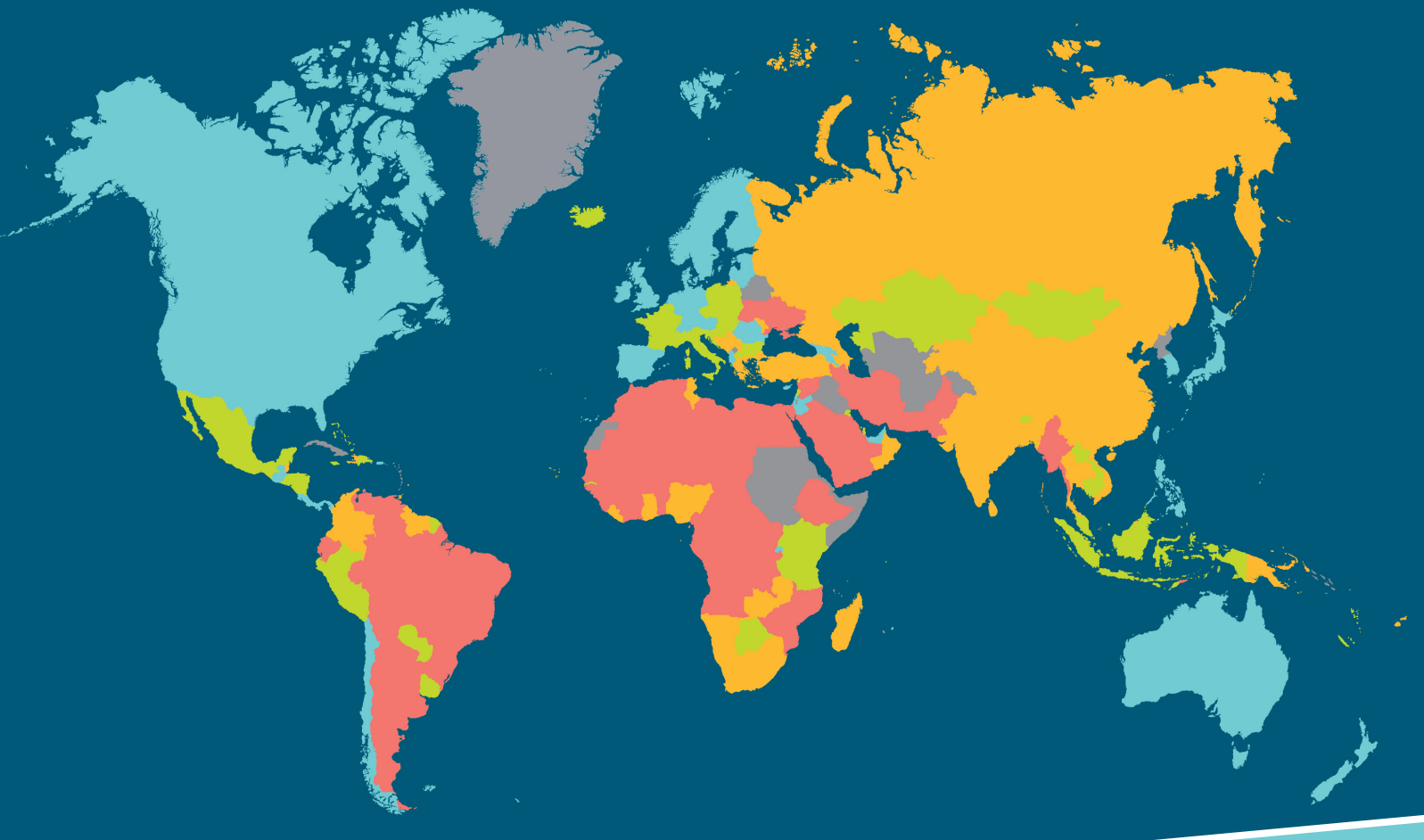


MOST FREE

2ND QUARTILE

3RD QUARTILE

LEAST FREE



# LESSONS IN ECONOMIC FREEDOM

CREATED BY  
SIGNÈ THOMAS

#### **NOTE ABOUT THE MATERIALS:**

- + A **"Handout"** refers to a page(s) you will give to each of your students, or to each group of students if you split them into teams.
- + A **"Resource"** refers to a page(s) for you, the teacher. (Example: an Answer Key to a Handout)
- + A **"Visual"** refers to a page you will show your students as a visual.
- + You will find a list of glossary terms at the end of the teacher's guide for each lesson. These terms are listed in order of appearance in the lesson. You may want to clarify some of the glossary terms for your students.

