### Basics in entrepreneurship (optional)

 *Optional:* For those students and learners without any or very little economic background, we recommend to read this optional introduction on entrepreneurial basics!

#### **Homo oeconomicus**

Economic thinking and acting is as old as human beings. Economists - scientists who explore the economy - developed through centuries with the help of a multitude of observations and analyses the generally accepted basic principle, that the idea of generating a benefit as high as possible is determining most human activities, assuming that people are thinking and acting "rational". In practice, you can follow this principle in two ways:

- You try to get a maximum of benefits with given possibilities and resources or

- You try to realize a determined objective with as few resources as possible.

The human model behind this principle is known as the ‘homo oeconomicus’ approach. It is nowadays heavily disputed by a lot of economists. There are recent scientific studies, which describe cases, situations and specific circumstances, where this approach fails to explain individual activities. However, there are in fact problems to transfer this approach to large groups of humans, like enterprises, organisations or informal groups. Because individual members of groups have often differing individual objectives compared to overall objectives of groups / associations / enterprises, it happens, that activities of the group as a whole can be irrational or deviate from economic principles: What is well in line with personal interests of staff and management, must not be necessarily in line with overall objectives of an enterprise or an association....

Anyway, we can assume, that the "maximizing your personal benefit"-rationale is able to explain large - probably most - parts of economic activities in the world. This is even more the case, when personal benefits are not only understood as financial advantage, but covering also positive contributions to objectives like personal wellness, social relationships, social recognition, self-realization and more. The personal wish to generate individual benefit is probably the most important "engine" (the "motivating force") of our economy, and we all - including farmers, entrepreneurs, employees, but also public servants, priests, social workers, tax officials and even ecological activists - earn directly or indirectly our livelihood on that base.

What would happen to a society without that "motivating force"? - The Dutch poet Bernard Mandeville thought about this in his famous book "The fable of the Bees or Private Vices, Publick Benefits", published in 1714. In short, there was a hive with hard-working bees, generating great wealth for their nation, but there was also a lot of bad behaviour ("depravity"). The bees wished more virtuousness and more compassion in the sense of the Christian religion. One day their wish came true - but in line with decreasing individual egoism all activities of the bee nation went down - and the wealth of the nation broke. Boredom, laziness and chaos increased.... With this fable, which was attacked heavily in former centuries, Bernard Mandeville made a point to an important mechanism of economic life: Without individual egoism, there are no economic activities, without economic activities, there are no economy, no income, no welfare, no taxes, no donations to charity... it is quite simple.

The famous British economist Adam Smith, who published in 1776 his book "The Wealth of Nations", stressed the importance of individual egoism for economic welfare of nations as well. But differing interests of individuals are in practice balanced on markets, where supply and demand meet each other and interact - and finally this mechanism, which Smith calls the "invisible hand", creates benefits for all.

Adam Smith explained economics as follows:

„....every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good.“ (Smith, 1776)

Cuneiform scripts from Babylon, 3,000 years BC indicate that traders were already at that time profit-oriented and could get social reputation and wealth by trading activities. One of the first - or perhaps the first - entrepreneur known by name was Iddin-Marduk, who lived in the 7th century BC in Babylon - today this region is Iraq. During cereal harvest he got the idea to trade small, less noticed tubers - onions! - which were grown by domestic farmers only for their own use at that time. Iddin-Marduk started to buy up onions from the farmers - and transported them by ship to the cities (So in fact he started also with agribusiness!!). On the Babylonian markets, where mainly cereals and dates were traded, the onions as a new product had a sudden and great success: The demand increased, and onions were standard ingredients in urban meals soon. Around year 500 BC it was reported, that the family of Iddin-Marduk had large land property, 16 houses and more than 100 slaves - and they started with borrowed money - credits! - to construct more houses for rent. The rents were used to pay back the credits - and so another important economic mechanism - financing economic activities by credits - was born. All in all: Innovative entrepreneurship seems to be as old as human civilization...

