Financial analysis of small business

Ivanka Kostova [*1A]

*Corresponding author: [1] Professor, Doctor, a Lecturer at University, e-mail: vanjakostova@hotmail.com, ORCID: 0000-0003-2909-6803

[A] Paisii Hilendarski University, Plovdiv, Bulgaria

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Abstract

The purpose of this article is to provide cost analysis tools and help you perform "what-if" calculations. We will look at price because there are many business people who don't have a thorough understanding of what the price of their work is, the price of their products, or the cost of their labor. Even with all the emphasis on the value of pricing in this article, costs are the foundation on which prices are built. Once the businessman has mastered pricing, he will only be able to use mathematical rules to decide whether to raise or lower the price. From now on, there is a natural development of the way business is viewed, namely by "probability and profit" to achieve the set goal – profit. This is called quite often – a predetermined profitability. It is built on the assumption that business exists to generate profit.

Key words: price, profit, costs, analysis tools.

Introduction

We will look at price because there are many business people who do not have a thorough understanding of what the price of their work is, the price of their products, or the cost of their labor.

Material and methods

Even with all the emphasis on the value of pricing in this article, costs are the foundation on which prices are built. Once the businessman has mastered pricing, he will only be able to use mathematical rules to decide whether to raise or lower the price. From now on, there is a natural development of the way business is viewed, namely by "probability and profit" to achieve the set goal – profit. This is called quite often – a predetermined profitability. It is built on the assumption that business exists to generate profit.

Results and Discussion

Knowing your real labor costs

What is the real cost of labor?

Very often small owners know what the real market price of their employees' labor is. Such is the case with D, who is an employee of one who is paid BGN 12 per hour, but he also receives a salary during his leave, according to labor law. Together with the company he works for, they are participants in the government's social, pension and health insurance policies. In addition to the above deductions, the employer is obliged to cover the contributions for insurance against accidents at work.

In this example, the initial cost of labor is BGN 12 per hour. However, it rises to BGN 15.17 per hour due to insurance, salaries, money in case of accidents and money for vacation. All these deductions add 25% to the original price, and these costs are made at the expense of the owner, which is favorable to the worker. The insurances and the way of their payment are different for each company and are developed separately.

Table 1 – Labor expenses

	Employee costs (BGN per hour)
Cost of labor	12
Remuneration during leave (4%, 2 weeks per year)	0.48
Insurance	0.50
Pension plan or other	0.50
Benefits – 12%	1.44
Compensation for accidents at work	0.25
Total	15.17

Why is all this important? I propose to consider an example with a cleaning company with one worker - D, where the price set by the owner for the service is BGN 18, in which he included: BGN 12 for the hourly rate of the worker and BGN 6 profit for the company, i.e. 50% of E's salary, as indicated below. But in reality, these BGN 6 are part of the total value of the service, which is BGN 18 or only 33% of them.

Table 2 – Income taxes as part of labor costs

Hourly Remuneration	12		Hourly Remuneration	12	
			Income tax – 25%	3,17	
Profit 50%	6		Total	15,17	
Sales price per hour	18		Sales price	18	
Expected profit	6	33%	Actual profit	2,83	16%

In fact, the income tax is BGN 3.17 per hour. It halves the profit from BGN 3.17 to BGN 2.83 or 16%. Profits are still made for each job performed, but the low level of income shows that there is no benefit from this business and the company begins to decline.

There is another often forgotten area of the price, and that is the holiday. Every worker has the right to one. If you produce, there is always a break until the micrometer is found.

If you are a service technician, your technicians go to repair shops. It takes time to get to it, during which no work is done. This time is added to your expenses.

While these costs cannot be skipped, others can. In conveyor production, technicians focus on the time required to prepare the machines. In a large American car company, it took workers 3 weeks to readjust the assembly line to move to another model. By comparison, Japanese carmaker workers only needed 24 hours to readjust the production line. line faster to produce a model that sells better. During this time, American manufacturers would continue to fill their warehouses with unsold cars. Then they would have to lower the prices so they could sell them.

Know your true cost of the product

Is this the true price of the shovel indicated by the distributor in the invoice?

And the transport costs?

What is the cost of buying, processing, unpacking and storing the shovel before it is sold?

And what about financial costs? Is it possible to use 10% of your bank overdraft and pay an invoice within 30 days to keep your account in good condition, since you can wait 60 days before receiving your salary (Kostova, 2012, 86-111)?

