



Ekonomická
fakulta
Faculty
of Economics

Jihočeská univerzita
v Českých Budějovicích
University of South Bohemia
in České Budějovice

Accounting in trading firms

Business accounting

Textbook

Jindřiška Kouřilová



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Preface

The textbook on the subject Accounting in Trading Firms (Business Accounting) is a shorter version based on an original Czech textbook. It does not include a chapter on the audit of goods.

The textbook forms a part of courses on accounting subjects. Accounting in a trading firm is the course which concentrates on business activities. The structure of the textbook is aimed at individual activities from the point of view of accounting within business.

The whole textbook consists of 13 individual chapters, which are based on topics dealing with normal commercial practices in the context of accounting. The attention is not paid only to accounting and bookkeeping according to the Czech accounting legislation but also to an impact of managerial accounting. It is assumed that the basics of accounting are known by students. As to where would be appropriate for the use of this information, accounts may be discussed at seminars.

Most of the chapters contain examples. Original texts or links are used as well. Some of the topics offered to complement the contexts are needed to solve accounting transactions.

Frequently used accounting terminology in business has got its place in Chapter 1. Chapter 2 includes tax records as a basic simple entry into accounting. Accounting begins in Chapter 3, with an overview of the payment system, and financial accounts. Chapter 4 is more comprehensive; it presents specific problems of the trade in goods.

The next parts cover: sales promotion; advertising (Chapter 5), discounts on goods (Chapter 6).

Then the following block consists of chapters belonging to: commercial risk (Chapter 7) and damage and losses (Chapter 8).

The following special chapters are also presented: a brief treatise about packaging (Chapter 9) and accounting by a business representative (Chapter 10), which also contains links to original external sources.

A more comprehensive and important topic can be identified in Chapter 11, which is devoted to calculations, and again with specific operations. The last chapter, (Chapter 12) deals with parts of financial statements, again in the context of the issue of goods and the possibilities of accounting.

This textbook should be a basis for further study, and development. We assume that students themselves may participate in this activity.

1 Accounting, introduction

- SYLABUS
- BOOKKEEPING AND ACCOUNTING IN A TRADING FIRM



Topics (Repeating)

- Terms, Accounting, Bookkeeping.
- Accounting in a trading firm.
- Luca Pacioi.

1.1 Terms

- Bookkeeping v. Accounting; VAT, GM.
- Costs, revenue from sales, selling to customers, goods as its primary source of revenue.
- Costs of Goods Sold.
- Assets:
 - Stock, stock of goods, inventory, inventories, storage, warehouse,
 - Merchandise,
 - Gross (Brutto), Correction, Net (Netto).
- Stock on hand.

See Enclosure 1.

See Enclosure 2.

1.2 Schema: Accounting in a trading firm

Formulate a scheme of accounting in a trading firm according to its organisation. In which way could the accounting date and statement be affected by the management, owners.

1.3 Luca Pacioli

See Exercise.



Excercise

Used terms, scheme of accounting in a trading firm, who is Luca Pacioli and his today's reference.

What is the difference in the calculation process between the income tax records and accounting, accrual principle?

2 Tax Records

Single, (one) entry accounting, bookkeeping.



Topics

- Advantages and disadvantages of Tax records compared to accounting.
- Books in Tax record.
- Records of goods, examples.

2.1 Advantages and disadvantages

Tax records in comparison with accounting - see exercise.

2.2 Books in Tax Records

Cash book

= Data on income and expenditure forms of records.

This book records all items and is mainly based on the income tax in the reference (current) period. In particular: Accurate monitoring of income and expenditure of structure to determine the tax base required.

The structure of cash book: Income from sales (divided into selling price income and VAT Value Added Tax. Gross income = incl. VAT, Net income = income (less) minus VAT).

But: besides the cash book there are a lot of records in the other books:

- Invoices issued (sent) to customers,
- Stock of goods, inventory, inventories, warehouse,

- Fixed assets,
- Receivable, accounts payable etc. are recorded in special books of accounting.

It's necessary to follow all these items very carefully.

Books of receivables, claims

Very important due to invoices, advanced – maturity.

This book records all claims arising from business tax in the reference period. In particular: Trade receivables (invoices issued to customers) must contain:

1. Date of issue, maturity, the name of accounting case, as a taxable event and the taxable event,
2. Number of the document (variable symbol on invoice),
3. Description of transactions (e.g. invoice accompanying the goods),
4. Type of transaction (e.g. sale of goods, sale of services, a payment, etc.),
5. Debtor (business partner, employee) - name, company or institution.

The complaint claims arising from the requirement for payment of any penalties or interest on arrears.

Book of loan, accounts payable and liabilities indicate, for example, the following commitments:

1. Trade payables (according to the invoices received from suppliers),
2. Advances received (e.g. advance payment for services in the future),
3. Payable income tax, social health insurance,
4. Other taxes (VAT, excise tax, income tax, property tax and other taxes),
5. Date of issue, maturity, and the taxable event,
6. The number of the document (variable symbol on invoice).

Book of inventories, stock of goods.

Book inventory is the same as in accounting.

2.3 Records of goods, examples

Special procedures for simple calculation of inventories, goods. Possible ways of recording materials and goods in stock, in a shop.

2.3.1 Records of goods in valuation of a purchase price (PP)

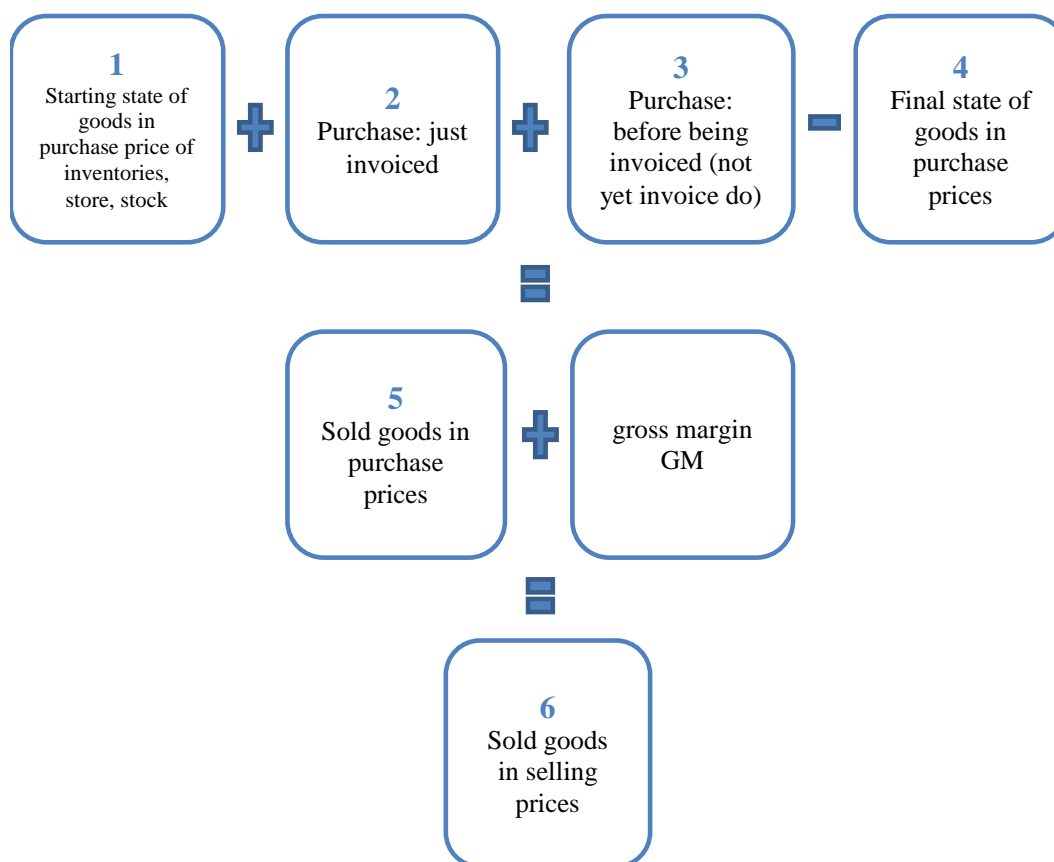
Example 1

BALANCE: used for the calculation of various items in turnover:

Initial state of goods in purchase price of inventories, stock (1), PP
+ purchase of goods in PP: just invoiced (2)
+ purchase of goods in PP: before being invoiced (not yet invoiced) (3)
+ /- changes of prices, methods
= final state of goods in purchase prices (4)
- sold goods in purchase prices PP (5)
+ gross margin GM
= sold goods in selling prices SP (6).

Figure 1: Balance of goods

Sold goods in the purchase price + GM gross Margin = Sold goods in the sale price.
Initial state of goods.



Example and solution: See exercises.

Example 2

State of stock of goods (by Jasanský & Macík, 1998).

Used in cases where it is not known how much of a specific good is sold due to not having records.

The task is: to check the initial state of goods (of stock), (for example 1.1. xxxx) and at the end of final data, for example 31.12.xxxx.

There are three different kinds of goods:

- (a) 1. kind of purchased goods sold immediately and sent to other customers. There is no record in a stock of goods.
- (b) 2. kind of purchased goods which are recorded as input in the inventory and output (selling) (1).

(c) 3. kind of purchased goods which are recorded as input in the inventory only, not output (selling) (2) (for example, small and cheap goods).

It is necessary to calculate the state of two kinds of goods (1) and (2) at the end of the year 31. 12. 201x and the state on any date in the next year 201x+1.

Prerequisite: goods (1) and goods (2) are sold in the same proportion without big changes.

At first we calculate the ratio between the coefficient of condition of goods in stock 1 and 2.

$$\text{ratio coefficient} = \frac{\text{state of goods 2 (31.12)} + \text{increase of goods 2}}{\text{state of goods 1} + \text{increase of goods 1}} = 0.19$$

Initial state of goods

0.19 x out of stock goods 1 = out of stock goods 2 calculation, estimate is 500 MU (Monetary Unit).

Example and solution: see exercises.

2.3.2 Records of goods in the sales price (SP)

Used particularly in the retail business, individual inventory items (groceries, drug-stores etc. or in firms with a complicated structure).

Schematic: stock of goods and in shops with records in the sale price SP.

The starting state of the goods in selling prices + purchase of goods for the current year in sales prices; this means: state in stock of goods is higher + / - Re-assessment, discounts - Disposal (sale, damaged goods) - Total Sales = Closing balance of stock of goods in sale prices (quantity x price). Selling sale price.

Example 3

Check the records in selling prices, find out the status of goods in stock at the end of year and check the inventory in stock:

Example and solution: see exercises.



Excercise

Advantages and disadvantages of bookkeeping and tax records.

Type examples: 1, 2, 3; practical examples and calculation (of their).

Double entry bookkeeping.

3 Financial accounts, payment

Murphy's Laws:

- It is good to produce, better to sell and the best is to get money for sold goods.
- Revenue (income) and costs (expenses) try to catch up to each other, regardless of which of them leads.
- The accountant of a firm should be the person who is able to prevent employees from spending the firm's money.



Topics

- Repeating and opinion of money in a firm.
- Why pay attention to financial accounts, complex engagement, context.
- Payment methods.
- Foreign trade activity.
- Trade receivable and overdue claims.

Repeating, your opinions and looking for context:

Context of payments:

Legislative.

Cash Flow; claims, cost recovery funds, stock turnover of goods store.

Why pay attention to financial accounts.

Payment methods.

Foreign trade activity.

Overdue claims in the trade.

Why is it necessary to pay attention to financial accounts?

(discussion)

Important is: To know: what, where, who, when, to whom, why... to pay...

Errors in payments have serious consequences.

Payments - Overview

a)

- Person who pays and to whom is paid, business partners: creditor, debtor,
- Place of payment,
- Payment methods,
 - cash and non-cash,
 - credits, bills, statements, checks, payment cards,
- Time of payment.

b)

- Own resources (advances, business loans, discounts and sales promotions,...),
- Liabilities, loans, bank loans, loan repayments.

c)

- Instruments and payment transactions, financial derivatives,
- Identifying of currency,
- Role and the course credit of exchange rates, interest,
- Ensuring of claims,
- Analytical and not occupied accounts; how to use them.

Methods of payment

Accounting: Treasury cash, bank, credit cards, cash in transit-through item.

Cash and non-cash.

Cash payment

Cash: pay attention to:

- Limit of cash,
- Control of cash,
- Responsibility for cash register keeping, treasury management,
- Foreign currency- cash.

Checks - (signature, date of issue).

- Security of payments, but a risk of bad checks as well.
- The need to verify and control the customer.

Accrual: time between accepting the check and getting money.

Non cash payment.

Debit, credit card, loss, card abuse overdrafts.

Advantages and disadvantages when paying by cards.

It is possible to have overdraft arrangements, provided you have a permit. Passive balance of payments is recognized as a bank loan. Payment cards: are welcomed in shops, risk of debit cards. Time saving; bank charges nowadays: max. 0.3% of a turnover payment for a bank; according to an achievement of turnover, type of terminal. Credit cards: advantage and disadvantage, responsibility.

Risks by paying by card. Internal rules of using of cards in a firm (complete treatment situations).

Bank accounts, overdrafts.

Promissory note, letter of credit.

Valuables.

Represent cash: postage stamps, stamps, phone cards, meal tickets - purchased, have a nominal value.

Loan, credit:

- How much is necessary to sell cash by means of business credit (invoice),
- Maturity,
- Short term credits, loans; maturity less than 1 year,
- Long term credits, loans; more than 1 year,
- Business (invoice) credit: Bank credits; mortgage, Lombard credit, overdraft, revolving,
- Mortgage credits on real estate,
- Guarantee loan,
- Lombard loan - a loan provided by the bank to pledge movable property, securities,

- Revolving loan, the loan is renewed; there are provided new loans on the due date,
- Interest is charged continuously.

Not all banks offer all types of loans, credits.

Evidence of foreign currencies.

Exchange rate differences.

Context:

- Accounting,
- Tax aspects,
- Financial aspects (hedging transactions, the impact on the price...),
- Economics, casting, managerial accounting,
- Exchange rate difference:
 - Foreign currency: exchange loss,
 - Foreign currency: exchange gain, profit.

Payment assets in statements:

- Financial assets in financial statements,
- Sold and purchased goods,
- Sold goods; the invoice and time of payment: invoices overdue, after maturity.

Receivables, claims.

Terms:

Customers do not pay (Overdue claims),

Trade receivables (Cash flow),

Risks: doubtful, questionable, bad claims (bad debts),

Claims, receivables and the ensuring of them (ex-ante, ex-post),

Adjusting entry-adjustment,

Sanctions in commercial relationships, default interest, contractual penalties, damages.



Exercices

It would be useful looking for context:

Can you add your own opinion?

It is said:

That money is in first place, but is...

To have sufficient finance, enough money, is excellent, but...

Financing in time and at the right place seems to be good, but...

Many (claims) receivables means that...

What about:

Reliability, tunnelling -FRAUDS in accounting...

Motivation of a management to control the payments...

Understanding of needs, methods of payments in a firm...

4 Inventories, Inventory, Goods

Goods in the context with:

Overview of the activities, methods, events in relation to the accounting of goods:

Trade margin and trade mark-up;

Valuation;

Calculation;

Sales, margins, adjustments;

Damages, losses, shortages

Discounts;

Foreign Trade;

Wrapping, packing, packaging;

Specific cases (samples);

Foreign Trade;

Wrapping, packing, packaging.

← Goods, management of goods;

(Damage and loss, advertising, discounts, calculation, they are in the separate chapters).



Topics

Inventory, inventories, storage, stock:

- System of activities in the area: turnover of inventories and goods,
- Inventories and goods in the balance sheet and profit loss (income) statement,
- Some good transactions,
- Transportation, freight,
- Management of goods in stock,

- Margin and Mark-up,
- Calculation of margins in variant point of view.

4.1 System of activities in the area: turnover of inventories and goods

Purchase	purchasing and valuation methods, controller-ship of the quantity and quality, goods reception, discount.
Evidence	in the stock, storage, goods control, perpetual A and periodic B evidence, price structure, goods valuation and registration in stock, storage, costs, purchasing price and selling price, specific cases (samples), adjustments.
Sale	claims, receivables, revaluation-change of price, complaint, reclamation- complaint, methods of promotion: marketing, discounts, advertising, selling competition, objective-aim determination of prices, margins, influence of market and policy, structure of selling price.

4.2 Inventories and goods in balance sheet and income statement

Table 1: Inventories and goods

Balance sheet	Income statement
Sales on credit (invoice)	
Assets = Liabilities + Owners Equity	+ Revenues – Expenses
Receivable (100)	Sales, Revenue (100)

(Cost of sold goods 80 + 20 GM (TM) (M)=100 sales, GM (Gross Margin), TM (Trade Margin), M (Margin).

4.3 Some goods transactions

Receiving goods in stock:

It is necessary to inspect goods. Quantitative and qualitative inspection, random control, statistical evaluation. Check: the amount, integrity of packaging of goods, number of packets and containers, the accompanying documents. Record of faults found.

Valuation of goods MU.

Example 1: Balance, accounting	
Cost of goods sold "income statement"	15
Inventory:	
Purchase	65
Less purchase returns and allowance	2
Purchase discounts	4
Net purchase	59
Add transportation in	4
Cost of goods purchased	63
Cost of goods available for sale	78
Less inventory 31.12.	18
Cost of goods	60
	$15 + 63 = 78$
	$78 - 18 = 60$

4.4 Transportation, freight

Example 2: Purchase of goods:	
-------------------------------	--

Costs include components (cost of transportation, storage location).

Important is to choose a concrete cost as an indicator; to monitor especially the cost of transport, freight.

Goods in Income statement:

Net sales	100	
Costs of goods sold	60	
Gross; Trade; Margin	40	important for the analysis of Margin
Selling and administrative expenses	29	and calculation
Net income before tax	11	
Income tax expense	4	
Net income	7	

Transport, Freight Costs: monitoring of them is important for calculation – freight in, freight out.

See lesson 12.

4.5 Management of goods in stock, inventory

Problems in the stock evidence, records in a firm:

- Internal directions (regulations) of a firm, problem of their absence or quality,
- Input control, a comparison (inspection) with the invoice, including quality of goods,
- Remaining (not sold) goods are not placed back into the stock,
- Damage, lost, shortage,
- Absence of analytical accounts, (used for types, location of people etc.),
- Software manuals, descriptions of algorithms,
- Reasons of dissolution of differences, deviation,
- Activation of transport costs into accounting,
- There is no registration, where A and B methods (it means perpetual and periodic methods) are used,
- Transfer of products within their own stores.

The problem is:

4.6 Margin and Mark-up

A problem is with the use of the terminology:

The difference between selling and purchasing price is called: Gross Margin, Gross Profit, Trade Profit, Margin, Mark-up as well.

Table 2: Scheme of calculation of (trade) margin

In Czech (Řehulka, 2009)	In English
GM marže = OM/PC	GM, TM, Margin / SP selling price: Margin %
OP přírážka = OM/NC	GM, TM, Margin / PP purchasing price: Mark-up %
Profit from trade: Gross margin GM or Trade Margin TM	

The percentage of Margin is a share of gain (profit) and final selling price. A mark-up is what percentage of the cost price we add on to get the selling price; a share of gain (profit) and cost of goods sold (as Řehulka, 2009).

Example 3.1

Calculation of (Trade Margin; Gross Margin) Margin and Mark-up:

CZ	English
M, OM	Margin, (Gross Margin, Trade Margin)
PC	Selling price SP
NC	Purchase price PP
$M = (PC - NC) / PC \times 100$	$\text{Margin} = (SP - PP) / SP \times 100$
$OP = (PC - NC) / NC \times 100$	$\text{Mark-up} = (SP - PP) / PP \times 100$

Example 3.2

Mark-up for goods purchased for 60 and sold them for 90: $90 / 60$ means a 150% increase. Or $90 - 60 / 60 = 30 / 60$, i.e. 50% is; how much was added to the purchase price, the increase of the purchase price.

Margin: (GM, profit 30. It means $30/90$ is 33%).

