

## **NON-FUNGIBLE TOKEN (NFT): OVERVIEW, OPPORTUNITIES AND CHALLENGES**

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### **Abstract**

Most people still believe that playing the stock exchange is “a ruse” for the naive, or that investing in stock market is very complicated or requires extremely advanced financial know-how. In reality, investments in stock market have been and still are a very important source of wealth, for everyman included.

Not everybody has the funds, the skills, and the right disposition to create a successful business. The failure rate here is approximately ninety percent. Also, real estate investments require significant amounts of money to be invested, as well as a lot of time.

Not everyone has the time, the knowledge and resilience to invest in individual stocks profitably. The good news is that anyone can passively invest in an ETF portfolio (exchange-traded funds, funds that trade on exchanges). An ETF is practically a bundle of stocks in various percentages given by the indexes that this ETF tracks.

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**JEL Classification:** I2

### **1. Introduction**

In Romania there are few people who own the majority of their wealth at national level.

Successful people do not allow themselves to be blinded by smokescreens; they go into detail, to get as close to reality as possible. It is only when we have factual data anchored in the present, that we manage to make the best decisions and excel. For instance, there are ETFs that replicate the S&P 500 Index which reunites the most important 500 companies listed in the U.S.A market. At the moment, the most relevant companies in the S&P 500 Index are Apple, Microsoft, Google, Tesla, Amazon and Facebook. In the past one hundred years, the S&P 500 Index has displayed an annual average return of approximately 10%. Anybody can learn how to draw up an efficient and smart ETF portfolio and acquire the discipline of making two or three transactions a month. In terms of time input, it will take

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you only as little as fifteen minutes per month and, what is more, you can surprisingly have better results than over ninety percent of the other investors.

#### *Net worth versus median wealth and the concentration of wealth in Romania*

To understand more easily, according to Credit Suisse, the average net worth of a Romanian is approximately 176.000 RON, whereas the median net worth is 80.300 RON.

This kind of difference, which is more than double, between the average and the median, could make one think immediately of the concentration of wealth in Romania. If one stopped here, one might think that indeed a handful of people own most of the wealth in Romania. And this is how one ends up making the wrong decisions based on incomplete data, believing that this is real.

However, if one gets into details, one may notice, from a report drawn up by Boston Consulting Group (BCG), exactly how the Romanians' wealth is divided by segments.

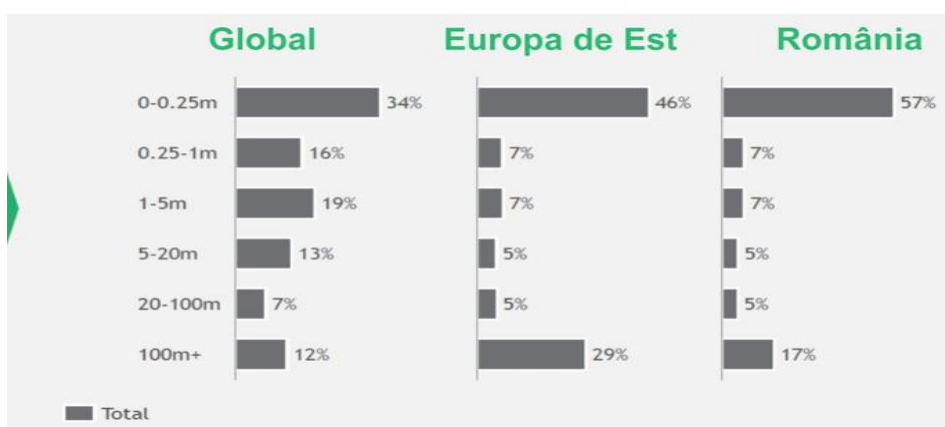


Chart 1: Comparison between wealth segments in 2019

Thus, we find out that, in fact, those pertaining to the segment with the smallest worth (0 – 0.25m USD) hold the highest percentage from the total wealth of Romania: 57%.

Moreover, comparing the same wealth segment with what happens at a global level, we notice an enormous difference: 34% versus 57%. In comparison with the regional level (Eastern Europe), there is a great difference as well, of over 11% in our favor.

At the other extreme, for the 100m+ segment, we notice the same thing. In relation with the region (Eastern Europe), the people with a 100m+ worth in Romania hold a much lower percentage from the total wealth of Romania: 17% versus 29% Eastern Europe. It is a fabulous difference of 12%.

