



## IEO: Financial Literacy Game

The game will be posted here: [finance.ecolymp.org](https://finance.ecolymp.org) . To make sure that the game works properly, please use latest Google Chrome browser.

A player has to “live” through 30 years (turns) after graduating from the university. Each contestant can choose one of the suggested characters with personality traits that will affect the strategic choices required to succeed.\* One turn in the game equals one year of life. During the game, there will be events happening in the life of your character, e.g., getting fired, coming down with sickness, etc.

**Principles of financial literacy**, that the game is aimed to test are simple:

1. Contestant should account and manage personal money flow
2. Contestant income should exceed your expenses
3. Contestant should have a financial goal and a plan to achieve it
4. Contestant should save and invest money for your future and retirement
5. Contestant should invest wisely

Each principle is tested in the game differently:

- 1 - is embedded, but contestants should learn to use it
- 2 - is embedded, contestant can control expenses in different spheres of life (like healthcare, entertainment, sports) and increase income by using additional education services
- 3 - is made by the conversion of all the expenses taken and all the capital saved into points.
- 4 - is part of the in-game process
- 5 - is part of the in-game process\*\*

In the game, a contestant will find most of the **market instruments**. The more risk - the more the potential loss or gain:

- The safest instruments with less return rate, like bank account and some bonds
- ETFs and indices funds
- Some Blue Chip corporations' stocks, which are mild risk in comparison to other stocks and most of commodities
- Some of the risky instruments.

The result of the game is determined based on the number of **points** you have collected. Both savings and spending are rewarded with points. Thus, each player can develop a certain strategy (using planning skills, which is also part of financial literacy): get points by spending or by using a larger amount of accumulated capital.

**Spending** options vary from buying clothes and fulfilling life-long dreams (e.g. a trip to Hawaii) to paying for education that will help you get a pay rise in the future. Apart from general spending (e.g., rent, life expenses), there are such expenses as holidays, healthcare, etc. which contestants are also in control of.

**Savings** can be managed by distributing money among available financial instruments. You can choose instruments according to the degree of risk, based on the type of the instrument, information about the emittent, News section, and price charts.

To count the final points, spending and savings are multiplied by special **coefficients**. By default, a unit of game currency is equal to one point, regardless of the source of points - in the accumulated capital or in the money spent. Almost the entire cash flow is taken into account, which means that those who distribute money thoughtfully and carefully consider the impact of coefficients will have more points. No points are given for money spent on loan servicing and losses in the value of market assets.

**Flow coefficient** is applied to spendings, apart from loan servicing and losses in the value of market assets.

**End coefficient** is applied to the total acquired capital (Assets).

The coefficients can be affected by buying particular goods and services, fulfilling your dreams and achievements, carefully distributing your portfolio among the available instruments (considering the risks and keeping enough money to have a financial safety cushion).

Detailed information on what instruments affects the coefficients will be available in advance. Thus, anyone who would like to succeed in the game can plan what instruments to use and in which order. These prepared materials can be written or printed in advance and used during the FLG part of the IEO. \*\*\*

All the achievements, goods and services in the game will be the same at the IEO contest and in the Demo version.

There is no “best” strategy that will guarantee you victory – just like in real life, players cannot accurately predict the future. By applying basic finance literacy concepts instead of thoughtlessly clicking through the simulation, you will significantly increase your chances of winning the game. The scenario is the same for each student.

*\* Please note that in the demo version, your choice of character will affect the whole scenario of the game. In an actual (IEO) version, the scenario will be the same for everyone, only difference being your character's preferences.*

*\*\* “What do we mean by “investor”? Throughout this book the term will be used in contradistinction to “speculator.” As far back as 1934, in our textbook Security Analysis, we attempted a precise formulation of the difference between the two, as follows: “An investment operation is one which, upon thorough analysis promises safety of principal and an adequate return. Operations not meeting these requirements are speculative.”*

*Benjamin Graham, “Wise investor”*



*We do not require deep financial knowledge from our students, for this game is not about investment portfolio creation, but rather about basic principles of financial literacy. Therefore, there will be no deep information on instruments, news will be of little value and will be close to what you can find in real life - controversial. It is the initial choice of investing or speculation that the game is oriented on.*

*\*\*\* For example, players will have access to a shopping list, in which  $1.2 \cdot x$  points are awarded for buying a car (where  $x$  is a car cost), and  $2 \cdot y$  points are awarded for a trip around the world along with the coefficient for all spending (Flow) increasing by 0.1 for the following 3 turns (where "y" -is trip cost).*

*The coefficients are applied in moment of the transaction, however, they are recalculated in the end of each turn, thus, the order of the transactions during one particular turn does not matter.*

*\*\*\* Data about the instruments' prices in the game is taken from the real world statistics of financial markets, but processed in such a way that it cannot be identified with its' origin. The design of the FLG is made authentic, inspired by the globally leading platform for financial market professionals.*