Example 3.3

If we want to achieve the margin of 25%, for example, the purchase price of goods is 400 MU, the selling price will be determined as follows:

$NC = PC / (1 - M)$	$PP = SP / (1 - M)$
$PC = 400 / (1 - 0.25)$	$SP = 400 / (1 - 0.25)$
$PC = 533.33$	$PP = 533.33$

Another sources: see link:

http://www.buildingtrade.org.uk/articles/markup_or_margin.html#id3

How to Calculate Margins:

You will often have to calculate margins. Either to work out a selling price from a cost price or to work out what margin a certain selling price would result in.

Selling Price from Cost Price (original text in English):

The full formula for working out a selling price from a cost price and a certain margin is: $\text{selling} = \text{cost}/(100 - \text{margin})/100$. Thankfully there is a quicker way to work it out. For a five percent margin, divide the cost price by 0.95.

Margin from Cost and Selling Prices. Sometimes you will have a cost and selling price and need to know what margin that results in. The formula is:

$$\text{margin} = (1 - (\text{cost}/\text{selling}) \times 100) \quad 1 - 0.67 = 0.33 \quad 33\%$$

It is possible to work it back from the examples given in Selling Price from Cost Price. If cost/selling is 0.95, the margin is five percent. If cost/selling is 0.9, the margin is ten percent etc.

Remark: In a merchant situation it is probably better to work with margins. This means you can know what percentage of your total income is profit.

4.7 The calculation of profit, gains, margins from a different from point of view; Management and Accounting in terms:

The manager and accountant pursue different objectives. While the an accountant monitors particularly financial expenses (see financial statements), the manager must reckon with the full amount of the costs.

Example 4

Table 3: Different objectives of manager and accountant

	Version 1 Manager	Version 2 Accountant
x Sales of goods	2,500	2,500
x Cost of goods sold	1,861	1,661
invoiced purchase price of	800	800
discounts, surcharges, interests, financial cost	200	0
duty, customs service	800	800
freight	28	28
Insurance of stocks	33	33
x Gross margin from trading activities	639	839
x Income from other activities	44	44
x Current costs	40	40
x Profit from operations	643	843
Interest income	2	2
Bank charges	4	4
Foreign exchange losses, interest on loans, etc.	0	200
x Income from financing activities	-2	-202
x Profit from operations on the whole	641	641

(Matysová 1998)

Example 5:

Determination of the purchase price of goods sold and unsold - in stock of goods.

Task: Check the state of the goods in stock (xx) in the purchase price, if we know the total sales and we can use 18.9 M%.

Table 4: Determination of the purchase price of goods

	PP	TM	Total SP	VAT	SP +VAT	M %
Starting price stock 1.1.20xx	80	20	100	19	119	20.0
Purchase	40	8	48	9	58	17.0
Total	120	28	148	28	176	18.9
Known sale 31.1.20xx	(99)xx	(23)x	122	27	145	18.9

(Louša 1994)

Calculated for determining a margin of 18.9%; it means in result: 23. At the end of the year, is possible to determine purchase price of unsold goods $122 - 23 = 99$.



Excercise

Practical examples: the mark up and margin, managerial calculation of profit, using of purchase price – possibilities

5 Advertising, Promotion

Sales promotion:

Advertisement, marketing, discounts, taxes.



Topics

- Kinds, forms of advertising, advertisement, advertisement budget.
- Efficiency of advertising.
- Advertising in accounting and tax implications.

5.1 Kinds and form of advertising

- (a) Good and bad advertising, clever and stupid advertising.
- (b) Advertising as a service, material consumption (flyers, posters, billboards, catalogues, CD, DVD presentation, leaflets, floppy disk, etc.
- (c) Goods of own production (tasting).
- (d) Intangible assets (television commercials, movies, etc.), competitions, consumer lottery-cash prizes.

Advertisement budget:

- residual method of budget: the amount has been added to the budget;
- method of percentage of turnover, based on last one.

It is not taken into account in current developments, but in long-term objectives;

- methods of calculating the costs: necessary for the implementation of specific advertising activities.

The need to take into account the life cycle of the product catalogue.

5.2 Effectiveness of advertisement

Measured by output / input:

In accounting it can be used as:

- Sales (revenues) /cost of goods sold + share of overhead costs or calculations on a piece of goods,
- Price of an advertisement / readership magazines, (number of people),
- Number of clicks on a web advert,
- Specific procedures based on marketing surveys.

Strict fiscal rules: it is necessary to distinguish and to qualify: kinds of advertisement Advertising, donations, sponsorship.

It depends on the specifics of the goods; methods of budgeting:

What is the accrual principle? From the viewpoint of the customer and from the day of bookkeeping? The time of advertising should be considered in accounting as well.

Example 1:

12/2016 Billboard with advertisement is installed in December; Just before the end of the year, it will be replaced by another billboard for the services of another firm or another's goods. Although it is likely that, based on this, ad revenues will increase not only at the end of 2016, but especially in 2017.

What about its effects in the following year 2016? In this case the time and material relationship depends on the time when the first billboard was installed.

It is necessary to follow the case law of the courts.

Clever advertising (Konvit, 2003):

There were three shops with shoes in one street:

- First shoemaker wrote the inscription: Sale of the latest shoes.
- Second shoemaker later wrote: Cheapest shoes.
- Third shoemaker (most clever), wrote after: The main entrance.



Other sources, links:

<http://www.magazine.org/sites/default/files/Media-Effectiveness-08.pdf>

<http://www.google.com/patents/US7949561>

<http://www.investinganswers.com/financial-dictionary/businesses-corporations/cost-thousand-cpm-2917>

<http://www.dummies.com/how-to/content/analyze-in-material-price-and-efficiency-variances.html>

Measuring Advertising Effectiveness discussion:

http://www.esmalloffice.com/SBR_template.cfm?DocNumber=PL24_0540.htm&location=all

Original text:

A customer who doesn't know much about your business, or doesn't even know it exists, won't purchase your products or services. Public relations campaigns can help get you in the public eye, but for most businesses, effective advertising is critical. But effective advertising means more than simply spending large amounts of money on a variety of advertising media. Your overall goal is to receive a real, measurable return on your investment. A secondary, but just as important goal is to analyse the effectiveness of different types of advertising; that way you can ensure that each advertising dollar is spent wisely.

The process of measuring advertising effectiveness starts with a simple formula: Return on Investment.

Return on Investment (ROI) evaluates cost against return. (While ROI can be used to evaluate advertising expenditures, it can also be used to evaluate any type of investment, improvement project, process redesign, etc., virtually any situation where money will be spent and a return on that spending is expected.

Here is the formula:

$ROI = (R - CI) / CI \times 100;$

R = Gross Margin (Sales Revenue-Cost of Goods Sold);

CI = Cost of Investment.

The result is a ratio; the higher the ratio, the better the return. For example, say you decide to run a new direct mail campaign. You print 4,000 postcards and mail them to potential customers; the total cost of printing and mailing is \$2,000. As a result of the campaign you generate \$9,500 in sales and \$5,000 in Gross Margin. Simply do the math:

$\$5,000 - \$2,000 = \$3,000; \$3,000 / \$2,000 = 1.50, \text{ or } 150\%.$ Your ROI on the direct mail campaign was 150%.

Other factors may have come into play. If your postcards advertised customers a discount on a specific item, the discount will have affected your total profit level on the sales of those items. But that is okay, especially since you generated increased revenue, (more total sales) and hopefully some of your new customers purchased other items as well. That's why evaluating advertising effectiveness can become somewhat subjective; other financial factors do come into play.

Another variable that makes evaluating advertising effectiveness difficult is utilizing different types of advertising media. For example, say this month you run a television ad, three newspaper ads, and run one direct mail campaign. How can you determine the return generated by each type of advertising?

Possibly you don't care. You may simply decide to measure the program's overall effectiveness. In that case, add up all the costs of advertising, determine your total sales, and calculate ROI. On a one-month basis you won't learn much; evaluated over time you will be able to see trends: whether your return is increasing, decreasing, or staying flat.

A better way is to tie specific items or activities to specific forms of advertising. Your television ads may be a general awareness ads designed to increase market awareness. Newspaper ads are typically used to spread the word about specific sales or product offerings. Direct mail pieces should target a specific item or service and call for a direct response.

Say you run a lawn care business and produce a direct mail flyer advertising a 10% discount for customers who sign-up for a seasonal lawn care program. Measuring the effectiveness of the flyer is relatively simple: just keep track of the number of customers who call in response and evaluate the revenue generated against the cost of the flyer. You can do the same with newspaper or television ads: include information about a specific item, service, discount or sale and then measure the increase in activity against the expense.

Imagine you run a retail store and decide to place a large ad in the newspaper. You provide an overview of your store, but you also mention that you are running a "10% Off Everything in the Store" promotion this weekend. At the end of the weekend, compare your total sales for that period against sales on non-promotional weekends; the difference is, in large part, the result of the newspaper ad you placed. Then calculate ROI.

Say you spent \$1,500 to place the advertisement. On a "normal" weekend, your store does \$6,500 in sales. This weekend you did \$11,500 in sales. While other factors may have come into play, you could easily assume that the additional \$5,000 in sales was due to the ad you ran in the newspaper. Assume the Gross Margin on these additional sales was fifty percent, or \$2,500. To calculate ROI: $\$2,500 - \$1,500 = \$1,000$; $\$1,000 / \$1,500 = 0.66$, or 66%. Your ROI for the campaign was 66%. (In essence, you received \$0.66 in profit after every advertising dollar you spent, which is a good return on investment.)

The key to evaluating advertising effectiveness is to work hard to determine where sales and revenue originated, at least in terms of the advertising you place. If you run three types of advertisements, all featuring the same products or dis-

counts, simply add the total of your advertising spending together. If you wish to evaluate television, radio, print, etc., advertising separately, try to tie unique items to each type of advertising so you can determine the impact of each method. It's not as hard as you think, especially if you ensure that most of your advertising messages include a direct call to action. Otherwise why spend the money on advertising in the first place?

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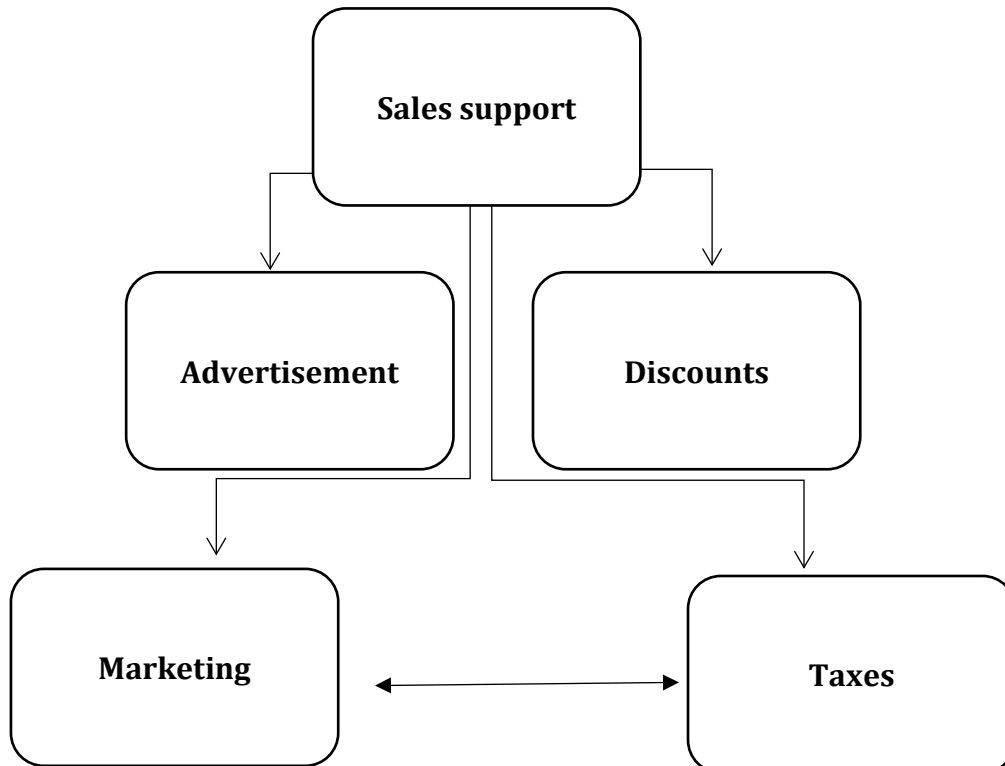


Excercise

Kinds of advertising in accounting, meaning of accrual principle.

6 Trade Discounts

Figure 2: A trade discount is a reduction to the published price of a product



Topics

- About reasons for trade discounts.
- Kinds of discounts, credit terms and sales discounts.
- Discounts in financial (accounting) statements.

The problem is to unify the interpretation of terms used between trading partners.

6.1 About reasons for discounts

- Reclamation,
- Discrepancy between a supply and demand,
- Bad purchase, bad assortment,
- Influence of external conditions,
- Low turnover of goods,
- Avoiding of additional costs,
- Looking for appropriate customers,
- New products, brand, etc.

6.2 Several kinds of discounts

- Discounts requiring and not requiring additional cost.
- There are no clear rules, agenda of discounts only explicitly on the basis of existing legislation.
- Important is: the time of sale, taxable transactions.

A. Influence of time

There are 2 main groups of discounts in trade sales between supplier and buyer:

- (a) Trade (sales) discounts: allowances; reclamation, seasonal discounts, quantity discounts; purchase discounts; discounts based on contractual agreements.
- (b) Financial discounts: discounts paying before (prior to maturity of invoice, if it is not recorded in a contract or invoice).

B. Income tax

Kinds of discounts according to income tax:

- Seasonal discount; it is necessary to prove, demonstrated by the help of an invitation letter-offer list (related documents concerning taxes);
- Quantity discounts: rebate in %;
- Cash discounts, discounts as a payment before the maturity of invoice;

- Discounts bonus payment and price conditions, in-kind and cash;
- Bonus discounts: if purchase or selling is higher than a plan or offer;
- Discounts for dealers, employees;
- Discounts from claims, credit, debit note, complaint report, record of performance flaws.

C. Discounts, allowances, returns

Sales Returns and Allowances:

Sales revenue	110
Less sales returns and allowances	8
Sales discounts	2

Credit terms and Sales Discounts.

Example 1:

List price	300
Less 30% quantity discount	100
Selling price	200
X number of pieces of goods x	40
Sales, revenue	8,000

Example 2: Skonto 2/10

2/10 means that customers may deduct 2% from the selling price if invoice is paid within 10 days, during the first 10 days of the date of maturity.

How important is it for a customer? For example, a 2% discount for payment during the first 10 days? A possible alternative for a seller is to take a loan in a bank.

We can suppose that the goods are sold (1000). If the customer, the purchaser, pays at the end of 10 days, the cash paid will be 980 with net savings of 20. The customer has saved 20 by paying 2 days earlier than required by the 30 day term.

Example 3: What kind of discount should be used?

The maturity of invoice is 30 days. The discount provided by the supplier is

- 3% if the customer pays in cash upon acceptance of delivery;
- or 2% upon payment of deliveries in the first 10 days due.

Ad a) cash paid: yield 3% of the deliveries, the annual rate:

$$\begin{aligned} & \% \text{ Interest rate discount} \times 360 / \text{maturity-period for the discount:} \\ & = 3 \times 360 / 30 - 0 = 36\%; \end{aligned}$$

Ad b) paid in 10 days: credit is 2%:

$$\begin{aligned} & \% \text{ Interest rate discount} \times 360 / \text{maturity-period for the discount:} \\ & = 2 \times 360 / 30 - 10 = 36\%; \end{aligned}$$

In this case the result is the same.

6.3 Discounts in statements

Table 5: Discounts in statements

Balance sheet	Income statement
	Sales on credit (invoice) 1,000
Assets = Liabilities + owners' Equity	+ Revenues - costs
-30	-30
Receivable (1,000 - 30)	Sales discount (30)

Example 3:

Purchase of goods 65,000 MU during the period; allowance and returns 1,800 and purchase discounts 3,700.

Transportation costs (freight in) 3,500 in added to net purchased 59,500.

Incomes:

Purchase	65,000 during the period
Less purchase return and allowance	1,800
Less discounts	3,700
Net purchase	59,500
Add freight, transport	3,500
Goods of purchase	63,000



Excercise

Importance of trades discounts:

When costs change.

Sales discount an Invoice.

7 Business risks

Risks in business (originally it was a risk in connection with the terms of freight – transport, by ship in the 17th century).

Definition of business risks fully corresponds with thoughts of management:

Business risk arises: mostly in cases where a firm will not have adequate cash flow to meet its operating expenses.

Classic ideas:

- Optimism is caused by lack of information.
- The idea: if the problem within 30 days does not resolve it self, it means it does not require any attention.
- If something can go wrong, it will be wrong.



Topics

- Management of business risks.
- Warranty repairs: reserve or (and) funds to reduce business risk.

7.1 Management of business risks

The risk is understood as a certain probability of losses due to poor decisions, etc.

Risk management, it is necessary to keep self-discipline.

It is advisable to divide risks into subjective and objective.

It is necessary to monitor risk management and its early detection.

Risks arising from the business activities of a firm, such as:

- Economic climate.
- From financing activities: debt, the amount of payment, method of payment, secure payments, exchange rates, adherence to budgets, inflation.

- From operating activities: costing and pricing, way of selling, technical losses, but as well: imported pests on pallets, timely delivery, embargo, customs, deposits, inappropriate outsourcing.
- Marketing bad strategy: unattractive products, no-acceptance of goods, the customer's insolvency, absence of ethics.
- Risks from extraordinary activities: response to crisis moments, competition, loss of technical nature, unfounded speculative risks.
- Improperly used accounting methods and procedures.
- Risk management: loss of management support, changing of employees; bad assumption in financial calculation.
- Psychological risks: corruption, failure- fraud, character of an accountant Making improper discounts (discounts activities www portals).

Possible ways of reducing risk

Provisions (correcting items), creation of reserves in case of difficulty with sold goods, the response to price cuts.

- Own personal financial responsibility; insurance.
- Insurance of goods, services.
- Reserve for risks and charges; determination of reserve by means of % of turnover.
- Fund to eliminate the consequences of risky transactions in commercial activities; retained earnings.
- Using of suitable methods: ABC, CVP, SWOT and other methods in management accounting. See exercise.

7.2 Warranty repairs, reserve or funds to reduce business risk

Warranty period (for example expiration) depends on:

- The corresponding order, quantity.
- Speed of shipment, transport.
- Responsibility of employees (staff), fast discounts.

Guarantee fee, the provision for warranty repair. Costs should be included in the price of goods sold (the same as a provision).

Example 1: Calculation of provisions for warranty repairs

- (a) Reserve: the amount of it is based on findings from previous years - 2.2% of turnover as the amount of the reserve for warranty repair services.
- (b) Accurate data, for example, 70% of the goods are free of defects, 20% of goods have minor faults and 10% of goods require a radical repair.

Expected, (planned), cost of small repairs: 300,000 MU, major repairs 500,000 MU; Creation of the above provision of warranty repair:

$(70\% \text{ of MU}) + (20\% \text{ of } 300,000 \text{ MU}) + (10\% \text{ of } 500,000 \text{ MU}) = 110,000 \text{ MU}$ for the period.



Excercise

Illustrate risks in the financial statements.

Calculation of provisions for warranty repairs.

What link should there be between: a reserve and a fund for financial leverage.

SWOT, ABC, CVP methods.

8 Damage, Losses



Topics

- Damages, losses in: legal, accounting, taxes.
- Natural (typical) loss of materials and goods.
- The loss standard in % is tax-deductible, as well as loss, damage by unknown offender and documented natural disaster.
- Statute of the firm: methods of determining, the calculation of these losses.
- Determination of amount of damages and losses (statute of firm).
- Thieves, stealing.
- Damage, losses, calculation in a shop.

8.1 Determination of amount of damages and losses

Usually:

- % of turnover planned, current - or past.
- Turnover of prices without VAT.
- Using of competitions prices.

It is necessary for long-term monitoring and recording of the occurrence of damage emergence.

8.2 Stealing in shops: customers, staffs

See Exercise.

8.3 Damage, losses, calculation in a shop

Calculation of a standard norm of losses in an assortment, turnover in food store with mixed goods.



Excercise

Understanding Example 1.

