

ACTA FACULTATIS PHARMACEUTICAE UNIVERSITATIS COMENIANAE

NEW TYPES OF ASSESSMENTS OF COMMUNITY PHARMACY TECHNOLOGY BUSINESS AND THEIR CONTRIBUTION TOWARDS PROSPERITY OF THE COMMUNITY PHARMACY

NOVÉ PRÍSTUPY K POSUDZOVANIU PODNIKANIA VO VEREJNEJ LEKÁRNI A ICH PRÍNOS

Original research article

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Received 15.1.2013, accepted 6.2.2013

Abstract The new approach how to assess community pharmacy business by monitoring indicators of financial analysis, contributes to a positive economic development in the community pharmacy business. The better is understanding and analysis of the financial statements in the community pharmacy business, the better will be improvement in managing and controlling finances. Financial analysis enable the community pharmacy to make more informed decisions, comparisons of actual financial performance with forecast targets, performances in past years and comparisons to industry averages. The most important analysed financial statements are balance sheet and profit and loss statement. The outcomes of the financial analysis are debt, efficiency, profit ability, liquidity ratios and working capital ratio. They are compared to recommended values and the suggestions are made to improve community pharmacy's efficiency and prosperity. The result of the new approach to assessment community pharmacy technology business will contribute to positive financial development of the community pharmacy and it's maintenance or survival at the upcoming time.

Slovak abstract Nový prístup k posudzovaniu podnikania vo verejnej lekárni monitorovaním ukazovateľov finančnej analýzy, prispieva k dosiahnutiu pozitívneho ekonomického vývoja lekárenského podnikania. Čím lepšie pochopíme a analyzujeme finančné výkazy lekárne, tým lepšie bude riadenie a kontrola financií. Finančná analýza umožňuje verejnej lekárni uskutočniť informovanejšie rozhodnutia, porovnať aktuálnu finančnú výkonnosť s predpovedanou a porovnať výsledky z minulých rokov s priemerom odvetvia. Najdôležitejšími analyzovanými dokumentmi sú súvaha a výkaz ziskov a strát. Výsledkami finančnej analýzy sú ukazovatele zadlženosti, výkonnosti, rentability, likvidity a pracovného kapitálu. Pomerové ukazovatele sú porovnávané s odporúčanými hodnotami a sú navrhnuté riešenia vedúce k zlepšeniu efektivity a prosperity verejnej lekárne. Výsledkom nového prístupu k hodnoteniu podnikania vo verejnej lekárni prispejeme k pozitívnemu finančnému vývoju verejnej lekárne, a tým k jej zotrvaniu alebo záchrane v nadchádzajúcej dobe.

Keywords community pharmacy – financial analysis – balance sheet, profit and loss statement – debt ratios – liquidity ratios – efficiency ratios – profitability ratios – working capital ratio

Kľúčové verejná lekáreň – finančná analýza – súvaha, výkaz ziskov a strát – ukazovatele zadlženosti – ukazovatele likvidity – ukazovatele výkonnosti – ukazovaslová: tele rentability – pracovný kapitál

1. Introduction

The Community pharmacy as a direct provider of medicines and pharmaceutical services to patients, have an important role in the health status of a society. At the time of financial crisis with general economic slow-down, reduced retail growth, decreased margins is having a very difficult time. It faces financial stress every day. The new participants enter developed health care market where revenues are limited. It makes a pressure on community pharmacy which is daily confronted with accelerated competition. To moderate these problems, the role of the pharmacist is gradually changing. New assessments of community pharmacy technology business approach to maximize effectiveness of the community pharmacy to maintain and survive at the upcoming time. New approach towards community pharmacy business assessment is by better knowledge of the **organizational system** that company figures (Tootilian et al., 2012). The organizational system of community pharmacy introduces manager or owner of the community pharmacy with financial literacy and improves their essential skill for running a successful business. There are some important financial statements which help the community pharmacy provide a summary of all the relevant financial information about health care business. Financial analysis is performed on these statements and provides management with a more detailed understanding of the figures. Manager or owner of the community pharmacy use the information provided in the financial statements to make key decisions that affect the ongoing operation of an organization business. There are two basic financial relevant statements profit and loss statement, which reports on a business's income, expenses, and profits over a period of time and balance sheet,

