Self evaluation

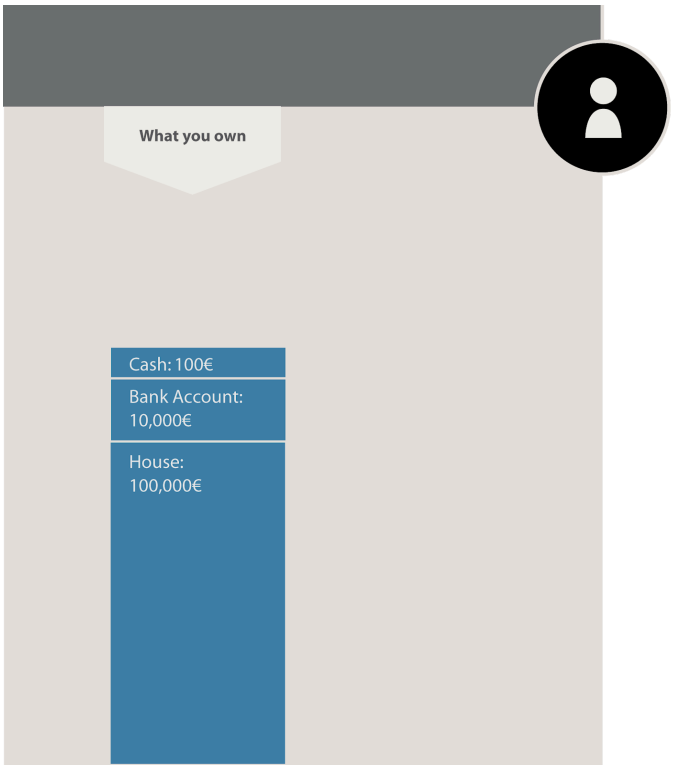
Fill out the sentences with asset, liability, income and expenditure.

- A company that makes toys sells a one of its products for 100€. The amount is accounted as a/an _____.
- A company invests in a building. The building is booked as a/an _____.
- A company takes a loan at the bank. The loan is a/an _____.
- A company pays its boss a 5,000€ salary. The salary is booked as a/an _____.

