## Teacher's Guide

## HOW TO START INVESTING

Financial education at school:
An AMF activity for teachers.

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## AUTORITÉ <br> DES MARCHÉS FINANCIERS

## CLASSROOM ACTIVITY HOW TO START INVESTING

Presentation of workshop

| Target audience |
| :--- |
| Approximate duration |
| Description |

Objectives

Materials required

Secondary V students
40 minutes for steps 1 and 2.
40 minutes for step 3 (optional).
Students learn about the advantages of starting to invest early and the different features of investments.
As an option, students learn to distinguish between the main types of investments.

- Indicate what savings are for.
- Determine the advantages of starting to invest early.
- Identify the features of an investment.
- Distinguish between the main types of investments.
- Board
- Computer and Internet connection for step 3 (optional)


## Suggested flow of activities

| STEP | ACTIVITY | MATERIALS REQUIRED | APPROXIMATE |
| :---: | :--- | :--- | :--- |
| $\mathbf{1}$ | Introductory activity to engage the <br> students. | Introductory activity <br> Student sheet: Introductory activity | 20 minutes |
| $\mathbf{2}$ | The teacher presents the theory <br> using the method of his/her choice. | Theory: notions about investing <br> Student sheet - Notions <br> about investing | 20 minutes |
| $\mathbf{3}$ | As an option: Choose your investment <br> workshop. | Workshop: Choose your investment | 40 minutes |

## STEP 1 <br> INTRODUCTORY <br> ACTIVITY

## Investing: an inspiring case

Ask students to read the "Introductory Activity" sheet or read it aloud in class.
Then ask students to answer the suggested questions.

Jade is in Secondary V and thinks she's too young to start investing. She may not be alone. Here's a real-life example to help you answer this question: How old should you be to start investing?

## Warren Buffett

Born in 1930, Warren Buffett is considered by many to be the greatest investor of all time. He delivered newspapers as a young boy and did odd jobs to save money. He bought his first shares while he was still in school. He watched them drop and quickly sold them as soon as they went up, earning a small profit. He had just made his first trading mistake. The price of the shares later jumped 500\%! What's important is that Warren Buffett learned from his mistake. He read several books about investing and stopped worrying when the price of shares he bought fluctuated.

When he was around 15 years old, he invested \$1,200 of his savings in 40 acres of land rented to farmers. At age 27, he bought his first house. You may think there's nothing surprising about buying a house at that age but he had enough money to buy four, and to pay cash for them all! In 1961, at age 31, he was a millionaire. By the time he was 37, he had over $\$ 10$ million and two years later he had over $\$ 25$ million. In 2014, he was worth over $\$ 70$ billion.

## STEP 1

INTRODUCTORY
ACTIVITY

## Questions on the introductory activity

There are several possible answers. Here are a few suggestions to discuss with students.

## How did he find money to invest?

He started working part-time very young and he could put money aside because he didn't spend everything he earned.

## How did he become a billionaire?

He always lived within his means. He also invested carefully, taking advantage of compound interest. If you invest for over 70 years, the amount you earn can be astronomical.

Of course, not all investors have Warren Buffett's talent. However, even earning a 5\% return per year, an investment of just $\$ 1,000$ per year would be worth over $\$ 600,000$ seventy years later. Of course, 70 years is a long time and you can always set short-term goals!

## What can I do to have money to save or invest?

There are several possible answers. Here are a few:

- work part-time;
- spend less than I earn;
- prepare a budget;
- wait for something to go on sale before buying it;
- use coupons;
- take advantage of student discounts;
- wait a week before buying something I want.

After a week, I might dicovers that I don't want it as much.

## STUDENT SHEET INTRODUCTORY ACTIVITY

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## Questions for discussion

How did Warren Buffett find money to invest?

How did Warren Buffett become a billionaire?

What can I do to find money to save or invest?

## STEP 2 <br> THEORY: <br> NOTIONS ABOUT INVESTING

Understanding the features of an investment: return, liquidity and risk


Before the discussion, distribute the "Notions about investing" student sheet so students can note the suggested definitions.

## Return

Let's say you want to go to university soon. This year, you set aside $\$ 1,000$. Rather than leaving the money in your account, which will probably earn you almost nothing, you can place it in a safe investment that will give you approximately $\$ 15$ per year. That's not much, but it's money you earn without having to work. Do you want a better return? The following sections are for you! They'll show you what types of investments can help you achieve your goals.

You already know one of the important features of investments: return.

The return on a security is what you earn from it.

Before continuing, ask students to look at the composition of a Québec fixed-rate bond on their "Student sheet - Notions about investing."

| QUÉBEC FIXED-RATE BONDS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERM | $\begin{gathered} 1 \\ \mathrm{yr} \end{gathered}$ | $\begin{gathered} 2 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 3 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 4 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 5 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 6 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 7 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 8 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 9 \\ \mathrm{yrs} \end{gathered}$ | $\begin{aligned} & 10 \\ & \mathrm{yrs} \end{aligned}$ |
| ANNUAL RATE (\%) | 3.75 | 3.80 | 3.85 | 3.90 | 3.95 | 4.00 | 4.05 | 4.10 | 4.15 | 4.20 |

Here's how to calculate the return on a Québec fixed-rate bond.

If you invest $\$ 1,000$ for 4 years, at the end of the first year you'll have:
$\$ 1,000 \times 1.039=\$ 1,039$.
At the end of the second year you'll have
$\$ 1,016.5 \times 1.039=\$ 1,079.52$.