Entrepreneur - definition

Someone who exercises initiative by organizing a venture to take benefit of an opportunity and, as the decision maker, decides what, how, and how much of a good or service will be produced. An entrepreneur supplies risk capital as a risk taker, and monitors and controls the business activities. The entrepreneur is usually a sole proprietor, a partner, o the one who owns the majority of shares in an incorporated venture. According to economist Joseph Alois Schumpeter (1883 - 1950), entrepreneurs are not necessarily motivated by profit but regard it as a standard for measuring achievement or success (BusinessDictionary, 2016)

Enterprise – definition and functions

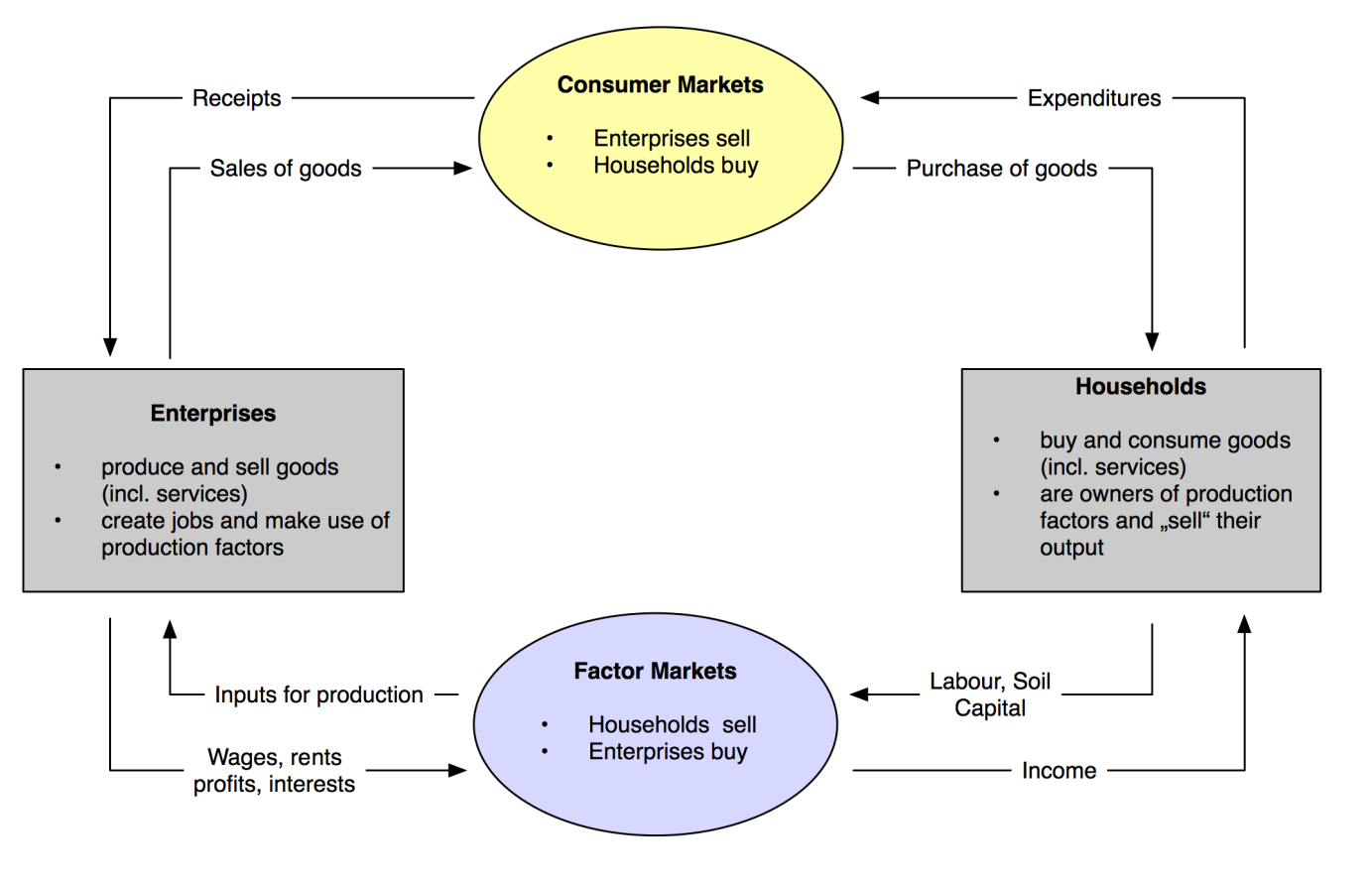
Enterprises are specialized organizations, which occupy themselves with management of production. Their most important functions are making use of economies of scale, procurement of financial resources and the organisation of production factors (Samuelson and Nordhaus, 2005).