We therefore see how the premises of the equation change radically, as there is no question of concentration of wealth in the case of Romania.

On top of that, we shall have a look at how the economic environment in Romania provides us with an unique opportunity. It is still Boston Consulting Group (BCG) that presents us the estimation of the wealth growth rate by segments.



Chart 2: Wealth segments in Romania

We may notice how it is estimated that those in the 0 – 0,25m segment, respectively 0.25 – 1m segment will experience the most rapid growth, with a CAGR of 6.9%, respectively 7.3%.

As we can see, it is only in Romania that the concentration of wealth is much lower than in the region, respectively globally, but also that the smallest two wealth segments will increase the most rapidly.

The aim should be to increase wealth quicklier, and this is possible through efficient investments. Unfortunately, nevertheless, a lot of people invest without previous analysis, discovering too late, or never, that the returns of their investment could have been much higher.

If one tracks the evolution of a 12.000 RON investment annually (or 1000 RON per month) for thirty years, at an annualized average return of 5%, we witness how every 0.1% increment “lost” on taxes/commissions/inefficient allocation etc. “eats up” over 15.000 RON from the portfolio.

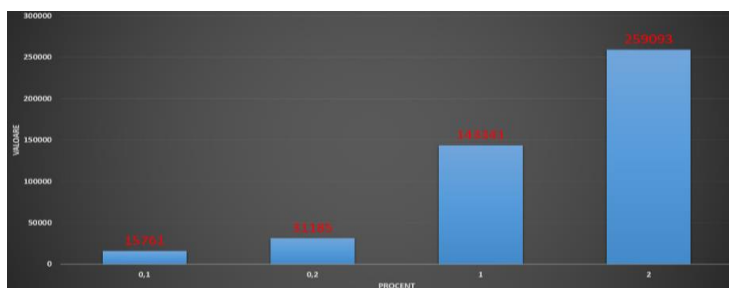


Chart 3: Portfolio increase/decrease per 0.1%

It is clear how every 0.1% return is extremely important, making all the difference between success and failure.

Depending on the savings rate, respectively the yield of the portfolio, we can calculate how many years the road to financial independence will take.

Practically speaking, for a savings rate of 35%, having a return of 5%, what results is a road of 24.6 years.

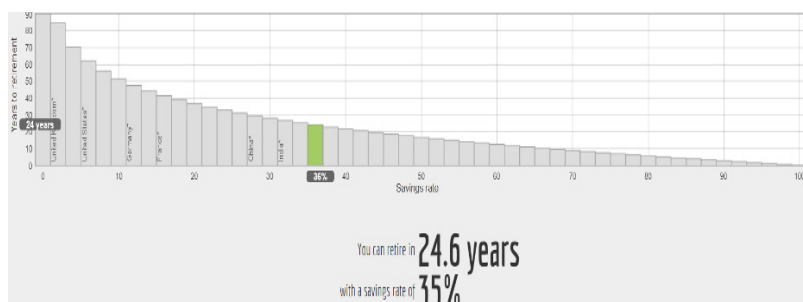


Chart 4: Retirement age/pension – scenario no. 1

Of course, this amount of time can be shortened by increasing the savings rate, but what if there were another way to increase quality of life?

For instance, by generating premium, i.e., greater returns. If, in the same math, we introduce a yield of 7% per year, at the same savings rate, one can gain 3.2 years of one's life, reaching financial independence in 21.4 years, instead of 24.6.

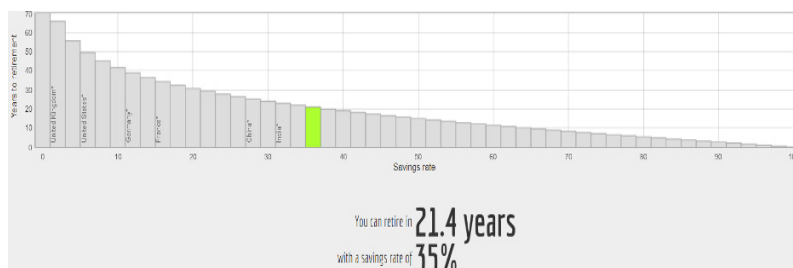


Chart 5: Retirement age/pension – scenario no. 2

This is not all, there is another element that can shorten the road to financial independence: the safety withdraw rate (SWR). With a portfolio that has a SWR that is greater by 0.5%, one gains another 1.3 years.