Example 1

Table 6: Turnover in food store

Product groups	Turnover of kinds	Turnover total in shop	Calculation	Group's share of turnover
Pastries	36,000	250,000	36,000/250,000	0.144
Milk, eggs and others	43,000	250,000	43,000/250,000	0.172
Fruits, vegetables	27,500	250,000	27,500/250,000	0.11
Meat, sausages	33,500	250,000	33,500/250,000	0.134
Delicatessen, blanks, oven ready goods	9,000	250,000	9,000/250,000	0.036
Tins, others	52,000	250,000	52,000/250,000	0.208
Drinks	49,000	250,000	49,000/250,000	0.196
TOTAL	250,000			1

Group's share of turnover:

On the basis of detailed records of inventory and monitoring such as evidence of discarded (removed) goods.

Reasons for its (removal) discarding and the way they were found in the following standards for individual products.

Table 7: Evidence of discarded (removed) goods

Product groups	Amount of dis- carded goods	Quantity of goods purchased	Disposals not caused losses (in %)
Pastries	100	40,000	0.25
Milk, eggs and others	109.20	42,000	0.26
Fruits, vegetables	359.90	29,500	1.22
Meat sausages	234.30	35,500	0.66
Delicatessen, blanks, oven ready goods	38.70	9,000	0.43
Tins, others	174	58,000	0.3
Drinks	216	54,000	0.4

Continued example:

The calculation of % of norm, standard: the amount norms for retail stores, shop.

Table 8: Norms for retail stores

Assortment	Disposals not caused losses (in %)	Group's share of turnover	Calculate	Multipl.
Pastries	0.25	0.144	0.25x0.144	0.03600
Milk, eggs and others	0.26	0.172	0.26x0.172	0.04472
Fruits, vegetables	1.22	0.11	1.22x0.11	0.13420
Meat, sausages	0.66	0.134	0.66x0.134	0.08844
Delicatessen blanks, oven ready goods	0.43	0.036	0.43x0.036	0.01548
Tins, others	0.3	0.208	0.3x0.208	0.06240
Drinks	0.4	0.196	0.4x0.196	0.07840
Total = total standard, norm loss for shop				0.45964

Remark: % of standard norm is calculated from physical inventory, it is not based on a fault of someone.

9 Packaging, wraps



Topics

relations transitioning into accounting:

- Functions of packaging: protection, marketing, advertising, information.
- Multinational suppliers' tactics. Unknown producer.
- Economic and tax context.
- Legislation, Law on Waste, Law on Packaging.
- Frauds (usually the content of goods).
- The obligation to draw up a declaration of the conditions placed on packaging.



Firm regulations

Types of packaging in accounting:

- Transportation, business, consumer.
- There are or there are not the parts – components of a good.
- Packaging can be included in accounting as: Inventories, fixed assets, goods.
- Reversible (returnable) packaging: for example beer bottle.

Note: if packaging is invoiced but not with VAT (or off-balance sheet), it is expected to be returned).

Packaging not own, but belonging to supplier: off-balance sheet

Note: Original equipment manufacturer, for example, a brewery, buys bottles as tangible assets with depreciation. In trade there are returnable bottles in accounting as goods.

Upon returning empty packaging for example by car: costs are paid by the supplier, in other cases by the purchaser.

For mail order sales: VAT of packaging depends on VAT of goods.

In accounting, the method of registration of packaging depends on the kind packaging and also may vary depending on the date of return. In cases where the price is written on the invoice, it must be taken to the warehouse.

Example 1: VAT on returnable packaging
--

In the case where there were deliveries to customers of 500 barrels of MU x 100.

- a return of 450 barrels, subject to tax, 50 000 MU + tax will be paid,
- a return of 550 barrels, the tax base - 50 000 MU and negative tax.



Excercise

Bookkeeping on different kinds of wraps.

The obligation to draw up a declaration on the conditions place on packaging.



Other sources, links:

<http://icmai.in/upload/CASB/gncas9.pdf>

<http://www.accountingtools.com/definition-wrap-report>

10 Dealership, Agents

What is necessary to know?

- Psychology of vendors, dealers, customers.
- Trade information, feedback.
- The external and internal environment.
- Ways and means of payment.
- Knowledge of economic disciplines etc.

The task is to negotiate and implement purchasing and selling advantageously.



Topics

- The kinds, ways and forms of activity; sales representatives, employees, the self-employed, contracts.
- Requirements of dealers, commercial agent for the assessment of business partners > financial {debtors} and management {good and worse clients}.
- Evaluation of commercial agents.

10.1 The kinds of activities of an agent

- Buys and sells.
- Provides services (prepares trade agreements between trading partners), payments on his own or on his own account or on accounts of his business partners.
 - (a) Major changes of factors affecting the performance of firms: for example, soft factors, i.e. relationships with customers, market position, product quality, involvement of employees, enterprise and social climate, knowledge, skills (intangible resources of the firm), use

of management accounting, the called Resource-Based Theory of managerial activities.

- (b) The knowledge of specific calculations in direct relation to customers. Monitoring of expenses, by appropriate allocation base, motivation, methods, SWOT, portfolio matrix, e.g. the costing of competition, cost performance, life cycle costing, variance sales prices, and customer profitability analysis.

10.2 The requirements of dealers, and the commercial agent for the assessment of business partners

Example 1: Detection of profit in relation to each customer (by Šoljaková 2009)

Table 9: The detection of the parts of income, fixed costs, gains, and profit

Items	Customer A		Customer B	
	MU total	%	MU total	%
Sales in basic prices				
Variable costs to a performance standard				
Margin I				
Fixed costs are paid by the customer				
Margin II				
Providing discounts				
The cost of value-adding to performance caused by the customer				
Margin III				
The value-added cost performance not caused by the customer				
Margin IV				
The cost is a negative value caused by the customer				
The cost decreasing value caused by the customer				
Profits are allocated to a specific customer				

This may be beneficial, but also the cause of inflexibility and a decline in service quality.

For example see exercises.

10.3 The evaluation of short-term results of the activities of the agent, and dealer

There are possibilities, e.g.

The share of Gross Margin GM or Trade Margin (TM) spent on specific agent, or conversely, the proportion of those costs (GM and TM) which are spent such an agent.

Example 2:

The results of the dealer (by Mařík 1992):

Annual sales: Wholesale margin 5% of total 3000,000 MU Marging (TM).

Direct costs:

Wage	30,000
Commission	2,000
Travel costs	2,000
Telephone	3,000
Insurance	5,000
Direct costs a total of	42,000

5% of the 3000,000 = 150,000

$$\frac{150,000 - 42,000}{42,000} = \frac{108,000}{42,000} = 2.6$$

Note: Outsourcing (external hiring of traders) may be beneficial, but also a source of inflexibility and decline in service quality.



Excercise

Example 1: Valuation of two dealers.

Example 2: Introduction to Dealership Accounting + other sources, for example:

<http://www.pagepublications.com/preview/FordDOMFAsamplepages.pdf>

<http://www.dealersedge.com/ME2/dirmod.asp?sid=&nm=Advanced+Search&type=Publishing&mod=Publications%3A%3AArticle&mid=B502EFAB5C2C4AB5BDB4C5E749BA3B2A&tier=4&id=7C3201B3CD564E2A883FF85AD9D40A30>

11 Calculation in a trading firm

Each shark in business has excellent calculation.



Topics

- Calculation, the significance of the calculation, relationship of indicators to other disciplines:
incl. psychology-behaviour.
- Decision-making; management.
- Calculation methods, kinds of calculation risk.
- Absorption costing (full cost) method.

11.1 Calculation- Relationships of indicators

- The amount of costs and cost structure.
- Increasing or decreasing prices, behaviour of management.
- The objectivity of internal accounting, financial accounting, their binding.
- The choice of accounting methods.
- Controlling, reporting.

11.2 Decision-making, management (see creative accounting)

These are characterized by the question "What happens, when..." These decisions relate to connections with costs and gains (profit):

- "positive" decisions, such as how much a variant of the expansion of sales of new products would cost, or a new range of customers, or a new technology,

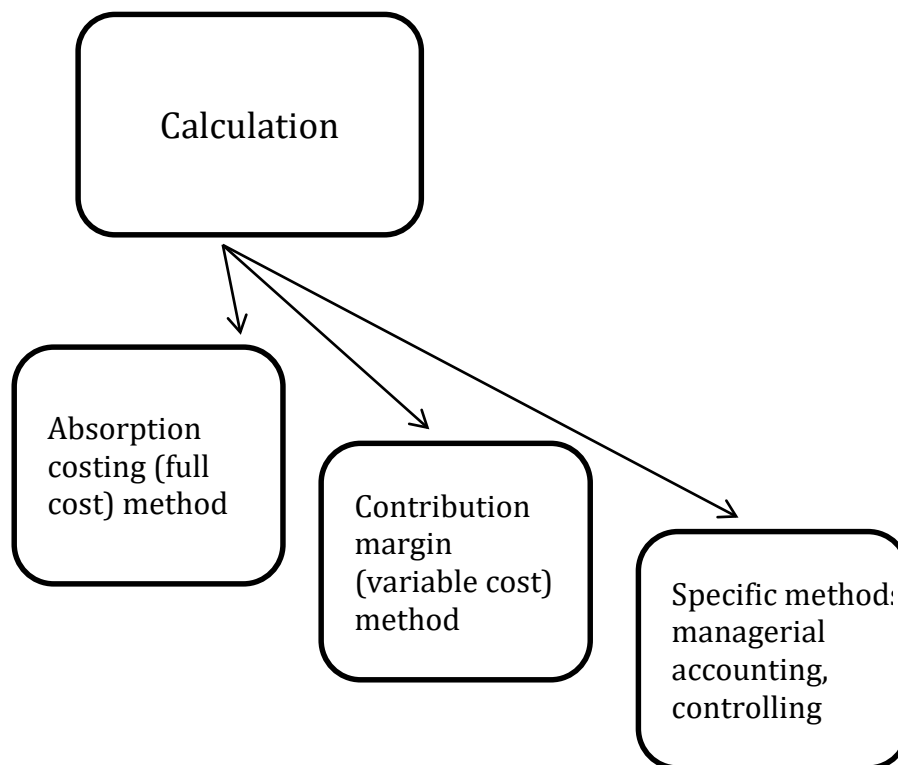
- "negative" decisions, such as how much the limitation, stopping or abolition of the sale of specific goods, or of a specific group of customers, would cost.

These points are important:

- The amount of costs and the cost structure.
- The increasing or decreasing of prices, the behaviour of management.
- The objectivity of internal accounting and financial accounting: binding, relation, difference between them.
- Each calculation method has its advantages and disadvantages.
- Methods of calculations depend on the cost and gain (profit) of one unit of goods.

11.3 Types (kind) of calculation

Figure 3: System of calculation for our purposes



There is a wide choice of accounting methods.

11.3.1 Absorption costing (full cost) method of calculation

The calculation method is the way of attaching costs to the unit calculated. All costs (direct and indirect) are considered (taken into account).

Example of identifying the share of costs of one kind or group of goods:

Proportional calculation: by means of indirect costs and purchase price.

For the division of indirect costs of similar goods (they usually differ in just one technical parameter) using an index related to the basic goods.

11.3.1.1 Examples of the Absorption costing method

Example 1: Calculation of costs and the price of goods (Vysušil 1998).
--

It should find the price of one piece of goods A and of goods B.

Ad 1) Calculation by division – one kind of goods is sold.

Example of identifying the share of the costs of one kind or group of goods:

MU (Monetary unit), SU (Sales Unit), pc (piece).

Table 10: Calculation of costs and the price of goods

Disposition:	MU
Purchase price	1,300
Sales assistants' wages	100
Rent	150
Cost of transport and handling	250
Cost of goods purchased	1,800
Selling price	2,000
Margin, Profit	200
Purchased and sold	100 SU
Cost calculation:	per 1pc
Purchase price	13
Shop assistants' wage	1
Rent	1.50
Transport and handling cost	2.50
Price calculation:	per 1pc
Calculation of total selling price	$2,000 : 100 = 20$
TM. Profit calculation	$200 : 100 = 2$

Example 2: Calculation by means of using proportion: indirect costs and purchase price (by Vysušil 1998)

Proportionality calculation: by means of indirect costs and purchase price.

(a) There is known: the total indirect cost (mostly overheads), total purchase prices of goods A and B (invoice). The total indirect cost per calculated share of indirect costs of goods A is equal to the total purchase price of A and B compared to the total purchase price of goods A.

(b) PPpurchase price of goods A:

Indirect cost: $X_A =$ purchase price: PP

$A + B$ unknown $A + B$ A

The share

of indirect

costs on goods A.

(c) Calculation with the use (allocation) of coefficient:

The pre-calculation (allocation) base is created by the sum of purchase prices.

$$\sum NC = NC_A + NC_B$$

Then we find the share of the total indirect cost and the sum of the purchase prices (allocation base) = k ,

$$k = \frac{\sum NN}{\sum NC}$$

NN indirect cost,

NC direct, here purchase cost.

Particular purchase prices are multiplied by a coefficient and thus we arrive at the result, i.e. the indirect costs of goods A and goods B.

$$NC_A \times k = NN_A (X_A)$$

$$NC_B \times k = NN_B (X_B)$$

Example 3: The calculation of means of using allocation base (by Vysušil 1998).

Surcharge calculation: overhead rates costing – the sale of different kinds of goods. For example: fridge, shaver, TV...

The direct cost is: the purchase price, transport-freight costs of these goods, advertisement, etc. The indirect cost is for example: the stock cost, wages of seller, etc. Most of them are overhead costs. To find the right share of indirect cost per appropriate unit calculation, it is necessary to calculate the ratio between the entire amount of estimated indirect cost and the chosen allocation basis. This ratio is expressed as:

- (a) Overhead surcharge – at the financial allocation base (e.g. direct wages).
- (b) Overhead rate – at the natural allocation base (e.g. weight of goods, area).

$$\text{Overhead rate \%} = \frac{\text{Overhead costs allocation} \times 100}{\text{Allocation base (selling area in m}^2\text{)}}$$

Example 4: Cost and price calculation of goods (Vysušil 1998)

It is necessary to count the objective calculation of good A and good B.

- Seller: his wage depends on the quantity of goods sold and their price.
 - The rent for the stock is in relation to the area of goods in stock.
 - Transport is in relation to the area and the weight of good A and good B.
 - Handling of goods, ditto the area covered by the goods.
1. 600 pieces of good A at 100 MU and 100 pieces of good B for 20 MU per unit were bought and sold.
 2. Wages of seller: 12,000 MU.
 3. Rent: 10,000 MU. Good A has a volume, area: 100 cm³/pc, good B 10 cm³/pc.
 4. Handling costs 300 MU, 1 piece of good A: weighs 0.5 kg, 1 piece of good B: 0.1 kg.
 5. The transportation cost is 1,500 MU. Do we try to add it? What criterion would you choose?
 6. The profit is (or should be) 8,000 MU and it depends on the quantity and price of goods.
 7. Total revenue is (or should) be 93,800 MU.

Cost and price calculation:

Cost calculation per 1 pc:

A = 100 B = 20

Allocation – of wages (overheads) 12,000

Absorption rate 60,000 + 2,000 (bought and sold goods):

$$\frac{12,000}{62,000} \times 100 = 19.35\%$$

$$A = \frac{60,000 \times 19.35}{100} = 11,610$$

$$B = \frac{2,000 \times 19.35}{100} = 390$$

check 11,610 + 390 = 12,000

Allocation - rent (overheads) 10,000

Absorption rate $600 \times 100 + 100 \times 10$

$$\frac{10,000}{60,000 + 1,000} \times 100 = 16.39\%$$

$$A = \frac{60,000 \times 16.39}{100} = 9,834$$

$$B = \frac{1,000 \times 16.39}{100} = 164$$

check $9,836 + 164 = 10,000$

Allocation - handling costs 300

Absorption rate $600 \times 0.5 + 100 \times 0.1 = 310$

$$\frac{300 \times 100}{310} = 96.77\%$$

$$A = \frac{300 \times 96.77}{100} = 290$$

$$B = \frac{10 \times 96.77}{100} = 9.7 = 10$$

$290 + 10 = 300$

Allocation - overheads - transport costs 1,500

Absorption rate: $600 \times 100 + 100 \times 10 = 61,000$

$$\frac{1,500 \times 100}{61,000} = 2.46\%$$

$$A = \frac{60,000 \times 2.46}{100} = 1,475$$

$$B = \frac{1,000 \times 2.46}{100} = 24.6 = 25$$

$1,475 + 25 = 1,500$

Allocation - profit

$$\frac{8,000 \times 100}{60,000 + 2,000} = 12.9$$

$$A = \frac{60,000 \times 12.9}{100} = 7,740$$

$$B = \frac{2,000 \times 12.9}{100} = 258$$

$$7,742 + 258 = 8,000$$

Table 11: Cost, profit, price calculation per 1 pc

Cost, profit, price calculation per 1 pc	A	B
Direct costs	60,000:600 = 100	2,000:100 = 20
Overheads c.wage	11,610:600 = 19.35	390:100 = 3.9
C. rent	9,834:600 = 16.4	164:100 = 1.64
Handling	290:600 = 0.48	10:100 = 0.1
Transport	1,476:600 = 2.46	24:100 = 0.24
Profit	7,740:600 = 12.9	258:100 = 2.58
In sum	151.59	28.46
Check of overall revenues	151.59 x 600 = 90,954	28.46 x 100 = 2,846
At rounded price	90,900 MU	2,800 MU
Total	93,800 MU	

Calculation, part II.

11.3.1.2 Scheme of purchase and sales calculation

There are many forms of sales price calculation schemes, for example:

(a) Purchase price calculation: mainly on the basis of pricelists or offers (here the price often does not include VAT):

- Purchase price, acquisition price

-
- + costs connected with acquisition (packaging, transport¹, loading, unloading, phone calls, travel expenses, customs charges, ev. rate of exchange, interest)
 - + trading costs, (VAT, excise)
 - deductions from price, discount (cash, trade discount, ev. skonto, bonus)
 - + commission costs.

(b) Initial state (start) of stock in selling prices (SP):

- + purchase price in SP
- turnover
- +changes of prices
- = final stock in SP for commodity groups (including gross profit)
- gross profit
- = final stock in purchase prices (PP).

(c) Initial state, start of stock in PP (purchase price):

- + purchase in PP
- final stock
- = sold goods in PP.

Calculation - searching lower price limits:

a) using full cost

- Purchase price
- + direct operational cost (storage, stock, store)
- + determined % of indirect cost
- = wholesale proper cost, fco; store expedition
- + distribution cost
- = own cost, fco(?) retail store
- + VAT
- = lower price limit

b) using direct cost (covering commission cost)

- Purchase price
- + direct cost of storage, handling
- + commission cost
- + direct cost of distribution (packaging, transport)
- + VAT
- = lower price limit

¹ invoice notes:

- On your account and risk: the customer pays for the transport and bears damage-related risks (not caused by wrong packaging);
- Loko factory: the supplier does not pay for the transport at all;
- Franco -cross border: the supplier pays for the transport to the border;
- Franco.- a firm: the supplier pays for the entire transport but does not bear the risk of damage;
- Loco vagon place: the customer must pay for loading of the material at a given train station, and transport of his firm (the supplier pays for the transport to the train station).

Trade margin:

Purchase price
 + cost of acquisition (purchase, gift, own costs etc.)
 – skonto, bonuses, discounts
 = net purchase price
 + operational cost of trading
 = own cost of goods
 + profit
 = net price of goods
 +VAT
 gross price of goods.

Purchase price (purchase price of goods):

+ overhead rate in % (can also be a fraction of overhead for last year and direct wages for last year)
 + direct calculable cost, unless dependent on selling price (insurance, transport)
 Sub-total
 + required profit (e.g. it should involve inflation, turnover of goods and liabilities)
 Sub-total
 + direct cost depending on selling price
 or performance decrease such as skonto, commission on sale, transport cost etc.
 Net selling price
 + VAT
 Gross selling price.

11.3.1.3 Possibility to obtain objective information to calculate the prices of goods

Example 5: Deriving overhead rate from accounting data (balance sheet and profit and loss statement) (by Swoboda 1992)

– Cost of purchased goods incl. transport and cost of premises (storage, depreciation, etc.)	990,000 MU
– Labour costs	50,000 labour, wages
– Other costs in a firm	300,000.

It is necessary to detect the structure of other costs. Costs that should be included in the direct costs of our goods must be eliminated while some costs which are the components of other costs should be added to direct costs.

