

1 Introduction

1.1 First Things First

First and foremost, the spreadsheet file named *Finances-2019.ods* is free. The file is intended to help you to track and budget your finances, or rather, cash. It is to be understood as a tool for managing your household's books and savings.¹ It is, in a sense, all about book-keeping. How much money is coming in, how much is going out and knowing where it is going.

Should you choose to use the sheets for budgeting your expenses and income, you will be able to budget your cash, e.g. for allocating a certain amount for spending on groceries each month, or on a single item (or 3) you intend to purchase in a few months (or more).

It does neither get automatically updated, nor does it receive or send data from any banking service, website or other kind of service. It relies on you to enter data.

Finances.ods was created in LibreOffice's spreadsheet program named *Calc*, hence I strongly suggest you use it when working with this file.

I have used this file and its countless previous iterations for roughly 4–5 years now and would like to share it. I am not saying it is perfect and/or free of bugs, but I think I have maintained, updated and improved it quite a lot over the last few years so I am putting it online. Nevertheless, it is provided to you as-is.

1.2 What Does It Not Do?

Finances.ods was *not* engineered to analyze different offers for portfolio calculations from different broker firms, modeling possible pension plans with regards to tax optimization or buying and selling stocks by implementing some financial key performance indicators.

1.3 Basic Understandings

1.3.1 Core Concepts

The “core concepts”, or rather, “principles” are as follows:

- **Data Entry:**
You will need to enter data for the use of this file. Or rather: for this file to have a purpose, you need to enter data into the *tracking sheets*, which are sheets that exist just to document you the amounts you spend and earn/receive. Please do so diligently and thoroughly.
- **Frequency:**
My advice is to update the file at least every 2 weeks. It might take an hour or two then. At the end of each month, please go through your monthly bank statement line-by-line and check if all lines were documented correctly.
- **Human Error:**
You are human. It is inherently impossible to not make an error. (Unless you don't, which would be weird because you probably are not human.) Do not get upset if you lost a receipt or forgot to write down a note with the exact price/amount of a purchase, activity or whatever.² The best course of action then is to enter a rough estimation.

¹From here on forth, whenever *file* or *Finances.ods* is mentioned or referenced, it shall be interpreted synonymous with *Finances-2019.ods* or whichever year is written down.

²This type of error is irreversible, unlike typos or logical errors within the file, e.g. a wrong cell reference, incomplete sum and so forth.

That is good enough and considerably better than to enter nothing.

- **The Drift:**

An inevitable occurrence when using the file is what I like to call *the drift*. It is a fancy term for the direct consequences of the human error (it most definitely is a human error that causes it, i.e. an error within the file, and not a banking error). With time, you will undoubtedly notice a difference between the cash you have based on your file vs. the real-world amount. Accept it because otherwise you are fighting a fight you cannot win. To offset the drift, enter values in the *drift cells* in the *Overview* sheet.

With the best intention at heart, I can only ask you to accept and follow these principles.

1.3.2 Implications

With subsection 1.3.1 in mind, let us talk about what it actually means to work with *Finances.ods*. For that, please read this list of important statements:

- You need to work with LibreOffice Calc.³
- You need to enter data into spreadsheet files.
- For that you need to collect receipts. In case you did not receive a receipt, you might need to write down (whether digitally or on paper) what you spent. This might be mitigated with the next point.
- You need to remember what you spent in case you neither received a receipt, nor made a note of it or were unable to.
- You do not expect the file to somehow conjure up awesome graphs and diagrams with great insights on its own. Well, through its formulas it does in fact possess some slim amount of intelligence, but it is based on data *you* entered.
- In case you would like to *edit* some formulas in the file, you would obviously need to learn about editing spreadsheet files with Calc and understand how exactly the calculations work.
- You are ok with facing numbers about your spending head-on.
- You have the discipline that is required to manage *Finances.ods*.

