Introduction - Accounting Source Documents

You will have heard the term "double entry bookkeeping". This is an old established system of bookkeeping which forms the basis of all accounting systems. Today, of course, companies of all sizes usually use computerised accounting systems. Nevertheless, it is useful to learn a little about the double entry system as this will help you understand how a trial balance is drawn up.

Every "transaction" is supported by a business document. What do you understand by the term "transaction", and which documents are we talking about?

We have listed some of the most common transactions below. Most transactions are related to the sale or purchase of goods, services, capital items and consumables.

**If you are a seller and make a sale:**
- You produce an invoice.
- You send the top copy of the invoice to the buyer.
- You retain the second copy of the invoice.

**If you are a buyer and make a purchase:**
- The seller produces an invoice.
- You receive the top copy of the invoice.
- The seller retains the second copy of the invoice.

**If you are a seller who has goods returned:**
- You produce a credit note.
- You send the top copy of the credit note to the buyer.
- You retain the second copy of the credit note.

**If you are a buyer who returns some goods:**
- The seller produces a credit note.
- You receive the top copy of the credit note.
- The seller retains the second copy of the credit note.

In this way everybody receives a document as a record of the transaction.

When purchasing capital items you will receive the top copy of the seller's invoice. In addition, you may also receive a deed (for premises) or a formal hire purchase agreement.

When purchasing small quantities of consumables or other small items the document you will receive could be the till receipt. Alternatively, the proprietor may make out and sign an internal petty cash voucher to release the money from the petty cash account.

**Between the sheets**

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Glossary of terms

This is a glossary of all the terms that appear in the downloadable spreadsheets in this section. The downloadable spreadsheets and all the notes in this section have been written by Duncan Williamson. Follow the links below to get to the terms associated with each spreadsheet:

- **Tasker** - an introduction to the balance sheet and income statement
- **Cost analysis** - fixed and variable costs
- **Elasticity** - price, cross and income elasticities
- **Profit measures** - mark up and margin
- **Gearing** - different types of company finance and their significance
- **Depreciation** - measures of depreciation
- **Cost volume profit analysis**
- **Profit Maximisation** - revenues, costs and profit
- **The Master Budget** - an exercise in drawing up a cash budget, income statement and balance sheet

**From Tasker**

**Objectivity:**
the objectivity concept means that an accountant has to prepare any accounts only on the basis of objective and factual information. Thus, this concept attempts to ensure that if, for example, 100 accountants were to draw up a set of accounts for one business, there would be 100 identical accounting statements prepared.

**Duality:**
is the very foundation of double entry book keeping system and it comes from the fact that every transaction has a double (or dual) effect on the position of a business as recorded in the accounts. For example, when an asset is bought, another asset cash (or bank) is also and simultaneously decreased OR a liability such as creditors is also and simultaneously increased.

**Entity:**
otherwise known as the 'accounting entity' concept. The idea here is that the financial transactions of one individual or a group of individuals must be kept separate from any unrelated financial transactions of those same individuals or group. The best example here concerns that of the sole trader or one man business: in this situation you may have the sole trader taking money by way of 'drawings' - money for his own personal use. Despite it being his business and apparently his money, there are still two aspects to the transaction - the business is 'giving' money and the individual is 'receiving' money.

**Cost:**
this concept is based on the notion that only the costs paid to acquire an asset are relevant and thus
should be the only costs to be shown in the accounts.

**Monetary Measurement:**
one of the simpler concepts. It simply and clearly states that only those transactions which may be expressed in money values (whatever the currency) are of interest to the accountant.

**Materiality:**
accountants should concern themselves only with matters which are significant because of their size and should not consider trivial matters.

**Realisation:**
Realisation occurs when a sale is made to a customer. The basic rule is that revenue is created at the moment a sale is made, and not when the price is later paid in cash.

**Accruals:**
The purpose of this concept is to make sure that all revenues and costs are recorded in the appropriate statement at the appropriate time. So, when a profit statement is compiled, the cost of goods sold relevant to those sales should be recorded accurately and in full in that statement. Costs concerning a future period must be carried forward as a prepayment for that period and not charged in the current profit statement.

**Going concern:**
this concept is the underlying assumption which any accountant makes when he prepares a set of accounts. That the business under consideration will remain in existence for the foreseeable future.