Other costs include transport costs of 20,000 MU. 5,000 MU for a building we don't need, 3,000 MU for the insurance costs of goods, 15,000 MU for interest from credit, 40,000 MU for entrepreneurial remuneration, 10,000 MU for calculation of risks (reserves for trade risks).

Other assigned, distributable costs:	300,000
Transport per particular good	-20,000
Areas, spaces; rent	-5,000 not necessary for our trade
Insurance per particular good	-3,000
Interest from credit	-15,000
Entrepreneurial remuneration	+40,000
+ calculation risks	+10,000
total overhead cost	
per particular goods	307,000.

Total overhead cost of 307,000 + personal costs of 50,000, so total costs 357,000. Modified costs of purchased goods 1028,000 (990,000 + 20,000 + 15,000 + + 3,000); rate of overheads of purchased goods 357,000: 1028,000 = 34.7%.

Example 6: Determining the planned surcharge for goods [%]; mark-up, margin (by Mařík 1997)

- Cost of operation	20 on the basis of the past period
- Profit share	2
- Trade risks	4
- VAT	5 (expressed as part of the selling price)
Margin 31	Purchase price 69.

- The trade margin should be 31 % (incl. VAT) of the turnover, a surcharge to the purchase price in % mark-up (gross profit/purchase price) would thus be about 45 %.
- 100% total selling price (turnover), mark-up 31/69 margin 31/100.

(The planned surcharge should follow inflation, and the turnover rate of goods).

11.3.1.4 Scheme of pricing in international trade – influence of delivery conditions on price

Theoretically, the buyer pays the same amount for the acquisition of goods which is divided between the supplier's selling price and the expenses of the buyer (insurance, transport, customs charges etc.). This division of cost will influence the determined price.

The price of parity includes a contractual settlement of payments for transport and insurance along the route based on the agreement between the buyer and supplier. Ex.: CIF Cost, Insurance and Freight – expenses are paid for transport and insurance. At EXW export (see the chapter on Stock) the price can be lower than DDP conditions, when all related expenses are added to the price. CTP Carriage Paid to, transport paid to ...) etc. The risks are considered in the same way.

Import:

ZCOP (foreign price in business parity, covered by the foreign supplier)
 + ZPON other costs
 ZC FCO (foreign price fco to border A)
 + profit margin + import duty + other costs
 selling price
 + VAT
 Selling price including tax.

Export:

ZCOP (foreign price in trade parity)
 – ZPON other costs
 ZC FCO revenues
 – profit margin (gross profit)
 purchase price
 + VAT
 Purchase price with taxes.

Example 7: Using the rate of overheads when calculating imported goods
 (by Swoboda 1992)

Contractual price of CIF Croatia:	
1 000 pieces in MU, incl. other costs (paid by the buyer)	34,000 MU
Transport from Croatia to Austrian border	2,000
Haulage from Austrian border to Linz	500
Transport insurance	500
Purchase price FCO Linz	37,000
+ rate of overheads 10 %	3,700
+ directly added costs (e.g. own transport)	1,300
Total	42,000
Margin of profit to direct cost (e.g. 7.5% of 42,000)	3,150
Subtotal	45,150
+ commission of 6% of the purchase price	2,882
Net selling price	48,032
We estimate a discount, rebate of 12.7% of the total selling price	6,987
	incl. rebate
Total	55,019
+ VAT = gross selling price.	

11.3.1.5 Another possible application of the absorption costing method

If most of the overheads caused by sales activities (payments for telecommunications services, invoicing work etc.) and actual sales (how many times the seller sells something) are the same, the same sums can be allocated to each of them.

Example 8: Sales acts as ration indexes (by Swoboda 1992)

The overhead costs for sales in a firm are 200,000 the number of sales is 20,000. Each of the sales should represent 10 of the overhead costs (purchase price of goods, other direct costs and the reduction of output). In the case of various kinds of goods which require various sales periods, it is possible to differentiate the bases to one actual sale and one kind of goods.

A problem can be seen in defining one kind of sale (1 piece or the time for the sale: a shorter sales period should be reflected by a rebate according to the amount). Purchase prices and the number of sales are the basis for allocation here.

Purchase of goods	1,000,000
Overhead costs	200,000
Number of actual sales	20,000
Overheads	200,000
per one actual sale	20,000

When defining the amount of an actual sale, goods of a higher value provide results with lower costs and goods of a lower value provide higher costs than in the calculations with a uniform overhead cost rate.

Overheads charged on purchased goods	200,000 = 20%
	1,000,000
or for 1/2:	
overheads charged for purchased goods	100,000 = 10%
	1,000,000
overhead costs	100,000 = 5%
per actual sale	20,000

Both the basis for allocation – the number of actual sales - and the purchase prices may be combined. Therefore one half of the overhead costs can be included after the purchase of goods and the other half later according to the number of actual sales.

Example 9: Distribution cost and price policy (by Swoboda 1992)

Distribution costs are becoming important (advertising, organisation of sales). Last year a firm achieved a turnover of 1,000 pieces per 100 = 100,000 when pro-

ducing product A. A rise in turnover of 20% (120,000) is planned for this year. Experts estimate that it could be achieved by decreasing the price by 3%, or through additional advertising costs of 8,000, or through the increase in the number of sales representatives (costs of 4,000).

According to current experience, lowering the price (3,600) seems to be the most effective measure at first sight but the use of additional advertising costs of 8,000 could bring a rise in the turnover by 20% in the longer perspective during the following 3 years. On the other hand, lowering the prices or increasing the number of employees seems to be a more permanent problem.

Example 10:

Employment policy is also important: for example, there is an assumption that an advertising event will achieve a turnover of 100 units per 100 (= 10,000); its effectiveness would be for one year and it costs 2,000.

With low employment, the sale of an additional 100 units requires only an additional proportional cost of, for example, 4,000. Then the profit on advertising events represents 10,000 (turnover rise) minus 2,000 (advertising) minus 4,000 for other additional costs = 4,000.

If the firm wants to achieve the same turnover of 10,000 in the case of over-employment, it must be equipped with new machinery, which means additional costs. If these are, for example, 3,000, planned advertising, would bring 4,000 minus 3,000 = 1,000. (By Swoboda 1992)

11.3.1.6. Weaknesses of the absorption costing (full cost) method

Although the absorption costing may seem to be easier and sufficient, its practical use has its risks and limitations.

Problem: When using this method, it needs to be taken into account that there are weaknesses of the full cost method.

It seems to be easier and sufficient yet the practical use has its risks and limitations as well:

- Prices are independent of the quantity of sold goods.
- By using a % margin for all goods, it seems to be that all goods are profitable.
- The margin, mark-up could not be calculated correctly and objectively.
- Some overhead costs can in fact be direct costs, included in the purchase price, but it leads to a wrong calculation. The margin seems to be higher than it in fact is.

-
- The results of the calculation sufficiently illustrate how far we have advanced towards fulfilling a yearly profit plan in a current year. It is not clear whether fixed costs have already been covered or not.
 - If any firm has a complicated organizational structure, the margin is calculated rather more from previous times. It means the % (per cent) is calculated several times. The mistake could then be more significant and the whole calculation would be wrong.
 - The objective is not to achieve a profit on any particular goods only; for loss making goods frequently support the sales of goods as a whole.
 - Using a certain margin of profit, which is used during the first sale of an item in a new year, creates the illusion that each sale result depends on direct profit.
 - The contribution margin is used to cover fixed costs (risk of loss). This leads to the fact that we neglect the results of cost regression with the rising volume of the sales capacity of the stock etc.
 - The procedure of overheads costing; when this cost, assumed to be fixed, could in fact be variable.
 - The costing of the full cost output does not illustrate sufficiently how far we have advanced towards fulfilling a yearly profit plan in a current year. It is not clear whether fixed costs have already been covered or not and whether it is necessary to make special efforts to achieve a planned yearly profit.

It can be said that the use of the overheads costing method is suitable only when very uniform kinds of goods are sold, when the amounts sold are stable during a period of time, and when the capacity of shops is at an optimal level. Pricing by using the method of total real cost, while disregarding the amounts sold, often seems to be a basic mistake.

11.3.2 Fixed, variable costs method - Absorption costing (full cost) method, Contribution margin method

The kinds of indicators we follow:

Maximum level of activities, margin analysis; additional costs as a result of increasing activities. Selling price is determined on the basis of variable costs during additional sales.

Figure 4: Contribution margin

Revenue, Sale		
Fixed cost	Profit margin	Variable cost
GM		

Use of this method especially, in these cases:

- Classification, calculation of costs; variable costing, fixed costing.
- Dependence of prices on production output.
- Optimization of sale.

The difference is called the contribution margin for the covering of fixed costs and the generated profit-margin. It can be used as a basic criterion of profitability of individual outputs and, in relation to the laboriousness of the manufacturing time of these outputs, it represents an efficiency criterion as well. The assessment of the fixed costs is specified then. Only that part of the fixed costs is used which the goods are able to bear from the point of view of the price and costs.

Variable costing allocates only a part of total costs (the variable costs) to a particular unit with the assumption of their proportional development. The result of the comparison of price and costs calculated this way is gross profit.

11.3.2.1 Costing and pricing policy with regard to the amount of orders

Progressive variable costing

1. Price

– direct cost (variable, distribution etc.)

= variable cost margin, margin I (contribution range, gross profit, gross margin I)

– fixed cost (sales overheads)

= goods cost contribution, margin II (goods cost contribution, goods contribution, gross margin)

– common fixed cost

= loss or profit

This costing of a particular output expresses how fixed costs are gradually covered.

We suppose: a standard capacity use of 80–85%.

Frequent types of costing are, for example, the calculations of minimal sales (revenues) so that a firm would not be unprofitable. A similar method: revenue contributions, RC.

$RC = \text{price} / (\text{revenues}) - \text{variable cost} / \text{price} (\text{revenues}).$

Minimal sales, number \times price = fixed cost/RC.

Analytic registration in the class of costs as well as revenues can be used for costing of partial output, e.g.

Transport costs are included in the price.

Example 11: (by Ogerová, Fibírová 1998)

- A) A firm sells one item of goods A with the price of 1 MU and one item of goods B with the price of 1000 MU. If the firm uses a cost rate mark-up of 25% for all goods, then the selling price is 1.25 MU per goods A, and 1,250 MU per goods B. At the same time it is evident, that actual overhead costs calculated for items of goods A are in many cases higher than 0.25 MU. calculated for items of goods B can be lower than 250 MU. (Note: Are these two figures for goods B supposed to be the same?)
- B) The rate mark-up of overhead costs a firm is 15%. One kind of Good A can be sold with a mark-up of 20% and another kind of Good B with a mark-up of 10%. However, this does not imply that the other product, good B, causes loss of profit 5%. In this case it is necessary to know the variable and fixed costs of manufacturing this product and to reflect its complementary and substitution relations to Good A.

11.3.2.2 Break-even´- point determination; determination of the break point

This procedure based on distribution of costs into fixed and variable costs, allows short-term decision-making and optimized resource utilization in an enterprise. The break point is a volume of output at which the company has a loss of just less than the profit. Total costs are recovered by total revenues.

Total cost = total revenue

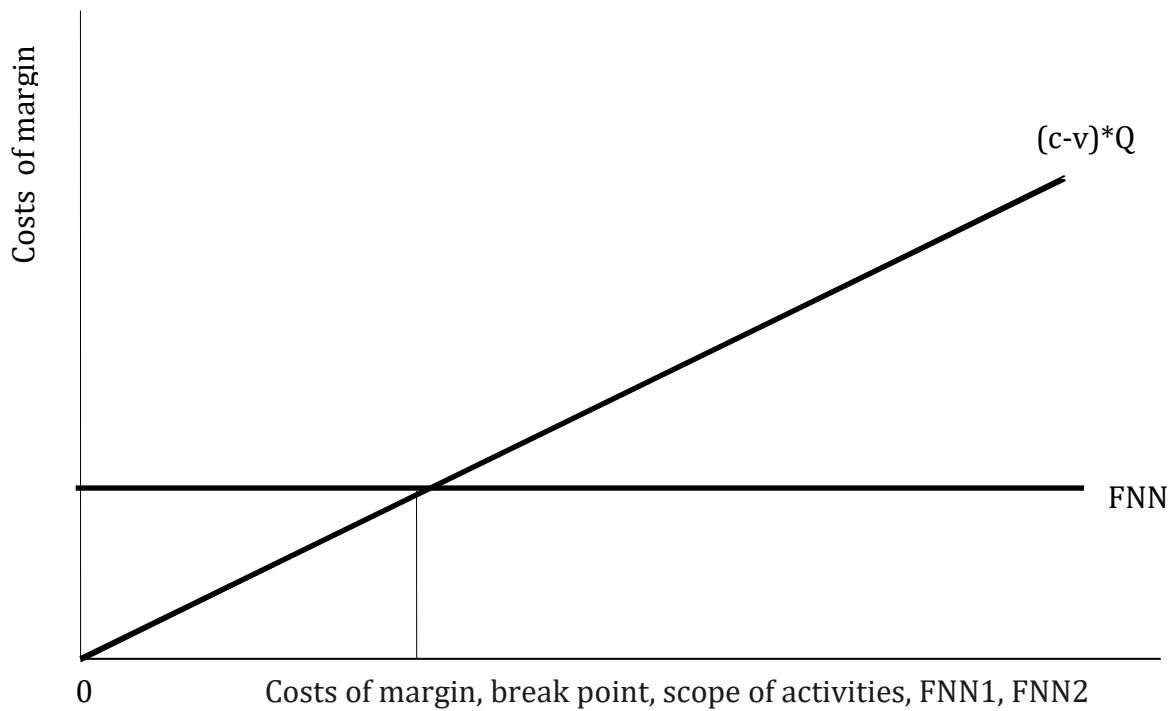
Fixed costs (c) + variable costs (v) = total revenue

$$(FN) + (vxQ) = (cxQ)$$

$$FN = (c - v) \times Q$$

Fixed costs I Fixed costs II

Figure 5: Break point



Example 12: Profit and Loss statement of seller: (by Ogerová, Fibírová 1998)

Revenue from sale of goods	7,080	8,000
Cost of goods sold	4,248 (60 %)	5,000
Margin (Sales, Trade margin)	2,832	3,000
Margin covers: other costs and profit:		
Proportional cost of sales	1,062 (15 %)	2,000
Contribution margin	1,770 (25 %)	1,000
Fixed costs	980	800
Profit before tax	790	200

Example 13: If an enterprise wants to get new customers, it can use two different tactics:

1. To increase the provision of sellers and to intensify advertising. According to preliminary studies, a 30% increase in sales can be expected, if we reduce the share of the margin per unit of revenue to 20%, then the fixed costs will increase to 1,020,000 MU.

2. To reduce the selling price by 5%, and support advertising: this could increase sales by 50%. If the proportional cost of sales stays near to 15% revenue, it would be possible to increase the fixed costs to 1,236,000 MU.

1. Variant (in thousands of MU)

Revenue from sale of goods	(7,080 x 1.3) =	9,024
Cost of goods sold ⁽¹⁾	(4,248 x 1.3) =	5,522.4 (60%)
(Gross) margin		3,681.6
Proportional sale costs		1,840.8 (20%)
Margin		1,840.8 (20%)
Fixed costs		1,020
Profit before tax		820.8

⁽¹⁾ Assumed: prices don't change

2. Variant (in thousands of MU)

Revenue from sale of goods	(7,080 x 1.3 x 0.95) =	10,089
Cost of goods sold	(4,248 x 1.5) =	6,372 (63.15%)
Gross margin		3,717
Proportional sale costs		1,513.35 (15%)
Margin		2,203.65 (21.85%)
Fixed costs		1,236
Profit before tax		967.65

The second variant seems to be better if the most important criterion for us is profit before tax. Break point

- **in the period of one year: revenue (sale) at break point, in % sale, revenue, in one year**

$$\frac{980}{0.25} = 3,920 \text{ MU}$$

(2/3 of month)

- **1. variant**

$$\frac{1,020}{0.20} = 5,100 \text{ MU} \quad 55.41 \%$$

(2/3 of month)

- **2. variant**

$$\frac{1,236}{0.2185} = 5,656 \text{ MU} \quad 56.06 \%$$

(3/4 of month)

Costing and pricing policy with regard to the amount of orders

Orders from customers result in fixed costs from the operation of a firm and are calculated at the same amount whether with small or large orders (writing out an order, preliminary costing, preparation of documents, cost accounting, and purchase of material). Smaller orders are usually less risky than large ones. Fixed costs can vary; and may reflect over-employment in a firm.

Progressive variable costing

1. Price

– direct cost (variable, distribution etc.)

= variable cost margin, margin I (contribution range, gross profit, gross margin I)

– fixed cost (sales overheads)

= goods cost contribution, margin II (goods cost contribution, goods contribution, gross margin)

– common fixed cost

loss or profit.

This costing of a particular output expresses how costs are gradually covered.

Example14: Contribution Margin (by Vysušil 1996)

Table 12: Contribution Margin

Goods	A	B	C
Given from evidence, records:			
Direct material	0.5	1.0	1.67
Direct salaries	0.5	0.35	2.33
Variable overhead costs	0.85	0.55	4.42
Total variable costs	1.85	1.9	8.42
Selling price	2.5	2.4	12.00
Calculated:			
Contribution M to fixed cost remittance and	0.65	0.5	3.58
Profit per item of individual producers	(2.5 - 1.85)	(2.4 - 1.9)	(12.00 - 8.42)
Given in registration, records			
Goods sold (per item)	120,000	300,000	36,000
Contribution M. to fixed costs	78,000	150,000	128,880
Profit per item for individual producers	(120,000 x 0.65)	(300,000 x 0.5)	(36,000 x 3.58)
Total contribution margin (sum)	356,880		
Minus fixed overheads (given from registration)	- 309,000		
Profit of current period	47,880		

11.3.2.3 Analytical accounts using

Costs as well as revenues can be used for costing of partial output, e.g. Costs, according to the causality principle, are divided into variable and fixed costs; fixed costs are further divided into other groups depending on the rate of variability.

Account name: (CAS)

501 xxx	Consumed material, Fixed cost I (repair and maintenance material), Combined cost (consumption overheads), Fixed cost II (known causes and a place of consumption do not always exist).
504	Costs of goods sold ...variable costs.
511 xxx	Repairs and maintenance, Fixed costs I (capital assets maintenance), (correction).
512 xxx	Travel costs - Fixed I.
518 xxx	Service costs mostly Fixed I, advertising.
521 xxx	Personal costs, usually: variable or Fixed costs I, combined in overheads.
551 xxx	Fixed costs I (accounting depreciation).
548 xxx	Insurance costs, usually Fixed I.

11.4 Checks of revenues and selling prices

Checks of revenues and selling prices can be done by means of deviation calculations, structured, for example, as:

- Qualitative deviation – the difference between the budget and achieved price, salaries etc.;
- Quantitative deviation – the difference between the budget and achieved price of sold pieces;
- Deviation in the Assortment;
- Ev. deviations in savings, market share, share of claims after maturity.

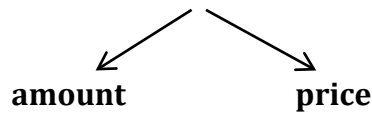
By means of quantified deviations and their structure, it is possible to assess the effect of the individual factors, e.g. the effect of the amount of goods sold,

achieved price. The effect of the goods sold can be divided into the effect of market share and market growth, or to monitor the development of variable and fixed cost etc.

Total deviation – revenues structured for example, thus:

By the help of quantified deviations and their structure, it is possible to assess the effect of the individual factors. The effects of the amount of goods sold, and the achieved price, while the effect of the goods sold can be divided into the effects of market share and market growth. The effects of goods sold can be used to monitor the development of variable and fixed costs etc.

Total deviation – revenues, sales



Quantitative deviation: $Q_{amount} = (Q_{planned\ sale} - Q_{real\ sales}) \times C_{plan}$,
Qualitative deviation: $Q_{price} = (C_{planned} - C_{real}) \times Q_{real\ sales}$,
 $Q \dots sales$.



Excercise

- Marging analysis.
- Calculation of increased sales when granting discounts.
- Calculation of the contribution margin for product X using the profit and loss statement.
- Calculation of the optimal sale of goods using the full cost method and variable costs, and analysis and design of measures.
- Coffee a trading account example.
- Adding or removing goods goods on sale. Impacts.

