

A practical guide  
for small businesses



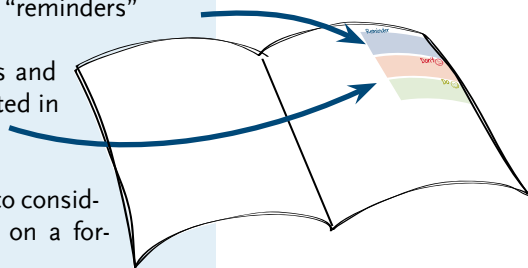
# IMPROVE YOUR FINANCING DECISIONS

**How to assess the risks and opportunities  
of borrowing in foreign currency**

This brochure provides advice, but ultimately the decisions must be taken by you. The brochure suggests: look for opportunities but don't take risks that are too high or that you do not understand.

### You will find:

- clear advice on specific measures that you can take to strengthen your business
- a rule of thumb and three simple tools that can help you to improve your financing decisions
- realistic examples that explain financing concepts and how to use the tools
- highly valuable recommendations and insights marked as “reminders”
- important 😊 do's and ☹️ don'ts highlighted in the margin
- a checklist of what to consider before deciding on a foreign currency loan



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## Which option would you choose?

Imagine you need to stock up your inventory and you have calculated that you need to borrow 100,000 Georgian lari (GEL) to do so. Your bank offers you a choice between two options: either a GEL loan at 13% annual interest rate or, alternatively, a US dollar (USD) loan at 10% annual interest rate. Both loans are repayable in 6 equal instalments over a six-month term at fixed interest rates. **Please note that you should not just compare interest rate but also all other costs and conditions of the respective loans.**

### Would you opt for the GEL loan or the USD loan?

Your entrepreneurial instinct is probably telling you to opt for the USD loan. Af-

ter all, why pay higher interest on a GEL loan? But on the other hand, you will have to repay the loan in USD and the value of the lari could fall in USD terms. The question is: can depreciation really cause much harm over such a short term? Yes, it can!

### The wrong decision could be costly and could even put the viability of your business at risk!

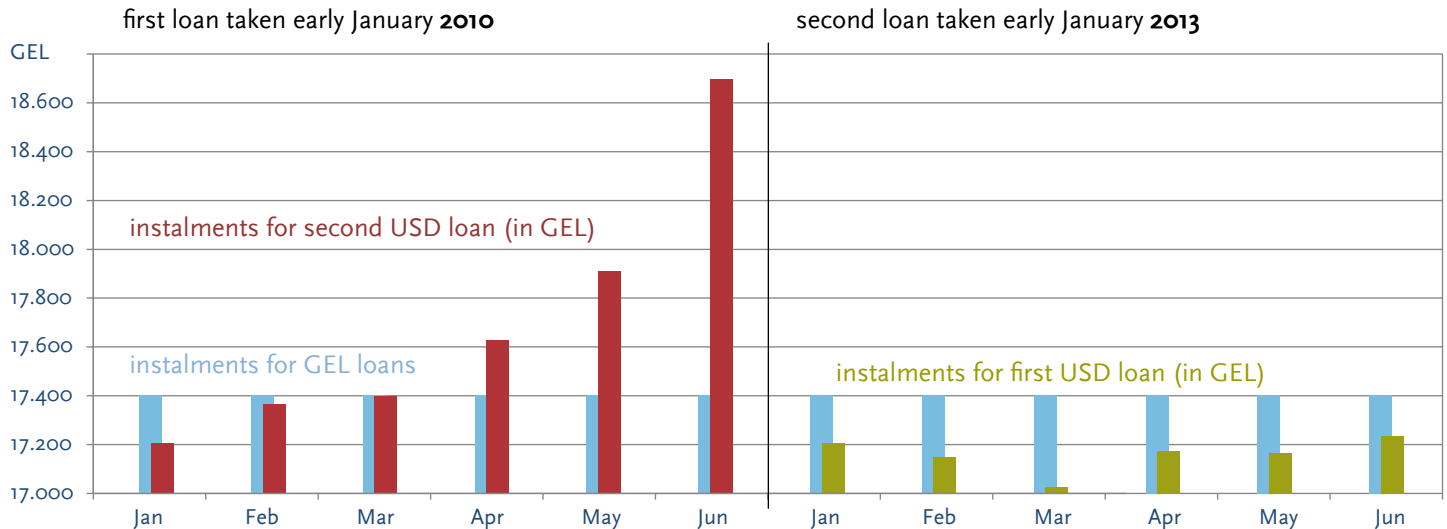
Let's look at a concrete example: If you had taken out the loan in early January 2010 and had opted for USD (annual interest rate 11%), your decision against GEL (annual interest rate 15%) would have cost you nearly GEL 1,800 more than if you had opted for a loan in your local currency.

### So should you avoid foreign currency loans altogether?

If you had taken out the same USD loan later, in early January 2013, you would have saved nearly GEL 1,500 compared to an equivalent GEL loan. Clearly, foreign currency loans not only imply risks but also offer opportunities.

This example illustrates the dilemma you are facing as an entrepreneur in Georgia. In fact, it can be even more challenging: sometimes you may only have the choice to either take out a foreign currency loan or to forgo the investment completely, for example if you want long-term financing to invest in fixed assets. In such a scenario the cost of making the wrong decision can be even higher.

### Monthly loan instalments (USD vs. GEL loans, identical loan sizes at disbursement dates)



## Essentials

If you want to improve your financing decisions, you will need to know the essentials that determine how and when you should use foreign currency loans. Let's first review the most important definitions and concepts related to foreign currency borrowing.

