# Digital Personal Investing

# Methodology

Draft version 04.05.2022





# Table of Contents

1. IN	TRODUCTION	3		
1.1.	What is Digiperin?	3		
1.2.	Summary of research	3		
1.3.	Structure of methodology paper	4		
2. FI	NTECH	4		
3. PE	RSONAL FINANCIAL MANAGEMENT	5		
4. PE	RSONAL DIGITAL COMPETENCIES	7		
4.1.	Technical competences for the digital investing	8		
4.2.	Digital resources	9		
5. DI	GITAL INVESTMENT TARGETS	10		
5.1.	Stocks	10		
5.2.	Cryptocurrencies	13		
5.3.	Forex trading (currencies)	16		
5.4.	4. Investment funds19			
5.5.	Bonds (company and state)	22		
5.6.	Commodities	26		
5.7.	Crowdfunding or Peer to peer lending	30		
5.7	7.1. Crowdfunding	30		
5.7	2.2. Peer to peer lending	34		
5.8.	Voluntary pension insurance & long-term pension savings	37		
5.9.	Forests	40		
6. DI	GITAL INVESTING PLAN	45		
6.1.	How to choose investing targets?	45		
6.2.	Exercise: Create your own plan!	54		
7. CU	JRRICULUM	56		
8. VC	DCABULARY OF TERMS	56		
9. Re	9. Resources 57			

# **1. INTRODUCTION**

# 1.1. What is Digiperin?

Digital economy era make a new challenge for individuals responsibility in personal financial planning. Individuals will need to have higher level financial sophistication to make effective use of financial products and services and avoid fraud and costly mistakes. Digiperin – abbreviation of Nordplus project – "*Digital personal investing: available to anyone*".

Nordplus Adult 2020 collaboration project "*Digital personal investing: available to anyone*" (NPHZ-2015/10009) the main aim is to develop personal digital investing skills through greater digital personal financial management competencies.

Project partners / authors:

- Klaipeda State University of Applied Sciences (Lithuania), Eglė Hidri, Sabina Jurkaitienė, Audrone Meškelienė, Aurelija Zonienė
  - o <u>https://www.kvk.lt/</u>
- Anmiro Oy (Finland), Jukka Kallio, Oili Niittynen
  - o <u>https://www.anmiro.net/</u>
- Art Smart Ltd (Latvia), Juris Riekstins, Marija Grinavica

   https://www.art-smart.eu/

# **1.2. Summary of research**

As mobile payment tools and FinTech become more popular among consumers, it is increasingly urgent to understand how technological change affects financial behavior and indeed consumer vulnerability.

Citizens who use mobile payments are at greater risk in terms of their financial wellbeing. This result demonstrates that the digital availability of financial services needs to be accompanied by greater financial management skills. There is a need of being aware of the existence of non-traditional financial products and services provided through digital means and related to possibility to manage individuals' own savings and investing for a better future. For this reason, *Digiperin* conducted research on the most popular digital investment instruments for individuals in Lithuania, Latvia and Finland.

The research revealed that the most popular digital personal investment instruments are stocks, cryptocurrencies, forex trading (currencies), investment funds, bonds (company and state), crowdfunding, commodities, voluntary pension insurance & long-term pension savings and forests. There was identified their advantages, disadvantages, similarities and differences in the Baltic (Lithuania and Latvia) and Nordic (Finland) countries.

These examples of digital personal investment opportunities are explored and integrated into this methodology. *Digiperin* expects that this methodology will encourage individuals to start digital investing and introduce advanced investors to the possibilities of diversifying their digital investment portfolio.

# **1.3. Structure of methodology paper**

The methodology consists of an Introduction, six chapters, Curriculum, Vocabulary of Terms and References.

Chapter 2 presented FinTech aim, definition and understanding.

Chapter 3 presented Personal Financial Management – five main levels for making financial investments.

In Chapter 4 there are described two essential components – technical (digital) competences and the material resources that the individual requires for the investing that must be evaluated in order to begin digital investing.

Chapter 5 presented digital investment targets: stocks, cryptocurrencies, forex trading (currencies), investment funds, bonds, peer to peer lending, commodities, crowdfunding pension funds, forests. Each tool is describing here, indicating the potential risk of investing, the main steps of investing, is presented list of active operators in Finland, Latvia and Lithuania.

In Chapter 6 there is provide digital investing plan, the steps which will help to make wise financial decisions.

The references in each chapter will provide a search opportunity to study the questions You want in more detail. The term vocabulary at the end of the methodological tool will make it simpler to recognize each term and to understand them all at the same time.

# 2. FINTECH

Fintech (Financial technology) can be defined as being computer programs and other technology used to support or enable banking and financial services. The FinTech aim is to compete with traditional financing methods in the provision of financial services. It is an emerging industry that uses technology to improve financing<sup>1</sup>.

In March 2018, the European Commission adopted an action plan on FinTech to foster a more competitive and innovative European financial sector. The action plan sets out 19 steps that the Commission intends to take to:

- Enable innovative business models to scale up at EU level;
- Support the uptake of new technologies such as blockchain, artificial intelligence and cloud services in the financial sector;
- Increase cybersecurity and the integrity of the financial system.

Most notably, European Commission speaks about digital financing which can be seen to be a synonym for Fintech. Digital finance is the term used to describe the impact of new technologies on the financial services industry. It includes a variety of products, applications, processes, and business models that have transformed the traditional way of providing banking and financial services.<sup>2</sup>

While technological innovation in finance is not new, investment in new technologies has substantially increased in recent years and the pace of innovation is exponential. We now interact with our bank using mobile technology. We make payments, transfer money and make investments using a variety of new tools that were not there few years ago. Artificial

<sup>&</sup>lt;sup>1</sup>There are a growing number of universities which offer graduate studies in FinTech see e.g., https://www.masterstudies.com/Masters-Degree/Fintech/Europe/

<sup>&</sup>lt;sup>2</sup>https://ec.europa.eu/info/business-economy-euro/banking-and-finance/digital-finance\_en

intelligence, social networks, machine learning, mobile applications, distributed ledger technology, cloud computing and big data analytics have given rise to new services and business models by established financial institutions and new market entrants.

All these technologies can benefit both consumers and companies by enabling greater access to financial services, offering wider choice and increasing efficiency of operations. They can also contribute to bringing down national barriers and spurring competition in areas such as:

- Online banking, online payment and transfer services;
- Peer-to-peer lending;
- Personal investment advice and services;
- Digital personal investing.

2020 EU adopted a digital financing package. It is a digital finance strategy, and legislative proposals on crypto-assets and digital resilience, and a renewed retail payments strategy. The goal is to create a competitive EU financial sector that gives consumers access to innovative financial products, while ensuring consumer protection and financial stability. The package supports the EU's ambition for a recovery that embraces the digital transition. Digital financial services can play an important role in modernizing the European economy across sectors and turning Europe into a global digital player.

The digital euro, a digital form of central bank money, would offer greater choice to consumers and businesses in situations where physical cash cannot be used. However, the digital euro would be a complement to cash, which should remain widely available and useable.<sup>3</sup>

In the context of the EU's digital transition, the digital euro could support the EU's digital finance and retail payments strategies described above, given its potential as an additional, innovative and safe means of payment.

The digital euro could also increase the international role of the euro and support the EU's open strategic autonomy.<sup>4</sup>

# 3. PERSONAL FINANCIAL MANAGEMENT

When one considers starting investing, he or she should consider a structured path or step by step procedure of what Level of investing should be achieved. Overall, there are five main Levels for making financial investments:

0) Getting rid of expensive short to middle term debts; 1) Financial resources for force major situations; 2) Investment into a Safety pillow; 3) Investments into pension; 4) Investments for other purposes.

# Level 0 – get rid of expensive short to middle term debts

The very first thing to do, before even starting to invest somewhere, is to get rid of expensive debts (15% and above) that most probably cost You more than any of further described investments will bring You back. If You have them, start with analysis, how You have got in this situation? Spending too much or in other words, living above Your standards? Some previous force major situations, that have forced You to take these debts. Nevertheless, the reason, the main aim is to understand the reasons that have led You there and speed up the repayment of these debts.

<sup>&</sup>lt;sup>3</sup>European Central Bank (ECB) launched the digital euro project and start its investigation phase.

<sup>&</sup>lt;sup>4</sup>https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210714~d99198ea23.en.html

# Level 1 – financial resources for force major situations

When one considers starting investing, first step should be a creation of the "fund" for the force major situations – unexpected health situations, damage to some equipment or machinery or other situations that usually are not budgeted into monthly bills, however they may occur. These funds should be available so that You can get them "right now", however it is suggested not to attach them to the payment cards. So, the most appropriate way of investing for force major situations would be to invest into a separate bank account that do not have extra commissions.



This is considered to be the easiest and straight forward digital investment, however it is necessary as with different other investment options that will be looked further, there may arise significant loses if one decides to take out their investment rapidly due to emergency situation. Or if You realize that taking out Your money from long term investment targets causes losses due to high commissions or losses due to lost short term values You may decide to fix Your emergency with a quick short-term debt, that will return You to Level 0. Although this money will not earn, it also will not cause fees in case of rapid take-out. Suggestion is to keep EUR 1000 – 2000 for these purposes, however this amount may vary from person to person depending on amount of different

assets they hold.

# Level 2 - investment into a "safety pillow"

A "safety pillow" that will help You in case of losing part or all monthly income. The total amount of the "Safety Pillow" is considered to be equal to at least 6 months income. The main idea is that these investments should earn some profit, but at the same time, at least part of them should be possible to take out quite fast, while some other part can be accessible in month or more (not all pillow one will need immediately). So, it is advisable to divide this "pillow" into different investment targets starting from a deposit account in the bank (low income, but quickly accessible) till investment in, Peer to Peer lending platforms or commodities.

#### Level 3 – investment into a pension

This investment target is considered to be with the longest term, so here goes different investment options that show the most growth in long term, not in 6 months or one year. The simplest investment action towards the pension is to choose which operator and with which Programme will take care of mandatory payments into the 2nd pension fund pillar (6% from the brutto salary (individuals pay this amount by paying social income payments)).

Further individuals have the option to invest additional resources into different 3rd pension fund pillar funds or independent investment fund portfolios. Any amount invested for the pension counts, but in order to achieve considerable increase in future pension, it is suggested to invest at least 10% from monthly income and do it regularly (it is more advisable to invest on a regularly basis every month a small bit, rather than make one major investment as this strategy will reduce the volatility of the investment).

# Level 4 – other investment targets

When all expensive debts are paid off, there is some small reserve for emergency situation, there is a "safety pillow" and at least 10% of income is being forwarded for the future pension, You can now go further to try out different other digital investment possibilities, like crowdfunding (moderate risk, possible quite long time of return), stocks (volatile), crypto currencies (highly volatile) or Forex Trading (requires specific knowledge). If it happens to lose some money on these investment targets, Your financial stability will not be damaged, as You still will be without short term debts, will have an emergency funds and safety pillow for situations if You lose Your regular monthly income.

Investment Level	Total amount	Availability	Riskiness	Profit	Digital Investment tools
L1 Funds for Emergency situation	EUR 1000 – 2000 or more	0–5 days	No risk	0%	Bank account that is not connected to payment card and has no commissions
L2 Safety Pillow	6 months or more of total income	Some part up to 5 days, the rest can be up to month or more	Moderate	5%-10%	Deposit account Peer to Peer platforms Investments in Commodities
L3 Pension	Preferably at least 10% of the monthly income	More than a year	Low risk	Up to 5%	Pension funds 2 <sup>nd</sup> & 3 <sup>rd</sup> pillars, investment funds
L4 Other	Depending on personal preferences	Different, can be up to year (e.g., crowdfunding)	Depending on the tool	Depending on the risk, maybe 20% and more	Crowd Funding Stocks Crypto Currencies

Table 3.1. Summary of different levels for investments. Source: Developed by the authors.

# 4. PERSONAL DIGITAL COMPETENCIES

According to The Digital-Competence EU, the digital competence is a combination of knowledge, skills and attitudes with regards to the use of technology to perform tasks, solve problems, communicate, manage information, collaborate, as well as to create and share content effectively, appropriately, securely, critically, creatively, independently and ethically. Digital competence is therefore divided into the following domains: 1) Instrumental skills for using digital tools and media; 2) Knowledge, theories and principles related to technology; 3) Attitudes towards strategic use, openness, critical understanding, creativity, accountability and

independence.<sup>5</sup> There are certain skills that must be acquired in order to begin digital investing. In this instance, the individual must recognize that there are two essential components that must be evaluated: technical (digital) competences (e.g., use of the Internet, use of and authentication in an Online banking) and the material resources that the individual requires for the investing (e.g., computer, tablet, smart phone, the Internet connection and so on).

# 4.1. Technical competences for the digital investing

# 4.1.1. The Usage of the Internet

The Internet has been one of the most revolutionary and disruptive technologies in history, creating a major paradigm shift. It has had a profound impact on the way that consumers listen to music, watch movies, buy and sell products, and communicate.<sup>6</sup> It has also had a hugely beneficial impact on investing, especially for the digital investors. On this basis, it may be inferred that Internet literacy is the first critical competency that an investor must require.

The Internet literacy is ability to use devices, such as smartphones or laptops, to access the internet. It covers accessing websites and apps, navigating through them to access content and understanding, to some extent, how and why someone published that content online.<sup>7</sup> In this case, Internet literacy as a skill set would be essential for the investor to comprehend how and where to look for digital investment information online, access necessary platforms, and monitor fluctuations, among other things. Aside from the factors mentioned, the investor should be able to download specific documents from the Internet (in the context of digital investing), search for specific keywords, and look for particular reports and financial information that must be analyzed and understood by the investor in order to make the investing process easier. More detailed information of the required skills for the Internet usage can be found here: <u>What is The Internet? (copian.ca)</u>

# 4.1.2. The Usage of the Online Banking

Online banking, also known as internet banking, web banking or home banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. In order to provide consumers with access to banking services in replacement of traditional branch banking, the online banking system will typically connect to or be a part of the bank's core banking system.<sup>8</sup> Viewing account balances, obtaining statements, verifying recent transactions, transferring money between accounts, and making payments are just a few of the functions offered by internet banking, which also includes the opportunity to undertake digital investing.

<sup>&</sup>lt;sup>5</sup>What is Digital Competence? Available at: <u>The Digital Competence Wheel (digital-competence.eu)</u>

<sup>&</sup>lt;sup>6</sup> Internet & & Investing. Available at: <u>How The Internet Has Changed Investing (investopedia.com)</u>

<sup>&</sup>lt;sup>7</sup>The Internet literacy. Available at: <u>Why is internet and social media literacy so important? - 5 steps to a conscious</u> <u>consumer (niallmcnulty.com)</u>

<sup>&</sup>lt;sup>8</sup>Online Banking. Available at: <u>Online Banking: Definition and Features: [Essay Example], 397 words</u> <u>GradesFixer</u>

In order to carry out the digital investing through online banking the investor must obtain the skill of use of and authentication in an Online banking. Authentication in online banking has changed dramatically in recent years. From usernames and passwords, code-calculators and Digipasses to authentication apps like Smart-ID. For the investor, the skill of using apps like Smart-ID would be the easiest, most convenient and safest way to authenticate Yourself online – check Your online bank account, access e-services and confirm transactions.

# 4.1.3. The Usage of Different Digital Investment Applications

Aside from the previously mentioned skills, the individual must also be competent to use various digital investing applications. Most people have heard of digital investment platforms, but do not truly understand what one could do for financial services, or how to get started.<sup>9</sup>

These applications are becoming increasingly popular in recent years due to their ease of use. Both new and experienced investors can use investing applications to manage their stock market and other financial market investments. These investment apps may help investors save money, increase their portfolios, and, most significantly, simplify the digital investing process by providing a variety of easy services at cheap rates. While previously investors used to have to pick up a phone and call a stockbroker to make a trade (and then pay a steep commission), You can now pick up Your smartphone, tap Your screen a few times, and trade almost instantly - often for free or at a relatively low cost.<sup>10</sup> There are lot of video tutorials available online how to use such apps on (e.g., https://www.youtube.com/watch?v=OSAzCT2pVJg).