12 Financial statements



Topics

- Financial, accounting statements; balance, current problems of financial statements.
- Using various methods of accounting for better utilization of data.
- Goods in GAAP.

12.1 Financial (accounting) statements

- The balance sheet, assets, debts.
- Profit and loss (statement) report.
- Cash Flow.
- Notes on financial statements.

See Enclosures.

Balance-sheet is basically a static view of the situation and the structure of the accounting entity assets and debts, (expressing the situation of assets and debts on the date of making the balance).

Profit and loss statement (report) refers to a definite period (1-year period) and it is the summary of the outcome of operations for this time period. The accrual principle is used.

Financial Statements are important for financial management and decision-making, taxes, owners, management.

The evaluation in the historical (purchasing) price has its positives but its negatives as well:

- it doesn't take into account the changes of market-prices,

- it does not take into account the changes of the purchasing capacity (power) of a monetary unit,
- it distorts the economic result of a common, calendar year.



Excercises

Table 13: Balance sheet statement

Balance	Brutto (Gross)	Correction	Netto (Net)
Goods	200	30	170
Receivables	160	40	120
Cash	30	30	30

Profit and loss report	
Cost	Revenue
180	220

How selected accounting cases in reports (statements) are reflected and what the risks are.

About some of the current problems of financial statements

The main problems are:

- Circumstances influencing the results and the events in a firm which the reports cannot show; for example: the competitive environment, area quality, purchasing power of the inhabitants, inflation effect, location of a firm.
- The data in the reports having alternative forms, for example: the way of estimating prices of goods, and receivables.
- The use of AA (Analytical Accounts) enabling the observation of the necessary objects besides the division of cost and yield accounts. On the basis of tax effectiveness, also there is the already mentioned division of the costs in variable, or fixed costs; and division of the costs according to the related causal activities.

12.2 Using various methods of accounting to for better utilization of data

In this context the following part is focused on:

- A) The future and present value of money.
- B) The use of AA in business activities.
- C) Analysis of all the items in terms of prediction ability.

A) Future and present value of money

Here we are interested in liabilities and especially the assets which are affected by the trend of the devaluation of purchasing capacity.

$$FV = PV(1 + i)n$$

where i = % inflation; n = number of years; PV = present value; FV = future value.

For example: Today's debt with the nominal value of 1,000 and with 12% devaluation of the purchasing power of money, means the following for one year; $1,000 \times (1 + 0.12)^1 = 1,120$ MU.

International accounting standards require enumeration of such effects of external factors which can influence economic results. It seems to be useful to use the accounting data on the basis of the purchasing capacity of money (from the purchase price) or recounts on the basis of reproduction prices.

12.3 The use of Analytical Accounts

Profit and loss statements in business and trade

Financial statements in our conditions do not make a difference between manufacturing firms, services or business. However, as was already mentioned, in the case of purchasing goods it is necessary to focus especially on the statement of profits and losses and to compile given data according to certain requirements, which come from the needs of a business firm.

Costs, and accounts of enterprise for example: (by Matysová 1997) (in CSA):

501	Material consumption	50
504	Cost of goods sold (purchase cost)	10,000
511	Repairs and maintenance	60
512	Travelling costs	200
513	Representation costs	100
518	Other services	1,000

521	Personal costs	900
524	Insurance	300
538	Other taxes and fees	1
548	Other operating costs	50
551	Depreciation NIM and HIM	500
568	Other financial costs	10
595	Income-tax	0
	Total	13,171

Revenue:

602	Revenue from sales services	400
604	Revenue for sales of goods	12,600
648	Other operating revenues	19
662	Interest	1
	Total gain, profit	13,020
	Book (accounting) loss	-151

The firm has displayed a loss despite selling with a high margin.

However, the business margin is not calculated from all the costs on sold goods (see above).

Statement of profits and losses

Earnings from goods sold	12,600
Costs of goods sold	10,000
Trade gross margin	2,600
Service	400
Earnings from sales of goods and services	400
Consumption and operation costs	1,410
Energy and material consumption	50
Services	1,360
+ Added value	1,590
Personal costs	1,200
Labour costs	900
Security costs	300
Taxes	1
Tangible property depreciation	500
Other operating revenues	19
Other operating costs	50
Operational loss	-142
Financial revenues	1
Financial costs	10
Loss from financial operations	-9
Profit and gain from ordinary activities,	151

And now:

We can divide the items according to their activity area with the help of AA – namely: Sales, services, servicing (S), marketing (M), administration (A), in such a way that these activities correspond with expended costs and revenues, yields, profit.

As in the case of the (trade, gross) margin calculation and other calculations - we try to achieve the most predictive ability of the statements possible and to link real costs to sales (S), and marketing and distribution (M). Administration costs (A) should remain purely non-productive activities. Other costs (O) should contain just the items not able to be allocated anywhere else. Attention should be given to presenting yields, which have nothing in common with business activities (for example recovering the costs for repairing a crashed car by the insurance company, to be presented as repair costs recovery) by Matysová 1997).

501	Material consumption	50
	501.1. Material for servicing	20 (S)
	501.2. Promotional articles	10 (M)
	501.3. Office material	20 (A)
504	Cost of goods sold	10,000 (S)purchase
511	Repairs and maintenance	60
	511.1. in the shop	30 (M)
	511.2. director's car	10 (M)
	511.3. in the office	20 (A)
512	Travelling costs	200
	512.1. Travelling costs for goods	80 (S)
	512.2. Travelling costs of the customers	50 (M)
	512.3. Travelling costs of the service engineer	60 (S)
	512.4. Other travelling costs	10 (A)
513	Representation	100 (M)
518	Other services	1,000
	518.1. Shop rent	300 (M)
	518.2. Office rent	200 (A)
	518.3. Advertising, publicity	250 (M)
	518.4. Book-keeping, legal and other services	200 (A)
	518.5. Servicing sub delivery	50 (S)
521	Personnel, labour costs	900
	521.1. Shop assistants` wages	300 (M)
	521.2. Service engineers` wages	120 (S)
	521.3. Directors` wages	420 (M)
	521.4. Clerical staff wages	60 (A)
524	Social and health insurance	300
	524.1. For shop assistants	100 (M)
	524.2. For service engineers	40 (S)

	524.3. For directors	140 (M)	
	524.4. For clerical staffs	20 (A)	
538	Other taxes and fees (cars, fees)	1	
548	Other operating costs	50	
	548.1. Goods in stock insurance	30 (S)	
	548.2. Shop insurance	10 (M)	
	548.3. Car insurance	10 (M)	
551	Property depreciation	500	
	551.1. Shop arrangement	300 (M)	
	551.2. Service of gadgets and equipment	50 (S)	
	551.3. Office arrangement	150 (A)	
568	Other financial costs	10	
595	Income tax	0	
	Total costs	13,171	
602	Earnings for sales service	400 (S)	
604	Earnings from sale of goods	12,600 (S)	
648	Other yields	19 (M)	
662	Interests	1 (F)	1
	Total yields, profit,	13,020	
	Book- accounting losses	-151	

If in this phase profit and loss reports are made especially for sales (S), marketing (M), administration (A), or finance (F); than the results of separate activities of departments and branches would be:

Example for sales and services

	(S) Revenue from goods sold	12,600
	Costs of goods sold	10,110
	Purchase price of goods	10,000
	Travelling costs	80
	Stock, goods insurance	0
	Gross margin of goods	+ 2,490
	Service activity revenue, yields	400
	Service activity costs	340
	Material for service	20
	- travelling costs of engineers	60
	- sub deliveries for service	50
	- engineers' wages	120
	- engineers' social insurance	40
	- depreciation of service apparatus equipment	50
	Gross margin from service activities	+ 60
	Total gross margin	+ 2,550

(M)	marketing and distribution costs:	
-	promotional articles	10
-	repairs in the shop	30
-	director's car repairs	10
-	expenses for travel to customers	50
-	representation	100
-	shop rent	300
-	advertising and publicity	250
-	wages - shop assistants	300
-	directors	420
-	social expenses - shop assistants	100
-	directors	140
-	taxes on cars	1
-	shop insurance	10
-	car insurance	10
-	depreciation of shop arrangement	300
-	insurance company	-19
-	Total marketing and distribution	-2,012
(A)	Administration costs	
-	office material	20
-	office repairs	20
-	other travelling costs	10
-	office rent	200
-	book-keeping, legal and other services	200
-	clerical staff wages	60
-	social expenses for clerical staff	20
-	office arrangement depreciation	150
	Total clerical staff costs	- 680
(F)	Interest earnings	1
	Other financial costs	10
	Financial activity income	- 9
	ORDINARY SERVICES, activities INCOME before taxation	- 151
	Income tax	0
	NET LOSS for period	- 151

12.4 Goods in GAAP, some interesting for management

What were they thinking of, as a matter of fact? I don't know.

The mentioned discrepancies can also be seen in the uses of terminology, which can be different. The mentioned gross margin (see chapter entitled Calculation) is used in the EU as gross margin (eventually Deckungsbeitrag), whereas in GAAP accounting it means contribution margin. Gross margin is conceived as an idea like business or trade margin.

In the case of accounts discount from the selling price (sales allowance), purchase allowance can be used.

There are two standard types of price reduction or discounts:

- Trade discounts provided to business partners in terms of assertion business policy, seasonal discounts, rabat, bonus and compensation.
- Cash payment discounts (cash discounts, skonto).

Examples

Example 1: discounts	MU
% Gross revenue	500
Returned goods	30
Trade discount	20
Cash discount	10
Net revenue	440

Income statement about the trade of a firm

Sales

Total sales	500
Less Sales discount sales	60
Reserve for advertising	25
Net Sales	415

Transport has a special position; the movement of goods; namely on the ground of its importance in the following areas:

- (a) It is an appropriate component of e.g. the purchase price of goods; transport can be by the supplier or customer.
- (b) The trends of cost, offers; can decrease or increase – the variety of transport methods.

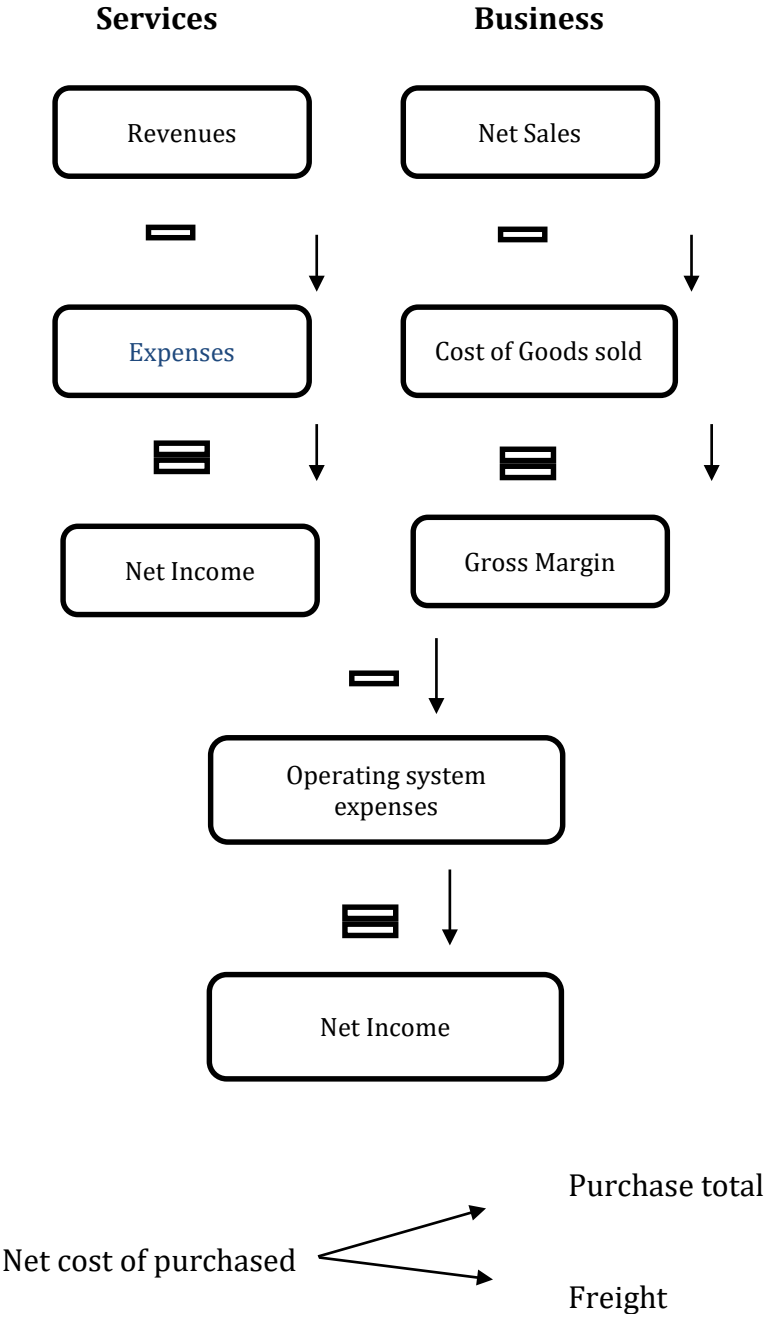
Abroad, two avenues of approach are used; both take into account these aspects of transport:

1. Transport costs of freight in – there are a part of the purchase price of goods in the income statement (method of freight haulage). In the income statement, the gross margin is declining.
2. Transport costs – haulage of freight out.

It is important to keep track of the trends of cost and price, offers; decrease or increase – and variety of transport methods.

Transport, then, has a special position: the haulage of goods or freight; namely on the ground of its importance in these areas.

Figure 6: Income statement components of firms engaged in services and trade



Example 1: A part of the income statement of a business firm:

	MU	
	Debit	Credit
Sales		
Sales returns and allowances		297
Purchases	15.2	
Purchase returns and allowances	114.8	
Freight in	5.6	
Selling Expenses	48.5	
General and administration expenses	37	



Excercises

Pay attention to Asymmetric information in market failure.

What accounting methods for a item goods can you find as more useful, choosing: CAS, GAAP, IFRS?

Sales of goods, comparison: Czech accounting standards and IFRS (variants with short-term payment and deferred payment), impact on margin and reporting in financial statements.

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Enclosures



1 Accounting and Bookkeeping

file:///C:/Users/Jindra/Desktop/Nov%20slo%20BEka%20UCOA%20p%20ADlohy/2%20Accounting%20and%20Bookkeeping%20.htm

<http://autocww.colorado.edu/~toldy2/E64ContentFiles/EconomicsAndBusiness/AccountingAndBookkeeping.htm>

The process of identifying, measuring, recording, and communicating economic information about an organization or other entity, in order to permit informed judgments by users of the information. Bookkeeping encompasses the record-keeping aspect of accounting and therefore provides much of the data to which accounting principles are applied in the preparation of financial statements and other financial information.

Personal record keeping often uses a simple single-entry system, in which amounts are recorded in column form. Such entries include the date of the transaction, its nature, and the amount of money involved. Record keeping of organizations, however, is based on a double-entry system, whereby each transaction is recorded on the basis of its dual impact on the organization's financial position or operating results or both. Information relating to the financial position of an enterprise is presented in a balance sheet, while disclosures about operating results are displayed in an income statement. Data relating to an organization's liquidity and changes in its financial structure are shown in a statement of changes in financial position. Such financial statements are prepared to provide information about past performance, which in turn becomes a basis for readers to try to project what might happen in the future.

History

Bookkeeping and record-keeping methods, created in response to the development of trade and commerce, are preserved from ancient and medieval sources. Double-entry bookkeeping began in the commercial city-states of medieval Italy and was well developed by the time of the earliest preserved double-entry books, from 1340 in Genoa.

The first published accounting work was written in 1494 by the Venetian monk Luca Pacioli. Although it disseminated rather than created knowledge about double-entry bookkeeping, Pacioli's work summarized principles that have rema-

ined essentially unchanged. Additional accounting works were published during the 16th century in Italian, German, Dutch, French, and English, and these works included early formulations of the concepts of assets, liabilities, and income.

The Industrial Revolution created a need for accounting techniques that were adequate to handle mechanization, factory-manufacturing operations, and the mass production of goods and services. With the emergence in the mid-19th century of large, publicly held business corporations, owned by absentee stockholders and administered by professional managers, the role of accounting was further redefined.

Bookkeeping, which is a vital part of all accounting systems, was in the mid-20th century increasingly carried out by machines. The widespread use of computers broadened the scope of bookkeeping, and the term data processing now frequently encompasses bookkeeping.

Accounting Information

Accounting information can be classified into two categories: financial accounting or public information and managerial accounting or private information. Financial accounting includes information disseminated to parties that are not part of the enterprise proper—stockholders, creditors, customers, suppliers, regulatory commissions, financial analysts, and trade associations—although the information is also of interest to the company's officers and managers. Such information relates to the financial position, liquidity (that is, ability to convert to cash), and profitability of an enterprise.

Managerial accounting deals with cost-profit-volume relationships, efficiency and productivity, planning and control, pricing decisions, capital budgeting, and similar matters. This information is not generally disseminated outside the company. Whereas the general-purpose financial statements of financial accounting are assumed to meet basic information needs of most external users, managerial accounting provides a wide variety of specialized reports for division managers, department heads, project directors, section supervisors, and other managers.

Specialized Accounting

Of the various specialized areas of accounting that exist, the three most important are auditing, income taxation, and nonbusiness organizations. Auditing is the examination, by an independent accountant, of the financial data, accounting records, business documents, and other pertinent documents of an organization in order to attest to the accuracy of its financial statements. Businesses and not-for-profit organizations in the United States engage certified public accountants (CPAs) to perform audit examinations. Large private and public enterprises sometimes also maintain an internal audit staff to conduct auditlike examinations, including some that are more concerned with operating efficiency and managerial effectiveness than with the accuracy of the accounting data.

The second specialized area of accounting is income taxation. Preparing an income-tax form entails collecting information and presenting data in a coherent manner; therefore, both individuals and businesses frequently hire accountants to determine their taxes. Tax rules, however, are not identical with accounting theory and practices. Tax regulations are based on laws that are enacted by legislative bodies, interpreted by the courts, and enforced by designated administrative bodies. Much of the information required in figuring taxes, however, is also needed in accounting, and many techniques of computing are common to both areas.

A third area of specialization is accounting for nonbusiness organizations, such as universities, hospitals, churches, trade and professional associations, and government agencies. These organizations differ from business enterprises in that they receive resources on some nonreciprocating basis (that is, without paying for such resources), they do not have a profit orientation, and they have no defined ownership interests as such. As a result, these organizations call for differences in record keeping, in accounting measurements, and in the format of their financial statements.

Financial Reporting

Traditionally, the function of financial reporting was to provide proprietors with information about the companies that they owned and operated. Once the delegation of managerial responsibilities to hired personnel became a common practice, financial reporting began to focus on stewardship, that is, on the managers' accountability to the owners. Its purpose then was to document how effectively the owners' assets were managed, in terms of both capital preservation and profit generation.

After businesses were commonly organized as corporations, the appearance of large multinational corporations and the widespread employment of professional managers by absentee owners brought about a change in the focus of financial reporting. Although the stewardship orientation has not become obsolete, financial reporting in the mid-20th century is somewhat more geared toward the needs of investors. Because both individual and institutional investors view ownership of corporate stock as only one of various investment alternatives, they seek much more future-oriented information than was supplied under the traditional stewardship concept. As investors relied more on the potential of financial statements to predict the results of investment and disinvestment decisions, accounting became more sensitive to their needs. One important result was an expansion of the information supplied in financial statements.

The proliferation of footnotes to financial statements is a particularly visible example. Such footnotes disclose information that is not already included in the body of the financial statement. One footnote usually identifies the accounting methods adopted when acceptable alternative methods also exist, or when the unique nature of the company's business justifies an otherwise unconventional approach.

Footnotes also disclose information about lease commitments, contingent liabilities, pension plans, stock options, and foreign currency translation, as well as details about long-term debt (such as interest rates and maturity dates). A company having a widely distributed ownership usually includes among its footnotes the income it earned in each quarter, quarterly stock market prices of its outstanding shares of common stock, and information about the relative sales and profit contribution of its different industry segments.

