

The Ministry of Education and Science of Ukraine

Ivan Franko National University of Lviv

Department of Accounting and Audit

Організація обліку і оптимізація оподаткування

(англійською мовою викладання)

Для студентів другого магістерського рівня освіти
спеціальності 071 «Облік і оподаткування ОПП «Облік і
аудит»

Organization of accounting and optimization of taxation

Associate Professor Yaroslava Kril

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Course objectives – mastering the competencies of the organization of the accounting and taxation system, disclosing its essence and content of the main applied categories; mastering skills and abilities to account for the accrual and collection of taxes and fees in modern business conditions

Learning outcomes of the course:

know: the essence of accounting and taxation, its place in the system of economic information and the relationship with management, financial accounting; practical purpose of methodological elements of accounting and taxation and the main accounting categories;

mechanisms of functioning of budgetary and tax systems of Ukraine and to consider their features for the purpose of the organization of the account, a choice of system of the taxation and formation of the reporting at the enterprises;

be able: to organize the system of accounting and taxation at the enterprise with the use of specialized information systems and computer technologies;

to form and analyze financial, managerial, tax and statistical reporting of enterprises and to correctly interpret the received information for making managerial decisions; organize and provide consulting services, perform work of control and audit groups, create a system of automated jobs of accountant, the introduction of progressive forms and methods of accounting;

able to demonstrate: substantiation of methods of accounting and taxation of any fact, phenomenon, process, which reflect the operations of financial and economic activities of the enterprise; maintenance and procedure for tax reporting; accounting techniques for any system and form; analysis of the development of accounting systems, models and methods at the national and international levels in order to justify the feasibility of their introduction in the enterprise; work with a computer, use information technology to implement accounting procedures using specialized information systems and computer technology;

have the skills: readiness to carry out tax calculations and reporting; use of methods of analysis and evaluation of sustainable development programs

solve independently: what management decisions should be made to form and regulate the system of accounting and taxation of the enterprise; directions of substantiation of methodology and methods of accounting policy of the enterprise and procedures of its choice, to make administrative documents on the organization of accounting at the enterprises

«Organization of accounting and optimization of taxation» is based on the knowledge obtained from the courses "Accounting", "Macroeconomics", "Microeconomics", "Statistics", "Finance", "Banking", "Law", "Financial Accounting-1,2", "Tax Accounting and Reporting", "Audit", etc.

Topic 1 Fundamentals of accounting in the enterprise management system

Task 1

Accounting Cycle

Accounting cycle is a step-by-step process of recording, classification and summarization of economic transactions of a business. It generates useful financial information in the form of financial statements including income statement, balance sheet, cash flow statement and statement of changes in equity.

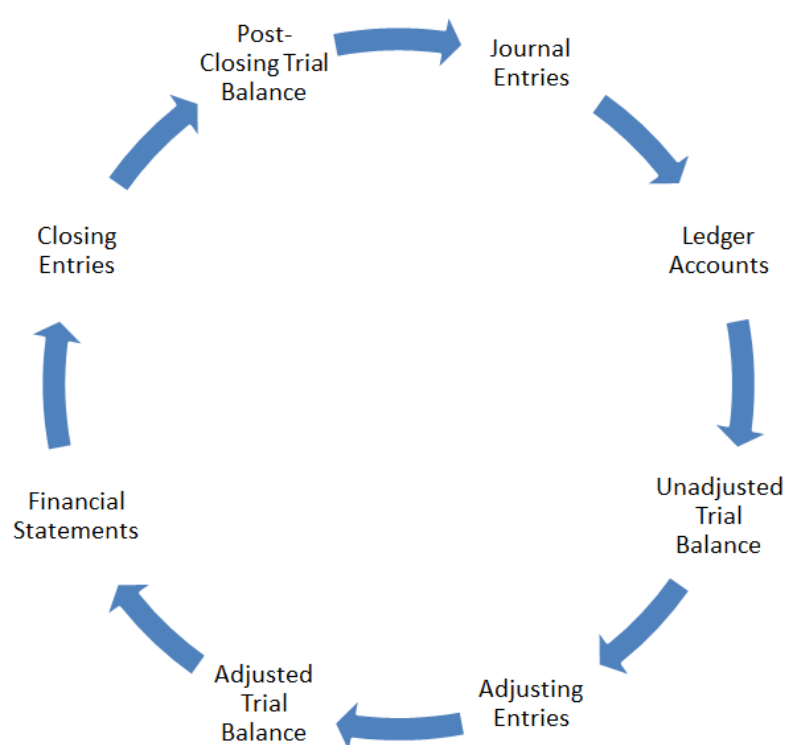
The time period principle requires that a business should prepare its financial statements on periodic basis. Therefore accounting cycle is followed once during each accounting period. Accounting Cycle starts from the recording of individual transactions and ends on the preparation of financial statements and closing entries.

Major Steps in Accounting Cycle

Following are the major steps involved in the accounting cycle. We will use a simple example problem to explain each step.

1. Analyzing and recording transactions via journal entries
2. Posting journal entries to ledger accounts
3. Preparing unadjusted trial balance
4. Preparing adjusting entries at the end of the period
5. Preparing adjusted trial balance
6. Preparing financial statements
7. Closing temporary accounts via closing entries
8. Preparing post-closing trial balance

Flow Chart



journal entries

Analyzing transactions and recording them as journal entries is the first step in the accounting cycle. It begins at the start of an accounting period and continues during the whole period. Transaction analysis is a process which determines whether a particular business event has an economic effect on the assets, liabilities or equity of the business. It also involves ascertaining the magnitude of the transaction i.e. its currency value.

After analyzing transactions, accountants classify and record the events having economic effect via journal entries according to debit-credit rules. Frequent journal entries are usually recorded in specialized journals, for example, sales journal and purchases journal. The rest are recorded in a general journal.

The following example illustrates how to record journal entries:

Example

Company A was incorporated on January 1, 2010 with an initial capital of 5,000 shares of common stock having \$20 par value. During the first month of its operations, the company engaged in following transactions:

Date	Transaction
Jan 2	An amount of \$36,000 was paid as advance rent for three months.
Jan 3	Paid \$60,000 cash on the purchase of equipment costing \$80,000. The remaining amount was recognized as a one year note payable with interest rate of 9%.
Jan 4	Purchased office supplies costing \$17,600 on account.
Jan 13	Provided services to its customers and received \$28,500 in cash.
Jan 13	Paid the accounts payable on the office supplies purchased on January 4.
Jan 14	Paid wages to its employees for first two weeks of January, aggregating \$19,100.
Jan 18	Provided \$54,100 worth of services to its customers. They paid \$32,900 and promised to pay the remaining amount.
Jan 23	Received \$15,300 from customers for the services provided on January 18.
Jan 25	Received \$4,000 as an advance payment from customers.
Jan 26	Purchased office supplies costing \$5,200 on account.
Jan 28	Paid wages to its employees for the third and fourth week of January: \$19,100.
Jan 31	Paid \$5,000 as dividends.
Jan 31	Received electricity bill of \$2,470.
Jan 31	Received telephone bill of \$1,494.
Jan 31	Miscellaneous expenses paid during the month totaled \$3,470

The following table shows the journal entries for the above events.

Date	Account	Debit	Credit
Jan 1	Cash	100,000	
	Common Stock		100,000
Jan 2	Prepaid Rent	36,000	
	Cash		36,000
Jan 3	Equipment	80,000	
	Cash		60,000
	Notes Payable		20,000
Jan 4	Office Supplies	17,600	
	Accounts Payable		17,600
Jan 13	Cash	28,500	
	Service Revenue		28,500
Jan 13	Accounts Payable	17,600	
	Cash		17,600
Jan 14	Wages Expense	19,100	
	Cash		19,100
Jan 18	Cash	32,900	
	Accounts Receivable	21,200	
	Service Revenue		54,100
Jan 23	Cash	15,300	
	Accounts Receivable		15,300
Jan 25	Cash	4,000	
	Unearned Revenue		4,000
Jan 26	Office Supplies	5,200	
	Accounts Payable		5,200
Jan 28	Wages Expense	19,100	
	Cash		19,100
Jan 31	Dividends	5,000	
	Cash		5,000
Jan 31	Electricity Expense	2,470	
	Utilities Payable		2,470
Jan 31	Telephone Expense	1,494	
	Utilities Payable		1,494
Jan 31	Miscellaneous Expense	3,470	
	Cash		3,470

At the end of the period, all the journal for the period are posted to the ledger accounts.

The second step of accounting cycle is to post the journal entries to the ledger accounts.

The journal entries recorded during the first step provide information about which accounts are to be debited and which to be credited and also the magnitude of the debit or credit (see debit-credit-rules). The debit and credit values of journal entries are transferred to ledger accounts one by one in such a way that debit amount of a journal entry is transferred to the debit side of the relevant ledger account and the credit amount is transferred to the credit side of the relevant ledger account.

After posting all the journal entries, the balance of each account is calculated. The balance of an asset, expense, contra-liability and contra-equity account is calculated by subtracting the sum of its credit side from the sum of its debit side. The balance of a liability, equity and contra-asset account is calculated the opposite way i.e. by subtracting the sum of its debit side from the sum of its credit side.

Example

The ledger accounts shown below are derived from the journal entries of Company A.

Asset Accounts

Cash

\$100,000	\$36,000
28,500	60,000
32,900	17,600
15,300	19,100
4,000	19,100
	5,000
	3,470
\$20,430	

Office Supplies

\$17,600	
5,200	
\$22,800	

Equipment

\$80,000	
\$80,000	

Accounts Receivable

\$21,200	\$15,300
\$5,900	

Prepaid Rent

\$36,000	
\$36,000	

Liability Accounts

Accounts Payable

\$17,600	\$17,600
	5,200
	\$5,200

Utilities Payable

	\$2,470
	1,494
	\$3,964

Notes Payable

	\$20,000
	\$20,000

Unearned Revenue

	\$4,000
	\$4,000

Equity Accounts

Common Stock

	\$100,000
	\$100,000

Revenue, Dividend and Expense Accounts

Service Revenue

	\$28,500
	54,100
	\$82,600

Wages Expense

\$19,100	
19,100	
\$38,200	

Electricity Expense

\$2,470	
\$2,470	

Dividend

\$5,000	
\$5,000	

Miscellaneous Expense

\$3,470	
\$3,470	

Telephone Expense

\$1,494	
\$1,494	

The ledger accounts step of accounting cycle completes here. The next step is the preparation of unadjusted trial balance.

Unadjusted Trial Balance

A trial balance is a list of the balances of ledger accounts of a business at a specific point of time usually at the end of a period such as month, quarter or year.

An unadjusted trial balance is the one which is created before any adjustments are made in the ledger accounts.

The preparation of a trial balance is very simple. All we have to do is to list the balances of the ledger accounts of a business.

Example

Following is the unadjusted trial balance prepared from the ledger accounts of Company A.
Company A

Unadjusted Trial Balance

January 31, 2010

	Debit	Credit
Cash	\$20,430	
Accounts Receivable	5,900	
Office Supplies	22,800	
Prepaid Rent	36,000	
Equipment	80,000	
Accounts Payable		\$5,200
Notes Payable		20,000
Utilities Payable		3,964
Unearned Revenue		4,000
Common Stock		100,000
Service Revenue		82,600
Wages Expense	38,200	
Miscellaneous Expense	3,470	
Electricity Expense	2,470	
Telephone Expense	1,494	
Dividend	5,000	
Total	\$215,764	\$215,764

Since, in double entry accounting we record each transaction with two aspects, therefore the total of debit and credit balances of the trial balance are always equal. Any difference shall indicate some mistake in the recording process or in the calculations. Although each unbalanced trial balance indicates mistake, but this does not mean that all errors cause the trial balance to unbalance. There are few types of mistakes which will not unbalance the trial balance and they may escape un-noticed if we do not review our work carefully. For example, to omit an entry, to record a transaction twice, etc.

After the preparation of an unadjusted trial balance, adjusting entries are passed.

Adjusting Entries

Adjusting entries are journal entries recorded at the end of an accounting period to adjust income and expense accounts so that they comply with the accrual concept of accounting. Their main purpose is to match incomes and expenses to appropriate accounting periods.

The transactions which are recorded using adjusting entries are not spontaneous but are spread over a period of time. Not all journal entries recorded at the end of an accounting period are adjusting entries. For example, an entry to record a purchase on the last day of a period is not an adjusting entry. An adjusting entry always involves either income or expense account.

Types

There are following types of adjusting entries:

- **Accruals:**
These include revenues not yet received nor recorded and expenses not yet paid nor recorded. For example, interest expense on loan accrued in the current period but not yet paid.
- **Prepayments:**
These are revenues received in advance and recorded as liabilities, to be recorded as revenue and expenses paid in advance and recorded as assets, to be recorded as expense. For example, adjustments to unearned revenue, prepaid insurance, office supplies, prepaid rent, etc.
- **Non-cash:**
These adjusting entries record non-cash items such as depreciation expense, allowance for doubtful debts etc.

