

A practical guide
for farmers



MAKING FINANCIAL DECISIONS

**How to choose the best financial solutions
for your agricultural business**

About the brochure

This brochure was developed to assist small and medium-sized Ukrainian farmers with choosing financial products that best suit their specific business needs. If you are planning to invest in agricultural equipment or inputs, this brochure will provide you with guidance on how to:

- analyse and choose financial products that match your investment plan
- compare the terms and conditions of financial products
- choose the best available offer
- determine how much debt is too much debt
- avoid cash flow problems
- increase competitiveness while saving on energy costs

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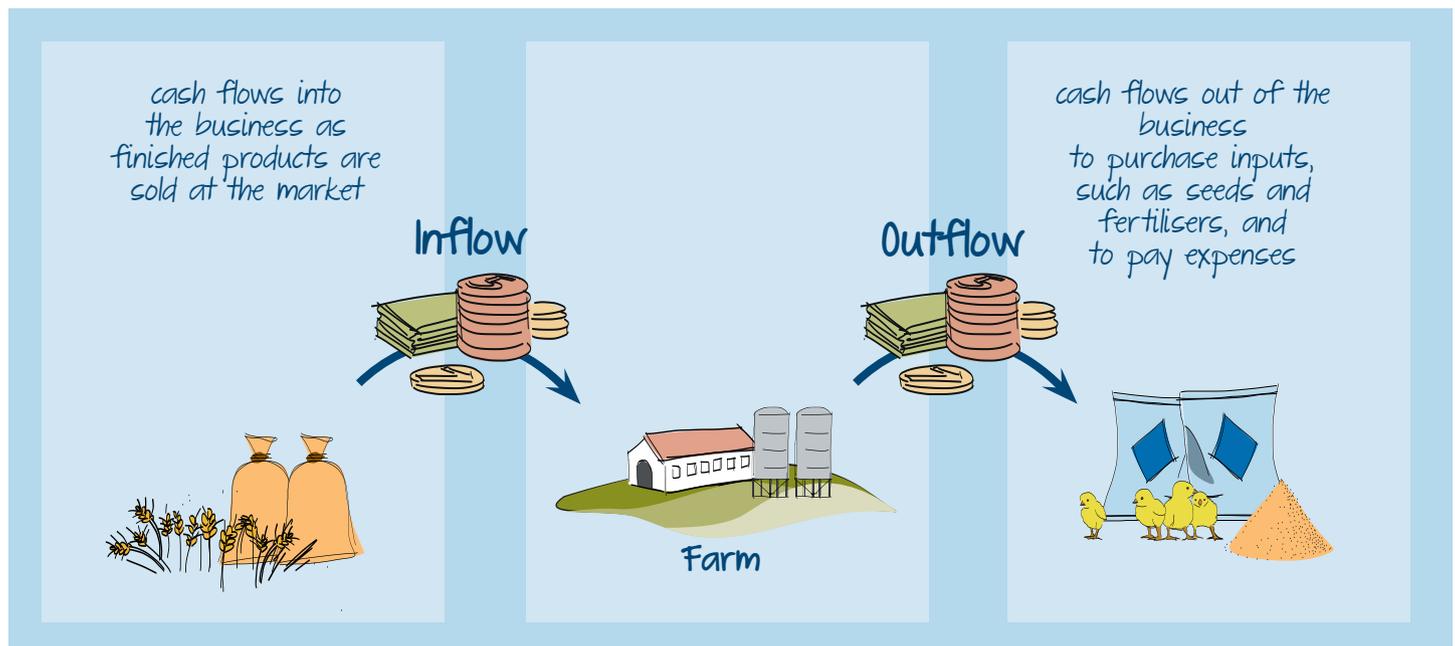
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Farming and agricultural business: How to find the best financing solutions

Most farmers would agree that it is very difficult to run an agricultural business without credit. There always seems to be a need for more funding, whether it is for inputs or equipment. But how much debt can your business take on? The first step towards answering this question is to assess your specific situation, starting with calculating your cash flows – the money flowing into and out of your business.

Definition

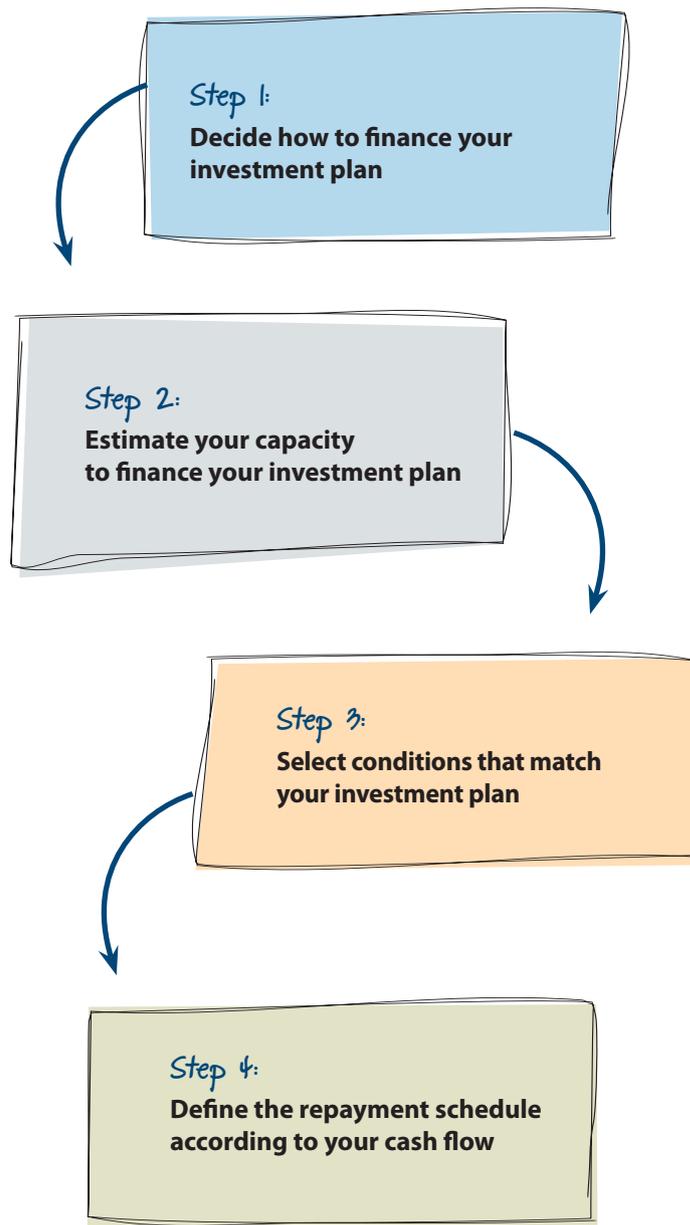
Cash flow is the movement or “flow” of money into and out of a business.