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which reports on the assets, liabilities and net equity of a business at a given point in time. It is important to understand and analyse the financial statements of the community pharmacy business to manage and control finances and make more informed decisions armed with facts, not intuition. Also it is important to understand and track the current financial health of the community pharmacy business without solely relying on accountant. Some basic financial analysis could include making comparisons of actual financial performance with forecast targets, performance in past years, and industry averages (business benchmarks) (Doucette et al., 2012).

Profit and Loss Statement is a summary of the financial performance of community pharmacy business over time (monthly, guarterly or annually). It reflects the past performance of the community pharmacy business and is the report most often used to track how the community pharmacy business is performing. As the name indicates the profit and loss statement (also known as a statement of financial performance or an income statement) measures the profit or loss of community pharmacy over a specified period. A profit and loss statement summarises the income for a period and subtracts the expenses incurred for the same period to calculate the profit or loss. Community pharmacies are required to prepare and lodge a profit and loss statement with their annual tax return. Statement is useful in helping to objectively determine the financial performance of the community pharmacy. The community pharmacies are required by law to prepare a formal financial report that complies with Accounting Standards for each financial year (National Community Pharmacists Association, 2009). Profit and loss statement preparation (at least quarterly or monthly) will enable to answer the question, "How much money is the community pharmacy making, if any?", compare projected performance with actual performance; compare community pharmacy's performance against industry benchmarks; use past performance trends to form reasonable forecasts for the future; show community pharmacy's business growth and financial health over time, detect any problems regarding sales, margins and expenses within a reasonable time so adjustments may be made to recoup losses or decrease expenses; provide proof of income if the community pharmacy needs a loan or mortgage and calculate community pharmacy's income and expenses when completing and submitting tax return. Each component of the Profit and Loss statement influences the determination of net profit, and is used in the two basic equations 1. Gross profit = sales - cost of goods sold and 2. Net profit = gross profit - expenses. Example of gross profit and net profit calculation is listed in Table 1.

Table 1. Example of gross profit and net profit calculation

	Revenue	550,000€
less	Cost of goods sold (COGS)	<u>220,000 €</u>
	Gross Profit	330,000€
less	Expenses	<u>275,000 €</u>
	Net Profit (before tax)	<u>55,000 €</u>

The main components of a profit and loss statement are revenue, cost of goods sold, gross profit, expenses and net profit. **Revenue** (sales) is the total earned money from ordinary business operations. Revenue includes sales of goods and services, interest received, dividends, rebates, and rent received.

Cost of goods sold (COGS) is the cost of merchandise sold during the period. COGS includes all the costs directly related to getting inventory ready for sale such as the purchase price, import duties, non-recoverable taxes, freight inwards, freight insurance, handling, direct labour, and other costs of converting materials into finished goods and services. COGS vary directly with sales and production; the more items or services community pharmacy sell or make, the more stock or components it needs to buy. Example of cost of goods sold calculation is listed in Table 2.

Table 2. Example of cost of goods sold calculation

	Opening inventory	
	(cost of inventory at the beginning of the period)	10,000€
plus	Inventory purchased (during the period)	<u>43,500€</u>
equals	quals Total inventory available during the period	
less	Closing inventory (cost of all unsold stock)	<u>7,000 €</u>
	Cost of goods sold	<u>46,500 €</u>

Gross profit is the difference between sales and the cost of producing or purchasing products or providing services before subtracting operating expenses such as wages, rent, accounting fees, or electricity. Gross profit reflects how efficiently labour and materials are used to produce goods or services. **Gross profit = sales – cost of goods sold**. The gross profit margin is one indicator of the financial health of the community pharmacy. Larger gross profit margins are better – the higher the percentage, the more the business retains of each euro of sales for other expenses and net profit. **Gross Profit Margin % = (Gross Profit ÷ Sales)** × 100. Gross profit is used to calculate the gross profit margin ratio.