### **Exchange rate, depreciation, appreciation**

The exchange rate is the price you pay for foreign currency, e.g. the value of 1 USD in GEL terms. Always keep in mind that it is impossible to foresee exactly how this price will develop, especially in the short term, as exchange rates are difficult to predict! The development of the exchange rate is influenced by many factors that you cannot control, e.g. in the short-term, expectations and speculations, in the mid-term, trade balance and balance of payments and, in the long-term, economic growth/performance and inflation. A depreciation of the GEL means that the Georgian currency has lost value against the USD over time, which in turn means that you have to pay a higher amount in GEL for 1 USD than you did, for example, a few months ago. Conversely, an appreciation of the GEL means that you have to pay less GEL for 1 USD.

### **Foreign currency loan**

If you take out a foreign currency loan you have to repay this loan to your bank in the same currency, e.g. USD or the equivalent of the foreign currency in GEL. If you do not have any USD inflow (generated by your business income or from any other sources), you will have to exchange GEL

into USD on the due date at the current exchange rate set by your bank.

### **Foreign exchange (FX) risk**

Foreign exchange risk describes the extent of additional costs your business might incur because it is exposed to fluctuations in the exchange rate between the GEL and another currency. Businesses are generally exposed to two important types of foreign exchange risk: For one, you may have contracts which oblige you to pay for goods or services in foreign currency; these become more expensive if you have to convert GEL into foreign currency to pay for them and the GEL has depreciated in value against that currency. For another, the market value of your business assets may be influenced by exchange rate fluctuations.

### **Foreign borrowing risk costs**

The term "foreign borrowing risk costs" describes the additional costs of borrowing a certain amount in foreign currency (or indexed in the foreign currency) instead of borrowing the same amount in GEL. Whereas the GEL value of instalments you have to pay for a USD loan (or loan indexed in USD) will depend on fluctuations of the exchange rate, the GEL value of instalments you have to pay for a GEL loan will remain constant. The depreciation of the GEL increases your foreign borrowing risk costs. Bear in mind that exchange rate fluctuations, regardless of conversion costs you will encounter, will influence the amount of GEL you need to have at a given point in time if you borrow in foreign currency (or indexed in a foreign currency).

### **Loan conditions other than interest rate**

In any case, a borrower should always compare all loan conditions in addition to the interest rate, such as collateral requirements, any additional fees/commissions that may arise or other conditions that may influence business operations and result in costs, such as requirements to maintain a certain level of liquidity etc. In practice, often but not always, disbursement fees, withdrawal fees, and collateral requirements are similar for GEL and foreign currency loans. However, you can usually get longer maturities on foreign currency loans allowing you to pay back the borrowed money in smaller installments over a longer period, and choosing a maturity that matches the time it will take your investment to generate profits.

### **Conversion costs**

If you convert the GEL you have earned into USD in order to repay the loan, this will cost you money. This is because you will have to buy USD at the ask rate set by the bank, which is different from the bid rate at which you sold your USD for GEL when you received the loan. On any given day, the ask rate will be less advantageous than the bid rate because the bank takes a spread. In other words, you receive less USD for your GEL at the ask rate than the bank paid for your original USD at the bid rate. You will always incur these conversion costs due to this spread, regardless of any depreciation that may have occurred between receiving and repaying the loan. The only sure way to avoid conversion costs is to have sufficient inflows of cash in USD.

# Risks & Opportunities

The scales in the picture give you a clear overview of the most important risks and opportunities of foreign currency loans for your business. Don't worry if you don't understand all of the details immediately – you'll find answers to your questions further on in this brochure.

## Reminder

Exchange rates do not follow predictable trends. If your business sells to its customers mainly in GEL and pays its suppliers mainly in GEL, the GEL loan is always the safer bet. You can rule out the costs of foreign exchange risk.

Don't 

Never take out a loan in any currency that has no relevance for your business operations. This would be pure speculation!

## Risks

### Depletion of equity

If you use your foreign currency loan to buy assets whose value in GEL does not depend on the fluctuations of the FX rate (e.g. locally produced and sold furniture), your debt will be higher than the value of your assets if the GEL depreciates. This can decrease your equity!

### Business failure

Depreciation of the GEL is likely to occur at the same time as the overall economy slows down. This means that your financing costs could increase right at the time when your business income decreases.

### Liquidity constraints

The GEL value of the instalments in which you have to repay a foreign currency loan depends on exchange rate fluctuations that are unpredictable. As a result, GEL payments on your foreign currency loan may be much higher than expected and you might need to generate more GEL cash inflows to repay your loan.

### Decreasing profits

Increased foreign borrowing risk costs due to unfavourable exchange rate fluctuations can lead to decreased profitability or even losses, which in turn can trigger additional costs.

### Lower financing costs

Lower interest rates can lead to lower overall financing costs for your business.

### Better maturity matching

Foreign currency loans offer opportunities for better “maturity matching” between your assets and your liabilities. In other words, you will find it easier to match the maturity of your loan with the time it takes your investment to start generating a return, because foreign currency loans are typically available for longer terms than GEL loans.

