

# Project KBS – Art of teaching UCLL and EM in Economics UHasselt

Teaching Sustainable Investing in Secundary Education in Flanders

Prof. dr Tom Kuppens – Karolien Vlayen

# CONTENT



- Framing the lesson series within the modernization of secondary education in Flanders
- Presentation of lesson series
- Test cases in secondary education

Project partners

**Context SE** 

Lesson series





# Project partners

- Expertise center Art of Teaching & Smart
   Organisations University Colleges UCLL
- Educational Master in Economics UHasselt
- Secundary Education testing schools
- King Baudouin Foundation

Project partners

**Context SE** 

Lesson series





# Context of lesson series within secondary education in Flanders

- Project objective
- Link to key competencies: Flanders Fincomp
- Background information for teachers

# **OBJECTIVE**





Testaankoop prijst aandelen in wapenindustrie aan: "Mensen moeten zelf beslissen in welke bedrijven ze investeren"

Aangepast op 13 maart 2024 Wat is duu

Een opvallend advies in de laatste nieuwsbrief van Testaankoop: volgens de consumentenorganisatie zou het momenteel het ideale moment zijn om te investeren in de wapenindustrie. Gezien de huidige situatie in Oekraïne en het Midden-Oosten, doet dat de wenkbrauwen fronsen.

### oke Reynaerts, general manager van ar hun ouders als naar hun grootouders ies vaak om duurzaam te beleggen. vaak zijn we in onze acties op korte termijnimpact ervan BANKING AND WEALTH MANAGEMENT

# Opvallende t twintigers en duurzaam be wo 18 okt 2023 O 11:10

Elke spaarder of belegger is geïnteresseerd in het rendement van zijn of haar portefeuille. Maar niet iedereen hecht evenveel belang aan het duurzame karakter ervan. En wat blijkt? Duurzaam investeren valt vooral bij jongeren en vrouwen in de smaak.

De Stantidadiu https://www.standaard.be > dmf20240313 95305545

#### Duurzaam beleggen begint met kritische vragen stellen

15 mrt 2024 — Met de campagne 'Voor het klimaat telt elke cent' willen journalist Jasper Vekeman en UCLL-docent Siem De Ruijter hun 'Duurzaam beleggen ...

## KEY COMPETENCES SECUNDARY EDUCATION FLANDERS: 3RD GRADE (17-18)

Aso, kso, tso > Finaliteit doorstroom > Economische en financiële competenties > Eindtermen

#### Algemene info

#### Uitgangspunten

- > 11.01 De leerlingen beargumenteren binnen een persoonlijk of gezinsbudget keuzes bij aankopen rekening houdend met de totale kostprijs en de financieringskost.
- > 11.02 De leerlingen vergelijken sparen en beleggingsvormen op het vlak van risico en rendement.
- > 11.03 De leerlingen lichten gevolgen van het werken met een arbeidsovereenkomst toe.
- > 11.04 De leerlingen lichten verantwoordelijkheid en aansprakelijkheid bij een schadegeval toe.
- > 11.05 De leerlingen illustreren het marktmechanisme op de productmarkt.
- > 11.06 De leerlingen lichten toe hoe de overheid via inkomsten en uitgaven een impact heeft op de samenleving en ongelijkheid tracht te beperken.



Aso, kso, tso > Finaliteit doorstroom > Duurzaamheid > Eindtermen

#### Algemene info

> 0000 Omwille van de verwevenheid van deze sleutelcompetentie met andere sleutelcompetenties zoals sleutelcompetentie 6 'Competenties inzake wiskunde, exacte wetenschappen en technologie', sleutelcompetentie 7 'Burgerschapscompetenties met inbegrip van competenties inzake samenleven', sleutelcompetentie 9 'Competenties met betrekking tot ruimtelijk bewustzijn' zijn er geen aparte eindtermen geformuleerd.