Expenses (overheads, outgoings) are costs incurred for the purposes of earning income. They include items such as wages, rent, accounting and legal fees, electricity, depreciation, and interest paid on loans.

Net profit (net income; net earnings; the bottom line) is calculated by subtracting expenses from the gross profit, showing what the community pharmacy's business has earned (or lost) in a given period of time (usually monthly, quarterly, or annually) after both the cost of goods sold and operating expenses have been taken into account. **Net Profit = Gross Profit – Expenses.** Example of profit and loss statement calculation is listed in Table 3.

The Balance Sheet provides a good picture of the financial health of the community pharmacy business and is a tool used to evaluate community pharmacy's business liquidity (Chrisholm-Burns et al., 2011). It helps the community pharmacy identify trends and quickly grasp the financial strength and

Table 3. Example of profit and loss statement calculation

	Total revenue	1,000,000 €	100%
less	Cost of Goods Sold	426,200€	42.6%
2000	Gross Profit	<u>-120/200 €</u>	57.4%
		<u>575/000 C</u>	57.170
Less	Expenses		
	Accounting and legal fees	11,700€	
	Advertising	15,000€	
	Depreciation	38,000€	
	Electricity	2,700€	
	Insurance	15,200€	
	Interest and bank charges	27,300€	
	Postage	1,500€	
	Printing and stationary	8,700€	
	Professional memberships	1,800€	
	Rent for premises	74,300€	
	Repairs and maintenance	21,100€	
	Training	6,900€	
	Vehicle operating costs	20,000€	
	Wages and salaries	223,500€	
	Workers compensation	6,500€	
	All other expenses	<u>14,100 €</u>	
Less	Total Expenses	<u>488,3</u> 00€	48.8%
	•		

Equals Net Profit (Before owners salary)

85,500€ 8.6%

capabilities of its business. The balance sheet is the financial statement used to report on the financial position of the community pharmacy business to the owner and other stakeholders such as banks and investors. The balance sheet is a statement of what community pharmacy owns (assets) and owes (liabilities), and the value of the owner's equity (or net worth of the business) at a specific point in time. The balance sheet is also known as a statement of financial position because it shows a summary of the community pharmacy's financial position at a particular point in time. The difference between the assets and liabilities is known as owner's equity. The balance sheet is so named because the equity must equal assets minus liabilities. A balance sheet enables to guickly see the financial strengths and capabilities of community pharmacy business; review the level of assets, debt and working capital of community pharmacy business; compare the increase or decrease in value of the business over time; see the relative liquidity of community pharmacy business; analyse community pharmacy's ability to pay all short-term and long-term debts as they come due; and review the composition of assets and liabilities, the relative proportions of debt and equity financing and the amount of retained earnings.

The three key components of a balance sheet are assets, liabilities and owner's equity. Assets and liabilities are subdivided into current (short-term) and non-current (long-term) and may have several components within each sub-division such as cash in bank, inventory, property, accounts payable, or business bank loans. It is called a balance sheet because assets minus liabilities (net assets) must <u>equal</u> the owner's equity (they must balance). A balance sheet is based on the formula: **Owner's equity = Assets – Liabilities**. Example of simple balance sheet calculation is listed in Table 4.

Table 4. Example of the simple balance sheet calculation

Owners equity (Balance)	200,000€
Net assets	<u>200,000€</u>
Total liabilities	<u>320,000 €</u>
Non-current liabilities	<u>210,000 €</u>
Current liabilities	110,000€
Total assets	<u>520,000€</u>
Non-current assets	<u>400,000 €</u>
Current assets	120,000€

Assets are the resources that community pharmacy uses to operate its business such as cash, inventories, land, buildings and equipment. Essentially, assets are any items of value owned or controlled by the community pharmacy that contributes towards generating revenue. Assets are categorised as either current or non-current assets. Current assets are items of value that are expected to be consumed or converted into cash within the next 12 months. Examples include cash, inventory that is turning over regularly and accounts receivable. Non-current assets are not expected to be consumed or converted into cash within the next 12 months. Examples include assets that the business would generally keep for more than one year such as equipment, cars and buildings.

