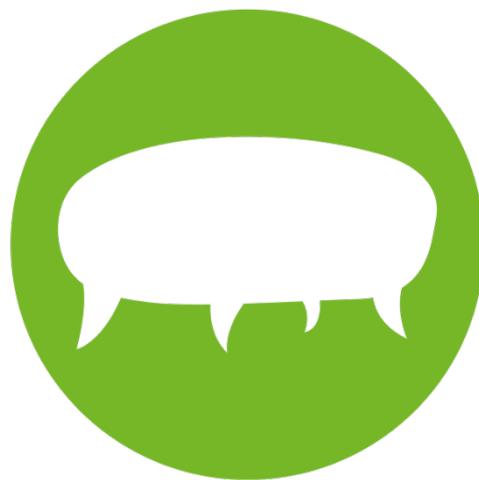# YouthStart
ENTREPRENEURIAL CHALLENGES

My Community Challenge B1

I can do things for the community where I live.
Entrepreneurial Civic Education

Improving the Quality of Life

How can you measure the quality of life? And what do terms like gross domestic product or the Gini coefficient have to do with it? Specific tasks in the different training units will help the students answer these questions. Finally, they will develop their own indicator to measure quality of life and discuss, question and debate various aspects of wealth in our society.

Teacher's Guide

The materials contain a detailed step-by-step description of the challenge to facilitate a direct implementation in the classroom. The teaching materials are designed to be used together with the student materials (=worksheets).
The ✪► -sign indicates optional tasks for a deeper understanding. You will find the corresponding worksheets in the file "Extension Materials for Students". All materials are provided at www.youthstart.eu.

You^th Start Entrepreneurial Challenges Programme

based on the TRIO Model for Entrepreneurship Education – www.youthstart.eu

Core Entrepreneurial Education		Entrepreneurial Culture			Entrepreneurial Civic Education
Idea Challenge	Hero Challenge	Empathy Challenge	Storytelling Challenge	Buddy Challenge	My Community Challenge
My Personal Challenge	Lemonade Stand Challenge	Perspectives Challenge	Trash Value Challenge	Open Door Challenge	Volunteer Challenge
Real Market Challenge	Start Your Project Challenge	Extreme Challenge	Be A YES Challenge	Expert Challenge	Debate Challenge

The TRIO Model is a holistic definition of entrepreneurship that encompasses three areas:

Core Entrepreneurial Education comprises basic qualifications for entrepreneurial thinking and acting: developing and implementing original and innovative ideas in a creative and structured manner.
Entrepreneurial Culture refers to personal development: self-initiative, self-confidence, teamwork, empowering oneself and others.
Entrepreneurial Civic Education aims at enhancing social competences and empowering students in their role as citizens: assuming responsibility for oneself, others and the environment.

Each challenge belongs to a **challenge family** that has its own icon with a colour code that corresponds to one of the three TRIO areas. A challenge family comprises several challenges on different competence levels. The letter codes given in the teaching materials correspond to the following levels:
A1 – primary level; A2 – secondary level I; B1 and B2 – secondary level II; C1 – transition from secondary level II to tertiary level. Each level builds on the preceding level.

Unit Planner

Theme	Improving the quality of life
Level	B1
Challenge Family	My Community Challenge –every contribution counts
	There are many different responsibilities in a community – be it in class, within a family or in society. Everyone can make their own personal contribution and assume responsibility. Primary school students look within their immediate surroundings. Which tasks need to be addressed and how can they be completed together with friends and family? The Harvesting Game for students at the lower secondary level demonstrates how communities can handle resources in a sustainable and responsible way. The upper secondary level focuses on the general aspects of prosperity and quality of life. The Changemaker Card Game teaches students at the upper secondary level how a single person can make big changes. Students at C1-level can look forward to the Utopia Game and questions like: What ideas did people have in the old times and what can we learn from these for the present?
Time / Length	3–4 periods
Big Idea behind the Challenge	The students are challenged to develop an indicator to measure quality of life. They shall consider common views on wealth and quality of life held in our society, developing, discussing, and challenging individual aspects of the topic at different classroom learning stations.
Entrepreneurial Competences according to the Reference Framework	I can identify my strengths and weaknesses. I can set goals to improve my skills where needed.
	I am comfortable in taking responsibility for a task.
	I can face potential competition in the implementation of tasks.
	I can develop ideas and provide justifications for why they should be implemented.
	I can identify and seize opportunities.
	I am aware of risks and take over responsibility for my own actions.
	I can plan goals and implement a supervised project.
	I can work with others and maximise the use of individual skills. I can take the initiative to convince others when making group decision.
	I can communicate well with other people.