Example

This example is a continuation of the accounting cycle problem we have been working on. In the previous step we prepared an unadjusted trial balance. Here we will pass adjusting entries.

Relevant information for the preparation of adjusting entries of Company A

Office supplies having original cost \$4,320 were unused till the end of the period. Office supplies having original cost of \$22,800 are shown on unadjusted trial balance.

Prepaid rent of \$36,000 was paid for the months January, February and March.

The equipment costing \$80,000 has useful life of 5 years and its estimated salvage value is \$14,000. Depreciation is provided using the straight line depreciation method.

The interest rate on \$20,000 note payable is 9%. Accrue the interest for one month.

\$3,000 worth of service has been provided to the customer who paid advance amount of \$4,000.

The adjusting entries of Company A are:

Date	Account	Debit	Credit
Jan 31	Supplies Expense	18,480	
	Office Supplies		18,480
	<i>Supplies Expense = \$22,800 - \$4,320 = \$18,480</i>		
Jan 31	Rent Expense	12,000	
	Prepaid Rent		12,000
	<i>Rent Expense = \$36,000 ÷ 3 = \$12,000</i>		
Jan 31	Depreciation Expense	1,100	
	Accumulated Depreciation		1,100
	<i>Depreciation Expense = (\$80,000 - \$14,000) ÷ (5 × 12) = \$1,100</i>		
Jan 31	Interest Expense	150	
	Interest Payable		150
	<i>Interest Expense = \$20,000 × (9% ÷ 12) = \$150</i>		
Jan 31	Unearned Revenue	3,000	
	Service Revenue		3,000

An adjusted trial balance is prepared in the next step of accounting cycle.

Adjusted Trial Balance

An Adjusted Trial Balance is a list of the balances of ledger accounts which is created after the preparation of adjusting entries. Adjusted trial balance contains balances of revenues and expenses along with those of assets, liabilities and equities. Adjusted trial balance can be used directly in the preparation of the statement of changes in stockholders' equity, income statement and the balance sheet. However it does not provide enough information for the preparation of the statement of cash flows.

The format of an adjusted trial balance is same as that of unadjusted trial balance.

Example

The following adjusted trial balance was prepared after posting the adjusting entries of Company A to its general ledger and calculating new account balances:

Company A

Adjusted Trial Balance

January 31, 2010

	Debit	Credit
Cash	\$20,430	—
Accounts Receivable	5,900	—
Office Supplies	4,320	—
Prepaid Rent	24,000	—
Equipment	80,000	—
Accumulated Depreciation	—	\$1,100
Accounts Payable	—	5,200
Utilities Payable	—	3,964
Unearned Revenue	—	1,000
Interest Payable	—	150
Notes Payable	—	20,000
Common Stock	—	100,000
Service Revenue	—	85,600
Wages Expense	38,200	—
Supplies Expense	18,480	—
Rent Expense	12,000	—
Miscellaneous Expense	3,470	—
Electricity Expense	2,470	—

Company A

Adjusted Trial Balance

January 31, 2010

Telephone Expense	1,494	—
Depreciation Expense	1,100	—
Interest Expense	150	—
Dividend	5,000	—
Total	<u>\$217,014</u>	<u>\$217,014</u>

The totals of an adjusted trial balance must be equal. Any difference indicates that there is some error in the journal entries or in the ledger or in the calculations.

The next step of accounting cycle is the preparation of closing entries.

Closing Entries

Closing entries are journal entries made at the end of an accounting period which transfer the balances of temporary accounts to permanent accounts. Closing entries are based on the account balances in an adjusted trial balance.

Temporary accounts include:

1. Revenue, Income and Gain Accounts
2. Expense and Loss Accounts
3. Dividend, Drawings or Withdrawals Accounts
4. Income Summary Account

The permanent account to which balances are transferred depend upon the type of business. In case of a company, retained earnings account, and in case of a firm or a sole proprietorship, owner's capital account receives the balances of temporary accounts.

Income summary account is a temporary account which facilitates the closing process.

Closing entries are better explained via an example.

Example

The following example shows the closing entries based on the adjusted trial balance of Company A.

Note	Date	Account	Debit	Credit
1	Jan 31	Service Revenue	85,600	
		Income Summary		85,600
2	Jan 31	Income Summary	77,364	
		Wages Expense		38,200
		Supplies Expense		18,480
		Rent Expense		12,000
		Miscellaneous Expense		3,470
		Electricity Expense		2,470
		Telephone Expense		1,494

Note	Date	Account	Debit	Credit
		Depreciation Expense		1,100
		Interest Expense		150
3	Jan 31	Income Summary	8,236	
		Retained Earnings		8,236
4	Jan 31	Retained Earnings	5,000	
		Dividend		5,000

Notes

1. Service revenue account is debited and its balance is credited to income summary account. If a business has other income accounts, for example gain on sale account, then the debit side of the first closing entry will also include the gain on sale account and the income summary account will be credited for the sum of all income accounts.
2. Each expense account is credited and the income summary is debited for the sum of the balances of expense accounts. This will reduce the balance in income summary account.
3. Income summary account is debited and retained earnings account is credited for the amount equal to the excess of service revenue over total expenses i.e. the net balance in income summary account after posting the first two closing entries. In this case $\$85,600 - \$77,364 = \$8,236$. Please note that, if the balance in income summary account is negative at this stage, this closing entry will be opposite i.e. debit to retained earnings and credit to income summary.
4. The last closing entry transfers the dividend or withdrawal account balance to the retained earnings account. Since dividend and withdrawal accounts are contra to the retained earnings account, they reduce the balance in the retained earnings.

The last step of an accounting cycle is to prepare post-closing trial balance.

Post-Closing Trial Balance

A post-closing trial balance is a list of balances of ledger accounts prepared after closing entries have been passed and posted to the ledger accounts. Since the closing entries transfer the balances of temporary accounts (i.e. expense, revenue, gain, dividend and withdrawal accounts) to the retained earnings account, the new balances of temporary accounts are zero and therefore they are not listed on a post-closing trial balance. However, all the other accounts having non-negative balances are listed including the retained earnings account.

The preparation of post-closing trial balance is the last step of the accounting cycle and its purpose is to be sure that sum of debits equal the sum of credits before the start of new accounting period. It provides the opening balances for the ledger accounts of the new accounting period.

Example

The following post-closing trial balance was prepared after posting the closing entries of Company A to its general ledger and calculating new account balances:

Company A

Adjusted Trial Balance

January 31, 2010

	Debit	Credit
Cash	\$20,430	—

Accounts Receivable	5,900	–
Office Supplies	4,320	–
Prepaid Rent	24,000	–
Equipment	80,000	–
Accumulated Depreciation	–	\$1,100
Accounts Payable	–	5,200
Utilities Payable	–	3,964
Unearned Revenue	–	1,000
Interest Payable	–	150
Notes Payable	–	20,000
Common Stock	–	100,000
Retained Earnings	–	3,236
Total	<u>\$134,650</u>	<u>\$134,650</u>

This is the end of the accounting cycle. In the next accounting period, the accounting cycle will be repeated again starting from the preparation of journal entries i.e. the first step of accounting cycle.

Financial Statements

A set of financial statements is a structured representation of the financial performance and financial position of a business and how its financial position changed over time. It is the ultimate output of an accounting information system and has following six components:

1. Income Statement
2. Balance Sheet
3. Statement of Cash Flows
4. Statement of Changes in Equity
5. Notes and Other Disclosures

Financial statements are better understood in context of all other components of the financial statements. For example a balance sheet will communicate more information if we have the related income statement and the statement of cash flows too.

Following the time-period principle, financial statements are prepared after a specified period; say a quarter, year, etc.

Interim Financial Statements

Quarterly and semiannual financial statements are called interim financial statements and are normally prepared in a condensed form. It means that the disclosures required in them are far less than those required in annual financial statements. Quarterly financial statements are normally unaudited but semiannual reports need to be at least reviewed by an auditor who is a qualified professional accountant authorized to attest the authenticity of financial statements.

Annual Financial Statements

Financial statements prepared for a period of one year are called annual financial statements and are required to be audited by an auditor (a chartered accountant or a certified public accountant). Annual financial statements are normally published in an annual report which also includes a directors' report (also called management discussion and analysis) and an overview of the company, its operations and past performance.

Income statement communicates the company's financial performance over the period while a balance sheet communicates the company's financial position at a point of time. The statement of cash flows and the statement of changes in equity tells us about how the financial position changed over the period. Disclosure notes to financial statements cover such material information which is not appropriate to be communicated on the face of the main financial statements.

Topic 2. Regulatory and legal support of the accounting process and accounting policy of the enterprise

1. Basic principles of accounting

Financial accounting is a system that accumulates, processes and reports information about an entity's performance (i.e. profit or loss), its financial position (i.e. assets, liabilities and shareholders' equity) and changes in financial position.

Every entity, whether for-profit or not-for-profit, aims at creating maximum value for its stakeholders. The goal of maximum value addition is best achieved when there is a mechanism to monitor the management and the board of directors. Financial accounting helps in such monitoring by providing relevant, reliable and timely information to the stakeholders.

Inputs to a financial accounting system include business transactions which are supported by source documents, such as invoices, board resolutions, management memos, etc. These inputs are processed using generally accepted accounting principles (GAAP). The processed information is reported through standardized financial statements.

Users of the Financial Statements

The most basic objective of financial accounting is preparation of general purpose financial statements, which are financial statements meant for use by stakeholders external to the entity, who do not have any other means of getting such information, i.e. people other than the management. These stakeholders include:

- **Investors and Financial Analysts:** Investors need the information to estimate the intrinsic value of the entity and to decide whether to buy, hold or sell the entity's shares. Equity research analysts use financial statements to conduct their research on earnings expectations and price targets.
- **Employee groups:** Employees and their representative groups are interested in information about the solvency and profitability of their employers to decide about their careers, assess their bargaining power and set a target wage for themselves.
- **Lenders:** Lenders are interested in information that enables them to determine whether their loans and the interest earned on them will be paid when due.
- **Suppliers and other trade creditors:** Suppliers and other creditors are interested in information that enables them to determine whether amounts owing to them will be paid when due and whether the demand from the company is going to increase, decrease or stay constant.
- **Customers:** Customers want to know whether their supplier is going to continue as an entity, especially when they have a long-term involvement with that supplier. For example, Apple is interested in long-term viability of Intel because Apple uses Intel processors in its computers and if Intel ceases operations at once, Apple will suffer difficulties in meeting its own demand and will lose revenue.
- **Governments and their agencies:** Governments and their agencies are interested in financial accounting information for a range of purposes. For example, the tax collecting authorities, such as IRS in USA, are interested in calculating taxable income of the tax-paying entities and finding their tax payable. Antitrust authorities, such as Federal Trade Commission, are interested in finding out whether an entity is engaged in monopolization. The governments themselves are interested in efficient allocation of resources and they need financial accounting information of different sectors and industries to decide on federal and state budget allocation, etc. The bureaus of statistics are interested in calculating national income, employment and other measures.
- **Public:** the public is interested in an entity's contribution towards the communities in which it operates, its corporate social responsibility updates, its environmental track record, etc.

Accounting Principles

Accounting follows a certain framework of core principles which makes the information generated through an accounting system valuable. Without these core principles accounting would be irrelevant and unreliable.

These principals include:

1. **Accrual Concept**
2. **Going Concern Concept**
3. **Business Entity Concept**
4. **Monetary Unit Assumption**
5. **Time Period Principle**
6. **Revenue Recognition Principle**
7. **Full Disclosure Principle**
8. **Historical Cost Concept**
9. **Matching Principle**
10. **Relevance and Reliability**
11. **Materiality Concept**
12. **Substance Over Form**
13. **Prudence Concept**
14. **Understandability Concept**
15. **Comparability Principle**
16. **Consistency Concept**

These principles are the building blocks that form the basis of more complex and specialized principles called GAAP or generally accepted accounting principles such as the International Financial Reporting Standards, US GAAP, etc. They deal with matters like accounting for revenue, accounting for income taxes, accounting for business combinations, etc.

Accrual Concept

Accrual concept is the most fundamental principle of accounting which requires recording revenues when they are earned and not when they are received in cash, and recording expenses when they are incurred and not when they are paid.

GAAP allows preparation of financial statements on accrual basis only (and not on cash basis). This is because under accrual concept revenues and expenses are recorded in the period to which they relate and not when they are received or paid. Application of accrual concept results in accurate reporting of net income, assets, liabilities and retained earnings which improves analysis of the company's financial performance and financial position over different periods.

At the end of each reporting period, companies pass adjusting journal entries to record any accruals, for example accrual of utilities expense, interest expense, accrual of wages and salaries, adjustment of prepayments, etc.

Examples

The following examples elaborate the accrual concept.