Accounting Principles

Accounting as it exists today may be viewed as a system of assumptions, doctrines, tenets, and conventions, all encompassed by the phrase "generally accepted accounting principles." Many of these principles developed gradually, as did much of common law; only the accounting developments of recent decades are prescribed in statutory law. Following are several fundamental accounting concepts.

The *entity concept* states that the item or activity (entity) that is to receive an accounting must be clearly defined, and that the relationship assumed to exist between the entity and external parties must be clearly understood.

The *going-concern* assumption states that it is expected that the entity will continue to operate indefinitely.

The *historical-cost principle* requires that economic resources be recorded in terms of the amounts of money exchanged; when a transaction occurs, the exchange price is by its nature a measure of the value of the economic resources that are exchanged.

The *realization concept* states that accounting takes place only for those economic events to which the entity is a party. This principle therefore rules out recognizing a gain based on the appreciated market value of a still-owned asset.

The *matching principle* states that income is calculated by matching a period's revenues with the expenses incurred in order to bring about that revenue.

The *accrual principle* defines revenues and expenses as the inflow and outflow of all assets—as distinct from the flow only of cash assets—in the course of operating the enterprise.

The *consistency criterion* states that the accounting procedures used at a given time should conform with the procedures previously used for that activity. Such consistency allows data of different periods to be compared.

The *disclosure principle* requires that financial statements present the most useful amount of relevant information—namely, all information that is necessary in order not to be misleading.

The *substance-over-form* standard emphasizes the economic substance of events even though their legal form may suggest a different result. An example is the practice of consolidating the financial statements of one company with those of another in which it has more than a 50 percent ownership interest.

The *conservatism doctrine* states that when exposure to uncertainty and risk is significant, accounting measurement and disclosure should take a cautious and prudent stance until evidence shows sufficient lessening of the uncertainty and risk.

The Balance Sheet

Of the two traditional types of financial statements, the balance sheet relates to an entity's position, and the income statement relates to its activity. The balance sheet provides information about an organization's assets, liabilities, and owners' equity as of a particular date (such as the last day of the accounting or fiscal period). The format of the balance sheet reflects the basic accounting equation: Assets equal equities. Assets are economic resources that provide potential future service to the organization. Equities consist of the organization's liabilities together with the equity interest of its owners. (For example, a certain house is an asset worth \$70,000; its unpaid mortgage is a liability of \$45,000, and the equity of its owners is \$25,000.)

Assets are categorized as current or long-lived. Current assets are usually those that management could reasonably be expected to convert into cash within one year; they include cash, receivables, merchandise inventory, and short-term investments in stocks and bonds. Long-lived assets encompass the physical plant—notably land, buildings, machinery, motor vehicles, computers, furniture, and fixtures. Long-lived assets also include real estate being held for speculation and intangibles such as patents and trademarks.

Liabilities are obligations that the organization must remit to other parties, such as creditors and employees. Current liabilities usually are amounts that are expected to be paid within one year, including salaries and wages, taxes, short-term loans, and money owed to suppliers of goods and services. Noncurrent liabilities are usually debts that will come due beyond one year—such as bonds, mortgages, and long-term loans. Whereas liabilities are the claims of outside parties on the assets of the organization, the owners' equity is the investment interest of the owners in the organization's assets. When an enterprise is operated as a sole proprietorship or as a partnership, the balance sheet may disclose the amount of each owner's equity. When the organization is a corporation, the balance sheet shows the equity of the owners—that is, the stockholders—as consisting of two elements: (1) the amount originally invested by the stockholders; and (2) the corporation's cumulative reinvested income, or retained earnings (that is, income not distributed to stockholders as dividends), in which the stockholders have equity.

The Income Statement

The traditional activity-oriented financial statement issued by business enterprises is the income statement. Prepared for a well-defined time interval,

such as three months or one year, this statement summarizes the enterprise's revenues, expenses, gains, and losses. Revenues are transactions that represent the inflow of assets as a result of operations—that is, assets received from selling goods and rendering services. Expenses are transactions involving the outflow of assets in order to generate revenue, such as wages, rent, interest, and taxes.

A revenue transaction is recorded during the fiscal period in which it occurs. An expense appears in the income statement of the period in which revenues presumably resulted from the particular expense. To illustrate, wages paid by a merchandising or service company are recognized as an immediate expense because they are presumed to generate revenue during the same period in which they occurred. If, however, the wages are paid to process merchandise that will not be sold until a later fiscal period, they would not be considered an immediate expense. Instead, the cost of these wages will be treated as part of the cost of the resulting inventory asset; the effect of this cost on income is thus deferred until the asset is sold and revenue is realized.

In addition to disclosing revenues and expenses (the principal components of income), the income statement also lists gains and losses from other kinds of transactions, such as the sale of plant assets (for example, a factory building) or the early repayment of long-term debt. Extraordinary—that is, unusual and infrequent—developments are also specifically disclosed.

Other Financial Statements

The income statement excludes the amount of assets withdrawn by the owners; in a corporation such withdrawn assets are called dividends. A separate activity-oriented statement, the statement of retained earnings, discloses income and redistribution to owners.

A third important activity-oriented financial statement is the statement of cash flows. This statement provides information not otherwise available in either an income statement or a balance sheet; it presents the sources and the uses of the enterprise's funds by operating activities, investing activities, and financing activities. The statement identifies the cash generated or used by operations; the cash exchanged to buy and sell plant and equipment; the cash proceeds from stock issuances and long-term borrowings; and the cash used to pay dividends, to purchase the company's outstanding shares of its own stock, and to pay off debts.

Bookkeeping and Accounting Cycle

Modern accounting entails a seven-step accounting cycle. The first three steps fall under the bookkeeping function—that is, the systematic compiling and recording of financial transactions. Business documents provide the bookkeeping input; such documents include invoices, payroll time cards, bank checks, and receiving reports. Special journals (daily logs) are used to record recurring transactions; these include a sales journal, a purchases journal, a cash-receipts journal, and a

cash-disbursements journal. Transactions that cannot be accommodated by a special journal are recorded in a general journal.

Step One

Recording a transaction in a journal marks the starting point for the double-entry bookkeeping system. In this system the financial structure of an organization is analyzed as consisting of many interrelated aspects, each of which is called an account (for example, the "wages payable" account). Every transaction is identified in two aspects or dimensions, referred to as its debit (or left side) and credit (or right side) aspects, and each of these two aspects has its own effect on the financial structure. Depending on their nature, certain accounts are increased with debits and decreased with credits; other accounts are increased with credits and decreased with debits. For example, the purchase of merchandise for cash increases the merchandise account (a debit) and decreases the cash account (a credit). If merchandise is purchased on the promise of future payment, a liability would be created, and the journal entry would record an increase in the merchandise account (a debit) and an increase in the liability account (a credit). Recognition of wages earned by employees entails recording an increase in the wage-expense account (a debit) and an increase in the liability account (a credit). The subsequent payment of the wages would be a decrease in the cash account (a credit) and a decrease in the liability account (a debit).

Step Two

In the next step in the accounting cycle, the amounts that appear in the various journals are transferred to the organization's general ledger—a procedure called posting. (A ledger is a book having one page for each account in the organization's financial structure. The page for each account shows its debits on the left side and its credits on the right side, so that the balance—that is, the net credit or debit—of each account can be determined.)

In addition to the general ledger, a subsidiary ledger is used to provide information in greater detail about the accounts in the general ledger. For example, the general ledger contains one account showing the entire amount owed to the enterprise by all its customers; the subsidiary ledger breaks this amount down on a customer-by-customer basis, with a separate subsidiary account for each customer. Subsidiary accounts may also be kept for the wages paid to each employee, for each building or machine owned by the company, and for amounts owed to each of the enterprise's creditors.

Step Three

Posting data to the ledgers is followed by listing the balances of all the accounts and calculating whether the sum of all the debit balances agrees with the sum of

all the credit balances (because every transaction has been listed once as a debit and once as a credit). This determination is called a trial balance. This procedure and those that follow it take place at the end of the fiscal period. Once the trial balance has been successfully prepared, the bookkeeping portion of the accounting cycle is concluded.

Step Four

Once bookkeeping procedures have been completed, the accountant prepares certain adjustments to recognize events that, although they did not occur in conventional form, are in substance already completed transactions. The following are the most common circumstances that require adjustments: accrued revenue (for example, interest earned but not yet received); accrued expense (wage cost incurred but not yet paid); unearned revenue (earning subscription revenue that had been collected in advance); prepaid expense (expiration of a prepaid insurance premium); depreciation (recognizing the cost of a machine as expense spread over its useful economic life); inventory (recording the cost of goods sold on the basis of a period's purchases and the change between beginning and ending inventory balances); and receivables (recognizing bad-debt expenses on the basis of expected uncollected amounts).

Steps Five and Six

Once the adjustments are calculated, the accountant prepares an adjusted trial balance—one that combines the original trial balance with the effects of the adjustments (step five). With the balances in all the accounts thus updated, financial statements are then prepared (step six). The balances in the accounts are the data that make up the organization's financial statements.

Step Seven

The final step is to close noncumulative accounts. This procedure involves a series of bookkeeping debits and credits to transfer sums from income-statement accounts into owners' equity accounts. Such transfers reduce to zero the balances of noncumulative accounts so that these accounts can receive new debit and credit amounts that relate to the activity of the next business period.

Regulations and Standards

Until 1973, accounting principles in the United States had traditionally been established by certified public accountants. Such persons are accountants licensed by their state governments on the basis of educational background, a rigorous certification examination, and, in some jurisdictions, relevant field experience. In 1973, the seven-member Financial Accounting Standards Board was created as an

independent standard-setting organization. Regulations for auditors are promulgated by the American Institute of Certified Public Accountants. United States companies whose stocks or bonds are traded by the general public must conform to rules set by the **Securities and Exchange Commission**, a federal government agency. Tax laws and regulations are administered at the federal level by the **Internal Revenue Service** and at the local level by state and municipal government agencies. The United States has no standard-setting body for managerial accounting. From 1971 to 1980, however, the federal Cost Accounting Standards Board established accounting rules for contracts with parties that sell goods and services to the government. The nongovernmental Institute of Management Accounting, although not active in issuing technical standards, does administer a program qualifying candidates for a certificate in management accounting (CMA). The Institute of Internal Auditors has a program enabling an accountant to be designated a certified internal auditor (CIA).

Accounting has a well-defined body of knowledge and rather definitive procedures. Nevertheless, standard setters continue to refine existing techniques and develop new approaches. Such activity is needed in part because of innovative business practices, newly enacted laws, and socioeconomic changes. Better insights, new concepts, and enhanced perceptions have also influenced the development of accounting theory and practices.

Contributed by:

Philip E. Meyer

2 To credit cards

<http://www.gocompare.com/credit-cards/credit-cards-explained/>

By Emily Bater

2.1 Beginners' guide to credit cards

Learn more about basics of credit cards, their advantages and disadvantages and why it's important to choose the right one for your needs.

Consider before taking out a credit card:

- What do I need the card for?
- What sort of card is best suited to my needs?
- What card will I qualify for with my credit rating?

Provided they're used responsibly and managed effectively, credit cards can be a flexible and convenient way to borrow money and pay it back over time.

What's a credit card?

A credit card is not the same as a debit card - when you pay for something on a credit card you're borrowing money.

Every time you use your card - whether it's to make a purchase, to withdraw cash or to transfer a balance from another card - you're effectively borrowing money.

Each card is the subject of a credit agreement between the cardholder and the provider.

This agreement is regulated by the Consumer Credit Act 1974 and details key financial information plus other details, such as that relating to missed payments, theft, loss and misuse of the card, your right to cancel and general terms.

You'll receive a copy of the credit agreement when you make an application.

If you don't pay off the full amount outstanding then any payments you do make will be allocated to the outstanding balance in a specific order, known as a 'payment hierarchy'.

For instance if new purchases have a 0% promotional interest rate, but a balance transferred from another card attracts interest immediately.

You can find details of this on your credit agreement and it may also be included on your statement.

It used to be common for providers to allocate payments so that transactions at the lowest rate of interest were cleared first, with those at the highest rate of interest cleared last, but this changed in 2011 when new rules came in to protect consumers.

Now, the transactions that attract the highest levels of interest are paid first, which should allow you to clear your balance as efficiently as possible.

If you do repay your balance in full each month, then no interest is charged.

However, if you only make the minimum payment each month then it'll take you longer and cost you more to clear your balance, as interest will be added to your debt.

Some cards come with an extended interest-free period, but if this ends and you're yet to pay off your balance you'll have to pay interest.

How credit rating affects card applications.

When you apply for a credit card, the issuer will carry out a credit check. If you're judged to have a poor credit rating, the creditor may decide to turn down your application.

Alternatively, you may not be offered the advertised rate but will instead be charged a higher rate of interest.

Did you know...?

- Credit card companies only have to offer the advertised APR to 51% of successful applicants - 49% can be offered a higher interest rate.

Creditors in fact only have to offer the advertised APR to 51% of successful applicants - so 49% of people may not be offered the advertised rate.

If you need to rebuild a credit score or have never had a credit rating, you may want to consider a credit builder card.

These tend to have high interest rates and to put limits on the amount of money you can borrow but - if used responsibly - help you to become a lower risk to credit companies, so helping to improve your chance of getting a more attractive deal in the future.

You can obtain a credit file that will give an indication of your credit worthiness from the main credit bureaus, Equifax, Experian and Callcredit, or from various other third-party reference agencies.

"If you've been declined for credit cards, stop applying - every application will leave a footprint on your file which lenders will see as a warning signal that you may be over-stretching yourself financially," said Gocompare.com's Matt Sanders.

"This shouldn't trouble you when you first enter our credit card comparison service - at this point you're just browsing through the options that are on the market.

"Do take care if you choose to take the next step and actually apply for a card, though. That's when you need to be realistic about what you will or won't be accepted for."



You can also avoid harming your credit score by using our smart search tool before you apply.

'Smart search' makes a soft search for credit cards before you proceed with a formal application.

Such a soft search will show you the cards you're likely to be accepted for without impacting on your credit history.

Advantages of credit cards.

Purchase protection

Under Section 75 of the Consumer Credit Act, credit card issuers and retailers take joint responsibility for faulty purchases.

This means that if you pay for something valued between £100 and £30,000 with your credit card your purchase will be protected in the event that it's faulty or you do not receive the goods or services you've paid for. In such cases, you can claim a refund from your card provider.

Incentives

Some providers will offer incentives for using your plastic, such as loyalty points, cashback or donations to charity.

Flexible credit

Most cards offer an interest-free period, meaning you can benefit from free, short-term credit if you clear your balance in full by the due date. They offer flexibility and convenience, allowing you to make emergency purchases or pay for more expensive items by instalments.

If you've been declined for credit cards, stop applying - every application will leave a footprint on your file.

Matt Sanders, Gocompare.com

Disadvantages of credit cards.

It's easy to run up large debts

Whilst it's easy to run up a large debt on your plastic, it can be much harder to repay it, and this can take a considerable amount of time.

Interest charges

If you incur interest charges it can take longer to clear your balance, and will probably end up costing you more.

No interest-free period for cash advances

Interest rates for withdrawing cash are usually significantly higher than for balance transfers or purchases and there's no interest-free period, meaning interest is charged from the date of the withdrawal, regardless of whether you clear your balance in full or not.

Credit card charges

Most credit card providers will charge a fee if you:

- Fail to make the minimum payment by the due date.
- Exceed your credit limit.
- Have a direct debit or cheque returned unpaid.

If you have a habit of forgetting that your payment's due, setting up a monthly direct debit will help you to avoid late or missed payment charges.

Remember that missed payments can have severe consequences, and may affect your ability to obtain credit in the future.



Choosing the right credit card

Your credit history and the way you use your plastic is the key to finding the right deal. We've put together a few common scenarios to help you decide which option may be the most suitable for you.

You always pay your balance in full each month

If you always pay your balance in full each month then you can use the interest-free period offered by most cards to your advantage, avoiding interest charges.

Interest rates aren't likely to be your primary motivation - instead, think about looking for a card that offers a good incentive scheme, such as a cashback card or a reward card.

You clear most, but not all, of your balance each month

If you clear most, but not all, of your balance each month then you may want to consider a card with an introductory rate, preferably 0% interest.

A number of providers offer interest-free introductory periods, but you should always check what the interest rate will revert to when the introductory period expires - if you haven't cleared your balance in full by this time then it will start to accrue interest.

If you do still have an outstanding balance at the end of the introductory period, you may want to consider making a balance transfer to another card to take advantage of another introductory rate.

Remember that it's dangerous to assume you'll qualify for a new balance transfer deal. Your circumstances can change and card issuers can change their qualification criteria, meaning that you could be stuck with your old card when the introductory period ends.

If you don't think you'll clear your balance by the end of the introductory period and you can't be bothered switching, then a product that has a low standard rate may be a longer-term solution.

You already have debt on a credit card

If you're planning on using a credit card abroad, it's important to know what you'll be charged.

Similarly, if you have an existing debt to transfer and are paying the standard rate of interest then you could save money on interest charges by transferring it to a new card that offers a low or 0% balance transfer rate.

Most providers now charge a fee for balance transfers, which is typically 2–3% of the amount transferred.

Even if there is a fee, transferring your balance can still be cost effective if you're switching to a 0% or low interest rate offer - do the maths.

If you also plan to use this card for new purchases then look for a provider that offers an introductory period for both purchases and transfers.

Alternatively, have a credit card for each purpose - one for the balance transfer and the other for new purchases.

You regularly use your card overseas

If you regularly take trips abroad and use your plastic to pay for goods or services, then you could get some major benefits from a card with no overseas usage fees.

Credit card exchange rates are based on the Visa and MasterCard wholesale rates, with an additional charge (loading percentage) of up to 3% added by the card provider.

Not all providers will charge these fees, and if you find one that doesn't it can equate to a significant saving when you make a large number of overseas transactions.

While taking a credit card abroad provides peace of mind when making purchases, try to avoid withdrawing cash while on holiday.



"If you're planning on using a credit card abroad, it's important to know what you'll be charged for and where," said Sanders.

"Withdrawing cash is usually the most expensive way to pay when you're abroad and it won't give you the additional protection that paying by plastic does.

"Try to avoid ATMs and use cards for purchases in restaurants, with tour operators and at attractions."

Find out about other types of credit cards, including business credit cards and premium credit cards - in our credit card guides.

Credit card fraud, loss, theft and misuse.

If you're the victim of financial fraud, or your card is lost, stolen or misused without your permission, you should not be expected to pay.

To protect your card when shopping online, you should keep your PC protected by using a firewall and up-to-date anti-virus software.

If you're using a wireless connection then ensure it's encrypted.

Before entering any personal details into a website, look for a padlock symbol in your browser or check that the website address starts with 'https' as these both indicate that you are within a secure area of the site.

You can also register for 'Verified by Visa' or 'MasterCard SecureCode' as these add an extra layer of protection when using your card to buy goods and services online.

Read more about how online card payments work in our guide.

Ensuring you can meet repayments

The reputation of any sort of payment protection for credit cards has been tainted by the PPI scandal, but the right income protection policy can be a valuable product and may mean you could cover your card repayments if you're unable to work due to injury, illness or unemployment.

If you're in a situation where you're finding it difficult to make your repayments and you're unable to reduce the amount you're paying on interest charges by switching to a credit card that offers lower interest rates, contact your provider at your earliest opportunity to discuss your options.

Credit providers are usually keen to help and come to an arrangement, and may offer you the chance to take a payment holiday - this is a break of a few weeks or months, depending on your needs.

You can also contact your local Citizens Advice Bureau, National Debtline or StepChange Debt Charity (formerly the Consumer Credit Counselling Service) for free advice.

2.2 The Pros And Cons Of Small Business Credit Cards

By Katie Adams

<https://bayintegratedmarketing.wordpress.com/2013/05/01/the-pros-and-cons-of-business-cards-for-small-businesses/>

<http://www.investopedia.com/articles/pf/09/small-business-credit-cards.asp>

If you're a small business owner, you've probably received numerous offers and applications for a small business credit card. You probably wonder whether you should consider getting one or how they differ from other forms of credit. According to the National Small Business Association, 44% of small business owners reported using credit cards for financing needs in 2007 to 2008, which exceeds any other source of funding. A business credit card can be a convenient way to quickly access financing for short-term needs and can increase your company's purchasing power. However, like any source of financing, it comes at a cost and must be carefully managed. Let's look at what small business credit cards are, and the pros and cons of using them as a corporate financial tool.