All the aforementioned bullet points entail important aspects which describe the use of the file. If multiple points in the list represent something negative for you, I strongly suggest that you might find it more pleasant to use another program or app for managing your cash/finances overall.⁴

In case you intend to use *Finances.ods* for managing finances of more than one person, I suppose all persons involved have to understand the points outlined above.

1.4 Motivation and A Little Bit of History

Originally, I only used *Finances.ods* to track my cash spending, i.e. what I spent on groceries, how much money I spent on eating out, clothing and so forth. Over time, I started to add sections for tracking more and other kinds of categories. It grew into something that is possibly invaluable in my day-to-day life nowadays, yet perhaps there are still some errors I have not

³Unless you use the file with Excel, that is. However I do not own Excel and really like Calc's capabilities as free software. More on that topic in subsection 6.3, p. 4.

⁴You could then perhaps take a look at the tools page of the Personal Finance-subreddit:
<https://www.reddit.com/r/personalfinance/wiki/tools>.

found so far or features that are missing or I have not thought of.

I created the file because I checked the landscape of budgeting software several years ago and found that I do not want to pay for managing my own finances. And everything that was available did not quite interest me enough to full use it. I was sure that with enough time and an eye for detail, one could build a tool for tracking his/her own finances. And with even more time, coffee and bite to test things, one could build some sort of formula/algorithm to expand the file's capabilities. Well, you will find that there are lot of like-minded people sharing their knowledge and—for the lack of a better term—product in places such as the */r/personalfinance*-subreddit and similar platforms.

The second reason was concern for privacy. Not only is it my motivation to create something, but also because I want to understand what I am putting my personal finances into. And on top of that I always want to know that I can limit the scope of risk and exposure. More on that topic is mentioned in subsubsection 2.1.2, p. 2.

I think *Finances.ods* benefits from putting it online and reaching more people. Ultimately, I share the file because I hope for a win-win outcome. First of, this file might help others. Secondly, I would like to receive feedback and suggestions. If you are interested in that, you can jump to section 7 on p. 4.

2 First Steps

2.1 Introducing LibreOffice Calc

LibreOffice is a free office suite and great software.⁵ You can download it on the official download page of course.

Per its official website:

Calc is the free spreadsheet program you've always needed. Newcomers find it intuitive and easy to learn, while professional data miners and number crunchers appreciate the comprehensive range of advanced functions. Built-in wizards guide you through choosing and using a comprehensive range of advanced features. Or you can download templates from the LibreOffice template repository, for ready-made spreadsheet solutions.

Now before I elaborate on some key aspects I regard as crucial, here are the most important links for finding proper help on LibreOffice Calc:

- The Official Documentation is really great.
- But even better is the *Getting Started* guide, which was released for LibreOffice 6. Please start with pages 1–14, which are important overall, but especially for Mac users. The actual good stuff is the section for Calc, which starts on page 118. By the way, you can quickly jump to that page with the shortcut **Ctrl** + **N** in Adobe Reader. In Evince, use **Ctrl** + **L**.
- For the sake of thoroughness, here are 2 links for some up-and-coming search machine: Google and the awesome DuckDuckGo.

Here are some suggestions for first steps if you intend to follow through with learning how to work with LibreOffice Calc. The most important bit beforehand: you can relax a bit. LibreOffice Calc is not so different from Excel. To properly work with *Finances.ods*, you should learn about *cell templates* and the *navigator*.

- Cell style templates are the core properties of formatting the whole thing. Without them, one would have go crazy when editing *Finances.ods*. The templates can be found in the stylist (press **F5** for that), which enable you to make fast changes to the look (format-wise) of the file.
- The navigator enables you to navigate arguably fast between the sheets if you do not use keyboard shortcuts. It not only lists all visible sheets in the file, but also all other kinds of elements that can be found in it.
- For the case of editing formulas and/or copying/replacing cells in bulk, look at keyboard shortcuts on page 129 in *Getting Started*. They are arguably identical to the ones you might be familiar with in Excel. For example, if you would like select the block of cells to the right of the current cell, use the shortcut **Shift** + **Ctrl** + **→**. Then just hit **Enter**.