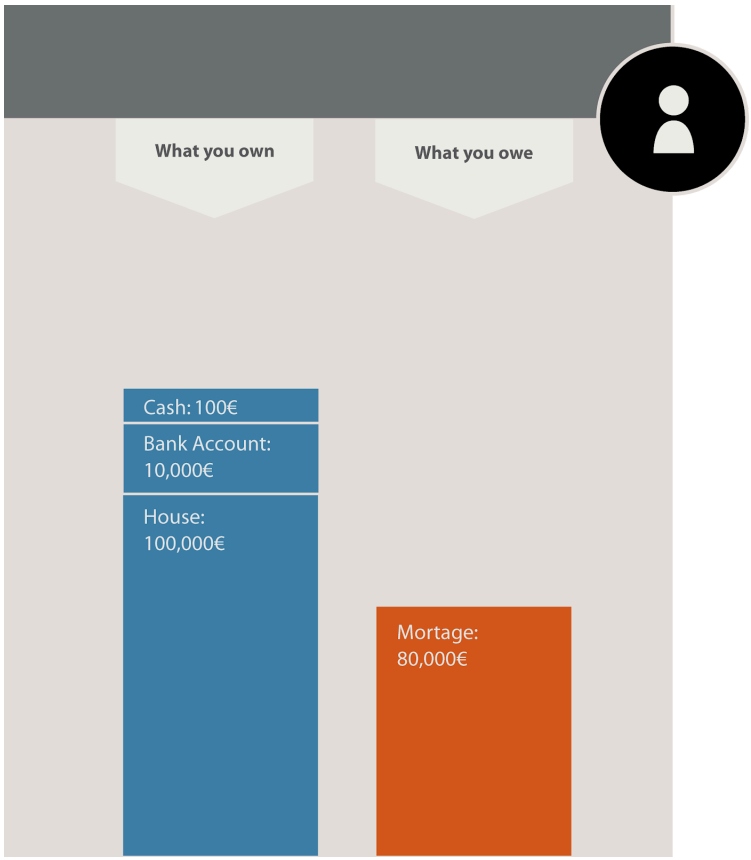
The basics

Counting wealth

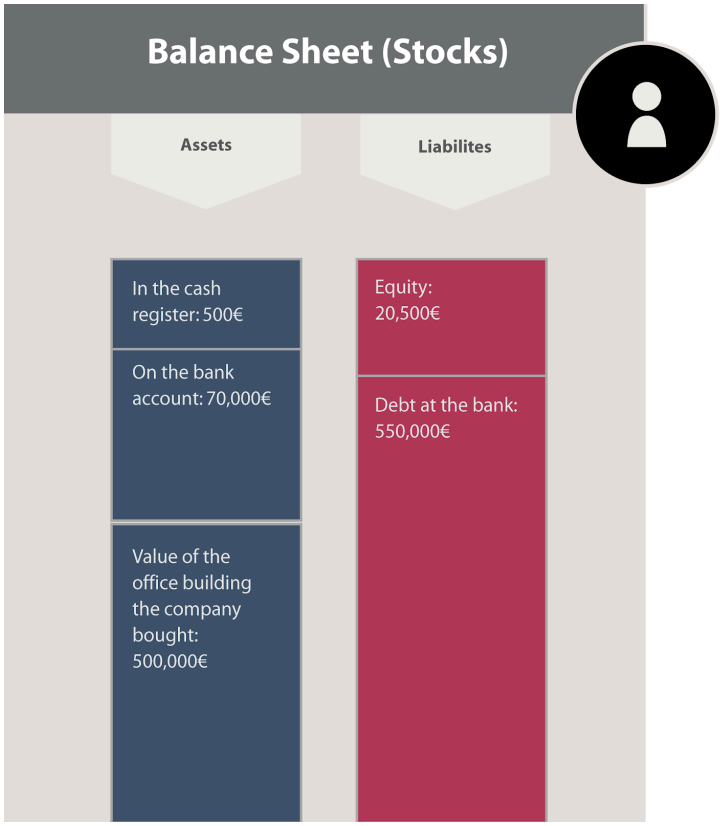
For individuals, counting money is easy. You own what you own. You can own different types of things, such as the money on your bank account, the cash in your wallet and maybe a car or, if you're lucky, a house.



Of course, individuals can owe money, too. In this case, you have debt, such as a mortgage for your house.



For companies or any other legal entity, things can be seen as a little different. What a company owns is called **assets**. What it owes is called **liabilities**. The difference between the two is called **equity**. “Equity” represents the value of the company for its owners. Given a fixed asset value, a higher debt load means the equity has less value (the company isn’t worth much). If there is no debt, the equity is equal to all the assets. A basic rule in accounting is that, by definition, assets must always be perfectly equal to the sum of liabilities and equity.
Because assets always balance the liabilities, this is called a **balance sheet**.

