origin worth 18.000 lei. These goods will be sold on consignment. There will also recovered and collecting goods on consignment.

a. recorded assets seized under applicable law:				
	347	=	102	18.000 lei
"Real or entered legally confiscated by law in the private property of the state"			"Fund assets that make up the private domain of the State"	
b. sending the consignment to the recovery of such goods:				
	359	=	347	18.000 lei
"Consignment goods in custody or third parties"			"Real or entered legally confiscated by law in the private property of the state"	
c. cashing the recovered goods on consignment:				
	560	=	708	18.000 lei
"Available from own revenues"			"Income from business"	
simultaneously:				
	102	=	359	18.000 lei
"Fund assets that make up the private domain of the State"			"Consignment goods in custody or third parties"	

Stock assessment produced can be made:

A. Inventory manufactured at cost effective production - actual cost of production includes all direct costs (raw materials, wages including social security contributions and payments etc.) And indirect costs allocated according to criteria employed.

Example: A public institution operates recording productive obtain products worth 15.000 lei. Half of these finished products are valued by a third party at a price of 10.000 lei, VAT 24% (institution is liable for VAT).

a. recorded to obtain a final product:				
	345	=	709	15.000 lei
"Finished"			"Changes in inventories"	
b. finished products are sold:				
	4111	=	%	12.400 lei
"Customers with a maturity of 1 year"				
			701	10.000 lei
			"Revenue from the sale of finished products"	
			4427	2.400 lei
			"Output VAT"	

c. download management for finished goods sold:

709 = 345 7.500 lei
 "Changes in inventories" "Finished"

B. Inventory valued at standard cost manufacturing production - standard costs are predetermined costs, pre-calculated, scientifically rigorous and considered real costs. It is an effective means to exercise preventive control over production costs by establishing early standards for the rational use of materials, wages and other means for every job. Any deviation of these costs relative standard deviation is considered normal and will affect the financial results of the unit.

In accounting input / output finished products will reflect the standard cost of production, the differences between standard and actual costs are reflected using 348 price difference account "Differences in prices of products" that will allocate proportional differences on both stocks obtained from production process and the out-of heritage rough (sale or other means). Distribution will be done using a distribution coefficient determined

as follows:
$$K_{348} = \frac{(sold_initial + rulaj_debitor)_{cont348}}{(sold_initial + rulaj_debitor)_{cont345}}$$

To determine the differences that will be distributed on finished products output from heritage coefficient determined above is multiplied by the selling price of finished products, such as: $diferente_repartizate = K_{348} \times rulaj_creditor_cont345$

Example: At the beginning of N state to the finished product "X" is as follows: initial stock (standard cost): 5.000 lei price difference conditions (initial debit balance): 500 lei products obtained in the first half of the actual cost of 10.000 lei, standard cost 8.500 lei products obtained in the second half of the actual cost of production 5.000 lei, standard cost of 7.000 lei. Finished products sold at standard cost of 10.000 lei, sale price 15.000 lei (institution is liable for VAT).

a. record finished products from the first half of the month:

% = 709 10.000 lei
 "Changes in inventories"
 345 8.500 lei
 "Finished"
 348 1.500 lei
 "The difference in the price of products"

b. record the final products obtained in the second half of the month:

% = 709 5.000 lei
 "Changes in inventories"
 345 7.000 lei
 "Finished"
 348 -2.000 lei
 "The difference in the price of products"

c. record finished goods sold:

c1. sale of finished products:

4111 = % 17.850 lei
 "Customers with a maturity of 1 year"
 701 15.000 lei
 "Revenue from the sale of finished products"
 4427 2.850 lei
 "Output VAT"

c2. determine the allocation coefficient to allocate the price differences on products sold:

345 "Finished"				348 "The difference in the price of products"			
SI :	5.000			SI :	- 500		
(a)	8.500			(a)	1.500		
(b)	6.000	(c3)	10.000	(b)	- 2.000	(c4)	- 600
TSD :	19.500	TSC :	10.000	TSD :	- 1.000	TSC :	- 600
SF :	9.500			SF :	- 400		

$$K_{348} = \frac{(sold_initial + rulaj_debitor)_{cont348}}{(sold_initial + rulaj_debitor)_{cont345}} = \frac{-500 - 500}{5.000 + 14.500} = -0,06$$

c3. download management for finished goods sold:

709	=	345	10.000 lei
"Changes in inventories"		"Finished"	

c4. price differences for finished products sold:

$diferente_repartiza$	=	$K_{348} \times rulaj_creditor_cont345$	$= (-0,06) \times 10.000 = -600lei$
709	=	348	- 600 lei
"Changes in inventories"		"The difference in the price of products"	

Conclusions:

The analysis performed shows that some elements of IPSAS 12 "Inventories" were extracted and missed from the national accounting rules, i.e. similar or different approach to the accounting issues. How current information requirements imposed adoption of a common language for financial reporting, something that brings attention to the need to introduce and Romanian accounting regulations relating to stock the items on the current replacement cost, exchange transactions and transactions that do not involve the exchange. I believe that this proposal could increase the quality and credibility of accounting information on stock assessment and recognition in the financial statements of the public.

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