Four steps to financial decision-making

The starting point for making good financing decisions is always the analysis of your business's financial situation and needs. Whether you are engaged in grain production, dairy farming or any other type of agricultural activity, the process of analysing your business's needs is the same. First, you need to determine which type of investment you would like to finance. Second, you should make sure that you have the capacity to support the amount of debt you want to take on. Third, you need to choose financial solutions that match your business needs. This includes choosing a financial product with an appropriate maturity at an acceptable cost. Fourth, you should select conditions, e.g. repayment schedules that match your cash flow to ensure that you will be able to comfortably repay your loan. This means that the currency of the loan should ideally match the currency of your incoming cash flow and that the proposed repayment plan of the loan should schedule payments in the months when you will have funds available to cover them.

By following these steps, you can weigh the advantages and disadvantages of different financial products to arrive at a financial decision that matches your business and helps it to grow and prosper.



Step 1: Decide how to finance your investment plan

What kind of investment do I want to make?

What kind of loan or credit do I need?

Like most businesses, agricultural businesses need both operating inputs (seeds, pesticides, fuel, worker salaries) and fixed assets (tractors, crop storage facilities) to run. The type of loan you take will largely depend on the type of investment you would like to make in your business.

There are two main options for financing: working capital loans (including supplier credit) and fixed asset loans.

- **Working capital loans:** These loans are used to purchase **inputs** such as seeds, pesticides and fertilisers, as well as to cover any other immediate **operational costs**, such as the purchase of fuel or the payment of workers' salaries, for example.
- **Fixed asset loans:** These loans are used to purchase **equipment**, such as ploughs, combine harvesters or tractors, and also for **other long-term assets**, such as warehouses and silos, or any other type of asset you will use for production over several years.
- **Mixed purpose loans:** As their name suggests, these loans can be used for both fixed assets and working capital needs.

Example of a balance sheet for a small-scale farmer

In the balance sheet below, you can see the working capital and fixed assets in the left (Assets) column. On the right you can see the short-term debts, which are generally working capital loans (<12 months maturity), and the long-term debts, which are generally for fixed assets and have maturities longer than one year.

Assets		Liabilities	
Working capital	2,660,120	Short-term debt (≤12 months)	875,400
Cash	50,000	Debt to input suppliers	518,400
Stock of inputs (seeds, fertilisers and pesticides)	1,640,600	Short-term facilities from financial institutions	357,000
Crops in the field	969,520	Other short-term debts	0
Fixed assets	2,334,500	Long-term debt (>12 months)	110,000
Buildings	300,000	Long-term loans from financial institutions	110,000
Tractors, combines and other equipment	2,034,500	Debt to leasing companies	0
		Other long-term debts	0
		Total liabilities	985,400
		Equity	4,009,220
Total assets	4,994,620	Total liabilities and equity	4,994,620

All values in UAH

The first question to ask yourself is: Do I want to increase my working capital or do I want to invest in fixed assets?

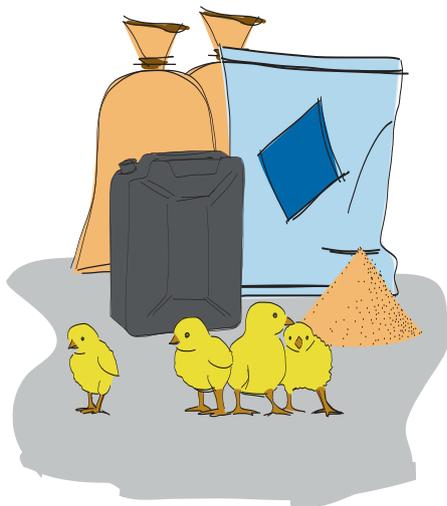
I need working capital

Whether you need working capital for inputs or for other costs of operating your farm, such as paying salaries or purchasing fuel, you can find a number of institutions in Ukraine that offer short-term financing to farmers. There are two main options available:

1. obtain inputs from your suppliers on supplier credit
2. take out a working capital loan from a financial institution to pay suppliers and cover other expenses

Other less common options for financing working capital needs include promissory notes, overdrafts, and loans from private sources.

Which option best suits your needs?



Financing option 1: Supplier credit

As you know, suppliers sell both on credit and on an upfront cash basis. If you need inputs but do not have the cash flow on hand, you could obtain them on credit from your supplier.

😊 Pros of using supplier credit:

- The procedure is simple, resulting in a quick or instant decision
- For recurring clients, no collateral is usually required
- Some suppliers offer additional benefits, such as free delivery of inputs or agronomic support

☹ Cons of using supplier credit:

- It is usually more expensive to purchase goods on supplier credit than to pay for them upfront in cash
- The price of inputs is very often indexed to a foreign currency, which creates FX risks for the farmer
- Typically only a limited range of inputs are available for purchase with supplier credit
- The term for repayment is relatively short, i.e. due shortly after the harvest

Financing option 2:**Working capital loan from a financial institution**

Suppliers generally give discounts of up to 20-30% for upfront cash purchases, depending on factors such as the brand and quality of the inputs, supplier pricing strategy and the client's relationship with the supplier. Therefore, depending on the offer from your input supplier and your relationship with your financial institution, it could be more advantageous for you to take a loan to purchase inputs upfront in cash and take advantage of the discounted price from your supplier. You can also use a working capital loan if you need to pay for items or services that you cannot purchase with supplier credit. Loan maturities usually range from one production cycle up to 12 months, the loans can be obtained in hryvnas without being indexed to a foreign currency, and interest rates are fixed for the duration of the loan.