What They Are.

Small business credit cards provide business owners with easy access to a revolving line of credit with a set credit limit, in order to make purchases and withdraw cash. Like a consumer credit card, a small business credit card carries an interest charge if the balance is not repaid in full each billing cycle. You may be able to get a credit card through your bank or you can compare cards terms and features – and apply online - through websites like Creditcards.com or Credit.com.

Credit Card Vs. Line of Credit

Small business credit cards are marketed as an attractive alternative to a traditional line of credit, but there are some important differences.

The first and most obvious difference is that a credit card provides you with a revolving line of credit for your business whereas a loan or line of credit is fixed. That means that you can continue to borrow or charge up to your credit limit as you repay your monthly bill when you use a credit card, compared to a fixed line of credit which requires that you apply for a new loan once you have used and repaid your first loan.

Another important difference is the amount of money you can access and the amount of interest charged. Traditional small business loans or fixed lines of credit typically provide a larger amount of financing, which is necessary for more substantial purchases such as equipment leasing and facility costs. These loans cost less because they charge a lower rate of interest.

Lastly, unlike most loans or fixed lines of credit, small business credit cards do not require that the card holder put up collateral to qualify for the line of credit. Credit cards represent an unsecured line of credit, meaning that the money is not secured with an asset. Instead, the card includes a requirement for the card holder to sign a personal guaranty, meaning that she or he is personally and legally liable for repaying the money borrowed on the card. (For more on this read *Asset Protection For The Small Business Owner*.)

Business Credit Card Pros

There are a number of reasons why a small business owner may consider applying for a small business credit including:

- **Easier Qualification**

It can be easier for business owners who do not have a well-established credit history to qualify for a revolving line of credit with a credit card, rather than a traditional line of credit or bank loan.

- **Convenience**

Credit cards are the ultimate in financing convenience. Business owners can quickly access funds for purchases or cash withdrawal, much more easily than having to find cash and/or use a checkbook.

- **Financial Cushion**

A credit card can provide business owners with a much-needed financial "cushion" when accounts receivables are behind or sales are slow and the business is short on cash.

- **Online Ease**

Increasingly, business owners make purchases and do business online with vendors, contractors and suppliers. Using a credit card makes online transactions easier.

- **Financial Bookkeeping Assistance**

In addition to receiving a monthly statement, most cards provide small business card holders with online tools to manage their account, and a year-end account summary which can help a bookkeeper track, categorize and manage expenses. It can simplify bookkeeping, help when using outside professionals to navigate an audit and pay taxes, and provide an easy way to monitor employee spending.

- **Rewards and Incentives**

Many cards offer business owners rewards for using the card including discounts, airline travel miles and more. Some also provide "cash back" incentives, repaying card holders a percentage of their purchases. (For more information on this read *Credit Card Perks You Never Knew You Had*).

- **Tool to Build Credit**

Responsibly using a small business credit card - which means paying the bill on time, paying more than the minimum due, and not going over the credit limit - can be an easy way in building up a positive credit report for your business. That, in turn, can help you be more likely to qualify for a loan or line of credit, and at a potentially lower interest rate, in the future. (To learn more, see *How Credit Cards Affect Your Credit Rating*).

Business Credit Card Cons

Before rushing to apply for a business credit card, it's important to consider these potential downsides:

- **More Expensive**

The convenience and ease of small business credit cards come at a price - they typically charge a much higher interest rate (1-3% over prime) than a bank loan or fixed line of credit. That interest can add up quickly if card activity is not repaid on time and in full each month. According to the National Small Business Administration, 71% of business owners who used credit cards as a source of financing in 2007 carried a monthly balance. In addition, without a system to regularly and carefully monitor card usage it can be easy to accidentally overextend your firm financially by going over your firm's credit limit or incurring late fees or penalties. (For more on this, read *Six Major Credit Card Mistakes*).

- **Personal Legal Liability**

Most small business credit cards require a personal-liability agreement (your personal security) to repay debt. This means that any late or nonpayment could result in a negative personal credit report and the

inability to personally borrow money. You also may have to pay more with a higher interest rate.

- **Security Issues**

Business owners need to carefully manage their business credit cards. Security measures should be created to ensure that cards or card information is not stolen by employees, vendors, contractors and others who come through the office space. It's also important to make sure that employees that are authorized to use the card do not use the cards for personal spending, and that they take precautions when making online transactions to avoid being hacked. (Find out how to protect your personal information from phishers, scammers and thieves; read *[Keep Your Financial Data Safe Online](#)*).

- **Less Protection**

Often, small business credit cards do not carry the same protection as consumer credit cards. For example, many cards will not provide the same level of assured services when disputing billing errors or needing to make merchandise returns. Be sure to review what level of protection and services a card offers before applying.

- **Fluctuating Interest Rates**

Unlike a loan or fixed line of credit, the company that issues your credit card can reset the interest rate on your credit card depending on how you use and manage your account.

Conclusion

Small business credit cards are one option business owners may want to consider when choosing financing tools and resources. Make sure you understand the credit card's terms of usage, costs and benefits before applying, and have a system in place to monitor and manage usage. (For more information on small businesses, read our related articles *[Keeping A Small Business Afloat](#)* and *[Six Steps To A Better Business Budget](#)*).

Read more: The Pros And Cons Of Small Business Credit Cards | Investopedia <http://www.investopedia.com/articles/pf/09/small-business-credit-cards.asp#ixzz4jIBz9TsL>

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The traditional business card harkens from an era where a firm handshake and a “call me tomorrow to discuss” paved the way to a signed contract. Despite today’s proliferation of digital communications, for some businesses a traditional card still makes sense. Weighing whether to go digital or stick with the paper? Here are some pros and cons for leaving an impression with a printed business card.

The Pros

For many small business owners, marketing doesn’t come naturally. A business card is a simple and established way to network and get your small business known in the community. Here are some other advantages:

- **Deliver Important Information:** A business card is meant to provide vital information about your business, including phone number, address and website. These details can help prospective customers find your business easily.
- **Create a Positive First Impression:** Delivering a very practical and convenient marketing tool, the business card can help you make a great and lasting first impression.
- **Save Time:** Handing over a business card takes less time than writing down your phone number, address and website.
- **It’s Inexpensive:** Ordered in large quantities, business cards deliver some of the most inexpensive marketing tools you can find today. A business promotion expense, the printing and design fees can be written off on your taxes and paid for using your company’s business prepaid debit card.
- **It’s Effective:** Although digital business cards are becoming more popular, many business owners prefer having something physical to hand out to potential customers they face to face. Business cards are especially effective if you’re in an offline or creative industry. Graphic design firms, arts and crafts companies, and painting services can showcase their unique talent and service in the design of a printed business card.

A Few Cons

You've worked hard to start your own business and are no doubt excited to promote it any way you can. It's important to consider the appropriate channels to promote your business, and business cards may not always be the best solution.

- **Cost:** It's true that business cards are inexpensive, especially when ordered in large quantities. However, small businesses typically don't need thousands of business cards at one time. Ordering business cards in small quantities can make them quite expensive. Additionally, there are situations when business information changes. This implies additional costs because you have to replace your old business cards with new ones. Business cards that stay in boxes whether because of excessive quantity or outdated information are simply a wasted expense.
- **Accessibility:** Another essential drawback consists of the fact that you may forget to take your business cards with you. In this case, the only thing you can do is to write your telephone number and address on a piece of paper, which is quite unprofessional.
- **Organization:** Consider your card recipient's preferred way of networking. As people adopt digital forms of saving contact information, the business card may become a cumbersome requirement of time and file organization.

Being aware of the disadvantages related to business cards, more and more business owners opt for digital business cards, which deliver a fantastic way to showcase products and services. However, experts advise businesspeople to use these alternatives only to complement the paper business card, which remains the most valuable tactile reminder of a company.

Marilyn Smith specializes in covering the latest news of interest to small business owners, [including business prepaid debit cards.](#)

3 Cost of goods sold

<https://www.thebalance.com/how-to-calculate-cost-of-goods-sold-397501>

By [Jean Murray](#)

Updated August 18, 2016.

What is Cost of Goods Sold?

Cost of goods sold is a calculation of all the costs involved in selling a product. Calculating Cost of goods sold for products you manufacture or sell can be complicated, depending on the number of products and the complexity of the manufacturing process.

Cost of goods sold is a required calculation on business tax returns. It reduces your business income, and thus your business taxes, so it's important to get it right.

Calculating Cost of Goods Sold - Step by Step

This "how to" takes you through the calculation for one product, so you can see how it is done and what information you will need to provide your CPA. You most likely will need a CPA or tax professional to calculate COGS for your [business income tax return](#).

Before you begin, review this article on the [information](#) you will need in order to calculate cost of goods sold.

Step One: The Basic Components of the COGS Calculation

The basic calculation is:

- Beginning Inventory Costs (at the beginning of the year).
- Plus Additional Inventory Cost (inventory purchased during the year).
- Minus Ending Inventory (at the end of the year).
- Equals Cost of Goods Sold.

For example:

\$14,000 cost of inventory at beginning of year
+ \$8,000 cost of additional inventory purchased during year
– \$10,000 ending inventory
= \$12,000 cost of goods sold.

The COGS calculation process allows you to deduct all the costs of the products you sell, whether you manufacture them or buy and re-sell them.

There are two types of costs included in COGS: Direct and Indirect.

- **Direct Costs** are costs related to production or purchase of the product.
- **Indirect Costs** are costs related to warehousing, facilities, equipment, and labor.

Step Two: Determine Direct Costs

Determine direct costs, including:

Cost to purchase the merchandise for resale,
Cost of raw materials,
Packaging costs,
Work in process,
Cost of inventory of finished products,
Supplies for production.

Direct overhead costs related to production (for example, utilities and rent for manufacturing facility).

Step Three: Determine Indirect Costs

Indirect costs include manufacturing materials and supplies:

- Labor (for workers who actually touch the product),
- Costs to store/wholesale the products,
- Depreciation of equipment used to produce, package, or store the product,
- Salaries of administrators, managers overseeing production,
- Equipment used for administrative work (not production).

Step Four: Determine Facilities Costs

Facilities costs are the most difficult to determine. This is where a good CPA comes in. Your CPA must allocate a percentage of your facility costs (rent or mortgage interest, utilities, and other costs) to each product, for the accounting period in question (usually a year, for tax purposes).

Step Five: Determine Beginning Inventory

Inventory includes merchandise in stock, raw materials, work in progress, finished products, and supplies that are part of the items.

Your beginning inventory this year must be exactly the same as your ending inventory last year. If it does not, you will need to submit an explanation for the difference.

Step Six: Add Purchases of Inventory Items.

Most businesses add inventory during the year. You must keep track of the cost of each shipment or the total manufacturing cost of each product you add to inventory. For purchased products, keep the invoices and any other paperwork. For items you make, you will need the help of your CPA to determine the cost to add to inventory.

Step Seven: Determine Ending Inventory

Ending inventory costs are usually determined by taking a physical inventory of products, or by estimating.

Ending inventory costs can be reduced for damaged, worthless, or obsolete inventory. For damaged inventory, report the estimated value. For worthless inventory, you must provide evidence that it was destroyed. For obsolete inventory, you must also show evidence of the decrease in value. Consider donating obsolete inventory to a charity.

Step Eight: Do the COGS Calculation

At this point, you have all the information you need to do the COGS calculation. You can do it on a spreadsheet, or have your accountant help you.

Inventory Valuation Methods

The final item to be determined is how which inventory has been sold. There are two acceptable methods for determining which inventory is left at the end of the accounting period: LIFO (Last in, first out), or FIFO (first in, first out).

Your CPA will help you determine which method is best for your business tax situation. If you change your valuation method, you must apply to the IRS for approval. For example, if this is the first year your business is using the LIFO method, you must apply to the IRS to make this change. Use IRS Form 970 - Application to Use LIFO Inventory Method.

Tips:

1. **REMEMBER:** You can only deduct cost of goods sold if you have sales. If you purchase or make products to sell, and you don't sell any products, you can't deduct these costs.

2. If your business has less than \$1 million in sales/receipts annually, you do not need to report inventory.
3. For more information on inventory valuation and cost of goods sold, see [IRS Publication 538 "Accounting Periods and Methods."](#)
4. You cannot use the "lower of cost or market" method if you are using [LIFO](#) inventory valuation. You must use the "Cost" method of valuing inventory (not "lower of cost or market") if you use the [cash accounting method](#). It is best to use the [accrual method](#) if you have inventory.
5. **Disclaimer:** The information in this article and on this site are intended to be general and not tax or legal advice. Every situation is different and circumstances change. Please get help from your [tax preparer or tax advisor](#) to make sure your calculations are correct.

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4 Introduction to Inventory and Cost of Goods Sold

<http://www.accountingcoach.com/inventory-and-cost-of-goods-sold/explanation>

Inventory is merchandise purchased by merchandisers (retailers, wholesalers, distributors) for the purpose of being sold to customers. The cost of the merchandise purchased but not yet sold is reported in the account Inventory or **Merchandise Inventory**.

Inventory is reported as a **current asset** on the company's balance sheet. Inventory is a significant asset that needs to be monitored closely. *Too much* inventory can result in cash flow problems, additional expenses (e.g., storage, insurance), and losses if the items become obsolete. *Too little* inventory can result in lost sales and lost customers.

Because of the **cost principle**, inventory is reported on the balance sheet at the amount paid to *obtain* (purchase) the merchandise, not at its selling price.

Inventory is also a significant asset of manufacturers. However, in order to simplify our explanation, we will focus on a retailer.

Cost of Goods Sold

Cost of goods sold is the *cost* of the merchandise that was *sold* to customers. The *cost* of goods sold is reported on the **income statement** when the sales *revenues* of the goods sold are reported.

A retailer's cost of goods sold includes the cost from its supplier *plus* any additional costs necessary to get the merchandise into inventory and ready for sale. For example, let's assume that Corner Shelf Bookstore purchases a college textbook from a publisher. If Corner Shelf's cost from the publisher is \$80 for the textbook plus \$5 in shipping costs, Corner Shelf reports \$85 in its Inventory account until the book is sold. When the book is sold, the \$85 is removed from inventory and is reported as cost of goods sold on the income statement.

When Costs Change

If the publisher increases the selling prices of its books, the bookstore will have a higher cost for the *next* book it purchases from the publisher. Any books in the bookstore's inventory will continue to be reported at their cost when purchased. For example, if the Corner Shelf Bookstore has on its shelf a book that had a cost of \$85, Corner Shelf will continue to report the cost of that one book at its actual cost of \$85 even if the same book now has a cost of \$90. The cost principle will not allow an amount higher than cost to be included in inventory.

Let's assume the Corner Shelf Bookstore had one book in inventory at the start of the year 2015 and at different times during 2015 purchased four identical books. During the year 2015 the cost of these books increased due to a paper shortage. The following chart shows the costs of the five books that have to be accounted for. It also assumes that none of the books has been sold as of December 31, 2015.

	Number of Books	Cost per Book	Total Cost
Inventory at Dec. 31, 2014	1	@ \$85 =	\$ 85
First purchase (January 2015)	1	@ 87 =	87
Second purchase (June 2015)	2	@ 89 =	178
Third purchase (December 2015)	<u>1</u>	@ 90 =	<u>90</u>
Total goods available for sale	<u>5</u>		\$440
Less: Inventory at Dec. 31, 2015	5		<u>-440</u>
Cost of goods sold	0		<u>\$ 0</u>

Special Feature: Review what you are learning by working the three interactive crossword puzzles dedicated to this topic. They are completely free. [Inventory & Cost of Goods Sold Puzzles.](#)

Cost Flow Assumptions

If the Corner Shelf Bookstore sells only one of the five books, which cost should Corner Shelf report as the cost of goods sold? Should it select \$85, \$87, \$89, \$89, \$90, or an average of the five amounts? A related question is which cost should Corner Shelf report as inventory on its balance sheet for the four books that have not been sold?

Accounting rules allow the bookstore to move the cost from inventory to the cost of goods sold by using one of three **cost flows**:

-
1. First In, First Out (FIFO).
 2. Last In, First Out (LIFO).
 3. Average.

Note that these are *cost* flow assumptions. This means that the order in which *costs* are removed from inventory can be different from the order in which the *goods* are physically removed from inventory. In other words, Corner Shelf could sell the book that was on hand at December 31, 2014 but could remove from inventory the \$90 *cost* of the book purchased in December 2015 (if it elects the LIFO cost flow assumption).

Inventory Systems

Each of the three cost flow assumptions listed above can be used in either of two systems (or methods) of inventory:

- A. Periodic.
- B. Perpetual.

A. Periodic inventory system. Under this system the amount appearing in the **Inventory** account is not updated when purchases of merchandise are made from suppliers. Rather, the Inventory account is commonly updated or adjusted only once—at the end of the year. During the year the Inventory account will likely show only the cost of inventory at the end of the previous year.

Under the periodic inventory system, purchases of merchandise are recorded in one or more **Purchases** accounts. At the end of the year the Purchases account(s) are closed and the Inventory account is adjusted to equal the cost of the merchandise actually on hand at the end of the year. Under the periodic system there is no **Cost of Goods Sold** account to be updated when a sale of merchandise occurs.

In short, under the periodic inventory system there is no way to tell from the general ledger accounts the amount of inventory or the cost of goods sold.

B. Perpetual inventory system. Under this system the Inventory account is continuously updated. The Inventory account is increased with the cost of merchandise purchased from suppliers and it is reduced by the cost of merchandise that has been sold to customers. (The Purchases account(s) do not exist.)

Under the perpetual system there is a Cost of Goods Sold account that is debited at the time of each sale for the cost of the merchandise that was sold. Under the perpetual system a sale of merchandise will result in two journal entries: one to record the sale and the cash or accounts receivable, and one to reduce inventory and to increase cost of goods sold.

Inventory Systems and Cost Flows Combined

The combination of the three cost flow assumptions and the two inventory systems results in six available options when accounting for the cost of inventory and calculating the cost of goods sold:

A1. Periodic FIFO.

A2. Periodic LIFO.

A3. Periodic Average.

B1. Perpetual FIFO.

B2. Perpetual LIFO.

B3. Perpetual Average.

A1. Periodic FIFO

"Periodic" means that the Inventory account is not routinely updated during the accounting period. Instead, the cost of merchandise purchased from suppliers is debited to an account called Purchases. At the end of the accounting year the Inventory account is adjusted to equal the cost of the merchandise that has not been sold. The cost of goods sold that will be reported on the income statement will be computed by taking the cost of the goods purchased and subtracting the increase in inventory (or adding the decrease in inventory).

"**FIFO**" is an acronym for **F**irst **I**n, **F**irst **O**ut. Under the FIFO cost flow assumption, the first (oldest) costs are the first ones to leave inventory and become the cost of goods sold on the income statement. The last (or recent) costs will be reported as inventory on the balance sheet.

Remember that the costs can flow differently than the goods. If the Corner Shelf Bookstore uses FIFO, the owner may sell the newest book to a customer, but is allowed to report the cost of goods sold as \$85 (the first, oldest cost).

Let's illustrate periodic FIFO with the amounts from the Corner Shelf Bookstore:

	Number of Books		Cost per Book	Total Cost
Inventory at Dec. 31, 2014	1	@	\$85 =	\$ 85
First purchase (January 2015)	1	@	87 =	87
Second purchase (June 2015)	2	@	89 =	178
Third purchase (December 2015)	<u>1</u>	@	90 =	<u>90</u>
Total goods available for sale	5			\$440
Less: Inventory at Dec. 31, 2015	<u>4</u>			<u>-355</u>
Cost of goods sold	1	@	\$85	<u>\$ 85</u>

As before, we need to account for the total goods available for sale (5 books at a cost of \$440). Under FIFO we assign the first cost of \$85 to the one book that was sold. The remaining \$355 (\$440 - \$85) is assigned to inventory. The \$355 of inventory costs consists of \$87 + \$89 + \$89 + \$90. The \$85 cost assigned to the book sold is permanently gone from inventory.

If Corner Shelf Bookstore sells the textbook for \$110, its gross profit under periodic FIFO will be \$25 (\$110 - \$85). If the costs of textbooks continue to increase, FIFO will always result in more profit than other cost flows, because the first cost is always lower.