1. An airline sells its tickets days or even weeks before the flight is made, but it does not record the receipts as revenue because the flight, the event on which the revenue is based has not occurred yet. The airline journalizes receipt of cash as follows:

Bank	ABC	
Unearned revenue		ABC

2. Unearned revenue is a current liability which extinguishes when the flight is made.

Unearned revenue	ABC	
Revenue		ABC

- ~~2.3.~~ An accounting firm obtained its office on rent and paid \$120,000 on January 1 as annual rent. It does not record the payment as an expense because the building is not yet used. Instead it records the cash payment as prepaid rent (which is a current asset):

Prepaid rent	DEF	
Bank		DEF

3-4. The firm recognizes rent expense over the period. For example, in preparing its quarterly income statement on March 31, the firm expends out three months' rent i.e. 30,00 (= \$120,000/12 × 3] because 3 months equivalent of time has expired (from 1 January till 31 March).

Rent expense	GHI	
Prepaid rent		GHI

4-5. A business records its utility bills as soon as it receives them and not when they are paid, because the service has already been used. The company ignores the date when the payment will be made.

Cash basis

An alternative to accrual basis is the cash basis of accounting. Under the cash basis, transactions are recorded based on their underlying cash inflows or outflows. Cash basis is normally used while preparing financial statements for tax purposes, etc.

Going Concern Concept

Going concern concept is a simple but very important financial accounting principle which stipulates the basis on which financial statements are prepared depending on the likelihood of the company continuing its normal course of business.

General purpose financial statements are prepared assuming that the company can and will continue its business in the foreseeable future. If the company is not expected to continue operations i.e. it is required (or reasonably expected) to wind up, its financial statements are prepared using break-up basis. Foreseeable future normally means at least one year.

The assumption that a business is expected to continue in future affects the timing, nature and amount on which accounting transactions are recorded. For example, one criteria for classification of assets and liabilities into current and non-current is whether they are realized/settled within normal course of business. In a non-going concern basis, income, expenses, assets, liabilities and equity are recorded at values that reflect the winding up of business, i.e. assets are recognized at values they are expected to fetch if sold right away, etc.

Management is required to assess at the date of financial statements whether a business is a going concern. Some accounting frameworks require management to disclose their assessment of going concern. Indicators that jeopardize the going concern status of a business include: (a) situation where liabilities exceed assets, (b) default of a loan(s), (c) tax penalties, heavy fines, etc., (d) very adverse regulations, (e) negative cash flows, (f) extremely adverse legal claims, etc.

The auditors of the company are required to analyze the going concern status of a business.

Going concern concept is closely linked with business entity concept, materiality concept and historical cost concept. For example, in assessing going concern, a business is looked at in isolation of its owners, etc. (in line with entity concept); and only material reasons affect the likelihood of continuing operations (in line with materiality concept), etc.

Examples

In the following examples, identify if the company should prepare its financial statements on a going concern basis or a non-going concern basis:

- Nigoilia, Inc. is a Nigerian subsidiary of iOil, Inc., a multinational oil and gas firm. Recently the apex court of the country stopped the company from operations in Nigeria.
- National Oil, Inc., a nationalized refinery is facing serious cash flows problems but the government of the country provided a guarantee to the refinery to help it out with all payments.
- A bank is in serious financial trouble and the government is not willing to bail it out. The Board of Directors has passed a resolution to liquidate it.
- IGH, Inc. is in a credit crunch. A creditor demanded payment which the company could not make within 30 days. The creditor has moved the court for liquidation of the company. PQR, Inc. has agreed to bail IGH, Inc. out. The creditor has to withdraw its petition.

Solution

- Nigoilia, Inc., the subsidiary must not prepare its financial statements on going concern basis because it can't continue its operations. Whether iOil, Inc. (the parent company) is a going concern or not depends on the financial hit the parent has suffered due to shutting down of Nigoilia, Inc. Though iOil, Inc. is not directly affected by the judgement, it may not be a going concern if 85% of its investment is in Nigoilia, Inc. However, if the shutdown subsidiary accounted for just 10% of its holdings, the multinational parent can most likely prepare its **financial statements** on going concern basis.
- Though National Oil, Inc. has severe cash flow problems, it is still a going concern due to backing of the government.
- The bank is not a going concern and must prepare its financial statements on a basis other than going concern because the Board of Directors has decided to liquidate it.
- Though IGH ran into serious trouble, the bail out by PQR has ensured that the company operates in its normal course of business. IGH should prepare its financial statements on going-concern basis.

Business Entity Concept

In accounting we treat a business or an organization and its owners as two separately identifiable parties. This concept is called business entity concept. It means that personal transactions of owners are treated separately from those of the business.

Businesses are organized either as a **proprietorship**, a **partnership** or a **company**. They differ on the level of control the ultimate owners exercise on the business, but in all forms the personal transactions of the owners are not mixed up with the transactions and accounts of the business.

Examples

1. A CPA has 3 rooms in a house he has rented for \$3,000 per month. He has setup a single-member accounting practice and uses one room for the purpose. Under the business entity concept, only 1/3rd of the rent or \$1,000 should be charged to business, because the other 2 rooms or \$2,000 worth of rent is expended for personal purposes.
2. The CPA received \$900 bill for utilities. He paid the whole amount using his business account. \$600 is to be considered a withdrawal because only \$300 (1/3rd) related to business and the other \$600 was for domestic purpose.
3. Assuming each public accounting business is required to pay \$100 to a local association of CPAs each month. If the CPA pays that amount from a personal bank account the amount shall be considered additional capital.

Monetary Unit Assumption

In accounting we can communicate only those **business transactions** and other events which can be expressed in monetary units. This is called monetary unit assumption.

There are certain other frameworks for reporting business performance such as triple bottom line which focuses on "people, planet profit" the three pillars; corporate social responsibility reporting, etc. Accounting focuses on the financial aspects of the business and that too for matters which can be expressed in terms of currencies.

One aspect of the monetary unit assumption is that currencies lose their purchasing power over time due to inflation, but in accounting we assume that the currency units are stable in value. This is alternatively called stable dollar assumption.

However, there are exceptional circumstances called hyperinflation when the accounting standards require adjustment of prior period figures.

Examples

1. The company's **property, plant and equipment** on 2009 balance sheet amounted to \$2 billion. During 2010 inflation was 10%. The monetary unit and stable dollar assumption prohibits any adjustment to current or prior period figures to account for the inflation.
2. The BP oil spill in Gulf of Mexico was a natural disaster but accounting only reports the financial impact in the form of claims paid, damages paid, cleanup costs, etc. This is due to the limitation imposed by the monetary unit assumption.

Time Period Principle

Although businesses intend to continue in long-term, it is always helpful to account for their performance and position based on certain time periods because it provides timely feedback and helps in making timely decisions.

Under time period assumption, we prepare financial statements quarterly, half-yearly or annually. The **income statement** provides us an insight into the performance of the company for a period of time. The **balance sheet** (also known as the statement of financial position) provides us a snapshot of the business' financial position (assets, liabilities and equity) at the end of the time period. The **statement of cash flows** and the **statement of changes in equity** provide detail of how the company's financial position changed during the time period.

One implication of the time period assumption is that we have to make estimates and judgments at the end of the time period to correctly decide which events need to be reported in the current time period and which ones in the next.

Revenue recognition and **matching** principles are relevant to time period assumption. Revenue recognition principle provides guidance on when to record revenue while matching concept tells us how to reach an accurate net income figure by creating 1-1 correspondence between revenues and expenses.

Revenue Recognition Principle

Revenue recognition principle tells that revenue is to be recognized only when the rewards and benefits associated with the items sold or service provided is transferred, where the amount can be estimated reliability and when the amount is recoverable.

Accrual basis of accounting is used in recognizing revenue which tells that revenue is to be recognized ignoring when the cash inflows occur.

Examples

1. A telecommunication company sells talk time through scratch cards. No revenue is recognized when the scratch card is sold, but it is recognized when the subscriber makes a call and consumes the talk time.
2. A monthly magazine receives 1,000 subscriptions of \$240 to be paid at the beginning of the year. Each month it recognizes revenue worth \$20,000 [$(\$240 \div 12) \times 1,000$].
3. A media company recognizes revenue when the ads are aired even if the payment is not received or where payment is received in advance.

In case where payment is received before the event triggering recognition of revenue happens, the debit goes to **cash** and credit to unearned revenue. In case the event triggering revenue recognition occurs before payment is received, the debit goes to accounts receivable and credit to revenue.

Revenue is the item which is the easiest to misstate, hence more stringent rules and guidance is required in this area. IAS 18 Revenue deals with recognition of revenue.

Full Disclosure Principle

Full disclosure principle is relevant to materiality concept. It requires that all material information has to be disclosed in the financial statements either on the face of the financial statements or in the notes to the financial statements.

Examples

1. Accounting policies need to be disclosed because they help understand the basis of accounting.
2. Details of contingent liabilities, contingent assets, legal proceedings, etc. are also relevant to the decision making of users and hence need to be disclosed.
3. Significant events occurring after the date of the financial statements but before the issue of financial statements (i.e. events after the balance sheet date) need to be disclosed.
4. Details of property, plant and equipment cannot be presented on the face of the balance sheet, but a detailed schedule outlining movement in cost and accumulated depreciation should be presented in the notes.
5. Tax rate is expected to change in near future. This information needs to be disclosed.
6. The draft for a new legislation is presented in the legislative of the country in which the company operates. If passed, the law would subject the company to significant cleanup costs. The company has to disclose the information in the notes.
7. The company sold one of its subsidiaries to the spouse of one of its directors. The information is material and needs disclosure.

Historical Cost Concept

Accounting is concerned with past events and it requires consistency and comparability that is why it requires the accounting transactions to be recorded at their historical costs. This is called historical cost concept.

Historical cost is the value of a resource given up or a liability incurred to acquire an asset/service at the time when the resource was given up or the liability incurred.

In subsequent periods when there is appreciation in value, the value is not recognized as an increase in assets value except where allowed or required by accounting standards.

Examples

1. 100 units of an item were purchased one month back for \$10 per unit. The price today is \$11 per unit. The inventory shall appear on balance sheet at \$1,000 and not at \$1,100.
2. The company built its ERP in 2008 at a cost of \$40 million. In 2010 it is estimated that the present value of the future benefits attributable to the ERP is \$1 billion. The ERP shall stand on balance sheet at its historical costs less accumulated depreciation.

The concept of historical cost is important because market values change so often that allowing reporting of assets and liabilities at current values would distort the whole fabric of accounting, impair comparability and makes accounting information unreliable.

Matching Principle

Matching principle is one of the most fundamental principles in accounting. It requires that a company must record expenses in the period in which the related revenues are earned. Matching concept is at the heart of accrual basis of accounting.

It is important to match expenses with revenues because net income, i.e. the net amount earned in a period, is calculated by subtracting expenses from revenues. If expenses are not properly recorded in

the correct period, the net income for a particular period may be either understated or overstated and so are the related balance sheet balances.

Matching principle is what differentiates the accrual basis of accounting from cash basis of accounting. It requires recognition of revenues and expenses regardless of the actual receipt of cash from revenues and actual payment of cash for expenses.

In order to apply the matching principle, management of a company is required to apply judgment to estimate the timing and amount of revenues and expenses. **Prudence concept**, which is a related accounting principle, requires companies not to overstate revenues, understate expenses, overstate assets and/or understate liabilities.

In line with the **materiality concept**, a company is not required to trace every dollar of expense to every dollar of revenue because the cost of doing so would exceed the potential benefit.

Examples

Example 1: When a company makes sales, majority of it are against credit, i.e. where the customer receives delivery of goods or services but promises to make the payment, say within 30 days. In accordance with **revenue recognition principle**, revenue is recognized when the delivery is made. Now, there is a risk that the customers may not pay the amount due against those sales, which results in the company writing off the account receivable as bad debts expense. The possibility of bad debts exists when the sale is made, so expense should be recognized right at that moment when the sale is made. Recognizing bad debts expense requires considerable estimation.

Example 2: Company B generates \$2,000,000 in revenue in 2010. Total purchases of inventories were \$1,000,000 of which \$100,000 remained on hand at the end of 2010. The cost of sales should be reflected in the income statement at \$900,000 [\$1,000,000 minus \$100,000]. The company's gross profit for 2010 should be \$1,100,000 (=\$2,000,000 minus \$900,000). The main point is to subtract only that much expense in a particular period which is related to the revenues earned in that period. Since \$100,000 worth of inventories are to be sold in next period, they should not be subtracted from revenue for the current period.

Example 3: A hospital pays \$20,000 per month to 5 of its doctors. Monthly sales are \$500,000. \$100,000 worth of monthly salaries should be matched with \$500,000 of revenue generated.

Relevance and Reliability

Relevance and reliability are two of the four key **qualitative characteristics** of financial accounting information. The others being understandability and comparability.

Relevance requires that the financial accounting information should be such that the users need it and it is expected to affect their decisions.

Reliability requires that the information should be accurate and true and fair.

Relevance and reliability are both critical for the quality of the financial information, but both are related such that an emphasis on one will hurt the other and vice versa. Hence, we have to trade-off between them. Accounting information is relevant when it is provided in time, but at early stages information is uncertain and hence less reliable. But if we wait to gain while the information gains reliability, its relevance is lost.