2.1.1 Synchronization

Simply save the file in a folder that belongs to the folder which get synchronized with Dropbox(-like) software.

2.1.2 Security

For securing the file, use the password-protection when you save it. For more guidance on that, please consult the *Getting Started* guide, page 30. Do not lose the password because if you do, you cannot open it again!

2.2 The Start

As you first open *Finances.ods*, you should navigate sheet called *Introduction* is the first one you'll find at the beginning of the file. If not, please navigate to it. For this, please either open the navigator by pressing **F5** (this is a toggle operation, pressing **F5** again will close it) or click on View above in the task bar and then on Navigator.

As its name declares, it features an overview of several things:

- First of, on top there are the the budget headers for the month before the current month, the current months and the two consecutive ones.

3 Tracking

Clearly the most riveting part of the guide. This insanely complex topic can be summed up with: *do the damn tracking*.

There are *tracking sheets* for entering data on your expenses and income. These sheets simply contain data which is to be put into 3 columns:

- Date: You may use any format, but I strongly suggest using YYYY-MM-DD based on the international standard ISO 8601.
- Description: Put anything in here, e.g. Name-of-Supermarkt, Something Street
- Amount: The amount

The following subsection contain some tips/advice guidance on how to approach the tracking.

3.1 Receipts and Documentation

Collect your receipts, bills, notes and whatever you have that documents the amounts you paid (not: liabilities you will have to

⁵See <https://www.libreoffice.org/discover/libreoffice/>.

pay in the future).⁶ As soon as you worked through a receipt and split up its content into your spending categories, mark it or throw it away instantly. If you think that you might need the receipt in the future, say for tax purposes or for possibly returning the item, maybe put them in another kind of documentation envelope/folder.

3.2 Workload

In a way, entering all the data could be interpreted at work. In my experience, I am content with updating Finances.ods once a week. Of course it would still work fine to update it every 2, 3 or 4 weeks as well.

3.3 Categories and Splitting Receipts

A good structure of categories for tracking is the key to a good overlook and analysis of your finances. I suggest to split up your spending into as many categories as possible. You will find a But again, do what works for you!

When I shopped at a store where I bought multiple kinds of various items, I would split the bill, proverbially speaking. I divide the amounts spent in different categories among the respective tracking sheets for these categories and name the entries accordingly.

An example: I spent a total amount of 30 Euros at Aldi. I bought groceries and supplies for the household. Then this could be an entry in the sheet for groceries.

Groceries

Date	Description	Amount
2018-06-01	Aldi tot. 30	18.00

The remainder of $30 - 18 = 12.00$ Euros is to be billed to any other category, in this case Household & Bath Supplies. So again you go the relevant sheet and enter the data accordingly:

Household & Bath Supplies

Date	Description	Amount
2018-06-01	Aldi tot. 30	12

4 Budgeting

A short primer on budgeting:

The process or definition of budgeting is the act of creating a plan to spend your money. Creating this spending plan allows you to determine in advance whether you will have enough money to do the things you need to do or would like to do.⁷

A budget will help you plan for short-term expenses such as your monthly bills; mid-term expenses such as vacations; and long-term expenses such as buying a house, paying for a child's college education or putting away money for retirement. When you have an app, spreadsheet or notebook in front of you showing how much money you expect to make over the one month, six months, one year or five years — and how much of that money will be flowing out and how much you will have left to save each month — you'll always know when you need to cut back on spending, when you can afford to loosen the reins and how long it will take to save for major goals or pay off debts. If you're not happy with the numbers, knowing what they are will help you take steps to improve your situation. These steps

might include paying off credit cards to increase your monthly cash flow; reducing your food expenses; or getting a promotion, switching companies, starting a side hustle or founding your own full-time business to make more money.⁸

As mentioned in subsection 1.1, if you like to budget your income and expenses, you need to use the budgeting sheets for this. It is possible to create lots of different budget items which essentially represent either incoming or outgoing cash flows. In other words, you can budget practically any kind of cash flow, regardless if you expect it to receive or spend any cash amount in the future.