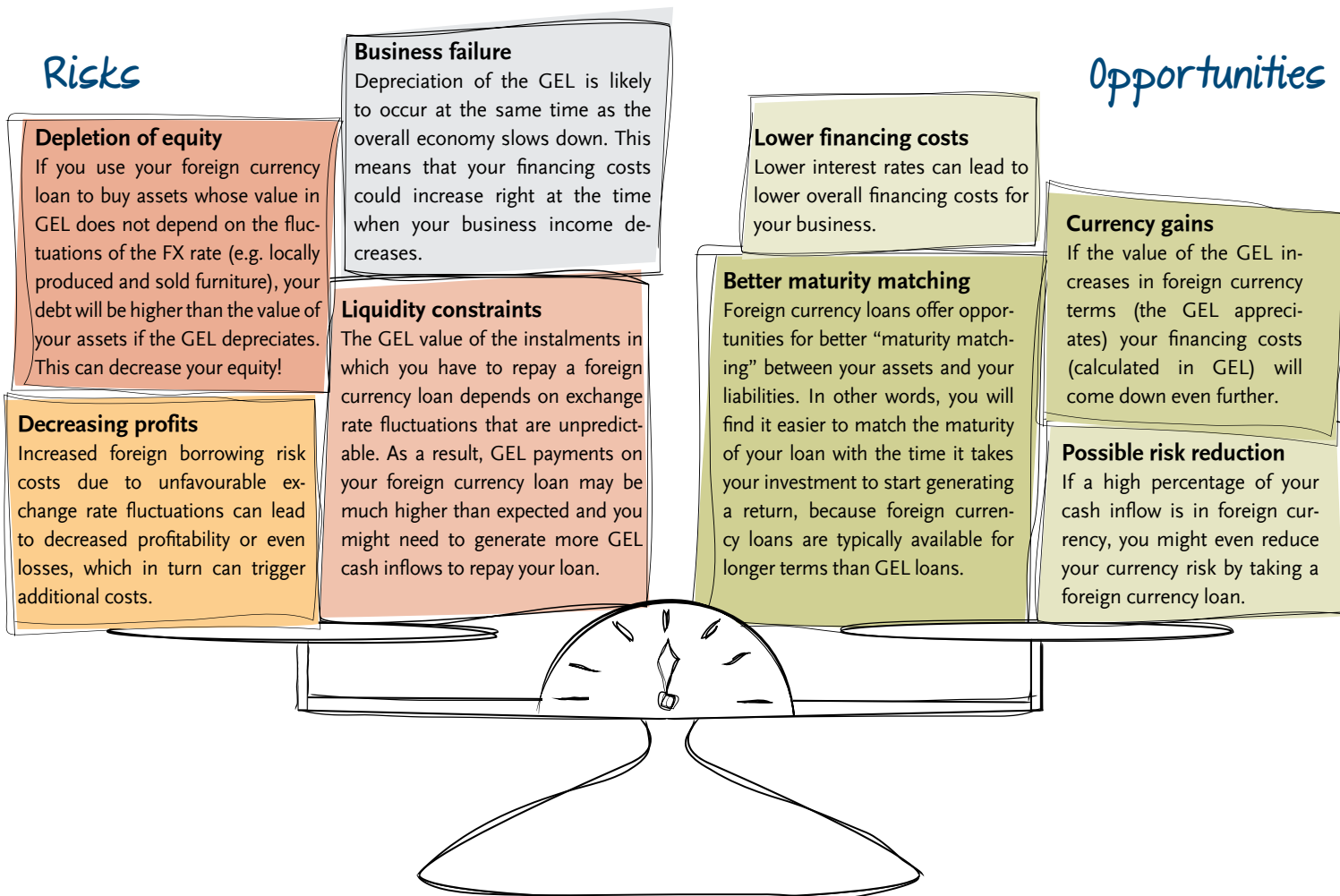
## Opportunities

### Currency gains

If the value of the GEL increases in foreign currency terms (the GEL appreciates) your financing costs (calculated in GEL) will come down even further.

### Possible risk reduction

If a high percentage of your cash inflow is in foreign currency, you might even reduce your currency risk by taking a foreign currency loan.



## How much risk can you afford to take?

How can you judge whether the risks outweigh the opportunities? – Use an easy rule of thumb and three simple tools!

There is an easy rule of thumb to tell you whether a USD loan (or a loan indexed in USD) will cost you more than a GEL loan. And there are three simple tools that can help you to calculate quickly whether taking on foreign exchange risk would threaten the viability of your business if the GEL depreciates. You should use the tools to assess the individual situation of your business at the time you consider taking out a foreign currency loan.

As general advice when you want to take out a foreign currency loan: base your business calculations always on a conservative exchange rate scenario and calculate – with the three tools - possible impacts of a GEL depreciation on:

- your business cash flow
- your company's profit and loss statement
- your company's balance sheet

Look at historic exchange rates and ask yourself: what was the highest annual GEL depreciation rate recorded during the last 5 to 10 years? Assume that the GEL will depreciate again at this rate (at least) during the term of your loan. It is impossible to know exchange rate developments exactly beforehand but you can forecast how your business situation would change if you have foreign currency debt and the GEL depreciates. There are no tools to tell you whether things will turn good or bad – so be prepared for them to turn bad!

### Rule of thumb

Start simple: A rule of thumb can tell you whether a foreign currency loan is likely to be cheaper than a GEL loan.

As we have seen, USD loans usually carry a lower interest rate, but a depreciation of the GEL can cancel out this advantage. Before you start calculating and using tools, there is an easy rule of thumb which tells you the level of GEL depreciation that would make the USD loan more expensive than the GEL loan – despite the interest rate advantage of the USD loan:

**Subtract the interest rate of the USD loan from the interest rate of the GEL loan and compare the result with your expected rate of depreciation.**

The rule of thumb is particularly effective when applied to short-term loans with bullet repayment of the principal, where the GEL depreciation hits you all at once. But it also provides a good first estimate of the impact of depreciation on USD loans which have to be repaid in instalments.



Example:

$$\begin{array}{r}
 13\% \text{ (interest on GEL loan)} \\
 - 10\% \text{ (interest on USD loan)} \\
 \hline
 = 3\%
 \end{array}$$

If you expect that the average depreciation of the GEL over the term of the loan will be higher than 3%, the USD loan will cost you more than an equivalent GEL loan.

## Impact on your cash flow

### Cash flow tool

This tool tells you: To what extend am I exposed to foreign exchange risk because I have to convert GEL into USD to repay my loan?

If you take in more cash in USD than you spend in USD (or indexed in USD) you will have USD left for paying instalments on a USD loan. The USD you earn cannot lose value against the USD you have to pay your bank. For this amount you have no foreign currency risk.