# 4.2. Digital resources

In addition to the abilities described above, the investor requires tangible resources to carry out the investment. It is indeed acceptable if the investor only has one of these devices at first - a computer, laptop, tablet, or smartphone. The Internet or mobile data connection is the most critical factor. Investment applications, online banking, and other services require an Internet (or mobile data) connection. Additionally, the investor requires an Internet connection in order to examine stock market information and news, as this information changes on a daily basis and the investor must keep up to date.

<sup>&</sup>lt;sup>9</sup> Digital Investment platforms. Available at: <u>https://www.nucoro.com/insights/your-complete-digital-investment-platform-guide</u>

<sup>&</sup>lt;sup>10</sup> Investment applications. Available at: <u>Best Investment Apps of 2022 (thebalance.com)</u>

# 5. DIGITAL INVESTMENT TARGETS

# 5.1. Stocks

A stock (also known as equity) is a security that represents the ownership of a fraction of a corporation. This entitles the owner of the stock to a proportion of the corporation's assets and profits equal to how much stock they own. Units of stock are called "shares." Corporation's issue (sell) stock to raise funds to operate their businesses. The holder of stock (a shareholder) has now bought a piece of the corporation and, depending on the type of shares held, may have a claim to a part of its assets and earnings. In other words, a shareholder is now an owner of the issuing company.

Shareholder from earns stocks in two main ways: receiving (corporations dividends profit distributed to shareholders proportionally to their ownership) or by selling the shares to somebody else on a stock market. As shares are being sold freely on stock exchanges, their value as well change depending on company's performance and demand for its shares - example, value of Tesla share has raised from 88.60 USD on 3rd of January 2020 to 1'222 USD on 5th of November 2021.



Figure 5.1. Trading diagrams. Source: <u>www.unsplash.com</u>

This example also shows that potential return from investment in stocks cannot be predefined<sup>11</sup>.

# How to use

Investing in stocks has a long history, however in the digital age it has become more and more accessible. At present there are two main options how to invest in stocks:

- 1. By opening a securities account in Your bank and starting to trade with shares from there (this account will also work for bonds). If investing from such investment account, in most cases investor will have access to all world markets, however, the commission for the trade will vary from few percentages to fixed minimum of e.g., 15 EUR, which may constitute a high yield in case of a relatively small investment. Commissions usually are lower for stock investments that are made in regional stock exchange markets, e.g., Baltic or Scandinavian Stock exchanges.
- 2. Investment in stocks is also offered by different digital platforms, like eToro or Revolut (most known in Latvia). This option gives access to all global stock exchanges and all global corporations, like Amazon, Tesla, Apple, etc.

<sup>&</sup>lt;sup>11</sup> <u>https://www.investopedia.com/terms/s/stock.asp</u>

In order to start investing in stocks investor should either 1) go to bank and open securities account or 2) download the application that allows investing (e.g., Revolut or Etoro) and register in it. For most of such platforms registration is considered to be easy, however the identity of the investor will have to be checked, which will require to make a selfie as well as to scan ID document.

When the platform is set investor can easily upload the money and invest in most popular stocks or indexes of the world which makes a pure digital investing possibility.



Figure 5.2. The main steps of investing in Stocks. Source: Developed by the authors.

As can be seen in screenshots from the Revolut app, these platforms are very convenient to use, all stocks have historic price graphs for different time spans, where investor can see as well when the stocks was bought and when sold.

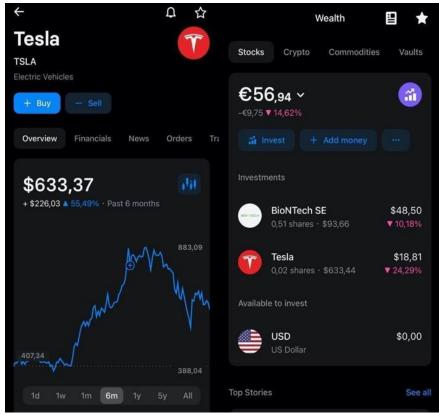


Figure 5.3. Screenshot from the Revolut app, stock investment section. Source: Revolut app.

As one of the main drawbacks of the investments in stocks should be considered its low liquidity, that can be affected with two separate factors:

- Investors won't find a market for the stocks, slowing down the speed by which investor would exchange stocks to money;
- At the moment when investor may run into a need of money investments may be negative and in order not to have losses from them, would require leave investments active and not selling the socks at the time when their value has fallen.

# Volatility risk

• When investing in stocks one should remember that stocks are volatile and in the digital age one tweet or one post in reddit.com can cause high fluctuations in the stock markets.

# Platform risk

• You could lose money if the investment platform goes out of business. In this case a wise move would be to choose a platform that operates as bank in Your country, so You are covered with protection from the government (for example, Revolut has a banking license in Lithuania and Latvia.

#### Liquidity risk

• This refers to the risk that investors won't find a market for the stocks, potentially preventing them from buying or selling when they want.

#### **Currency risk**

• If You buy a shares in the stock market that has a different currency than investor, there is a risk of currency, which means, although the share value grows, the curency may fall (e.g. buying stocks in New York Stock Exchange requires operations in US Dollars, which may loose its value to EUR.

Figure 5.4. Potential risks of investing in stocks. Source: Developed by the authors.

Remember: Perhaps the most important thing to remember about investing is that return and risk are closely linked. You can't have one without the other. The lower the potential return, the lower the potential risks. The higher the potential returns, the higher the risks – although what You can expect and what You actually get may differ.

In order to reduce volatility risk, it is advised to diversify investments in stocks by investing in different stock funds (baskets) that are combined of stocks of different corporations from different industries. Usually, each stock exchange has its own fund, funds can also be compiled with different objectives (index, value, income, growth or specific sector funds). Some examples of funds: Standart and Poor'500 (S&P500) – is a stock market index tracking the performance of 500 large companies listed on stock exchanges in the United States. It is one of the most commonly followed equity indices.

Due to high risks and potentially limited flexibility of taking out Your investment, stocks are considered to be part of Level 3 "Investment for Pension" or Level 4 "Investments for other targets" as it is not suitable to serve as an emergency fund or as "6-month safety pillow" do to its long-term nature.

All active Stocks operators in Finland, Latvia, and Lithuania are listed in Table 5.1. You can check out these operators using the provided links and choose one of them for stock investing.

No	Operator name	Website			
Finland					
1.	Mandatum	https://www.mandatumlife.fi/			
2.	Nordnet	https://www.nordnet.fi/fi			
3.	Sijoittaja	https://www.sijoittaja.fi/			
4.	Lähitapiola	https://www.lahitapiola.fi/henkilo			
5.	Osinkoja	https://osinkoja.fi/sijoita-osakkeisiin/			
Latvia					
1.	Swedbank, AS	https://www.swedbank.lv/private/investor/stock/equit ies?language=LAT			
2	SEB Banka, AS	https://www.seb.lv/privatpersonam/uzkrajumi-un- ieguldijumi/ieguldijumi/akcijas			
3.	Citadele Banka, AS	https://www.citadele.lv/lv/private- banking/broker/stocks/			
4.	AS Mintos Marketplace	https://www.mintos.com/lv			
5.	SIA VIAINVEST	https://viainvest.com/lv			
Lithuania					
1.	UAB FMĮ "INVL Finasta"	https://www.invl.com/investavimas/musu- veikla/kaip-mes-investuojame/			
2.	AB Luminor Bank	http://www.luminor.lt/lt/investor			
3.	AB Macte Invest FM	http://www.macteinvest.com/lt/shares			
4.	UAB FMĮ "Myriad capital"	https://myriadcapital.lt/investavimo-platformos/			
5.	UAB FMĮ "Orion securities"	https://www.orion.lt/kapitalo-rinkos/			
6.	AB SEB bankas	https://www.seb.lt/privatiems/taupymas-ir- investavimas/investavimas/akcijos			
7.	AB Swedbank	https://www.swedbank.lt/private/investor/stock/equities?language=LIT			
8.	AB Šiaulių bankas	https://sb.lt/lt/privatiems/investavimas/vertybiniu- popieriu-prekyba/akcijos			

Table 5.1. Places where individual can start investing in Stocks.

Source: Developed by the authors.

# 5.2. Cryptocurrencies

A cryptocurrency is a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on <u>blockchain</u> technology – a distributed ledger enforced by a disparate network of computers. A defining feature of cryptocurrencies is that they are generally not issued by any central authority, rendering them theoretically immune to government interference or manipulation.

A cryptocurrency is a form of digital asset based on a network that is distributed across a large number of computers. This decentralized structure allows them to exist outside the control of governments and central authorities. The word cryptocurrency is derived from the encryption techniques which are used to secure the network. Blockchains, which are organizational methods for ensuring the integrity of transactional data, are an essential component of many cryptocurrencies.

Largest cryptocurrencies by market capitalization (all prices and market capitalizations as of 10th of November 2021):



Figure 5.5. Design for Bitcoins. Source: Revolut app.

- 1. Bitcoin (BTC), price EUR 59'400, market capitalization 1127 billion EUR.
- 2. Ethereum (ETH), price EUR 4200, market capitalization 497 billion EUR;
- 3. Binance Coin (BNB), price EUR 565, market capitalization 94.5 billion EUR;
- 4. Cardano (ADA), price EUR 1.96, market capitalization 65.02 billion EUR;
- 5. Solana (SOL), price EUR 212.40, market capitalization 64.15 billion EUR.

Investing in cryptocurrencies can be done through the same platforms as investing in stocks.

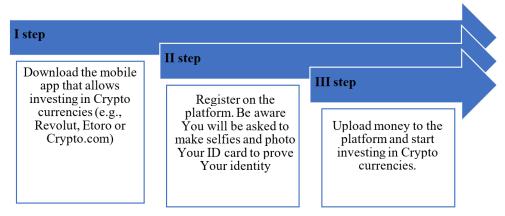


Figure 5.6. The main steps of investing in cryptocurrencies. Source: Developed by the authors.

For example, Revolut, the most popular app in Latvia offers to invest in most of the largest crypto currencies (in November 2021 platform offers to invest in 46 different crypto currencies) For base plan, each move (buy or sell the currency) takes at least a fee of 3%, so have profit from trading in Revolut platform, investor should earn at least 6%.

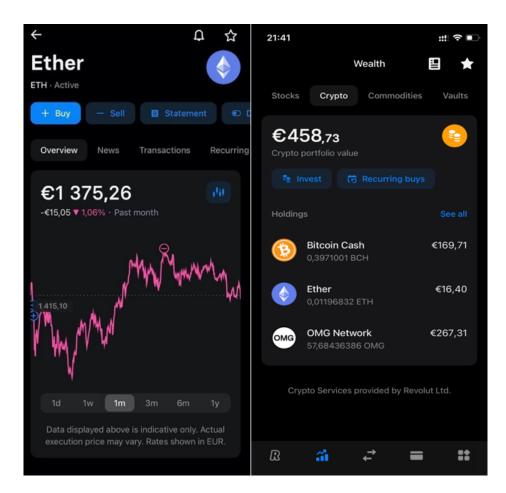


Figure 5.7. Screenshot of crypto currency trading section in Revolut app. Source: Revolut app.

Figure 5.8. Potential risks of investing in cryptocurrencies.

# Volatility risk When investing in cryptocurrencies, investor should remember that they are extremelly volatile, price can drop by more than 20% in a single day (in the digital age one tweet or one post in reddit.com or twitter.com can cause high fluctuations

#### **Platform risk**

• You could lose money if the investment platform goes out of business. In this case a wise move would be to choose a platform that operates as bank in Your country, so You are covered with protection from the government (for example, Revolut

#### Liquidity risk

• At the moment when investor may run into a need of money, crypto investments may be negative and in order not to have losses from them, would require leave investments active and not selling the cryptocurrencies at the time when their

Low regulation of the market

• Cryptocurrency market has low regulation and high anomity. In recent years, terrorist organizations have come to use cryptocurrency to finance their activities based on traditional ways of raising funds. The anonymity of cryptocurrency is attractive to terrorist organizations.

Source: Developed by the authors.

Due to extremely high risks and potentially limited flexibility of taking out Your investment, investments in cryptocurrencies are considered to be part of Level 4 "Investments for other targets" as it is not suitable to serve as an emergency fund or as "6-month safety pillow" do to its long-term nature or as an investment for pension due to overall uncertainty of these types of markets. Table 5.2. lists all active cryptocurrency selling sites in Finland, Latvia, and Lithuania. You can look over these platforms using the offered links and pick the one that best meets Your investment needs.

No	Operator name	Website			
Finlan	Finland				
1.	Binance	https://www.binance.com/en			
2.	Kraken	https://www.kraken.com/			
3.	Uphold	https://uphold.com/en-eu			
4.	Revolut	https://www.revolut.com/en-FI			
5.	Gemini	https://www.gemini.com/eu			
Latvia					
1.	Binance	https://www.binance.com/lv/buy-sell-crypto			
2.	Pluss500 Ltd.	https://www.plus500.com/lv/Trading/CryptoCurrencies			
3.	REVOLUT, SIA	https://www.revolut.com/lv-LV/no-skaidras-naudas-uz- kriptovalutu-acumirkli			
4.	SIA AltePay	https://altepay.com/lv/			
5.	AS BlueOrange Bank	https://www.blueorangebank.com/lv/kriptovalutu- investicijas			
Lithua	Lithuania				
1.	Revolut Bank UAB	https://www.revolut.com/lt-LT/go-from-cash-to-crypto- instantly			
2.	Binance Markets Limited	https://www.binance.com/en/markets			
3.	Kraken (Futures API)	https://www.kraken.com/sign-up			
4.	Bitfinexi (Finex Inc)	https://www.bitfinex.com/sign-up			
5.	Changelly (Fintechvision Ltd)	https://changelly.com/buy?utm_source=pro.changelly&ut m_medium=headerlink&utm_campaign=buy_fiat_to_cryp to			

Table 5.2. Places where individual can start investing in cryptocurrencies.

Source: Developed by the authors.

# 5.3. Forex trading (currencies)

The foreign exchange (also known as FX or forex) market is a global marketplace for exchanging national currencies. Because of the worldwide reach of trade, commerce, and finance, forex markets tend to be the largest and most liquid asset markets in the world. Currencies trade against each other as exchange rate pairs. For example, EUR/USD is a currency pair for trading the euro against the U.S. dollar. Forex markets exist as spot (cash) markets as well as derivatives markets, offering forwards, futures, options, and currency swaps. Market participants use forex to hedge against international currency and interest rate risk, to speculate on geopolitical events, and to diversify portfolios, among other reasons.

In its most basic sense, the forex market has been around for centuries. People have always exchanged or bartered goods and currencies to purchase goods and services. However, the forex market, as we understand it today, is a relatively modern invention. After the Bretton Woods accord began to collapse in 1971, more currencies were allowed to float freely against one another. The values of individual currencies vary based on demand and circulation and are monitored by foreign exchange trading services<sup>12</sup>.

Nowadays trading with different currencies can be done in different complexity levels, starting from just opening multi-currency account in Your bank or downloading any of financial apps already mentioned before (e.g., Revolut, Etoro or others) and acting in the spot market (buying and selling currencies) till finding Your own Forex brokerage and exploiting more complicated currency exchange strategies that also involve forwards, futures, options, and currency swaps.

This material will stick to the basics and will just give pathway to follow if there is a motivation to learn Forex trading in more detail.

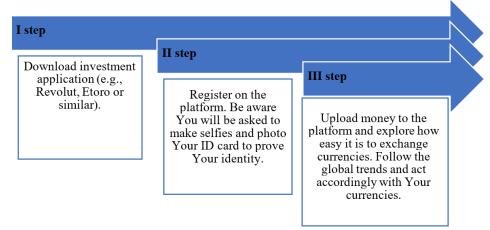


Figure 5.9. The main steps of making a spot market investment in Forex trading. Source: Developed by the authors.