# **OBJECTIVE**

- Reduction competences after revision government >
  lesson series = adding a little extra
- Combining financial competencies and sustainability competencies
- Taking into account didactic principles w.r.t. ESD and EFC
- Based on financial competence framework for youth and adults in the European Union

# FINCOMP FOR YOUTH







Financial competence framework for children and youth in the European Union

Financial competence framework for children and youth in the European Union (EN)

Choosing how to save		
97. Understands that money can be saved physically (e.g., at home) or in a deposit account at a financial institution	98. Knows about different saving options and that they might differ in terms of protection, time horizon and expected return	99. Confident in choosing suitable saving products  100. Compares and chooses different saving options based on their characteristics (interest rates, fees, taxes, withdrawal policy, including where available environmental, social and corporate governance aspects), also using reliable and impartial comparison tools
Choosing investments	Aware that past performance of an investment does not predict future performance, and that the value of an investment can be influenced by several factors (e.g. macroeconomic and investment-specific factors)	112. Able to make investing decisions based on one's own investment profile, risk tolerance and sustainability preferences  113. Understands the differences, main characteristics, tax treatment, risks and fees of different assets including shares, bonds, investment funds, commodities and real estate  114. Aware that different types of investment providers give different services and charge different fees
Sustainability considerations  235. Aware that personal financial decisions have an impact on society and on the environment	236. Considers how environmental or social considerations may impact one's personal financial situation (e.g. cost of organic products, reduction of waste, etc.)	237. Understands societal goals related to sustainability (e.g. net zero) and the implication for the economic and financial environment  238. Takes into account environmental, social or governance considerations in one's personal financial decisions

# FINCOMP FOR ADULTS

# Financial competence framework for adults in the European Union

2.4 Invest	189. <b>Understands</b> that the same stock or fund can have a different purchase / selling price a different points in time	ıt .	
	Choosing and diversifying investments		
	190. <b>Knows</b> the characteristics of various investment products including levels of risk, liquidity, expected performance and sustainability features or can find out easily	197. <b>Considers</b> risk, performance, costs and other investment characteristics when managing and monitoring investments	204. <b>Confident and motivated</b> to undertake research on potential investments before committing
	191. <b>Knows</b> that fees, commissions and other charges may be made for investment	198. <b>Monitors</b> investments periodically and makes adjustments as necessary	205. Confident and motivated to compare the level of sustainability of investment products using for example other standards, labels or
	products and services and that these items may vary depending on the provider and the sales channel	199. Able to incorporate personal preferences with respect to investment goal, risk tolerance, time horizon and sustainability, when making an investment decision	ratings

© European Union / OECD 34

Understanding	Skills and Behaviour	Confidence, Motivation and Attitudes
<b>Knows</b> that prices for the same investment product may vary across providers and sales channels	200. <b>Can</b> retrieve relevant and reliable information to inform investment decisions	206. <b>Confident and motivated</b> to question investment offers that appear too good to be true
Knows that different investment products may have different sustainability characteristics (environmental, social and corporate governance)	<ul><li>201. Researches potential investments</li><li>202. Creates a diversified portfolio</li></ul>	207. Confident and motivated to compare the investment portfolio composition of pension funds, life insurance policies, endowments, collective investment schemes or other investment products in order to assess their
pi Si	(nows that prices for the same investment roduct may vary across providers and ales channels (nows that different investment products hay have different sustainability haracteristics (environmental, social and	Inows that prices for the same investment roduct may vary across providers and ales channels  Inows that different investment products may have different sustainability haracteristics (environmental, social and