**These Lessons in Economic Freedom were created by**

**Signè Thomas at the request of the Fraser Institute, for teachers**

**to be able to use as interactive activities ("econ games") in**

**their classroom. These lessons are designed to help educators**

**teach their students about economic freedom in a fun,**

**engaging manner.**

# TABLE OF CONTENTS

*Note about the Materials* ..... i

## **Lesson 1: What Does This Map Represent?**

Teacher's Guide.....	1
Handout 1.1.....	5
Resource 1.2.....	7
Visual 1.3.....	9

## **Lesson 2: Map-Reading Relay Race**

Teacher's Guide.....	10
Handout 2.1.....	13
Handout 2.2.....	14
Resource 2.3.....	16

## **Lesson 3: Economic Freedom Trivia**

Teacher's Guide.....	17
Handout 3.1.....	22
Handout 3.2.....	25
Handout 3.3.....	26
Handout 3.4.....	27
Resource 3.5.....	30
Resource 3.6.....	31

## **Lesson 4: The Rapid Response Quiz Show: Why is Economic Freedom So Vitally Important?**

Teacher's Guide.....	34
Handout 4.1.....	40
Handout 4.2.....	43
Handout 4.3.....	44
Resource 4.4.....	45
Resource 4.5.....	47

## **Lesson 5: The Rules of the Game: How Policies Influence Incentives**

Teacher's Guide.....	49
Handout 5.1.....	53
Resource 5.2.....	54
Handout 5.3.....	56
Resource 5.4.....	58

## **Lesson 6: Economic Freedom Runners**

Teacher's Guide.....	60
Handout 6.1.....	64
Handout 6.2.....	66
Handout 6.3.....	68
Visual 6.4.....	69
Resource 6.5.....	74

## **Lesson 7: Learning the Ropes of Research: EFW on the Web**

Teacher's Guide.....	75
Handout 7.1.....	78
Resource 7.2.....	83

## **Lesson 8: Economic Freedom Line**

Teacher's Guide.....	88
Resource 8.1.....	93
Visual 8.2.....	97
Visual 8.3.....	99
Handout 8.4.....	103
Resource 8.5.....	104

# LESSON 1

## What Does This Map Represent?

### THEME:

Economic performance varies dramatically from nation to nation in the world economy. Some nations enjoy very high living standards, while other nations remain desperately poor. Many policies exist to correct this unequal distribution of economic performance. These policies range from foreign aid in the form of financial aid or material goods, to preferential trade policies and forgiveness of debt for poor nations. None of such policies have achieved a level of success necessary to overcome poverty. This lesson illustrates the different levels of prosperity that exist in the world. It gives students an opportunity to express their beliefs about the causes of world poverty. It asks them to consider the impact of economic freedom on income and standard of living: that is, does economic freedom lead to economic wealth for a nation, and a lack of economic freedom result in poverty?

### DESCRIPTION:

In this lesson, the 2016 Economic Freedom of the World map is placed in view of the students with the edges of the map covered so that only

the outline of the countries is showing. Cover the title and description along the top, the graphs along the bottom, and the country list by quartiles along the right-hand side of the map. Students are divided into small groups where they look at **Handout 1.1** which contains nine photos of economic activity in countries with different levels of economic prosperity. The students hypothesize which countries are displayed in the nine photos, and estimate how the countries compare in average per capita income. Then they compare their income conjecture with the correct information (gathered from the CIA World Factbook), locate the countries on the 2016 EFW map, note the map's different colours for countries, and hypothesize the purpose of the map. The purpose of the exercise is to elicit student preconceptions about average income in different countries, develop their map reading skills, highlight the purpose of the EFW map, and illustrate the linkage between a nation's level of economic freedom and per capita income.

### LEARNING OUTCOMES:

- + identify what the EFW map represents
- + learn what economic freedom means
- + recognize the positive correlation between higher levels of economic freedom and higher levels of income per capita (per capita GDP)
- + discover what each of the colours on the map represents

### PROCEDURE:

1. Prepare for the “What Does This Map Represent?” activity:
  - A. Print a copy of **Handout 1.1** for each student.
  - B. Print a copy of **Resource 1.2** (the answer key) for yourself.
  - C. Print a copy of **Visual 1.3** to be able to project/show to your students. (Or, if you'd rather use a PowerPoint: you can use this lesson's corresponding PowerPoint which displays the information within **Visual 1.3**, or you can place **Visual 1.3's** info into your own PowerPoint to project for

## NOTE TO THE TEACHER:

This information can be found online in the CIA World Factbook ([www.cia.gov/library/publications/the-world-factbook/index.html](http://www.cia.gov/library/publications/the-world-factbook/index.html)).

The technical name for this average is the GDP per capita PPP. The GDP per capita (PPP) on the student handout refers to average income per person in the country. These calculations are prepared by various organizations such as the International Monetary Fund and the World Bank. GDP per capita PPP is a country's Gross Domestic Product divided by the number of people in the country and then converted to US dollars and adjusted for relative inflation levels.

As a hypothetical example, assume Big Mac hamburgers cost one (1) U.S. dollar and that they're sold for the same amount in Canada and China. If Canada has a GDP per capita PPP of \$30,000 and China has a GDP per capita PPP of \$10,000, the figures suggest that a Canadian citizen who only buys Big Macs has the purchasing ability to buy three times the number of Big Macs as a Chinese citizen who only purchases Big Macs. Remember, this is a very simplified example. The Purchasing Power Parity comparison is actually done with a sophisticated market basket of goods to make the best possible comparison of the purchasing behaviors of people in different countries.

your students.)