The ancient world under Greek and Roman predominance is described by historians as "hostile to enterprises" and as a phase of "exploitation" of humans by humans (in negative sense). A recovery of entrepreneurship started from 7th century on, in line with the spread of Islam. Prophet Mohammed is seen by a lot of historians as the person, who revived entrepreneurship; and in fact the rapidly increasing and economically blooming Muslim hemisphere developed in the following centuries a standardized contract system and a general legal system. Both elements are essentials for successful entrepreneurial activities. In the Middle Ages legal security developed also in Europe and promoted entrepreneurship, which was realized at that time mainly by private persons or families. Enterprises in ownership of a lot of individuals, not related persons were the next innovation in history of entrepreneurship: Probably this was initiated by the Italian bank "Banca di San Georgio" in Genoa, founded in 1407. The bank was over-indebted one day, and as a solution the debtors became co-owners of the bank. At that time, end of the Middle Ages, first marketable securities (shares) were developed, and the first exchange was founded in Bruges, Belgium in 1409. They – along with other European exchanges founded some years later - traded first mainly "promissory notes" (bills of exchange), and later also first papers representing shares of an enterprise or an economic activity. The first share holding company, the "Moscovy Company" was founded in 1553: The objective of the enterprise was to open a new trading route to Russia with three new ships - and the investment and the risk was too large for few persons. But with a larger ownership the investment sum could be brought up and the risk could be limited and distributed - a principle, which is important for all enterprises run and owned by a smaller or larger number of individuals. This is also true for later developed cooperatives - and recently invented social enterprises, all of them forms, which can be used by agricultural entrepreneurs as well (Remark: Details of organisation forms are later explained).

The economic circle

For a first understanding of economy as a system, we have a look to a simplified circular model. We assume that our simplified economy has only one enterprise - your urban farm - and only one household - your family. We assume further, that your family is the owner of an urban garden plot, which you can rent from it to start your urban agriculture enterprise.

The operation of the economic cycle - here a cycle of money, goods and services - can be shown with the picture below:



Let us assume, that you decide to start your entrepreneurial career with an urban agri-culture operation (an "enterprise"; see picture above). First, you need land (production factor "soil". Production factors are means, which you need for producing goods and services.) But soil alone is not enough for an urban farm: You need technical equipment like tools and irrigation facilities, a greenhouse, a small hut for equipment and more (production factor "capital"). Let us assume, you don't have own money to finance that - and so you would borrow the money from your family - or, in practice, you would go to a bank/to a credit cooperative/to a crowd funding institution, which lends the savings of its customers (in our example your family). Finally, there is too much work to do for you alone - and so you decide to hire your brothers and sisters for your new enterprise (production factor "labour"). For the use of all of these production factors you have to pay to your family (a "household"): Rent for the soil, interest for the credit and wages for labour. But there is also remuneration for your own work and your risk as an entrepreneur: this is the profit of your enterprise, which is also "flowing" to the household of your family (because you are also part of it).