 *Pros of using a working capital loan:*

- They can be used to make upfront cash payments to input suppliers, resulting in discounted prices
- The funds can be used for additional working capital needs, such as paying salaries, purchasing fuel, or renting machinery
- Loans are generally cheaper than supplier credit
- Most of the loans are disbursed in UAH, thus creating no FX risk to the business
- The maturity is relatively long, which allows flexibility in terms of when you sell your harvest

 *Cons of using a working capital loan:*

- Collateral is required
- The loan amount may not cover the full cost of a production cycle
- Processing times are longer (i.e. there is no instant approval)

Other options for financing working capital needs:**Promissory notes**

Promissory note is a financial instrument that allows the payee to request from the issuer the repayment of a specified amount of debt at a specified time. One may ask a question: who will agree to lend to an unknown person and who secures the repayment of the loan on time? In order to assure the repayment promissory notes are availed by banks that can assess creditworthiness of the issuer. When availed, the bank becomes a guarantor for the issuer. This financial instrument is gradually becoming popular among farmers due to the low costs (bank's fee for availing - 4-6% interest per year) and simple issuing procedures. Suppliers are also willing to accept promissory notes from farmers in exchange for agricultural inputs. Please check if your bank offers this product and carefully review the terms and conditions.

Overdrafts

If you maintain a certain level of transactions via your bank account, then your bank may offer you an overdraft. With an overdraft, you can finance your short-term needs even if your account balance falls to zero. While the maturity of an overdraft is generally 30 days, some financial institutions may offer longer periods of up to 90 days. The overdraft amount is set individually and your bank may request collateral. Please consider that your bank will charge interest and a fee for the overdraft.

Private loans

It is relatively quick and easy to obtain a private loan as private lenders do not require a multitude of documents and sometimes do not even require collateral. Despite these advantages, please consider that a private loan could end up being the most expensive option. For example, interest rates of 3, 4, and 5% per month add up to 36, 48, and 60% per year, respectively. Moreover, please ensure that your loan repayment schedule is documented on paper and that you will be able to meet the payments with your future cash flows. Last but not least, make sure that the loan currency will be fixed and not indexed to another currency; otherwise, you will incur FX risks and the cost of the loan can increase significantly.

I want to invest in fixed assets

Fixed assets are the backbone of an agricultural business: Having them and keeping them in good condition has a direct impact on your production cycle. However, investments in fixed assets tend to be costly and their payback periods run well over 12 months; therefore, you would need to have access to large amounts of long-term funds. The most common way to invest in fixed assets is to take a loan from a financial institution.

In some cases, it is useful to check whether your equipment or machinery supplier has leasing options or partnership programmes with any of the banks or leasing companies. Many of these programmes offer special conditions which usually aim at lowering the final cost of your loan transaction or accelerating the loan approval process. You may also ask your bank representative if the bank participates in any partnership programmes with suppliers.

Loan from a financial institution

With a long-term bank loan you can finance the purchase of agricultural equipment and machinery, such as tractors, combine harvesters, ploughs or other multi-stage equipment, or the construction of facilities, such as silos or warehouses. Depending on the scale of your business, you can make several investments at once.

Pros of financing from a financial institution:

- Maturities are longer – from 3 to 7 years
- The loan can be used to purchase used equipment or new equipment
- The loan will finance a large part of your investment plan – in some cases even up to 100%
- Repayment schedules are more flexible, with payments matching your cash flow and grace periods on capital repayment, i.e. repayments can be scheduled for post-harvest periods
- Banks' collateral policies tend to be flexible; some lenders accept personal assets as well as business assets
- All of your income is taken into account, e.g. private income or income from other businesses as well as agricultural business income

Cons of financing from a financial institution:

- The processing time can be several weeks or more
- There are additional costs and fees – obligatory insurance, administration fees – to consider
- Bankable collateral and/or additional guarantees may be requested

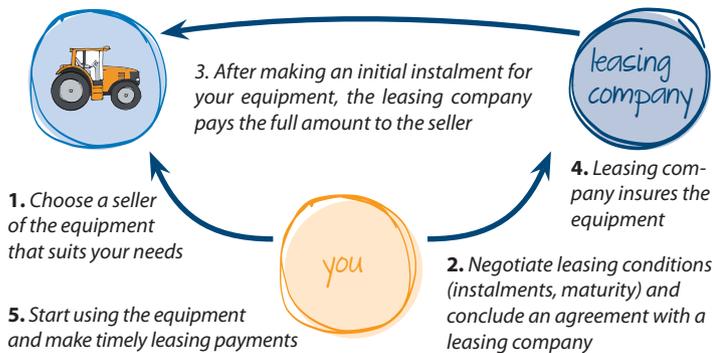
Other options for financing investments in fixed assets:

Leasing

One of the ways to purchase equipment such as tractors, combine harvesters or other farming implements is via dedicated leasing companies. Leasing companies have direct relationships with equipment suppliers and are a convenient option if your investment plan only involves purchasing equipment. Of course, you should always compare leasing costs with other means of financing, i.e. bank loans.



How does a leasing operation work?



Partnership programmes

Some financial institutions and equipment suppliers have jointly established special programmes to simplify certain procedures for farmers in obtaining long-term loans to buy specific equipment. When taking part in such programmes, you may benefit from simple and quick procedures, or if programme criteria are satisfied, receive funds at a reduced or subsidised rate. Please ask your bank representative or equipment supplier if they offer such programmes.

So, should I take supplier credit or a working capital loan?

Case study: Supplier credit vs. working capital loan

Mr. Kravchenko needs to purchase UAH 500,000 worth of inputs. His supplier offers him a 20% discount if he agrees to pay upfront in cash. He can get a loan to purchase the inputs but must pay 24% in interest per year in interest plus processing fees. Does it make sense to take the loan to pay for the inputs upfront and get the discount, or should he obtain the inputs on credit from his supplier?

Financing option 1: Purchase on supplier credit

Cost of inputs purchased on supplier credit: UAH 500,000

Financing option 2: Take out a working capital loan

Cost of inputs purchased in cash with a 20% discount: UAH 400,000

Loan details:	Amount	UAH 400,000
	Interest rate	24% per year
	Interest monthly payment	UAH 8,000
	Fees	2% of principal amount (UAH 8,000)
	Maturity	8 months

Example of cash flow of a working capital loan

	Feb	Mar	April	May	June	July	Aug	Sept
disbursement fee & monthly interest		monthly interest	capital repayment & monthly interest					
	16,000	8,000	8,000	8,000	8,000	8,000	8,000	408,000

Conclusion

In this case, the total cost of the inputs if purchased on supplier credit is UAH 500,000, while as the table above shows, the total cost of the inputs purchased upfront in cash with a loan adds up to UAH 472,000. Purchasing the inputs with a loan therefore saves Mr. Kravchenko UAH 28,000.