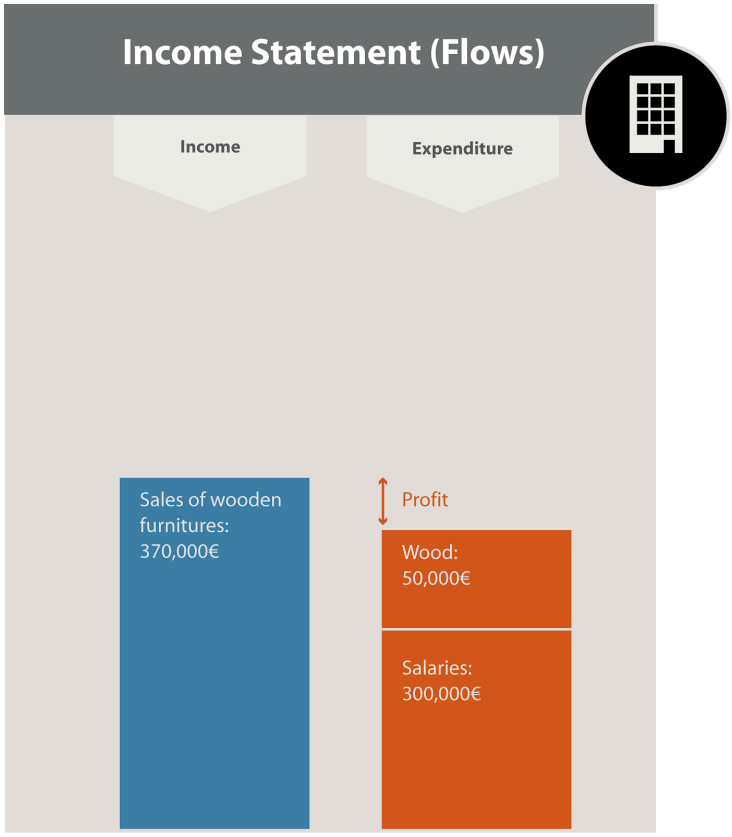


Money flows

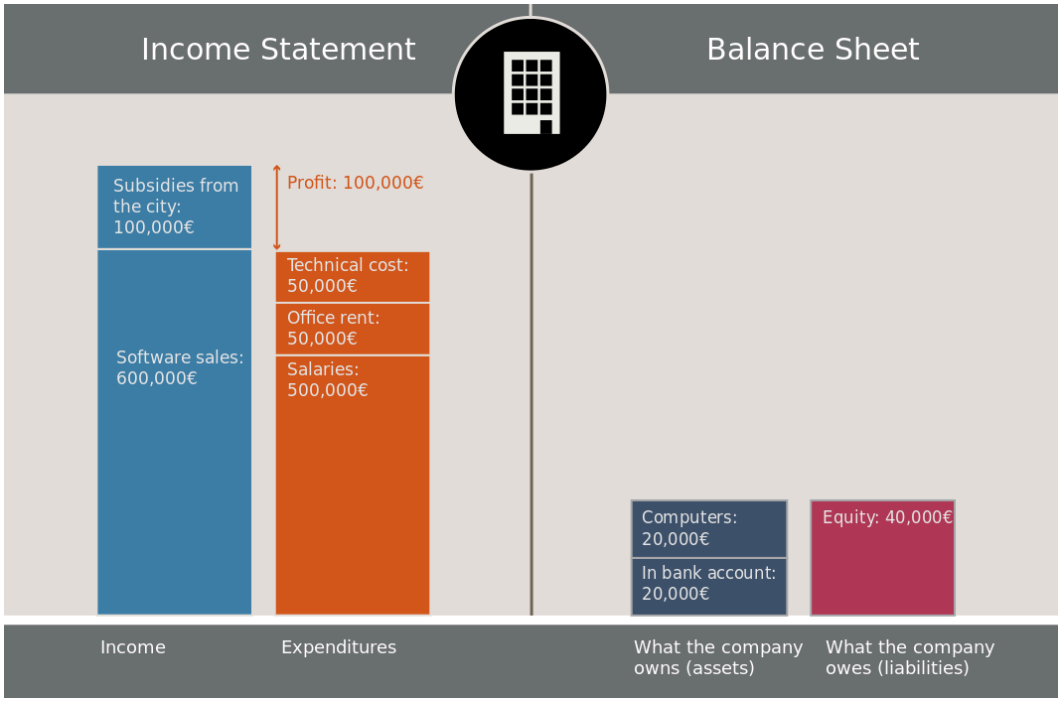
Balance sheets tell us what a company or an NGO owns. To know how it operates, we must look at the **income statement**. The income statement registers what the company earns and what it pays out for a given period of time, usually one year. Whatever the company sells is counted as income. Whatever it pays and disburses money for is an expenditure.

Loans do not appear in the income statement. If they did, a company would just have to take a lot of loans to appear profitable! Loans can only be found in the balance sheet.

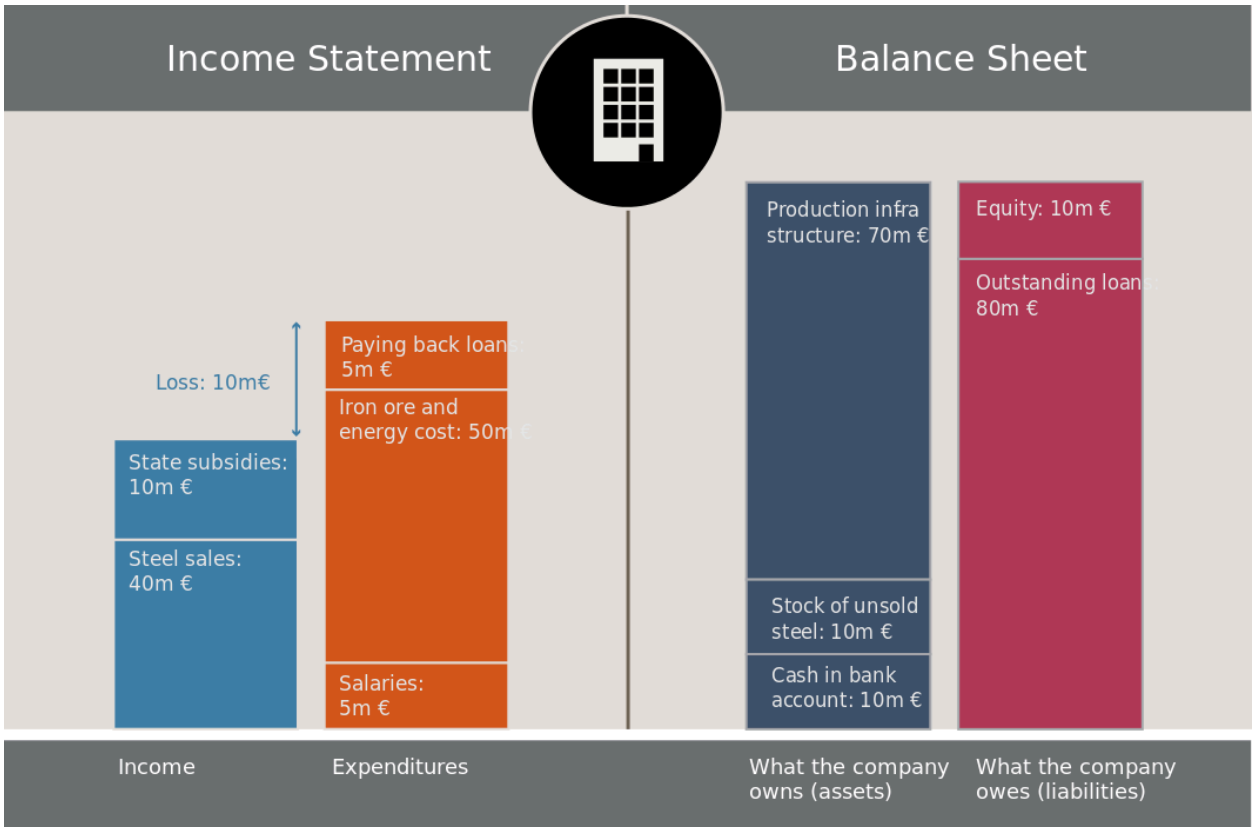
The statement of income alone is not enough to understand if a company is doing well or not. A company can make a small profit, but if the balance sheet shows that it owes an enormous amount of debt, it means the company is not in good shape. Conversely, a company can have a bad year and make a loss on the income statement, but the balance sheet can show that the company has lots of cash in the bank and can keep going.