**Consistency:**
because the methods employed in treating certain items within the accounting records may be varied from time to time, the concept of consistency has come to be applied more and more rigidly.

**Conservatism:**
The concept says that whenever there are alternative procedures or values, the accountant will choose the one that results in a lower profit, a lower asset value and a higher liability value.

**Stable money:**
normal or historic cost accounting assumes that transactions occurring over a period of time can be measured in terms of a single, stable measuring unit eg Pounds, Dollars ... This means that, in the UK, all accounts are drawn up in Pounds; and this year's balance sheet can be compared with last year's balance sheet. All of this gives rise to consistency but there is a problem with reality - inflation means that very few currencies are truly stable.

**Compound transaction:**
in the Tasker case, we have combined two or more transactions in one question. For example, this is a compound transaction:

*the company buys land for £7,000: £2,000 is paid in cash immediately and £5,000 is paid for by*
means of taking out a mortgage secured on the property
Here we have a cash transaction and a mortgage transaction.

From Cost Analysis: Fixed and variable costs

Total cost:
the total value of all costs incurred by a product or department or organisation. Total costs can be expressed in algebraic form as \( Y = a + bX \)

Fixed cost:
those costs that tend to remain unchanged even when the volume of sales or output changes. Fixed costs can be expressed in algebraic form as \( Y = a \)

Variable cost:
costs that tend to change in relation to changes in output. Variable costs can be expressed in algebraic form as \( Y = bX \)

Linear:
this term is used when costs and relationships we are describing are straight lines when they are put onto a graph. The formula for a straight line is \( Y = a + bX \) (see total cost). Non linear is the term used when costs, revenues and other relationships are curved lines when put onto a graph.

High low method:
a method cost behaviour estimation that uses only two sets of values to determine the values of 'a' and 'b' in the function \( Y = a + bX \)

Regression line:
the line of best fit. The line, or curve, that splits a series of data exactly in two.

Regression analysis:
ordinary least squares. The method that is used to estimate statistically the regression line and the value of \( Y = a + bX \).

Left click the mouse:
the instruction to computer users to click on the button on the left hand side of the mouse. Most actions relating to mouse clicks use the left click.

Right click the mouse:
the instruction to computer users to click on the button on the right hand side of the mouse

Dialogue box:
a box or menu or display that informs the computer user that something has happened, or that they should do something, or that they are at the beginning or in the middle of a series of steps that they need

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to follow and complete to achieve a certain objective

**Menu:**
in computer jargon, a list

**Chart wizard:**
a function that helps spreadsheet users, for example, to build a chart or graph from data entered onto a worksheet

**Icon:**
a picture or graphic that represents a software package or a one click operation that starts a software package

**F11 key:**
in the case of Microsoft Excel, the Function Key that we press once we have selected one or more series of data and that will automatically build a graph for us.

**From Elasticities**

\[
\text{Price elasticity of demand} = \frac{\text{% change in quantity demanded}}{\text{% change in price}}
\]

\[
\text{Income elasticity of demand} = \frac{\text{% change in quantity demanded}}{\text{% change in real incomes}}
\]

\[
\text{Cross-elasticity of demand} = \frac{\text{% change in quantity demanded of one product}}{\text{% change in price of another good}}
\]

\[
\text{Advertising elasticity of demand} = \frac{\text{% change in quantity demanded}}{\text{% change in advertising expenditure}}
\]

\[
\text{Price elasticity of supply} = \frac{\text{% change in quantity supplied}}{\text{% change in price}}
\]

Total revenue = Total number of units sold x selling price per unit

**Demand schedule:**
the table, graph or data series that links the selling price of a good or service with the level of demand for it. In general, the higher the price the lower the demand and vice versa.

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From Profit measures: mark up and margin

Mark up
is the amount of profit added on to the cost of a product or service to give selling price. A mark up is usually expressed as a percentage. Note: you might see a definition that says that mark up refers to Gross Profit and Cost of Sales. No problem, it's really the same as we have said.

Margin
is short for profit margin. The margin compares the profit made with the selling price that we sold our things for. The margin may be shown as either a percentage or as a value; and here we'll show it as a percentage figure.