In order to make more complicated actions in Forex market, trader will have to open a Forex account. For this reason, specific brokerage platforms can be used, like, admiralmarkets.com. These platforms are very forthcoming to beginners in trading offering demo account possibilities and lot of different training material.

<sup>&</sup>lt;sup>12</sup> https://www.investopedia.com/articles/forex/11/why-trade-forex.asp

# Table 5.10. Potential risks of investing in Forex trading:

#### Leverage risk

• When traded in Forex markets - Banks, brokers, and dealers in the forex markets allow a high amount of leverage, which means that traders can control large positions with relatively little money of their own. Example - a trader might put up just EUR 1,000 of their own capital and borrow EUR 9,000 from their broker to bet against the USD in a trade against the Japanese yen (JPY). Since they have used very little of their own capital, the trader stands to make significant profits if the trade goes in the correct direction. The flipside to a high-leverage environment is that downside risks are enhanced and can result in significant losses. https://www.investopedia.com/articles/forex/11/why-trade-forex.asp

#### Platform risk

• You could lose money if the investment platform goes out of business. In this case a wise move would be to choose a platform that operates as bank in your residence country, so You are covered with protection from the government (for example, Revolut has a banking license in Lithuania and Latvia.

#### Liquidity risk

• At the moment when investor may run into a need of money, Forex may be negative and in order not to have losses from them, would require leave investments active and not selling the currencies at the time when their value has fallen.

Source: Developed by the authors.

Due to high risks and potentially limited flexibility of taking out Your investment, Forex Trading is considered to be part of Level 3 "Investment for Pension" or Level 4 "Investments for other targets" as it is not suitable to serve as an emergency fund or as "6month safety pillow" do to its long-term nature.

All active forex trading sites in Finland, Latvia, and Lithuania are listed in Table 5.3. Using the provided links, You can explore different platforms and select the one that best matches Your investing objectives.

No	Operator name	Website			
Finla	Finland				
1.	Lynx	https://www.lynxbroker.fi/online-broker/valuutoilla- sijoittaminen/			
2.	Capital	https://capital.com/			
3.	Libertex	https://promo.libertex.com/lp/en- en/forex/?aff_id=36295&cxd=36295_512002_lafp0:fx_b983 1_7447a823748aa3f87be23ee71f4f93fa_1lafp1:Sijoitusrahas totForex			
4.	Plus500	shorturl.at/qLO05			
Latv	Latvia				
1.	Trading Point Holdings Ltd (XM)	https://www.xm.com/?utm_source=balibo.com&utm_conten t=25&utm_medium=affiliate			
2.	AVA Trade EU Ltd.	https://www.avatrade.com			
3.	IC Markets (EU) Ltd.	https://www.icmarkets.com/global/en/			
4.	Saledo Global LLC.	https://olymptrade.com/			

Table 5.3. Places	where	individual	can start	investing	in forex	trading
1 4010 5.5. 1 14005	11010	marviadai	cuil bluit	mesting	minut	uaam <sub>5</sub> .

5.	HF Markets (Europe) Ltd.	www.hfeu.com
Lith	uania	
1.	Plus500 Ltd	https://www.plus500.com/lt
2.	Trading Point of Financial Instruments Ltd (XM)	https://www.xm.com
3.	AVA Trade EU Ltd (Avatrade)	https://www.avatrade.com
4.	IC markets (EU) Ltd	https://www.icmarkets.eu/en/
5.	Revolut Bank UAB	www.revolut.com/
6.	Forex TB LTD	https://www.forextb.com/eu/
7.	Royal Forex LTD	https://www.royalforex.com/
8.	Robo Markets Ltd (Cyprus)	https://www.robomarkets.lt/

Source: Developed by the authors.

# 5.4. Investment funds

Investing to **Investment funds** is possibility to invest money alongside other investors. Investing in funds reduce the risks because professional management of funds offer better returns. Very important is benefit from lower transaction costs.

Investment funds are promoted with a wide range of investment aims either targeting specific geographic regions (*e.g.*, emerging markets or Europe) or specified industry sectors (*e.g.*, technology). Depending on the country there is normally a bias towards the domestic market due to familiarity, and the lack of currency risk. Funds are often selected on the basis of these specified investment aims, their past investment performance, and other factors such as fees.

Choice of investment in Funds is decided by the fund manager.

# Investments to funds could be:

- Regular investment;
- Lump-sum investments;
- Regular investment could start from small amounts and invest them regularly; if You already have spare money accumulated that You want to invest in financial instrument then You can invest in lump-sum whenever and in the amount You desire.

# New Trend – Sustainable investments

Sustainable value creation refers to create long-term returns for investors while also contributing to the positive development of society and the environment. **Sustainable Finance** – the EU Sustainable Finance Action Plan: Through new EU action plans and legal requirements, sustainability will become a regulated area for the financial industry. In March 2018, the European Commission launched an action plan to finance sustainable growth with three main objectives: 1) shift capital flows towards sustainable investments in order to achieve sustainable and inclusive growth; 2) address financial risks arising from climate change, environmental degradation and social issues; 3) increase transparency and improve reporting and promote transparency and long-term sustainability in economic activities.

The Disclosure Regulation means that new requirements will be imposed on the disclosure of sustainability-related information. The purpose of the Regulation is to (1) harmonize requirements for sustainability-related information within the EU; 2) increase transparency and clarity regarding sustainability-related information; 3) increase the attractiveness of sustainable investments.

- Light Green the fund promotes environmental and/or social characteristics.
- Dark Green the fund has sustainable investments as its goal.
- **Other** the fund is not classified as Light Green or Dark Green.

Regular investments: if You want to try investing in financial instruments, You can start by investing small amounts and investing them regularly. It's possible begin with 1 EUR. Lumpsum investments: if You decided to invest Your spare money You can invest in lump-sum whenever and in amount You desire. You then buy 'units' in Your chosen fund, which rise and fall in line with how well the overall fund performs.

Different risk of funds:

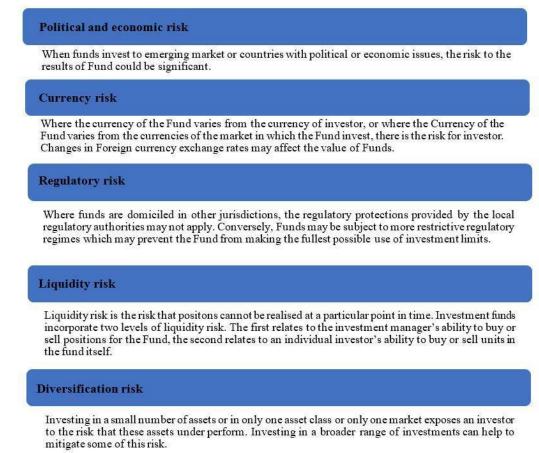
**Low risk funds** – less investment to equity funds and main part – to fixed-income funds for example 10 % to equity 90 % to fixed- income funds.

**Medium-risk funds** – 30-60% to equity funds and 40-70% to fixed – income funds. **High risk funds** –100 % to equity funds.

Find guide:

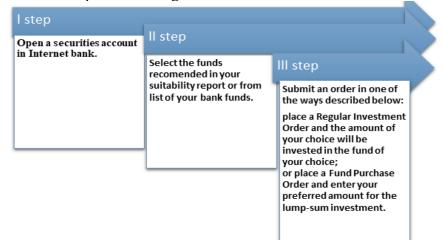
- Equity funds;
- Bond Funds;
- Balanced and Special Funds;
- Fund Family.

Figure 5.11 Potential risks of investing in funds.



Source: Developed by the authors.

Figure 5.12. The main steps of investing to Funds.



Source: Developed by the authors.

No	Operator name	Website			
Finla	Finland				
1.	Lynxbroker	https://www.lynxbroker.fi/online-broker/etf-rahastoihin- sijoittaminen/			
2.	Nordea	https://www.nordea.fi/henkiloasiakkaat/palvelumme/saasta minen-sijoittaminen/rahastot/			
3.	Mandatumlife	https://www.mandatumlife.fi/sijoittaminen/digitaalinen- varainhoito/#/kartoitus			
Latv	ia				
1.	Swedbank, AS	https://www.swedbank.lv/private/investor/funds/investment Funds?language=LAT			
2.	SEB Banka, AS	https://www.seb.lv/privatpersonam/uzkrajumi-un- ieguldijumi/ieguldijumi/ieguldijumu-fondi			
3.	Citadele Banka, AS	https://www.citadele.lv/lv/private-banking/funds/			
4.	Compensa Life Vienna Insurance Group, SE	https://www.compensalife.eu/lv/show.asp?docID=public.use fulinfo.funds			
5.	Indexo IPAS, AS	https://indexo.lv/blogs/fonds-ir-draugs/ieguld-fondi-2/			
Lith	uania	- 1			
1.	AB Swedbankas	https://www.swedbank.lt/private/investor/newsanalysis/start Investing?language=LIT&cid=allyear S-savings- investments-robur_search_textads_lt_lit			
2.	AB SEB bankas	https://www.seb.lt/privatiems/taupymas-ir- investavimas/investavimas			

Table 5.4. Places where individual can start investing in funds.

3.	Invalda INVL	https://www.invl.com/pensija/iii-pakopos-pensija/iii- pakopos-pensiju-fondai/
4.	Šiaulių bankas	https://sb.lt/lt/privatiems/investavimas/vertybiniu-popieriu- prekyba/investiciniai-fondai

Source: Developed by the authors.

# 5.5. Bonds (company and state)

Bonds are a loan from investors to a company or government. A bond is generally a form of debt which the investors pay to the issuers for a defined time frame. Bonds are issued for a period of more than one year to raise money by borrowing. A company or government is in debt to investor when they buy a bond, and it will pay to investor **interest** on the loan for a set period, after which it will pay back the full amount investor bought the bond for.

Once the bond expires, You'll get back to Your original investment. The day on which You get Your original investment back is called the **maturity date**. Different bonds will come with different maturity dates – You could buy a bond that matures in less than a year, or one that matures in 30 years or more. Bonds generally have a fixed maturity date.

Figure 5.13. Why do people buy bonds?

Inv	estors buy bonds because:
	They provide a predictable income stream. If the bonds are held to maturity, bondholders get back the entire principal, so bonds are a way to preserve capital while investing. Bonds can help offset exposure to more volatile stock holdings. It is also comfortable that the investor does not have to wait for the redemption date of the bond –he can sell the bond to another investor at any time. And a simple loan is not easy to sell.
	mpanies, governments issue bonds to get money for various ags, which may include:
	Providing operating cash flow. Financing debt. Funding capital investments in schools, highways, hospitals, and other projects.

Source: Developed by the authors.

It is important for a beginner investor to understand that when the interest rate rises, the price of bonds falls on the stock exchange, and when the interest rate falls, the price of bonds rises on the stock exchange (Figure 5.14.).

Bond prices can rise for two main reasons. If the borrower's credit risk profile improves so that it's more likely to be able to repay the bond at maturity, then the price of the bond typically rises. Also, if prevailing interest rates on newly issued bonds go down, then the value of an existing bond at a higher rate goes up.

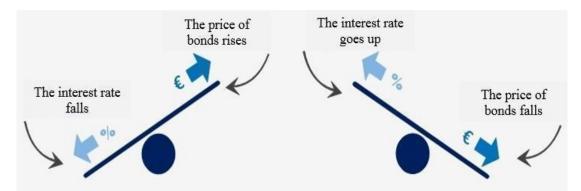


Figure 5.14. The effect of the interest rate on the price of the bond. Source: https://investicijosirfinansai.lt/investavimas/investavimas-%C4%AF-obligacijas.

Your strategy, goals and risk management should determine what kind of bonds You would like to include in Your portfolio.

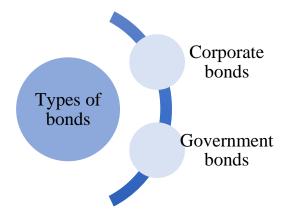


Figure 5.15. Types of bonds. Source: Developed by the authors.

Corporate bonds are issued by companies. Companies issue bonds – rather than seek bank loans for debt financing in many cases – because bond markets offer more favorable terms and lower interest rates. Corporations may issue bonds to fund a large capital investment or a business expansion.

A government bond is a type of debt-based investment, where You loan money to a government in return for an agreed rate of interest. Governments use them to raise funds that can be spent on new projects or infrastructure, and investors can use them to get a set return paid at regular intervals.

Government securities are securities issued on domestic or foreign markets attesting to the right of the holder thereof to obtain, within the time limits provided for, an amount corresponding to a nominal value thereof, an interest, or other equivalent.

The issuer of the Government securities is the Government of the Republic of Lithuania which borrows on behalf of the State and is represented by the Ministry of Finance of the Republic of Lithuania.

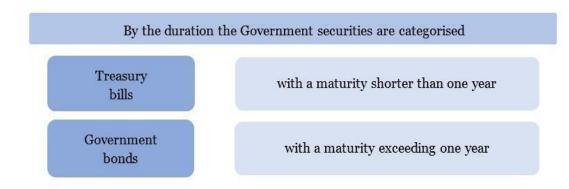


Figure 5.16. Types of Government securities. Source: Developed by the authors.

T-bills – short-term (one-year or less) Government securities. T-bills are sold at a discount and their nominal value is repaid on the maturity date.

Bonds – Government securities that have maturity longer than one year. T-bonds are sold with annual coupon payments and their nominal value and last coupon are paid on the maturity date.

The Ministry of Finance of the Republic of Lithuania plans Lithuanian Government securities auctions and sets Government securities' characteristics. The auctions are organized by Nasdaq Vilnius and held according to the auction schedule.

Only banks and financial brokerage companies that met requirements set by the Ministry of Finance for auction participants and had signed Government Securities Auction Participant Agreements with the Ministry of Finance were allowed to participate at the auctions.

As with any investment, bonds have risks.

# **Credit risk**

The issuer may fail to timely make interest or principal payments and thus default on its bonds.

#### **Interest rate risk**

Interest rate changes can affect a bond's value. If bonds are held to maturity the investor will receive the face value, plus interest. If sold before maturity, the bond may be worth more or less than the face value. Rising interest rates will make newly issued bonds more appealing to investors because the newer bonds will have a higher rate of interest than older ones. To sell an older bond with a lower interest rate, you might have to sell it at a discount.

# **Inflation risk**

Inflation is a general upward movement in prices. Inflation reduces purchasing power, which is a risk for investors receiving a fixed rate of interest.

# Liquidity risk

This refers to the risk that investors won't find a market for the bond, potentially preventing them from buying or selling when they want.

#### **Call risk**

The possibility that a bond issuer retires a bond before its maturity date, something an issuer might do if interest rates decline, much like a homeowner might refinance a mortgage to benefit from lower interest rates.

Figure 5.17. Potential risks of investing in bonds Source: Developed by the authors.

Corporate bonds tend to carry a higher level of risk than government bonds, but they generally are associated with higher potential yields. The value and risk associated with corporate bonds depend in large part on the financial outlook and reputation of the company issuing the bond.

Government bonds are considered to be safer or even completely safe because the state always redeems bonds on time and pays interest. Only in exceptional cases - the redemption of government bonds can be postponed. As a result, government bonds are considered safe but generally have lower interest rates than corporate bonds. To hold, buy and sell bonds, You will need a securities account.

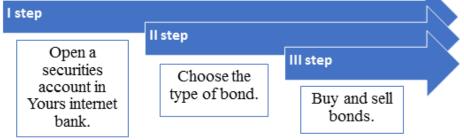


Figure 5.18. The main steps of investing in bonds. Source: Developed by the authors.

To open a securities account is free of charge. Amounts from EUR 1 can be invested. You can hold up to EUR 30,000 worth of securities in Your account free of charge.