Financial Statement 1: A successful wood factory



Financial Statement 2: A start-up company with few employees that is just starting to generate profit



Financial Statement 3: A steel mill that has a rough year

Accounting does it best to help understand the financial state of an entity when it combines statements of income, balance sheets and cash flow statements (a reconciliation of the movement in the cash position of such entity from the beginning to the end of the period considered - typically a year).

It's important to remember that both documents, statement of income and balance sheets, show totally different things but are equally important. The statement of income is for **flows**, i.e amounts over a period of time, usually one year. The balance sheet is for **stock**, i.e an amount at a given date (usually December 31st).

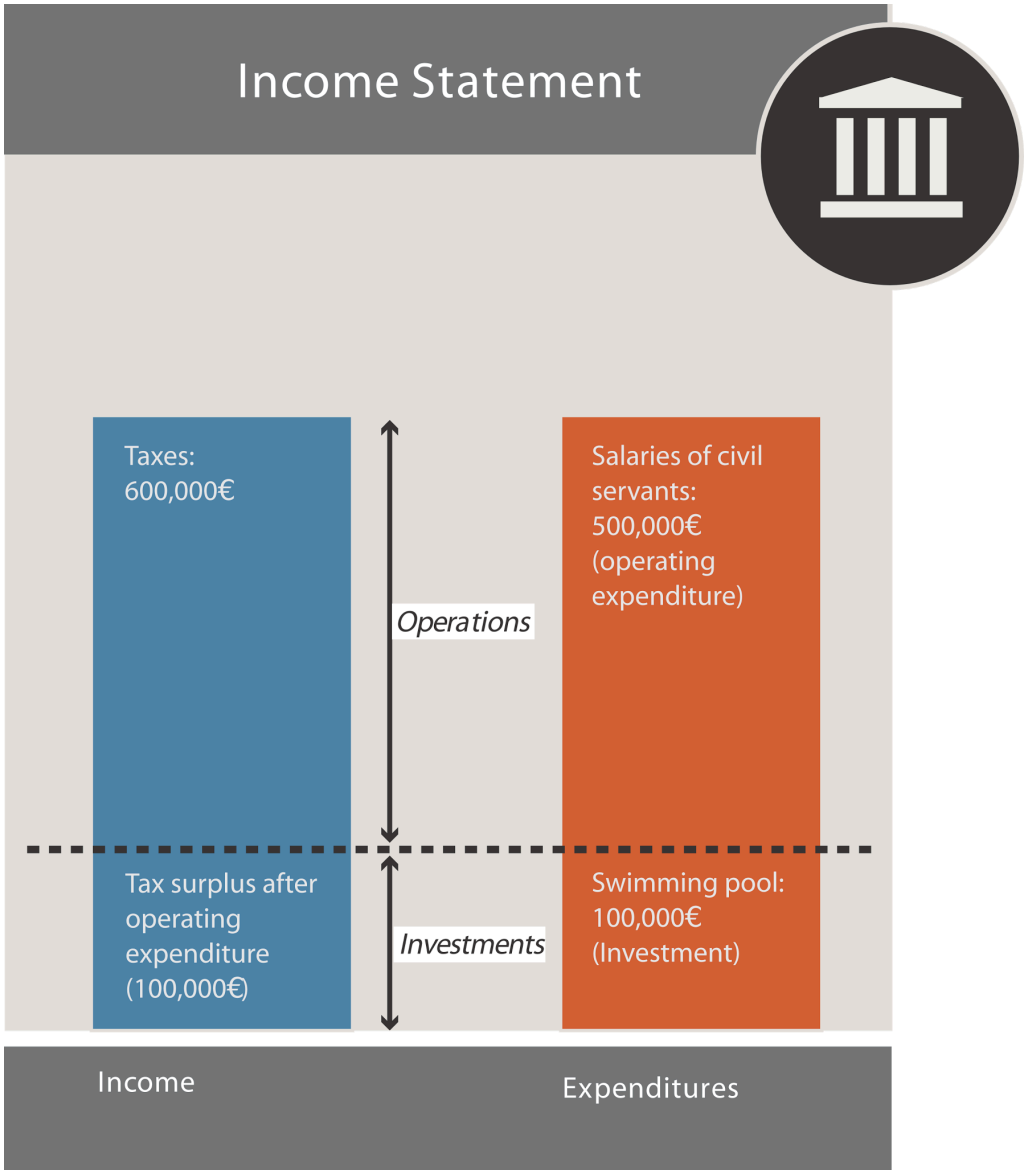
In the public sector

Local administration

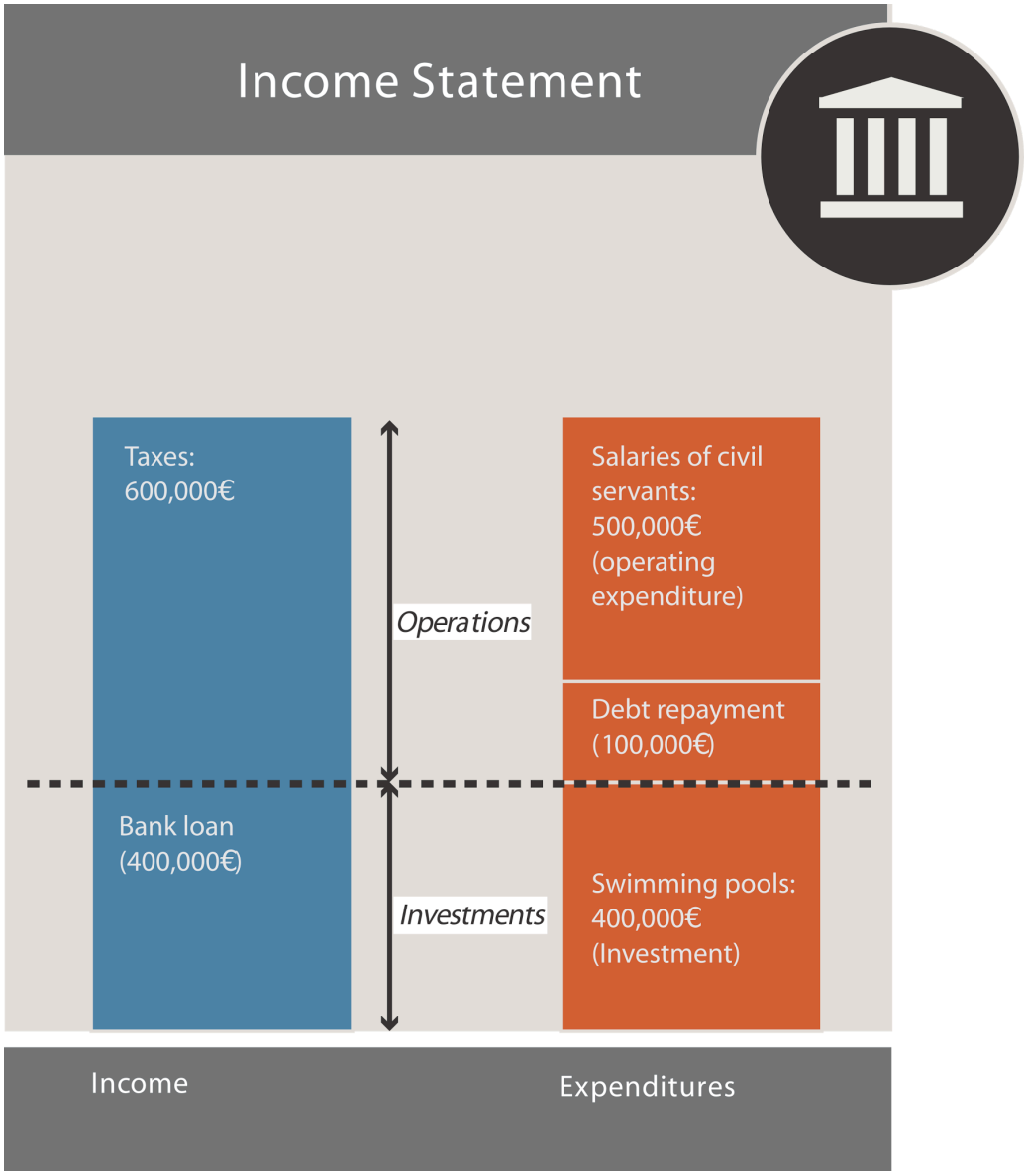
Local administrations count money flows much like companies do. They usually get their income from taxes and spend money on the salaries of civil servants, like teachers, police officers, on the things they need to provide public services (buses for public transport), and on companies that carry out some of the work (a construction company that builds a highway).