# Financial competence framework for adults in the European Union

Topic	Awareness, Knowledge and Understanding	Skills and Behaviour	Confidence, Motivation and Attitudes
	Sustainable investment		
2.4 Investing	219. Aware about existing sustainable investment products on the market  220. Aware about the different dimensions of sustainability (environment, social and governance) and about the principles behind each of these dimensions  221. Aware that different investment strategies can be used to invest according to one's own environmental, social and corporate governance (sustainability) preferences, for instance by avoiding investments in certain sectors or companies (divestment), or engaging with certain companies to make them change their activities (engagement)	<ul> <li>222. Looks for investment products in line with one's own sustainability preferences</li> <li>223. Picks an investment strategy in terms of divestment or engagement or combination of both according to one's personal situation and preferences</li> <li>224. Asks follow-up questions to an advisor on sustainability related aspects of investment products</li> <li>225. Researches and compares sustainability attributes of potential saving and investment products</li> </ul>	226. Motivated to research the products one already holds or plans to invest in, to ensure that they meet personal sustainability preferences  227. Confident to ask questions about the extent to which an investment product meets sustainability criteria
	Commodities  228. Aware that the value of investments in material goods such as gold may increase or decrease as a result of a range of factors	229. <b>Keeps an eye</b> on changes in the price of goods held as investment	

# FINCOMP FOR ADULTS

4.4. Financial Products and Services	Sustainability preferences  497. Able to determine one's sustainability preferences, using reliable and regulated information	498. Able to explain one's own preferences for financial products (e.g. in terms of risk or preferences, including one's sustainability preferences)	499. Aims to choose financial products and services that are consistent with one's sustainability preferences
	Sustainability labels and standards  500. Aware of the existence and meaning of various sustainable product standards and labels	503. Makes informed decisions in line with one's sustainability preferences based on reliable standards and labels for financial products	<b>504. Motivated</b> to research existing standards and labels and to understand their meaning of

# BACKGROUND INFORMATION FOR TEACHERS

<u>Duurzaam Beleggen Academy – Leer zelf duurzaam beleggen</u>



E-learning ~

Webinars

Events

Blog

Over ons

Contact



Project partners

Context SE

Lesson series



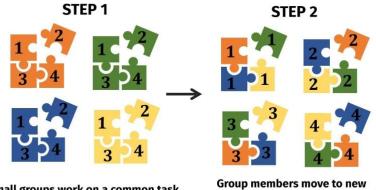


# Lesson series

- Structure and content of the lesson series
- Test cases
  - First lesson series
  - Type of lesson series

# **OVERVIEW LESSON SERIES**

Lesuur	Inhoud 1 2 1 2 1 2 4	
Lesson 1	<ul> <li>Introduction / Motivation phase</li> <li>Jigsaw - Expert groups</li> <li>Investment products (equities, bonds, retirement savings)</li> <li>Sustainable investment strategies – info &amp; discussion</li> </ul>	ısk
Lesson 2	<ul> <li>Investment funds – classroom discussion</li> <li>Jigsaw – Home groups</li> <li>Knowledge sharing on investment products</li> <li>Exercise on sustainable investment strategies</li> </ul>	
Lesson 3	<ul> <li>Formative evaluation lesson 1/2</li> <li>Making an investor profile</li> <li>Group assignment: investment advice Pommelien Thijs</li> </ul>	
Lesson 4	<ul> <li>Group assignment: investment advice Pommelien Thijs (continued)</li> <li>Individuele assignment: own investment portfolio</li> <li>Discussion of assignments</li> </ul>	



groups to share what they learned

# INTRODUCTION / MOTIVATION PHASE

Gaining insight into the initial situation of student (Wooclap or mentimeter):

- Knowledge about investing & sustainability
- Investment preferences

# INTRODUCTION / MOTIVATION PHASE





Suppose you win 50 000 euro in the lottery and you want to invest this money. In which companies/sectors would you invest?

#### TIPS

- Prepare leading questions for the classroom discussion
- Check whether there are any companies/sectors that students would not invest in.

# **MOTIVATION**

# Paradox between investing and sustainability via headline

Testaankoop prijst aandelen in wapenindustrie aan:
"Mensen moeten zelf beslissen in welke bedrijven ze
investeren"

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Ine Philippe

wo 18 okt 2023 @ 11:10

#### **TIPS**

- Ask students what this headline does to them
- Emphasise that investing is/remains an individual choice
- Be aware of the possible sensitivity of the topic

