

## LESSON 11

Pharmacy profit. Profitability.

Analysis and forecasting of profit, its maximization in the short term. The impact of the main factors on profit.

Questions for discussion

1. Pharmacy profit. Definition. Profit functions.
2. Types of profit:
  - profit from the sale of goods and services,
  - gross profit ,
  - net profit.
3. Factors affecting the amount of profit.
4. Profit measurement. Profitability.
5. Profit and profitability analysis.
6. Methods of profit planning.
7. Use and distribution of profits

### **1. Pharmacy profit. Definition. Profit functions.**

Making a profit is one of the most important goals of any enterprise. Profit is the result of entrepreneurial activity expressed in monetary form.

Profit performs the following functions:

- this is the main goal of entrepreneurial activity and a factor of increasing the material interest of employees;
- measure of the efficiency of trade and economic activity;
- a source of financial resources for the development of the enterprise and a source of increasing its market value;
- the source of the formation of the revenue part of the federal, regional and local budgets.

### **2. Types of profit:**

The main source of profit for a pharmacy organization is gross income. (pharmacy income from the sale of goods - pharmacy revenue from the sale of goods)

Gross income is an indicator that characterizes the financial result trading activity and defined as the excess of revenue from the sale of goods and services over the costs of their acquisition for a certain period of time.

Gross income (GI) is defined as the difference between the sale and purchase value of goods (trade overlays). It is also called margin profit.

**Profit from the sale of goods is the excess of income over costs (Cc) for a certain period of time.**

The profit (Pr) from the sale of goods is determined by the formula:

$$\mathbf{Pr = GI - Cc}$$

Where: Pr-profit from the sale of goods, works, services, RUB.;

GI - gross income from the sale of goods, works, services, rub.;

Cc - handling costs, rub.

The amounts of profit from sales and profit received from other income form the gross profit of the pharmacy.

**Gross profit is the amount of profit from the sale of goods, services, property and from other types of pharmacy activities (non-operating).**

In order to determine which part of the gross profit remains at the disposal of the pharmacy, it is necessary to deduct the expenses of paying income tax and tax penalties from its total amount. Thus, a net profit is formed.

**Net profit is a part of the gross profit that remains at the disposal of the trading company after the payment of income tax to the budget.**

### **3. Factors affecting the amount of profit.**

The following factors influence the amount of gross and net profit:

-factors determining the specifics of the pharmacy's activities (prescription, large nomenclature, difficulties in studying demand, etc.);

-factors affecting gross income (all factors that will contribute to an increase in gross income will increase gross and net profit);

-factors affecting costs (all factors that reduce costs will increase gross and net profit);

The overall positive trend is an annual increase in gross and net profit.

The main sources of reserves for increasing profits are:

reserves for increasing turnover,

saving circulation costs,

factors associated with an increase in gross income (improving the assortment structure, effective pricing policy, reducing the cost of purchasing pharmacy assortment goods).

In addition, the reserve for increasing profits is the reduction of other expenses (non-operating).

#### 4. Profit measurement. Profitability.

Gross and net profit are measured

1. in absolute terms, this is the amount of profit ( $\Sigma P$ ) in monetary terms, RUB. calculated as the difference between pharmacy income ( $\Sigma I$ ) and circulation costs ( $\Sigma Cc$ )

$$\Sigma P = \Sigma I - \Sigma Cc$$

2. in relative terms - in% of turnover.

The relative indicator is called the level of gross and the level of net profit, or profitability, and is measured in % of turnover

**The level of net profit (LNP or profitability - Prof) is defined as the ratio of the amount of net profit (NP) to the amount of turnover ( $\Sigma T$ ) as a percentage:**

$$\text{LNP (Prof)} = (\Sigma NP / \Sigma T) 100\%,$$

where accounting is the LNP - level of net profit, %; (Prof) – profitability, %

$\Sigma NP$  - the amount of net profit, RUB.;

$\Sigma T$  - the volume of retail turnover, rub.