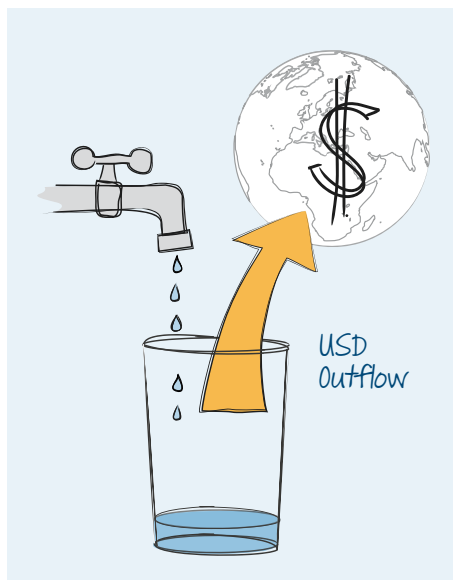
The cash flow tool can tell you whether you have enough cash in foreign currency to pay for a foreign currency loan as well as all your other liabilities in foreign currency. You just need to divide all your expected incoming and outgoing business payments for the next 12 months into the following categories:

- incoming cash in GEL
- outgoing cash in GEL
- incoming cash in foreign currency
- outgoing cash in foreign currency
- outgoing cash for instalments on new foreign currency loan

Now sum up all incoming and outgoing cash flows in GEL. Do the same for your foreign currency cash flows (or for the cash flows indexed in a foreign currency).

If the instalments on your planned USD loan plus all other USD outflows of your business

are smaller than your USD inflows, i.e. your new net monthly USD cash flow is positive, you should borrow in USD. If, on the other hand, your planned USD instalments and outflows are much higher than your USD inflows, you run a significant foreign currency risk if these USD outflows represent a significant part of your net cash flow in local currency. The more your USD inflows match your total USD outflows and the lower your net USD outflows are in relation to your net cash flow in local currency, the less foreign exchange risk you have. **If you have to convert more than 70% of your net monthly GEL cash flow into USD to pay your foreign currency liabilities when they come due, you run a high risk!**



*If your USD glass is empty, you cannot use its content for easing your worries about foreign exchange risk. Then you need sufficient liquidity in GEL.*

Don't 

Do not consider the USD loan amount disbursed on your business account as incoming USD cash flow if you convert it into GEL assets right away. Consider it as GEL inflow.

Example:

Monthly cash flow	
Cash flow in GEL	
Cash inflows in GEL	90,000
Cash outflows in GEL	70,000
Net GEL cash flow	20,000

Cash flow in USD	
Cash inflows in USD or indexed in USD	3,000
Cash outflows in USD or indexed in USD	1,000
Net USD cash flow	2,000

Additional cash outflow in USD for the new planned USD loan	8,792
New net USD cash flow	-6,792

Net USD cash flows (converted to GEL) as % of net GEL cash flow	68%
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GEL/USD exchange rate: 2.0

$$\frac{\text{New net USD cash flow} * \text{exchange rate}}{\text{Net GEL cash flow}}$$



# Impact on your profit and loss statement

## Debt service ratio tool

This tool tells you: Are my profits still sufficient to service my debt if the GEL depreciates? Will my business still be viable if things turn bad?

It is important to ensure that your business will still generate enough profit to service your bank debt, even if the GEL depreciates. Suppose the loan instalments you have to pay the bank for the USD loan (or loan indexed in USD) you took out initially amount to GEL 5,000. But then the GEL loses 20% in value against the USD and the USD instalments you have to pay now equal GEL 6,000.

What percentage of your profits will now be consumed for paying your debts? To answer this question, collect the profit & loss data for your business and do the calculation as shown in the table to the right.


In our example the profit decreases from GEL 7,500 to GEL 4,700. This means that in the case of a 20% GEL depreciation the profit level decreases by 37% and the debt service ratio increases from 67% to 105%.

If, after applying the expected depreciation rate, you find that your debt service ratio is above 100%, you should not take

out a foreign currency loan because your profits will not be sufficient to service all your debt. If the average maturity of your debt is long-term, i.e. if you have investment loans rather than working capital loans, you especially need to keep your debt-service ratio low. In fact, **we strongly recommend that you always keep your debt service ratio below 80%.**

Example:

	Profit & loss Base month	Profit & loss after GEL depreciation
Total sales	50,000	50,000
Total cost of goods sold	30,000	31,000
Imported goods	5,000	6,000
Other goods	25,000	25,000
Gross profit	20,000	19,000
Operating costs	12,500	13,300
Fuel	1,000	1,200
Rent	3,000	3,600
Other operating costs	8,500	8,500
Add. foreign borrowing risk costs	-	1,000
Profit	7,500	4,700
Debt service (instalments)	5,000	6,000
Debt service ratio	67%	105%

 **Do**  
Consider what percentage of your sales and costs is in foreign currency or indexed in foreign currency when you compute your profit & loss statement after GEL depreciation.

Additional foreign borrowing risk costs =  
 USD instalments \* FX rate after depreciation  
 - USD instalments \* current FX rate

Debt service ratio =  $\frac{\text{Debt service (instalments)}}{(\text{Profit} + \text{Add. foreign borrowing risk costs})}$



# Impact on your equity

## Balance sheet tool

This tool tells you: How much equity will I lose if the GEL depreciates?

Your equity represents the current value of your share in your company. If your company makes a loss, this has to be covered by equity, which is why having enough equity is an important risk buffer. If you have more foreign currency debt than foreign currency assets, GEL depreciation will cause your equity to decline. The bigger the difference between the value of your foreign currency debt and the value of your foreign currency assets is, the more your equity will decline if the GEL depreciates. If you have no equity left, you are overindebted and your company could go bankrupt, or at least it will not be able to borrow any more.

**You need to keep your equity at a level equivalent to at least 30% of your total assets,** and you should work out the rate of GEL depreciation that would cause it to drop below that level. To do so, draw up your balance sheet and calculate the proportion of your assets and liabilities whose value increases if the USD appreciates (“Foreign Assets” and “Foreign Liabilities”), expressed as a percentage of your total business assets. Insert these proportions, together with the proportion of the remaining assets (“Local Assets” and “Local Liabilities”) as well as your equity, into the starting balance sheet as shown in the example to the right.