2. Post the 2016 Economic Freedom map on the classroom wall. Cover the edges of the map so students do not know what the map represents. Be sure to cover the title and description along the top, the graphs along the bottom, and the country list by quartiles along the right-hand side of the map.
3. Explain to the class that they will be using this map for the next few days to investigate economic behavior in different countries.
4. Distribute a copy of **Handout**

**1.1** to each student. The regions are identified on the handout. Ask the students to guess which country is represented in each photo and to mark it on their own handout. Ask them to then estimate the average income of the individuals in each country.

5. Divide the students into groups of 3 to 5 people. Ask them to accomplish two tasks:
  - + If possible, reach a consensus on which countries are represented in the photos.
  - + Number the photos according to what they

perceive the level of wealth to be in each country, where 1 is the wealthiest and 9 is the poorest.

- + Explain that this exercise is intended to bring out information as they investigate their preconceived thoughts about the relative prosperity of different countries.
6. **Use Resource 1.2 (the answer key to Handout 1.1)** to provide the students with the correct answers about the name of the country and average income of the countries depicted in **Handout 1.1**, and tell them to note the correct answers of each country's name and average income level on their own handout. Let students comment on how close (or far) they were from the correct answer. It is not critical that they are correct on this exercise. What is critical is that they are willing to test their preconceptions with evidence to confirm or reject their earlier conclusions.
7. Once students know the countries depicted in **Handout 1.1** and the average income of each of these countries, ask them to locate the countries represented on the **Handout 1.1** using the EFW map posted in the room. Ask the students to write down the colour depicted on the map for each of the nine countries on **Handout 1.1**.
8. Ask students to hypothesize

what the map represents. What is its title? What is the significance of each colour grouping? This will further test their preconceptions. Students will likely think the map measures world poverty or income levels.

9. Remove the cover from the edges of the map, revealing the map's title and additional descriptions and graphics. Explain that this map is providing the viewer with information regarding economic freedom. The higher a country's level of economic freedom, the higher the EFW (Economic Freedom of the World) score that country receives using the EFW Index.

10. Let the students know what each colour on the map represents: Blue depicts the countries in the most economically free quartile, green depicts the countries in the second-most economically free quartile, orange depicts the countries in the third quartile, and red depicts the countries in the least economically free quartile.

11. Ask the students if they notice any trend when looking at the colour groupings for the countries in **Handout 1.1**. By placing the nine countries from **Handout 1.1** in a list from lowest to highest income, the trend can easily be noticed:

+ #9: Pakistan (red): US \$5,100

+ #8: Egypt (red): US \$12,600

+ #7: Venezuela (red): US \$13,800

+ #6: Columbia (orange): US \$14,100

+ #5: Thailand (orange): US \$16,900

+ #4: Japan (green): US \$41,300

+ #3: France (green): US \$42,300

+ #2: Canada (blue): US \$46,400

+ #1: Germany (blue): US \$48,100

The students should notice that the red countries in Handout 1.1 have the lowest average income levels, the orange countries in the handout have low income levels but not as low as those in red, the green countries in the handout have fairly high average income levels, and the blue countries in the handout have the highest income levels.

12. Explain that while this map is not representing the income levels of various countries, there indeed is a correlation between high levels of economic freedom and the growth and prosperity seen within a country. Ask the students to consider why this is the case. Ask the students if what they learned today supports the idea that economic freedom leads to economic prosperity while the lack of economic freedom results in poverty.

13. Present students with the definition of economic freedom by displaying **Visual 1.3** (or by showing a PowerPoint projection that contains the information within **Visual 1.3**). Explain that each of the next lessons will help them develop a more complete understanding of the concept of economic freedom.

## A FINAL THOUGHT:

Ask students why preconceptions should be tested with available information. Remind students that our knowledge is based on the best information we have up to this point. As new evidence surfaces, we must consider the new information and adjust our previous knowledge to include new evidence that better explains the realities around us. Gaining economic knowledge will help people to use scarce resources more wisely as they use the economic way of thinking in their decision making. Gaining and implementing economic knowledge can also improve human living standards.

## GLOSSARY:

**GDP per capita (i.e. income per capita):** GDP per capita stands for gross domestic product per person. It is a measure of a country's economic output that accounts for its number of people. GDP

per capita (PPP) compares GDP on a purchasing power parity basis divided by a country's population.

**PPP (Purchasing Power Parity):** Purchasing Power Parity (PPP) is an economic theory that compares different countries' currencies through a market "basket of goods" approach. According to this concept, two currencies are in equilibrium or at par when a market basket of goods (taking into account the exchange rate) is priced the same in both countries.

**Quartile:** One of four equal groups into which a population can be divided according to the distribution of values of a particular variable.