Liabilities are the financial obligations or debts of the community pharmacy and include claims that creditors have on the business's resources such as accounts payable, bank overdrafts, provision for employee's annual leave and long service leave, tax liabilities, and loans payable. Essentially, liabilities are amounts owed by the community pharmacy to external parties. Liabilities are categorised as either current or non-current liabilities. Current liabilities are expected to be paid within the next 12 months and include creditors (accounts payable), inventory purchases, overdraft, short-term loans and credit card debts. Non-current liabilities are not expected to be settled within the next 12 months and include mortgages on buildings and equipment, and long term loans.

Owner's equity (proprietorship, member's funds, capital, or shareholders' equity) is the residual interest in the assets of the community pharmacy after liabilities are deducted. It is the net worth of a business and equals the difference between assets and liabilities. Equity represents the amount belonging to the owners of the community pharmacy once all financial obligations have been met. Equity includes the initial and ongoing capital investments made by the owners, retained earnings (or accumulated losses), and reserves. Equity is any cash or assets the owner has contributed to the business. Retained earnings are any profits that are reinvested in the business. Reserves are profits set aside for particular purposes such as asset replacement, or major building maintenance. Example of the balance sheet calculation is listed in Table 5.

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Table 5. Example of balance sheet calculation

ASSETS

	Current Assets	
	Cash	<u>20,000 €</u>
	Accounts receivable	15,000€
	Inventory	<u>150,000 €</u>
	Total Current Assets	<u>185,000 €</u>
	Non-Current Assets	
	Plant and equipment	50,000€
	Business premises	650,000€
	Vehicles	70,000 €
	Total Non-Current Assets	<u>770,000 €</u>
TOTAL ASSETS		<u>955,000 €</u>
LIABILITI	ES	
	Current Liabilities	
	Accounts payable	25,000€
	Bank overdraft	10,000€
	Credit card debt	5,000€
	Tax liability	<u>30,000 €</u>
	Total Current Liabilities	<u>70,000 €</u>
	Non-Current Liabilities	-
	Long term business loan 1	450,000€
	Long term business loan 2	<u>50,000 €</u>
	Total Non-Current Liabilities	<u>500,000 €</u>
TOTAL LIABILITIES		<u>570,000 €</u>
NET ASSETS		<u>385,000 €</u>
OWNERS EQUITY		385,000 €

The next stage is to analyse figures in order to gain a better understanding of the community pharmacy business (Herist et al., 2011). It is essential to convert financial data to ratios or percentages. Comparing the absolute euro values over time is not very meaningful and does not provide a complete view of the community pharmacy's business. It does not make adjustments for inflation or it does not allow make comparisons with other community pharmacies in the industry. Many of the shortfalls can be overcome when the financial data is converted to ratios or percentages. A ratio by itself means little unless it is benchmarked, so it needs to be compared to some expected or required outcome. For example, ratios might be compared to different time periods in the same business or to industry expectations to determine whether there has been a significant change. Financial analysis can bring a lot of benefits because it tells a lot about the performance of the community pharmacy's business and will help to determine the overall financial health of community pharmacy's business. Issues such as liquidity (does the business have enough cash to pay its debts on time) and profit (the percentage of net profit to total sales) are only part of the financial analysis of a community pharmacy's business that puts the information from the financial statements into perspective. Financial analysis will help identify problems, implement the necessary corrective actions and improve the community pharmacy operations. Measures should be developed for the business to set aside extra time each month to regularly review and analyse financial statements of the community pharmacy. In this way there will be better control over the business operations. To calculate the ratios there will be a need for information from annual profit and loss statements. Profitability ratios measure the ability of the community pharmacy's business to make a profit. We use profitability ratios to answer the question, "Is my community pharmacy's business as profitable as it should be?" An increase in the ratios is viewed as a positive trend. The profitability ratios for analysing the profit and loss statement are gross profit margin ratio, net profit margin ratio, break even analysis (Annemans, 2008).