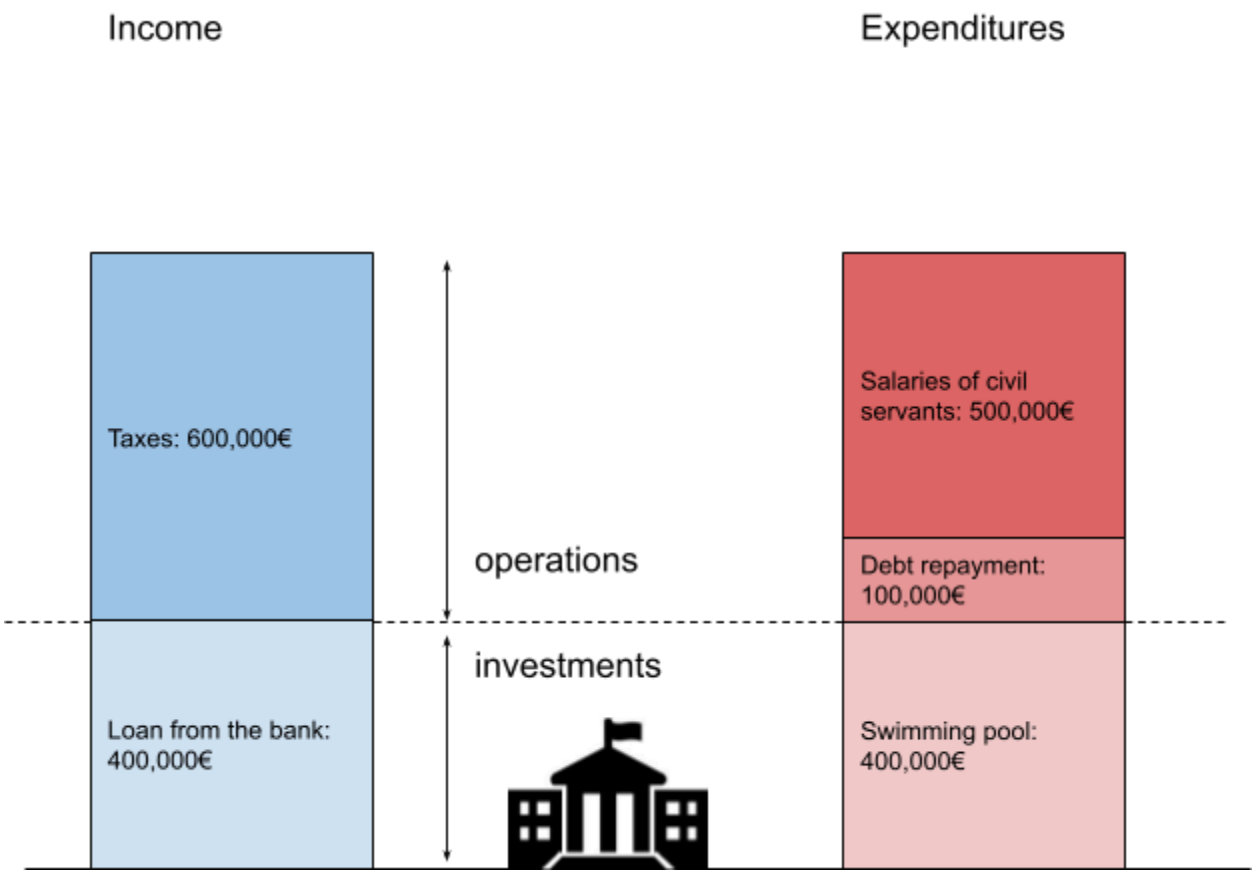
There are many things that local administrations must provide no matter what, such as education, transport, policing etc. Citizens, for their part, must pay taxes. To represent this continuous cycle, public budgets use the terms “operating income” and “operating expenditures” (sometimes, “revenue” is used instead of “operating”).

Local administrations also have to build swimming pools and schools. These are called “investment expenditures” (sometimes “capital expenditures”). This can be financed by the surplus from the operations.



Most of the time, taxes do not suffice to pay for all investments. Local administrations can go to the bank to borrow money. In most countries, it is forbidden for a local administration to borrow money to cover operational expenditures. Borrowing for investment is allowed, borrowing for everyday operations is not.


Income Statement
Taxes:
600,000€
Bank loan
(400,000€)
Operations
Investments
Salaries of civil servants:
500,000€
(operating expenditure)
Debt repayment
(100,000€)
Swimming pools:
400,000€
(Investment)
Income
Expenditures



In this picture above, the local administration loaned money from the bank. It received a one-time €400,000 money transfer from the bank, counted as income. That's a key difference with private-sector accounting, where loans are **not** counted as income.

