

Match of Gross Profit Contribution Margin Within Romanian and German Accounting Systems Under Perspective of IFRS Harmonisation

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MATCH OF GROSS PROFIT CONTRIBUTION MARGIN WITHIN ROMANIAN AND GERMAN ACCOUNTING SYSTEMS UNDER PERSPECTIVE OF IFRS HARMONISATION

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Abstract

Gross Profit as a line of Profit and Loss by function under IFRS is a Contribution Margin for covering fixed costs and represents a vital indicator for the health of one business, not only in the manufacturing sector, but also in the service industries. Furthermore, it represents the link between the financial and cost accounting reporting, as also operational result does.

Tanking into consideration the IFRS harmonization, the identification of this contribution margin in each accounting system becomes a must. From this perspective, we may search for and conclude that, there is no clear equivalent in the Romanian accounting system, as the cost accounting in Romania is not given by law. In our argumentation we look around in the German Accounting System, to establish to what extend this contribution margin would be reflected. In the German case, this match may be perfect, but in the Romanian Accounting remains unclear.

Keywords: Gross Profit, Contribution Margin, Profit and Loss under IFRS, Internal Reporting,

JEL classification: F15, M11, M41

1. Introduction

Harmonizing accounting systems is a big challenge of our days. Business leaders need to take the time to understand the rules and regulations and develop practices that meet standards without huge costs. The need for internationally comparable financial statements has increased over time in Romania, especially in certain categories of public interest entities, but also for performance evaluation purposes in business. The -most commonly used reporting framework that ensures this comparability is International Financial Reporting Standards (IFRS).

In this line of though, we discuss in the following to what extend the Romanian financial accounting system provides a comparable framework for the profit and loss account (P&L) of a reporting entity under IFRS. Furthermore, we take a look at German financial accounting system to underline the similarities.

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2. P&L account framework under IFRS and local GAAPs in Germany and Romania

IAS1 prescriptions provide full instructions regarding the must be compounding elements in reporting statements, but no particular framework is obligatory. Nevertheless, there are clear recommendations given for P&L account by nature and by function.

For mini respectively micro entities the simplified profit and loss account (and simplified balance sheet) is prepared in Germany (HGB 275), similar as in Romania for micro entities (F20). These little entities are usually not object of IFRS reporting.

In Germany and in Romania the reporting framework for financial statements are given by law. While in Romania the presentation of the statement of income and expenditure is made by nature, according to the legislation in force (O2844), in Germany, there is a freedom of choice in presenting it by nature or by function. The translated names of these two classifications in German legislation, would be the total cost method, by nature and the cost of sales method respectively by function (267 HGB).

The first 7 lines of P&L by function in Germany are similar with the ones recommended by IFRS/IAS1, as Table 1 shows bottom, only the order of presenting one line is different but the calculation of gross profit line is similar, as the execution of cost accounting in Germany is officialised by law, with given freedom of choice for the reporting entities for adopting each chosen calculation method. At a first look, the structure of gross profit in Romanian P&L by function, according to explanatory note no.4 seems to be also similar. But as the cost accounting in Romania is not regulated by law, in order to be sure that the calculation of the gross profit line is the same, we have to further investigate the indirect production costs line. Variable overhead should be simple and clear but **allocation of fixed production overhead on a systematic and consistent basis and in respect to usual output levels** should be assured. Furthermore, other expenses from **P&L by function under IAS1 are missing in the Romanian version.** That may conduct to **the same calculated operational result in both systems below, but the gross profit line calculation may still differ.**

3. Overview on gross profit contribution margin

Gross profit or gross (contribution) margin refers to **the economic efficiency** measured as the difference between output - sales of turnover and input - cost of goods 0sold. It is a vital instrument for short-term decision-making process because it shows at a glance and timely, before month end, how much overhead respectively period costs may be covered in order to obtain the planed profit. Therefore, contribution margin is an excellent tool for short term decision making as well as, for transfer prices documentation with cost plus method (CPM).

In the financial accounting it represents a line of Profit and Loss (P&L) after function according to the expense classification by function under IAS1. Cost of

sales include all expenditure directly related to the final product: all variable costs (direct costing) – direct or indirect and a calculated allocated part of fixed overhead, except Administration and Distribution costs, according to IAS2. This cost allocation can be made on drivers' basis, according to the production capacity actually achieved compared to normal production capacity.