No	Operator name	Website			
Finlan	Finland				
1.	Mandatumtrader	https://www.mandatumtrader.fi/kaupankaynti/instrumentit/u udet/joukkovelkakirjat/			
Latvia					
1.	BlueOrange Bank, AS	https://www.blueorangebank.com/latvija/lv/blueorange- obligacijas			
2.	SEB Banka, AS	https://www.seb.lv/privatpersonam/uzkrajumi-un- ieguldijumi/ieguldijumi/obligacijas			
3.	Citadele banka, AS	https://www.citadele.lv/lv/private-banking/broker/debt/			
4.	Baltic International Bank, SE	https://www.bib.eu/lv/obligacijas			
5.	Swedbank, AS	https://www.swedbank.lv/private/investor/stock/bonds2?lan guage=LAT			
Lithua	Lithuania				
1.	UAB FMĮ "INVL Finasta"	https://www.invl.com/investavimas/musu-veikla/kaip-mes- investuojame/			
2.	AB Luminor Bank	https://www.luminor.lt/lt/investor			
3.	AB Macte Invest FM	https://macteinvest.com/lt/bonds			
4.	UAB FMĮ "Myriad capital"	https://myriadcapital.lt/investavimo-platformos/			
5.	UAB FMĮ "Orion securities"	https://www.orion.lt/kapitalo-rinkos/			
6.	AB SEB bankas	https://www.seb.lt/privatiems/taupymas-ir- investavimas/investavimas/obligacijos-skolos-vertybiniai- popieriai			
7.	AB Swedbank	https://www.swedbank.lt/private/investor/stock/bonds2?lang uage=LIT			
8.	AB Šiaulių bankas	https://sb.lt/lt/privatiems/investavimas/vertybiniu-popieriu- prekyba/obligacijos			

Table 5.5. Places where individual can start investing in bonds.

Source: Developed by the authors.

# 5.6. Commodities

The chemical abbreviation for gold is AU and silver is Hg. The purchasing power and value of gold has remained stable in the long run, and gold is easy to monetize everywhere. The same applies to other precious metals.

"Troy ounce" (oz) is an international measure of the weight of gold. One troy ounce (1 oz) is 31.1035 g. The value of gold is determined daily on the major metal exchanges in London, Tokyo and New York. Carat determines the content of pure gold in an alloy (gold alloy). 24 carats means it is 100 percent gold. Under water, gold weighs 10 to 11 times more than sand or gravel. Therefore, gold rinsing is a good method to find gold.

Demand for gold is global, but supply is limited. A currency that cannot be printed like paper money. Mining production is limited. Interest in gold, the world's most traditional investment destination, has been growing steadily in recent years.

- General increase in raw material prices;
- Growing markets e.g., China, India.

Investing in commodities are made for balancing the investment portfolio. Gold usually thrives in circumstances where, for example, stocks do not. The world's central banks own substantial amounts of gold. Gold can be equated with "insurance" that protects against inflation, political and economic instability, or even catastrophes. Affordable insurance because the value of gold is preserved and can even increase. The most suitable raw material investment for individuals for precious metals. Investment gold is not subject to VAT (practical size, beautiful product).

#### Silver

Pure silver is a white, beautifully shiny metal. Silver is softer than copper, but harder than gold, easy to forge and very stretchy. It has excellent thermal conductivity and electrical conductivity. Due to its bactericidal properties, silver is used e.g., in medicine as well as the manufacture of cutlery and crockery. Silver is one of the first metals introduced by man. In the early days, it was considered almost as valuable as gold, even more valuable, until more silver finds were made. Silver mining production is ten times that of gold. The diverse industrial demand for silver today makes it an interesting destination for investors as well.

K. A. Rasmussen Finland is the leading precious metals company in the Nordic countries. Here You can buy gold bars and coins, silver bars and coins, and platinum and palladium bars. You can order investment metals using the form on the website. Daily rates are displayed. Safe delivery to anywhere in Finland. Possibility of storage service.

# Gold

There are three types of gold funds, funds that invest directly in physical gold, funds that invest in companies that use gold, and funds that use gold derivatives. Investment demand for gold has been significantly boosted by new ETFs, or index mutual funds.

# **Investing In Gold with Jewelry**

Many first-time gold investors decide to start their investments by buying jewelry. Jewelry is very easy to acquire but can also be very difficult to trade in. You need to ensure that You are getting gold that is at least 14 karats. Most jewelry will also have a pretty high markup due to the fact they are pieces of art not investment items. Gold jewelry rarely reaches 24 karats because the gold at that point is too soft. You don't want jewelry that will break too easily. When buying jewelry for investing in gold it is often done by looking for some of the most expensive pieces. Besides having a high karat count, You also want it to appear nice.

#### **Physical Gold as An Investment**

One of the most popular gold investments is to buy physical gold such as gold bullion, coins, or gold bars. Having something physical to hold means that You always have it at hand if You want or need it. As long as You buy from a legitimate seller, the gold will also be far purer than jewelry gold.

# **Gold Certificates as An Investment**

You can also opt to buy gold certificates. These are certificates that You own certain pieces of gold that are stored at a company. You don't need to worry about storing the gold and

still have a gold investment. When buying gold certificates, You need to be very careful to buy from a reliable backer. The number of companies that offer gold certificates is very limited.

Gold Investments in The Form of Gold Mining Stocks

A way to invest in a gold mine is to invest in mining stocks. You are basically backing the mining company and the prices of gold mining stocks follow the gold industry and the performance of the company. Gold mining has its risks though, remember it's a dangerous business and this factors into the investment.

Figure 5.19. Potential risks of investing in commodities:

#### Value

Once all the gold has been mined, it is virtually no longer available. And, of course, when the supply of a product decreases and the demand remains the same, its price goes up. For this reason, the price of gold has been rising for several decades.

# Storage risk

You have to worry about storage. If your gold is stolen, it is stolen! Most insurance companies will not cover precious metals stored at home. Collectible coins will also come with a markup.

# Liquidity risk

It can be difficult to liquidate if you don't have a local gold buyer.

# **Commodity price risk**

Financial risk on an entity's financial performance/ profitability upon fluctuations in the prices of commodities that are out of the control of the entity since they are primarily driven by external market forces.

Source: Developed by the authors.

# **Greater Risk of Failure**

A business that has been capitalized through equity crowdfunding arguably runs a greater risk of failure than one that has been funded through venture capital or other traditional means that offer seasoned professionals to help steer a start-up through early development challenges. The success of a business cannot be assured merely by funding. Without an adequate business plan and support structure, even promising ventures can fail. Source: <u>https://www.investopedia.com/articles/investing/102015/invest-through-equity-crowdfunding-risks-and-rewards.asp</u>

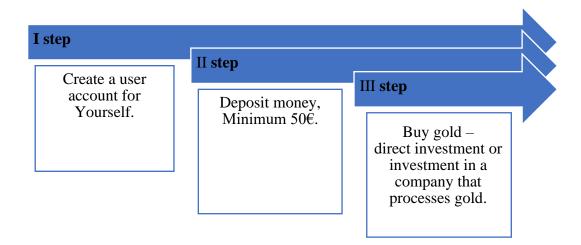


Figure 5.20. Main steps of investing on Commodities. Source: Developed by the authors.

No	Company	Website			
Finland	Finland				
1.	Investing in gold	https://sijoitakultaan.fi/ https://investingin.gold/			
2.	A Beginner's Guide to Investing in Gold	https://ostaosakkeita.fi/sijoita-kultaan/			
3.	Change in the value of gold 5 years	<u>https://sijoitakultaan.fi/sijoita-kultaan/faktoja-kullasta/kullan-hinta-kaavio/</u>			
4.	Change in the value of silver 5 years	https://sijoitakultaan.fi/sijoita-hopeaan/faktoja- hopeasta/hopean-hinta-kaavio/			
5.	Nordnet	https://www.nordnet.fi/fi/markkina/nordnet- markets/hyodykkeet			
6.	Investment portfolio builder	https://www.salkunrakentaja.fi/2012/09/kultaan- sijoittaminen-kaytannossa/			
7.	Investing on gold Jalonom	https://www.jalonom.com/kultaan-sijoitus/			
8.	Storage and price list	https://www.jalonom.com/sinettisailytyspalvelu/			
Latvia	Latvia				
1.	Tavex SIA	https://tavex.lv/tag/ieguldijumu-zelts/			
2.	Baltic International Bank, SE	https://www.bib.eu/lv/zelta-iegade			
3.	Paysera Latvia, SIA	https://www.paysera.lv/v2/lv-LV/dargmetali			

4.	BlueOrange Bank, AS	https://www.blueorangebank.com/latvija/lv/investicijas- zelta	
Lithuani	Lithuania		
1.	UAB "Lietuvos monetų kalykla"	https://kalykla.lt/parduotuve/	
2.	UAB "Aurum LT"	https://www.investicinisauksas.lt/lt/parduotuve/	
3.	UAB "Florinus"	https://www.florinus.lt/shop/products	

Source: Developed by the authors.

# 5.7. Crowdfunding or Peer to peer lending

# 5.7.1. Crowdfunding

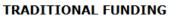
Crowdfunding is the use of small amounts of capital from a large number of individuals to finance a new business venture. Crowdfunding makes use of the easy accessibility of vast networks of people through social media and crowdfunding websites to bring investors and entrepreneurs together, with the potential to increase entrepreneurship by expanding the pool of investors beyond the traditional circle of owners, relatives, and venture capitalists.

Crowdfunding refers to raising money from the public (i.e., the "crowd"), through online forums, social media, and crowdfunding websites.

Equity crowdfunding involves exchanging relatively small amounts of cash allowing investors to own a proportionate slice of equity in the business.

A business capitalized through equity crowdfunding can run the risk of failure, fraud, or may take years for profits to be realized.

Crowdfunding is a way of raising money to finance projects and businesses. It enables fundraisers to collect money from a large number of people via online platforms.



CROWDFUNDING



Large amounts from one, or a few, sources \* \*



Many small sums from a large group of individuals

Figure 5.21. Traditional funding and crowdfunding. Source: European Commission, 2015

# **How Crowdfunding Works?**

In most jurisdictions, restrictions apply to who can fund a new business and how much they are allowed to contribute. Similar to the restrictions on hedge fund investing, these regulations are supposed to protect unsophisticated or non-wealthy investors from putting too much of their savings at risk. Because so many new businesses fail, their investors face a high risk of losing their principal.

Crowdfunding has created the opportunity for entrepreneurs or small business to raise hundreds of thousands or millions of euros from anyone with money to invest. But on the other hand there are greater risks investors in crowdfunding. Crowdfunding provides a forum to anyone with an idea to pitch it in front of waiting investors.

# https://www.investopedia.com/terms/c/crowdfunding.asp

# Crowdfunding for companies

Mass financing is one way for a company to raise funding for investment, product development or business expansion. For companies, crowdfunding can offer many benefits:

- Fast and flexible financing for a wide range of needs;
- Crowd financing can bring visibility to a company;
- Crowdfunding can be a good option if no other financing is available, and the company cannot be granted a corporate loan.

For start-up companies, crowdfunding is an attractive financing option because it is fairly easy to implement and usually receives funding quickly. Financing targets are often quite small in the context of the business world. For many companies, crowdfunding may also remain the only option if no other financing or corporate loan is available.

# Mass financing for individuals and communities

Mass funding can also be applied for as an entity and, in principle, also as an individual, but according to Finnish law, an individual cannot obtain a fundraising permit. For example, museums, charities, animal and nature conservation organizations and theaters have found funding through the Finnish Mesenaatti.me service. Community individuals can apply for money (or rather, in this context, donations) by looking at the European crowdfunding platforms e.g., here: <u>https://whydonate.nl/en/blog/top10-crowdfunding-platforms-europe/</u>Services for individuals and communities tend to be more platforms based on donations or consideration.

Compensation-based financing means that the financier receives, for example, an experience, an entrance ticket or other consideration corresponding to the amount of funding. Entities shall disclose the funding received in the accounts. Private individuals need to be vigilant, as the law does not allow an individual to obtain a fundraising permit, so arranging large-scale fundraising can be illegal.

# Investing in crowdfunding services

For investors, crowdfunding or peer-to-peer loans can be a lucrative investment. From the investor's point of view, the most common crowdfunding investments are peer-to-peer loans, real estate investments and other similar investments. You can invest in such crowdfunding targets or peer-to-peer bonds through Mintos or EstateGuru, for example. These services offer investments in peer-to-peer loans and real estate projects around the world, and both services have an average annual return of more than 10 percent.

#### **Greater Risk of Failure**

A business that has been capitalized through equity crowdfunding arguably runs a greater risk of failure than one that has been funded through venture capital or other traditional means that offer seasoned professionals to help steer a start-up through early development challenges. The success of a business cannot be assured merely by funding. Without an

adequate business plan and support structure, even promising ventures can fail. Source: https://www.investopedia.com/articles/investing/102015/invest-through-equity-crowdfunding-risks-and-rewards.asp

Figure 5.22 Potential risks of investing in Crowdfunding.

#### Default risk

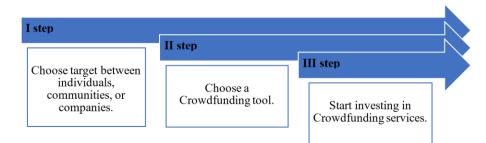
The person or business You lend money to might not be able to pay it back. The higher the default rate on a P2P website, the higher the number of people or businesses that are unable to repay their loans. But a number of P2P websites have contingency or provision funds, which are designed to pay out if a borrower defaults on their loan. These provision funds vary widely from one site to another, so it's important to know what's covered if You're thinking of becoming a lender.

# Early or late payment risk

If your loan is repaid early or late, You could make less profit than You'd expected. If a loan is repaid early, You can simply lend out the money again. But there is a chance that You might not be able to lend out at the same interest rate.

#### **Ceasing risk**

The risk of the P2P site going bust. You could lose money if the P2P company itself goes out of business (as several have done). But if they are regulated by the National Bank, they must keep lenders' money in ring-fenced accounts separate from their own.



Source: Developed by the authors.

Figure 5.23. The main steps of investing in Crowdfunding. Source: Developed by the authors.

Table 5.7. Places where individual can start investing in Crowdfunding.

No	Company	Website
Finland		
1.	Whether You are an entrepreneur applying for a business loan, a startup entrepreneur applying for financing for product development or an investor looking for a return by investing in crowdfunding	https://whydonate.nl/en/blog/top10- crowdfunding-platforms-europe/ https://financer.com/fi/wiki/joukkorahoitus/

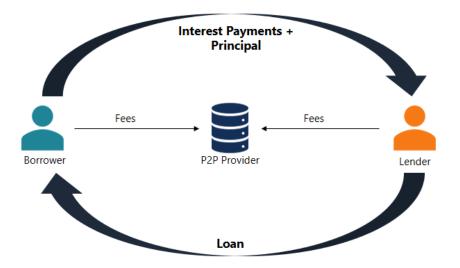
	services, this guide provides comprehensive information on crowdfunding.	
2.	Mesenaatti	https://mesenaatti.me/
	Wesendatti	https://mesenaatti.me/en/
3.	Mintos, Investment in loans	https://www.mintos.com/en/
4.	EstateGuru Fast and flexible financing for borrowers, stable return for investors. Europe's leading mortgage market:	https://estateguru.co/fi/?switch=fi
5.	Real estate crowdfunding service	https://www.groundfunding.fi
		https://financer.com/fi/yritys/nordea/
6.	Banks	https://financer.com/fi/yritys/osuuspankki/
		https://financer.com/fi/yritys/danske-bank/
7.	Communities and individuals can apply for money (or rather donations in this context) through the US GoFundMe site:	https://www.gofundme.com/
8.	The largest crowdfunding service in the Nordic countries	https://www.fellowfinance.fi/ https://www.fellowfinance.com/
9.	What to know before investment crowdfunding	https://www.thebalance.com/what-to-know- before-investment-crowdfunding-4153351
	Groundfunding	https://www.groundfunding.fi/
10.		https://www.groundfunding.fi/sijoittajille
10.		https://www.groundfunding.fi/rakennuttajille
		https://www.groundfunding.fi/riskit
Latvia		
1.	TWINO, AS	https://www.twino.eu/lv/
2.	DoFinance, SIA	https://www.dofinance.eu/lv
3.	FINTELUM, SIA	https://www.fintelum.com/company/about/
4.	AS Mintos Marketplace	https://www.mintos.com/lv/
5.	LendSecured	https://lendsecured.eu/lv
Lithuania	a	
1.	UAB "Bendras finansavimas"	https://gosavy.com/registracija- investuotojams/
2.	UAB "EstateGuru Lietuva"	https://estateguru.co/lt/investor/
3.	UAB "Finansų bite verslui"	https://p2p.finbee.lt/?lang=lt
	Developed by the outhors	

Source: Developed by the authors.