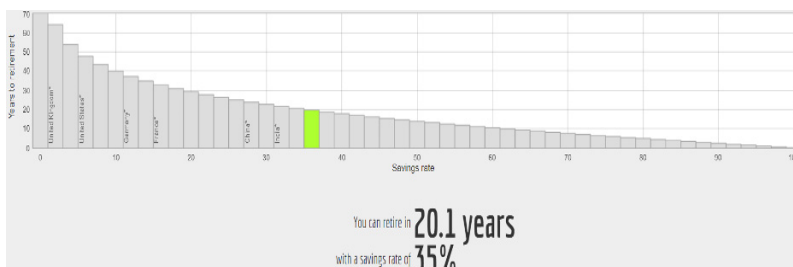


Chart 5: Retirement age/pension – scenario no. 3

We shall introduce here exactly this: a strategy to minimize the number of years that are necessary to reach financial education through efficient investments that generate premium yield.

## **2. WHAT IS AN NFT?**

NFT means nonfungible token. Simply put, it is a digital token existing on blockchain.

A real example in this sense would be the next one. A dollar is a dollar; it is fungible. A plane ticket, on the other hand, is nonfungible. Every plane ticket has different information and characteristics and cannot be exchanged with another. NFTs can be anything digital. Literally, anything can be an NFT, including an X-ray of your teeth, one of your Tweets or a two-second video of you.

Because digital assets can be copied and duplicated easily, NFTs, or non-fungible tokens, were created to provide proof of ownership over a digital asset. Again, think of it as a piece of artwork, although many prints can be created, often the original piece is most valuable. The benefit of owning an NFT is you can sell it to others and potentially make a profit.<sup>4</sup> [1]

### **2.1 WHAT IS A TOKEN?**

Technically speaking, a “token” is just another word for “cryptocurrency” or “cryptoassets”, but it has increasingly acquired more specific meanings, depending on the context.

The first is all cryptocurrency, except Bitcoin and Ethereum (even though, technically, these are tokens as well).

The second is to describe certain digital assets that roll over the blockchain of other cryptocurrencies, the way a lot of decentralized finance tokens (or DeFi) do.

Tokens have a large array of potential functions, from enabling decentralized exchanges to rare item sale in video games.

Nevertheless, all of them can be transacted or held as any other cryptocurrency.

### **2.2 WHAT IS A BLOCKCHAIN?**

A blockchain is a “distributed database [...] shared among the nodes of a computer network. As a database, a blockchain stores information electronically in digital format.” (Hayes, Brown, Kvilhaug, <https://www.investopedia.com/terms/b/blockchain.asp>)<sup>5</sup> [2]

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<sup>4</sup> Hayden, Marissa (2022, February 17). “What does it mean to mint an NFT?”, On *Canstar*. Retrieved November 25, 2022, 1:20 p.m., from <https://www.canstar.com.au/cryptocurrency/mint-nft/>

<sup>5</sup> Hayes, Brown, Kvilhaug, <https://www.investopedia.com/terms/b/blockchain.asp>

Blockchains are best known for their crucial role in cryptocurrency systems, such as Bitcoin, for helping maintain a secure decentralized track of transactions.

Innovation brought by a blockchain is that it guarantees the accuracy and security of a data record and generates trust eliminating the need for a trustworthy third party.

*How can one create an NFT?*

One needs a crypto wallet with cryptocurrency in it to create an NFT.

An NFT can be created through the minting process of your digital asset (irrespective of its nature) on a blockchain.

Decryption defines minting as a computerized process of information validation, the creation of a new block and the registration of that information on blockchain. In short, if you want to create an NFT with one of your digital works of art (known as NFT art and CryptoArt), then you will need to use one of the CryptoArt platforms and mint the work of art through a smart contract. This is easy to do once you have connected your crypto wallet to a website.

Ethereum is the most popular blockchain for CryptoArt. In any case, there are other blockchains such as: Elrond eGold WAX, Flow Cosmos Tezos, EOS, Tron, Binance Smart Chain.

The value of an NFT may be a topic of discussion, these NFTs allowing proof of property in the digital world.

Due to blockchain technology and NFTs, the “scarcity” principle now exists in the digital world as well.