From Gearing: different types of company finance and their significance

Permanent capital
is made up of ordinary shareholders' funds (share capital and reserves)

Long term capital
is made up of preference shares and loans such as mortgages, bank loans and debentures

Short term capital
is made up of creditors and similar sources normally provided in exchange for goods and services

Mortgage:
a debt, secured on real property or land buildings

Public limited company:
a company that has a share capital for that members of the public can buy

Private limited company:
a company that has a share capital but that members of the public cannot readily buy

Equity capital:
the ordinary shares of a public or private limited company

Nominal value:
the value of a share that is written on the share certificate of the company. Note: the nominal value and the market value of a share can be the same or more or less than each other!

Risk capital:
a synonym for the equity capital

Par value:

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a synonym for nominal value

**Share capital:**
the permanent capital of a company divided into shares or smaller amounts

**Trade creditor:**
a person who has supplied goods in exchange for a promise to pay in the future

**Ordinary shares:**
a synonym for equity shares

**Bank overdraft:**
a short term loan taken out by a company or individual that is normally repayable on demand

**Preference shares:**
shares in a company that often have a fixed dividend due to them and that have preference over ordinary shares if the company has a problem and has to be closed down and/or sold

**Expense creditor:**
a person who has supplied services in exchange for a promise to pay in the future

**Voting capital:**
share capital in a company the holding of which entitles the owner to attend general meetings of the company and vote on the items on the agenda

**Dividends:**
amounts of money paid out of the profit of a company to the holders of ordinary and preference shares

**Redeemable:**
shares or loans that can be sold back to the company that issued them

**Dividends payable:**
dividends that have been promised but not yet paid

**Loans:**
amounts borrowed from banks, finance houses, other business or individuals

**Interest:**
the amount payable on a loan by way of reward to the lender

**Debenture:**
a loan secured on an asset. That is, we might borrow some money to buy a large machine and the lender of the money will prepare a debenture that says that if we have a problem paying back the interest on the loan and the money itself, the lender can take the machine and sell it or do whatever he needs to get his
money back.

**Capital employed:**
the difference between total assets and current liabilities

**From Depreciation**

**Depreciable amount**
is the cost of the asset less the scrap or resale value that is expected to be received when the asset is finished with.

**Depreciation**
arises because fixed assets lose value as they get older and wear out. Depreciation is the allocation of the depreciable amount of an asset over its working life.

**Depreciable assets**
are assets which are expected to have a limited working life that is greater than one year and that are used in the production or supply of goods or services or for administration purposes.

**Working life**
is the length of time that the organisation expects the asset to remain useful; or the number of units of production that can be expected to be made by the asset. The working life is also known as the Useful Life.

**Straight Line Method:**
This is the simplest method. Here we divide the total cost of an asset by an estimate of its working life; we also have to take into account any selling or scrap value that we might get back when we sell the asset at the end of that working life. The amount charged for depreciation will be the same for every year using this method and is calculated as follows:

\[
\text{Cost of the asset - Selling Value} \over \text{Working life of the asset}
\]

**Reducing balance method:**
This method charges a lot of depreciation in the early years and less later. The method works on the basis that in the early years of the life of an asset its repair and maintenance costs will be small; but they will increase as the asset gets older. This suggests that depreciation + repairs and maintenance will be the same each year.

\[
\text{Reducing balance provision for depreciation} = 1 - \sqrt[n]{S/C}
\]

Where \( n \) is the working life of the asset

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S is the selling value of the asset and
C is the cost of the asset

Units of production method:
With this method, depreciation is calculated by sharing the cost of the asset over its working life in terms of the number of units it will make. The calculation is simple and is

\[
\text{Cost of the asset - Selling Value} \div \text{Number of units of output to be produced during the working life of the asset}
\]

Sum of the years' digits method:
This method calculated depreciation by taking the total working life of the asset and using this to apply a fraction based on that working life. The calculation here gives us a different value year by year and is based on the following formula:

\[
\text{SYD} = n \left[ \frac{n + 1}{2} \right]
\]

Where \( \text{SYD} \) = sum of the year's digits
\( n \) = working life of the asset in years

Depletion method:
This method of depreciation applies to natural resources such as coal, oil, gold: assets that naturally are not replaced as they are exploited. This method is similar to the production unit method and is based on the following formula:

\[
\text{Cost of the asset - Selling Value} \div \text{Total estimated reserves}
\]