Examples

1. After the **balance sheet** date but before the date of issue a company wants to dispose of one of its subsidiaries and is in final stages of reaching a deal but the outcome is still uncertain. If the company waits they are expected to find more reliable information but that would cost them relevance. The information would be outdated and no longer very relevant.
2. After the balance sheet date during the time when audit is carried out, it becomes clear which debts were realized and where were not hence it improves the reliability of allowance for **bad**

debts estimate but the information loses its relevance due to too much time being taken. Timeliness is key to relevance.

Materiality Concept

Financial statements are prepared to help its users in making economic decisions. All such information which can be reasonably expected to affect decisions of the users of financial statements is material and this property of information is called materiality. Materiality is a key concept in accounting because it helps accountants and auditors in deciding which figures need separate reporting and what is the maximum amount above which errors or omissions should be avoided at all costs.

Deciding whether a piece of information is material or not requires considerable judgment. Information can be material either due to size of the amounts involved or due to the nature of the event.

Example: Materiality due to size

Maldives Plc's total sales for the financial year 2012 amounts to \$100 million and its total assets are \$50 million. The company's external auditors have found out that \$3 million worth of sales shouldn't be recognized in financial year 2012 because the risks and rewards inherent in the sales have not been transferred.

This amount of \$3 million is material in the context of total assets of \$50 million. The company should adjust its financial statements.

Examples: Nature of the event

1. EW Casinos Corporation operates in a country which is about to enact a new legislation which would seriously impair the company's operations in future. Although there are no figures involved, the disclosure of the development is required in the financial statements for the period on account of materiality because the new legislation can potentially end the revenues and profits earned from the country.
2. The remuneration paid to a company's executives and directors is material due to qualitative reasons (even it is not material quantitatively). It is because the investors would like to make sure that the management is not overcompensating itself.
3. The accounting policies are material and can't be omitted because they help the users understand how the management arrived at the amounts presented in the financial statements.

Materiality Estimates

Accounting frameworks and standards have avoided setting any quantitative guidance for materiality because materiality always depends on the nature of the amount (such as how reliability it is possible to calculate/estimate the amount) and on other related circumstances.

In practice accountants and auditors need some crude estimate as quantitative threshold of materiality. They estimate it either as some percentage of a net measure such as 0.5% of net income or as percentage of some gross measure such as 5% of total assets.

Some accounting and financial reporting standards do provide some quantitative guidance. For example, accounting standards on segment reporting treat segments with revenue or assets greater than 10% of total revenue/assets as reportable segments.

Substance Over Form

Substance over form is an accounting principle which recognizes that business transactions should be accounted in accordance with their (economic) substance instead of their (legal) form. Economic substance refers to the underlying economic or commercial purpose of a business transaction apart

from its legal or tax considerations. Legal form refers to interpretation of a business transaction in accordance with the applicable business laws.

While accounting for business transactions and other events, substance over form principle requires accountants to measure and present the economic impact of an event instead of its legal form. Substance over form approach is critical for preparation of true and fair financial statements. It is particularly relevant while accounting for revenues, sale and purchase agreements, leases etc.

Substance over form principle is recognized by all major financial reporting frameworks, namely the International Financial Reporting Standards (IFRS) and US GAAP, etc. External auditors are required to attest that companies recognize all business transactions in compliance with the substance over form concept.

Example 1

ABC, Inc. is an airline which has obtained 5 jets from DEF, Inc. on lease under following conditions:

- The jets shall be available only to ABC, Inc. for the next 10 years (useful life is 12 years)
- The jets shall be modified to meet specific requirements of ABC, Inc.
- ABC, Inc. shall make quarterly payments which when discounted appropriately equals the cost of the jet plus other related costs
- The ownership of the jets shall remain with DEF, Inc. over the life of the lease and the physical custody of the jets shall be transferred back to DEF, Inc. at the end of the lease term.

Identify the economic substance of the transaction and demonstrate how it differs from its legal form.

Solution

In accordance with the terms of the lease agreement, the jets remain in ownership of DEF, Inc. throughout the lease term so the legal form of the contract/agreement dictates that ABC, Inc. should not record them as asset on its balance sheet. However, when we analyze the economic effects of the lease agreement, we see that it has put ABC, Inc. in control of the economic benefits inherent in the use of jets for major portion of the lease term because it has full control on the use of the jets. Further, the present value of lease payment is fairly equal to the fair value of the jets, etc., which means that ABC, Inc. has undertaken a liability equal to the cost of the jets by entering into the agreement. The transaction is best reflected in the financial statements by showing the jets as assets and also presenting a corresponding lease liability.

Example 2

A food-processing company has cash flow problems, so it sells its fleet of delivery trucks to a bank and gets it back on a lease. The transaction is called sale and leaseback. Although the legal ownership of the assets has transferred but the underlying economics remains the same and hence under the substance over form principle the sale and subsequent leaseback are looked at as one transaction. The company cannot just remove the fleet from its balance sheet because the legal ownership has changed. It will continue to recognize the fleet as an asset and shall also record a lease liability that arise out of the associated lease-back.

Example 3

If two companies swap inventories of identical nature, legally the ownership of goods has changed, but there is no commercial purpose of the transaction because it does not generate any profit or loss. Substance over form principle disallows recognition of revenue by any of the companies even if they have entered into valid enforceable contracts.

Prudence Concept

Accounting transactions and other events are sometimes uncertain but in order to be relevant we have to report them in time. We have to make estimates requiring judgment to counter the uncertainty. While making judgment we need to be cautious and prudent. Prudence is a key accounting principle which makes sure that assets and income are not overstated and liabilities and expenses are not understated.

Examples

1. Bad debts are probable in many businesses, so they create a special contra-account to accounts receivable called allowance for bad debts which brings the accounts receivable balance to the amount which is expected to be realized

and hence prevents overstatement of assets. An expense called bad debts expense is also booked to stop net income from being overstated.

2. Some liabilities are contingent upon future occurrence or non-occurrence of an event such a law suit, etc. We judge the probability of occurrence of that event and if it is more than 50% we record a liability and corresponding expense at the most likely amount. Hence, we stop liability and expense from being understated.
3. Periodic evaluations of assets are made to make sure their carrying value does not exceed the benefits expected to be derived from the asset, and if it does exceed, the impairment of fixed asset is recorded by reducing its carrying amount.

Understandability Concept

Understandability is one of the four qualitative characteristics of financial accounting information. The other being relevance, reliability, timeliness, faithful representation, comparability and materiality. Understandability refers to the quality of financial information which makes it understandable by people with reasonable background knowledge of business and economic activities.

Understandability requires the information presented in financial reports to be concise, complete and clear in presentation. The information should be presented so as to facilitate the user of the information.

However, understandability never prescribes any complex information to be omitted altogether due to its underlying difficulty in understanding. It just requires us to disclose the information systematically instead of presenting it haphazardly.

Examples

Understandability would require the financial statements to be identified by presenting the name of the financial statement, the name of the entity and the period covered by the statement.

Understandability also requires the notes to be properly numbered and cross-referred to the original balance sheet and income statement items. For example the note number of disclosure on leases should be mentioned in front of the lease payable line item appearing on the face of a balance sheet.

Financial instruments and derivatives are specialized instruments which require rigorous understanding of finance to properly understand the underlying economics. In such complexity we cannot omit the disclosure because it is not easily understandable.

Comparability Principle

Comparability is one of the key qualities which accounting information must possess. Accounting information is comparable when accounting standards and policies are applied consistently from one period to another and from one region to another. The characteristic of comparability of financial statements is important because it allows us to compare a set of financial statements with those of prior periods and those of other companies.

Examples

1. We can compare 20X2 financial statements of ExxonMobil with its 20X1 financial statements to know whether performance and position improved or deteriorated.
2. We can compare the ExxonMobil financial statements with that of BP if both are prepared in accordance with same set of accounting standards, such as IFRS or US GAAP, etc.
3. When preparing 20X3 financial statements we are required to present with each of the 20X3 figure the corresponding 20X2 figures. This is done to add the characteristic of comparability to the financial statements.

Accounting standards are intended to outline the best accounting treatment so that companies follow them and hence accounting information is understandable, relevant and reliable and comparable. Consistency means that the accounting policies should be changed only when there are valid grounds for such a change.

Consistency Concept

The concept of consistency means that accounting methods once adopted must be applied consistently in future. Also same methods and techniques must be used for similar situations.

It implies that a business must refrain from changing its accounting policy unless on reasonable grounds. If for any valid reasons the accounting policy is changed, a business must disclose the nature of change, the reasons for the change and its effects on the items of financial statements.

Consistency concept is important because of the need for comparability, that is, it enables investors and other users of financial statements to easily and correctly compare the financial statements of a company.

Examples

1. Company A has been using declining balance depreciation method for its IT equipment. According to consistency concept it should continue to use declining balance depreciation method in respect of its IT equipment in the following periods. If the company wants to change it to another depreciation method, say for example the straight line method, it must provide in its financial report, the reason(s) for the change, the nature of the change and the effects of the change on items such as accumulated depreciation.
2. Company B is a retailer dealing in shoes. It used first-in-first-out method of inventory valuation in respect of shoes at Branch X and weighted average inventory valuation method in respect of similar shoes at Branch Y. Here, the auditors must investigate whether there are any valid reasons for the different treatment of similar inventory located at different locations. If not, they must direct the company to use any one of the valuation method uniformly for the whole class of inventory.

Topic 5.. Features of the organization of accounting of assets, equity and liabilities

1. Organization of accounting for fixed assets

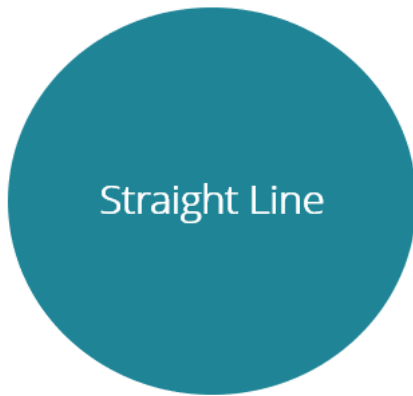
Task 2

What Are the Main Types of Depreciation Methods?

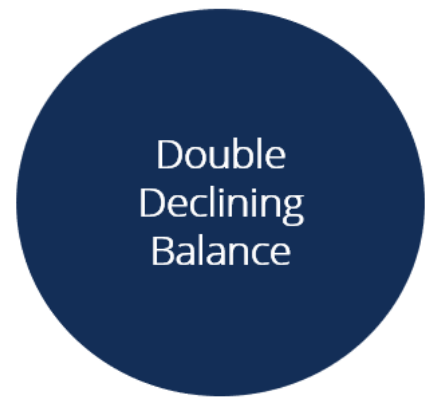
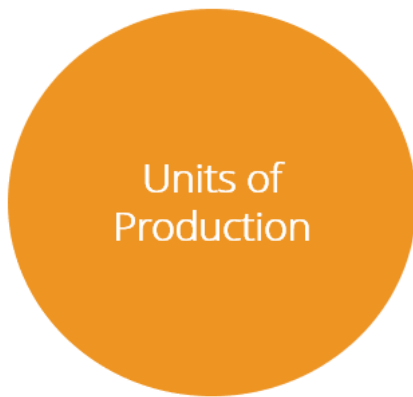
There are several types of depreciation expense and different formulas for determining the book value of an asset. The most common depreciation methods include:

1. Straight-line
2. Double declining balance
3. Units of production
4. Sum of years digits

Depreciation expense is used in accounting to allocate the cost of a tangible asset over its useful life. In other words, it is the reduction in the value of an asset that occurs over time due to usage, wear and tear, or obsolescence. The four main depreciation methods mentioned above are explained in detail below.



Types of Depreciation



#1 Straight-Line Depreciation Method

Straight-line depreciation is a very common, and the simplest, method of calculating depreciation expense. In straight-line depreciation, the expense amount is the same every year over the useful life of the asset.