	I would like to contribute my ideas to a future-oriented ecologically and socially sensitive behaviour in business and society. I can see ethical problems.
	I can explain and analyse the gross domestic product (GDP) and alternative concepts. I can analyse GDP's limits. Furthermore, I can reflect on the relationship between GDP and social and individual factors such as education, fortune, happiness as well as about the environment.
Language Objective	I can work on texts and work together with others.
	I can express myself orally and in writing and apply the content vocabulary.
	I can explain concepts to others and understand explanations myself.
Content Vocabulary (Word Wall)	Quality of life, wealth, gross domestic product, sustainability
Assessment	• Individual indicator for quality of life. • Reflection on and discussion about wealth and quality of life. • Written self-reflection (individually)
Necessary Background Knowledge	The students are acquainted with the circular flow of income and the gross domestic product (GDP).
Mind & Body	For physical exercises to help students activate and concentrate as well as improve their mindfulness go to:www.youthstart.eu (incl. video clips). Choose the appropriate exercise(s) to support your challenge!
Materials Needed	Prepare copies of each of the following: • Photocopy a task sheet for each of your students. • Make a copy of the worksheets for stations 1, 2, and 4 for each student. • Print out each <u>answer key</u> (following this Unit Planner) once. Place the answer key for Station 1, face down, on the table. The teacher keeps all other answer keys.
	Arrange the tables for 6 stations (7 tables if you include ↻ Station 1). For the last station, arrange the chairs in a small circle: • Print out a sign indicating the number of each station (for details see the material following this Unit Planner) on thick paper, fold it and place it on the respective tables. • Station 1: Print in colour, cut out, and laminate the Memory cards. • Print out the materials for the other stations on thick paper and laminate them. • ↻ Station 1: Place the data sheets 1a, 1b, and 1c at the station. • Station 2: Place the data sheet (Station 2) at the station. • Station 3: Place the newspaper clips at the station. In addition, place an empty sheet of paper (A4) for each student at the station.

- <u>Station 4:</u> Have at least one smartphone per pair.
- Station 5: Print the Country Trump cards on thick paper and in colour if possible. Print out multiple copies if necessary (a set of cards for 2 to 4 students) and laminate them. Provide the game instructions at the station.
- Station 6: Provide cards or Post-it notes at the station.
- Station 7: Print out written information on the procedure and some quotes and place them in the middle of the circle of chairs.

In addition, make copies of Worksheet 1 (End of Unit Self-Assessment) and – if used – ✇ Worksheet 2 (Self-Reflection Wrap-Up) for each student.

Step-By-Step Activities	
Step 1	Instructions Explain the process of the classroom learning stations (How long will it take, what to do, compulsory and optional stations, results).
Step 2	Start Give out the guide sheets, including the worksheets for stations 1, 2, and 4. The students should read through the guide sheet, go to one of the stations and start their tasks.
Step 3	Implementation The students work individually. The teacher assumes the role of a coach, giving feedback and checking their work (this will be necessary for some of the stations).
Step 4	Reflecting at the Round Table After the students have finished all stations, a final discussion on wealth and quality of life is held. On the basis of the given statements (see "Station 7: Reflect on the quality of life" following this Unit Planner) and using the Fishbowl method, the students shall take different positions.
Step 5	Self-Reflection (Worksheet 1 and ✇ Worksheet 2) Work with Worksheet 1 (End of Unit Self-Assessment) and – if used – ✇ Worksheet 2 (Self-Reflection Wrap-Up).
Context within the Challenge Programme	This challenge builds on the "My Community Challenges" for the learning levels A1 and A2 is the basis for the challenges for the learning levels B2 and C1.