From Cost Volume Profit Analysis

Fixed costs:
costs that tend to remain unchanged even if output changes significantly. Here \( Y = a \)

Variable costs:
costs that vary directly with output. A change in output will automatically lead to a change in a variable cost. Here \( Y = bX \)

Semi variable cost:
a cost that is partly fixed and partly variable at the same time. Here \( Y = a + bX \). Total costs are an
example of a semi variable cost

**Contribution:**
the contribution that sales make towards fixed costs and profit. Also defined algebraically as:
Contribution = Sales - Variable Costs = Fixed Costs + Profit

**Contribution per unit:**
total contribution divided by the number of units made or sold

**Contribution/Sales ratio:**
keep as a decimal: contribution divided by sales, expressed as a decimal or as a percentage. Also known as the C/S ratio, it shows us the rate at which profits are made.

**Break even point in units:**
the number of units it is required to make to ensure that total costs = total revenue or sales. Calculated by dividing the total fixed costs by the contribution per unit

**Break even point in values:**
the total value of sales at which total costs = total revenues. Calculated by dividing the total fixed costs by the C/S ratio

**Units to sell to achieve a given profit:**
the break even calculation modified so that profit can equal any value other than, or including, zero. Calculated by dividing the total fixed + profit costs by the contribution per unit

**Value of sales to achieve a given profit:**
the break even calculation modified so that profit can equal any value other than, or including, zero. Calculated by dividing the total fixed + profit costs by the C/S ratio

**Margin of safety:**
also known as the MOS, this calculation shows us how much leeway we have in terms of where we are now and how close we are to our break even point. We need to know this if, for example, we are close to our break even point and we think that our sales are going to fall ... hence driving us to make a loss. The formula for calculating the MOS value is MOS = (total sales - sales at BEP)/sales at BEP

**Break even chart:**
a graph based on linear functions that sets total costs against total revenue to illustrate when the organisation is operating at a profit, at a loss and at its break even point

**Profit volume chart:**
a graph that gives us the same break even results but it contains only the profit line, showing the amount of profit expected to be made over a range of levels of output

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From Profit Maximisation: revenues, costs and profit

**Total costs of production:**
the total of all materials, labour and overhead costs associated with production

**Break even point:**
the level of output at which total costs = total revenues, therefore profit = zero

**Accountant’s break even chart:**
a graph based on linear functions that sets total costs against total revenue to illustrate when the organisation is operating at a profit, at a loss and at its break even point

**Economists break even chart:**
the same as the accountant’s break even chart except that cost and revenue functions are likely to be non linear and the profit curve is also drawn on the graph

**Marginal cost:**
the increase in total cost when output is increased by one unit

**Marginal revenue:**
the increase in total revenue when sales are increased by one unit MC = MR: profit maximising output

From The Master Budget

**Master budget:**
variously defined as the cash budget only; or the income statement and the balance sheet combined; or the income statement and the balance sheet and the cash budget combined. In this series, we use the latter definition.

**Functional budget:**
a budget relating to a function within an organisation. That is, relating to an area of an organisation that does something such as making, selling, administrating ...

**Cash budget:**
the budget that illustrates total cash to be received and spent and the balance left at the end of each period

**Budgeted income statement:**
a budget that illustrates the net sales set against cost of sales to give gross profit and then sets other revenues and expenses against that to give net profit

**Budgeted trading account:**
a budget that illustrates the net sales set against cost of sales to give gross profit

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**Budgeted profit and loss account:**
a budget that illustrates the difference between gross profit and net profit and that also illustrates any revenues over and above net sales

**Budgeted balance sheet:**
a budget that shows the planned for levels of assets and liabilities at a particular time

**Inter relationships of budgets:**
the relationships between budgets that illustrates how budgets depend on each other. For example, the sales budget can have an impact on the cash budget, the production budget, the stock budget ... and likewise for any other budget.

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**What Do We Do With the Source Documents?**

These must be posted onto the *books of original entry.*

These record on a daily basis every transaction that a business makes. The books are often referred to as "journals" e.g. The Purchases Journal. They record the details of the transaction, the amount of money involved and the date of the transaction. Each transaction will have a folio number. Do you want to see an example?