Depreciation Formula for the Straight Line Method:

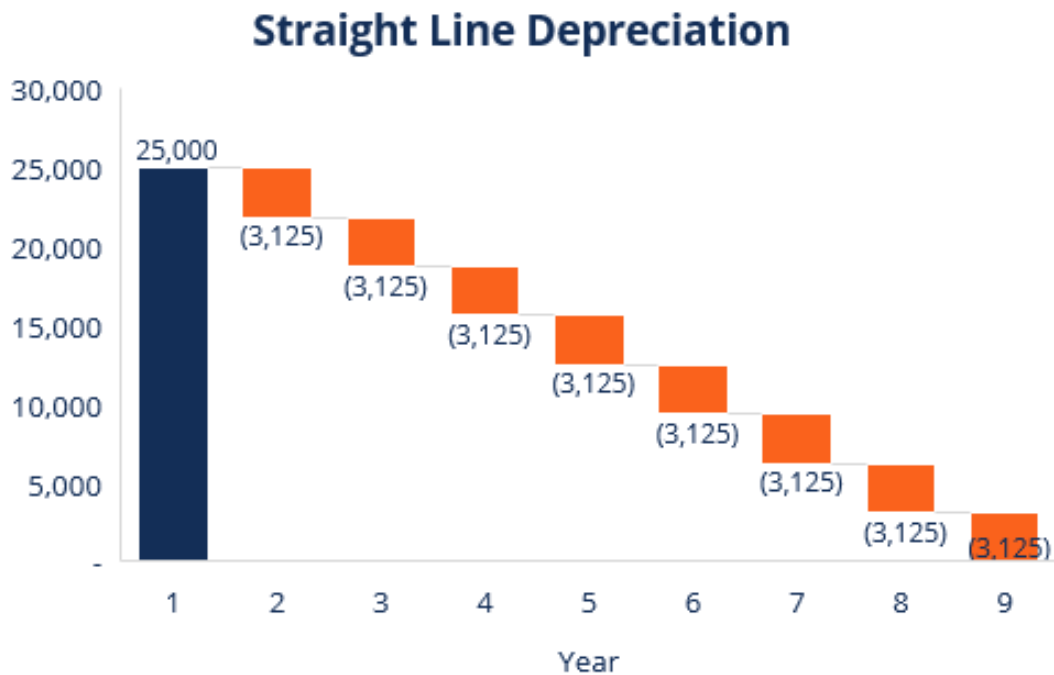
$$\text{Depreciation Expense} = (\text{Cost} - \text{Salvage value}) / \text{Useful life}$$

Example

Consider a piece of equipment that costs \$25,000 with an estimated useful life of 8 years and a \$0 salvage value. The depreciation expense per year for this equipment would be as follows:

Year #		1	2	3	4	5	6	7	8
Straight Line									
Opening Book Value		25,000	21,875	18,750	15,625	12,500	9,375	6,250	3,125
Depreciation	8	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125
Ending Book Value	25,000	21,875	18,750	15,625	12,500	9,375	6,250	3,125	-

Depreciation Expense = $(\$25,000 - \$0) / 8 = \$3,125$ per year



#2 Double Declining Balance Depreciation Method

Compared to other depreciation methods, [double-declining-balance depreciation](#) results in a larger amount expensed in the earlier years as opposed to the later years of an asset's useful life. The method reflects the fact that assets are typically more productive in their early years than in their later years – also, the practical fact that any asset (think of buying a car) loses more of its value in the first few years of its use. With the double-declining-balance method, the depreciation factor is 2x that of the straight-line expense method.

Depreciation formula for the double-declining balance method:

Periodic Depreciation Expense = Beginning book value x Rate of depreciation

Example

Consider a piece of property, plant, and equipment (PP&E) that costs \$250,000, with an estimated useful life of 8 years and a \$2,500 salvage value. To calculate the double-declining balance depreciation, set up a schedule:

Year #		1	2	3	4	5	6	7	8
DDB									
Opening Book Value		25,000	18,750	14,063	10,547	7,910	5,933	4,449	3,337
Depreciation	25%	6,250	4,688	3,516	2,637	1,978	1,483	1,112	834
Ending Book Value	25,000	18,750	14,063	10,547	7,910	5,933	4,449	3,337	2,503

The information on the schedule is explained below:

1. The beginning book value of the asset is filled in at the beginning of year 1 and the salvage value is filled in at the end of year 8.
2. The rate of depreciation (Rate) is calculated as follows:

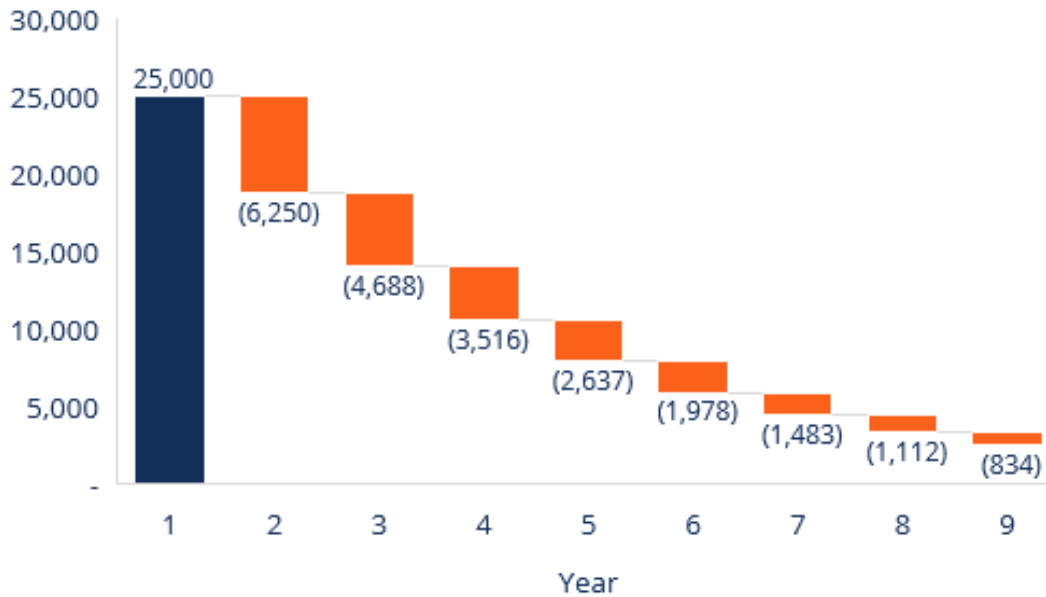
Expense = (100% / Useful life of asset) x 2

Expense = (100% / 8) x 2 = 25%

Note: Since this is a double-declining method, we multiply the rate of depreciation by 2.

3. Multiply the rate of depreciation by the beginning book value to determine the expense for that year. For example, \$25,000 x 25% = \$6,250 depreciation expense.
4. Subtract the expense from the beginning book value to arrive at the ending book value. For example, \$25,000 – \$6,250 = \$18,750 ending book value at the end of the first year.
5. The ending book value for that year is the beginning book value for the following year. For example, the year 1 ending book value of \$18,750 would be the year 2 beginning book value. Repeat this until the last year of useful life.

Double Declining Balance Depreciation



Learn more in CFI's [Accounting Courses](#).

#3 Units of Production Depreciation Method

The units-of-production depreciation method depreciates assets based on the total number of hours used or the total number of units to be produced by using the asset, over its useful life.

The formula for the units-of-production method:

Depreciation Expense = (Number of units produced / Life in number of units) x (Cost – Salvage value)

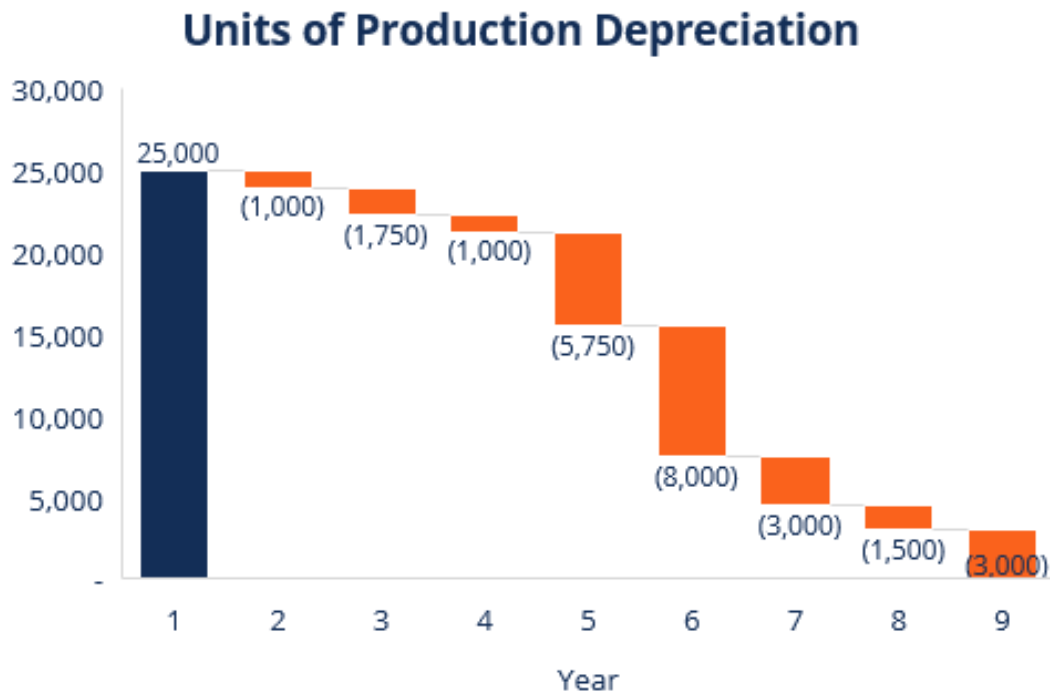
Example

Consider a machine that costs \$25,000, with an estimated total unit production of 100 million and a \$0 salvage value. During the first quarter of activity, the machine produced 4 million units.

Year #	1	2	3	4	5	6	7	8
Units								
Production (Units)	4	7	4	23	32	12	6	12
Opening Book Value	25,000	24,000	22,250	21,250	15,500	7,500	4,500	3,000
Depreciation	1,000	1,750	1,000	5,750	8,000	3,000	1,500	3,000
Ending Book Value	25,000	24,000	22,250	21,250	15,500	7,500	4,500	3,000

To calculate the depreciation expense using the formula above:

$$\text{Depreciation Expense} = (4 \text{ million} / 100 \text{ million}) \times (\$25,000 - \$0) = \$1,000$$



#4 Sum-of-the-Years-Digits Depreciation Method

The sum-of-the-years-digits method is one of the accelerated depreciation methods. A higher expense is incurred in the early years and a lower expense in the latter years of the asset's useful life.

In the [sum-of-the-years digits depreciation method](#), the remaining life of an asset is divided by the sum of the years and then multiplied by the depreciating base to determine the depreciation expense.

The depreciation formula for the sum-of-the-years-digits method:

$$\text{Depreciation Expense} = (\text{Remaining life} / \text{Sum of the years digits}) \times (\text{Cost} - \text{Salvage value})$$

Consider the following example to more easily understand the concept of the sum-of-the-years-digits depreciation method.

Example

Consider a piece of equipment that costs \$25,000 and has an estimated useful life of 8 years and a \$0 salvage value. To calculate the sum-of-the-years-digits depreciation, set up a schedule:

Year #	1	2	3	4	5	6	7	8
SYD								
Remaining Life	8	7	6	5	4	3	2	1
Opening Book Value	25000	19,444	14,583	10,417	6,944	4,167	2,083	694
Depreciation	5,556	4,861	4,167	3,472	2,778	2,083	1,389	694
Ending Book Value	25,000	19,444	14,583	10,417	6,944	4,167	2,083	694

The information in the schedule is explained below:

1. The depreciation base is constant throughout the years and is calculated as follows:

Depreciation Base = Cost – Salvage value

Depreciation Base = \$25,000 – \$0 = \$25,000

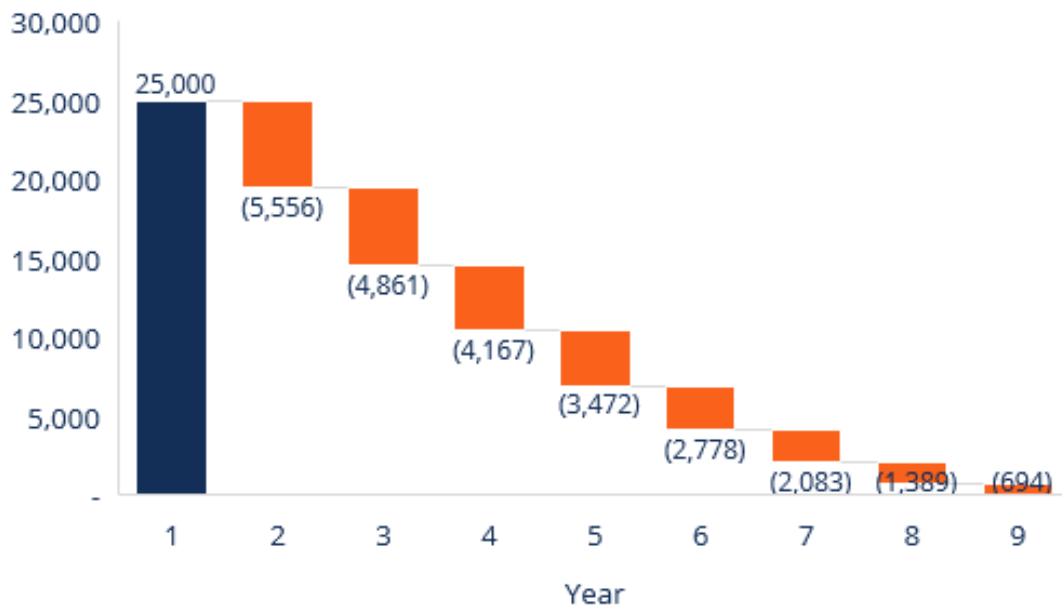
2. The remaining life is simply the remaining life of the asset. For example, at the beginning of the year, the asset has a remaining life of 8 years. The following year, the asset has a remaining life of 7 years, etc.