# 5.7.2. Peer to peer lending

Peer to peer (P2P) lending or crowdlending is a part of crowdfunding. Compared with traditional bank loans, P2P lending has its own features. Firstly, lenders make direct investments on the lending website, and they can learn the detailed information about online borrowers. So, the information asymmetry is low in P2P lending. Secondly, the lending website provides a variety of functions that enable borrowers to indicate their creditability. It also provides functions for lenders to search loan request, do comparisons, and finally decide. So, the open web platform actually observe the activities on both sides, say, the borrower side and the lender side. Collectively, it is presenting a good opportunity to study the lending process. Thirdly, P2P borrower' credit is rated online. It relies on a large amount of web information and probably resort to data mining techniques. So, the basic operation method in P2P lending is different from that in traditional bank loan (Wang et. all, 2015).

P2P is a direct alternative to a bank loan with the difference that, instead of borrowing from a single source, companies can borrow directly from tens, sometimes hundreds, of individuals who are ready to lend. Crowd lenders often bid for loans by offering an interest rate at which they would lend. Borrowers then accept loan offers at the lowest interest rate. The second figure shows the process of P2P lending platform. Internet-based platforms are used to match lenders with borrowers. Due diligence is carried out for each loan request, as crowdfunding platforms have a duty to protect both businesses and investor interests. Platforms normally require financial accounts and a trading track record (European Commission, 2015).





It is necessary to mention, that in P2P invested amount can be  $5-500 \in$  (it depends on different platform) and can be earned annual interest ratio 7-27%. Peer-to-peer lending is a fairly straightforward process. All the transactions are carried out through a specialized online platform. The steps below describe the general P2P lending process:

A potential borrower interested in obtaining a loan completes an online application on the peer-to-peer lending platform.

The platform assesses the application and determines the risk and credit rating of the applicant. Then, the applicant is assigned with the appropriate interest rate.

When the application is approved, the applicant receives the available options from the investors based on his credit rating and assigned interest rates.

The applicant can evaluate the suggested options and choose one of them.

The applicant is responsible for paying periodic (usually monthly) interest payments and repaying the principal amount at maturity.

The transaction value for P2P consumer lending and business lending platforms in the European alternative finance market (excluding the U.K.) increased considerably between 2014 and 2020 (figure 3). In 2020, P2P consumer lending reached a total transactions value of almost 2.9 billion U.S. dollars (Statista, 2021).

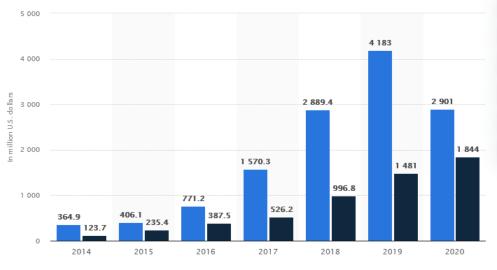




Figure 5.25. Peer-to-peer consumer and business lending transaction value in Europe (Excluding the UK).

Source: Statista, 2021.

P2P lending can be risky for several reasons. It's useful to understand these risks and how they can be reduced.

#### The risk of default

The person or business You lend money to might not be able to pay it back (this is called 'defaulting'). The higher the default rate on a P2P website, the higher the number of people or businesses that are unable to repay their loans. But a number of P2P websites have contingency or provision funds, which are designed to pay out if a borrower defaults on their loan. These provision funds vary widely from one site to another, so it's important to know what's covered if You're thinking of becoming a lender.

The risk of early or late repayment

If Your loan is repaid early or late, You could make less profit than You'd expected. If a loan is repaid early, You can simply lend out the money again. But there is a chance that You might not be able to lend out at the same interest rate.

The risk of the P2P site going bust

You could lose money if the P2P company itself goes out of business (as several have done). But if they are regulated by the National Bank, they must keep lenders' money in ring-fenced accounts separate from their own.

Figure 5.26. Potential risk of investing peer to peer. Source: Developed by the authors.

# Figure 5.27. Control questions before investing in P2P:

Security

Are loans secured or unsecured?

Interest rate

How is the interest rate set? Who decides this?

Choice of loans

Can You choose a specific loan or borrower? Can You invest in several loans or borrowers, to reduce the risk of losing all your money?

Repayments

How long will it take to get any money back?

Getting your money back

Do You have cooling off rights if You change your mind? If so, can You get your money back?

Risk assessment

What is the operator's track record of assessing borrower risk? For example, a high number of defaults or late repayments may indicate a poor credit assessment process.

What if the borrower defaults

How will the operator recover Your investment? Who pays the expense of any recovery action?

What if the platform fails

What happens if the operator becomes insolvent or goes into external administration?

Fees

What fees do You have to pay the operator? For example, to invest, handle repayments or access Your money early.

Source: Developed by the authors.

Consider whether the fund suits Your needs and objectives before You invest (https://moneysmart.gov.au/managed-funds-and-etfs/peer-to-peer-lending).

P2P lending and tax. Money earned through P2P lending is usually classed as income, which means it is taxable. For example, in Lithuania it is allowed to earn up to 500€ tax-free interest per year. Any interest earned above that sum must be paid 15 rates of tax.

If You want to lend money, You should first compare P2P lenders and find one You feel comfortable with. There are three main steps (Figure 5.28.).

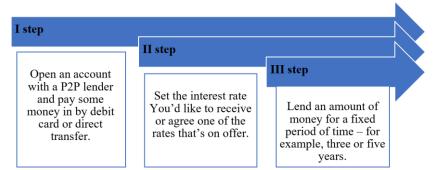


Figure 5.28. The main steps of investing in peer to peer lending. Source: <u>https://www.moneyhelper.org.uk/en/savings/investing/peer-to-peer-lending-what-you-need-to-know</u>

You might have to pay a fee to lend money (i.e., 1% of the loan, not in all platforms). Some lenders have an "auto bid" feature. This means You can set limits on how much You want to lend each business and the lowest interest rate You're prepared to lend at.

Below is a list of P2P lending platforms in Finland, Latvia and Lithuania.

No	Operator name	Website			
Finland	Finland				
1.	Tuntitili (List of P2P operators)	https://www.tuntitili.fi/vertaislaina			
2.	Bondora	https://www.bondora.fi/			
3.	Fixura	https://fixura.com/lainaa/			
4.	Fellow Finance	https://www.fellowfinance.fi/			
5.	Lainaaja (Vertaislaina Oy)	https://www.lainaaja.fi/			
6.	Eurovippi	https://eurovippi.fi/			
Latvia	Latvia				
1.	SIA "Viainvest"	https://viainvest.com/			
2.	AS "Mintos Marketplace"	https://www.mintos.com/lv/			
3.	SIA "AV Marketplace"	https://peerberry.com/			
4.	SIA "ViVentor"	https://www.viventor.com/			
5.	SIA "DN Operator" (Debitum Network)	https://debitum.network/en			
6.	SIA "Dofinance"	https://www.dofinance.eu/lv			
7.	AS "TWINO"	https://www.twino.eu/lv/			
8.	SIA "CREDON"	https://www.credon.com/en/			
9.	SIA "Secured Finance MGMT" (Lend Secured)	https://lendsecured.eu/lv			
Lithuan	Lithuania				
1.	UAB "Bendras finansavimas"	https://gosavy.com/registracija-investuotojams/			
2.	UAB "EstateGuru Lietuva"	https://estateguru.co/lt/investor/			
3.	UAB "Finansų bite verslui"	https://p2p.finbee.lt/?lang=lt			
4.	UAB "Nordstreet"	https://nordstreet.com/register			
5.	UAB "FinoMark"	https://www.finomark.lt/register			
6.	UAB "Heavy finance"	https://heavyfinance.com/register			
7.	UAB "Inreto"	https://inrento.lt/private-registration.html			
8.	UAB Sutelktinio finansavimo platforma "Profitus"	https://www.profitus.lt/registracija			

Table 5.8. Places where individual can start investing in P2P.

Source: Developed by the authors.

### 5.8. Voluntary pension insurance & long-term pension savings

### Introduction in earnings-related pension system

In accordance with the traditional international classification, pension provision is divided into three pillars. First pillar pensions are statutory pensions. In Nordic and Baltic countries, such pensions are the national and the earnings-related pensions.

Second-pillar pensions are collective industry- or employer-specific pension schemes. In Nordic and Baltic countries, such schemes include group pension insurance arranged by the employer. Third-pillar pensions are private, voluntary pensions. In Nordic and Baltic countries, they may be individual pensions or long-term saving accounts. People may prepare for their retirement also by saving in other ways.

Pension arrangements are very diverse in the EU Member States, due to both different traditions on how to provide retirement income, and to different phases of the reform process of pension systems. The large majority of pension systems in the EU 27 Member States are public pension systems. Still, several Member States have introduced occupational pension schemes and/or private mandatory and voluntary schemes<sup>13</sup>.

In most Member States, the core of the pension system is based on the statutory earnings related old-age pension schemes. At the same time, the public pension system often provides also a minimum-guaranteed pension to those who do not qualify for the earnings related scheme or have accrued only a small earnings related pension. Minimum guarantee pensions are usually means-tested and are provided either by a specific minimum pension scheme or through a general social assistance scheme.

The financing method of the pension systems also differ across countries. Most public pension schemes are financed on a pay-as-you-go (PAYG) basis, whereby contribution revenues are used for the payments of current pensions. In most countries, minimum guarantee pensions are covered by general taxes. Earnings-related schemes are often subsidized to varying degrees from general government funds. Some specific schemes, notably public sector employees' pensions sometime do not constitute a well identified pension scheme but, instead, disbursements for pensions appear directly as expenditure in the government budget. On the other hand, some predominantly PAYG pension schemes have statutory requirements for partial pre-funding, and, in view of the increasing pension expenditure, many governments have started to collect reserve funds for their public pension schemes.

Employers and employees finance earnings-related pension cover together. The employer collects their employees' contribution from their pay and renders this and their own share of the insurance fee to the pension institution. Authorized pension providers, pension funds and foundations take care of earnings-related pensions.

The amount of earnings-related pension depends on how long You have worked and how high Your salary has been. Earnings-related pension companies, pension funds and pension foundations manage earning-related pensions.

### Voluntary or private pension systems

You can voluntarily supplement Your statutory pension cover by taking out individual pension insurance or concluding a long-term savings agreement (PS agreement). Your spouse can also take out individual supplementary pension insurance for You.

As an entrepreneur, You can equally supplement Your own statutory pension security with individual supplementary pension insurance.

Individual pension insurance is offered by life insurance companies and ps contracts by deposit banks, management companies and investment companies.

In addition to the insurance terms and conditions, the increase in insurance savings is affected by the tax legislation and other regulations on pension savings in force at the time.

You can get a tax benefit from the supplementary pension insurance premium and the ps contract. At the time the savings are withdrawn, retirement income and income from the ps agreement are taxed. Administrative expenses also reduce pension savings.

<sup>&</sup>lt;sup>13</sup>https://ec.europa.eu/economy\_finance/publications/pages/publication16034\_en.pdf

Private pensions work similarly to workplace (earnings-related) pensions but are set up by You or than Your employer. You can set up regular contributions (e.g. monthly) or make one-off payments into Your fund, and Your pension provider will add tax relief.

The money a person puts into his/her personal pension will usually be invested in a range of assets like shares, bonds, property and cash. When a person starts his/her pension, he/she is willing to take.

In Nordic and Baltic countries, an employee's earnings-related pensions can be supplemented with voluntary pension insurance.

The employee can take out a voluntary private pension insurance for her-/himself. The employer can take out either a group pension insurance or an individual pension insurance for an employee<sup>14</sup>.

You can supplement Your statutory pensions by taking out voluntary private pension insurance or by setting up a long-term savings account.



Biometric risks (of which the most important in a pension plan is longevity risk)

Figure 5.29. Potential risks of investing in voluntary pension. Source: Developed by the authors.

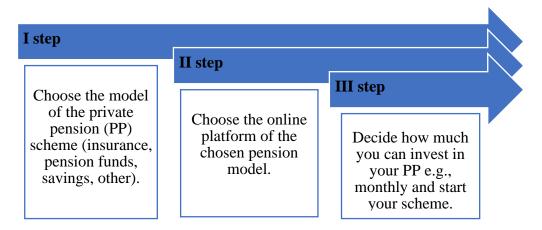


Figure 5.30. The main steps in investing in voluntary-supplementary-pension or (pension) saving account.

Source: Developed by the authors.

When looking at options for additional funding for Your voluntary pension, it's important to understand that Your pension pot is invested - and like all investments, Your capital is at risk. But the risk of losing money comes with a reward - Your pension pot can also grow. In most cases, the money You pay into Your retirement is invested in various funds. Of these, You should choose low-risk funds. Additionally, it is advisable to choose a bank or other very reliable digital wealth management enterprise.

<sup>&</sup>lt;sup>14</sup>https://www.tyoelake.fi/en/what-are-pensions/voluntary-supplementary-pensions/#title

No	Company	Website			
Finland					
1.	Old-age Pension Systems in the Nordic Countries	https://norden.diva- portal.org/smash/get/diva2:968720/FULLTEXT01.pdf			
2.	Pension funds in Baltic countries:	https://www.ipe.com/baltic-pension-funds-the-way- forward/10016960.article			
3.	Voluntary pension schemes in Finland	https://www.pensionfundsonline.co.uk/content/country- profiles/finland			
4.	Economic Policy Committee	https://ec.europa.eu/economy_finance/publications/pages/p ublication16034_en.pdf			
5.	Työeläke	https://www.tyoelake.fi/en/what-are-pensions/voluntary- supplementary-pensions/#title			
6.	INVL	https://www.invl.com/en/pension/iii-pillar-pension/3rd- pillar-pension-funds			
7.	Pension Funds Online	https://www.pensionfundsonline.co.uk/content/country- profiles/finland			
Latvia	Latvia				
1.	SEB Banka, AS	https://www.seb.lv/en/private/savings-and- investments/pension/pension-system-latvia			
2.	INDEXO IPAS, AS	https://indexo.lv/			
3.	Swedbank, AS	https://www.swedbank.lv/private/pensions/funds?language =LAT			
4.	Citadele Banka, AS	https://www.citadele.lv/lv/private/3rd-pension/plans/			
5.	INVL Asset Management, AS	https://www.index.lv/			
Lithua	ania				
1.	UAB "INVL Asset Management"	https://www.invl.com/pensija/ii-pakopos-pensija/ii- pakopos-pensiju-fondai/			
2.	UAB "Swedbank investicijų valdymas"	https://www.swedbank.lt/private/investor/pensions/pillar2			
3.	UAB "SEB investicijų valdymas"	https://www.seb.lt/privatiems/taupymas-ir- investavimas/pensija/ii-pakopos-pensiju-fondai			
4.	UAGDPB "Aviva Lietuva"	https://www.aviva.lt/lt/epensija/pensiju-sutarties- sudarymas/			
5.	UAB Luminor investicijų valdymas	https://ib.dnb.lt/document.aspx?DocTName=N_PENSION 3_AGREEMENT&MenuClicked=723			
~					

Table 5.9. Places where individual can start investing in pensions.