## Reminder

If the price of an asset is determined by the amount of USD that a buyer is willing to pay for it, its value in GEL terms will increase in times of GEL depreciation. If this does not apply to any of your assets, then your “Foreign Assets” in the calculation will be 0%.

### Example:

Starting balance sheet			
Assets (as % of total assets)		Liabilities (as % of total assets)	
Local assets	90%	Local liabilities	5%
Foreign assets	10%	Foreign liabilities	55%
		Equity	40%
Total	100%	Total	100%

Now you’re ready to calculate whether your equity will drop below the threshold level of 30% if the GEL depreciates as you expect, for example by 20%.

Balance sheet after GEL depreciation			
Assets (as % of total assets)		Liabilities (as % of total assets)	
Local assets	90%	Local liabilities	5%
Foreign assets*(1+GEL depreciation)=	12%	Foreign liabilities*(1+GEL depreciation)=	66%
		Equity = 102% - 5% - 66%	31%
Total	102%	Total	102%



End balance sheet			
Assets (as % of total assets)		Liabilities (as % of total assets)	
Local assets = 90% / 102%	88%	Local liabilities = 5% / 102%	5%
Foreign assets = 12% / 102%	12%	Foreign liabilities = 66% / 102%	65%
		Equity	30%
Total	100%	Total	100%

In the above example the equity decreases from 40% of total assets to 30% of total assets. This means that in the event of a 20% GEL depreciation the value of the equity of our sample company decreases by 25%.

If, based on the calculation with the balance sheet tool, you find that **the expected GEL depreciation rate would cause your equity to fall below the 30% threshold or would reduce it by more than 20%, you should definitely not take out a foreign currency loan.** Your risk buffer against foreign exchange risk – your equity – is not sufficient in this case.

## Case Study I

### Impact on your cash flow

How the cash flow tool can help you to make a sound financing decision.

The cash flow tool is the first of three tools that can help you to decide on the currency in which you finance your business. Let's have a look.

Imagine that you run "Georgia Spares", a company that trades in used spare parts for cars and you're thinking about taking out a loan to stock up your inventory. Should you borrow in foreign or local currency? The business generates most of its income in GEL, but, as some items are exported to Turkey, some of its sales are in USD. Only a small percentage of the overall costs have to be paid in USD. At the end of an average month, your company has USD 2,000 more incoming USD cash than outgoing USD cash. To stock up your inventory you need a loan of GEL 200,000 and have already checked the offers available from local banks. The two best offers are as follows:

#### GEL loan (GEL 200,000)

Maturity: 12 months

Annual interest rate: 13%

or

#### USD loan (USD 100,000 – currently equivalent to GEL 200,000)

Maturity: 12 months

Annual interest rate: 10%

How will your choice affect Georgia Spares' cash flow? Does the foreign exchange risk and its possible impact on

cash flow outweigh the opportunity to save money on interest payments? **Use the cash flow tool from page 7 to answer these important questions!**

The cash flow tool summarises your average monthly GEL cash flow on the right in rows 1 to 3. Your average USD cash flow before taking out the loan is summarized in rows 4 to 6. When the monthly instalment for the USD loan is entered in row 7, the tool will compute your new monthly net USD cash flow in row 8.

If you decide to take out the USD loan, you would have a new monthly net USD cash outflow of USD 8,792. This foreign currency outflow you need to see in perspective and compare it to your net GEL cash flow (row 3). If you were to take out the USD loan, you would already have to convert 67% of the GEL you earn into USD each month on average, even if the exchange rate does not change (row 10).

#### But what if the GEL depreciates by 20%?

In this case you would have to convert as much as 82% of your monthly GEL cash flow to USD to meet your USD obligations (rows 13 + 14). That's already high risk! In a month when you have not accumulated enough money in your company accounts and you have higher-than-average outgoing GEL payments but lower-than-average incoming GEL cash, you can easily run out of liquidity.

Example:

Monthly cash flow	
<b>Cash flow in GEL</b>	
1	Cash inflows in GEL
2	Cash outflows in GEL
3	Net GEL cash flow
<b>Cash flow in USD</b>	
4	Cash inflows in USD or indexed in USD
5	Cash outflows in USD or indexed in USD
6	Net USD cash flow
7	Additional cash outflow in USD for the new planned
8	New net USD cash flow
9	Average annual GEL/USD exchange rate (current)
10	USD cash flows (current GEL equivalent) as % of net
11	Net USD cash flows as GEL equivalent (current fx rate)
<b>Scenario: GEL depreciates by 20%</b>	
12	Average annual GEL / USD exchange rate
13	USD cash flow (GEL equivalent) as % of net GEL cash
14	New net USD cash flow as GEL equivalent
15	Total cash remaining in GEL

v - with new USD loan	
	90,000
	70,000
	20,000
	3,000
	1,000
	2,000
USD loan	8,792
	-6,792
	2.0
Net GEL cash flow	68%
	-13,584
	2.4
h flow	82%
	-16,301
	3,699

In an average month, if the GEL exchange rate changes but the other factors influencing your payments do not, your total remaining cash at the end of the month in GEL equivalent will amount to GEL 3,699 (row 15). But you run a high risk of running out of liquidity in a certain month. If the GEL depreciates a little bit more, or if other factors reduce your GEL cash inflows, your company will find it very difficult to make its loan repayments on time or to obtain additional finance from a bank.

Now, let's have a look at what would happen if you took out the loan in GEL. In that case, your monthly instalment would constantly equal GEL 17,863 and your total remaining cash after a 20% GEL depreciation in an average month would amount to about GEL 6,937, or about 87% more than if you had taken out the USD loan.

In this case the viability of the company is not threatened by a tight liquidity situation. In an average month you do not need to convert any of your GEL to USD. You have monthly net cash inflows in USD and you would even profit from the GEL depreciation. If the GEL depreciates by 20%, your USD 2,000 incoming cash would be worth GEL 800 more in your local currency.