Many companies do a great job of allocating their costs so that they end up making a profit so that they can cover all their expenses.

This is the main line of pricing that must be followed when setting prices. However, it is good to be creative with prices in order to be competitive in the market. We must not forget that we cannot sell cheaper than the cost of goods.

Knowing your true overhead

We recommend that you organize your income and expense statements so that direct material and labor costs are placed below gross sales to form a gross margin. This arrangement would help the owner to focus on it.

In table 3, the gross margin is retained at 83%. This percentage may lead the marketing department to believe that prices have become more flexible and start offering discounts.

Table 3 – Overheads

Net sales revenue BGN	**100,000**	**100%**
Direct costs		
Cost of goods sold	17,000	17%
Gross profit	**83,000**	**83%**
Sales and expenses		
Advertisng and promotion	3,000	3%
Direct labor	43,000	43%
Subcontractor	2,000	2%
Other direct costs	6,700	7%
Depreciation	689	1%
Equipment costs	2,800	3%
Interest expenses	125	0%
Compensation	7,500	8%
Salaries and commissions	3,400	3%
Other salaries / commissions	2,000	2%
Other sales expenses	4,589	5%
Other expenses	500	1%
Total sales and expenses	**76303**	**76%**
Net profit	**6,697**	**7%**

The percentages in the table help us understand what our costs are. They are not like fixed costs, but very often they cannot be changed either. Rents and public services cannot be changed, but advertising costs can be stopped altogether in the event of a monetary crisis. Costs are those things that we pay for in an organization and we cannot change directly. We haven't noticed anyone adding advertising costs to the total.

Overheads increase prices by a force equal to direct costs, but a little more smoothly. Let's go back to the previous example with D. His work costs BGN 12 per hour plus income tax. Expenses for expenses add another BGN 4.25 (excluding profit) and then the real price is 12 + 3 + 4.25 = 19.25.

To know your true responsibilities

Liabilities are a fixed price you have to pay. They are agreed in advance, whether we are talking about rent or mortgage. You have to pay them every month for a certain period of time. Although your business is not going well you have to make these payments, otherwise you may be fired.

From a price point of view, many obligations limit your flexibility in setting product prices. This leads to your inability to reduce prices if you want to attract more customers and also lose competitiveness in the market.

When we add up the cost of materials, labor and fixed costs and then divide them by the number of hours of production or the number of products, we end up with the full amount we spend. But if our debts are more, even just the amount to service them will spend the money we need to keep the business "alive".

Let's say that debts are not a bad thing in principle, but because of them a company is limited in entering new markets, even after their analysis, which shows that there is a shortage of a product or service that does not allow it to take advantage of a supplier (manufacturer), i.e. from aggressive pricing policy.

Most business people prefer to have their own building where they can operate. However, when we do a financial analysis, we see that it is more profitable to hire. The difference between rent and mortgage payment allows us to invest money in production. In fact, this is not the case. Paying the mortgage every month is a kind of insurance, because if we have not secured our future, owning the land and the building would provide it for us.

Knowing your real transaction costs

The costs of transactions "eat" the profit. There are many different types of transactions with costs attached to them:

• fast payment discounts offered to customers to speed up cash flow;
• incentives for larger purchases;
• advertising allowances;
• free delivery;
• one year unlimited access to a hotline, and
• six months additional parts and labor and warranty from the company.

This is the so-called price discount. The manufacturer offers a series of discounts and incentives that affect the price of the product. The company offers a 2% discount if the trader pays his invoice within 30 days. Offers an annual bonus of up to 5%, based on the total amount of purchases. Retailers also receive advertising quotas of up to 4% if they include the manufacturer's products in their ads. The company pays the wholesaler's shipping costs for all orders above a certain value. Taken individually, none of these proposals affect profits. Together, however, they amount to 22.7% of the difference between invoice prices and discounts.

Do your company's minimum profits suffer from transaction costs?

After looking at our prices and the costs we incur in transactions, we need to look at what discounts our suppliers make. If we have a 2% discount on an earlier payment, then this 2% is then added to our income. This allows us to be more flexible pricing in conditions of strong competition. Companies that do not have enough income cannot be flexible with prices.

Even if the managers of a company make the right decisions and the price level has reached 90%, it is worth trying to raise it to 92%. But this increase is quite risky. Even if there was a 1% drop in the company's prices, it would mean destroying 11.1% of the company's operating profit.