4.1 Budgeting for Expenses

Here are the steps you take to budget for an expense item. Note: their order does not matter, just that you do *all* of them.

1. Fill in its description or just name it.
2. Enter the amount.
3. Enter the month you want to start budgeting for it.
4. Enter the month

4.2 Budgeting for Income

There is nothing new to explain here. Simply go to the budgeting sheet for

4.3 Advice for Using Budgeting Sheets

4.4 Different Dates in Real Life

- If you bought an item *earlier* than you planned, backdate said item! Otherwise the budget will penalize you in the month it was dated for purchase and you will have made a huge minus in the month you actually purchases it.
- If you forgot to purchase

4.5 Total Deviation of Budget Categories

- In general, the budget categories get summed and lumped together each month.
- One could argue that the budget categories should be
- Dealing with (delayed) deviations can result in a double-edged sword:
 - On one hand, it feels kind of "good" to have a surplus for a budget item.
... in case this happens often, this item is clearly budgeted
 - On the other hand,
 - ... wrong.

5 Miscellaneous bits and possible features

5.1 Prepare the next year

- Come December 31, the very last TODO-point on your list should be to write down the last pieces of information in regards to the last day of the year. So literally write down 2016-12-31 into any cell that prints today's date, e. g. in the *Budget*.

⁶Maybe collect them in a shoebox, an envelope or in a plastic pocket.

⁷Cp. <https://www.mymoneycoach.ca/budgeting/>.

⁸From <https://www.investopedia.com/university/budgeting/basics1.asp>.

- Otherwise the next time you open that file later than December 31 of that year, the cell that prints today's date will obviously be the date of that day. Hence January of the next year or the years to come perhaps.
- Proceed in an analogical fashion for every cell that prints
- Otherwise all the budget-sheets which feature formulas based on the current month and/or date are faulty. Or rather, they do not show values which make sense and/or are coherent.
-
- Is there something missing?
- Is there something wrong?
- Is something not working (as intended)?
- Is something really good?

6 Roadmap

Roadmap might be a strong word. At this stage, something like *loose thoughts for future features and enhancements* might be a more appropriate phrase. Obviously, everything about the roadmap is contingent on the demand and support for them. You can find the biggest 3 thoughts below.

6.1 Translations

Translating Finances.ods is incredibly time-consuming, as every single word has to be manipulated. It is especially tiresome in regards to manipulating formulas and their (text) results.

I would certainly welcome any contribution! :)

6.2 Additional Features or Changes

Whether integrating additional features in entirely new sheets or in an existing one or changing something in regards to optimization, I welcome it. This would be great and—as outlined in subsection 1.4—is one of the key factors for putting this online.

6.3 Excel

I am aware of Excel being the de facto standard in the industry. In terms of productivity software, its reach is possibly unparalleled. Although I am arguably highly proficient in Excel and am very capable of writing macros (which I do at work sometimes), I personally do not own Excel in its current version (whatever exactly that is nowadays).

However I have reached a point where I am happy with Calc alone. I see no reason why I should buy Excel. Ever since I created Finances.ods, I of course had doubts if it was the right thing to do it all in LibreOffice Calc. Well, yes, it was. The catch is: personally, I prefer playing around in free software, especially when I manage to reach the same goal with zero or negligible differences in effort. Therefore, at this time, I do not think it is feasible for me to somehow port the file to Excel as it might be more complex than just saving the file as `.xlsx`.⁹

If I were to own a current Excel version at some point, one of the first porting steps would definitely be to use macros to automate lots of kinds of tasks and then publish Finances.ods as an Excel file as well. One thing I can say is that I am (slowly) learning Python. When I become proficient enough, I am going to use it for the aforementioned automation tasks.

7 Feedback

I welcome any feedback, but of course the best kind would be *specific* feedback.

⁹But if you want to, go ahead and please give me feedback!