The overall positive trend is an annual increase in gross and net profit.

There are several most important *indicators* of profitability:

1) Return on sales (Rs)

is the ratio of net profit  $\Sigma NP$ , to the amount of revenue received (turnover)  $\Sigma T$  as a percentage :

$$\text{R sales} = \Sigma NP / \Sigma T \times 100\%$$

Profitability of sales characterizes the efficiency of production and commercial activities, as it shows the amount of profit per 1p. Sales. The positive value of the return on sales indicator indicates the effectiveness of the main activity. This indicator is traditionally used in the analysis of the profitability of the pharmacy organization and is calculated as a whole for the pharmacy and individual groups and types of products.

2) Profitability of products (cost recovery) Prof products can be calculated:

– across the entire product range

– by individual groups and commodity units

The profitability of products is defined as the ratio of net profit to the costs of production and sale of products

The profitability indicators of all products sold give an idea of the efficiency of the current costs of the pharmacy organization and the profitability of the products sold, since they show the amount of profit per 1rub. costs.

The increase in the profitability of products is a consequence of rising prices at constant costs for the sale of products or reducing the cost of sales at constant prices.

3) Return on assets is the ratio of gross or net profit to the amount of assets of the organization (the average value of the property for the analyzed period, determined by the balance sheet)

This indicator characterizes the efficiency of the use of fixed and current assets of the organization.

4) Return on capital is the ratio of gross or net profit to the average annual value of all invested capital or its individual components - own (equity), borrowed, fixed, working capital, etc.

### **5. Profit and profitability analysis.**

The main stages of profit analysis of a pharmacy organization:

1) Stage study of the composition, dynamics and implementation of the profit plan;

at the first stage of the analysis, the amount of over-fulfillment (under-fulfillment) of the profit plan, the percentage of fulfillment of the profit plan, the rate of its change compared to previous years in general and in the context of individual types of profit are determined.

2) stage analysis of factors affecting profit and analysis of the use of net profit;

When analyzing the factors that influenced the change in the amount of profit, the following factors are considered first of all,

as the volume of sales,

income (trade overlays),

circulation costs.

These factors allow us to identify the size of a possible increase in profit from the sale of goods in the coming period.

3) stage analysis of profitability of activity:

- profitability of products;

- profitability of sales;

- return on assets;

- return on capital;

- payback period of capital;

4) stage identification of reserves for increasing profit and profitability

- profit increase reserves;

- reserves for increasing profitability.

The main sources of profit increase reserves are reserves for increasing turnover, saving circulation costs, increasing gross income, reducing operating and non-operating expenses.

The main source of reserves for increasing profitability is an increase in the amount of profit from the sale of pharmacy assortment goods.

## 6. Methods of profit planning.

Profit planning of JSC consists in determining the planned amount of profit for the year and distributing it by quarters in accordance with the specific weight of the turnover of each quarter.

To plan the profit of a joint - stock company , the following can be used:

- direct billing methods;
- regulatory method;
- target planning method;
- the method of operating leverage;
- method of determining the margin of financial strength.

Direct billing method

This method of profit planning is most often used in pharmacies

The direct account method is based on calculations of planned amounts of gross income, circulation costs, as well as other income and expenses.

Gross profit planning is preceded by calculations of the planned amounts of gross income and circulation costs, since:

$$\text{gross profit} = \text{income} - \text{circulation costs}$$

in absolute units (monetary, rubles)

$$\Sigma GP = \Sigma GI - \Sigma Cc$$

in relative units, %

$$LGP = LGI - LCc$$

Forecasting profit from sales and profitability can be carried out based on

- previously predicted gross income of trade and circulation costs (in total and by level);
- based on the results of the profitability analysis for a number of periods.

**option # 1**

1. From the projected total gross income of trade ( $\Sigma GI$ ) and the amounts of circulation costs ( $\Sigma Cc$ ).

Absolute indicators:

Profit plan. = Amount of Income plan - Amount of IO plan.

$$\Sigma p = \Sigma d - \Sigma io$$

Example: the pharmacy's income plan is 3850 thousand rubles.