The impact of discount prices

Calculate how much additional sales account is needed to compensate for price reductions

In most companies, there is a misunderstanding between sellers who want to have secure prices and accountants who see the lost benefits of those prices.

There are three ways to determine the price of sales:

1. No change in variable or fixed costs
2. Only by changing the variable costs
3. Only by changing the fixed costs

No change in variable or fixed costs

Most price reductions are based on the assumption that falling prices will generate huge sales and therefore huge profits (Nagle and Hogan, 2006). Table 4 shows how to calculate the sales volume needed to overcome the fall in prices and help achieve the set goals for staff.

The company is considering reducing the price of its goods as their price will fall from BGN 9.95 to BGN 9.45 and thus make the company more competitive within its retail space. The marketing department believes that in this way the company will be able to sell 20% more goods. The operations manager believes that price changes will not lead to the use of cheaper raw materials.

Table 4 shows the effect of reducing the price of goods, which leads to a reduction in total profits from BGN 5,000 to BGN 25,000. To compensate for these losses, the volume of goods must increase by 11.268 or 11.27%. If the marketing department has made the right decision, it should generate higher sales and higher revenues.

If the marketing department of the company has calculated the market correctly, it can sell 20% more and the profit will jump to BGN 3,000.

Table 4 – Impact in reducing prices

	Now	Price Effect	Need More quantity
Cach sale	**10,000**	**10,000**	**11,268**
Price per piece, BGN	**9,95**	**9,45**	**9,45**
Total revenue	**99,500**	**94,500**	**106,479**
Variable costs per number	**5,45**	**5,45**	**5,45**
Gross profit per number	**4,50**	**4,00**	**4,00**
Total gross profit	**45,000**	**40,000**	**45,070**
Fixed costs	**15,000**	**15,000**	**15,000**
Profit	**30,000**	**25,000**	**30,070**

Only by changing the variable costs

In this example, we will set aside fixed costs and focus on variable costs and prices to see how they affect the product, distributor and retailer. In this case, we will see that the more we produce and buy, the cheaper it will be for us. The marketing plan of the company includes the idea of reducing prices, which will generate a temporary difference between the price of the product and its sales, but this in turn will lead to higher sales and revenue. This will show the owner how to calculate sales, how to compensate for the decline.

Table 5 – The impact of price reductions and changes in Variable Costs

Change in Variable Costs	Now	Pricing effect	Required sales
Cash sales	**10,000**	**10,000**	**11,268**
Price for one piece	**9,95**	**9,45**	**9,45**
Total revenue	**99,500**	**94,500**	**101,247**
Variable costs per number	**5,45**	**5,25**	**5,25**
Gross margin of	**4,50**	**4,20**	**4,20**
Total gross margin	**45,000**	**42,000**	**44,998**
Fixed costs	**15,000**	**15,000**	**15,000**
Profit	**30,000**	**27,000**	**29,999**

In this table, the effect of lower prices and lower costs means a drop-in profit from BGN 3,000 to BGN 27,000. To regain profitability levels, the company must sell more goods (Kostova, 2012, 86-111).

If the marketing department's prediction is correct and there is a potential customer in the market who would buy 2,000, then what would the profit look like? See table 6.

Table 6 – Impact on increasing sales

Cash sales	**12,000**
Price per piece	**9,45**
Total revenue	**113,400**
Variable costs for number	525
Gross margin for	420
Total gross margin	**50,400**
Fixed costs	**15,000**
Profit	**35,400**

Only by changing the fixed costs

In some cases, fixed costs may change and this may affect the price and sales volume. As stated earlier in the discussion on capacity utilization, as in the case of the plant, costs are reaching their peak and are gradually starting to increase in order to meet deadlines, to maintain a steady increase in the frequency of production.

The company is considering a 5% reduction in quantity, and their price will fall from BGN 9.95 to BGN 9.45. The marketing department believes that this will generate 20% more profit.

The operations manager believes that costs can be reduced, but another worker will have to be hired to increase production. It follows that fixed costs will increase by BGN 2,000.