Gross profit margin ratio expresses the gross profit as a proportion of sales. The gross profit margin ratio is used as one indicator of a business's financial health. It shows how efficiently a business is using its materials and labour, in the production process and gives an indication of the pricing, cost structure, and production efficiency of the business. The higher the gross profit margin ratio, the better. Gross profit margin ratio = gross profit ÷ income. The gross profit margin is simply the gross profit margin ratio expressed as a percentage. Gross profit margin (%) = (gross profit ÷ income) × 100. Larger gross profit margins are better for businesses. The higher the percentage, the more the business retains of each euro of sales, which means more money is left over for other operating expenses and net profit. A low gross profit margin ratio means that the community pharmacy generates a low level of revenue to pay for operating expenses and net profit. It indicates that either the business is unable to control production and inventory costs or that prices are set too low.

Net profit margin ratio is the net profit as a proportion of sales. The net profit margin ratio shows the proportion of every euro of sales that is left after all expenses have been paid and remains as net profit. Net profit is used to pay for interest, tax and distribution to the owners. The higher the net profit margin ratio, the better. Net profit margin ratio = net profit ÷ income. The net profit margin is simply the net profit margin ratio expressed as a percentage Net profit margin (%) = (net profit ÷ income) × 100. A high net profit margin ratio demonstrates how effective a business is at converting sales into profit. It may mean that the community pharmacy is capitalising on some competitive advantage that can provide the community pharmacy's business with extra capacity and flexibility during through hard times. A low net profit margin ratio may mean that the community pharmacy is not generating enough sales, the gross profit margin is too low, or that community pharmacy is not keeping operating expenses under control to leave an acceptable profit. A decrease in the net profit margin ratio over time may indicate cost blowouts that require efficiency improvements. A community pharmacy with a low ratio might need to take on debt to pay its expenses.

Break even analysis identifies the point at which income and expenses are exactly equal. The community pharmacy has not made a profit or a loss, but all business expenses have been recovered. Another way to look at it is that at the break even point each unit that has been sold has paid for itself (cost of goods sold (COGS) or variable costs) and contributed a share toward the total operating expenses (fixed costs or overheads) for the period. The break even analysis is critical for any community pharmacy, because it will know exactly when it begins to make a profit. The break even point is the lowest limit when determining profit margins. It shows how low a price for goods and services can be offered, and the effects of discounting on the community pharmacy's net profit. The break even point can be calculated for any period of time – a year, guarter, month, week, day - and all estimates must relate to the same time period. The formula used to calculate the number of units for break even Number of units = total fixed costs ÷ (unit selling price - variable unit cost). The formula used to calculate the value in euro for break even *Euro value=total* fixed costs ÷ (1-(total variable costs ÷ total sales)). Fixed costs (business expenses, overheads, outgoings, operating expenses) are paid whether or not community pharmacy makes any sales. Fixed costs do not vary in proportion to sales or production. Variable costs (the cost of goods sold (COGS), cost of sales, direct costs of sales) vary directly with the volume of sales or production.