# **GOAL OF LESSON SERIES**

# Students will have to behave as an investment advisor

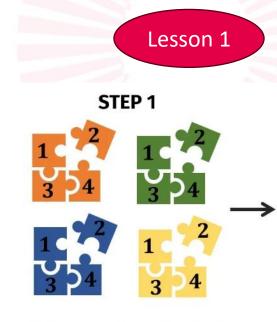
- For Pommelien Thijs
  - Sustainable person
  - Successful person (= budget to invest)
- For themselves



# WORK IN EXPERT GROUPS

## **Practical:**

- Groups of 3-4 students
- Assign each group an expert topic:
  - shares
  - o bonds
  - retirement savings
- Each group has (online) access to the workbook of their topic
- Groups have to go trough and complete their workbook



Small groups work on a common task

# WHAT'S IN THE LESSON MATERIAL? (EXPERTGROUP)

- 1. Intro video & questions:
  - (potential) returns
  - o risks
  - a sustainability aspect of the investment product
  - o resources to facilitate research
- 2. Short explanation + discussion question on strategies for sustainable investment

# SRI (SUSTAINABLE, RESPONSIBLE AND IMPACT INVESTING)

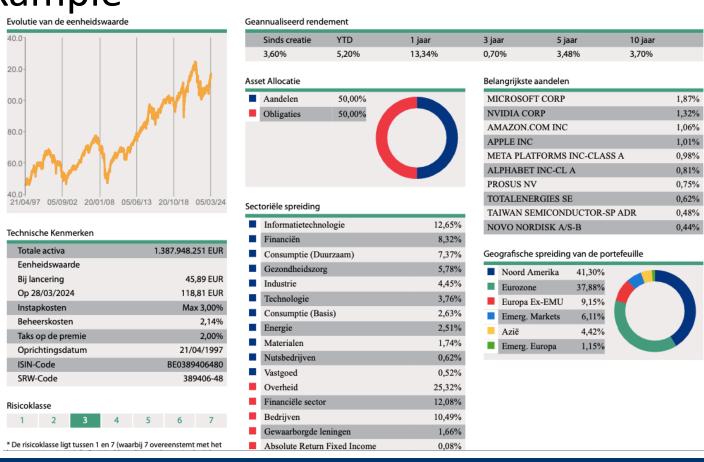
- 1. Negative screening or exclusion
- 2. Norm-based screening
- 3. ESG-integration
- 4. Best-in-class
- 5. Thematic SRI
- 6. Impact investing (and social investment)
- 7. Active share ownership

# INVESTMENT FUNDS (SOCRATIVE METHOD)

- Introductory video
- Discussion based on example

#### TIPS

 Have students themselves name anything they see on screen that can be linked to info from intro video

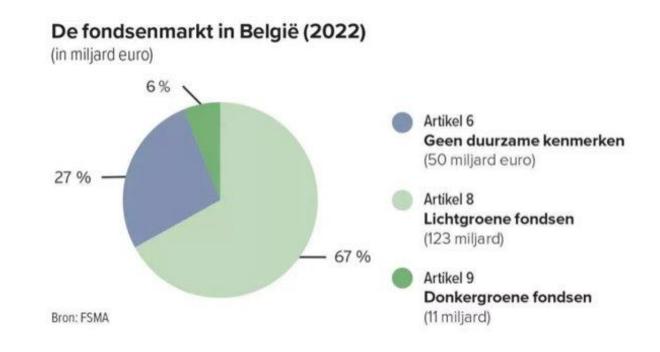


# **INVESTMENT FUNDS**

Is green really green? And how green?

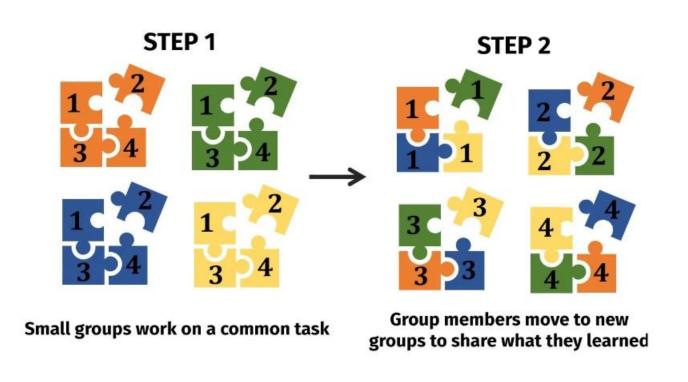
# Honderden 'duurzame' fondsen misleiden Europese beleggers