Useful Links	About the Youth Start Entrepreneurial Challenges project: www.youthstartproject.eu
	Further teaching materials (including videos): www.youthstart.eu
	What is GDP? www.youtube.com/watch?v=XoIqVLO4Smg
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Authors Editors	Walter Kieweg (Author), Daniel Raithofer (Author), Johannes Lindner (Author & Editor), Gerald Fröhlich (Author & Editor), Chadwick V.R. Williams (Author Assessment)
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Station 1:
Three different perspectives on wealth

Task 1 / GDP-Memory:

Shuffle the cards and lay them out face down. On each turn, a player turns over two cards. If you turn over a matching pair (concept and fitting definition), you're allowed to keep it. You get to take another turn until you draw two cards that don't match. The player with the most matching pairs wins.

Task 2 / Approaches for calculating GDP:

Find out which concepts belong to which approach for calculating GDP! Enter them correctly on your worksheet (Station 1).

⊕➤ Station 1: Calculating GDP

There are three different ways to calculate GDP. You may use the production approach, the expenditure approach or the income approach.

Choose one of the examples to calculate. Then ask classmates who have already worked out another calculation. Compare your results! Have you noticed anything?

You can check your answer with the answer key on your teacher's table.

⊕▸ Data sheet 1a (⊕▸ Station 1)

Newpanolia lives on a big steel works which produces railway tracks. The largest employer of the country has two suppliers: the ore mine at Isenberg and the coal mine in the Black Forest. Taxes and subsidies are unknown in Newpanolia. The railway tracks are sold to the neighbouring countries. The government only buys tracks worth €5 million for the small regional railway in the capital city.

Using the production approach and the numbers from last year, calculate the GDP of Newpanolia.

Production approach:

Total sales

– Intermediate consumption

+ Taxes on products

– Subsidies on products

Ore mine		Coal mine		Steelworks	
Sales	€20 million	Sales	€10 million	Sales	€60 million
Wages	€1 million	Wages	€1.5 million	Wages	€2.5 million
				Purchases	€28 million
Profits	€19 million	Profits	€8.5 million	Profits	€29.5 million

The coal demand of Newpanolia's citizens accounts for 20% of the coal mine's sales.

⊕➤ Data sheet 1b (⊕➤ Station 1)

Newpanolia lives on a big steel works which produces railway tracks. The largest employer of the country has two suppliers: the ore mine at Isenberg and the coal mine in the Black Forest. Taxes and subsidies are unknown in Newpanolia. The railway tracks are sold to the neighbouring countries. The government only buys tracks worth €5 million for the small regional railway in the capital city.

Using the expenditure approach and the numbers from last year, calculate the GDP of Newpanolia.

Expenditure approach:

> Private consumption
>
> + Investment
>
> + State expenditure
>
> + Exports
>
> – Imports

Ore mine		Coal mine		Steelworks	
Sales	€20 million	Sales	€10 million	Sales	€60 million
Wages	€1 million	Wages	€1.5 million	Wages	€2.5 million
				Purchases	€28 million
Profits	€19 million	Profits	€8.5 million	Profits	€29.5 million

The coal demand of Newpanolia's citizens accounts for 20% of the coal mine's sales.

⊕▸ Data sheet 1c (⊕▸ Station 1)

Newpanolia lives on a big steel works which produces railway tracks. The largest employer of the country has two suppliers: the ore mine at Isenberg and the coal mine in the Black Forest. Taxes and subsidies are unknown in Newpanolia. The railway tracks are sold to the neighbouring countries. The government only buys tracks worth €5 million for the small regional railway in the capital city.

Using the income approach and the numbers from last year, calculate the GDP of Newpanolia.

Income approach:

Total income (compensation of employees, corporate and investment income)

+ Taxes

– Subsidies

+ Depreciation

Ore mine		Coal mine		Steelworks	
Sales	€20 million	Sales	€10 million	Sales	€60 million
Wages	€1 million	Wages	€1.5 million	Wages	€2.5 million
				Purchases	€28 million
Profits	€19 million	Profits	€8.5 million	Profits	€29.5 million

The coal demand of Newpanolia's citizens accounts for 20% of the coal mine's sales.

Station 2: Analysing GDP

GDP can be expressed in several ways:
absolute GDP, GDP per capita, nominal GDP, real GDP

Use the data sheet (Station 2) to complete the tasks and note down possible explanations on the respective worksheets.