For closing the economic circle, your family should buy and consume the goods of your urban agriculture enterprise - let us assume (however, not realistic...), that you can cover all of its needs with your production and offer. In this case all the money, which the family had earned by "selling" the output of her production factors to your operation will "flow" back to your urban agriculture enterprise - and you can make use of it to cover your production factor costs and - most important - to keep a part of it as your profit. Finally, imagine, that in real economy there are millions of households and enterprises, which cooperate in principle in that way - then you have got a good idea of the circular principle of the economy. And it becomes clear, why wealth of households depends directly from wealth of enterprises - and reverse!

#### **Giulia’s and Gino’s urban farm – Basics on accountancy**

Before thinking about an own enterprise, we should have at least a rough idea about its basic functions. However, most of them deal with numbers, and you should try to get a relaxed relationship with them. But no worry - there is no need of complex mathematical theory - basic tools like percentage calculation are enough! Finally you should know how to calculate and how to interpret most important key figures / key indicators, which describe the situation of an economic operation.

Starting Capital

Every economic operation - our example "Giulia's and Gino's Urban Farm" as well - needs Starting Capital or "seed money" at its beginning. Let us assume, that our founders have 1,000 € on their own, but following their first calculations they need at least 5,000 € Equity Capital (one's own capital / funds) for starting their enterprise.

However, every new start-up means a risk for failure - and this might be an argument against lending big sums for starting a new enterprise not only from the viewpoint of founders, but from the viewpoint of the credit donors as well. Risky economic operations get credits usually only with high interest rates (which can be understood as a kind of insurance rate against failure) - but high interest rates will decrease on the other hand their chances for profit. Increasing the equity capital base by taking partners into your enterprise is an option for sharing business risks and improving the chances to get loans from banks or other capital donors as well. The "price" for shared risks with new partners is that you have to share the profits of your new enterprise later. Participation by shares can be realized by different legal forms of enterprises, like public limited companies, cooperatives, limited liability companies, personal partnerships.... Founding a real public limited company is a complex, long lasting and expensive operation - but organizing a small company by shares on a private base should be feasible with limited resources. Let us assume, that Giulia and Gino have a lot of friends, who want to support their new idea: If they need for starting 5,000 €, they can finance their urban farm by "selling" 500 shares with a value of 10 € each: 100 shares they would keep by themselves for their 1,000 € they brought in, and 400 shares they would sell to their friends and their family - their new partners - at a price of 10 € per share. This model has a great advantage: Giulia's and Gino's Urban Farm is starting now with an equity (own) capital of 5,000 €, there is no need to pay interest and repayment for this sum, and the chances for success, profit and for borrowing further money are much better. But profits of the future have to be shared with the new equity partners - it is the price for sharing the risk.

But even with increased equity capital Giulia's and Gino's Urban Farm would not have enough money to invest in efficient production hardware, like greenhouses, irrigation technology, mechanization.... To cover these investments, they can borrow money from a bank as a loan, or from private persons, e. g. by crowd funding. If they do this, they have to pay regularly interest (a percentage rate, the "price" for the credit) and repayment of the loan (which means, that they have to pay back the loan in small portions to the bank). In our example the new urban farm would start with an initial capital of 5.000 €; also called Equity Capital (One's Own Capital / Funds) and the money borrowed from a bank or private persons is called Outside Capital (= Debt or Borrowed Capital / Funds).

Will Giulia's and Gino's Urban Farm make profit?

Before taking the risk of starting a new business, every young entrepreneur should calculate his/her costs and revenues as precisely as possible with carefully estimated figures. Specific methods for planning calculations will be presented later in this course, but you can use the method described below as a planning tool as well.

Let's assume, Giulia's and Gino's planning calculation showed a positive profit result with revenues higher than costs and they have started their business - then they and their possible shareholders want to know permanently, how the business is performing - and - most important - whether it generates a profit or a loss within a defined period of time. For this purpose all kind of enterprises set up a Profit and Loss Account, which results in the Statement of Income (or Statement of Loss and Gain). You find these kinds of accounts / income statements in every annual report of enterprises around the world; and large shareholding companies quoted on stock exchanges publish such statements of income quarterly.