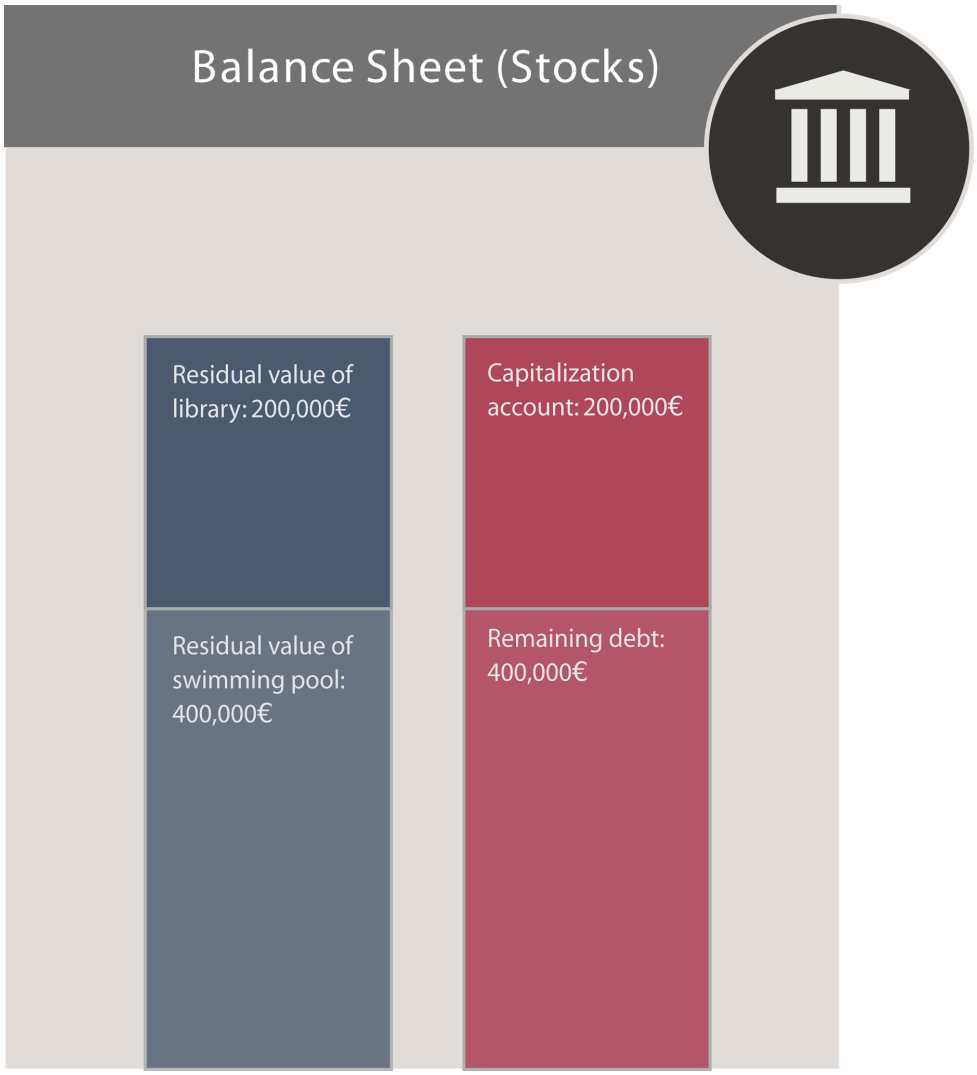
The debt that the administration contracted, by contrast, is a *stock*. It will appear on the balance sheet. Every year, the local administration will repay part of the debt stock to the bank. This will appear in the statement of income as debt repayment. The stock of debt will decrease by the same amount, and this will be visible in the balance sheet.

Balance sheets of local administrations

It's hard to do a balance sheet for a local administration. For companies, the balance sheet exists mostly to know how much the company is worth (so that it can be sold in case of a bankruptcy). This does not make sense for local administrations, because they cannot be sold! What's more, local administrations often own assets that they cannot account for. For example, the Louvre Museum in Paris considers that the book value of the building itself is just 1€[1]! The book value is the accounting value of an asset, not its "real" value. Of course, the Louvre Museum is not really worth 1€. The balance sheet of a local administration shows the **book value** of its assets and liabilities.

[1] Source: http://www.senat.fr/rap/r06-384/r06-38414.html (in French)

The assets of a local administration represent the book value of things like buildings. The liabilities are the loans to be repaid, for instance. Unlike a company, a local administration has no equity. Instead, the difference between what the administration owns and what it owes is called *capitalization account*.



Budgets, execution and realization

Unlike companies, local administrations have budgets to plan ahead. The budgets can be either voted, if the administration has an assembly, such as a city council, or can be decided by the administration itself if it has no such council (a museum, for instance). The budget tells the different departments of the administration what they can spend in a given year and it estimates what the administration will take in in taxes and other income. It must be voted before the year starts: The budget for 2017 must be decided in 2016. Most local administrations budget from January 1st to December 31st, but some might adopt other reporting periods (the government of the United Kingdom, for instance, reports from April 1st to March 31st).

If politicians want to change priorities after the budget was voted, they can easily vote modifications of the budget.
After the year has ended, the books are presented to the assembly or to the higher-level administration and must be approved.
To sum up, when working on public expenditures, you will face several types of budgets:

- The initial or preliminary budget, which is a plan.
- The amending budgets, which are plans made after the initial budget.
- The executed budget, or annual accounts, which presents what actually happened during the year. This is the most interesting document when you want to follow the money.

When Value isn't Cash

Cash-based vs. accrual accounting

For us normal people, we consider our wealth and revenues to be the actual cash we have in our pocket or in our bank account. If we have debts or assets (such as a house or a car), we don't add it to our bank statement - we just know we have it.