Data sheet (Station 2)

Table 1: Absolute GDP in billion U.S. dollars

GDP in billion US$ (rounded figures)	1993	2003	2012	2013	2015
Brazil	438	552	2490	2460	1774
Bulgaria	10	21	53	55	50
China	440	1641	8461	9490	10866
Germany	2068	2502	3539	3745	3355
Greece	109	201	246	240	195
India	284	618	1825	1863	2074
Japan	4415	4303	5957	4908	4123
Luxembourg	17	29	56	62	58
Nigeria	16	68	461	515	4810
Portugal	95	165	216	226	199
Austria	190	261	408	428	374
Saudi Arabia	132	215	734	744	646
Slovenia		30	46	48	43
United States	6878	11510	16155	16663	17947
EU	7795	11852	17249	17986	16229
World	25747	38540	74428	76431	73433

Source: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD

Chart 2: GDP per capita in U.S. dollars

GDP per capita in US$ (rounded figures)	1993	2003	2012	2013	2015
Brazil	2792	3040	12157	12072	8538
Bulgaria	1279	2697	7333	7656	6819
China	374	1274	6264	6991	7924
Germany	25489	30319	44010	45600	41219
Greece	10435	18292	22242	21842	18035
India	309	565	1444	1456	1581
Japan	35451	33691	46701	38549	32477
Luxembourg	41751	64422	105447	113726	101449
Nigeria	153	510	2739	2979	2640
Portugal	9536	15773	20577	21618	19222
Austria	24024	32103	48324	50557	43438
Saudi Arabia	7442	9390	24883	24646	20481
Slovenia		14881	22477	23144	20713
United States	26465	39677	51433	52660	55836
EU	16174	24073	34150	35402	31843
World	4654	6084	10498	10650	9995

Source: http://api.worldbank.org/v2/en/indicator/ny.gdp.pcap.cd?downloadformat=excel

Station 3: Reflecting on GDP

Carefully read through these newspaper articles. Reflect on the information with regard to gross domestic product (GDP).

1. Analyse which factors, areas, events etc. are included in GDP. Demonstrate how floods are therefore related to GDP.
2. Illustrate whether the floods cause wealth in a country to increase or to decrease.

Write your answers on an A4 sheet of paper.

Daily Express

Wednesday, 5th June		Price: €1

FLOODING DISASTER

Hochwasser

ST. PÖLTEN. The floods have reached their peak yesterday (Tuesday). Slowly, the water levels in the small towns along the Danube are receding to reveal the damage caused: many settlement areas and larger cities were particularly badly affected. Damage in the high double-digit or low triple-digit million euro range is expected. Firefighters, the Armed Forces as well as numerous volunteers are constantly working to repair any damage caused. One of the victims expresses her gratitude for the hundreds of people providing help: "We don't know how we'd survive this disaster without all the helping hands". Cleanup operations will take several more weeks.

In Melk the water inundated the first floor of many houses, making them uninhabitable. The Maier family is also affected. "We're faced with ruin, we've lost everything!" Jakob Maier, father of three children is distraught. The family is currently staying with relatives. Maier hopes for the Disaster Relief Fund to support the high renovation costs.

The fund will also have to repair damage caused by a naval accident near Krems. When passing under a bridge, the floods caused the cargo ship to graze one of the pillars. Experts are currently removing 1,000 litres of oil leaking from the tank. The impact on the environment is not yet fully understood. Conservationists are concerned about how the Danube wetlands will be affected.

Drug lab washed away

KREMS. Volunteers helping at the flood sites at the Donaulände were quite surprised when suddenly strange items floated by. The police later identified them to be the equipment of a drug laboratory. It is not clear yet where they came from. Investigations are in full swing.

Illegal economy is booming

KRITZENDORF. Cleanup efforts are still fully in progress. It is not possible to quantify the damage caused by the floods at this stage, but estimates run into the millions. "The citizens are desperate," says Mayor Huber. Many of the flood victims cannot afford to pay for expensive builders. According to first estimates, the participation rate in undeclared work is around 40%.

Putz & Bau generated record sales

MELK. Yesterday, Director Hans Baumeister published the figures for the past quarter. The increase in sales by 400 per cent has him celebrating. "We were up to our ears in debt, and then the floods luckily brought us profits."