A2. Periodic LIFO

"Periodic" means that the Inventory account is not updated during the accounting period. Instead, the cost of merchandise purchased from suppliers is debited to an account called Purchases. At the end of the accounting year the Inventory account is adjusted to equal the cost of the merchandise that is unsold. The other costs of goods will be reported on the income statement as the cost of goods sold.

"LIFO" is an acronym for Last In, First Out. Under the LIFO cost flow assumption, the last (or recent) costs are the first ones to leave inventory and become the cost of goods sold on the income statement. The first (or oldest) costs will be reported as inventory on the balance sheet.

Remember that the costs can flow differently than the goods. In other words, if Corner Shelf Bookstore uses LIFO, the owner may sell the oldest (first) book to a customer, but can report the cost of goods sold of \$90 (the last cost).

It's important to note that under LIFO periodic (not LIFO perpetual) we wait until the entire year is over before assigning the costs. Then we flow the year's last costs first, even if those goods arrived after the last sale of the year. For example, assume the last sale of the year at the Corner Shelf Bookstore occurred on December 27. Also assume that the store's last purchase of the year arrived

on December 31. Under LIFO periodic, the cost of the book purchased on December 31 is sent to the cost of goods sold first, even though it's physically impossible for that book to be the one sold on December 27. (This reinforces our previous statement that the flow of costs does not have to correspond with the physical flow of units.)

Let's illustrate periodic LIFO by using the data for the Corner Shelf Bookstore:

	Number of Books	Cost per Book	Total Cost
Inventory at Dec. 31, 2014	1	@ \$85 =	\$ 85
First purchase (January 2015)	1	@ 87 =	87
Second purchase (June 2015)	2	@ 89 =	178
Third purchase (December 2015)	<u>1</u>	@ 90 =	<u>90</u>
Total goods available for sale	5		\$440
Less: Inventory at Dec. 31, 2015	<u>4</u>		<u>-350</u>
Cost of goods sold	1	@ \$90	<u>\$ 90</u>

As before we need to account for the total goods available for sale: 5 books at a cost of \$440. Under periodic LIFO we assign the last cost of \$90 to the one book that was sold. (If two books were sold, \$90 would be assigned to the first book and \$89 to the second book.) The remaining \$350 (\$440 - \$90) is assigned to inventory. The \$350 of inventory cost consists of \$85 + \$87 + \$89 + \$89. The \$90 assigned to the book that was sold is permanently gone from inventory.

If the bookstore sold the textbook for \$110, its **gross profit** under periodic LIFO will be \$20 (\$110 - \$90). If the costs of textbooks continue to increase, LIFO will always result in the least amount of profit. (The reason is that the last costs will always be higher than the first costs. Higher costs result in less profits and usually lower income taxes.)

A3. Periodic Average

Under "periodic" the Inventory account is not updated and purchases of merchandise are recorded in an account called Purchases. Under this cost flow assumption an average cost is calculated using the total goods available for sale (cost from the beginning inventory plus the costs of *all* subsequent purchases made during the entire year). In other words, the periodic average cost is calculated after the year is over—after all the purchases of the year have occurred. This average cost is then applied to the units sold during the year as well as to the units in inventory at the end of the year.

As you can see, our facts remain the same—there are 5 books available for sale for the year 2015 and the cost of the goods available is **\$440**. The **weighted**

average cost of the books is **\$88** (\$440 of cost of goods available ÷ 5 books available) and it is used for both the cost of goods sold and for the cost of the books in inventory.

	Number of Books	Cost per Book	Total Cost
Inventory at Dec. 31, 2014	1 @	\$85 =	\$ 85
First purchase (January 2015)	1 @	87 =	87
Second purchase (June 2015)	2 @	89 =	178
Third purchase (December 2015)	<u>1 @</u>	90 =	<u>90</u>
Total goods available for sale	5		\$440
Less: Inventory at Dec. 31, 2015	<u>4</u>	\$88	<u>-352</u>
Cost of goods sold	1 @	\$88	<u>\$ 88</u>

Since the bookstore sold only one book, the cost of goods sold is **\$88** (1 x \$88). The four books still on hand are reported at **\$352** (4 x \$88) of cost in the Inventory account. The total of the cost of goods sold plus the cost of the inventory should equal the total cost of goods available (\$88 + \$352 = \$440).

If Corner Shelf Bookstore sells the textbook for \$110, its gross profit under the periodic average method will be \$22 (\$110 – \$88). This gross profit is between the \$25 computed under periodic FIFO and the \$20 computed under periodic LIFO.

B1. Perpetual FIFO

Under the perpetual system the **Inventory** account is constantly (or perpetually) changing. When a retailer purchases merchandise, the retailer debits its Inventory account for the cost; when the retailer sells the merchandise to its customers its Inventory account is credited and its **Cost of Goods Sold** account is debited for the cost of the goods sold. Rather than staying *dormant* as it does with the periodic method, the Inventory account balance is continuously updated.

Under the perpetual system, two transactions are recorded when merchandise is sold: (1) the sales amount is debited to **Accounts Receivable** or **Cash** and is credited to **Sales**, and (2) the cost of the merchandise sold is debited to Cost of Goods Sold and is credited to Inventory. (Note: Under the periodic system the second entry is not made.)

With perpetual FIFO, the first (or oldest) costs are the first moved from the Inventory account and debited to the Cost of Goods Sold account. The end result under perpetual FIFO is the same as under periodic FIFO. In other words, the first costs are the same whether you move the cost out of inventory with each sale (perpetual) or whether you wait until the year is over (periodic).

B2. Perpetual LIFO

Under the perpetual system the Inventory account is constantly (or perpetually) changing. When a retailer purchases merchandise, the retailer debits its Inventory account for the cost of the merchandise. When the retailer sells the merchandise to its customers, the retailer credits its Inventory account for the cost of the goods that were sold and debits its Cost of Goods Sold account for their cost. Rather than staying *dormant* as it does with the periodic method, the Inventory account balance is continuously updated.

Under the perpetual system, two transactions are recorded at the time that the merchandise is sold: (1) the sales amount is debited to Accounts Receivable or Cash and is credited to Sales, and (2) the cost of the merchandise sold is debited to Cost of Goods Sold and is credited to Inventory. (Note: Under the periodic system the second entry is not made.)

With perpetual LIFO, the last costs *available at the time of the sale* are the first to be removed from the Inventory account and debited to the Cost of Goods Sold account. Since this is the *perpetual* system we cannot wait until the end of the year to determine the last cost—an entry must be recorded *at the time of the sale* in order to reduce the Inventory account and to increase the Cost of Goods Sold account.

If costs continue to rise throughout the entire year, *perpetual* LIFO will yield a lower cost of goods sold and a higher net income than *periodic* LIFO. Generally this means that *periodic* LIFO will result in less income taxes than *perpetual* LIFO. (If you wish to minimize the amount paid in income taxes during periods of inflation, you should discuss LIFO with your tax adviser).

Once again we'll use our example for the Corner Shelf Bookstore:

	Number of Books	Cost per Book	Total Cost
Inventory at Dec. 31, 2014	1 @	\$85 =	\$ 85
First purchase (January 2015)	1 @	87 =	87
Second purchase (June 2015)	2 @	89 =	178
Third purchase (December 2015)	1 @	90 =	90
Total goods available for sale	5		\$440
Less: Inventory at Dec. 31, 2015	4		-351
Cost of goods sold	1 @	\$89	<u>\$ 89</u>

Let's assume that *after* Corner Shelf makes its second purchase in June 2015, Corner Shelf sells one book. This means the last cost at *the time of the sale* was \$89. Under perpetual LIFO the following entry must be made at the time of the sale: \$89 will be credited to Inventory and \$89 will be debited to Cost of Goods

Sold. If that was the only book sold during the year, at the end of the year the Cost of Goods Sold account will have a balance of \$89 and the cost in the Inventory account will be **\$351** (\$85 + \$87 + \$89 + \$90).

If the bookstore sells the textbook for \$110, its **gross profit** under perpetual LIFO will be \$21 (\$110 – \$89). Note that this is different than the gross profit of \$20 under periodic LIFO.

B3. Perpetual Average

Under the perpetual system the Inventory account is constantly (or perpetually) changing. When a retailer purchases merchandise, the costs are debited to its Inventory account; when the retailer sells the merchandise to its customers the Inventory account is credited and the Cost of Goods Sold account is debited for the cost of the goods sold. Rather than staying *dormant* as it does with the periodic method, the Inventory account balance under the perpetual average is changing whenever a purchase or sale occurs.

Under the perpetual system, two sets of entries are made whenever merchandise is sold: (1) the sales amount is debited to Accounts Receivable or Cash and is credited to Sales, and (2) the cost of the merchandise sold is debited to Cost of Goods Sold and is credited to Inventory. (Note: Under the periodic system the second entry is not made.)

Under the perpetual system, "average" means the *average* cost of the items in inventory *as of the date of the sale*. This average cost is multiplied by the number of units sold and is removed from the Inventory account and debited to the Cost of Goods Sold account. We use the average *as of the time of the sale* because this is a *perpetual* method. (Note: Under the *periodic* system we wait until the year is over before computing the average cost.)

Let's use the same example again for the Corner Shelf Bookstore:

	Number of Books	Cost per Book	Total Cost
Inventory at Dec. 31, 2014	1 @	\$85 =	\$ 85
First purchase (January 2015)	1 @	87 =	87
Second purchase (June 2015)	2 @	89 =	178
Third purchase (December 2015)	1 @	90 =	<u>90</u>
Total goods available for sale	5		\$440.00
Less: Inventory at Dec. 31, 2015	4	\$88.125	<u>-352.50</u>
Cost of goods sold	1 @	\$87.50	<u>\$ 87.50</u>

Let's assume that after Corner Shelf makes its second purchase, Corner Shelf sells one book. This means the average cost *at the time of the sale* was **\$87.50**

($[\$85 + \$87 + \$89 + \$89] \div 4$). Because this is a perpetual average, a journal entry must be made at the time of the sale for \$87.50. The \$87.50 (the average cost at the time of the sale) is credited to Inventory and is debited to Cost of Goods Sold. After the sale of one unit, three units remain in inventory and the balance in the Inventory account will be \$262.50 (3 books at an average cost of \$87.50).

After Corner Shelf makes its third purchase, the average cost per unit will change to **\$88.125** ($[\$262.50 + \$90] \div 4$). As you can see, the average cost moved from \$87.50 to \$88.125—this is why the perpetual average method is sometimes referred to as the **moving average** method. The Inventory balance is **\$352.50** (4 books with an average cost of \$88.125 each).

Comparison of Cost Flow Assumptions

Below is a recap of the varying amounts for the cost of goods sold, gross profit, and ending inventory that were calculated above.

	Periodic			Perpetual		
	FIFO	LIFO	Avg.	FIFO	LIFO	Avg.
Sales	\$ 110	\$ 110	\$ 110	\$ 110	\$ 110	\$ 110
Cost of goods sold	<u>-85</u>	<u>-90</u>	<u>-88</u>	<u>-85</u>	<u>-89</u>	<u>-87.50</u>
Gross profit	<u>\$ 25</u>	<u>\$ 20</u>	<u>\$ 22</u>	<u>\$ 25</u>	<u>\$ 21</u>	<u>\$ 22.50</u>
Ending Inventory	<u>\$355</u>	<u>\$350</u>	<u>\$352</u>	<u>\$355</u>	<u>\$351</u>	<u>\$352.50</u>

The example assumes that costs were continually increasing. The results would be different if costs were decreasing or increasing at a slower rate. Consult with your tax advisor concerning the election of cost flow assumption.

Specific Identification

In addition to the six cost flow assumptions presented in Parts 1–4, businesses have another option: expense to the cost of goods sold the *specific* cost of the *specific* item sold. For example, Gold Dealer, Inc. has an inventory of gold and each nugget has an identification number and the cost of the nugget. When Gold Dealer sells a nugget, it can expense to the cost of goods sold the exact cost of the specific nugget sold. The cost of the other nuggets will remain in inventory. (Alternatively, Gold Dealer could use one of the other six cost flow assumptions described in Parts 1–4.)

LIFO Benefits Without Tracking Units

In Part 1 and Part 2 you saw that during the periods of increasing costs, LIFO will result in less profits. In the U. S. this can mean less income taxes paid by the company. Most companies view lower taxes as a significant benefit. However, the process of tracking costs and then assigning those costs to the units sold and the units on hand could be too expensive for the amount of income tax savings. To gain the benefit of LIFO without the tracking of costs, there is a method known as dollar value LIFO. This topic is discussed in intermediate accounting textbooks. The Internal Revenue Service also allows companies to use dollar value LIFO by applying price indexes. (You should seek the advice of an accounting and/or tax professional to assess the cost and benefit of these techniques.)

Inventory Management

Over the past few decades sophisticated companies have made great strides in reducing their levels of inventory. Rather than carry large inventories, they ask their suppliers to deliver goods "just in time." Suppliers and merchandisers have learned to coordinate their purchases and sales so that orders and shipments occur automatically.

A company will realize significant benefits if it can keep its inventory levels down without losing sales or production (if the company is a manufacturer). For example, Dell Computers has greatly reduced its inventory in relationship to its sales. Since computer components have been dropping in costs as new technologies emerge, it benefits Dell to keep only a very small inventory of components on hand. It would be a financial hardship if Dell had a large quantity of parts that became obsolete or decreased in value.

Financial Ratios

Keeping track of inventory is important. There are two common financial ratios for monitoring inventory levels: (1) the Inventory Turnover Ratio, and (2) the Days' Sales in Inventory. (These are discussed and illustrated in the [Explanation of Financial Ratios](#).)

Estimating Ending Inventory

It is very time-consuming for a company to *physically* count the merchandise units in its inventory. In fact, it is not unusual for companies to shut down their operations near the end of their accounting year just to perform inventory counts. The company may assign one set of employees to count and tag the items and

another set to verify the counts. If a company has outside auditors, they will be there to observe the process. (Even if the company's computers keep track of inventory, accountants require that the computer records be verified by actually counting the goods.)

If a company counts its inventory only once per year it must *estimate* its inventory at the end of each month in order to prepare meaningful monthly financial statements. In fact, a company may need to estimate its inventory for other reasons as well. For example, if a company suffers a loss due to a disaster such as a tornado or a fire, it will need to file a claim for the approximate cost of the inventory that was lost. (An insurance adjuster will also compute this amount independently so that the company is not paid too much or too little for its loss.)

Methods of Estimating Inventory

There are two methods for estimating ending inventory:

1. Gross Profit Method.
2. Retail Method.

1. Gross Profit Method. The gross profit method for estimating inventory uses the information contained in the top portion of a merchandiser's multiple-step income statement:

ABC Company Income Statement (partial) For the Year Ended Dec. 31, 2014		
Sales	\$100,000	100.0%
Cost of goods sold		
Beginning inventory	\$ 22,000	
Purchases - net	<u>83,000</u>	
Cost of goods available	105,000	
Less: Ending inventory	<u>25,000</u>	
Cost of goods sold	<u>80,000</u>	80.0%
Gross Profit	<u>\$ 20,000</u>	<u>20.0%</u>

Let's assume that we need to *estimate* the cost of inventory on hand on June 30, 2015. From the 2014 income statement shown above we can see that the company's gross profit is 20% of the sales and that the cost of goods sold is 80% of the sales. If those percentages are reasonable for the current year, we can use those percentages to help us estimate the cost of the inventory on hand as of June 30, 2015.

While an algebraic equation could be constructed to determine the estimated amount of ending inventory, we prefer to simply use the income statement

format. We prepare a partial income statement for the period beginning after the date when inventory was last physically counted, and ending with the date for which we need the estimated inventory cost. In this case, the income statement will go from January 1, 2015 until June 30, 2015.

Some of the numbers that we need are easily obtained from sales records, customers, suppliers, earlier financial statements, etc. For example, sales for the first half of the year 2015 are taken from the company's records. The beginning inventory amount is the ending inventory reported on the December 31, 2014 balance sheet. The purchases information for the first half of 2015 is available from the company's records or its suppliers. The amounts that we have available are written in italics in the following partial income statement:

ABC Company		
Income Statement (partial)		
For the Six Months Ended June 30, 2015		
Sales	<i>\$56,000</i>	<i>100.0%</i>
Cost of goods sold		
Beginning inventory	<i>\$ 25,000</i>	
Purchases - net	<i>46,000</i>	
Cost of goods available		
Less: Ending inventory		
Cost of goods sold		<i>80.0%</i>
Gross profit		<i>20.0%</i>

We will fill in the rest of the statement with the answers to the following calculations. The amounts in *italics* come from the statement above. The bold amount is the answer or result of the calculation.

Step 1.	Cost of Goods Available	=	Beginning Inventory	+	Net Purchases	
	Cost of Goods Available	=	\$25,000	+	\$46,000	
	Cost of Goods Available	=	\$71,000			
Step 2.	Gross Profit	=	Gross Profit Percentage (or Gross Margin)	x	Sales	
	Gross Profit	=	20%	x	\$56,000	
	Gross Profit	=	\$11,200			
Step 3.	Cost of Goods Sold	=	Sales	-	Gross Profit	
	Cost of Goods Sold	=	\$56,000	-	\$11,200 (from Step 2.)	
	Cost of Goods Sold	=	\$44,800			

This can also be calculated as 80% x Sales of \$56,000 = \$44,800.

Inserting this information into the income statement yields the following:

ABC Company Income Statement (partial) For the Six Months Ended June 30, 2015			
Sales		\$56,000	100.0%
Cost of goods sold			
Beginning inventory	\$ 25,000		
Purchases - net	<u>46,000</u>		
Cost of Goods available	71,000		
Less: Ending inventory	<u> ?</u>		
Cost of goods sold		<u>44,800</u>	80.0%
Gross profit		<u>\$ 11,200</u>	<u>20.0%</u>

As you can see, the ending inventory amount is not yet shown. We compute this amount by subtracting cost of goods sold from the cost of goods available:

Ending Inventory	=	Cost of Goods Available	-	Cost of Goods Sold
Ending Inventory	=	\$71,000	-	\$44,800
Ending Inventory	=	\$26,200		

Below is the completed partial income statement with the estimated amount of ending inventory at \$26,200. (Note: It is always a good idea to recheck the math on the income statement to be certain you computed the amounts correctly).

ABC Company Income Statement (partial) For the Six Months Ended June 30, 2015			
Sales		\$56,000	100.0%
Cost of goods sold			
Beginning inventory	\$ 25,000		
Purchases - net	<u>46,000</u>		
Cost of goods available	71,000		
Less: Ending inventory	<u>26,200</u>		
Cost of goods sold		<u>44,800</u>	80.0%
Gross profit		<u>\$ 11,200</u>	<u>20.0%</u>

2. Retail Method. The retail method can be used by retailers who have their merchandise records in both cost and retail selling prices. A very simple illustration for using the retail method to estimate inventory is shown here:

	Cost	Retail
Beginning inventory	\$ 11,000	\$ 15,000
Purchases - net	+ 69,000	+ 85,000
Goods avail. & <i>cost ratio</i>	80,000	100,000
Less: Sales at retail		- 90,000
Est. ending inventory at retail		10,000
Est. ending inventory at cost	\$ 8,000	

As you can see, the *cost* amounts are arranged into one column. The *retail* amounts are listed in a separate column. The Goods Available amounts are used to compute the cost-to-retail ratio. In this case the cost of goods available of \$80,000 is divided by the retail amount of goods available (\$100,000). This results in a cost-to-retail ratio, or cost ratio, of 80%.

To arrive at the estimated ending inventory at cost, we multiply the estimated ending inventory at retail (\$10,000) times the cost ratio of 80% to arrive at \$8,000.

Additional Information and Resources

Because the material covered here is considered an introduction to this topic, many complexities have been omitted. You should always consult with an accounting professional for assistance with your own specific circumstances.

- [What is inflation accounting?](#)
- [What are production costs?](#)
- [What is the cost of goods manufactured?](#)
- [What is managerial accounting?](#)
- [What are nonmanufacturing overhead costs?](#)
- [What is the difference between periodic and perpetual inventory systems?](#)
- [What is the difference between FIFO and LIFO?](#)
- [What is the difference between inventory and the cost of goods sold?](#)

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