3. RL / SYD is “remaining life divided by sum of the years.” In this example, the asset has a useful life of 8 years. Therefore, the sum of the years would be 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 = 36 years. The remaining life in the beginning of year 1 is 8. Therefore, the RM / SYD = 8 / 36 = 0.2222.

4. The RL / SYD number is multiplied by the depreciating base to determine the expense for that year.

5. The same is done for the following years. In the beginning of year 2, RL / SYD would be 7 / 36 = 0.1944. 0.1944 x \$25,000 = \$4,861 expense for year 2.

Sum-of-the-Years Digits Depreciation



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Summary of Depreciation Methods

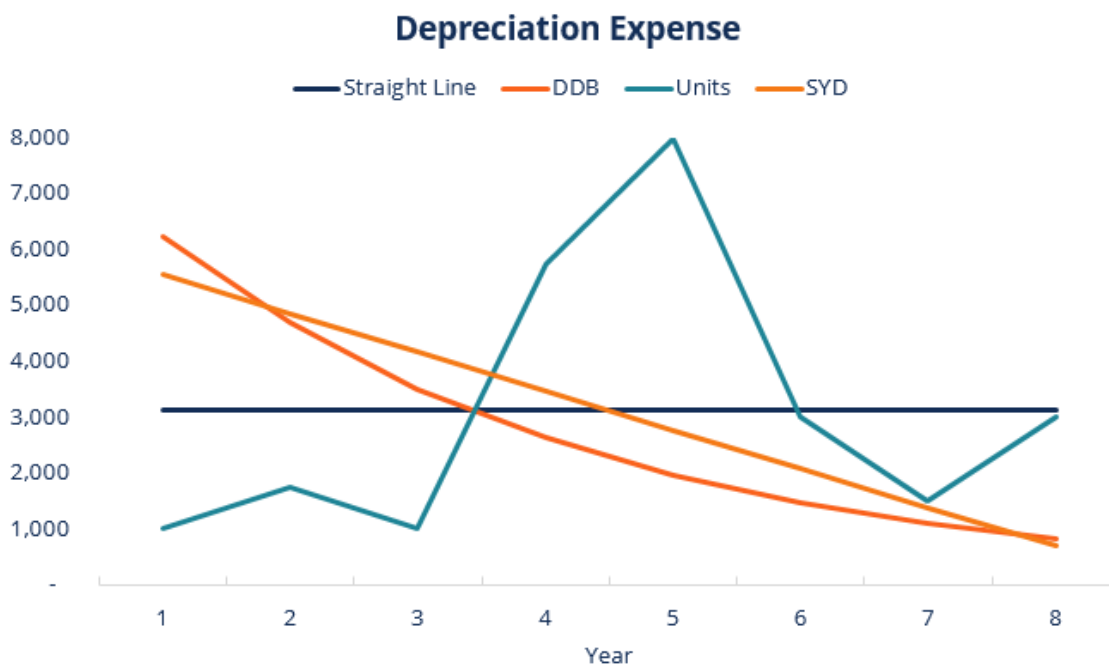
Below is the summary of all four depreciation methods from the examples above.

Year #		1	2	3	4	5	6	7	8
Straight Line									
Opening Book Value		25,000	21,875	18,750	15,625	12,500	9,375	6,250	3,125
Depreciation	8	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125
Ending Book Value	25,000	21,875	18,750	15,625	12,500	9,375	6,250	3,125	-
DDB									
Opening Book Value		25,000	18,750	14,063	10,547	7,910	5,933	4,449	3,337
Depreciation	25%	6,250	4,688	3,516	2,637	1,978	1,483	1,112	834
Ending Book Value	25,000	18,750	14,063	10,547	7,910	5,933	4,449	3,337	2,503
Units									
Production (Units)		4	7	4	23	32	12	6	12
Opening Book Value		25,000	24,000	22,250	21,250	15,500	7,500	4,500	3,000
Depreciation		1,000	1,750	1,000	5,750	8,000	3,000	1,500	3,000
Ending Book Value	25,000	24,000	22,250	21,250	15,500	7,500	4,500	3,000	-
SYD									
Remaining Life		8	7	6	5	4	3	2	1
Opening Book Value		25,000	19,444	14,583	10,417	6,944	4,167	2,083	694
Depreciation		5,556	4,861	4,167	3,472	2,778	2,083	1,389	694
Ending Book Value	25,000	19,444	14,583	10,417	6,944	4,167	2,083	694	0

Here is a graph showing the book value of an asset over time with each different method.



Here is a summary of the depreciation expense over time for each of the 4 types of expense.



2. Organization of accounting for inventories

Task 3

Perpetual vs Periodic Inventory System

Perpetual inventory system and periodic inventory systems are the two systems of keeping records of inventory.

In [perpetual inventory system](#), merchandise inventory and cost of goods sold are updated continuously on each sale and purchase transaction. Some other transactions may also require an update to inventory account for example, sale/purchase return, purchase discounts etc. Purchases are directly debited to inventory account whereas for each sale two journal entries are made: one to record sale value of inventory and other to record cost of goods sold. Purchases account is not used in perpetual inventory system.

In [periodic inventory system](#), merchandise inventory and cost of goods sold are not updated continuously. Instead purchases are recorded in Purchases account and each sale transaction is recorded via a single journal entry. Thus cost of goods sold account does not exist during the accounting period. It is determined at the end of accounting period via a closing entry.

Differences Between Perpetual and Periodic System

Following are the main differences between perpetual and periodic inventory systems:

- **Inventory Account and Cost of Goods Sold Account** are used in both systems but they are updated continuously during the period in perpetual inventory system whereas in periodic inventory system they are updated only at the end of the period.

- **Purchases Account and Purchase Returns and Allowances Account** are only used in periodic inventory system and are updated continuously. In perpetual inventory system purchases are directly debited to inventory account and purchase returns are directly credited to inventory account.
- **Sale Transaction** is recorded via two [journal entries](#) in perpetual system. One of them records the sale value of inventory whereas the other records cost of goods sold. In periodic inventory system, only one entry is made.
- **Closing Entries** are only required in periodic inventory system to update inventory and cost of goods sold. Perpetual inventory system does not require [closing entries](#) for inventory account.

Perpetual Inventory System Journal Entries

Under perpetual inventory system, inventory and cost of goods sold are updated for each sale/purchase and return transaction. We have already discussed the basic concept of perpetual inventory system in the [comparison of perpetual-periodic inventory](#). Here we will learn the journal entries which are typical to a perpetual inventory system:

Following are the journal entries under perpetual inventory system assuming that sales and purchases are recorded net of discount (to learn more, see [gross vs net method](#) of inventory purchase recording and [discount on sales](#)).

Inventory

Purchase:

Under perpetual inventory system, a purchase is recorded by debiting inventory account and crediting accounts payable assuming that the purchase is on credit. The journal entry is shown below:

Inventory	— —	
Accounts Payable		— —

Purchase

Discount:

Purchase discount will reduce the inventory directly. Thus:

Accounts Payable	— —	
Inventory		— —

Purchase

Return:

When inventory purchased is subsequently returned to the supplier, the journal entry is to debit accounts payable or accounts receivable and credit inventory account.

Accounts Receivable/Accounts Payable	— —	
Inventory		— —

Inventory

Sale:

A transaction of sale is recorded via two journal entries in perpetual inventory system. The first one records the sale value of inventory and the second one records the cost of goods sold and reduces the inventory balance. The two journal entries are shown below:

Accounts Receivable	— —	
Sales		— —
Cost of Goods Sold	— —	
Inventory		— —

Sales

Return:

The recording of sales return also requires two journal entries. Which are shown below:

Sales Returns	— —	
---------------	-----	--

Accounts Receivable/Accounts Payable		— —
Inventory	— —	
Cost of Goods Sold		— —

Written by Irfanullah Jan

Periodic Inventory System Journal Entries

Periodic inventory system updates inventory balance once in a period. We discussed this concept in the perpetual-periodic inventory comparison. Here, we will learn the typical journal entries under a periodic inventory system.

Let us assume that all sales and purchases are on credit. Also assume that where discounts are provided or availed on sales/purchases, they are recorded using the gross method (to learn more about gross method, see discount on sales and discount on inventory purchases).

Following are the typical journal entries under a periodic inventory system:

Inventory

The purchase of inventory is recorded by debiting purchases account and crediting accounts payable.

Purchases	— —	
Accounts Payable		— —

Purchase:

Purchase

Discount:

Under gross method, purchase discount is recorded using the following journal entry:

Accounts Payable	— —	
Purchase Discounts		— —

Note: The above two journal entries are usually combined in a single entry which is shown below:

Purchases	— —	
Accounts Payable		— —
Purchase Discounts		— —

Purchase

Return:

Purchase returns are recorded as shown below

Accounts Payable/Accounts Receivable	— —	
Purchase Returns		— —

Inventory

Sale:

Unlike perpetual inventory system, the periodic inventory system records the transaction of sale via a single journal entry:

Accounts Receivable	— —	
Sales		— —

Sales

Discounts:

A sales discount is recorded as shown below:

Sales Discount	— —	
Accounts Receivable		— —

Again, the above two entries are combined in a period inventory system as shown below:

Accounts Receivable	— —	
Sales Discounts		— —
Sales		— —

Sales

Return:

Similarly, sale returns are also recorded via a single journal entry:

Sales Returns	— —	
Accounts Receivable/Accounts Payable		— —

At the end of each accounting period, the value of ending inventory is determined by physical count. Cost of goods sold is determined either as a balancing figure in the closing entry shown at the end or by using the following formula:

$$\text{COGS} = \text{Beginning Inventory} + \text{Purchases} - \text{Ending Inventory}$$

The closing entry required in a periodic inventory system debits:

- inventory account by the value of ending inventory
- cost of goods sold account by the value as determined above or by the balancing figure

and credits:

- inventory account by beginning inventory
- purchases account

The entry is shown below:

Inventory (Ending Inventory)	— —	
Cost of Goods Sold (Balancing Figure)	— —	
Inventory (Beginning Inventory)		— —
Purchases		— —

A simplified form of the above journal entry uses a single debit or credit to inventory account by calculating the difference of ending inventory and beginning inventory. If the difference is positive, the inventory account will be debited for the difference and if it the difference is negative, the journal entry will credit the inventory account by the difference.

First-In, First-Out (FIFO) Method

First-In, First-Out (FIFO) is one of the methods commonly used to calculate the value of inventory on hand at the end of an accounting period and the cost of goods sold during the period. This method assumes that inventory purchased or manufactured first is sold first and newer inventory remains unsold. Thus cost of older inventory is assigned to cost of goods sold and that of newer inventory is assigned to ending inventory. The actual flow of inventory may not exactly match the first-in, first-out pattern.

First-In, First-Out method can be applied in both the periodic inventory system and the perpetual inventory system. The following example illustrates the calculation of ending inventory and cost of goods sold under FIFO method:

Example

Use the following information to calculate the value of inventory on hand on Mar 31 and cost of goods sold during March in FIFO periodic inventory system and under FIFO perpetual inventory system.

Mar 1	Beginning Inventory	68 units @ \$15.00 per unit
5	Purchase	140 units @ \$15.50 per unit
9	Sale	94 units @ \$19.00 per unit
11	Purchase	40 units @ \$16.00 per unit
16	Purchase	78 units @ \$16.50 per unit
20	Sale	116 units @ \$19.50 per unit
29	Sale	62 units @ \$21.00 per unit

Solution

FIFO Periodic

$$\text{Units Available for Sale} = 68 + 140 + 40 + 78 = 326$$

Units Sold = 94 + 116 + 62 = 272

Units in Ending Inventory = 326 - 272 = 54

Cost of Goods Sold	Units	Unit Cost	Total
Sales From Mar 1 Inventory	68	\$15.00	\$1,020
Sales From Mar 5 Purchase	140	\$15.50	\$2,170
Sales From Mar 11 Purchase	40	\$16.00	\$640
Sales From Mar 16 Purchase	24	\$16.50	\$396
	272		\$4,226

Ending Inventory	Units	Unit Cost	Total
Inventory From Mar 16 Purchase	54	\$16.50	\$891

FIFO Perpetual

Date	Purchases			Sales			Balance		
	Units	Unit Cost	Total	Units	Unit Cost	Total	Units	Unit Cost	Total
Mar 1							68	\$15.00	\$1,020
5	140	\$15.50	\$2,170				68	\$15.00	\$1,020
							140	\$15.50	\$2,170
9				68	\$15.00	\$1,020	114	\$15.50	\$1,767
				26	\$15.50	\$403			
11	40	\$16.00	\$640				114	\$15.50	\$1,767
							40	\$16.00	\$640
16	78	\$16.50	\$1,287				114	\$15.50	\$1,767
							40	\$16.00	\$640
							78	\$16.50	\$1,287
20				114	\$15.50	\$1,767	38	\$16.00	\$608
				2	\$16.00	\$32	78	\$16.50	\$1,287

29	38	\$16.00	\$608	54	\$16.50	\$891
	24	\$16.50	\$396			

Last-In, First-Out (LIFO) Method

Last-In, First-Out is one of the common techniques used in the valuation of inventory on hand at the end of a period and the cost of goods sold during the period. LIFO assumes that goods which made their way to inventory (after purchase, manufacture etc.) later are sold first and those which are manufactured or acquired early are sold last. Thus LIFO assigns the cost of newer inventory to cost of goods sold and cost of older inventory to ending inventory account. This method is exactly opposite to first-in, first-out method.