**Economic freedom:**  
*(Note to instructor: Do not read this to your students prior to the lesson!)* The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

# HANDOUT 1.1

## What Does This Map Represent?

*The GDP per capita figures below use 2016 PPP (Purchasing Power Parity) estimates in US dollars from the CIA World Factbook.*



Region: Africa

Population: 97,041,072

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_



Region: North America

Population: 35,623,680

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_



Region: South America

Population: 31,304,016

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_



Region: Europe

Population: 67,106,161

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_





Region: Europe

Population: 80,594,017

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_



Region: South America

Population: 47,698,524

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_



Region: Asia

Population: 68,414,135

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_



Region: Asia

Population: 126,451,398

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_



Region: Asia

Population: 204,924,861

Country: \_\_\_\_\_

GDP per capita (PPP): \_\_\_\_\_

Colour on map: \_\_\_\_\_

# RESOURCE 1.2

## Handout 1.1 Answer Key

*The GDP per capita figures below use 2016 PPP (Purchasing Power Parity) estimates in US dollars from the CIA World Factbook.*



Region: Africa

Population: 97,041,072

Country: Egypt

GDP per capita (PPP): US \$12,600. (#8 out of 9)

Colour on map: Red



Region: North America

Population: 35,623,680

Country: Canada

GDP per capita (PPP): US \$46,400. (#2 out of 9)

Colour on map: Blue



Region: South America

Population: 31,304,016

Country: Venezuela

GDP per capita (PPP): US \$13,800. (#7 out of 9)

Colour on map: Red



Region: Europe

Population: 67,106,161

Country: France

GDP per capita (PPP): US \$42,300. (#3 out of 9)

Colour on map: Green



Region: Europe

Population: 80,594,017

Country: Germany

GDP per capita (PPP): US \$48,100. (#1 out of 9)

Colour on map: Blue



Region: South America

Population: 47,698,524

Country: Colombia

GDP per capita (PPP): US \$14,100. (#6 out of 9)

Colour on map: Orange



Region: Asia

Population: 68,414,135

Country: Thailand

GDP per capita (PPP): US \$16,900. (#5 out of 9)

Colour on map: Orange



Region: Asia

Population: 126,451,398

Country: Japan

GDP per capita (PPP): US \$41,300. (#4 out of 9)

Colour on map: Green



Region: Asia

Population: 204,924,861

Country: Pakistan

GDP per capita (PPP): US \$5,100. (#9 out of 9)

Colour on map: Red

# What is Economic Freedom?

## VISUAL 1.3

### The cornerstones of economic freedom:

- *personal choice*
- *voluntary exchange coordinated by markets*
- *freedom to enter and compete in markets*
- *protection of persons and their property from aggression by others.*

### Individuals have economic freedom when:

- *property they acquire without the use of force, fraud, or theft is protected from physical invasions by others*
- *they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others*
- *they are free to choose, trade, and cooperate with others, and compete as they see fit*

# LESSON 2

## Map-Reading Relay Race

### THEME:

The Economic Freedom of the World map is based on the data from the Economic Freedom of the World (EFW) index. The map visually displays a country's degree of economic freedom relative to other countries, by assigning a colour to each economic freedom quartile: blue represents the most-free quartile, green represents the second quartile, orange represents the third quartile, and red represents the least-free quartile. The EFW index measures the degree of economic freedom present in five major areas:

- 1. Size of Government** – (government spending and taxes)
- 2. Legal System and Security of Property Rights**
- 3. Sound Money**
- 4. Freedom to Trade Internationally**
- 5. Regulation** – (regulations of credit markets, labour markets, and businesses)

It is important to be able to understand and interpret the Economic Freedom of the World map. Later lessons will focus on gaining a greater understanding

of the concept of economic freedom itself.

### DESCRIPTION:

This lesson teaches students to read and interpret the key features and information conveyed by the Economic Freedom of the World map while they play a game. The class is divided into teams of 3 to 5 students, and they participate in a map-reading relay race. Each team tries to answer 25 questions about the map as quickly and accurately as possible. The team with the lowest number of points wins the game. Then the students discuss the answers and the overall significance of the map. In later lessons, they will analyze this information.

If you do not have the EFW wall map, contact the Fraser Institute to attain one for your classroom. Or, you can use the EFW map located on the website <https://www.fraserinstitute.org/economic-freedom>. Note that the wall map associated with this lesson is based on the EFW 2016 Annual Report, which uses 2014 EFW data. Therefore, if you choose to use the website, you will need to alter/update some of the questions/answers you ask your students for this activity.

### LEARNING OUTCOMES:

- + hone world map reading abilities
- + read and understand the information presented in a bar graph
- + three bar graphs: one that relates economic freedom to income per capita, another that relates economic freedom to economic growth, and another that relates economic freedom to the income earned by the poorest 10%
- + identify other key pieces of information from the EFW wall map, such as knowing what each colour represents, how to determine a country's general level of economic freedom based on the quartile's colour, and how to identify a country's precise Economic Freedom of the World (EFW) index score

### PROCEDURE:

1. Prepare for the “Map-reading Relay Race” activity:
  - + Print a copy of **Handout 2.1** for each student.

- + Print a copy of **Handout 2.2** for each team of 3-5 students.
- + Print a copy of **Resource 2.3** (the answer key) for yourself.

2. Tell the students that they are going to participate in a relay race to see how quickly and accurately they can read and describe the information on the EFW map.

3. Put the Economic Freedom map in a place in the classroom where nothing obstructs the students' access to it. Several students will be viewing it at a time during the relay race. For large classes, you may want to set up more than one map, and assign teams to a particular map.