Bijna de helft van de beleggingsfondsen die zichzelf duurzaam noemen, investeert in fossielebrandstofbedrijven. Dat blijkt uit onderzoek van *De Tijd* met andere Europese media, waarover de krant vandaag bericht. De Europese toezichthouder ESMA noemt die fondsen misleidend en legt nog dit jaar striktere regels op.



**REDACTIE** 30 april 2024, 05:32

# WORKING IN GROUPS



# WHAT'S IN THE 2ND LESSON MATERIAL?

- Diagram to be completed as a summary of the expert groups → guideline for investment advice
- 2. Excercise on identifying the appropriate SRI strategy for different cases
- 3. Exercise on identifying distinctive adventages of each investment product → can help with investment advice assignments in next lessons

# FORMATIVE EVALUATION

- Via (Kahoot)quiz individual
- Ideal as conclusion of lesson or link to next lesson

1 - Quiz

Welke van onderstaande is géén strategie voor duurzaam beleggen?

2 - Waar of niet waar

Bij aandelen is het moeilijker om je verwacht rendement in te schatten dan bij obligaties. Waar of niet waar?

3 - Quiz

Bij welk financieel product kan je een belastingvermindering tot 30% ontvangen?

4 - Waar of niet waar

De Belgische staatsbon is een goed voorbeeld van een aandeel uitgegeven door de Belgische staat. Waar of niet waar?

5 - Waar of niet waar

lemand die 100 000 EUR wil beleggen kan owv het belastingvoordeel best minstens de helft investeren in pensioensparen.

# **INVESTOR PROFILE**

Goal: each student has his/her own profile to take into account further on.

- Defensive
- Neutral
- Dynamic

#### **TIPS**

Have the questionnaire already completed at home in preparation

# INVESTMENT ADVICE ASSIGNMENT

- Same group as previous lesson for advice Pommeline (budget € 100 000)
- Individual assignment for own advice
- Investor profile:
  - Pommelien: Dynamic
  - Yourself → determined from questionnaire
- Students should:
  - o select min 5, max 10 products form list
  - allocate a certain % from their budget
  - explain their choices

# **ASSIGNMENT**

Naam financieel product	Beschrijving financieel product	Type financieel product	Verwacht rendement	Risicoscore (1= laag risico; 7 = hoog risico)	Duurzaamheidsscore (0 = laag; 5 = hoog)	Percentage in portefeuille Pommelien
AmicaTech	Technologiebedrijf dat gespecialiseerd is in Al	Aandeel	12%	6	2	
BondSafe	Overheidsobligatie met AAA-rating	Obligatie	3%	1	5	
BrightEnergy	Producent van hernieuwbare energie	Aandeel	10%	5	5	
CleanWaterBonds	Obligaties uitgegeven door waterzuiveringsbedrijven	Obligatie	4%	2	3	
ContraCorp	Multinationale onderneming in de tabaksindustrie	Aandeel	5%	3	0	
DiverseMines	Mijnbouwbedrijf met activiteiten wereldwijd	Aandeel	8%	6	1	
EcoGro	Biologische landbouwcoöperatie	Aandeel	7%	5	3	
EthicalGrowthFund	Duurzaam beleggingsfonds gericht op groei	Beleggingsfonds	9%	3	4	
FastFoodInc	Internationale fastfoodketen	Aandeel	6%	5	1	
FlexiRetire	Tak 23 pensioenspaarfonds met flexibele activaspreiding	Pensioenspaarfonds	7%	3	3	

keuzes.	