An exemplary and simplified profit and loss account for Giulia's and Gino's Urban Farm can look like below - but please be aware, that we present here an internationally recognized calculation scheme, from which national and agriculture-specific calculation schemes may differ in some elements and terms, but not in the principal logic. We assume the exemplary calculation is set up for an average month in the 1st year of the operation, when customers had already taken notice of their offer and the business had taken off successfully from the ground.

For readers without economic pre-experience we have to give some explanations to the different terms: Sales (= Turnover) stands for the total sum of money or all revenues, which an enterprise gets from its customers in exchange for its goods and services within a defined period of time (one year, three months, one month, one day...). In our example, Giulia and Gino sales would present sales of goods like fruits and vegetables and services like guided tours and workshops about urban gardening and healthy nutrition. From sales you have to subtract first all Cost of goods sold (COGS) - mainly the sum of your (raw) material costs; in our example expenditures for input purchases like for seeds, seedlings and plants, fertilizer, irrigation water, energy or other material, which is not "durable" or which cannot be used for more than one production period. If you have finished that, you have calculated the first important key figure called Gross Profit or Gross Margin, which is widely used in agriculture for monitoring short-term economic development.

An improved view on the economic situation of an enterprise is delivered by the second important key figure called Earnings before Interest, Tax, Depreciation and Amortization (EBITDA). This key figure considers further "general" costs of an enterprise called Operating Expenses (also called Overhead Expenses), but without depreciation and amortization. Operating Expenses are all those, which are not directly linked to a specific production activity of an enterprise - if production is stopped, you have to pay for them anyway. Salaries based on long term working contracts f.e. are part of operating expenses, while wages for seasonal work are part of cost of products sold. In our example cost positions land rent, wages and salaries, other costs, depreciation and amortization form together operating expenses.

Table: Exemplary monthly profit and loss account for Giulia's and Gino's Urban Farm

|  |  |
| --- | --- |
| **Key figure** | **Amount (in €)** |
| **Sales** (= Revenues = Turnover)  - Cost of goods sold (= COGS = (raw) material costs; here: costs for purchased inputs like seed and plants, fertilizer, irrigation water, energy.... also called Direct Costs) | **6,000**  - 1,000 |
| = **Gross Profit** (= Gross Margin)  - Land rent (= costs for production factor "soil")  - Wages and salaries including social insurance (= costs for production factor "labour")  - Other costs (f.e. general costs of the business like telephone, internet, marketing, repairing and maintenance, insurance, outside services....) | **= 5,000**  - 200  - 4,000  - 110 |
| = **EBITDA** (= Earnings before Interest, Tax, Depreciation and Amortization)  - Depreciation and Amortization (= costs for production factor "capital") | **= 690**  - 400 |
| = **Operating Income** (= Operating Profit = EBIT =Earnings before Interest and Tax )  - Interest (= costs for production factor "capital") | **= 290**  - 40 |
| = **EBT** (= Earnings before Tax = Profit before Taxation)  - Tax (f.e. 20 %) | **= 250**  - 50 |
| = **Net Income** (= Net Profit = Profit after Taxation)  divided by number of shares, f.e. 500  = **EPS** (Earnings per Share) | **= 200**  : 500  **= 0.40** |

The next key figure called Operating Income or Operating Profit or Earnings before Interest and Tax (EBIT) is taking total costs for products sold and all operating expenses including Depreciation and Amortization into account.