Station 4: Explaining indicators

Choose three of the six following indicators for wealth and quality of life. Using your smartphones or tablets, search for information on the internet. Take the worksheet (Station 4) and answer the questions.

- Gross National Happiness
- HDI (Human Development Index)
- Big Mac Index
- Gini coefficient
- HPI (Happy Planet Index)
- ISEW (Index of Sustainable Economic Welfare)

Station 5: Play a game of Country Trumps

Rules

<u>Rules for 2 to 4 persons</u>

All cards are shuffled and dealt out. Your goal is to have won the most cards after 15 minutes of playing. Each card shows five indicators of "wealth and quality of life". The card with the best ranking wins against the other(s). If your card is missing the chosen value, you automatically lose.

When playing a card, you must name the country as well as the indicator and its respective ranking. After finishing the game, talk about your impressions and experiences (e.g. characteristics of the countries' rankings,...).

<u>Information on the cards:</u>

The following indicators are shown:
- GDP: gross domestic product per capita in terms of purchasing power - the higher value wins
- HDI: Human Development Index: expressed as a value between 1 (best) and 0 (worst) - the higher value wins
- Gini coefficient (income distribution): values ranging between 0 (perfect equality) and 100 (maximal inequality) - the lower value wins
- Big Mac Index: price of a Big Mac in U.S. dollars - the higher value wins
- HPI: Happy Planet Index with values ranging between 100 (best) and 0 (worst) - the higher value wins

Station 6: Developing your own indicator to measure the quality of life

- Develop your own personal indicator for quality of life. Be creative. The following key words shall serve as an impulse: environment – parks – public transport – pubs/bars – water – football pitches – WIFI ...

- Also consider ways to measure the indicator. These examples might be helpful: walking-distance from your flat to the nearest public transport stop in metres; noise pollution at home in decibels; ...

- Write down the chosen indicator on a card. Show your indicator to your teacher when you've finished and, if possible, make a poster with one of your classmates.

Station 7: Reflect on the quality of life

To conclude, you will hold a discussion in class, using the Fishbowl method. Four people sit in an inner circle, the rest of the group sit on the chairs around them. The inner circle is split into two groups, each of which represents one of the following positions. Participants in the outer circle may move into the inner circle and swap places with one of the debaters. (This person is allowed to finish his/her argumentation first.)

"If I wanted to destroy a nation, I would give it too much and I would have it on its knees, miserable, greedy and sick." (John Steinbeck; 1902-1968)

"The bulging pocket makes the easy life." (Bertolt Brecht; 1898-1956)

Answer key (Station 1)

Production approach:

Sales – €6 million worth of bread was sold

Intermediate consumption – flour for a bakery

Expenditure approach:

Consumption – TV, mobile phone, sausage roll, toilet paper, …

Government spending – education, health, culture, infrastructure, …

Investment – real estate, machinery, equipment, …

Imports – gas from Russia, fish from Norway, …

Exports – auto parts to Germany, railway tracks to Slovenia, …

Income approach:

Taxes – securities turnover, levy on capital, excise duty on tobacco, beverages, …

Subsidies – EU funds, payments of the Federal Government to the OEBB, …

Corporate and investment income – profits and interests

Compensation to employees – €2,000 wages

Answer key (⊕➤ Station ~~2~~ 1)

Answer to Example A:
Production approach:
Gross value added, i.e. gross value of output minus value of intermediate consumption

GDP = €20 million + €10 million + €60 million - €28 million = €62 million

Answer to Example B:
Expenditure approach:
Consumption (C) + Investment (I) + Government spending (G) + Exports (EX) – Import (IM)

GDP = €2 million + €5 million + €55 million = €62 million

Answer to Example C:
Income approach:
Total factor income (+ taxes - subsidies)

GDP = €1 million + €19 million + €1.5 million + €8.5 million + €2.5 million + €29.5 million = €62 million

Answer key (Station 2)

Task 1: Using the numbers given in table 1 on the data sheet (Station 2).

Possible answer: Over the past two decades, GDP has increased in all countries. On a global basis, GDP has tripled. EU-wide it has more than doubled.

China has the highest rate of increase (twenty-fold increase), followed by Nigeria (increase from 16 billion to over 500 billion U.S. dollars).