# **TESTING LESSON SERIES**

- Teaching Education
  - UHasselt students Educational master's degree
  - UCLL students Educational bachelor degree
- Secundary education

# ADJUSTMENTS MADE BASED ON TEST FEEDBACK

- Revision of material for expert groups (less tekst, inclusion of audovisual material)
- Assigning roles in groups
- Review of case studies on SRI strategies
- Formative evaluation before investment advice
- Investor profile questionnaire for more activation

# SECOND TEST - FINANCIAL LITERACY

"We define financial literacy as a combination of financial knowledge, attitudes towards money, financial self-efficacy, and financial behavior that support the implementation of financial knowledge in daily financial decision-making" (Amagir et al., (2020)).

Results still need to be tested further in other schools

# **SECOND TEST**

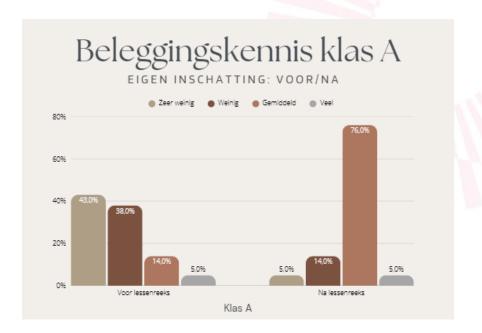
# Research question

"How does a series of lessons on saving and investing influence students' knowledge, behavior, and attitude when comparing investment types in terms of risk and return?"

- Group 1: normal lesson series
- Group 2: lesson series with extra focus on fictive portfolio during 5 weeks

# KNOWLEDGE

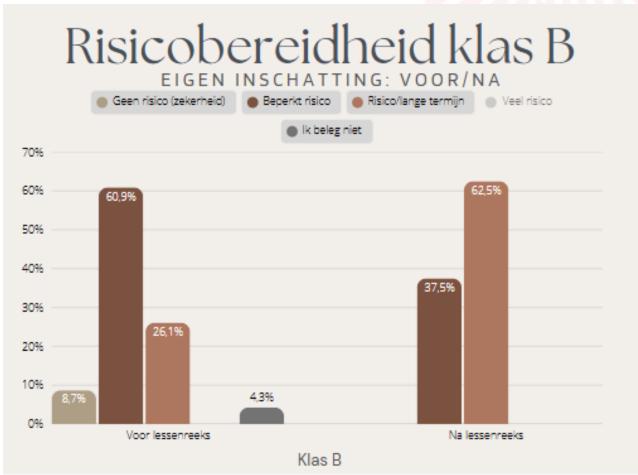
	Gemiddelde klas A op 10	Gemiddelde klas B op 10
Investor profiel	9,65	9,08
Saving account	8,87	8,06
Pension saving / long-term saving	9,00	7,43
Shares	8,53	8,36
Bonds	8,62	7,05
Sustainable investing	8,82	7,67
Investment funds	8,74	8,69
Crypto	9,00	8,98
Case study	8,10	<mark>8,49</mark>





# WILLINGNESS TO TAKE RISKS





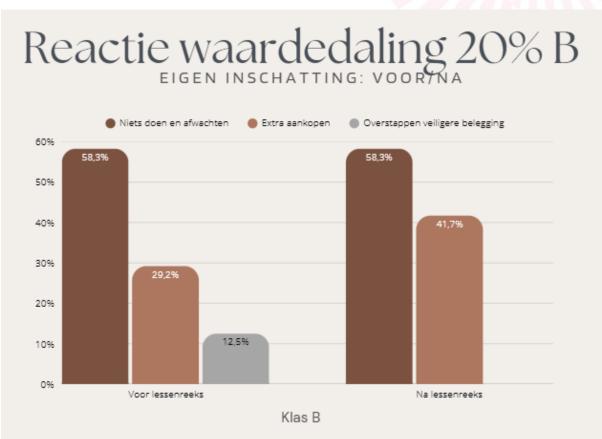
# **CONFIDENCE TO INVEST**





# REACTION TO A DECLINE IN VALUE





# "READY" TO START INVESTING?



# MATERIAL AT YOUR DISPOSAL

- Guiding slides
- Workbooks / assignments / excel files
- Teacher's guide

Duik met je leerlingen in de wereld van duurzaam