## Reminder

Although you expect the GEL to depreciate only a little, you should accept the possibility of a more disadvantageous exchange rate scenario. You need to know what would happen to your cash flow if you took out a USD loan and the GEL depreciated by 20%.



Before calculating foreign currency risks with the help of our three tools, always check the rule of thumb first to know whether the USD loan could be at all advantageous, based on your personal expectations regarding future exchange rate developments!

## ➔ Conclusion

The cash flow tool tells you, the manager of "Georgia Spares", to take out the loan in GEL! The risk associated with a USD loan clearly outweighs the opportunities it offers.

## Case Study II

### Impact on your profit and loss statement

How the debt service ratio tool can help you to make the right financing decision.

Imagine you are the owner of “Georgia Manufacturing Company”, which produces wooden furniture. You already have a full order book but not enough capacity to meet market demand. You therefore want to buy a new machine in order to take full advantage of the business opportunities. Now you have to decide whether to borrow in foreign currency or local currency to pay for the machine.

The company sells only locally and generates all its income in local currency, about GEL 50,000 per month. However, you have to pay rent for your business facilities and the landlord indexes the rent to the USD. Also, some input material has to be paid for in USD.

The new machine costs GEL 150,000, and an additional GEL 40,000 in working capital will be needed to run it. The best two offers received from local banks are as follows:

#### USD investment loan (currently equivalent to GEL 150,000)

Maturity: 60 months  
Annual interest rate: 11%

and

#### USD working capital loan (currently equivalent to GEL 40,000)

Maturity: 12 months  
Annual interest rate: 10%

or

#### GEL working capital loan (GEL 40,000)

Maturity: 12 months  
Annual interest rate: 13%

You expect the GEL to depreciate against the USD by 6% during the next year but want to know what would happen to the company’s profitability if things turned bad and the GEL were to depreciate by 20%. Would the company’s viability be in danger? **Use the debt service ratio tool from page 8!**

Assumptions for all scenarios: Instalment USD investment loan GEL 3,188 | after depreciation GEL 3,826

### Scenario I: Both investment and working capital loan in USD

As shown in the first column, the company is quite profitable and could easily pay its total debt service out of its profits, as its debt service ratio would be at healthy 69%.

The second column shows what impact a 20% depreciation of the GEL would have on the profitability of your company. Not

only the direct cost of foreign currency borrowing would drive the profits down but also the increased cost of imported goods, fuel and rent. Most alarmingly, the profit generated would not cover the total debt service of the company anymore, as the debt service ratio would suddenly increase to 106%!

Assumptions: Instalment USD working capital loan GEL 3,516 | after depreciation GEL 4,219

	Profit & loss Base month	Profit & loss after GEL depreciation
<b>Total sales</b>	<b>50,000</b>	<b>50,000</b>
<b>Total cost of goods sold</b>	<b>30,000</b>	<b>31,000</b>
Imported goods	5,000	6,000
Other goods	25,000	25,000
<b>Gross profit</b>	<b>20,000</b>	<b>19,000</b>
<b>Operating costs</b>	<b>10,500</b>	<b>11,500</b>
Fuel	1,000	1,200
Rent	4,000	4,800
Other operating costs	5,500	5,500
<b>Add. foreign borrowing risk costs</b>	<b>-</b>	<b>1,341</b>
<b>Profit</b>	<b>9,500</b>	<b>6,159</b>
Debt service (instalments)	6,704	8,045
<b>Debt service ratio</b>	<b>71%</b>	<b>107%</b>

### Reminder

The repayment of a working capital loan does not usually need to be covered out of a company’s profit but rather out of payments received only a certain time after outgoing payments have been made.

### Scenario 2: Investment loan in USD and working capital loan in GEL

If you had opted to finance your working capital needs in GEL, initially, the instalments would have been a bit higher but depreciation would have had less impact on your profitability.

The profit would decline less and your company would still be able to service all of its debts out of the profit.

Assumptions: Instalment GEL working capital loan GEL 3,573 | after depreciation GEL 3,573

	Profit & loss Base month	Profit & loss after GEL depreciation
Gross profit	20,000	19,000
Operating costs	10,500	11,500
Add. foreign borrowing risk costs	-	638
Profit	9,500	6,862
Debt service (instalments)	6,761	7,399
Debt service ratio	71%	99%

### Scenario 3: Both loans in USD, 25% of total sales in USD

Now imagine that your company sells 25% of its goods to Turkey and is paid in USD. In this case, sales levels would also go up and profit margins would not shrink as much after depreciation. Even

if you had taken out the working capital loan and the investment loan in USD, your profit and debt service ratio would remain at acceptable levels.

Assumptions: Instalment USD working capital loan GEL 3,516 | after depreciation GEL 4,219

	Profit & loss Base month	Profit & loss after GEL depreciation
Total sales	50,000	52,500
Total cost of goods sold	30,000	31,000
Gross profit	20,000	21,500
Operating costs	10,500	11,500
Add. foreign borrowing risk costs	-	1,341
Profit	9,500	8,659
Debt service (instalments)	6,704	8,045
Debt service ratio	71%	80%

### Reminder

Foreign currency income is an important foreign exchange risk buffer, also for your profit & loss situation.

If a company is confident that it can raise its prices quickly to reflect increased costs, it has a risk buffer. However, don't forget that other factors can aggravate the decline in profitability. For example, in times of sharp currency depreciation it is quite probable that the overall economy will slow down and sales levels will decline.

### → Conclusion

The debt service ratio tool tells you that local currency depreciation will drive down the profitability of the business significantly. A prudent entrepreneur with no foreign currency income and an average appetite for risk would choose GEL, at least for the working capital loan.

## Case Study III

### Impact on your equity

How the balance sheet tool can help you to make the right financing decision.