Source: Developed by the authors.

## 5.9. Forests

### Introduction of investing in forests

The advantages of investing forests are multiple. Forestry investment can offer financial as well as environmental, social and governance (ESG) benefits. A few years ago, there were only few types of forestry investments. In forest investment, the return consists mainly of the growth of trees, the sale of wood and the rise in wood prices. In addition, the fund can refine the forest properties it owns by blocking and zoning them. The fund may also lease hunting rights and sell land such as gravel and peat.

### **Forests investment targets**

Now there are many different types available, such as forest shares, forest funds or direct forestry investments. Upon closer inspection, most of them offer investments in wood (production). ForestFinance is one of the few providers that builds and protects forests and develops investment products from them. The wide range of investments is due to its success: The NCREIF Timberland Index, which results from the prices of millions of hectares of U.S. investment company forest, has been rising steadily for more than 20 years. The fluctuations in value are minimal compared to stock indices and forestry and timber investments are becoming increasingly popular as asset value investments and inflation protection. Owning a forest, that is, owning the right forest property directly, can be challenging and requires knowledge of many things. There are, however, other forest investing types, which can be acquired and managed digitally. Forest shares and funds might be an easy way to join the ranks of forest owners.

A forestry share is a security which securitizes a share in a stock corporation whose capital is invested to a large extent in forest property or wood processing. The value of forestry shares results from the stock market valuation multiplied by the number of shares. If the forestry share is listed on the stock exchange, trading is relatively easy.

In Baltic and Nordic countries, primarily Scandinavian and North American forestry stock corporations are traded. A disadvantage of forestry shares being tradable on the stock exchange at any time is their extreme fluctuations in value. The valuation of most listed forestry shares has fluctuated by several hundred per cent in recent years. This is mostly due to the strong dependence of many forestry shares on economic trends. Most forestry share companies are predominantly wood processors, who are strongly affected by economic fluctuations and thus by fluctuations in pulp or timber prices.

The most common investments in forests are direct investments or closed-end funds. Whereas in direct investments investors invest directly in one or more trees on specific areas and leave the management to a service provider, closed-end forestry funds are less individual. Investors in forestry funds are merely investors in a company that acquires and reforests land in order to produce wood. As shareholders, investors benefit from timber sales proceeds and correspondingly more if timber prices rise on the market. Thus, forestry funds as well as direct forestry investments and forestry shares are classic commodity investments. Since funds are usually solely aimed at profit for the investment company and its investors, forestry funds are largely investments in monocultures that are supposed to produce timber quickly and cheaply.

The problem with forest funds is the typical fund investment worries, i.e., management eats up a large portion of the returns. Forests are a type of physical asset where the organization of felling, planting and clearing requires active management by the management company. On the other hand, the return on forest investments through the funds is evenly generated annually, as the fund's forest assets are spread over forest plots of different ages.

If You go to invest in the forest directly, the return on forest investment will come from felling. In practice, the investor's accounting date is the final felling, which is done when the forest has grown to about 70 years of age.

In some countries, it is difficult to buy forest e.g., in Germany. For example, often in Finland, forests are not sold and bought but inherited undividedly. The demand for forests has therefore been growing for years without sufficient forests being offered for sale. Forest owners attribute rising demand and prices to interest rates and monetary policy of the European Central Bank. Most notably, forest prices have doubled over the past 20 years, further spurring on the desire to buy domestic forest and reap profits. This desire, however, is not easy to fulfil: In addition to the purchase price, land transfer tax, notary and fees, which often make up ten per cent of the purchase price, are added, thus significantly reducing the returns for forest investors.

Moreover, property tax has to be paid annually and wood production in Germany is relatively expensive due to environmental regulations and certifications.

Forest areas in other countries offer far higher returns, although buying forest in foreign countries can be difficult for foreigners. It is much easier to hire companies to lease or buy forests or fallow land in other countries, to manage them in order to generate yields for investors.

Direct forestry investments in precious woods, on the other hand, can react better to market fluctuations by postponing the harvest. The trees are left in the forest until the harvest is worth it – they become bigger, taller, and more valuable every day. In addition, the fluctuations in precious wood prices are significantly lower than those of timber or wood used for pulp production. Besides, the yields generated from a direct forestry investment are generally tax-exempt while the price gains of forestry shares and forestry shares dividends are subject to the almost 30 per cent flat rate withholding tax including solidarity surcharge and church tax.

Challenges to investing in forestry are significant—particularly in emerging markets, where reforestation, afforestation, and sustainable forest management are most needed. Forestry is a complex, specialist asset class that requires expert management to navigate. The lack of data, stemming partly from valuation uncertainty, deepens investors' concerns around natural disasters such as fires, as well as reputational risks resulting from negative social and environmental impacts. Despite the potential opportunities, challenges remain to investing in emerging markets were enabling conditions, including land rights and infrastructure allowing access to markets, are frequently lacking.

The benefits of forestry investments are the growing demand for the raw material wood and pulp<sup>15</sup>. There are fewer and fewer forest areas and already today the demand for wood exceeds the supply. This suggests that timber prices will continue to rise in the future and ultimately all investors will benefit from this. If the afforestation's are also managed sustainably – or are even designed, as with Forest Finance, to become permanent, near-natural forests – an investment in forests can literally generate green returns.

### **Downsides of forest investments**

There are also downsides. Forestry investments are not always socially beneficial, especially when stock corporations and other big companies buy cheap land in foreign countries and perhaps even displace locals, or the price of land for local residents rises immeasurably as a result of land purchases. Also, not all forests that are created through investments are ecologically friendly. Thousands of hectares with cloned eucalyptus or teak planted in rows are no gain for nature. On the contrary: many insecticides and pesticides that pollute and destroy the soil and the environment have to be used.

All forestry investments have one risk factor: the long contract term. Even with sustainable forestry investments which respect human rights and the environment, the planted trees need lots of time to grow. On ecologically farmed land, they probably take even longer to grow than the fast-growing trees in monocultures, which are harvested earlier, to produce cheap pulp and biomass. This is to the advantage of the slowly growing trees – because trees become larger with every centimeter, they gain in volume and thus in value – but it cannot be ruled out that during long contract terms, much can happen: companies can fall victim to mismanagement or go bankrupt, the regions in which the forests grow can become politically unstable.

<sup>&</sup>lt;sup>15</sup>See e.g., for the reasons of this ever growing phenomenon https://www.upmpulp.com/articles/pulp/21/demand-for-pulp/

Natural events such as fire, earthquakes, droughts or floods also have a lot of time to occur over the years. Forestry investment are therefore right for investors in particular if they do not shy away from risks, have the necessary financial means and staying power until the trees generate returns.

An important indicator for a reliable provider is its presence on the market. The longer he has successfully reforested and managed forests and perhaps already paid out proceeds to investors, the more likely it is that he will continue to do so in the future. It is also important how transparently a forestry investment provider operates: does he publish consolidated annual reports, disclose calculations showing how timber yields are generated and is there an opportunity to visit the forest areas and speak to employees on site? Based on these important indicators You can recognize solid and reliable business partners.

It is important to note the role of forests in the bioeconomy and thus in mitigating climate change. The forests in Nordic countries have been a source of food, products, and welfare for both local communities and for the nations as long as there has been any settlement. More recently, the way the forest supports the climate has become more pronounced. Forests are crucial for the development of sustainable bioeconomy in the Nordic and Baltic countries in substituting fossil fuel-based materials and energy. Forest biomass has a large potential for developing new bio-based products.

Bioeconomy and circular economy transformation depend on both technical and social innovations together with societies adapting to a bio-based sustainable future, which emphasizes the ecologic, economic, and social functions of forests. In policymaking and forest management, synergies need to be realized and trade-offs evaluated and addressed in forest management in general.

It can be argued that the prospects for forest bioeconomy may increase the attractiveness of forests as an investment and thus increase the annual rate of return on forest ownership<sup>16</sup>.

Figure 5.31. Investing in forests has at least the following risks:

Social and reputational risks

Not socially beneficial, especially when stock corporations and other big companies buy cheap land.

#### Risk in all forestry investments

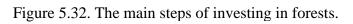
Long contract term.

### Natural events

Fire, earthquakes, pests, droughts or floods.

Source: Developed by the authors.

<sup>&</sup>lt;sup>16</sup>See more at https://www.barentsinfo.fi/beac/docs/The-Forest-in-Northern-Europe%E2%80%99s-Emerging-Bioeconomy.pdf



step		
	II step	
Select the appropriate route to the forests investment (e.g., buying forest land, investments or closed-end funds, forestry funds.	Choose the online platform of the chosen investment route.	III step Decide how much You can invest in forests in a certain period and start your scheme.

Source: Developed by the authors.

Table 5.10. Places where individual ca	an start investing in forests.
----------------------------------------	--------------------------------

Finland       1.     Investing in forests (Finland)       2.     Investing in forests (Ginal product)       but in English):     Investing in forests (Ginal product)		https://www.osakesijoittaja.fi/muut-sijoitusartikkelit/metsaan- sijoittaminen/			
Investing in forests (G		sijoittaminen/			
	erman origin				
2. Out in English).	C	https://www.forestfinance.de/en/media-library/how-to-invest- in-forests/			
3. Bio and circulation eco the forest investing point		https://www.barentsinfo.fi/beac/docs/The-Forest-in-Northern- Europe%E2%80%99s-Emerging-Bioeconomy.pdf			
4. Skogssällskapet		https://www.skogssallskapet.com/en/-news-and- events/news/2020-04-27-forest-ownership-in-the-baltic-states- tremendous-potential-for-growth.html			
Latvia	Latvia				
1. Investing in forests in countries	Baltic	https://www.hdforest.com/reasons-to-invest https://www.investitin.com/invest-baltic-forestry			
2. Latvian Forest Compa	ny, AB	http://www.latvianforest.lv/-latf-/latvian-forest-company/			
3. INVL Baltic Forests F Asset Management UA		https://www.invlmiskai.com/lit/en			
4. HD Forest, SIA		https://www.hdforest.lv/			
Lithuania					
1. UAB "Miškų Medijos	s Grupė"	https://branginu.lt/informacija/apie-mus			
2. UAB FMĮ "INVL Fin	asta"	https://www.invlmiskai.com/lit/lt/investuotojams			
3. UAB "Foros Global"		https://foros.lt/			

Source: Developed by the authors.

# 6. DIGITAL INVESTING PLAN

### **6.1.** How to choose investing targets?

Now that the investor has chosen to take control of their own investing, it is time to figure out what is next. Let's face it, deciding where to invest can be difficult at first but it is not as daunting task as it can seem. People who appear to "know-it-all" and assume they know what will happen in the future dominate forums on social media and the Internet. Some predict that Bitcoin will be worth 40 000\$ by the end of the year, while others say that it will plummet below 5,000\$. It is important for potential investors to remember that no one can accurately predict the price of Bitcoins or other cryptocurrencies, or the value of certain stocks. So, how do You make wise financial decisions? What criteria do You use to select Your targets? The investor must take the following steps to get the answers to these questions:

- General review of the financial situation;
- Creation of the list of investment goals (long-term; short-term);
- Risk assessment;
- Analysis of the current state of the market;
- Analysis of certain patterns;
- Periodic review of the performance.

Learning how to invest for the future is crucial regardless of how much or how little money the potential investor has. Most probably every potential investor has both short and long-term aspirations. As an investor, the person needs to keep in mind that they most likely want to attain both, therefore the investor must invest in accordance with their objectives.<sup>17</sup> To find the right investments, investors need to think about:

- **Return:** What is the expected return on the investment? Does it come from income or capital growth?
- Time frame: How long investor needs to invest to get the expected return?
- **Risk:** What types of risk does the investment involve? Is investor comfortable to take on these risks?
- Access to cash (liquidity): How long will it take to sell the investment and get the cash out?
- Cost to buy and sell: How much will it cost to buy and sell the investment?
- **Tax:** How much tax will investor pay on earnings (income and capital gains) from the investment?<sup>18</sup>

Whether the potential investor is saving for a down payment on a house, a new car, an emergency fund, or a retirement plan, the manner they invest can have a huge impact on their future.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup>Investing 101: Investing Basics For Beginners. Available at: <u>https://www.wealthsimple.com/en-</u> <u>ca/learn/investing-basics</u>

 <sup>&</sup>lt;sup>18</sup> Develop an Investing Plan. Available at: <u>https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan</u>
 <sup>19</sup> What Percentage of Retirement Funds Should Bonds Be? Available at:

https://budgeting.thenest.com/percentage-retirement-funds-should-bonds-be-28025.html

### General review of the financial situation

One of the first steps that needs to be done in terms of investing, is to preform broad analysis of the financial situation. The best practice would be to examine the debts (what the potential investor owes) and the assets (what the potential investor owns). For the assets – home, car, savings and other investments must be included. By gathering such information, investor will be able to determine what savings can be invested. It also will help to see how it can be diversified. After that, all the income and expenses also must be collected. This will allow the investor to see how much money they can put toward investing regularly.<sup>20</sup>

Best investment targets very much depend on existing financial situation of the potential investor. There are in total 5 levels of investments depending on the financial situation and thus depending on where the investor is, best targets differ:

- Level 0 is to get rid of expensive, in many cases short term debts. Although term "Expensive" may differ, in most cases that would be debts that cost more than 10% per yearly. The logic is simple saving from the high percentage yield will be higher than return from most of the investments.
- Level 1 is to have some money for the "force major situations" You may have unexpected expenses, computer or car break down, lost Your mobile phone or anything else unexpected. It is wise to have some quickly accessible financial resources to cover these unexpected costs. These funds should not generate income, their main task is to prevent You from taking expensive short-term debts in case of some force major situation. If You have these funds, great, You can go further.
- Level 2 Investment into a "safety pillow". A "safety pillow" that will help You in case of losing part or all monthly income. The total amount of the "Safety Pillow" is considered to be equal to at least 6 months income. The main idea is that these investments should earn some profit, but at the same time, at least part of them should be possible to take out quite fast, while some other part can be accessible in month or more (not all pillow one will need immediately).
- Level 3 Investment into a pension. Any amount invested for the pension counts, but in order to achieve considerable increase in future pension, it is suggested to invest at least 10% from monthly income and do it regularly. If investor is closer than 15 years to its pension, number of invested resources is advisable to be more than 10%.
- Level 4 If investor has previous levels done, it can now look for other investments targets, that may be of higher potential return but at the same time carry higher risks with them.

### Investment goal assessment

To determine the investing target, the potential investor should start with the list of their short-term and long-term investment goals and assess in which level of financial situation it is (Level 0 – Level 4). While it is tempting to come up with broad goals, specificity has its advantages. The investor should write down each of their goals and number of years they would be able to afford to keep the money invested to meet that goal. Short-term goals might include saving up money for the down payment on a starter home, gradually diverting some income toward a vehicle down payment or upgrading of old furniture, while longer term goals could

<sup>&</sup>lt;sup>20</sup> Develop an Investing Plan. Available at: https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan

include saving for retirement, building a college fund for Your children or buy a new home.<sup>21</sup> The investment goals can be divided, like:

- Short term (0 to 2 years);
- Medium term (3 to 5 years);
- Long term (5 years or more).

By translating these objectives into number-based terms the investor will be able to maintain a more realistic perspective. Whether the investor is among the most recent wave of market participants or a veteran at planning financial goals, setting investment goals is just as important as setting savings goals. Potential investment goals can be assessed also according to Level of financial situation where investor finds itself:

- Level 1 Here critical is to have money accessible immediately, so the most appropriate target is to have it in bank account that is not connected to payment card.
- Level 2 Here it is still critical to have investments with low-risk rate, however part of them can be with lower liquidity. So, part of the resources (equal to amount of at least 1 months spendings) should still stay in deposit account of the bank (money usually will be accessible in 5-7 days), part can be invested in other targets with lower flexibility (e.g., peer to peer platforms, commodities, investment funds).
- Level 3 First part is to decide which investment management company will take part of the 2<sup>nd</sup> pillar pension funds and further choose which investment fund to administer investors 3<sup>rd</sup> pension fund pillar and to set an automatic monthly payment which equals to at least 10% of monthly income.
- Level 4 When first 3 Levels are set, investor can start investing in different other investment targets depending on its risk tolerance.