Step 2: Estimate your capacity to finance your investment plan

The next step in financial decision-making is determining your business's limits in terms of repayment and debt capacity. Lenders have limits on how much they can lend to a single client and usually determine the maximum amount by calculating the client's equity ratio. This ratio reflects how much of the business is financed with funds contributed by the owner(s).

Definition

Equity is the sum of the value of all your assets minus all of your debts, both formal and informal, including debts to suppliers or private individuals.

What is my equity ratio, and what does it tell me?

The **equity ratio** reflects how much of your assets are financed by your own funds. It is calculated by **dividing your equity by your total assets**.

If the equity ratio falls to zero or becomes negative, this means that your equity is zero or negative and that the business has debts equal to or greater than the business's total assets. If the debt is too high and the equity ratio is too low, the business will eventually cease to be economically viable and go bankrupt.

Rule of thumb

If you are planning a large investment for expanding your business, it is very important that you are able to determine whether the investment is within your maximum debt capacity, which is the maximum amount of debt that you can afford to have at one time, regardless of the size of the instalments. A rule of thumb is that **the equity ratio should not be below 30%**. Therefore, you should estimate your current equity ratio as well as make sure that your equity ratio will not fall below 30% when you take on additional debt for a new investment.



30%

Case study: Equity ratio calculation

Mr. Bondar farms 1,500 ha. He sees two investment opportunities, but first he has to determine his debt capacity by putting together a balance sheet of his current assets and liabilities:

Assets		Liabilities	
Working capital	5,842,000	Short-term debts	5,015,000
Cash	100,000	Debt to input suppliers	2,015,000
Stock of inputs (seeds, fertilisers and pesticides)	3,609,000	Short-term facilities from financial institutions	3,000,000
Crops in the field	2,133,000	Other short-term debts	0
Fixed assets	5,823,000	Long-term debt	2,485,000
Tractors and lorries	2,343,000		
Implements	545,000		
Combine harvesters	2,935,000	Loan for combine harvester	2,485,000
		Total assets	11,665,000
		Total liabilities	7,500,000
		Equity	4,165,000
Total assets	11,665,000	Total liabilities and equity	11,665,000

All values in UAH

Good to know...

Fair valuation of assets

In order to determine the value of your assets for the purpose of calculating your equity ratio, it is important to consider the **fair value** of your assets, or, in other words, a realistic price for which you could expect to sell the assets in the local second-hand market. A good method for determining the fair value of a piece of equipment is by comparing the prices of similar equipment for sale in the second-hand market.

Based on the balance sheet, he must then calculate his current equity and his equity ratio:

$$\frac{\text{Equity UAH } 4,165,000}{\text{Total assets UAH } 11,665,000} = 36\% \text{ current equity ratio}$$

Current investment plan

Mr. Bondar is interested in building a grain silo (UAH 1,900,000) and starting a dairy operation (UAH 3,500,000), and he would like to finance both projects with a loan of UAH 5,400,000. In order to calculate his expected equity ratio after the investment is made, Mr. Bondar must adjust his balance sheet to reflect both the assets (the new grain silo and all assets related to the dairy operation) and the loan:

Assets		Liabilities	
Working capital	5,842,000	Short-term debts	5,015,000
Cash	100,000	Debt to input suppliers	2,015,000
Stock of inputs (seeds, fertilisers and pesticides)	3,609,000	Short-term facilities from financial institutions	3,000,000
Crops in the field	2,133,000	Other short-term debts	0
Fixed assets	11,223,000	Long-term debt	7,885,000
Tractors and lorries	2,343,000		
Implements	545,000		
Grain storage	1,900,000	Loan for investment plan	5,400,000
Dairy equipment & livestock	3,500,000		
Combine harvesters	2,935,000	Loan for combine harvester	2,485,000
		Total liabilities	12,900,000
		Equity	4,165,000
Total assets	17,065,000	Total liabilities and equity	17,065,000

All values in UAH

$$\frac{\text{Equity UAH } 4,165,000}{\text{Total assets UAH } 17,065,000} = 24\% \text{ expected equity ratio}$$

The amount of equity remains the same because no funds would be contributed to the project by the owner. However, the expected equity ratio would change to 24%.

Since the original investment plan put the expected equity ratio below 30%, Mr. Alexandru must adjust his investment plan so that it is an amount of credit his business can currently support.

Adjusted investment plan

In order to reduce the cost of his investment plan, Mr. Bondar decides to build the silo for UAH 1,900,000 and postpone the dairy operation. To adjust his balance sheet, he adds UAH 1,900,000 to his fixed assets and UAH 1,900,000 to his long-term liabilities in his current estimated balance sheet. The adjustment leads to total assets of UAH 13,565,000, total liabilities of UAH 9,400,000 and equity of UAH 4,165,000.

Mr. Bondar's calculation:

$$\begin{array}{r} \text{Total assets UAH } 13,565,000 \\ - \text{Total liabilities UAH } 9,400,000 \\ \hline = \text{Equity UAH } 4,165,000 \end{array}$$

$$\frac{\text{Equity UAH } 4,165,000}{\text{Total assets UAH } 13,565,000} = 31\% \text{ expected equity ratio}$$

When the investment plan is altered, the equity ratio remains at an acceptable level.

Step 3: Select conditions that match your investment plan

Now that you have determined which financial product suits your investment and have established that you have the capacity to repay the loan amount, it is time to request offers from potential lenders and apply for a loan. To be able to make an informed decision, you will need to compare the conditions of the products offered, namely:

- **loan maturity**
- **interest rate**
- **cost of borrowing.**

Working capital loans

The maturity of your loan will depend on the type of investment you are making. Working capital loan facilities are short-term by definition, ranging from one crop cycle up to one year. Most lenders offer revolving loans or credit lines for working capital.