Besides Interest (which will be considered later) costs for Depreciation and Amortization are the most important ones among operating expenses. Depreciation represents in practice costs for deterioration / devaluation of durable assets per period of time - for assets, which can be used for more production periods and which are usable for more than one year. In our example of Giulia's and Gino's Urban Farm such "tangible" assets are "production hardware", like f.e. greenhouses, a small tractor for soil preparation, a water tank, a small building for sales and for meetings, irrigation equipment, tools and more. Let's assume, that the total investment for this production hardware would be 48,000 €, and that it can be used over ten years (and would be worthless after that time). Then you have to calculate annual depreciation costs of 48,000 € : 10 years = 4,800 € per year or 400 € per month, like in our calculation example. The logic behind this calculation is, that you take virtually every year a part of the investment costs back to you - and after ten years you would be able to re-invest in new equipment and buildings by aggregating these depreciation sums. Amortization describes principally the same mechanism like depreciation, but its objects are so called "intangible" assets like licences, patents or other forms of intellectual property.

In general enterprises don't have enough equity capital at their disposal, and so they would ask a bank or other capital donors for a loan. The "price" for a loan is to pay regularly Interest, a percentage rate for the credit. If we assume, that Giulia and Gino and their respective shareholders will use their equity capital of 5,000 € for covering running costs, their enterprise can ask f.e. for a bank loan of 48,000 € for investing in production assets. With a duration of 10 years and an interest rate of around 2 % this would result in monthly interest costs of 40 € or 480 € per year. However, in practice you have not only to pay interest for a credit, but also to pay the borrowed sum back to the capital donor. This is usually done in small monthly or annual portions and called Repayment of a Loan. Let's assume, that Giulia and Gino would pay back their loan of 48,000 € over ten years in equal rates - so annual repayment would be 4,800 € and monthly repayment 400 € - exactly the sum, which is calculated for depreciation. Or, in other words, the depreciation covers the repayment of the loan.

Having finally taken interest costs into account, you can calculate the key figure Earning before Tax (EBT), also called Profit before Tax, and if you subtract tax payments from it, you get the final and most important financial key figure of an enterprise: Net Income or Net Profit or Profit after Taxation. Divided by numbers of all shares, the net income per share, also called Earnings per Share would be 0.40 € per month or 4.80 € per year, and for Giulia and Gino 100 shares this means a net income of 480 €. If we further assume, that Giulia and Gino would have been paid for their physical work (see "wages" in the calculation example), these 480 € net income can be considered as reward for taking entrepreneurial risk - not really much in our example, but compared to 1,000 €, which they brought in at the beginning, a nice capital return ratio! For describing this, there is another key figure used: The Return-on-Investment (ROI) rate:

**ROI (in %) = (Average Net Income : Average Capital Engaged) x 100**

**= (480.00 € : 1,000.00 €) x 100 = 48 % in our example, based on equity capital.**

This kind of equity based ROI can be considered as quite good, but ROI key figures are calculated based on total capital as well, generating then much lower percentage rates (this will be expanded later).

#### **Balance sheet**

How a business is running, you know by looking to the profit and loss account. But the balance sheet of an enterprise will inform you about its assets, and how the economic operations are financed. Does the enterprise have a considerable share of equity (own) capital, or is it heavily indebted by loans from third parties? Which types of assets are in its property? These questions are answered by an analytical look in a balance sheet, but attention: The balance is a "snapshot" of the economic situation at a specific date and providing a static picture - only by analysing balances of different dates you get a dynamic picture on positive or negative financial trends. Typically this is realized by comparing the balance sheet of the last day of a financial year of an enterprise with the balance sheet of the first day of the same financial year (financial years can be defined by enterprises and may differ from calendar years; f. e. agricultural financial years for cash crop farms are running from 1st of July up to 30th of June).

Understanding the basic principles of a balance sheet is indispensable for every young entrepreneur - and often supporting institutions and banks are requiring balance sheets, if you apply for subsidies or loans. For tax declarations, subsidies and credit applications balance sheets are often set up by specialised accountants, but even then you should be able to understand, what they do for you.