You can ask students to do the calculation for years 3 and 4 on their student sheet.

At the end of the third year:
\$1,079.52 X $1.039=\$ 1,121.62$
At the end of the fourth year:
$\$ 1,121.62 \times 1.039=\$ 1,165.07$.


## Liquidity

Look again at the rates offered in May 2016 for Québec fixed-rate bonds. You can see that the longer you invest, the higher the return. By investing for one year, your annual return is 1.1\%. If you're prepared to invest for 10 years, you earn $2.8 \%$ per year. Why do you think interest rates are better if you invest for a longer period?

Because you're giving up the liquidity on the security. The liquidity of an investment is another very important feature to consider before investing. Before tying up your money for several years, you should carefully consider when you'll need it!

Liquidity is the ability to convert an investment to cash quickly at a low cost.

## Risk

Do these rates seem low? In fact, they won't allow everyone to achieve their financial goals. For example, many parents could not simply invest all of their savings in this type of investment to build up money for retirement. They need a better return. That's why they generally invest
 part of their portfolio in other types of investments that are more risky but likely to generate a better return.

Your own goals are probably more short term, compared with retirement: Saving money for university, getting ready to live on your own, starting a business, paying for a trip, buying a car, etc. When you invest short-term, you can't take a chance on risky investments. Think about it: You invest so you can buy a car in two years but your investments drop by $30 \%$ temporarily. What do you do? You still have to sell your investment so you can buy your car! Now you understand the third feature of investments: risk.

Risk is the possibility that you'll make less money than you thought on your investment. It's also the possibility of losing all or part of your investment.

You can also see how risk and return are closely related
The lower the risk of losing money, the lower the potential return.
The greater the risk of losing money, the greater the potential return.
To find out how risky an investment is, you have to ask questions and read the information documents that come with it.

Now you know the three features of investments: return, liquidity and risk.


## STUDENT SHEET NOTIONS ABOUT INVESTING

## 1. Definitions

Write down the definitions of return, liquidity and risk as discussed in class.

## Return

$\qquad$
$\qquad$

Liquidity

## Risk

$\qquad$
$\qquad$

## 2. Calculating return

Using the example given in class, calculate the return on a $\$ 1,000$ investment over 4 years in a Québec fixed-rate bond.

| QUÉBEC FIXED-RATE BONDS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TERM | $\begin{gathered} 1 \\ \mathrm{yr} \end{gathered}$ | $\underset{\mathrm{yrs}}{2}$ | $\begin{gathered} 3 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 4 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 5 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 6 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 7 \\ \mathrm{yrs} \end{gathered}$ | $\begin{gathered} 8 \\ \text { yrs } \end{gathered}$ | $\begin{gathered} 9 \\ \text { yrs } \end{gathered}$ | $\begin{aligned} & 10 \\ & \mathrm{yrs} \end{aligned}$ |
| ANNUAL RATE (\%) | 3.75 | 3.80 | 3.85 | 3.90 | 3.95 | 4.00 | 4.05 | 4.10 | 4.15 | 4.20 |

YEAR 1: $\qquad$
YEAR 2: $\qquad$
YEAR 3: $\qquad$
YEAR 4: $\qquad$


## STEP 3

## WORKSHOP (OPTIONAL) <br> CHOOSE YOUR INVESTMENT OR YOUR ASSET

Here are some popular financial products and an indication of the degree of risk, the return and the liquidity level associated with them.

Bonds

Mutual funds

Exchangetraded funds

Québec
fixed-rate bonds

Fixed-rate guaranteed investment certificates

Loan to a company or a government

A basket of shares, bonds or other securities in which several investors have pooled their money

A basket of shares that tracks a market index
Digital assets that use cryptography (a method of securing data), a peer-to-peer network and a digital ledger system to record transactions.

Shares in a company. Holding shares makes you a part owner of the company

Loan to the Québec government

Loan to a financial institution

## Medium

Low

## Low

## Relative return

## Relative <br> risk

## Unknown

You could lose everything.


## High

Medium



## Relative liquidity

It can be difficult to trade a cryptoasset for money such as the Canadian dollar.

Can generally be sold again easily

May be more difficult to sell depending on the interest rate or financial condition of the company or government that issued the bond

Can generally be sold any time for a fee

Can be sold easily

You have to wait until the bond expires to recover your investment and receive the return

You generally have to wait until a GIC matures to recover your investment and receive the return

## ACTIVITY:

## FIND YOUR OWN <br> INVESTMENTS OR ASSETS!

On the Internet, find an example for each of the following investments, other than those identified above. Find your examples from different institutions or organizations for each investment.


|  | Type of investment /asset | Institution or organization that issues the investment /asset |
| :---: | :---: | :---: |
| Bond | Québec fixed-rate bond | Épargne Placements Québec |
| Now it's your turn |  |  |
| Cryptoassets |  |  |
| Stock |  |  |
| Bond |  |  |
| Mutual fund |  |  |
| Exchange traded fund |  |  |

## SUPPLEMENT

Encourage your students to participate in Bourstad, a contest that introduces the stock market through simulated on-line investing. Participants act as an advisor that manages $\$ 200,000$ for a fictitious client by investing this amount in different types of investments. They have to give reasons for the trades they make based on the client's profile and investment goals and analyze the investments chosen.
For more information: bourstad.ca

## ADDITIONAL

 RESOURCESOther educational tools are available at tesaffaires.com, in the Teachers' section.