To set other ratios, information is needed both from the annual balance sheet and the profit and loss statement to calculate the debt ratios, liquidity ratios, efficiency ratios. **Debt ratios** measure the ability of the business to repay long term debt. That is debt to equity ratio which indicates vulnerability of the business to risk and is often used by creditors to determine the ability of the business to repay loans. It shows the proportion of capital invested by the business owners to the funds provided by external lenders. It gives a comparison of how much of the business was financed by owner's equity and how much was financed through debt or liabilities. The formula used to calculate the debt to equity ratio is Debt to equity ratio = Total Liabilities ÷ Owners' Equity. The higher the ratio, the more the business relies on debt to finance its operations and the greater the risk to external lenders. A debt equity ratio of 1 : 1 indicates that the external lenders and the owners are bearing the same degree of risk. A ratio of less than 1:1 means that debt is less than owners' equity, the business is positively geared, the external lenders are bearing less risk than the owners and the owner has a stronger financial interest in the business than external lenders. A ratio of more than 1:1 means that debt is higher than the owners' equity, the business is negatively geared, the external lenders are bearing more risk than the owners, and external lenders have a stronger financial interest in the business than the owner. Generally, a debt to equity ratio in the range of 1 : 1 to 4 : 1 is acceptable but will depend on individual business and industry circumstances. The explanation of the ratio of 2 : 1, which is often used for business loans means that the community pharmacy has $2 \in$ loaned for every $1 \in$ of owner's equity. Too much debt can put the community pharmacy at risk and indicates a possible difficulty in meeting interest and principal repayments. Too little debt means that the community pharmacy is not taking advantage of opportunities and realising the full growth potential of the community pharmacy's business.

Liquidity ratios measure the capacity of the business to meet short term financial commitments as they become due (Michalski, 2011). These are current ratio and quick ratio. These ratios indicate a comparison of the proportions of current assets and short term liabilities. The current ratio (also called the working capital ratio) is a measure of the solvency or liquidity of the community pharmacy's business. It tells whether the business has enough current assets to meet its short term financial obligations (current liabilities) as they become due. The formula used to calculate the current ratio is Current ratio = current assets ÷ current liabilities. The higher the current ratio, the better the capacity to meet short term financial commitments. A current ratio of 2 : 1 (which means the business has current assets of 2 € for every 1 € of current liabilities) is regarded as desirable for a healthy business. As a general rule, it is desirable to try to achieve a current ratio above 1 : 1 and as close to 2 : 1 as possible. A current ratio that is too high may indicate investment in current assets that could otherwise be used to produce income. A current ratio that is too low means there may not be enough current assets to meet short term financial obligations when they are due. The **quick ratio** is a measure of the liquidity of the community pharmacy. It measures the level of all assets that can be quickly convertible into cash and used to meet short term liabilities. The quick ratio provides a more conservative measure than the current ratio because it excludes inventory. The formula used to calculate the quick ratio is Quick ratio = (Current assets - inventory) ÷ Current liabilities. The higher the ratio, the higher the level of liquidity for the community pharmacy's business. The optimal quick ratio is 1 : 1 or higher, which means that current liabilities can be met from current assets without the need to sell inventory (Schroeder, 2011).

Efficiency ratios measure how well the community pharmacy manages its assets. These ratios indicate how quickly a firm converts non-cash assets to cash assets. These are accounts receivable turnover ratio, average collection period, accounts payable turnover ratio, inventory turnover ratio. Accounts receivable turnover ratio shows how quickly credit customers are paying the community pharmacy. The greater the number of times receivables turn over during the year, the shorter the time between the sale and collecting of the cash for that sale. It measures the effectiveness of credit management policies with extending credit and collecting debts. The formula used to calculate the accounts