4. Divide the class into groups of 3 to 5 students. Ask each group to select a captain and a recorder. Distribute a copy of **Handout 2.1** (student directions) to each student, and distribute a copy of **Handout 2.2** (the score sheet) to each team. The recorder will keep track of their team's answers on the score sheet. You may want to offer a small prize for the winning team to enhance the competition.

5. Ask the students to read the directions on **Handout 2.1**. Make sure the students understand the directions. You may want to emphasize these points:

- + The teams may not start until you say "go!"
- + Only one student from each group may be at the map at a time. That student can

only bring back the answer to their given question (as the questions are to be answered in order).

- + All students in the group must take their own turn to find the answer to their question (no passing a turn to a teammate).

- + When a student returns from the map, the group may discuss the answer before the recorder writes the answer on their score sheet.

- + When the score sheet is completed, the team captain gives the score sheet to you.

- + The winning team is the team with the lowest score based on the amount of time it took to answer the questions and the number of questions they answered correctly. Every incorrect answer or unanswered question results in a penalty of one minute added to the score.

6. Have the recorders write the starting time on the score sheet when you say "go." All teams will have the same starting time.

7. The students go to the map and try to answer the questions. When a group is finished, the captain gives you the score sheet and you record their finishing time and check their answers. (The answers are on **Resource 2.3**.) For questions with longer answers, an answer that has the correct idea should be counted as correct. Add one minute as a penalty for each incorrect

answer or unanswered question, and calculate the total score for the team. Calculate each team's score.

8. Use **Resource 2.3** to go over the answers with the class. Show the students where they can find the correct information on the map for the questions where students had difficulty.

9. Announce the winning team. You may want to give a small prize to the members of the winning team.

## A FINAL THOUGHT:

The Economic Freedom of the World map is based on the Economic Freedom of the World (EFW) Index. The index is on a 0 to 10 scale, where a higher EFW score indicates more economic freedom. The index measures the degree of economic freedom in five major areas, comprised of 42 distinct variables. The five major areas of the index are:

### 1. Size of Government:

government spending and taxes

- + Lower government spending and lower tax rates result in a higher EFW score.

### 2. Legal System and Property Rights

- + The more property rights are protected by the rule of law, the higher the EFW score.

### 3. Access to Sound Money

- + A lower rate of inflation results in a higher score.

#### 4. Freedom to Trade Internationally

- + Lower barriers to trade (such as fewer tariffs) result in a higher EFW score.

#### 5. Regulation: regulation of credit, labour, and business

- + Government regulation restricts freedom of exchange in the credit, labour, and product markets; therefore, less government regulation results in a higher EFW score.

After you have explained the EFW index to the class, ask your students: Why would the authors of the Economic Freedom of the World index go to such lengths to construct this index? (The index is important because it provides a systematic measurement of economic freedom, and thereby shows how nations can improve the well-being of their citizens. Nations that are economically free outperform nations that are not economically free in many indicators of well-being, such as average income per person, average economic growth, and life expectancy. The index and map make it clear how economically free a nation is, and which policies a nation should follow in order to improve the lives of its citizens. The average economic freedom score rose from 5.31 in 1980 to 6.83 in 2007, but then fell back to 6.78 in 2008. The 2016 Annual Report (which uses 2014 data) shows that the average EFW score was 6.85 for 2014.)

## GLOSSARY:

**Economic freedom:** The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

**Economic Freedom of the World (EFW) index:** The Economic Freedom of the World index, published by the Fraser Institute, measures the degree of economic freedom present in five major areas: (1) Size of Government; (2) Legal System and Security of Property Rights; (3) Sound Money; (4) Freedom to Trade Internationally; (5) Regulation. Within the five major areas, there are 24 components in the index. Many of those components are themselves made up of several sub-components. In total, the index comprises 42 distinct variables. Each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. When subcomponents are present, the sub-component ratings are averaged to derive

the component rating. The component ratings within each area are then averaged to derive ratings for each of the five areas. In turn, the five area ratings are averaged to derive the summary rating for each country. A country's summary EFW rating ranges from 0 to 10, where a higher rating indicates greater levels of economic freedom. See <https://www.fraserinstitute.org/economic-freedom/approach> for more information on the variables comprised within each area of the EFW index.

**Quartile:** one of four equal groups into which a population can be divided according to the distribution of values of a particular variable. A quartile is a quarter (25%) of a group.

**EFW index score:** A country's Economic Freedom of the World score is placed on a scale of 0 to 10; the higher the score, the higher the level of economic freedom within the country.

**GDP per capita (i.e. income per capita):** GDP per capita stands for gross domestic product per person. It is a measure of a country's economic output that accounts for its number of people. GDP per capita (PPP) compares GDP on a purchasing power parity basis divided by a country's population.

**Economic growth rate:** the increase in the goods and services produced in an economy, typically a nation, from one period of time to another. It is measured as a percentage increase in real GDP, which is gross domestic product adjusted for inflation.

## HANDOUT 2.1

# Map-Reading Relay Race « STUDENT DIRECTIONS

Your team will compete against other teams in the class in a map-reading relay race. The winning team is the one that can most quickly and accurately read and interpret the information in the Economic Freedom of the World map.