Table 7 – Is it possible to lower the price to increase sales

Changes in Fixed and Variable Costs	Now	Price Effect	Needed sales saes
Cash sales	**10,000**	**10,000**	**11,190**
Price per piece	**9,95**	**9,45**	**9,45**
Total revenue	**99,5000**	**94,500**	**105,746**
Variable costs per number	**5,45**	**5,25**	**5,25**
Gross margin of	**4,50**	**4,20**	**4,20**
Total gross margin	**45.000**	**42,000**	**46,998**
Total gross margin	**15.000**	**17,000**	**17,000**
Profit	**30,000**	**25,000**	**29,998**

In this example, the price of one piece has fallen by 50 cents, and the variable costs by 30 cents. The new salaries of the staff will cost the company the profit. To prevent losses, it will have to sell 11,190 units.

If the marketing department has the opportunity to sell 12,000 units, then what would the situation look like?

Table 8 – Sales potential

Change in variable costs	
Cash sales	**12,000**
Price per piece	**9,45**
Total revenue	**113,400**
Variable costs per number	**5,25**
Gross margin	**4,20**
Total gross margin	**50,400**
Fixed costs	**15,00**
Profit	**35,400**

Profits could increase to BGN 35,400, which will make sellers ask for a higher commission.

Goal setting

As in many aspects of life, the goal of a company, the work that is done and the price it puts on its products are the main part of its realization in a niche market (Ross, 1984, 1-11).

If we have a solution to the problem of what the market can bring to our product or service, then we will know exactly what features and benefits they should have and at what price we should sell. Unfortunately, this is not the case and we are entering the market with the thought: “this is my product and I will sell it at the price I decide”.

What should you do instead?

1. To estimate what is the invested amount and what income to expect.
2. To assess the real price of the product that customers want to put.
3. To assess price competition (larger market niche).

Suppose we decide to help in the endeavor of our loved one. First, we need to look at the stores where there is a stock of different types of fabric. We look at what is being sold, where it is being sold and at what price. We are talking to the trader about this. Finally, we come up with some ideas to make a product that doesn’t exist on the market.

Then let's look at what budget we have. It shows how much money you can make by selling certain products in different quantities. Then you need to look at the competitor's products and find out a little more about the company. How do they produce, how do they sell and do they profit from it and what is it? Then we develop some ideas based on what our competitors do not offer. When you have an idea of what price you will sell with your partner, you will need a production plan that will show you for how long you will be able to afford to spend money on the product and how much money you will need for materials. Is it possible to save on materials? Can you use a combination of cheap and expensive materials? All these things should help you keep the cost per unit of product, to have a minimum profit on the price at which we will sell (Calogridis, 2006, 184-187).

This is a better process of work, in terms of market considerations. Knowing the competition and the capabilities of the company provides us with the opportunity to find the right price for our products. However, all our dreams are suppressed by the word "budget".

Let's look at the maxim "pay yourself first". By referring to our own financial situation, this means that we first save and then cut costs off balance so that all bills can come out. In business, this applies to the owner, who on the basis of cost and pricing structure he or she receives a salary. After all, if the business generated only profit, but not a salary for the owner, he would not be profitable (Daly, 2002).

How to use our knowledge? In the table below, the owner requires (according to compensation data) 8% of sales. If he wants BGN 75,000 per year, then the sales should be BGN 937,500 per year. But, if 8% is equal to BGN 75,000, how much will it be equal to 100%?

Table 9 – Backward strategy

Net sales, BGN	937,500	100%
DIRECT EXPENSES		
Cost of goods sold	170,000	18%
Labor	430,000	46%
Subcontractor	20,00	2%
Other direct costs	67,000	7%
Total direct costs	687,00	73%
GROSS PROFIT	250,500	27%
SALES AND EXPENSES		
Advertising and promotion	30,000	3%
Depreciation	6,890	1%
Equipment costs	28,000	3%
Interest expense	1,250	0%
Compensation of employees	75,000	8%
Salaries and commissions	34,000	4%
Other salaries / commissions	20,000	2%
Other sales expenses	4,589	0%
Other expenses	5,000	1%
TOTAL SALES AND EXPENSES	204,729	22%
Net profit	45,771	5%

The Work Back strategy that has been shown is very useful. The strategy "Work backwards" means – finding a solution to a problem, starting with the answer and using reverse operations to return the steps specified in the problem.

Conclusions

This article outlines the possibilities of financial analysis as they apply to pricing. Mathematical tools which we have considered must provide the basis for the company to understand costs so that the business has real prices. The most important tool is a predetermined return or strategy "works backwards" from sales costs, instead of trying to make costs so that they fit into the sales forecast.

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