Fixed asset loans

Investment loans are generally long-term loans. Long-term loans are more appropriate for investments in fixed assets because the cost of the asset is usually large in comparison to the profit the asset generates, but the asset will generate profit for many years.

Mixed purpose loans

Mixed purpose loans are usually for an investment plan that includes both working capital and investment in fixed assets. Not all financial institutions offer them. Instead of a single mixed purpose loan, some institutions may offer you two separate loans: a working capital facility and an investment loan. The institutions that do provide mixed purpose loans usually offer a maximum maturity of three or four years. If you need working capital and want to make an investment at the same time, explain this to your financial institution and ask about your options for either receiving a mixed purpose facility or combining different loan products.

Definition

A revolving facility is a loan that is renewed regularly, each season or annually, assuming that the borrower has repaid on time and that the business's condition is stable. A revolving facility assumes faster approval process of your future loans as most of the procedures are put through at the initial stage.



Maturities: **How do I match the maturity with my investment plan?**

Business opportunities sometimes come up at very short notice and require a quick decision. For example, let's say you have a chance to buy a used harvester at a good price. However, you only have a short time to pay the seller before he sells the harvester to another buyer. When opportunities like this arise, you need money fast but don't always have time to wait for the bank to approve a loan. So you pay for the investment with the money you already have, usually taking it from your working capital. But wait: Aren't you then actually financing the machinery, a fixed asset, with a working capital loan facility? Shouldn't you allow yourself a longer period of time to pay for this investment?

The situation described above is what lenders call "depletion of working capital", which simply means you have used your working capital for longer-term investments. This is a problem because working capital funds are the funds that need to circulate in your business, transforming from inputs into crops, into cash and back into inputs to replant. So if you deplete your working capital, you may not have enough funds available to plant your next crop.

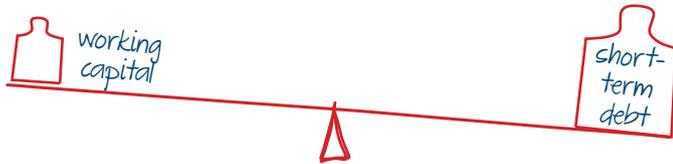
This is a problem for both you as a farmer and your financial institution because it puts stress on your business when you finance long-term investments with short-term funds. If this occurs, it is better to consult with your financial institution about options to avoid refinancing the investment with short-term facilities. A longer-term investment loan to reimburse the funds you took from your working capital or a permanent working capital loan would be more appropriate to top up your working capital and ensure that you do not run into refinancing problems in the future.

Attention:

Try to match the maturity of the investment with the maturity of the financing. For working capital loans, the maturity should correspond with the planting cycle that the funds are used for, and for investment in fixed assets, the maturity should correspond to the expected useful life of the asset.

Example of a balance sheet with "unbalanced" liabilities

In this balance sheet example, the business has significantly higher short-term liabilities than working capital (short-term) assets. The farmer has taken out several short-term loans to finance the purchase of fixed assets. If the short-term facilities expire without being renewed, the farmer will have a problem finding enough cash to finance the next crop. In addition, the farmer faces the risk that interest rates for future credits could be higher than in the past, which in turn would increase the overall cost of financing the purchase of the fixed assets.



Assets (at fair value)		Liabilities	
Working capital	1,086,000	Short-term debt	1,330,000
Cash	30,000	Debt to input suppliers	480,000
Stock of inputs	110,000	Short-term facilities from financial institutions	850,000
Crops in the field	946,000	Other short-term debts	0
Fixed assets	1,770,000	Long-term debt	380,000
Buildings	150,000	Long-term loans from financial institutions	0
Tractors, combines and other equipment	1,620,000	Debts to leasing companies	380,000
		Other long-term debts	
		Total liabilities	1,710,000
		Equity	1,146,000
Total assets	2,856,000	Total liabilities & equity	2,856,000

All values in UAH

Example of a balance sheet with balanced liabilities

In this example, the farmer has balanced short- and long-term assets with short- and long-term liabilities. The total amount of debt (UAH 1,710,000) and equity ratio (40%) are the same, but the farmer is now in a better position because it is no longer necessary to depend as heavily on the renewal of short-term loans to finance the business.



Assets (at fair value)		Liabilities	
Working capital	1,086,000	Short-term debt	780,000
Cash	30,000	Debt to input suppliers	480,000
Stock of inputs	110,000	Short-term facilities from financial institutions	300,000
Crops in the field	946,000	Other short-term debts	0
Fixed assets	1,770,000	Long-term debt	930,000
Buildings	150,000	Long-term loans from financial institutions	550,000
Tractors, combines and other equipment	1,620,000	Debts to leasing companies	380,000
		Other long-term debts	
		Total liabilities	1,710,000
		Equity	1,146,000
Total assets	2,856,000	Total liabilities & equity	2,856,000

All values in UAH

Understanding interest rates

When a financial institution sets an interest rate, it takes into consideration its cost of funding plus a premium to allow for the risk that you will not be able to repay your loan. This risk is due to several factors: the overall economic situation, the situation of the agricultural sector and your individual risk. When the financial institution assesses your individual risk, it generally looks at the financial stability of your business (i.e. length of time in operation, profitability, liquidity), your credit history, the quality of your collateral and the collateral's personal importance to you, along with your relationship with the institution. The more stable your business is, the stronger your credit history is, the more valuable and important your collateral is to you, and the better your relationship with the financial institution is, the lower the interest rate offer should be.

Attention:

Foreign exchange (FX) risks

Imagine you decide to take a private loan denominated in (or indexed to) a foreign currency. When you decide to take a loan such as this, you run an FX risk if your business earnings are denominated in a different currency than the loan. If your business revenues are generated in UAH, but the currency of the loan gains in value against the UAH, your loan repayments will become more expensive and will eat up your revenues. The FX risk is not a one-time occurrence; it will remain in effect for the duration of your loan. When taking out a loan in foreign currency, consider this risk and estimate whether you will earn enough revenues in that foreign currency to mitigate this risk. If the answer is No, ask for a loan in local currency only.

Effective cost of borrowing: Three key factors to bear in mind

Tip 1:

When comparing two offers, compare the effective interest rate or the effective cost of borrowing, rather than the nominal interest rate.