Last-In, First-Out method is used differently under periodic inventory system and perpetual inventory system. Let us use the same example that we used in FIFO method to illustrate the use of last-in, first-out method.

Example

Use LIFO on the following information to calculate the value of ending inventory and the cost of goods sold of March.

Mar 1	Beginning Inventory	60 units @ \$15.00
5	Purchase	140 units @ \$15.50
14	Sale	190 units @ \$19.00
27	Purchase	70 units @ \$16.00
29	Sale	30 units @ \$19.50

Solution

LIFO Periodic

Units Available for Sale	= 60 + 140 + 70	= 270
Units Sold	= 190 + 30	= 220
Units in Ending Inventory	= 270 – 220	= 50

Cost of Goods Sold	Units	Unit Cost	Total
Sales From Mar 27 Inventory	70	\$16.00	\$1,120
Sales From Mar 5 Purchase	140	\$15.50	\$2,170
Sales From Mar 1 Purchase	10	\$15.00	\$150
	220		\$3440

Ending Inventory	Units	Unit Cost	Total
Inventory From Mar 27 Purchase	50	\$15.00	\$750

LIFO Perpetual

Date	Purchases			Sales			Balance		
	Units	Unit Cost	Total	Units	Unit Cost	Total	Units	Unit Cost	Total
Mar 1							60	\$15.00	\$900
5	140	\$15.50	\$2,170				60	\$15.00	\$900
							140	\$15.50	\$2,170
14				140	\$15.50	\$2,170	10	\$15.00	\$150
				50	\$15.00	\$750			
27	70	\$16.00	\$1,190				10	\$15.00	\$150
							70	\$16.00	\$1,120
29				30	\$16.00	\$480	10	\$15.00	\$150
							40	\$16.00	\$640
31							10	\$15.00	\$150
							40	\$16.00	\$640

Average Cost (AVCO) Method

Average cost method (AVCO) calculates the cost of ending inventory and cost of goods sold for a period on the basis of weighted average cost per unit of inventory. Weighted average cost per unit is calculated using the following formula:

$$\text{Weighted Average Unit Cost} = \frac{\text{Total Cost of Inventory}}{\text{Total Units in Inventory}}$$

Like [FIFO](#) and [LIFO](#) methods, AVCO is also applied differently in [periodic inventory system](#) and perpetual inventory system. In periodic inventory system, weighted average cost per unit is calculated for the entire class of inventory. It is then multiplied with number of units sold and number of units in ending inventory to arrive at cost of goods sold and value of ending inventory respectively. In [perpetual inventory system](#), we have to calculate the weighted average cost per unit before each sale transaction.

The calculation of inventory value under average cost method is explained with the help of the following example:

Example

Apply AVCO method of inventory valuation on the following information, first in periodic inventory system and then in perpetual inventory system to determine the value of [inventory](#) on hand on Mar 31 and cost of goods sold during March.

Mar 1	Beginning Inventory	60 units @ \$15.00 per unit
5	Purchase	140 units @ \$15.50 per unit
14	Sale	190 units @ \$19.00 per unit
27	Purchase	70 units @ \$16.00 per unit
29	Sale	30 units @ \$19.50 per unit

Solution

AVCO Periodic

Units Available for Sale	= 60 + 140 + 70	= 270
Units Sold	= 190 + 30	= 220
Units in Ending Inventory	= 270 - 220	= 50

Weighted Average Unit Cost	Units	Unit Cost	Total
Mar 1 Inventory	60	\$15.00	\$900
Mar 5 Purchase	140	\$15.50	\$2,170
27 Purchase	70	\$16.00	\$1,120
	270	* \$15.52	\$4,190

* \$4,190 ÷ 270

Cost of Goods Sold	220	\$15.52	\$3,414
Ending Inventory	50	\$15.52	\$776

AVCO Perpetual

Date	Purchases			Sales			Balance		
	Units	Unit Cost	Total	Units	Unit Cost	Total	Units	Unit Cost	Total
Mar 1							60	\$15.00	\$900
5	140	\$15.50	\$2,170				60	\$15.00	\$900
							140	\$15.50	\$2,170
							200	\$15.35	\$3,070

14			190	\$15.35	\$2,916	10	\$15.35	\$154
27	70	\$16.00	\$1,120			10	\$15.35	\$154
						70	\$16.00	\$1,120
						80	\$15.92	\$1,274
29			30	\$15.92	\$478	50	\$15.92	\$796
31						50	\$15.92	\$796

Task 5

Each legal entity has its tax obligations. **Optimization of taxation** is aimed at reducing the level of such costs. It results in the improvement of the financial and economic performance. We are glad to offer our services in this area.

This process is based on a reasonable and proper application of the existing provisions and regulations in tax legislation. It applies not only to the payment of custom duties, but also to some business operations.

Here are many different situations, as well as options, for tax optimization. We often think that tax optimisation only makes sense for rich people and big companies, but this simply isn't true; practically anyone can do it.

In today's article, I'd like to leave you with some of them so you can better understand what well-applied [Flag Theory](#) and the life of the [Perpetual Tourist](#) can do for you.

Below you will find some examples of people we've advised and helped to optimize their taxes and situation. Of course, we've simplified the cases and, to protect the confidentiality of our clients, we've changed their names and have presented them in such a way that you cannot infer to whom they refer. All the examples are real ones, well, all but one: let's see if you can find out which one it is.

1. Dropshipping

Situation: Martina earns her income with dropshipping, selling jewellery handmade in Africa on Shopify. She sells worldwide and has an increasing number of orders, almost too much for her to handle alone. Martina lives in Canada and does not want to move. She knows that the CFC rules and residence test complicate the process of setting up a business abroad. She also needs a PayPal account to run her business.

Solution: Martina founds a **GBC1** company Mauritius, which pays 3% tax on its sales abroad. Thanks to the existing double taxation agreement, the credibility of the choice of jurisdiction from a business point of view, and the fact that she has hired a local employee to help her with the many orders, the Mauritian company is recognised by the authorities. Since she has an employee in the country, she hasn't had any problems opening a local bank account and linking it to PayPal. Mauritius has good commercial banks with easy-to-open accounts that have even joined the IBAN system.

2. Amazon FBA

Situation: Guillermo is tied to Spain by his home and children but is determined to legally reduce the amount of tax he pays on profits with his Amazon FBA business. He makes a profit of 500,000 euros before tax, of which, between corporation tax, personal income tax and dividend tax, half is left on the table which he is willing to invest heavily in a solution that saves him as much as possible in tax.

Solution: Guillermo has set up a [company in Bulgaria](#) that taxes profits at 10%. He only withdraws essential money and leaves most of it in the company, from where he reinvests it. In the not-too-distant future, when his children are a little older, he might move to Cyprus to be able to receive all the money accumulated in his Bulgarian company. Meanwhile, to avoid problems with the Spanish tax agency, and for the company to be recognised in Bulgaria, he opens an office there and hires two local employees who pay their social security contributions in Bulgaria. In this way he not only pays less tax but can also expand his business to other markets.

3. Starting out cheap and simple with an LLC in Wyoming

Situation: Mike would like to live as a digital nomad; he really likes travelling. He only earns 1,000 dollars a month, but even so does not want to get caught up in the Australian tax system, no matter how little he's taxed at first. Nor does he want to keep an account, charge VAT or have to pay an advisor or accountant. However, he needs to be able to issue invoices that his customers (who are companies) can recognise as tax-deductible.

Solution: Mike sets up an LLC in Wyoming for \$150. With the LLC he has a billing address from which he can bill his customers. LLCs are tax transparent, such that you only pay tax if you are required to where you live. Since Mike has deregistered and doesn't reside anywhere, as he is a perpetual traveller, he pays nothing in taxes. Unfortunately, he hasn't been able to get a bank account for the LLC he's registered, so he receives the money in a private PayPal account linked to an account he already had as a private individual. However, when he makes more money with his business he will register a [Florida LLC with bank account](#), stripe and paypal.

4. Consultancy – UAE

Situation: Manuel is a Venezuelan consultant who has been tax resident in Portugal for a long time. He works with customers all round the world and doesn't stop travelling, he's doing very well. He refuses to pour more than half the money he earns into taxes and is looking for another country to transfer his residence to, but where he doesn't have to spend much time. Of course, he wants to limit his responsibility should there be any problems and, since he only works with businesses, it's essential that his bills can be recognised as tax-deductible.

Solution: Manuel eventually decides to set up his business in the UAE free zone. This gives a business that's both globally recognised and tax free. The VAT introduced in 2018 only applies to one of his customers in Bahrain, one of the six Gulf states concerned. Since he's set up his business in the [United Arab Emirates](#). Manuel gets a residence visa there, so that he also remains tax free on a personal level. In order to maintain it, he only has to travel to the Emirates once every 183 days. Since Manuel regularly passes through Dubai, this isn't a problem for him.

5. Pensioner in Paraguay

Situation: María is a Spanish pensioner with a small pension, not enough to live as she wants to in one of the big Spanish cities. The 50,000 euros she's saved over her lifetime is steadily decreasing due to low interest rates and rising inflation. María thinks that Spain's economic, social and political evolution is awful, and she wants to move to a different environment, if possible somewhere where it's pleasant and warm all year round. She only speaks Spanish.

Solution: María decides to [emigrate to Paraguay](#). For €2,000 and a bank deposit of nearly €4,000 she gets a permanent residence permit for life. There she can enjoy the warm climate. María transfers the €50,000 from her Spanish bank account and deposits it in a local cooperative bank account. This not only supports the local economy of her small town in the outskirts of Asunción, but also allows her to receive 15% interest per year. The €7,500 she receives every year for her pension allows her to live comfortably in Paraguay, since living costs there are a lot less.

6. Forex Trading

Situation: David is from the UK. He is dedicated to Forex trading and resides in Switzerland. He's also started trading in cryptocurrency. In principle, in Switzerland you don't pay capital gains tax as long as it is not considered income from trading activity. Professional traders do have to pay it and pay tax on income from profits. Since in David's case he's easily considered professionally engaged in trading, he's looking for a new residence in the EU. It should be a place with a good climate and a good quality of life, as he wants to stay there long-term.

Solution: David becomes a [non-dom resident in Cyprus](#). Although Forex profits are taxed in Cyprus at 12.5%, he chooses to trade through an offshore company free of tax and accounting, rather than privately. He decides to set up the offshore company in Hong Kong, because there he can do Forex trading and in cryptocurrency, largely without anyone regulating what it does. Being a non-dom in Cyprus, David is exempt from dividend tax without any type of withholding. Setting up and directing companies abroad isn't a problem in Cyprus, at least if you're a non-dom. The only thing David has had to do to get Cypriot residence was to prove he had €30,000 of liquid asset, although it would also have been worth proving that he had €2,500 in monthly income over the last 3 to 6 months. Since he's going to spend over 6 months a year in Cyprus, he doesn't have to apply for social security. David has taken out private health insurance for about 50 euros a month.

7. NHR Programme in Portugal

Situation: Alex is a freelance graphic designer residing in France. Most of his clients reside in France, Austria and the UK. His annual profits of €50,000 represent a large outlay in social security and income tax. Alex has a weakness for cannabis and doesn't mind moving somewhere else, but it would have to be a country where he doesn't have to worry about his penchant for cannabis. Alex is looking for a country to stay in and he doesn't want to travel all the time. His customers are big companies and they'd need an invoice to be recognisable as tax deductible without any problems and that includes a VAT identification number.

Solution: Alex moves to Portugal, a country where drug use and possession have been decriminalised. He values the quality of life in a country he can easily emigrate to as an EU citizen. As a graphic designer, Alex falls under the professions included in the [Portuguese NHR programme](#). This means he'll be able to benefit from a fixed 20% tax on income from most countries, at least for the first 10 years as a resident in Portugal. Income from certain countries is completely tax-exempt, as is the case with income from the UK, for example.

8. Non-Dom in Italia for big fortunes

Situation: Christoph is a world-famous German football star and is considered one of the best players on earth. His salary is tens of millions, but in reality, he earns a lot more with his intellectual property rights abroad. He was recently convicted of tax evasion in Spain for continuing to apply the now abolished [Beckham law](#), under which foreign income was exempt from taxation under certain conditions. Since the fans of his current club are always booing at him, he wouldn't mind a change of scene.

Solution: Christoph transfers from his Spanish club to an Italian one after paying a record sum. His even higher salary is now taxed in Italy at a slightly lower rate than in Spain. However, his main concern was his income from his intellectual property, as well as no longer having problems with his fans. In Italy there has been a little-known non-dom scheme since 2016. Just as in the UK, Ireland or Malta, non-doms don't pay tax on foreign income that isn't brought into the country. Christoph pays the annual fixed fee of 100,000 euros so he can benefit from this scheme in Italy, a derisory sum compared to what he saves.