Growth rates in European countries were less dramatic. This may have several reasons: On the one hand, population has risen less in European countries than in emerging markets. On the other hand, Europe has a higher baseline for GDP to start with.

Directly comparing absolute values of the individual countries is not meaningful.

It is striking that Greece and Japan suffered a decline in GDP from 2012 to 2013.

Task 2: Compare tables 1 and 2 on your data sheet (Station 2). Analyse and explain the data given for Luxembourg and China.

Possible answer: Luxembourg's GDP in absolute values has nearly quadrupled in the past two decades. GDP per capita has nearly tripled.

In the same period, China's absolute GDP has increased more than twenty-fold, and GDP per capita has grown eighteen-fold.

Owing to the fact that the population in China is many times higher than in Luxembourg, China also has a higher absolute GDP. Though compared to China, Luxembourg's GDP per capita is 16 times higher.

Task 3: Analyse the fact that from 2012 to 2013 total GDP has increased in Saudi Arabia and India, whereas GDP per capita decreased.

Possible answer: Due to the rise in population in both countries, absolute GDP has to be distributed among a larger number of persons, causing GDP per capita to drop.

Task 4: From 2014 to 2015, a country's nominal GDP went up by 2%, whereas the real growth rate was only 0.3%. Differentiate.

Possible answer: Real GDP includes inflation, which is why increase is slightly smaller (nominal GDP – inflation = real GDP).

Answer key (Station 3)

Question 1:

included in GDP	not included in GDP
Large portion of environmental damage	Illegal economy
Efforts of oil spill experts	Illegal laboratories
Plaster & construction	Fire brigade, volunteers
Disaster relief	Possible damage to the environment

Question 2:
Wealth, as measured by GDP, goes up as it only takes into consideration expenditure for clearing operations and renovations, disregarding the personal suffering of those affected.

Answer key (Station 4)

Task 1:

1. Gross National Happiness (GNH)[1]

    This indicator was developed in Bhutan in the 1970s, the former king wanting to rebel against the prevalent GDP as an indicator for economic development and wealth. Gross National Happiness especially reflects Bhutan's culture and values. It includes nine domains (psychological wellbeing, time use, community vitality, cultural diversity, ecological resilience, living standards, health, education, and good governance) and is aggregated out of a number of different indicators.

    Gross National Happiness depends on a series of subjective judgments which makes it hard to objectify.

    GNH is only officially used in Bhutan. Thus, a direct comparison with other countries is not possible.

2. HDI (Human Development Index)[2]

    Since 1990, the United Nations has calculated the Human Development Index on a yearly basis. It covers 187 countries (as at 2011). The index combines the levels of health, education, and income. As of 2010, the HDI is a composite statistic of the following indices:

    - Life Expectancy Index (LEI): Life expectancy at birth (LE)
    - Education Index (EI): Mean years of schooling (MYS) and Expected years of schooling (EYS)
    - Standard of living: Gross National Income (GNI) per capita (PPP US$)

    Finally, the HDI is the geometric mean of these three dimensions.

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[1] de.wikipedia.org/wiki/Bruttonationalglück; letzter Zugriff: 10.03.2015
 http://www.nachhaltigkeit.info/artikel/bruttoinlandsglueck_in_buthan_1869.htm (German); last retrieved: 10.03.2015
 http://www.ratswd.de/download/RatSWD_WP_2011/RatSWD_WP_182.pdf (German); last retrieved: 10.03.2015
[2] https://en.wikipedia.org/wiki/Human_Development_Index; last retrieved: 22.07.2016
 http://www.bmz.de/de/service/glossar/I/index_hdi.html (German); last retrieved: 10.03.2015
 http://www.nachhaltigkeit.info/artikel/human_development_index_1867.htm?sid=75e80b1538ae66308236a4fe6d7b74d1 (German); last retrieved: 10.03.2015

3. Big Mac Index[3]

   Converted to dollars – how much is a Big Mac in different countries? That's what the Big Mac Index is about. About making exchange-rate theory a bit more digestible. You could compare it to a basket of goods*. In this case, our basket is only one product (a hamburger sold at McDonald's, the world's largest chain of fast food restaurants).