Lenders typically quote their **nominal annual interest rates**. However, the nominal interest rate does not include all of the costs related to the loan. These other costs, such as management fees or organisational fees, can vary significantly from lender to lender and increase the real cost of loans by 1.5% to 4.5%. The nominal interest rate plus all other costs related to a loan charged by the financial institution is called the **effective interest rate**. Usually, but not always, all of the charges related to the loan can be found in the repayment schedule or can be requested from the financial institution. Besides the fees charged by the financial institution, there may be other obligatory costs, such as insurance, which also need to be taken into consideration. The sum of the expenses payable to the financial institution and any additional expenses is called the **effective cost of borrowing**.

Tip 2:

Choose a repayment schedule that minimises your effective cost of borrowing.

Another factor that has an especially large impact on the total effective cost of borrowing for farmers is the **repayment schedule**. Since farm income is irregular, the instalments of agricultural loans are usually also irregular, with payments due only one to four times a year. For the same amount, maturity and effective interest rate, a loan with a yearly instalment will have a higher effective cost of borrowing than a loan with two or more instalments, such as a bi-annual repayment schedule.

Although it may be necessary to choose a seasonal repayment schedule because it matches your cash flow, it is important to understand that the effective costs of borrowing will be higher. When faced with the decision to choose between different repayment schedules, you should choose **more frequent repayments to reduce the effective cost of borrowing**. To clearly see the impact of the repayment schedule on the effective cost of borrowing, you can calculate the total interest and charges appearing in the repayment schedule provided by the financial institution.

Tip 3:

Plan ahead: Allow enough time to find the right source of financing.

The business environment may change unpredictably, just like the weather; however, you can at least roughly plan the time it will take to obtain a loan for your investments or working capital needs. This usually varies between 4-7 weeks, depending on the purpose of the loan, and the larger the loan amount, the more time will be needed. Other types of financial instruments may require less time, i.e. up to 4 weeks, but they might be more expensive. Please also consider that getting a loan requires a dual effort: the client has to provide a complete list of required documents and financial information, while the bank has to analyse the client's information. One way to speed up the process is to have all or most of the required documents ready for submission. Note that some financial institutions offer up to 6 months of validity after the loan is approved, meaning that you have up to 6 months after the approval of the loan to actually use the funds, which gives you more flexibility in terms of timing your investment.

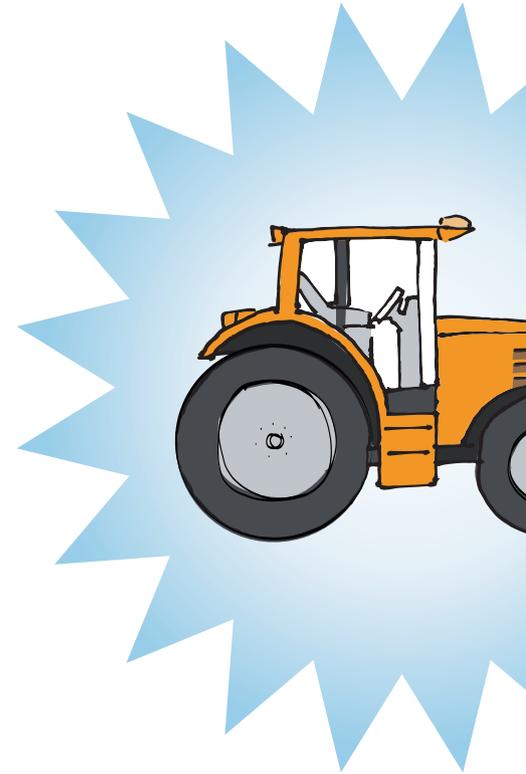
Step 4: Define repayment schedule according to your cash flow

After you have agreed to a loan amount and interest rate, you are usually presented with a repayment schedule. When checking whether a repayment schedule is right for you, the most important thing is that it **corresponds to your expected cash flow**. There are three aspects you especially need to pay attention to when it comes to your business's cash flow:



Scheduling of payments

Payments must be planned for time periods when you have inflows into your business. This might seem like a “no-brainer”, but if financial institutions do not understand your activity well, they may give you a generic monthly, bi-monthly or quarterly repayment schedule based on the assumption that during the periods between payments you will have some income you can save to pay the loan at the end of the term. However, a financial institution that knows your activity well will make an effort to properly forecast and plan your instalments in accordance with your cash flow so as to ensure that the repayment plan is convenient for you and that you do not have problems repaying the loan.





Instalment amount

Besides ensuring that the payments are scheduled for the right time, it is also important to make sure that you can afford to pay the amount of the instalment. This means that you know you will have sufficient funds after selling your crop to repay all short-term debts, plant the next crop and finally repay any additional loans you may have. If you take a long-term loan with a maturity of more than 3 years, you should ensure that you will have additional funds after all repayments. You will need these additional funds because other investment needs will come up in 4 or 5 years' time.



Currency

The loan and repayments should be denominated in the same currency as your inflows/income. Some people think that just because they need to pay for their new tractor in euros that they have to take out a loan in euros, even though they always receive payments for their crops in hryvna. This is not the case, however: You can take out a loan in the same currency as your income, convert it into euros at today's exchange rate, pay for the tractor and repay the loan with the hryvnas you earn. This way you will avoid possible losses from fluctuations in the exchange rate.

Energy efficiency: Save energy, save money

As your farm grows larger, greater efficiency and lower production costs will become increasingly important. There are several ways to improve efficiency on your farm, such as better inputs and technology to increase yields. One of the major trends in global agriculture that is catching on in Ukraine is to invest in new farming technologies and techniques that minimise fuel and input consumption. The ultimate goal of **energy efficiency investments** is to reduce the amount of energy required to produce the same amount of a product. The savings from reduced fuel consumption pay for the investment and reduce costs in the long term. Energy efficiency investments include, for example, tractors and combine harvesters with efficient fuel consumption as well as multi-stage or “one-pass” farm equipment.

Definition

Multi-stage or “one-pass” farm equipment is equipment that can be used for multiple field preparation steps. The equipment is fuel efficient because it reduces the number of times the tractor must pass over the field by performing multiple steps in just one pass, for example seeding and applying fertiliser at the same time.