In general, the principles of a balance sheet are more or less the same all over the world, but the way of presentation and especially detail regulations for calculating the different single elements are differing from country to country. However, there are international standards (International Accounting Standards IAS / International Financial Reporting Standards IFRS) and also the often used US-GAAP standard (United States Generally Accepted Accounting Principles), but there are also national standards f. e. for Germany, France, Italy.... The following explanation is based as far as possible on the common principles of the German, French, Italian and Dutch ways of presenting a balance sheet with a left and a right side, like a pair of scales, due to the origin of the balance concept derived from Italian word "Bilancia" (= pair of scales). Other (British and US) presentations have an "upper" and a "lower" part instead, but with the same elements.

A starting balance sheet

For starting a new enterprise, in general a starting balance sheet is required – the official starting signal for your economic accounting. In short, it is a confrontation of the assets of an enterprise (Aktiva/Actif/Attivo) with its debts and equity (Passiva/Passif/Passivo). Or, simplified, the left side shows the enterprise's property and the right side "where the money comes from".

The following table will show a simplified system of a balance sheet with its central terms in five languages (German-English-French-Italian-Dutch):

Table: The general system of a balance sheet

**Aktiva/Assets/Actif/Attivo/Activa Passiva/Liabilities and Equity/Passif/**

**Passivo/Passiva**

|  |  |
| --- | --- |
| A. Anlagevermögen  Non-current Assets  Actif immobilisé  Immobilizzazioni  Vaste Activa  *Specific positions under A. refer f.e. to "hardware" assets like land property, buildings, machines and "software" assets like licences, other intellectual properties and financial assets*  B. Umlaufvermögen  Current Assets  Actif circulant  Attivo circolante  Vlottende Activa  *Specific positions under B. are f.e. stocks (goods already produced, but not yet sold), pre-products, raw materials, credits owed against third parties and liquid cash* | A. Eigenkapital  Owner's equity  Capitaux propres  Patrimonio netto  Eigen Vermogen  *Specific positions under A. are f.e. the value of all shares of the owners and/or the value of the enterprise's own capital and retained earnings (= profit from last year(s), which stays in the enterprise)*  B. Langfristige Schulden  Liabilities  Dettes  Debiti  Vreemd Vermogen  *Specific positions under B. are typically "Non-current liabilities" (f.e. long-term borrowings / credits) and "Current liabilities" (f.e. short-term borrowings / credits)* |
| Bilanzsumme  Total Assets  Total du bilan  Totale Attivo  Totaal Activa | Bilanzsumme  Total liabilities + total equity  Total du bilan  Totale Passivo  Total Passiva |

**Finally, most important: The sum of all values of the left side (= Total Assets) has to be the same as the sum of all values of the right side: (= Total liabilities + total equity).**

Let's have a look on a simplified example of a starting balance sheet for Giulia's and Gino's Urban Farm, like presented in the following table. Please note that the sum of the left hand side (Total assets) has to be the same as the sum of the right hand side (Total liabilities + total equity).

Table: Starting balance sheet financial year 1 of Giulia's and Gino's Urban Farm

**Assets Liabilities and Equity**

|  |  |
| --- | --- |
| A. Non-current assets:  Buildings and equipment 48,000 €  B. Current assets:  Stocks (inventories) 1,000 €  Liquid assets ("cash") 4,000 € | A. Owner's equity  Share capital 5,000 €  Retained earnings 0 €  B. Non-current liabilities  Long-term borrowings (credit) 48,000 €  C. Current liabilities  Short-term borrowings (credit) 0 € |
| Total assets 53,000 € | Total liabilities + total equity 53,000 € |

Let's assume now, Giulia's and Gino's Urban Farm has finished its first financial year and has to present its first annual accounts: The annual balance sheet could then look as presented in the following table:

Table: Annual balance sheet financial year 1 of Giulia's and Gino's Urban Farm

**Assets Liabilities and Equity**

|  |  |
| --- | --- |
| A. Non-current assets:  Buildings and equipment 48,000 €  Financial assets 0 €  B. Current assets:  Stocks (inventories) 3,000 €  Credits owed against third parties 400 €  Liquid assets ("cash") 4,000 € | A. Owner's equity  Share capital 5,000 €  Retained earnings 2,400 €  B. Non-current liabilities  Long-term borrowings (credit) 48,000 €  C. Current liabilities  Short-term borrowings (credit) 0 € |
| Total assets 55,400 € | Total liabilities + total equity 55,400 € |