Each team will appoint a captain and a recorder. The captain will decide the order in which team members go to the map, and lead discussions about possible answers. The recorder will keep a record of the answers on this handout, which will serve as the official score sheet. When your team has answered all the questions on the handout, the captain will turn in this paper to your teacher.

Each member of the team must participate in the relay race. When your teacher says “go!” the recorder will write down the time, and the first team member will go to the map to find the information requested in the first question. Team members may discuss the answer to the question before the recorder writes the team’s final answer on the score sheet. When that answer is officially recorded, the second team member goes to the map to find the answer to the second question. Team members continue to go to the map in the order determined by the team captain, until all 25 questions are answered. Only one student from each team may go to the map at any one time. That student may bring back the answer to only that single question.

After your team has finished answering the questions and the captain has turned in the score sheet, your teacher will record the time and will check your answers.

***The team score is determined by the total time needed to answer the questions, adding one minute for each incorrect answer or unanswered question. The team with the lowest score wins.***



## Map-Reading Relay Race « TEAM ANSWER SHEET

SCORING  
INFORMATION:

Team Name: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Names of students on the  
team: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**A. Starting time:****B. Finishing Time:****C. Total Time (B. – A.):****D. Penalty Minutes:***(one for each incorrect answer  
or unanswered question)***E. Total Score (C. + D.):**

## QUESTIONS:

1. What does the map say the “key ingredients” of economic freedom are?
2. What colour indicates that a nation is mostly economically free?
3. What colour indicates that a nation is in the second economic freedom quartile (relatively free)?
4. What colour indicates that a nation is in the third economic freedom quartile (relatively unfree)?
5. What colour indicates that a nation is least economically free?
6. What colour indicates that a nation is unable to be measured?
7. Are countries that are unable to be measured more likely to be in the top two economic freedom quartiles or in the bottom two quartiles?
8. What is the most-free economy in the world?
9. Which country is more economically free, Canada or the United States?
10. How many economies are more economically free than Canada?
11. Canada has the same EFW score as how many other countries?

## Map-Reading Relay Race « TEAM ANSWER SHEET

12. What is Canada's EFW score?
13. Which country is more economically free, Brazil or Chile?
14. Which country is more economically free, India or China?
15. Which country is more economically free, the Czech Republic or the Slovak Republic?
16. Which country is the least economically free?
17. The continent of Africa is predominantly comprised of countries in which economic freedom quartile?
18. In which type of country (which quartile) is income per capita the highest?
19. What is the average per capita income of the countries that make up the least-free quartile?
20. What is the average per capita income of the countries that make up the most-free quartile?
21. Which type of country (which quartile) has the highest rate of economic growth?
22. What is the difference between the average rate of economic growth of the most-free quartile compared to that of the least-free quartile?
23. Which type of country (which quartile) has the highest income levels when comparing the individuals that make up the poorest 10% of each country's population?
24. What is the average income of the poorest 10% of the population in the countries that make up the least-free quartile?
25. What is the average income of the poorest 10% of the population in the countries that make up the most-free quartile?

# Map-Reading Relay Race « ANSWER KEY

## QUESTIONS AND ANSWERS:

1. What does the map say the “key ingredients” of economic freedom are? **Personal choice, voluntary exchange, freedom to compete, and protection of persons and property.**
2. What colour indicates that a nation is mostly economically free? **Blue**
3. What colour indicates that a nation is in the second economic freedom quartile (relatively free)? **Green**
4. What colour indicates that a nation is in the third economic freedom quartile (relatively unfree)? **Orange**
5. What colour indicates that a nation is least economically free? **Red**
6. What colour indicates that a nation is unable to be measured? **Grey**
7. Are countries that are unable to be measured more likely to be in the top two economic freedom quartiles or in the bottom two quartiles? **Countries that are unable to be measured are more likely to be in the bottom two economic freedom quartiles. The fact that they are unmeasurable means their governments either refused to provide the data or did not keep accurate data.**
8. What is the most-free economy in the world? **Hong Kong**
9. Which country is more economically free, Canada or the United States? **Canada**
10. How many economies are more economically free than Canada? **Four**
11. Canada has the same EFW score as how many other countries? **Five**
12. What is Canada’s EFW score? **7.98**
13. Which country is more economically free, Brazil or Chile? **Chile**
14. Which country is more economically free, India or China? **India**
15. Which country is more economically free, the Czech Republic or the Slovak Republic? **Czech Republic**
16. Which country is the least economically free? **Venezuela**
17. The continent of Africa is predominantly comprised of countries in which economic freedom quartile? **The least-free quartile**
18. In which type of country (which quartile) is income per capita the highest? **The most-free quartile**
19. What is the average per capita income of the countries that make up the least-free quartile? **\$5,471**
20. What is the average per capita income of the countries that make up the most-free quartile? **\$41,228**
21. Which type of country (which quartile) has the highest rate of economic growth? **The most-free quartile**
22. What is the difference between the average rate of economic growth of the most-free quartile compared to that of the least-free quartile? **2.11% (Note: 3.63% - 1.52% = 2.11%)**
23. Which type of country (which quartile) has the highest income levels when comparing the individuals that make up the poorest 10% of each country’s population? **The most-free quartile**
24. What is the average income of the poorest 10% of the population in the countries that make up the least-free quartile? **\$1,080**
25. What is the average income of the poorest 10% of the population in the countries that make up the most-free quartile? **\$11,283**

# LESSON 3

## Economic Freedom Trivia

### THEME:

This lesson defines economic freedom and explains how economic freedom is measured. Students will learn what is comprised in each of the five main areas of the Economic Freedom of the World index. They will gain an understanding of what policies will move a country toward more economic freedom, and which will decrease a country's economic freedom.