	Extract P&L under IAS German G	P&L by function according to explanatory note no.4	
х	1.Revenue	1 Revenue	
(x)	2. Cost of sales	2 Cost of sales (3+4+5)	
	3.Gross Profit	3 Direct/variable costs	
х	6. Other income	4 Auxiliary Expenses (direct cost)	
(x)	4. Distribution costs	5 Indirect production costs	
(x)	5 Administrative expenses	6 Gross Profit (1-2)	
(x)	7. Other expenses	7 Distribution costs	
	Profit before Tax	8 Administration costs	
		9 Other operating income	
		Operational Result (operating income:	
		6-7-8+9)	

Table 1: Profit and Loss after function under IFRS

Source: Expense classification by function, extract IAS1 para 103 and HGB 267 available at <u>https://www.gesetze-im-internet.de/hgb/__267.html</u> and Romanian P&L available at <u>https://static.anaf.ro/static/10/Anaf/Declaratii_R/1002_5_2018.html</u>

In order to align to the IAS2 requirements regarding the overhead allocation on a systematic and consistent basis and in respect to usual output levels, the responsibility centres may intervene. The most frequent responsibility center is the profit center, which is responsible for maximizing revenue and profits. (Horngren et.al., 2012). As traditional cost accounting explains, cost centers, that are responsible for controlling and minimizing costs, are always assigned to a profit center. This means that the settled costs on cost center level, will be automatically presented on profit center level. (Friedel, Hoffmann, Pedell 2010) This hierarchy of cost objects permits the drawing of a P&L at the responsibility centers level.

Consequently, in the cost accounting gross contribution margin represents **the sum of all gross results across all responsibility centres** respectively profit centres, meant to cover the fixed costs of administration and disposal.

Therefore, we may see this way, that the gross profit contribution does the **link** between the financial and cost accounting at Gross margin contribution level exactly as at operational result does. The difference of these two links is that the first one expresses the economic efficiency, while the second one only declares the result.

	Revenue (Production sold)
	 Cost of goods sold
	= Gross Profit (Contribution)
-	Fixed costs with Administration and Distribution
	= Operational Result at profit center level

Table 2: Profit and Loss at responsibility level

Source: adapted after Schindlbeck,(2017)

IFRS does not permit direct costing methods that expense all overheads. Therefore, inventories should not include administrative overheads unrelated to production, such as selling costs, abnormal waste and storage costs, where the storage is not part of the production process, as well as foreign exchange differences arising directly from the acquisition of inventories invoiced in a foreign currency and interest cost, when inventories are purchased with deferred settlement terms. These costs are referred to as **period costs**, as they are **not assigned** to products, nor to responsibility centres and therefore cannot be included in the cost of items held in inventory. Consequently, these are reported on the income statement in the accounting period in which they incur. (Girbina, 2007, IAS2). Period costs are deducted from revenues without ever having been included as part of inventory, whereas in the financial accounting they are assigned to the accounting period. They are extremely important for financial disclosure because they are running directly in the P&L account, having an immediately impact on income statement, and thus on financial performance. Ebbeken, Possler and Ristea (2000, p.19) declares that period costs are respective period related expenses that have nothing in common with inventories. Relating to period costs is of paramount importance the value of expense in any given period and not the detailed structure of it (Hoitsch& Lingnau, 2004, p.14). Thus, processing of period costs on responsibility centres level is not necessary.

After the individual profit centres have determined their results, the overall result of the company must also be determined. This is done in Profit Centre Accounting, which is basically a **multi-level contribution margin accounting.** For a better understanding of gross contribution margin, we take a look in the German accounting at the structure of profit centre accounting, shown in Table 3 below.

	Product 1	Product 2	Total
Turnover			
- Variable costs			
= Contribution margin no.1			
- Fixed costs of profit center			
= Contribution margin no.2			
- Fixed costs of activity			
= Contribution margin no.3			
- Fixed cost at company level			
= Gross profit at company level			

Table 3: Multi level contribution margin in profit center accounting

Source: adapted after Schindlbeck,(2017)

The gross contribution margin in German financial accounting and according to IAS1, in the P&L by function is named in German marginal cost accounting fixed cost contribution no. 2 In other words, the gross profit, shown in financial and cost accounting, as the sum of all gross results at the level of all responsibility centres, together with the fixed costs, separately shown in cost accounting, constitutes the contribution to cover fixed costs.

The contribution margin is from an internal reporting point of view at entity level, a result of variable costing calculation (direct costing), which in Germany is practised on several reporting levels and is the reference point for marginal cost calculations, which emerged from the interpretation of the principle of cost allocation causation Bramsemann, (2005). The gross contribution margin has a high use internationally, according to Horngren (2012) and Kilger (2012) and Horvath (2019), due to its ability to facilitate planning, control but especially short-term decision making. In terms of planning, the contribution margin facilitates planning at the operational level. Planning the turnover of the production sold and defining a target contribution margin, allows the calculation of the forecast operational result.