9. Finally free – home-schooler families

Situation: The Rodríguez family all-round the typical Spanish family, well, all except for the fact that they've decided they don't want to send their children to school. They think the Spanish education system isn't a good one, that only tries to brainwash children to think how the state wants them to. However, compulsory education laws in Spain prohibit them from giving their children the education they want to give them, and the news of a close family who do not send their children to school and to whom social workers are making life impossible has given the last push they needed to decide to flee Spain. They've decided they want to see the world, but that they also need a base, preferably

somewhere with a lot of nature. The Rodríguez family have an online business and make money selling digital goods. They sell their products through the German provider Digistore24.com.

Solution: After weighing up the different options, the Rodriguez family opt for [residence in Costa Rica](#), a popular destination amongst *expat* families who home-school their children. As well as having incredible nature, they can also get organic products, and it's a safe place. Another advantage of Costa Rica over other options is the exemption of taxes on foreign income that they can easily meet immigration requirements. They only have to spend 3 months a year over a 3-year period in Costa Rica and deposit 30,000 dollars a year in a local bank account. After these 3 years the family will have a permanent residence permit for life and will no longer have to meet these requirements. As for the business, they set up an offshore company for some 1,600 dollars or so in San Vicente and open a company bank account in Costa Rica. They have the advantage that the Digistore sales platform handles VAT wherever necessary and can seamlessly transfer its customers' money to virtually anywhere in the world.

10. Navigating the world.

Situation: Matthew is an Irish sailing enthusiast who's lived in Italy for a long time. He wants to leave Italy and travel the world for several years. He's received an inheritance, so he has enough capital to buy the boat and live without working, just trading in futures, something he has a lot of experience in. He's looking for a tax-free place to live where he can easily register his yacht.

Solution: Matthew decides on [residence in Panama](#), where he can register his yacht cheaply. Foreign income is tax-exempt and if, as in his case, you don't need a tax certificate, you only need to enter the country once every 2 years. Matthew doesn't need access to double taxation agreements, as no withholding is applied in the case of futures. Immigration with a Friendly Nations visa costs him \$5,500 or so, as well as a deposit of \$5000. The Panamanian company included in the price and part of the immigration requirements is perfect to keep the yacht. Now he can embark on his journey around the world as a permanent resident in Panama.

11. Hotel in Germany – exit tax

Situation: Kirsten has a small but luxury 5-star hotel in the North Sea. She runs it through a German GmbH, although, on her tax advisor's recommendation she doesn't participate in it directly, but through a UG (a type of limited company, but cheaper and simpler) in which she is the only shareholder. Kirsten doesn't want to live in the cold and humid region of the North Sea anymore and would rather move to the Caribbean. However, what she's heard about the German exit tax seems to complicate the situation.

Solution: Kirsten has got used to the idea that she won't be able to emigrate to the Caribbean at the moment, at least until she's dissolved the German companies. However, the Mediterranean is also a good option for her and her family. She decides to [move her residence to Cyprus](#) and meet the minimum stay of 2 months there, spending the rest of the time in the Caribbean. Cyprus is in the EU and she thereby avoids activating the exit tax. Kirsten pays a withholding tax on dividends from the hotel business in Germany, a withholding which is reduced to 15% thanks to the double taxation agreements. Cyprus is not obliged to pay tax on foreign dividends.

Without being aware of it when she set it up, her German holding (the UG) will come in very handy for Kirsten. Secondly, she creates a Cypriot company as a new company holding and sells the GmbH from her UG to the new Cypriot holding. Instead of paying 27%, she'll only pay somewhere under 1% in this transaction, as with transactions within one holding you only pay 5% of company tax and tax on economic activities (Gewerbesteuer). The market value of her hotel is some €5 million, although in liquid she couldn't have had more than €50,000, which could have tied her to Germany forever. The Cypriot company now owns 100% of the GmbH, allowing Kirsten to benefit from the EU Parent-Subsidiary Directive. This means that in the future dividends from the GmbH will pass to the Cypriot holding company after payment of 5% of the German corporate and business tax. Once the dividends have arrived at the holding in Cyprus, they are transferred tax-free to Kirsten as sole shareholder.

Kirsten will use the next 2 years to take out all profits from the UG with a 15% withholding in Germany. And when she's finished withdrawing the money she'll proceed with the liquidation of the UG. As there won't be any more companies in Germany, Kirsten will then be able to emigrate to

from Cyprus to the Caribbean without having paid any exit tax. She'll keep the Cypriot company as it will allow her to continue distributing dividends without withholding taxes. Incidentally, she's decided to move her residence to the Bahamas, taking advantage of the fact that she gets an immigration permit when she buys a property.

12. Sex in exchange for cryptocurrency

Situation: Carla is a luxury Viennese prostitute. Her customers pay her €2000 per night in cash. But she doesn't want to squander all the money; she'd like to start investing it. Unfortunately, no bank accepts such large sums in cash, especially if you can't justify the income and the source is unknown. However, Carla is forced to continue earning money in cash for her work.

Solution: Carla learns to handle cryptocurrency as a means of anonymous payment. From now she has the option of paying in Bitcoin, but also with other cryptocurrencies. All this opens the door onto a new audience amongst which she is known as a 'Blockchain Girl' and, of course, allows her easily to invest her money. She periodically takes the opportunity to buy Bitcoin with the money she continues to receive in cash through the local stock exchange and Bitcoin ATMs (especially in neighbouring countries, the Czech Republic and Slovakia where there are higher limits). She uses this Bitcoin to buy gold in a precious metals shop in Singapore. From this shop she can transfer the money after she sells the gold to her Austrian bank account, without any problems.

13. Developer

Situation: Mark is from the UK and has already lived in Austria for a decade and works as a developer. He works with a team of Romanian programmers in software development for several large companies. He currently pays a huge amount of tax on his annual €500,000 revenue, so he's looking for an alternative that'll allow him to continue living in Austria.

Solution: One of the options involves setting up the company in Hungary as it's nearby, and he could rent an office there where he'd work periodically, giving his foreign business the entrepreneurial substance it needs to be recognised by the Austrian tax authority. Although that 9% corporation tax is very attractive, there are actually other options. One of them is to [set up the company in Romania](#), where he already has 3 Freelancers working for him. It's a quick decision for him when he learns that Romania has a special scheme which allows you to pay only 3% of the amount billed when revenue is under 1 million euros. Especially when it turns out that having local employees can reduce the amount to almost 1%. Now he only pays 1% of tax on the billed amount, has a company with entrepreneurial substance, and can keep working comfortably from home.

14. Acting anonymously

Situation: Mercedes lives in Spain but wants to remain anonymous to avoid problems with competition. This is something she can't achieve if she sets up her company in Spain, as the register is public. Since she's at the beginning of her business activity she doesn't have enough income to set up the business abroad with the necessary business substrate to be fiscally recognised. Anyway, she wants to have from the very beginning a structure that allows her to save as much tax as possible in the future.

Solution: Mercedes sets up an [offshore company in the Marshall Islands](#) completely anonymously. Since she's just starting out, and the company's profit is minimal, she wouldn't mind too much entering into the international tax transparency scheme and thus paying for the company's profits in her personal income tax return (although she's actually decided to do something even better, as we'll explain later). The biggest advantage of the offshore company is that although the foreign company fiscally pays tax in Spain, it isn't governed by Spanish commercial law, so it can work anonymously in the face of competition. To get greater anonymity, she uses an SL as a holding company, a company for which she uses the services of a fiduciary agent. The additional SL not only gives her greater anonymity, but is also a good method for tax optimization, as she can better control the taxes she pays as an individual, and should she ever want to leave Spain, she'd have a better deal with the exit tax.

15. Influencers – requests and sanctions

Situation: Christina lives in the EU, and has an Instagram account with around 200,000 followers, in which she posts about swimsuits. She advertises fashion items from international brands and gets a commission for her recommendations. She's already received several requests and has had to pay

on multiple occasions faced with threats from different brands, as she can't always take their conditions for treatment and mention into account. The new data protection laws (GDPR) have only worsened things. Christina wants to be untouchable, and to be able to ignore all these demands. She wouldn't mind moving outside Europe, to somewhere in Southeast Asia.

Solution: Christina leaves her country and gets a 5 year visa in Thailand for around €12,000, taking advantage of the [Thai Elite Programme](#). To make things more difficult for the brands that would continue to pester her, she sets up an [offshore company in Nevis](#). This doesn't pay tax in Thailand. It's true that the odd customer won't want to work with an offshore company, but in return all the scares and demands become a thing of a past.

16. Emigrating as a family

Situation: The Alvarez are an Argentinian family who left Argentina for Germany during the 2002 *corralito*, in search of a new opportunity. Now they're looking for a country outside the EU to emigrate to, where they can spend the whole year. A mild climate, safety, German schools for the children and a high quality of life are important for them. They've considered going back to Argentina, to be closer to the rest of their family, but they're not sure. They don't have many assets, but they have a regular income due to their affiliate business, which they can run from anywhere in the world.

Solution: The Alvarez emigrate to Uruguay. As Mercosur citizens the process is even simpler, but even if they were EU citizens they wouldn't have had any problems proving their ability to support themselves financially (monthly income of around €2000) and spending 9 months in the country for the first year. Since foreign income is tax-exempt in Uruguay and they charge their commissions through a company in the US, they remain tax-free.

17. Tax-free in Monaco

Situation: Rudolf is German but has lived in Spain for over 20 years (where he's called 'Rodolfo'). He sold his commercial empire in Spain and, despite the high tax on his assets (he could've undoubtedly further optimized his situation had he formed an asset-holding company or a holding company), has enough money to retire at 40. His assets, of just short of 3 million euros, are invested in shares, but he under no circumstances wants to pay tax on his stock market profits. He'd rather move to a safe country in Western Europe.

Solution: Rudolf decides to go to Monaco. Switzerland would've been another option for him, but he doesn't want to pay Swiss property tax. In Monaco he lives completely free of tax in his beloved Mediterranean area and is surrounded by like-minded people. Contrary to what he thought, emigrating to Monaco has been relatively straightforward. Renting a flat has turned out to be more expensive than what he thought, although on the other hand, he's had no trouble getting the €500,000 together required by the authorities and transferring it to an account in Monaco. You don't have to be a multimillionaire to live in Monaco today.

18. Amazon Kindle Publishing (self-publishing on Amazon)

Situation: Helena isn't tax-resident in Spain anymore, and sells e-books through Amazon KDP (a programme for self-publishing books). She thought that as a non-resident in Spain she'd pay 0% tax on her commissions, but this wasn't the case. In fact, Amazon suddenly withholds 30% of her revenue, having been told it is a withholding. Helena had never had to pay this while in Spain.

Solution: When Helena lived in Spain, she had to pay the normal income tax there on her book sales, but thanks to the double taxation agreement between the US and Spain, Amazon's withholding was only 5%. After the drop in Spain she no longer pays tax on her royalties and book sales, but nor does she enjoy the reduction in the withholding tax. So, she decides to set up a company which, on one hand, reduces the withholding tax on copyright through a double taxation agreement and, on the other hand, also has a low corporation tax.

In the end it turns out that she can choose between [Bulgaria](#), with 10% corporation tax and 5% withholding in the US, and Cyprus, with 12.5% corporation tax and 0% withholding tax. Since Bulgaria also has a 5% withholding tax on dividend payments, Helena decides to set the company up

in Cyprus, despite it being more expensive to set it up and run it. It also turns out that in [Cyprus](#) she can cut her tax burden in using certain completely legal tricks.

19. Consultant resident in a country with a territorial tax system

Situation: Fritz is a Swiss consultant using a company in Zug (Switzerland) to serve his German-speaking customers. He emigrated to Costa Rica because he thought the salary and dividends from his company would be tax-free as they're foreign income. However, he didn't take into account taxes as a non-resident and the high withholding of 35% in Switzerland.

Solution: As a Swiss citizen, Fritz doesn't have to pay any kind of exit tax and so can transfer his assets to the Swiss company to a parent company tax-free as soon as he ceases to be tax-resident in Switzerland. He goes for a [holding company in Estonia](#), as the distribution of his shares is tax-exempt under the EU Parent-Subsidiary Directive, which also applies in the case of Switzerland. Estonia doesn't have a withholding tax if the dividends distributed by subsidiaries are distributed directly to shareholders. The Estonian company's 20% deferred tax can't be reduced by double taxation agreements or offset by other capital gains taxes, as it is a corporation tax paid at the time dividends are distributed. Fritz decides to take advantage of the deferred tax and invest the money transferred from Switzerland in shares. Another advantage of investing from his Estonian holding company is that he can take benefit from the Estonian double taxation agreements and thus avoid withholdings on his investments. In the end he only pays 20% tax (and only when he decides to distribute dividends from the holding company in Estonia).

Conclusion

As you've seen, tax optimization and applying Flag Theory isn't something only a selected few can do. If you're prepared to move, or move your business, and start internationalising your life, there's probably many ways you could do it, too.