### DESCRIPTION:

The students read **Handout 3.2**, which explains how economic freedom is measured. Before we can have a good understanding of the effects of economic freedom, we must first understand what the authors of the EFW index mean by “economic freedom,” and how they measure it. An alternative to this handout would be for students to read pages 1-5 of Chapter 1 of the *Economic Freedom of the World 2017 Annual Report* (which can be found at [www.freetheworld.com](http://www.freetheworld.com) if you do not have access to a hard copy of the report).

If searching for the annual reports specifically, go directly to <https://www.fraserinstitute.org/studies/economic-freedom>.

You can also read about the basics of economic freedom at this web link <https://www.fraserinstitute.org/economic-freedom/economic-freedom-basics>, and learn more about the five main areas and 42 distinct variables that make up the EFW index via <https://www.fraserinstitute.org/economic-freedom/approach>. Even if the students are not assigned to read Chapter 1 of the EFW Annual Report, it is helpful for the teacher to read it for a deeper understanding of the annual report, and the data that comprises the index.

After a brief discussion of **Handout 3.1** (a reading titled “What Does Economic Freedom Measure?”), the teams of students compete in the Economic Freedom Trivia activity to find out who knows the most about economic freedom.

### LEARNING OUTCOMES:

- + gain a deeper understanding of what economic freedom is
- + understand how the Economic Freedom of the World (EFW) index is measured, including the five main areas of the EFW index

- + learn what each of the five main areas of the EFW index measures
- + learn the reason why each of the five main areas of the EFW index is included in the effort to measure economic freedom
- + gauge understanding and reading comprehension via trivia questions based on the information in the handouts

### PROCEDURE:

1. Prepare for the “Economic Freedom Trivia” activity:
  - + Print a copy of **Handout 3.1** for each student. This is a reading on “What Does Economic Freedom Measure?”
  - + Print a copy of **Handout 3.2** (student directions) for each student.
  - + Print a copy of **Handout 3.3** (the score sheet) for each team of 3 to 5 students.
  - + Print a copy of **Handout 3.4** for each team of 3 to 5 students. **One page of this resource reads “TRUE,” and the other reads “FALSE.” You may print the TRUE and FALSE signs double-sided if you'd like. Print the next sign (which reads DOUBLE-**

**DOWN on its own sheet of paper so students can hold this card up at the same time as their TRUE/FALSE answer.**

- + Look at **Resources 3.5 and 3.6**, and decide whether you want to conduct this trivia game audibly, visually, or using a combination. You can choose to read each question aloud one at a time (and then reveal the answer one at a time once students have given their answers to the question). Or, you might prefer to allow the students to read each question, in which case you may want to utilize PowerPoint and a projector. You can either use the PowerPoint already created for this activity, or you can create your own PowerPoint presentation by simply making a slide for each question and a slide for each answer (a slide with the first question, a slide with the first answer, a slide with the explanation behind the first answer, a slide with the second question, a slide with the second answer, a slide with the explanation of the second answer, and so on). Or you may want to combine these two options and read each projected slide aloud so that both audio- and visual-learners are engaged.
- + Offer small prizes to the winning team (or extra credit on an upcoming assessment!)
- 2. Tell students they will be playing the Economic Freedom Trivia game today.

3. Distribute a copy of **Handout 3.1** to each student, and have the students read it. You may want to assign this reading as homework the day before you plan to hold the Economic Freedom Trivia game as an in-class activity. After they read **Handout 3.1**, it may be helpful to your students if you define terms that may not be familiar to them yet. See this lesson's **Glossary** for examples of terms you may want to go over with your students.

4. Distribute a copy of **Handout 3.2** (the student directions) and **Handout 3.3** (the score sheet), which you may want to print double-sided. Go over the directions of the Economic Freedom Trivia game with your students (**Handout 3.2**). Emphasize the following points:

- + **There are 10 questions.** Teams will use their TRUE and FALSE signs to answer each question. A team earns +10 points for answering a question correctly, and -10 points for answering a question incorrectly (when it is a regular question, i.e. when they aren't putting their DOUBLE DOWN sign into action). A team is allowed to use their DOUBLE DOWN sign when answering two questions. (A team can use the sign up to two times.) When a team uses their DOUBLE DOWN sign, the opportunity for the reward of points doubles, but the opportunity for a penalty of points also doubles;

meaning, if they use their DOUBLE DOWN sign and they answer the question correctly then they earn +20 points for that question. But if they answer incorrectly when using DOUBLE DOWN, then they lose 20 points (-20 points). A perfect score would be 120 points (if a team uses their DOUBLE DOWN sign twice and answers all 10 questions correctly).