The marginal contribution reflects the profitability per unit produced, i.e. revenue after extraction of variable costs, available to cover fixed costs. Marginal contribution is extremely important for the analysis as it shows the amount of revenue available to cover fixed costs, such as rent and utilities, which have to be paid even if production is stagnant or zero, i.e. for cost-benefit inflection point analysis. Marginal calculation is therefore a key tool in short-term decision-making. The marginal contribution, however, does not include indirect costs in the unit cost, but declares them directly in the period cost. Stocks will therefore be valued at the variable cost of production under marginal accounting, which is not accepted by IAS2. Therefore, in order to comply with IAS2 requirements, partial cost marginal accounting can only be used in parallel with one of the absorbing methods, in order to also benefit from the

advantages of using marginal analysis, provided that the necessary adjustments are subsequently made to comply with the IAS2 requirement for full costing.

The difference between the two above mentioned costing methods is in the treatment of **fixed manufacturing overhead costs**. Under the direct costing method, fixed manufacturing overhead costs are expensed during the period in which they are incurred. Under absorption costing, fixed manufacturing overhead costs are expensed when the product is sold (Webster, 2004, p.119). Moreover, **manufacturing overhead costs impact work in progress (WIP) inventory, as part of total manufacturing costs incurred and furthermore as cost of goods manufactured.**

Contrary to the basic principle of marginal accounting, fixed costs are allocated to products in accordance with IAS2 in an additional calculation level for medium and long-term objectives. In order to keep the distinction between fixed and variable costs, the calculation of fixed costs is separated from that for variable costs, as exemplified in Table 4, with fixed costs usually allocated as a percentage share of variable costs. Note that the **contribution margin is the key concept in marginal accounting** and expresses the extent to which an entity depends on its fixed costs in relation to its variable costs.



Table 4: Interdependence between cost allocation and capacity dependency

Source: Friedl, Hoffmann, Pedell, 2010

IAS 2 insists on delimitation between fixed and variable costs (IFRS, Girbina, p.82) and allows the capitalisation of variable overheads and fixed overheads also, so long as the **fixed overheads are allocated on a systematic and consistent basis and in respect to usual output levels**. Thus, the allocation rules gain a big importance under IFRS. Where output is lower than expected, the resultant excessive overhead should be considered a period expense and should be not capitalised. In case output is abnormally high the fixed overhead allocated to each unit must be decreased so as not to overvalue the inventory

Full costing, also known as Absorption costing, complies with IAS2 on accounting for inventory, whereby the value of inventory must include an appropriate amount of fixed production overhead, therefore becoming a part of the cost of the product. Furthermore, it explicit recognises that selling price must cover all costs. In this line of thought, in the bottom figure we may see the breakdown structure of the full cost calculation unhand marginal (partial) cost calculation.



Table 5: Link between partial (marginal) costing and full costing

Source: adapted after Schmidt (2008) p.162

The above figure underlines how come this gross profit margin is also called contribution margin (ACCA, F5). The gross profit declared in the financial statement may the analysed unhand cost accounting through this break down costs of marginal (partial) calculation. Its role is to identify variances of actual to the budget, exactly where they occur. On the other hand, variances between actual and standard costs, may be analysed on the cost centre accounting level. When standard costs are used to create an inventory valuation, there will inevitably be some differences between standard and actual costs that will create variances that appear in the cost of goods sold (Bragg, 2005).

Thus, we can generalise - partial costing methods can only be practised in addition to full costing methods in order to generate accounting information needed for internal control and managerial accounting decision-making, according to IFRS. Contribution margin is the key concept of marginal costing, so that partial costing

becomes a must, aside to one full costing method, in order to align to the gross profit contribution term of IFRS.

4. Conclusion

The missing regulation of the cost accounting in Romania in the perspective of IFRS harmonisation process may permit the occurrence of big confusions regarding the same financial terms. In order to eliminate such gaps as the case of gross profit contribution margin, a further proper alignment to the IFRS prescriptions should be taken into consideration.

The way of freely adopting cost accounting regulations – may be also implemented in Romania for the sake of those who struggle to prepare double sets of reporting – according to Romanian GAPP and to IFRS. The hard work of these ones may be much eased, as for the present time they have to accomplish all this work on their own.

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