There are seven books of original entry:

- **The Purchases Day Book** This records all purchases made by a company.
- **The Sales Day Book** This records all sales made by a company
- **The Purchases Returns Book** This records all items purchased by a company and subsequently returned to the seller.
- **The Sales Returns Book** This records all items sold by a company which were subsequently returned by the buyer.
- **The Journal Proper** This records rarer items such as the purchase of capital items.

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The Cash Book This records cash and cheques both issued and received.

The Petty Cash Book This records all items purchased using money from the petty cash account.

Where do the books of original entry fit into a basic accounting system?

The "Day Books" or "Journals" form the first tier of the system. They record each financial transaction from the source documents.

Source Documents

|-----------|------------------------|---------------|-------------------|----------------|----------------------------|-------------------------|----------------|

What happens to these records then? They are transferred onto the most important books in the accounting system: The "ledgers". There are three ledgers and the cash book:

<table>
<thead>
<tr>
<th>The Creditors' Ledger</th>
<th>The Debtors' Ledger</th>
<th>The Cash Book</th>
<th>The General Ledger</th>
</tr>
</thead>
</table>

All of the ledgers contain "accounts". These "accounts", just like bank accounts are either in credit or in debt.

Before you look at these ledgers in more detail we suggest you look at how these accounts are laid out, which column is which, and how they are balanced off.

Do you want to look at this topic now or return to the menu?

Which Column Is Which?

Each of the accounts is separated into two columns. The left hand column is used to show receipts and the right hand side is used to show payments.

There is a simple rule to explain which side of the account you should list any particular transaction.

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Debit - the account that receives the goods, services or money. (The receiver)

Credit - the account that gives goods, services or money. (The giver)

A local business called Sharp Ltd has an account with Pepe. They often have long business meetings and have pizzas delivered. If we look at their account below we can see that on May 10th they purchased pizzas from Pepe on credit. Sharp Ltd is the receiver of goods and the transaction is therefore entered on the debit side.

On June 9th (thirty days later) Sharp Ltd makes a payment for the goods. Sharp Ltd is the giver in this case and so his account is credited.

<table>
<thead>
<tr>
<th>Account of Sharp Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debit Side</strong></td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>May 10</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

At any given day, week or month the account can be balanced off.

**Assets and Liabilities**

**What do you understand by the word "Asset?"**

Assets are items which are owned by a business or money which is owed to the business. If Pepe owned his pizza parlour then the building would be an asset of his business.

Assets fall into two groups:

**Fixed Assets** - These are items which have a life span of more than one year. They are usually items that the business expects to keep. Fixed assets include land and buildings, plant and machinery, fixtures and fittings and motor vehicles. These assets fixed because they are necessary for the business to trade but are not affected by the level of trade or the profit made. If a business purchases any fixed assets then this is known as capital expenditure. If Pepe decided to purchase a new delivery van then it would be a new fixed asset of the business.
**Current Assets** - These are items which are much shorter term. The value of these items change in proportion to the amount of trade that a business engages in. If Pepe's business is doing good trade then he would have to purchase more stock (i.e. pizza bases, cheese etc.). This stock would be a current asset of the business.

Current assets include stocks (raw materials, work in progress and finished goods for resale), debtors (money owed to the business), bank balances and cash in hand.

Current assets are often described as being more "liquid" or having higher "liquidity". What this simply means is that assets of this type are much easier to turn into cash.

**What do you understand by the word "Liability"?**

Liabilities are amounts that are owed by a business. These fall into two groups.

**Long term liabilities** - These are loans that are repayable in more than one year. If the business premises were mortgaged, then that mortgage would be a long term liability. In addition, the capital put into the business by the owner would be looked on as money that is owed by the business to the owner. This again would be a long term liability.

**Current liabilities** - These are amounts which are owed by a business which must be repaid within the next twelve months. Current liabilities include money owed to creditors (for goods purchased but not yet paid for), money owed for services such as the telephone bill (often called accrued expenses) and bank overdrafts. You may think that an overdraft is repayable over a longer term but the bank can demand repayment at any time.

If you have worked through each of the sections of background reading you are now ready to learn about trial balances, trading and profit and loss accounts, balance sheets, cash flow statements and solvency / profitability / performance ratios.

You can either return to the "background reading" menu if you are still unsure of anything or you can go to the accounts menu to begin the next stage of your work.