If you want to know whether your balance sheet structure allows you to consider taking advantage of the lower interest rate charged on a USD loan, have a look at the balance sheet tool.

Your company, “Georgian Bakery”, currently has a balance sheet total of GEL 325,000. Its inventory is worth GEL 65,000. Assets include some cash in GEL accounts, accounts receivable, inventory and some old equipment and machinery whose value is not measured in USD. You have current liabilities for GEL 65,000.

You plan to buy a used van to deliver pastries to clients living in a neighbouring village. The overall costs would amount to GEL 175,000. Your local bank offers you the following loans:

#### GEL investment loan (GEL 175,000)

Maturity: 60 months

Annual interest rate: 13%

or

#### USD investment loan

(currently equivalent to GEL 175,000)

Maturity: 60 months

Annual interest rate: 10%

### Initial situation

Starting balance sheet					
Assets (in `000 GEL)			Liabilities (in `000 GEL)		
Local assets	325	100%	Local liabilities	65	20%
Foreign assets	-	0%	Foreign liabilities	50	15%
			Equity	210	65%
Total	325	100%	Total	325	100%

How can you assess the effect of the two options on your equity, assuming the GEL depreciates by 20% after you take out the loan? **Use the balance sheet tool from page 9!**

### Scenario I: Loan in USD

If you took out the loan in USD, local assets and foreign liabilities in your balance sheet would increase by GEL 175,000 to GEL 500,000 and GEL 225,000, respectively. Under the conservative assumption of an unfavourable exchange rate scenario in which the GEL rapidly loses 20% in value against the USD, your balance sheet would look like the one below:

Balance sheet after USD loan disbursement and GEL depreciation					
Assets (in `000 GEL)			Liabilities (in `000 GEL)		
Local assets	$325 + 175 = 500$	100%	Local liabilities	65	13%
Foreign assets	-	0%	Foreign liabilities	$(50 + 175) * 120\% = 270$	54%
			Equity	165	33%
Total	500	100%	Total	500	100%

The GEL value of your foreign liabilities would increase by 20% to GEL 270,000 and your equity would fall from GEL 210,000 to GEL 165,000, which translates into a depletion of your equity by more than 20%. In relation to your balance sheet total, your foreign liabilities would increase to 54% and your equity level would fall to 33%. This is critical because your local banks might refuse to provide you with any more finance in the future with an equity level below 30%. At the very least, your borrowing costs would increase. All in all, you could not afford to take such a high risk!

## Scenario 2: Loan in GEL

If you financed your investments with a GEL loan, you would not run the risk of severe equity depletion even if the GEL depreciated sharply. Local assets and local liabilities would increase by GEL 175,000 to GEL 500,000 and GEL 240,000, respectively. After the GEL had depreciated by 20% your foreign liabilities would increase from GEL 50,000 to GEL 60,000. This would lower your equity from GEL 210,000 to GEL 200,000, corresponding to an equity level of acceptable 40%:

End balance sheet after GEL depreciation					
Assets (in `000 GEL)			Liabilities (in `000 GEL)		
Local assets	$325 + 175 = 500$	100%	Local liabilities	$65 + 175 = 240$	48%
Foreign assets	-	0%	Foreign liabilities	$50 * 120\% = 60$	12%
			Equity	200	40%
Total	500	100%	Total	500	100%

**Our case studies are based on assumptions – the reality can be different!**

### Exchange rate

The assumed exchange rate for all our examples is GEL/USD 2.0. At the time you read this brochure the exchange rate may be different.

### Ceteris paribus assumption

The examples presented have been developed in consultation with Georgian banks and reflect real businesses. In these scenarios we have only looked at one factor: the exchange rate. Keep in mind, however, that many other factors might also vary in the real world.

### Correlation of depreciation and economic cycle

The GEL tends to depreciate at the same times when the economic cycle of Georgia hits a low. If you have debts in USD in such a situation you run a double risk that is not reflected in the examples. The cost of your debt service in GEL terms increases and at the same time your sales might go down. You will not be protected against this double risk unless you can easily charge your clients higher prices when the USD goes up or unless your clients are based in a foreign country and buy more from you if the GEL value declines.

## Reminder

If you want to borrow in foreign currency you need an equity risk buffer. As a rule, if a possible depreciation of the GEL would cause your equity to decline by more than 20% or your equity ratio to fall below the critical value of 30%, then do not borrow in foreign currency.

There are risks and opportunities! Before you decide which currency to borrow in, you need to understand your risk exposure and determine the impact of foreign borrowing risk costs in the event that things turn bad.

## Conclusion

**Conclusion: The balance sheet tool tells you that it is quite risky to finance in USD if your foreign currency liabilities are not largely offset by foreign currency assets. However, if you were the manager of “Georgian Bakery” you might still be willing to take the risk.**

### Payment schedules

Most examples in the brochure are based on payment plans with monthly instalments. Other payment schedules could lower the risk costs of foreign borrowing, but they could also raise such costs.

### Variable rates

A USD loan becomes even riskier if the interest rate is not fixed but variable. If the benchmark rate (generally, USD LIBOR) goes up, your interest rate advantage against the GEL will decline. And you will still bear the foreign exchange risk.



## Build your own tools!

You have seen how important it is to make an informed decision on the currency in which you borrow money from the banks! And you have seen that decision making can be improved by three easy-to-handle tools. So do not hesitate to use the tools for your business planning and financing decisions. It's not difficult to personalize them!

Go to the EFSE website and download your set of sample tools:

<http://www.efse.lu/studies-publications/publications/>



or visit the Consumer Protection website of the National Bank of Georgia:  
<http://www.nbg.gov.ge/cp/>

If you have a spreadsheet calculation software installed on your computer you can easily open the spread-sheet tool templates. Fill the tools with your own business data and your own assumptions.

You can also personalise the tools according to your needs!