   The Big Mac is great for comparison as it is sold in over 140 countries around the world and for more than 40 years, it has been made of the same ingredients (almost) everywhere: a sesame roll, ground beef, processed cheese, lettuce, pickles, onions, and sauce.

   In theory, the burger should cost the same in any given country. In practice, however, as the Big Mac Index shows, there are great differences. These differences indicate that a currency is over-valued or under-valued.

   * Basket of goods: A set of representative consumer products used to determine the price index and track inflation.

4. Gini coefficient[4]

   The Gini coefficient (also known as the Gini index or Gini ratio) was developed by the Italian statistician Corrado Gini at the beginning of the last century. The Gini coefficient is a statistical measure of inequality. It can range from 0 to 1; sometimes it is expressed as a percentage ranging between 0 and 100.

   For the comparison of different countries, the Gini coefficients for the distribution of income or wealth are often contrasted. In this context, you may also speak of welfare economics. A Gini coefficient of 0 expresses perfect equality, for example when everyone in a country has the same income or wealth. A coefficient of 1 or 100, respectively, expresses that only one person has all the income or consumption and all the others have nothing.

5. HPI (Happy Planet Index)[5]

   The Happy Planet Index (HPI) is designed to measure the environmental efficiency of supporting well-being in a given country. It is calculated, using the values for Life Satisfaction, Life Expectancy, and the ecological footprint per capita (Multiply life satisfaction and life expectancy, and divide it by the ecological footprint). Most importantly, unlike other indices, it takes into account sustainability. That is why countries with high levels of life satisfaction are featured at the bottom of the rank order if they use too many resources.

   Since 2006, the British New Economics Foundation produces the Happy Planet Index on a three-year basis. In 2012, already 151 countries were ranked.

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[3] https://en.wikipedia.org/wiki/Big_Mac_Index; last retrieved: 22.07.2016
http://www.zeit.de/2012/37/Waehrungskonten/komplettansicht (German); last retrieved: 10.03.2015
[4] https://en.wikipedia.org/wiki/Gini_coefficient; last retrieved: 22.07.2016
http://wirtschaftslexikon.gabler.de/Definition/gini-koeffizient.html (German); last retrieved: 10.03.2015
[5] https://en.wikipedia.org/wiki/Happy_Planet_Index; last retrieved: 22.07.2016
http://www.nachhaltigkeit.info/artikel/happy_planet_index_1866.htm (German); last retrieved: 10.03.2015
http://www.happyplanetindex.org/about/; last retrieved: 10.03.2015

6. ISEW (Index of Sustainable Economic Welfare)[6]

The Index of Sustainable Economic Welfare is intended to add to or to replace GDP, which is the main indicator of wealth.

Rather than simply adding together all expenditures like GDP, the ISEW also takes into account income distribution as well as consumer expenditure. It targets more personal than general economic wealth. Calculation includes factors such as:

- Income distribution (the more unevenly distributed, the lower the increase of total wealth)
- Unpaid domestic labour and household work
- Public spending on health services
- Education
- Air pollution and general environmental deterioration
- Depreciation of natural capital
- Costs of global warming

The Index of Sustainable Economic Welfare demonstrates that economic growth does not frequently result in income redistribution. On the contrary, stagnating or declining values point to an accumulation of wealth. Thus, economic growth is not sustainable.

Task 2:
Ranking for Austria

BNG:	-	
HDI:	0.881 (21.)	http://hdr.undp.org/en/content/human-development-index-hdi-table
GINI:	29.15 (15.)	http://hdr.undp.org/sites/default/files/reports/14/hdr2013_en_complete.pdf
Big Mac:	4.56$ (23.)	http://de.statista.com/statistik/daten/studie/199335/umfrage/big-mac-index--weltweiter-preis-fuer-einen-big-mac/ (German)
HPI:	47.1 (48.)	http://www.happyplanetindex.org/countries/austria/
ISEW:	-	

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[6] https://en.wikipedia.org/wiki/Index_of_Sustainable_Economic_Welfare; last retrieved: 22.07.2016
http://www.nachhaltigkeit.info/artikel/index_of_sustainable_economic_welfare_1874.htm?sid=bea61943e256f34a6a3fe724bb7d595b (German); last retrieved: 10.03.2015