Another aspect that should be remembered – money does not manage itself, so it is crucial to build a system that keeps the portfolio on track and lets the investor check in as often as they like. It is fine if investment portfolio goals seem contradictory at first. Effective financial planning typically involves diversified portfolio strategies that let the investor achieve multiple ends. In other words, not every stock, bond, retirement plan or mutual fund that the investor buys into needs to do precisely the same thing.<sup>22</sup> Setting and defining the financial objectives can help investors to pick the right investment to reach each goal.

### Assessment of the risk tolerance

As previously discussed, regardless of the instrument an investor chooses to invest in, there will always be some level of risk. When it comes to investing, risk and reward go hand in hand. The phrase "no pain, no gain" – comes close to summing up the relationship between risk and reward. Nobody can convince You otherwise: every investment entails some level of risk. If a potential investor is considering purchasing securities such as stocks, bonds, mutual funds, or exchange-traded funds, it is critical that they understand that they may lose part or all of their money. The potential for a higher investment return is the reward for taking on risk. If an investor has a long-term financial goal, they may be able to make more money by carefully investing in higher-risk assets like stocks or bonds rather than limiting themselves to lower-risk assets. On the other hand, lower risk cash investments may be appropriate for short-term

<sup>&</sup>lt;sup>21</sup> What Percentage of Retirement Funds Should Bonds Be? Available at:

https://budgeting.thenest.com/percentage-retirement-funds-should-bonds-be-28025.html

<sup>&</sup>lt;sup>22</sup> Setting Investment Goals That Help With Your Portfolio Success. Available at: https://www.m1finance.com/articles-1/investment-goals/

financial goals.<sup>23</sup> As a general rule, the higher the expected return on an investment, the higher the risk of the investment. The lower the expected return, the lower the risk. Lower risk means the returns are more stable and there is a lower chance You could lose money. For example, a government bond is a low-risk investment. It pays interest, and the value of the investment does not change too much in the short term. Shares are a higher risk investment. The price of a share can move up and down a lot over a short amount of time. The graph below shows the risk and return relationship for different asset classes.<sup>24</sup>

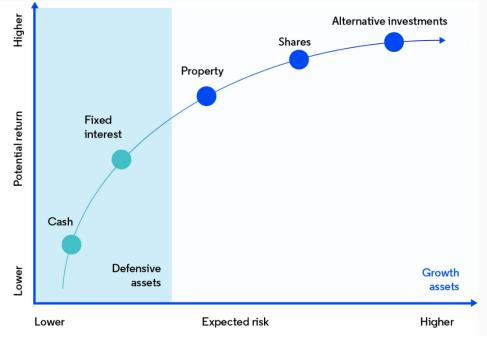


Figure 6.1. Risk and return.<sup>25</sup> Source: Moneysmart.gow.au

An aggressive investor, or one with a high-risk tolerance, is willing to risk losing money to get potentially better results. A conservative investor, or one with a low risk tolerance, favors investments that maintain his or her original investment.<sup>26</sup>



Figure 6.2. Risk profile assessment. For example, an investor may presently believe that his/her current portfolio reflects that of a somewhat "Conservative" investor profile (x) when in fact they may be comfortable with a higher risk factor, i.e., a "Strongly Balanced" (y) but more growth-oriented investor approach.<sup>27</sup>

<sup>24</sup> Develop an investing plan. Available at: https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan

<sup>&</sup>lt;sup>23</sup> Assessing Your Risk Tolerance. Available at: https://www.investor.gov/introduction-investing/getting-started/assessing-your-risk-tolerance

<sup>&</sup>lt;sup>25</sup> Develop an investing plan. Available at: https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan

<sup>&</sup>lt;sup>26</sup> A guide to Risk Assessment

for Investors. Available at: http://www.pinnaclewm.com.au/wp-content/uploads/2013/06/A-Guide-to-Risk-Assessment-for-Investors.pdf

<sup>&</sup>lt;sup>27</sup> A guide to Risk Assessment for Investors. Available at: <u>http://www.pinnaclewm.com.au/wp-content/uploads/2013/06/A-Guide-to-Risk-Assessment-for-Investors.pdf</u>

### Source: Pinnacle Wealth Management

Many investment websites provide free online quizzes to assist prospective investors in determining their risk tolerance. Some of the services will even predict asset allocations based on questionnaire responses. While the suggested asset allocations may be a good place to start, must be kept in mind that the findings could be skewed toward financial goods or services supplied by firms or persons who sponsor the websites.<sup>28</sup>

### Analysis of the current state of the market

It is not enough to say: "Because I believe this company/crypto will perform well in the future". Rather, it is about putting the information in front of the potential investor to good use. Patterns and analysis might assist the potential investor in making an informed target selection. As it was previously assessed, it is not recommended just to simply choose from the list of companies, cryptocurrencies or different investment platforms. The investor requires reliable data in order to make a substantial profit from their investments. One of the steps of deciding in where to invest is to assess the current state of the market. Many traders miss the forest for the trees because they get caught up in the details of choosing a trading entry point and forget that the market's sentiment is strongly biased against any chance of success.

As previously stated, one's personal financial situation can be measured based on their financial situation level. This evaluation is critical in determining whether or not a potential investor can begin investing in other investment options. Investors can go to Level 4 once all three previous levels have been set. To be successful in other investment targets, such as stocks, an investor must first assess the current market situation before deciding on an investment strategy.

There are three main market states: bullish (bull market), bearish (bear market), and neutral (in a trading range).  $^{29}$ 

### Bullish (Bull market)

A bullish market trend is represented by rising stock prices of various securities in the market, especially equity instruments. Growth of at least 20% or more has to be registered by several stock exchanges in terms of trade volume and purchases to be categorized as a bull market.

During this time, investors generate high expectations regarding the stock market performance, and pool their money readily into this sector. An increasing consumer confidence level, subsequently increasing the cash flow into this sector, allows companies to increase annual turnover, which leads to higher profits to be disbursed among shareholders.

Investors who want to benefit from a bull market should buy early in order to take advantage of rising prices and sell them when they have reached their peak. Although it is hard to determine when the bottom and peak will take place, most losses will be minimal and are usually temporary. There are some strategies investors can utilize during bull market periods:

• **Buy and Hold.** One of the most basic strategies in investing is the process of buying a particular security and holding onto it, potentially to sell it at a later date. This strategy necessarily involves confidence on the part of the investor: why hold onto a security

<sup>&</sup>lt;sup>28</sup> Assessing Your Risk Tolerance. Available at: https://www.investor.gov/introduction-investing/getting-started/assessing-your-risk-tolerance

<sup>&</sup>lt;sup>29</sup> Choosing Your Investment - How Do You Choose Your Target? Available at: <u>https://washingtonindependent.com/choosing-your-investment/</u>

unless You expect its price to rise? For this reason, the optimism that comes along with bull markets helps to fuel the buy and hold approach.

- **Increased Buy and Hold.** This strategy it involves additional risk. The premise behind the increased buy and hold approach is that an investor will continue to add to his or her holdings in a particular security so long as it continues to increase in price. One common method for increasing holdings suggests that an investor will buy an additional fixed quantity of shares for every increase in stock price of a pre-set amount.
- **Retracement Additions.** A retracement is a brief period in which the general trend in a security's price is reversed. Even during a bull market, it's unlikely that stock prices will only ascend. Rather, there are likely to be shorter periods of time in which small dips occur as well, even as the general trend continues upward. Some investors watch for retracements within a bull market and move to buy during these periods. The thinking behind this strategy is that, presuming that the bull market continues, the price of the security in question will quickly move back up, retroactively providing the investor with a discounted purchase price.
- **Full Swing Trading.** Perhaps the most aggressive way of attempting to capitalize on a bull market is the process known as full swing trading. Investors utilizing this strategy will take very active roles, using short-selling and other techniques to attempt to squeeze out maximum gains as shifts occur within the context of a larger bull market.<sup>30</sup> Investing in cryptocurrencies/stocks at a time when the market is increasing can help

the investor to make a lot of money. Even if the market is falling or staying flat, long-term rewards can still be realized.<sup>31</sup>

Bearish (Bear market)

A bear market is a situation when the stock market experiences price declines over a period of time. Generally, a bear market is declared when the price of an investment falls at least 20% from its high. In other words, a trend of falling stock prices for an extended period is considered a bear market. Substantial deterioration of at least 20% or more has to be recorded for a market to be classified as bearish. It is typically characterized by a falling speculative demand among residents, thereby reducing the aggregate cash flow of the capital sector in an economy.

The causes of a bear market often vary, but in general, a weak or slowing or sluggish economy, bursting market bubbles, pandemics, wars, geopolitical crises, and drastic paradigm shifts in the economy such as shifting to online economy, are all factors that might cause a bear market. The signs of a weak or slowing economy are typically low employment, low disposable income, weak productivity, and a drop in business profits. In addition, any intervention by the government in the economy can also trigger a bear market.<sup>32</sup>

For example, changes in the tax rate or in the federal funds rate can lead to a bear market. Similarly, a drop in investor confidence may also signal the onset of a bear market. When investors believe something is about to happen, they will take action—in this case, selling off shares to avoid losses.

Bear markets can last for multiple years or just several weeks. A secular bear market can last anywhere from 10 to 20 years and is characterized by below-average returns on a sustained basis. There may be rallies within secular bear markets where stocks or indexes rally

<sup>&</sup>lt;sup>30</sup> Bull Market. Available at: <u>https://www.investopedia.com/terms/b/bullmarket.asp</u>

<sup>&</sup>lt;sup>31</sup>Choosing Your Investment - How Do You Choose Your Target? Available at: <u>https://washingtonindependent.com/choosing-your-investment/</u>

<sup>&</sup>lt;sup>32</sup> What is Bear Market? Available at: <u>https://groww.in/p/bear-market/</u>

for a period, but the gains are not sustained, and prices revert to lower levels. A cyclical bear market, on the other hand, can last anywhere from a few weeks to several months.

Bear markets usually have four different phases:

- **The first phase** is characterized by high prices and high investor sentiment. Towards the end of this phase, investors begin to drop out of the markets and take in profits.
- In the second phase, stock prices begin to fall sharply, trading activity and corporate profits begin to drop, and economic indicators, that may have once been positive, start to become below average. Some investors begin to panic as sentiment starts to fall. This is referred to as capitulation.
- **The third phase** shows speculators start to enter the market, consequently raising some prices and trading volume.
- In the fourth and last phase, stock prices continue to drop, but slowly. As low prices and good news starts to attract investors again, bear markets start to lead to bull markets.<sup>33</sup>

### Neutral strategy

Neutral options trading strategies are employed when the options trader does not know whether the underlying stock price will rise or fall. Also known as non-directional strategies, they are so named because the potential to profit does not depend on whether the underlying stock price will go upwards or downwards. Rather, the correct neutral strategy to employ depends on the expected volatility of the underlying stock price.<sup>34</sup>

### Analysis of certain patterns

To find a potential short- or long-term trend, investors need to take a deep dive into underlying factors of the investment market. Luckily for new investors, there are plenty of digital analytics tools that are created to do the hard work for them. Online stock screeners, many of which are free, serve as great examples. Investors can use these to filter the market for stocks in a specific industry, with a particular market capitalization or within a price range. Plenty of free online platforms, tools and apps give free access to charts and graphs that track and analyze stock performance just for the specific investor.<sup>35</sup> By using different online platforms and applications, traders can also spot possible patterns by looking at different market indicators. These are statistical measurements that can be used to identify specific stock market tendencies. Fundamental analysis and technical analysis are two of the most commonly utilized methods of analysis in trading, yet they are on opposite sides of the spectrum when it comes to analyzing distinct market indicators. Both are used by investors and traders to investigate and forecast future stock prices, cryptocurrency values, and other investment types. Like any investment strategy or philosophy, both have advocates and adversaries.<sup>36</sup>

<sup>&</sup>lt;sup>33</sup> What Is a Bear Market? Available at: <u>https://www.investopedia.com/terms/b/bearmarket.asp</u>

<sup>&</sup>lt;sup>34</sup> Neutral Trading Strategies. Available at: <u>https://www.theoptionsguide.com/neutral-trading-strategies.aspx</u>

<sup>&</sup>lt;sup>35</sup> What Is Trend Investing and How Do You Do It? Available at: <u>https://smartasset.com/investing/what-is-trend-</u>

investing

<sup>&</sup>lt;sup>36</sup> Fundamental vs. Technical Analysis: What's the Difference? Available at:

https://www.investopedia.com/ask/answers/difference-between-fundamental-and-technical-analysis/

### Fundamental Analysis

Fundamental analysis attempts to forecast market behavior by examining the impact of an economic shift, such as the release of employment figures or changes in interest rates. Fundamental analysis is used to assess stocks by attempting to calculate their intrinsic value. Fundamental analysts research everything from the broader economy and industry circumstances to particular firms' financial strength and management. Fundamental analysts scrutinize earnings, costs, assets, and liabilities.<sup>37</sup>

# Fed hikes interest rates amid rising inflation

By Matthew Rocco Published September 26, 2018 The Fed FOXBusiness



Fed raises rates for third time in 2018 The Federal Reserve raised the benchmark interest rate by another quarter-percentage point. FBN's Edward Lawrence with more.

Figure 6.3. Fundamental analysis. This is a classic news headline that is a fundamental change to the stock market. Interest rates and inflation go hand and hand.<sup>38</sup> Source: <u>Trendspider.com</u>

## **Technical Analysis**

Technical analysis varies from fundamental analysis in that traders attempt to spot opportunities by analyzing statistical trends, such as price and volume changes in a stock. The basic premise is that all known fundamentals are already included into price, thus there's no need to pay attention to them. Technical analysts do not attempt to determine the intrinsic worth of a security. Rather, they analyze stock charts to spot patterns and trends that indicate how a stock may perform in the future.<sup>39</sup>

<sup>&</sup>lt;sup>37</sup> Fundamental vs. Technical Analysis: What's the Difference? Available at:

https://www.investopedia.com/ask/answers/difference-between-fundamental-and-technical-analysis/

<sup>&</sup>lt;sup>38</sup> Analyzing Different Stock Trading Patterns. Available at: https://trendspider.com/blog/analyzing-different-stock-trading-patterns-trendspider-blog/

<sup>&</sup>lt;sup>39</sup>Fundamental vs. Technical Analysis: What's the Difference? Available at:

https://www.investopedia.com/ask/answers/difference-between-fundamental-and-technical-analysis/



Figure 6.4. Technical analysis. The technical side of stock analysis looks at the price of an individual company or index and looks at patterns associated with them.<sup>40</sup> Source: <u>Trendspider.com</u>

Periodic review of the performance

It is crucial to check on the investments on a frequent basis to ensure they are performing as intended. The periodic assessment can help investors determine whether they are on track to meet their financial objectives.<sup>41</sup> An investor can check if the initially planned asset allocation still holds true by doing a periodic portfolio review, and if it does not, they can rebalance their portfolio to maintain the intended asset allocation.<sup>42</sup> For instance, perhaps the investor is not putting enough money into their investments on a monthly basis and is falling behind on their goals, or perhaps the investments are depositing more than the investor need, causing the investor to be ahead of schedule. Maybe an investor wants to move their money to a more stable investment as they near their long-term objectives, or perhaps their assets are performing well and they want to take on even more risk to achieve their objectives sooner.<sup>43</sup> Additionally, doing a portfolio review on a regular basis can help with tax planning, since individuals can modify their investments to decrease their overall tax burden if necessary. Investors' portfolio reviews may need to be done more frequently or less frequently based on their needs and investor profile. It is recommended to conduct a review every six months or once a year.<sup>44</sup>

<sup>&</sup>lt;sup>40</sup> Analyzing Different Stock Trading Patterns. Available at: <u>https://trendspider.com/blog/analyzing-different-stock-trading-patterns-trendspider-blog/</u>

<sup>&</sup>lt;sup>41</sup> Develop an investing plan. Available at: <u>https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan</u>

 <sup>&</sup>lt;sup>42</sup> Develop an investing plan. Available at: <u>https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan</u>
 <sup>43</sup> Making an Investment Plan: A Step-by-Step Guide. Available at: <u>https://smartasset.com/investing/how-to-</u>

<sup>&</sup>lt;u>make-an-investment-</u> plan#:~:text=1%20Step%20One%3A%20Assess%20Your%20Current%20Situation.%20The,not%20wise%20t

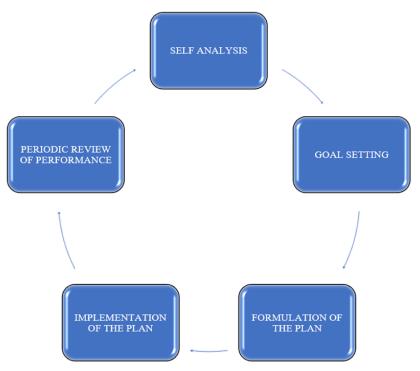
<sup>&</sup>lt;u>o%20just%20leave%20them%20alone.%20</u>

<sup>&</sup>lt;sup>44</sup> Why should an investor do a periodic portfolio review? Available at: <u>https://www.tatacapital.com/blog/wealth-management/why-should-an-investor-do-a-periodic-portfolio-review/</u>

### 6.2. Exercise: Create Your own plan!

The key to effective investing is planning. Making a strategy will assist You in finding investments that meet Your investing time frame and risk tolerance, allowing You to achieve Your financial goals faster.<sup>45</sup> Having an investment strategy is similar to having a strategy for anything else in life. What happens if You go grocery shopping without a list or go appliance shopping without knowing what You need? Most of the time, You will make a poor purchase or pay too much for an item that You might obtain at a lower price somewhere else.<sup>46</sup>

### **INVESTMENT PLAN PROCESS**



6.5. Building up an Investment Plan is a process which includes: Self-Analysis (define in which Level of financial situation investor is), Goal Setting by Investor (according to Level of financial situation), Formulation of the Plan for Achievement of Goal, Implementation of Plan and Periodic review of Performance of Investment made.<sup>47</sup> Source: Tax Guru In.