The balance sheet after the 1st financial year is providing some information for us: Stocks of products and raw materials have increased to 3,000 €, and liquid assets ("cash") are 4,000 € like before. Unfortunately, some clients have got products, but had not pay them yet: These are 400 € "credits owed against third parties", counting also to current assets. On the right hand side we see, that owner's equity has increased by 2,400 €, because Giulia, Gino and their partners had decided not to take out their profit of 2,400 € from the enterprise, but to reinvest it: This money is listed in the position "Retained earnings".

The 2nd financial year of Giulia's and Gino's Urban Farm will start with a modified balance sheet, like presented in the next table:

Table: Starting balance sheet financial year 2 of Giulia's and Gino's Urban Farm

**Assets Liabilities and Equity**

|  |  |
| --- | --- |
| A. Non-current assets:  Buildings and equipment 43,200 €  Financial assets 0 €  B. Current assets:  Stocks (inventories) 3,000 €  Credits owed against third parties 400 €  Liquid assets ("cash") 4,000 € | A. Owner's equity  Share capital 5,000 €  Retained earnings 2,400 €  B. Non-current liabilities  Long-term borrowings (credit) 43,200 €  C. Current liabilities  Short-term borrowings (credit) 0 € |
| Total assets 50,600 € | Total liabilities + total equity 50,600 € |

First, we see on the left hand side that buildings and equipment have lost their initial value by 4,800 € - this is the value of their annual depreciation. On the right hand side the credit of the enterprise has also decreased by 4,800 € compared to its initial value - we have assumed in our example, that the depreciation sum is used for the annual repayment of the credit.

Setting up the annual balance sheet for financial year 2 can look like the following table. On the left hand side, we see that stocks and cash have increased on values of 5,000 € each, while "credits owed against third parties" remained unchanged at 400 €. But Giulia, Gino and their partners have also decided to save some of the enterprise's money - 2,000 € - in form of financial investments, like f.e. securities or shares of institutions or enterprises with a good financial standing. This money is listed in position "financial assets". On the right hand side we see, that position "retained earnings" has increased by 5,000 € - we assume again, that all partners decided to reinvest the profit of that year. But it is also possible to give every partner a share of the profit, f.e. 8 € per share. This could be done at the beginning of 3rd financial year and would require 4,000 €, which can be covered by position "Liquids assets" (left hand side), but would decrease position "Retained earnings" (right hand side).

Table: Annual balance sheet financial year 2 of Giulia's and Gino's Urban Farm

**Assets Liabilities and Equity**

|  |  |
| --- | --- |
| A. Non-current assets:  Buildings and equipment 43,200 €  Financial assets 2,000 €  B. Current assets:  Stocks (inventories) 5,000 €  Credits owed against third parties 400 €  Liquid assets ("cash") 5,000 € | A. Owner's equity  Share capital 5,000 €  Retained earnings 7,400 €  B. Non-current liabilities  Long-term borrowings (credit) 43,200 €  C. Current liabilities  Short-term borrowings (credit) 0 € |
| Total assets 55,600 € | Total liabilities + total equity 55,600 € |

Comparing "Total assets"-value (= "Liabilities + Equity"-value) of the starting balance of a year with the same values of its annual balance sheet results in Net Profit value:

**55,400 € - 53,000 € = 2,400 € (Net profit year 1)**

**55,600 € - 50,600 € = 5,000 € (Net profit year 2)**

Finally you see, that comparing annual balance sheet with starting balance of a year is besides the profit and loss account another way to calculate the net profit (or a loss) of an enterprise, but both methods should result in the same values! And you should also understand, that leaving net profit within the enterprise is a good way of self-financiation of an economic operation, and will increase the value of an enterprise by increasing its owner's equity.

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