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receivable turnover ratio is Accounts receivable turnover ratio = total sales ÷ accounts receivable. The higher the ratio, the faster the business collects its accounts receivables and the more cash it has available. Community pharmacies that operate on a mainly cash basis will have a high ratio. A low ratio indicates inefficient management of debtors or less liquid debtors. The business needs to re-assess its credit management procedures to ensure faster collection of debts. Average collection period shows the average number of days it takes the business to collect payment for sales to customers on credit. The formula used to calculate the average collection period is **Average collection period = 365** ÷ (total sales + accounts receivable) = 365 + accounts receivable turnover ratio. The speed at which bills are collected has a significant impact on the cash flow of the business. Use this ratio to determine how long the community pharmacy's money is being tied up in customer credit. Accounts payable turnover ratio shows how quickly the business pays its bills and how often payables turn over during the year. Trends in the accounts payable turnover ratio demonstrates how the business handles its outgoing payments and can help us assess the cash situation of the community pharmacy's business. The formula used to calculate the accounts payable turnover ratio is Accounts payable turnover ratio = Cost of goods sold ÷ accounts payable. Average payment period shows the average number of days it takes the business to pay for purchases on credit. The formula used to calculate the average collection period is **Average payment period** = $365 \div (Cost of goods sold \div accounts payable) = 365 \div Ac$ counts payable turnover ratio. A high ratio means there is a relatively short time period between purchasing inventory or materials and paying for them. A low ratio may indicate that community pharmacy's business has a problem with cash shortages. Inventory turnover ratio tells the number of times inventory turns over during the year. It indicates how quickly inventory is sold and replaced in the operating period. We will first need to calculate the annual average value of inventory Annual average value of inventory = (opening inventory + closing inventory) ÷ 2. The formula used to calculate the inventory turnover ratio is *Inventory turnover* ratio = Cost of goods sold ÷ annual average value of inventory. Generally, a high inventory turnover ratio is an indicator of high demand for products or services and good inventory management. However, a high ratio can also mean there is a shortage of inventory and community pharmacy's business is losing sales because of inadequate stock on hand. A low inventory turnover ratio may indicate that inventory is naturally slow moving in the industry, or that the community pharmacy is carrying too much or obsolete inventory. Inventory that is turning over too slowly could hamper cash flow, and the business will tend to require higher working capital (Vlachynský et al., 2009).

Working Capital is the money needed to fund the normal, day to day operations of a business. It ensures a community pharmacy has enough cash to pay debts and expenses as they fall due, particularly during start-up periods. The working capital cycle, measures the time between paying for goods or services supplied and the final receipt of cash from their sale. It is desirable to keep the cycle as short as possible as it increases the effectiveness of working capital. The working capital cycle is made up of four core components that are cash (funds available), creditors (accounts payable), inventory (stock on hand) and debtors (accounts payable). The key to successful cash management is to be in control of each step in the cycle (Carroll, 2007). If community pharmacy quickly converts trading operations into available cash, it will increase the liquidity in business and will be less reliant on cash from customers, extended terms from suppliers, overdrafts, and loans. The right level of working capital depends on the industry and the particular circumstances of the business. If the working capital is too high, the business has surplus funds which are not earning a return; and low may indicate that the business is facing financial difficulties. The formula used to calculate working capital for a community pharmacy's business is working capital (val*ue* €) = *current assets* - *current liabilities*. This calculation will not give a sense of whether the working capital safety margin is wide enough. The working capital ratio (current ratio/liquidity ratio) will give a better measure of liquidity. The formula used to calculate an estimate of working capital as a percentage of sales for business is *Working capital as a percentage of sales* = ((Inventory + accounts receivable - accounts payable) ÷ Sales) × 100 and Working capital (€ value) = sales x (working capital as a % of sales). It means if working capital as a percentage of sales is 35%, the community pharmacy needs 35 € for every 100 € of sales to fund the sale to allow for the time delay in the working capital cycle. This method is useful for a community pharmacy's business going through a period of growth and expansion to work out how much extra working capital it needs if turnover is increased by a certain amount (Fetisovova et al., 2010). Examples of financial analysis ratios with explanations, calculations and recommended values are listed in Table 6.

2. Conclusion

New approach towards the assessment of community pharmacy business by monitoring financial analysis indicators improves a profitable economic development of the community pharmacy. Better understanding and analysis of the finances will improve the financial management and controlling and enable to make more informed decisions. The result of the new approach to financial management will be a positive economic development with improved interventions towards effective and sustainable position among other competitors on the market.