An NFT trading card is created on blockchain. Although they are not tangible (which means one cannot have them in physical form), the owner of the NFT holds, in a sense, the document of the digital transaction card. If it is appreciated in terms of value, the NFT owner can sell it for profit.

Perhaps the simplest method to make money from NFT purchase is to become an investor, more precisely to invest in the project as early as the private sale or pre-sale stage. Any serious NFT project should have three rounds, namely:

*Private sale*

It usually takes place before the pre-sale and the public sale. At this stage access is limited, most of the times only the greater investors of investment groups being able to obtain a ticket.

The biggest advantage is that, in the private sale, the NFT or the token (if it is about cryptocurrency) has a smaller price, and, most often, through its simple purchase at this stage, one can make double profit upon the official release.

For instance, a Richest NFT can be purchased at 0.5 EGLD in private sale, whereas in public sale the minimum acquisition price will be 1 EGLD, which means doubling the investment in just a couple of days.

*Presale*

It represents another round of investments. What we need to highlight here, though, is that not all projects have a pre-sale stage. At this point, investors who have not managed to buy in private sale can do that now.

Just as in the private sale, prices are lower than in the public sale, but the chances to acquire an NFT or token will be dim if the project aims for success, if it targets long-term results, as, in this period, like in the previous one, the number of NFTs that are released is not great either.

In order to give the possibility to as many people as possible to invest in good projects as early as the private sale or the pre-sale period, Richest sets for itself the goal to provide for the owners of at least 2 Richest NFTs the opportunity of membership in our community of investors upon releasing its NFT collection, a community where experts evaluate projects and negotiate the acquisition of a more valuable ticket that will be shared among those who invest in the respective project.

In this way, anybody who owns two Richest NFTs can obtain allotment from either the private sale or the pre-sale stages, in projects that are programmed for release. Thus, they can automatically increase their investment a few times.

#### *Public sale*

It is the official launch of the project. At this stage, most of the NFTs or tokens are released, and anyone who has in their wallets the equivalent sum of the listed price can buy.

This stage represents another auspicious moment for purchase, as, after the NFTs or tokens are finished, those who have not managed to buy yet and consider the project to be a good one shall buy at an even bigger price.

There have been NFT projects that have sold out in a few minutes from the release time, and those who have managed to buy in these three stages in the first week have made more than one hundred times profit, more precisely they have purchased an NFT for \$100 and then they have sold it for \$10.000.

### **3. What should one check first when one buys NFTs?**

#### *DESIGN*

If at the beginning NFTs were considered “digital paintings”, things are different now, and the role of NFTs has come to be understood better. Just as a normal painting, NFTs have been bought according to taste and the creator behind them, namely had an NFT been created by a famous designer, then it would have definitely sold for a great sum of money.<sup>6</sup>[3]

Although currently behind any serious NFT project there is a smart contract, design continues to represent an important factor in the NFT purchase decision, for two reasons:

1. It is as if one drew a tree, and the drawing were put on sale in the form of an NFT for a price of 1 million dollars, claiming that through that NFT the buyer will obtain access to a journey to Mars.

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<sup>6</sup> Michael D. Murray, NFTs and the Art World -What's Real, and What's Not, 2022

The example may be inappropriate, but what one needs to understand by it is that one cannot target the creation of a great project without working out every detail.

2. The second reason is the psychological factor, as, nevertheless, NFTs are, before taking into account their utility, benefits and objectives, images, and if one does not like the image, the chances to sell NFTs for profit are slimmer, as currently there are still people who make the decision to buy an NFT based on the image. Although an NFT represents an “access ticket/pass” to the utility one aims to get, design keeps representing a significant factor in the purchase decision.

### *UTILITY AND BENEFITS*

NFTs are used as a means to sell exclusive items in the online environment and have the potential to be used in order to check anything that might hold value in proving property, including digital works of art, tickets to events, limited editions of certain clothes, skins in a virtual game – and the list may continue.

Hence, the utility of an NFT consists in what one can do with that NFT, such as gain access to a private event.

One may ask why it is so important to know the utility and benefits that an NFT provides before buying it. We are interested in finding this out before the purchase, as in this way we can assess its value or the value that it may reach.

Through the purchase of a nonfungible token, one may gain access to a private event where a lot of influential people or business people will be present, each of whom may charge hundreds of euro for an hour of one to one consultancy. As a result of having bought the NFT, you have access to all of them at the same time for a few hours.