It's different for organizations. They mostly use what's called *accrual accounting*, which is a way to keep track of assets and liabilities as well as cash income and spending. Accrual accounting is great at keeping track of value and not cash. If a city buys a building, its cash reserves are decreased but a new asset of equivalent value is created. In the end, the total of the balance sheet remains the same.

Accrual accounting let accountants and controllers have a better vision of the financial health of an organization. Using cash only, it's hard to keep track of liabilities. An organization can take several loans and have plenty of cash - even though the amount it'll have to pay back put it in a terrible situation.

Accrual accounting enables things like amortization and provisions, explained below.

Germans beware!

Almost everyone uses accrual accounting, including public administrations. However, most local administrations in Germany and Austria still use cash-based accounting. Before you dive in budget data, check if it's cash-based or accrual. If a budget has terms like assets, liabilities, amortization or provision, then it's accrual.

Amortization

When a building is built by a local administration (or a company), it writes it as an asset , but not in the statement of income. If it did write it as an expense, the statement of income would look very bad one year and much better the next. It would be impossible to use it to understand how the organization works. Instead, investments such as a building are *amortized* over several years. Every year, the value of the building in the balance sheet is reduced by a 40^{th} of its initial value, so that after 40 years, the book value of the building is nil. Every year, this reduction in value also appears in the statement of income. The local administration incurs an expense of the same amount. The administration loses the amount in its books, even if it does not disburse (pays) anything. It's very important to realize that disbursements (actual money transfers) are just one part of accounting.

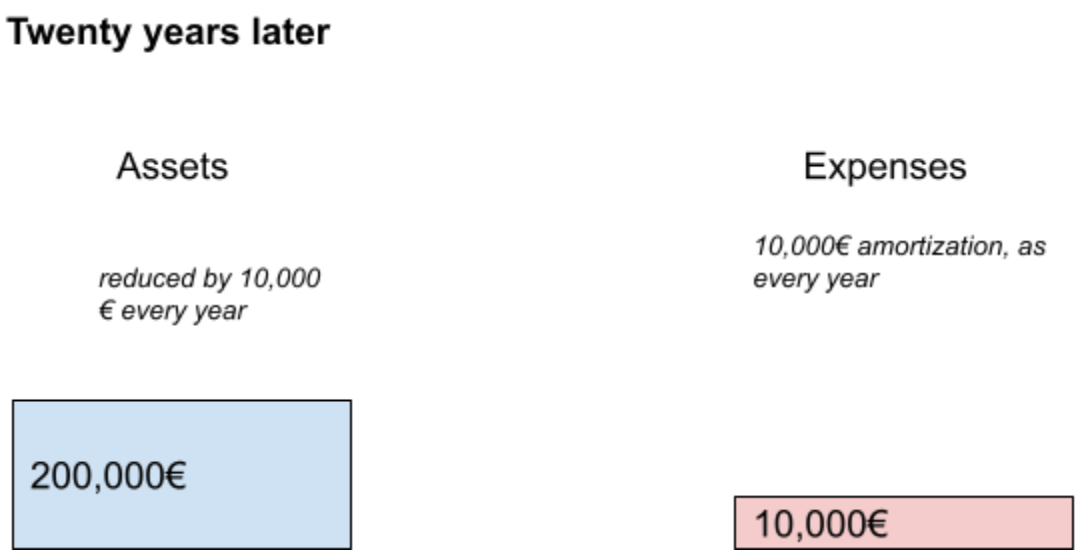
How the new swimming pool shows in the books

The swimming pool is built

Assets	Expenses
New asset! 400,000€	*Nothing shows here* 0€

One year later

Assets	Expenses
reduced by 10,000 € 390,000€	*10,000€ amortization* 10,000€



The duration of an amortization is fixed by law. Buildings are usually amortized over 40 years, cars over 10 years, computers over 3 years etc. Beware that the law is not the same in every country. There are many more rules (e.g when a building is renovated) but the basic concept remains the same: the book value of all assets decrease with time and the rate of decrease is set by law.

Why do we need amortization?
What if the actual value of the building actually increases with time? If a company built an office building in London 40 years ago, surely the value is not 0 today! In such cases, the book value of the company would not be the same as its actual value. Some countries allow for companies to assess the value of their assets at their "true" value. But how can we make sure that companies correctly assess the value of their assets? It's easy enough to know the value of a building in central London, but what if a company builds a stadium? Is there a "true" market value for this? Not using amortization rules gives so much freedom to companies that their books reflect nothing more than what they *think* they are worth. Needless to say, many use this opportunity to appear richer than they actually are. The Enron scandal, for instance, is in large part due to the company's freely (and wrongly) assessing the value of its assets.

Provisions

When you know you'll have to pay something in the future, you can make **provisions**. These are expenses that haven't been disbursed yet but that *will* be disbursed in the future. In the statement of income, they look exactly like disbursed items. If an administration is responsible for paying the pensions of its employees, for instance, it must add provisions to its statement of income to reflect this fact and help plan ahead.