Table 6. The financial analysis ratios with	explanations, calculations and recommended values
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Ratios		Explanation	Calculation	Recommended value
Profitability ratios	Gross profit margin ratio	The higher the ratio, the more the community pharmacy's business retains of each euro of sales.	Gross profit margin ratio = gross profit ÷ income	The higher the ratio, the better and the ratio must be compared from one period to another.
	Net profit margin ratio	The higher the ratio, the more effective is community pharma- cy's business at converting sales into profit.	Net profit margin ratio = net profit ÷ income	The higher the ratio, the better and the ratio must be compared from one period to another.
	Break even analysis	Identify the point when commu- nity pharmacy begins to make a profit.	Number of units = total fixed costs ÷ (unit selling price – variable unit cost) Euro value=total fixed costs ÷ (1-(total variable costs ÷ total sales))	-
Debt ratios	Debt to equity ratio	The higher the ratio, the more the community pharmacy's bu- siness relies on debt to finance its operations and the greater the risk to external lenders.	Debt to equity ratio = Total Liabilities ÷ Owners' Equity	The 2 : 1 ratio is recommended value and the explanation says that the community pharmacy has $2 \in$ loaned for every $1 \in$ of owner's equity.
Liquidity ratios	Current ratio	The higher the ratio, the better the capacity to meet short term financial commitments.	Current ratio = current assets ÷ current liabilities	Keep the current ratio above 1 : 1 and as close to 2 : 1 as possible and the explanation says that the community pharmacy has current assets of $2 \in$ for every $1 \in$ of current liabilities
	Quick ratio	The higher the ratio, the higher the level of liquidity for commu- nity pharmacy business.	Quick ratio = (Current assets - inventory) ÷ Current liabilities.	The optimal quick ratio is 1 : 1 or higher, which means that current liabilities can be met from current assets without the need to sell inventory.
Working capital ratio	Working capi- tal ratio	The higher the ratio, the more € are needed to fund the sale for the time delay in the working capital cycle.	Working capital as a percentage of sales = ((Inventory + accounts receivable - accounts payable) \div Sales) x 100 Working capital (\in value) = sales x (working capital as a % of sales).	The ratio must be compared from one period to another; the higher the ratio the slower collection of money. It may signal an under- lying problem in the community pharmacy's operations.
Efficiency ratios	Accounts rece- ivable turnover ratio	The greater the ratio, the shorter the time between the sale and collecting the cash for that sale.	Accounts receivable turnover ratio = total sales ÷ accounts receivable	The higher the ratio, the better. Community pharmacy faster col- lects its accounts receivables and the more cash it has available.
	Average col- lection period	The shorter the period, the better is business collecting payment for sales to customers on credit.	Average collection period = 365 ÷ (total sales ÷ accounts receivable) = 365 ÷ accounts receivable turnover ratio	The lower the average collecting period the better. It doesn't take the community pharmacy very long time to turn its receivables into cash.
	Accounts pay- able turnover ratio	Increasing trend in the ratio, the community pharmacy is paying of suppliers at a faster rate.	Accounts payable turnover ratio= Cost of goods sold ÷ accounts payable.	The increasing trend in the ratio, the better. (The higher the ratio, the better)
	Average pay- ment period	The higher the ratio, the shorter the time period between pur- chasing inventory or materials and paying for them.	Average payment period = 365 ÷ (Cost of goods sold ÷ accounts payable) = 365 ÷ Accounts payable turnover ratio	The higher the ratio, the better and the ratio must be compared from one period to another.
	Inventory turnover ratio	The higher the ratio, the higher demand for products or services and good inventory manage- ment.	Inventory turnover ratio = Cost of goods sold ÷ annual average value of inventory. Annual average value of inven- tory = (opening inventory + closing inventory) ÷ 2	The higher the ratio, the better and the ratio must be compared from one period to another.

NEW TYPES OF ASSESSMENTS OF COMMUNITY PHARMACY TECHNOLOGY BUSINESS AND THEIR CONTRIBUTION TOWARDS PROSPERITY OF THE COMMUNITY PHARMACY

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