The pharmacy's cost plan is 3450 thousand rubles.

So the profit plan will be  $3850 - 3450 = 400$  thousand rubles.

Relative indicators (profitability level):

$$\text{Rent P plan.} = (\Sigma P \text{ plan.} : \Sigma T/O \text{ plan.}) * 100\%$$

Example: the pharmacy's turnover plan is 15400 thousand. rub.

The Profit plan is (from the example above) 400 thousand rubles.

Then the profitability will be  $400 : 15400 \times 100\% = 2.6\%$

**option # 2.**

According to the planned levels of gross income of trade (LGI plan) and circulation costs (LCc plan).

Profitability plan. = LGI - LCc plan

Example. The plan Income level is 25%                      The plan cost level is 22, 4%

Then the profitability plan will be  $25 - 22.4 = 2.6\%$

In the sum of  $\Sigma P$ . plan. = ( $\Sigma T$  plan. \* Prof.plan) : 100%

example amount of profit =  $15400 \times 2.6\% : 100\% = 400$  thousand rubles.

**option #3.**

According to the analysis of profitability for a number of previous periods.

1sq. 2 sq. 3 sq. 4 sq.

6%    7%    8%    9%

Deviation + 1% + 1 % + 1 %

Average deviation     $1\% + 1\% + 1\% = 3\% : 3 = 1\%$ .

Then the projected profitability :     $9\% + 1\% = 10\%$ .

The amount of profit from the sale :

$(\Sigma T \text{ plan.} * 10\%) : 100\%$

The profit from sales changes with the change in turnover, gross income of trade (realized trade overlaps) and the costs of pharmacy circulation.

### 7. Use and distribution of profits

The main directions and the procedure for using net profit

are determined in the pharmacy by the decisions of the owners. The amount of profit is distributed to several pharmacy funds:

1. **A reserve fund** is created by a pharmacy organization to cover losses. The formation of a reserve fund for the pharmacy ensures the preservation of the pharmacy in case of difficult situations on the market and the risk of bankruptcy
2. **The accumulation Fund** provides for the development of the organization, the purchase of new equipment, increased purchases of goods, small repairs of equipment or pharmacy premises.
3. **A profit incentive fund** is created for additional payments to pharmacy employees (bonuses). The owners and employees of the pharmacy have the right to receive part of the pharmacy's profit in the form of an additional payment for the past quarter or the past year.

The size of these funds is determined by the pharmacy depending on the profit received and the working conditions of the pharmacy at the time of profit.

Profit distribution:

<b>Net PROFIT</b>
1. <b><u>A reserve fund</u></b>
2. <b><u>The accumulation Fund</u></b>
3. <b><u>A profit incentive fund</u></b>

Other profit-using funds may be formed in the pharmacy, depending on the situation and plans of the pharmacy. These issues are solved by the owners of the pharmacy.

### Tasks for self-solution:

1. Plan profit and profitability if:

- the planned turnover is set at 4250 thousand rubles,
- trade overlays are planned in the amount of 22% of the turnover,
- expenses -755 thousand rubles.

Trade overlays are the pharmacy's only source of income.

2. Determine the profitability of pharmacy sales for the 1st and 2nd quarters, compare and establish the reasons for the change in this indicator.

Indicator	Actual data in thousands of rubles.	
	1 sq.	2 sq.
<b>Turnover in retail prices</b>	<b>3660</b>	<b>3870</b>
<b>Turnover in wholesale prices</b>	<b>2820</b>	<b>2949</b>
<b>Implemented trade overlays</b>	<b>840</b>	<b>921</b>
<b>Handling costs</b>	<b>620</b>	<b>700</b>
<b>Profit from the sale of goods</b>	<b>220</b>	<b>221</b>

3. Plan profit and profitability (trade overlays are the only source of pharmacy income) if:

- the planned turnover per quarter is set at 5250 thousand rubles,
- trade overlays are planned at 22.5% of the turnover
- expenses - 855 thousand rubles.