Through its utility, an NFT represents the right to property over a certain commodity, so, before buying it, it is crucial to be aware of its usefulness.

At the same time, one must not overlook the benefits that an NFT project also provides. An NFT project should be regarded more as a company, better said a start-up, as one can get subsequent to the NFT purchase the right to be part of the decision-making process behind the project, which is similar to holding shares in a company.

Imagine how it would be like to have a reserved seat for the general assembly of one of the great companies at the stock exchange. One can experience this feeling through the simple purchase of an NFT, and this is a reason why it is important to know the benefits of the project beforehand.

There are also projects that provide the NFT owners with the possibility to acquire passive income through staking. In other words, this means that one can receive dividends through the margins that the project has achieved after having fulfilled its final objective.

Once one finishes reading this e-book, it is enough to remember the idea that utility is perhaps the most relevant element to check before buying an NFT. As we have mentioned, NFTs are no longer just a JPEG, they provide the right to property over a merchandise.

The roadmap should comprise the project objectives, the manner in which they will be implemented and the time to do so. This makes it easier for investors to know when they

can benefit from the utility of an NFT that they have purchased or when it is most likely for it to gain value and offer them returns.

All this being said, why are we interested in tracking the roadmap if we intend to purchase an NFT?

### *THE TEAM*

The moment we buy an NFT we wish to know who the creator of the project is and what recommends her/him to be able to develop what (s)he wants. We find a lot of NFT projects that want to accomplish great things, but behind them there are individuals who do not have enough experience for the respective goal.

Imagine Elon Musk would launch a collection of NFTs and that he would invest all the money in the creation of a flying car, while you would receive dividends from the sale of these cars. For sure, you would do your best to be among the owners of an NFT. How about if the project were launched by your second-floor neighbor? In order to have the certainty that we acquire an NFT whose value will increase, the assessment of the team should not be taken lightly.

In order to find out who is behind the project, one should check the official website of the respective project, where a presentation of the team would normally appear. As a side comment, if one does not find anything about the team or creator, it is a sure sign that one should no longer consider buying that NFT. Then, one should search for information on every member on social media channels, Google, LinkedIn, Instagram, Facebook or any other environment where something relevant can be found.

### *THE COMMUNITY*

The community is another important aspect. Without a community, no project can fulfil its objectives, it is not a secret that any project needs endorsement in order to be able to develop. Therefore, before buying an NFT, it would be a good idea to check on its community. This can be done quite easily. By accessing the official website, one should be able to see on display links to Instagram, Discord, Twitter, Telegram, and a conclusion should not be difficult to draw based on this information.

### *HOW DOES ONE DECIDE IF A COLLECTION IS PROFITABLE?*

Before explaining how we assess an NFT collection in terms of its profitability, it is important to mention that 98% of the NFTs will not be inspired long-term investments.

Perhaps this comment is scary, but one should realize that the same thing is valid for cryptocurrency projects. The percentage is similar even in traditional businesses, as nine out of ten go bankrupt in the first two years.

In order to minimize the risk to invest in an unprofitable project, it is first necessary to analyze the utility brought by the NFT one wishes to purchase.

Most NFTs do not provide utility based only on hype, which means that, for profit to be made, one needs to speculate the market, more exactly to predict when the interest in that NFT will rise and sell it then.

The problem is that most of the times the interest for an NFT that does not provide utility is low, just as the chance to make profit from it.

In the other category, there are the NFTs that provide long-term utility. One should think about what buying an NFT that grants access to an event or course with a limited number of attendants could mean.

In this case, one can generate profit twofold: for starters, one can go through the course, after which one can sell the NFT at a bigger price to someone who has not managed to buy from the beginning, and in this way both enjoy the benefits provided by the NFT and make some profit.

Another important aspect based on which we may conclude whether an NFT project can generate profit for the buyer is represented by the objectives established around it and the problems that it solves at the same time.

Along this line, in order to understand the final purpose of that project, one must follow the roadmap, which usually details every stage that is about to ensue.

In the case of an NFT project that pursues, for instance, the creation of an education platform, where access is granted solely based on NFTs, and the places available are limited by the number of the NFTs, the price of an NFT will automatically rise the moment the platform is launched.

The scarcity and desirability of the project are the next factors that determine the profitability of an NFT project. One should ascertain whether the project has only yet another opportunistic creator behind it, who produces mass JPEGs, or the individual NFTs have specific characteristics that make them rare and desirable.