Attention:

Multi-stage equipment is a large investment, usually starting at UAH 1,400,000 or more. Based on current prices, the fuel savings to be gained by using multi-stage equipment justifies the investment cost for land holdings of **800 hectares or more**.

Case study: Multi-stage equipment

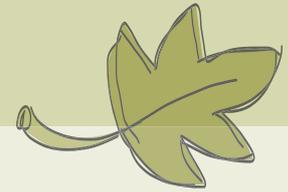
Mr. Melnichenko has 800 hectares of wheat fields. He wants to introduce multi-stage equipment in order to increase productivity and lower fuel consumption.

Mr. Melnichenko previously had to pass over his fields **four times: with a mouldboard (20 cm), chisel plough, disk harrow and seeder**. His total fuel consumption was 60 litres of diesel per hectare or about UAH 800,000 per year at current diesel prices.

He has chosen to invest UAH 1,400,000 in a piece of multi-stage equipment that combines 3 steps of soil preparation: sub-soiler, chisel plough and disc plough. Now, during soil

before:
60 litres
of diesel
per hectare





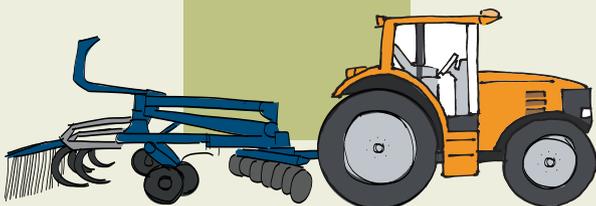
preparation the tractor only **passes over the field twice: once with the (heavier) multi-stage equipment and another time with the seeder**. This requires 35 litres of diesel per hectare or roughly UAH 465,000 at current diesel prices.

The total annual savings in fuel costs is about UAH 313,000. Considering the cost of the multi-stage equipment (UAH 1,400,000) and the annual savings (UAH 313,000), the fuel savings “pay” for the investment in approximately 4.5 years. Additionally, the farmer saves time because fewer passes must be made over the field.

Calculation:

Field preparation	Conventional tillage	Use of one-pass equipment
Total conventional tillage fuel consumption, L/ha	58.4	-
Total minimum tillage fuel consumption, L/ha	X -	34.9 X
Area of the farm, ha	800	
Total fuel consumption, L	46,720	27,920
Av. diesel price 2014 incl. subsidy, in UAH/L	16.67	
Annual energy costs, in UAH	778,822	465,426
Annual energy savings, in UAH	-	= 313,396
Investment costs, in UAH	-	1,400,000
Payback period of equipment, in years	-	: 313,396 4.5

after:
35 litres
of diesel
per hectare



Good to know...

Other benefits of multi-stage equipment

More efficient equipment can have additional benefits besides saving fuel, such as more precise application of fertiliser and seeds, which saves inputs and increases yields. For detailed information on additional benefits, consult a trustworthy equipment supplier.

Case study: A new tractor and grain silo

Mr. Lazarchuk has been in business for 15 years and currently runs his private farm on 840 hectares (he farms 50 ha and rents the remaining 790 ha). He currently cultivates corn, wheat, sunflowers and barley.

Step 1: Decide how to finance your investment plan

Mr. Lazarchuk is looking for a way to finance a two-part plan to invest in fixed assets. First, he would like to purchase a tractor for UAH 760,000.

Second, he would like to build a 1,000 tonne grain silo in which to store part of his crops. He has an offer to build a silo for a total cost of UAH 350,000. Therefore, to complete the investment plan, he needs financing of UAH 1,110,000.

He enquired at two different financial institutions about a loan for UAH 1,110,000 in order to compare the offers:

Offer from financial institution #1

20%, maturity of 5 years; 1% disbursement commission. Interest is repaid monthly, principal is repaid after the harvest (August-December of every season).

Collateral requirement: Agricultural machinery, real estate or other liquid assets.

Repayment information

Effective interest rate: 21%
Monthly instalment amount (first year):
- during grace period: UAH 18,500
- in other periods: UAH 60,000-63,000

Overall effective cost of borrowing: UAH 640,100

Offer from financial institution #2

22%, maturity of 5 years; 1.5% disbursement commission. Interest is repaid monthly, principal is repaid once a year (December).

Collateral requirement: Agricultural machinery, real estate or other liquid assets.

Repayment information

Effective interest rate: 23.5%
Monthly instalment amount (first year):
- during grace period: UAH 20,350
- in December: UAH 242,350

Overall effective cost of borrowing: UAH 749,250

Step 2:

Estimate your capacity to finance your investment plan

Now that Mr. Lazarchuk has decided on a concrete investment plan, he must check his equity ratio to test whether his business can support the debt.

Estimated balance sheet

Mr. Lazarchuk has already estimated his current balance sheet based on his accounting information and his own estimates. First he calculates his current equity ratio from his estimated balance sheet:

Assets (at fair value)		Liabilities	
Working capital	3,070,000	Short-term debt	1,770,000
Cash	200,000	Debt to input suppliers	620,000
Stock of inputs (seeds, fertilisers and pesticides)	420,000	Short-term facilities from financial institutions	1,150,000
Crops in the field	2,450,000	Other short-term debts	0
Fixed assets	3,230,000	Long-term debt	880,000
Buildings	330,000	Long-term loans from financial institutions	650,000
Tractors, combines and other equipment	2,900,000	Debts to leasing companies	230,000
		Other long-term debts	0
		Total liabilities	2,650,000
		Equity	3,650,000
Total assets	6,300,000	Total liabilities & equity	6,300,000

All values in UAH

$$\frac{\text{Equity UAH } 3,650,000}{\text{Total assets UAH } 6,300,000} = 58\% \text{ equity ratio}$$

well above the recommended 30% threshold

Now he must calculate his expected equity ratio assuming he takes out a loan of UAH 1,110,000. To do this he takes the total assets from his balance sheet and adds the value of the investment (UAH 1,110,000) to the fixed asset sections under:

- buildings, grain silo (since the investment will be in a grain silo)
- tractors, combines and other equipment (since the investment will be in a tractor) to reach a new total assets figure of UAH 7,260,000. Then he must also add the corresponding liability of UAH 1,110,000 to the long-term loans from financial institutions since it has a maturity of >12 months, which leads to a new total liabilities figure of UAH 3,760,000.