Preparation is essential for financial success. A well-thought-out investment strategy can help You understand why You are investing and locate investments that meet Your goals in a timely manner. If You do not have a strategy, it could take years before You invest, and by the time You do, You will have missed out on possibilities to grow Your money.<sup>48</sup>

In times of doubt, an investment plan serves as a reminder to stay focused. If the market falls into a slump or You become very emotional about your assets, You can always turn back

<sup>&</sup>lt;sup>45</sup> Develop an investing plan. Available at: <u>https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan</u>

<sup>&</sup>lt;sup>46</sup> How to create your very own investment plan. Available at: <u>https://www.bondora.com/blog/how-to-create-your-very-own-investment-plan/</u>

<sup>&</sup>lt;sup>47</sup> Building Up A Investment Plan. Available at: <u>https://taxguru.in/finance/building-investment-plan.html</u>

<sup>&</sup>lt;sup>48</sup> How to create your very own investment plan. Available at: <u>https://www.bondora.com/blog/how-to-create-your-very-own-investment-plan/</u>

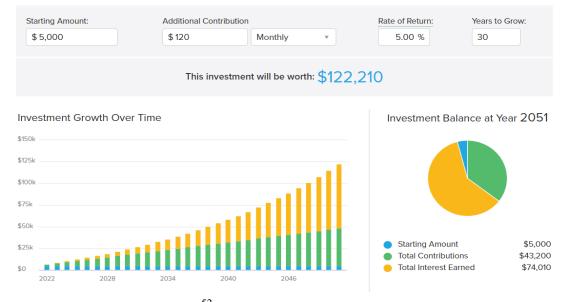
to Your investment plan for guidance. Because due diligence is king when it comes to investing, and emotions can lead to unwise conclusions.<sup>49</sup>

It is now time to establish an investment strategy. You can identify the backbone of Your investing plan using the following outline, and then choose the finest strategic assets for Your needs from there. Remember that everyone is unique, thus Your investment requirements may differ significantly from those of Your relatives and family. The most important thing is to be honest with Yourself and Your financial circumstances; otherwise, You will probably choose assets that are not the ideal fit for Your needs.<sup>50</sup>

Remember, once You have determined Your investment approach, Your plan is not finished. On the contrary, once You begin acting, Your strategy will stick with You all the way until the end of the investment. These stages will not only assist You in getting started with Your plan but will also assist You in continuing to make the best decisions when Your investments, aspirations, and living circumstances change over time. <sup>51</sup> A real-life example has been included below to make it easier for You to create Your own investment plan.

### Real-life example

Examining a real-life example will help You understand how a long-term investment can pay off handsomely over time. Let's take, for example, Charles, a 30-year-old store assistant who wishes to retire at 60. Charles has no experience with investing and does not have the time to learn, so he is seeking for a hassle-free, automatic investment that would provide him with a good return. In addition, given his current financial status, Charles can start with a monthly commitment of 120\$ and gradually increase his contribution by 5% each year, with the starting amount of 5 000\$. As it can be seen from the chart, at the year of 2051 Charles investment will be worth of 122 210\$.



<sup>6.6.</sup> Investment growth over time.<sup>52</sup> Source: Smartasset.com

<sup>&</sup>lt;sup>49</sup> How to create your very own investment plan. Available at: <u>https://www.bondora.com/blog/how-to-create-your-very-own-investment-plan/</u>

<sup>&</sup>lt;sup>50</sup> How to create your very own investment plan. Available at: <u>https://www.bondora.com/blog/how-to-create-your-very-own-investment-plan/</u>

<sup>&</sup>lt;sup>51</sup> How to create your very own investment plan. Available at: <u>https://www.bondora.com/blog/how-to-create-your-very-own-investment-plan/</u>

<sup>&</sup>lt;sup>52</sup> Investment Calculator. Available at: <u>https://smartasset.com/investing/investment-calculator#2Goxxg5nlZ</u>

One of the keys to any investor's success is developing and sticking to an investment strategy. Identifying an investing strategy and putting it into action puts You in control of Your own financial future while also increasing Your chances of investment success. Make an investing strategy for Yourself; doing so will put You on the road to the financial future You have always desired.<sup>53</sup>

## 7. CURRICULUM

Curriculum is aimed for trainers and teachers, and it is available for use Digiperin\_curriculum.pdf. This material is training material with related presentations.

### 8. VOCABULARY OF TERMS

Table 8.1 Terms.

Term	Description
Principal	The original amount that You pay for an investment.
Assets	Anything You buy with the expectation that You might reasonably make money from it. Assets can be "liquid", meaning easily transferable into cash like stocks, or "illiquid", meaning harder to turn into cash.
Interest	A payment for the use of someone else's money. It is income that an individual may receive by allowing other individuals to use their capital.
Stocks	Stocks, shares, bonds, or other certificates that You buy in order to earn regular interest from them or to sell them later for a profit.
Fintech	Fintech (Financial technology) can be defined as being computer programs and other technology used to support or enable banking and financial services.
"Safety Pillow"	Considered to be equal to at least 6 months income.
The digital competence	Is a combination of knowledge, skills and attitudes with regards to the use of technology to perform tasks, solve problems, communicate and so on.
Online Banking	An electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website.
Cryptocurrency	A digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend.
The Foreign Exchange (FX or Forex)	Is a global marketplace for exchanging national currencies.
Investing to Investment funds	Is a possibility to invest money alongside other investors.
Bonds	A bond is generally a form of debt which the investors pay to the issuers for a defined time frame. Bonds are issued for a period of more than one year to raise money by borrowing.
Commodities	A basic good used in commerce that is interchangeable with other goods of the same type.
Crowdfunding	Is the use of small amounts of capital from a large number of individuals to finance a new business venture.

<sup>&</sup>lt;sup>53</sup> How to create your very own investment plan. Available at: <u>https://www.bondora.com/blog/how-to-create-your-very-own-investment-plan/</u>

# 9. RESOURCES

# **Chapter 2 – FINTECH**

- <u>https://securionpay.com/blog/best-fintech-blogs-list/</u>
- <u>https://ec.europa.eu/info/business-economy-euro/banking-and-finance/digital-finance\_en</u>
- <u>https://en.wikipedia.org/wiki/Financial\_technology</u>

# **Chapter 4 – PERSONAL DIGITAL COMPETENCIES**

- What is Digital Competence? Available at: <u>The Digital Competence Wheel (digital-competence.eu)</u>
- Internet & Investing. Available at: <u>How The Internet Has Changed Investing</u> (investopedia.com)
- The Internet literacy. Available at: <u>Why is internet and social media literacy so</u> <u>important? 5 steps to a conscious consumer (niallmcnulty.com)</u>
- Online Banking. Available at: <u>Online Banking: Definition and Features: [Essay</u> <u>Example], 397 words GradesFixer</u>
- Digital Investment platforms. Available at: <u>https://www.nucoro.com/insights/your-</u> <u>complete-digital-investment-platform-guide</u>
- Investment applications. Available at: <u>Best Investment Apps of 2022 (thebalance.com)</u>
- Essential skills for Internet use. Available at: <u>What is The Internet? (copian.ca)</u> (Guide; Learning material)
- Using Investing.com to day trade with no no experience. Available at: <u>Using</u> <u>investing.com to day trade with no no experience!!</u> <u>YouTube</u> (Guide; Learning material)

# **Chapter 5 – DIGITAL INVESTMENT TARGETS**

## **Bonds:**

- Fiksusijoittaminen, <u>https://fiksusijoittaminen.fi/joukkovelkakirjoihin/</u>
- Bank of Lithuania. <u>https://www.lb.lt/lt/obligacijos#ex-1-3</u>.
- Bank SEB. <u>https://www.seb.lt/infobankas/taupymas-ir-investavimas/kodel-patyre-investuotojai-renkasi-obligacijas-o-ne-indelius</u>.
- Bank Swedbank. <u>https://www.swedbank.lt/private/investor/portfolio/newAccount</u>.
- Ministry of Finance of the Republic of Lithuania. <u>https://finmin.lrv.lt/en/competence-areas/state-debt-management/government-securities/government-securities-auctions.</u>
- Nasdaq Vilnius. https://nasdaqbaltic.com/lt/kaip-pradeti/pradeti-investuoti/.
- Securities and exchange commission. <u>https://www.investor.gov/introduction-investing/investing-basics/investment-products/bonds-or-fixed-income-products/bonds</u>.

# **Investment funds:**

- www.moneysavingexpert.com<u>Investment Fund need-to-knows Money Saving</u> <u>Expert;</u>
- Bankas Swedbankas. <u>www.swedbank.lt/</u>
- Lietuvos bankas. <u>www.lb.lt</u>
- Investuotojų asociacija. <u>www.investuoju.lt</u>

### **P2P:**

- <u>https://corporatefinanceinstitute.com/resources/knowledge/finance/peer-to-peer-lending/</u>
- <u>https://moneysmart.gov.au/managed-funds-and-etfs/peer-to-peer-lending</u>)
- <u>https://www.moneyhelper.org.uk/en/savings/investing/peer-to-peer-lending-what-you-need-to-know</u>)
- European Commission. (2015). Crowdfunding explained: A guide for small and medium enterprises on crowdfunding and how to use it. doi:10.2873/313319.
- Wang, H., Chen, K., Zhu, W. *et al.* (2015). A process model on P2P lending. *Financial Innovation* 1, 3. <u>https://doi.org/10.1186/s40854-015-0002-9</u>
- Corporate finance institute. <u>https://corporatefinanceinstitute.com/resources/knowledge/finance/peer-to-peer-lending/</u>
- <u>https://moneysmart.gov.au/managed-funds-and-etfs/peer-to-peer-lending.</u>
- <u>https://www.moneyhelper.org.uk/en/savings/investing/peer-to-peer-lending-what-you-need-to-know</u>.
- Bank of Lithuania.(2021). <u>https://www.lb.lt/lt/finansu-rinku-</u> dalyviai?ff=1&market=1&type%5B%5D=23.
- Statista. (2021). *Peer-to-peer consumer and business lending transaction value in Europe* (*excluding the UK*) from 2013 to 2020. <u>https://www.statista.com/statistics/412400/europe-alternative-finance-transaction-value-p2p-lending/</u>

## **Commodities:**

• <u>https://www.investopedia.com/articles/investing/102015/invest-through-equity-crowdfunding-risks-and-rewards.asp</u>

## **Crowdfunding:**

- <u>https://www.investopedia.com/terms/c/crowdfunding.asp</u>
- <u>https://whydonate.nl/en/blog/top10-crowdfunding-platforms-europe/</u>
- <u>https://www.investopedia.com/articles/investing/102015/invest-through-equity-crowdfunding-risks-and-rewards.asp</u>
- <u>https://www.fellowfinance.fi</u>

### Vocabulary words that everyone should know:

https://www.buzzfeed.com/meganeliscomb/basic-investment-terms-and-vocabulary https://www.collinsdictionary.com/dictionary/english/securities

# **Chapter 6 – DIGITAL INVESTMENT PLAN**

- What Percentage of Retirement Funds Should Bonds Be? Available at: https://budgeting.thenest.com/percentage-retirement-funds-should-bonds-be-28025.html
- Develop an Investing Plan. Available at: https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan
- Setting Investment Goals That Help With Your Portfolio Success. Available at: https://www.m1finance.com/articles-1/investment-goals/
- Assessing Your Risk Tolerance. Available at: https://www.investor.gov/introductioninvesting/getting-started/assessing-your-risk-tolerance
- Develop an investing plan. Available at: https://moneysmart.gov.au/how-to-invest/develop-an-investing-plan
- A guide to Risk Assessment for Investors. Available at: http://www.pinnaclewm.com.au/wp-content/uploads/2013/06/A-Guide-to-Risk-Assessment-for-Investors.pdf
- Choosing Your Investment How Do You Choose Your Target? Available at: https://washingtonindependent.com/choosing-your-investment/
- Bull Market. Available at: https://www.investopedia.com/terms/b/bullmarket.asp
- What is Bear Market? Available at: https://groww.in/p/bear-market/
- What Is a Bear Market? Available at: https://www.investopedia.com/terms/b/bearmarket.asp
- Neutral Trading Strategies. Available at: https://www.theoptionsguide.com/neutral-trading-strategies.aspx
- What Is Trend Investing and How Do You Do It? Available at: https://smartasset.com/investing/what-is-trend-investing
- Fundamental vs. Technical Analysis: What's the Difference? Available at: https://www.investopedia.com/ask/answers/difference-between-fundamental-and-technical-analysis/
- Analyzing Different Stock Trading Patterns. Available at: https://trendspider.com/blog/analyzing-different-stock-trading-patterns-trendspiderblog/
- Making an Investment Plan: A Step-by-Step Guide. Available at: https://smartasset.com/investing/how-to-make-an-investmentplan#:~:text=1%20Step%20One%3A%20Assess%20Your%20Current%20Situation. %20The,not%20wise%20to%20just%20leave%20them%20alone.%20
- Why should an investor do a periodic portfolio review? Available at: https://www.tatacapital.com/blog/wealth-management/why-should-an-investor-do-a-periodic-portfolio-review/
- Why should an investor do a periodic portfolio review? Available at: https://www.tatacapital.com/blog/wealth-management/why-should-an-investor-do-a-periodic-portfolio-review/
- How to create your very own investment plan. Available at: https://www.bondora.com/blog/how-to-create-your-very-own-investment-plan/

- Building Up A Investment Plan. Available at: https://taxguru.in/finance/building-investment-plan.html
- Investment Calculator. Available at: https://smartasset.com/investing/investment-calculator#2Goxxg5nlZ