Projects that issue a series of NFTs will usually set a limit for the project. For instance, in the Richest NFT project, there are only 3333 items.

Every NFT from that series shall be unique and program-generated at the moment of the minting, in order to incorporate a bundle of characteristics and features that point to its uniqueness.

Some features will be exceptionally rare, which entails that the NFTs which display them are more attractive and hence more valuable. Therefore, if in a collection we find a lot of NFTs with similar features, this leads us to believe that there has not been that much effort put in to make it, which would mean that the project does not have a long-term objective either.

To briefly conclude, in order to be able to make profit with an NFT, we should find a competent team behind the project, which has allotted enough time to outline the objectives, to create the design and to think of a strategy as a result of which the NFT owner can gain something long-term.

### *WHAT IS A SMART CONTRACT?*

A “smart contract can be defined as a “computerized transaction protocol which automatically executes the terms of a contract when certain conditions are met” (“What is

a smart contract?” (n.d.), On *capital.com*, <https://capital.com/smart-contracts-definition>). [4]

Placed on a blockchain such as Elrond, smart contracts allow the execution of a contract without intermediaries or human intervention, reducing to a minimum losses through fraud, taxes, commissions and minimizing intentional and accidental foul play or exceptions.

*Where can smart contracts be used?*

Given their dependance on blockchain technology, the concept of a smart contract is familiar to those from the blockchain industry. Supporters of blockchain projects, such as Ethereum, often discuss possible use of smart contracts in everyday life, such as data storage, peer-to-peer transactions (from one person to another), the verification of someone's identity and the facilitation of insurance applications.

*How do smart contracts function?*

They function in a similar way to regular contracts – they are simply faster, more secure, more efficient from the perspective of the costs involved, and they do not depend on third parties.

*What is the minting process?*

Minting “generally means something that is produced for the first time or made official, like minting a coin”; as Hayden points out, as far as the crypto and NFT world is concerned, the meaning stays the same, but the process is a bit different (Hayden, 2022). Hayden defines minting in the area of NFTs as “the process of taking a digital asset and converting the digital file into a digital asset stored on the blockchain”, “making it officially a commodity that can be bought and sold.” (*ibidem*) It may look complicated at a first glance, so let us take every stage step by step in order to make it easier to understand, which Hayden does for us. A digital asset “refers to any file that is created electronically”, i.e. “an image, article, video etc.”; its conversion into an NFT, namely the minting “is where the digital asset is added to a blockchain”; the blockchain is a “decentralised, digital ledger and once an asset is added to it, it cannot be modified, edited or deleted. Once the asset is minted and officially an NFT it can be sold at an NFT marketplace”, such as TRUST Market (*ibidem*).

E-commerce may be analyzed from four perspectives, as follows: from the point of view of communications, business processes, perspectives of services and real time (online) accessibility. {5}

Here is a guide on how to transform your work into an NFT, comprising of a few steps:

1. The creation of a digital wallet (Metamask)
2. Connecting the wallet to the market (TRUST Market)
3. Creating your own NFT
4. Listing the NFT for sale.

#### **4. Conclusions**

We have all been programmed from childhood to learn well, find a well-paid job and work to our retirement time. We have heard this hundreds or thousands of times. You have probably wondered yourself, thinking that there is nothing wrong with this thinking – it is honorable to learn well, find a good job and have a pension. The great problem with this situation is the depreciation of the real value of your economies, and the way it leads to the impossibility to retire at a decent standard.

The population of Europe is aging from one year to another. In Romania, an employee has come to support 1.3 pensioners already. In the current conditions, the situation is not looking up, it does not seem to improve at all.

Moreover, according to research of the Romanian Private Pensions Managers Association (APAPR), in the next fifteen years, Romania will be facing a crisis without a solution: an employee will be supporting 2.5 pensioners.

Under these circumstances, what pension may one expect to have after a lifetime of work? The probability that one should be able to lead a decent life from one's pension money is the same as for the rat on the treadmill to finish running and stop the continuously turning wheel.

Those who remain captive on the treadmill choose to run all their lives, to sell their time in exchange for money. Whereas those who escape the trap choose to put their money to work in order to gain time and to become independent. The latter are the people who end up living the life that they have always wanted. They manage to have a prosperous life, a decent pension and a peaceful retirement. As I like to put it, these are the ones who succeed in living “perfect, endless summer days”.

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