Expected balance sheet

Now that he has adjusted his balance sheet, he can calculate the expected equity ratio:

Assets (at fair value)		Liabilities	
Working capital	3,070,000	Short-term debt	1,770,000
Cash	200,000	Debt to input suppliers	620,000
Stock of inputs (seeds, fertilisers and pesticides)	420,000	Short-term facilities from financial institutions	1,150,000
Crops in the field	2,450,000	Other short-term debts	0
Fixed assets	4,340,000	Long-term debt	1,990,000
Buildings, grain storage	680,000	Long-term loans from financial institutions	1,760,000
Tractors, combines and other equipment	3,660,000	Debts to leasing companies	230,000
		Other long-term debts	0
		Total liabilities	3,760,000
		Equity	3,650,000
Total assets	7,410,000	Total liabilities & equity	7,410,000

All values in UAH

$$\frac{\text{Equity UAH } 3,650,000}{\text{Total assets UAH } 7,410,000} = 49\% \text{ equity ratio}$$

still comfortably above the 30% threshold.

Step 3:

Select conditions that match your investment plan

Let's consider those two offers again.

Interest rate, maturity and effective cost of borrowing: At 21%, the effective interest rate offered by institution #1 is slightly better than the 23.5% interest rate offered by institution #2. After analysing the offers and the effective cost of borrowing they represent, Mr. Lazarchuk realises that the repayment schedule is more important than the difference in the effective costs of borrowing offered by the financial institutions. Financial institution #2 offers a more convenient repayment plan, which allows him to postpone crop selling to the period during which he can obtain peak price.

To double check that the five-year maturity matches his balance sheet structure, Mr. Lazarchuk looks at the balance sheet projection he made in step 2. His short-term debts (UAH 1,770,000) do not exceed his working capital (UAH 2,920,000), and his long-term debts (UAH 1,990,000) are also much lower than the value of his total fixed assets (UAH 4,340,000). Since neither the short-term nor the long-term assets and liabilities are unbalanced, Mr. Lazarchuk is confident that he will not have refinancing problems. After speaking with both financial institutions, he decides that he has a preference for financial institution #2. Although financial institution #1 offers a slightly better interest rate, institution #2 is offering him a more convenient repayment schedule. The price of wheat is UAH 400 per tonne higher in December than in August. To pay off the principal he has to sell 90-100 tonnes of wheat per season, which means that the repayment plan proposed by institution #2 allows him to save UAH 36,000-40,000 every year or UAH 180,000-200,000 for the entire period of the loan.

Step 4:

Define the repayment schedule according to your cash flow

In step 4, Mr. Lazarchuk needs to make sure that the repayment schedule matches his cash inflows.

Repayment schedule: Mr. Lazarchuk knows that the prices for agricultural output are lowest during the harvesting period, so he is satisfied with the proposed repayment schedule, because it would allow him to wait until he can obtain a higher price for his crops.

Final result:

A loan from financial institution #2 for UAH 1,110,000 with an interest rate of 22%, a maturity of 5 years and a 1.5% disbursement commission. Effective interest rate: 23.5%. Monthly interest repayment and principal repayment in December of every year of the loan. Overall effective cost of borrowing: UAH 749,250. Collateral: fixed assets.

Flowchart for sound financial decision-making

Step 1: Determine the type of investment you would like to make

- Are you interested in working capital, fixed assets or both?
- Which institutions offer financing for the type of investment you would like to make?
- Which financial product best fits your investment plan?

Step 2: Estimate your capacity to finance your investment plan

- You should double check that your business can comfortably borrow this amount without running into difficulties.
- A good rule of thumb is that **you should maintain an equity ratio above 30% at all times.**

Step 3: Select conditions that match your investment plan

- Make sure that your financial institution offers you an appropriate product for your investment.
- Remember that the maturity of your financing should match the **maturity of your investment.**
- **Negotiate with your financial institution to finance fixed asset investment with longer-term financing at affordable rates** to ensure that you do not run into liquidity problems in the future.

Step 4: Define repayment schedule according to your cash flow

- Verify that your repayment schedule matches your cash flow.
- Be sure that you have the capacity to repay the amount.
- A good rule of thumb is to **only accept a loan with a repayment schedule that corresponds with the time and currency of your cash inflows.**
- Additionally, in your own projections, make sure that **you have extra funds available** for future unexpected needs or investments after you have paid all your debts.

Don't forget to ask...

Finally, we believe that your financial institution should not only offer you loans, but should also provide you with responsible and transparent advice. Below you will find a checklist of important questions that you should ask yourself about your financial institution before making your decision.

- Does my financial institution offer several specialised products for agricultural finance?
- Can representatives clearly explain the specific purpose, advantages and costs of the different products they offer?
- What criteria does the financial institution apply when assessing whether I can use a specific financial product? Does it consider my financial situation, collateral and/or relationship with the institution?
- Does the financial institution make an in-depth assessment of my business or only look at my financial statements?
- Which financial products does my business qualify for? Are there other special financial products that are affordable and could be beneficial for my business, such as guarantee funds or additional insurance?
- How does my financial institution's offer compare to other financial institutions' offers or supplier credit?
- Have I explored all of the possible financing options to complete my investment plan and compared offers from different financial institutions and/or input suppliers?
- What are the total effective costs of borrowing for each of the offers received? Are there other fees or expenses that I must pay, such as obligatory insurance? Do I have enough information to make a comparison and informed choice between the different offers?
- Does the maturity offered match the maturity of my investment and allow me enough time to comfortably repay the loan?
- Does my financial institution offer me repayment schedule options that match my cash flow?
- Is my financial institution flexible with repayment in the event of harvest problems or natural disasters?

Useful contact information

European Fund for Southeast Europe
www.efse.lu*

European Bank for Reconstruction and Development
<http://www.ebrd.com/Ukraine>*

Export Helpdesk of the European Union
<http://exporthelp.europa.eu>*

Ministry of Economic Development and Trade of Ukraine – Foreign Economic Activity
<http://www.me.gov.ua>

The Ukrainian Chamber of Commerce and Industry
<http://www.ucci.org.ua>

**site only available in English*





Sound financial decisions are key to business success. We are confident that the advice given in this brochure, coupled with advice and support from your financial institution, will help you to make the right decisions.