Here are some basic instructions on how to use the template spreadsheet tools (the instructions below refer to Microsoft Excel 2010 but the basic spreadsheet features you need to use are similar for the most commonly used spreadsheet tools):

## The typical set-up of a spreadsheet interface:

**Name Box**  
The name box displays the cell reference or the name of the active cell.

**Column Letters**  
Columns run vertically on a worksheet and each one is identified by a letter in the column header.

**Row Numbers**  
Rows run horizontally in a worksheet and are identified by a number in the row header.

**Active Cell**  
You can recognize the active cell by its black outline. Data is always entered into the active cell. Different cells can be made active by clicking on them with the mouse or by using the arrow keys on the keyboard.

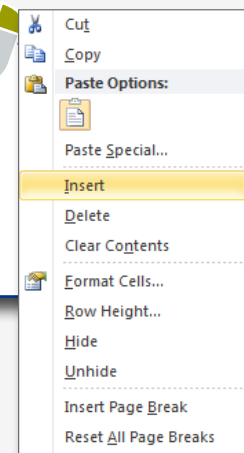
Assumptions		Profit & loss statement	
8	Monthly instalments of all USD loans before depreciation	Total sales	
9	2.500 USD = 5.000 GEL	Sales in local currency	
10	Monthly instalments of all USD loans after depreciation	Sales in foreign currency	
11	6.000 GEL	Total cost of goods sold	
12	Monthly instalments of all GEL loans	Imported goods	
13	0 GEL	Other goods	
14	Average annual GEL / USD exchange rate (current)	Gross profit	
15	2,0	Operating costs	
16	Assumed depreciation of GEL	Fuel	
17	20%	Rent	
		Other operating costs indexed in foreign currency	
		Other non-indexed operating costs	
		Add. foreign borrowing risk costs	
		Profit	
		Debt service (instalments)	
		Debt service ratio	



Base month	After GEL depreciation
50.000 GEL	50.000 GEL
50.000 GEL	50.000 GEL
0 GEL	0 GEL
30.000 GEL	31.000 GEL
5.000 GEL	6.000 GEL
25.000 GEL	25.000 GEL
20.000 GEL	19.000 GEL
12.500 GEL	13.300 GEL
1.000 GEL	1.200 GEL
3.000 GEL	3.600 GEL
0 GEL	0 GEL
8.500 GEL	8.500 GEL
0 GEL	1.000 GEL
7.500 GEL	4.700 GEL
5.000 GEL	6.000 GEL
67%	105%

### How can you insert a new column or row?

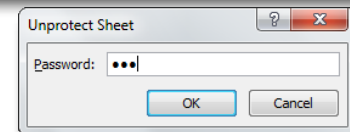
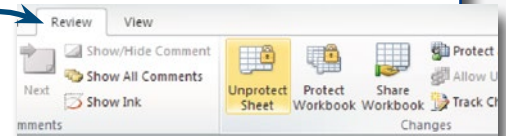
1. Right click on the column/row header above the location where the new column/row is to be inserted to open the right-click menu.
2. Choose insert from the menu.
3. The new column/row will be inserted to the left/above of the selected column.



### How can you unlock and lock the password protected template tools?

The tools you can download offer you the possibility to enter your data in the light blue cells. All the other cells are locked to prevent the user from accidentally overwriting important formulas. However, you can easily lock/unlock specific cells in your spreadsheet.

1. Click on the “Review” tab in the menu bar.
2. Click on “Unprotect sheet”
3. In the pop-up menu that will appear, enter “FXChange”.



4. Click on “Protect sheet”
5. Enter a password of your own choice.

**All formula cells in the template tools should be locked to prevent operational errors!**

### Cell References

Together a column letter and a row number create a cell reference. Each cell in the worksheet can be identified by this combination of letters and numbers such as A1 or F4.

## Make professional financing decisions

Whether your business needs short-term working capital finance or a longer-term investment loan, there will probably be many occasions when you will have to decide which currency to borrow in.

You now know how the rule of thumb and the three simple tools described in this booklet can help you to improve your financing decisions by managing foreign exchange risk prudently.

Now, let's have a look at all the steps you have to take in order to come to a sound financing decision:

### Professional financing decision-making in five steps



## Don't forget to ask your bank

Finally, we believe that your bank should not only offer you loans but should also provide you with useful advice. Below you will find a list of important questions that you should discuss with your bank before making your financing decision.

### General bank approach to foreign currency lending

- What does the bank think about small businesses borrowing in foreign currency?
- Does my company qualify for the desired loan in foreign currency?
- What criteria does the bank apply when assessing who can take out loans in foreign currency?

### Terms and conditions

- How do terms and conditions compare between local currency loans and foreign currency loans?
- What are the interest rates, other additional costs and maturities offered?
- Are there any fees that apply especially to foreign currency loans?
- Do the local currency loans and foreign currency loans offered by the bank differ in any other respects, e.g. collateral conditions?

### Repayment in foreign currency

- Can I always buy the foreign currency I need to repay my loan?
- How does the bank set its ask rate?

### Protection against depreciation of the local currency

- If I opt for a foreign currency loan, what additional advice or financial products does the bank offer to mitigate my foreign exchange risk?

### Conversion of the loan

- Is it possible to convert the foreign exchange loan into a local currency loan?
- What are the related costs?

### Step 4:

#### Apply the three tools

Use the three tools described in this booklet to identify your risk profile and determine the extent to which the foreign exchange risk associated with a USD loan could harm your business if things turn bad. The tools will help you to assess the potential impact of a foreign currency loan on your cash flow, your profit and loss statements and your balance sheet.

### Step 5:

#### Judge and choose

The tools can show you the most prudent choice of currency. However, the final decision rests with you, the entrepreneur. On the basis of the calculations you have done with the tools, it is up to you to decide which currency, or mix of currencies, you should borrow in.



Sound financing decisions are key to business success, and one of the main challenges is to manage foreign exchange risks professionally.

We are confident that the information given in this booklet, coupled with information and support from your bank, will help you to make the right choices.