4. Determine the amount of the pharmacy's balance sheet profit and calculate profitability according to the following reporting indicators:

- Actual turnover of 2,460 thousand rubles;
- Realized trade overlays of 468 thousand rubles.
- Circulation costs 370 thousand rubles;
- Non-operating income from renting out pharmacy premises 4.0 thousand rubles.,
- Non-operating expenses (fine paid by the pharmacy) 5.5 thousand rubles.

5. Determine the profitability of pharmacy sales for the 1st and 2nd quarters, compare and determine the reasons for the change in this indicator.

Indicator	Actual data in thousands of rubles.	
	1 sq.	2 sq.
<b>Turnover in retail prices</b>	<b>7660</b>	<b>6870</b>



<b>Turnover in wholesale prices</b>	5820	4949
<b>Implemented trade overlays</b>	1840	1921
<b>Handling costs</b>	1220	1400
<b>Profit from the sale of goods</b>	620	521

6. Plan profit and profitability (trade overlays are the only source of pharmacy income) if:

- the planned turnover per quarter is set at 4,650 thousand rubles,
- level of trade overlays are planned at 21.7% of the turnover
- expenses (costs) -785 thousand rubles.

7. Determine the amount of the pharmacy's balance sheet profit and calculate the profitability of sales according to the following reporting indicators:

- Actual turnover of 1,640 thousand rubles;
- Realized trade overlays of 410 thousand rubles;
- Circulation costs of 310 thousand rubles;
- Non-operating income from renting out pharmacy premises 5,6 thousand rubles.
- Non-operating expenses (fine paid by the pharmacy) 1,2 thousand rubles.

8. Plan gross income from sales of goods (trade overlays) in the amount and by level to obtain a profitability of 4% if:

- the planned turnover is set in the 1st quarter of 4250 thousand rubles.,
- expenses -755 thousand rubles.

Trade overlays are the pharmacy's only source of income.

9. Plan profit and profitability for the 3rd quarter if:

- the planned turnover is 4550 thousand rubles
- the level of trade overlaps is planned at the rate of 20% of the turnover,
- expenses -785 thousand rubles.

Trade overlays are the pharmacy's only source of income.

10. Plan profit and profitability for the 2nd quarter if:

- the planned turnover is set at 4350 thousand rubles,

- trade overlays are planned in the amount of 23% of the turnover,
- expenses -795 thousand rubles.

Trade overlays are the pharmacy's only source of income.

11. Determine the value of the pharmacy's gross profit and calculate profitability according to the following reporting indicators:

- Retail turnover of 2,460 thousand rubles;
- Realized trade overlays of 468 thousand rubles.
- Circulation costs 370 thousand rubles;
- Non-operating income from renting out pharmacy premises 4.0 thousand rubles.,
- Non-operating expenses (fine paid by the pharmacy) 5.5 thousand rubles.

12. Plan profit and profitability for the 2nd quarter if:

- the planned turnover is set at 4350 thousand rubles,
- trade overlays are planned in the amount of 23% of the turnover,
- expenses - 795 thousand rubles.

Trade overlays are the pharmacy's only source of income.

13. Determine the value of the pharmacy's gross profit and calculate the profitability of sales according to the following reporting indicators:

- Retail turnover of 1,640 thousand rubles;
- Realized trade overlays of 410 thousand rubles;
- Circulation costs of 310 thousand rubles;
- Non-operating income from renting out pharmacy premises 5,6 thousand rubles.
- Non-operating expenses (fine paid by the pharmacy) 1,2 thousand rubles.

14. Plan gross income from sales of goods (trade overlays are the only source of pharmacy income) in the amount and by level to obtain a profitability of 4% if:

- the planned turnover is set in the 1st quarter of 4250 thousand rubles.,
- expenses -755 thousand rubles.
- 4% return on sales