5. You may choose to allow the students to keep **Handout 3.1** as they answer the questions, but that will likely make the trivia game too easy for most students. You will likely want to have the students put **Handout 3.1** away when you're ready to start the trivia questions.

6. Play the Economic Freedom Trivia game!

- + Read the first question from **Resource 3.5** (or show the first question via a PowerPoint slide).
- + Allow the teams 2 minutes to discuss their answer. (This can be shortened to 1 minute if the teacher prefers.)
- + When the time is up, say "Answers, please." Each team captain will answer by holding up the True or False sign for their team; some teams may choose to display the DOUBLE DOWN sign along with their answer.
- + Remind the team recorders to record their team's points on their score sheet. You may also want to record a running

tally of each team's points on a white board in the classroom.

- + Read the correct answer (True or False) from **Resource 3.6**. (Or, click to the next slide of the PowerPoint slides so they can see the correct answer of “True” or “False.”) Ask one of the teams who answered the question correctly to explain to the rest of the class the reasoning behind the answer. After the student gives their explanation, enhance their answer by reading the explanation given within the Answer Explanations portion of **Resource 3.6**. (If you're utilizing the PowerPoint slides then you can click to the next slide that gives the explanation behind the answer, and read this aloud for the students.)
- + Continue this process for each of the 10 questions.
- + At the end of the trivia game, have the team recorders turn their score sheets in, tally up everyone's points, and announce a winner. Award small prizes if you would like.

## A FINAL THOUGHT:

This lesson helps students identify what economic freedom is, and what is comprised in the Economic Freedom of the World index in an attempt to measure economic freedom. You might want to ask your students what variables they would have chosen to incorporate into the index to measure economic freedom. As your students give suggestions, explore whether their idea is already incorporated into the index. In many cases, their suggestions will likely already be part of the index. Also, you can let your students know if they suggest something for which there is no measurable/reliable/consistent data available. Be sure your students are not suggesting outcome variables such as income per capita, as this is not a measure of economic freedom. If a student suggests something that is correlated with economic freedom but not an actual measure of economic freedom itself, you can let them know that they'll be learning more about how economic freedom impacts various common measures of well-being in a future lesson. Your students might also have a tendency to suggest variables that relate to political freedom instead of economic freedom. If this is the case, simply let them know that what they suggested is actually a political institution and not an economic institution, and that they'll be learning more about the

difference between political freedom versus economic freedom in a future lesson.

## GLOSSARY:

**Economic freedom:** The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

**Economic Freedom of the World (EFW) index:** The Economic Freedom of the World index, published by the Fraser Institute, measures the degree of economic freedom present in five major areas: (1) Size of Government; (2) Legal System and Security of Property Rights; (3) Sound Money; (4) Freedom to Trade Internationally; (5) Regulation. Within the five major areas, there are 24 components in the index. Many of those components are themselves made up of several sub-components. In total, the index comprises 42 distinct variables.

Each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. When subcomponents are present, the sub-component ratings are averaged to derive the component rating. The component ratings within each area are then averaged to derive ratings for each of the five areas. In turn, the five area ratings are averaged to derive the summary rating for each country. A country's summary EFW rating ranges from 0 to 10, where a higher rating indicates greater levels of economic freedom. See <https://www.fraserinstitute.org/economic-freedom/approach> for more information on the variables comprised within each area of the EFW index.

**Voluntary exchange:** the voluntary trade of goods and services, whether in exchange for money or other goods and services.

**Transfers (i.e. transfer payments):** payments to individuals or institutions that are not linked to the current supply of a good or service by the recipient.

**Subsidy:** a payment the government makes to either the buyer or the seller, usually on a per-unit basis, when a good or service is purchased or sold.

**Marginal tax rate:** the additional tax liability a person faces divided by his or her additional taxable income. It is the percentage of an extra dollar

of income earned that must be paid in taxes. The marginal tax rate is what is relevant in personal decision-making.

**Legal system:** the set of laws of a country and the ways in which they are interpreted and enforced

**Property rights:** the legal ownership determining the rights to use, control, and obtain the benefits from a good or resource. In economics, property rights form the basis for all market exchange, and the allocation of property rights in a society affects the efficiency of resource use.

⊕ **Note:** *Legal System and Property Rights is Area 2 of the Economic Freedom of the World index.*

➤ *Protection of persons and their rightfully acquired property is a central element of economic freedom and a civil society. Indeed, it is the most important function of government. Area 2 focuses on this issue. The key ingredients of a legal system consistent with economic freedom are rule of law, security of property rights, an independent and unbiased judiciary, and impartial and effective enforcement of the law. The nine components in Area 2 are indicators of how effectively the protective functions of government are performed. These components are from three*

*primary sources.*

➤ Security of property rights, protected by the rule of law, provides the foundation for both economic freedom and the efficient operation of markets. Freedom to exchange, for example, is fatally weakened if individuals do not have secure rights to property, including the fruits of their labour. When individuals and businesses lack confidence that contracts will be enforced and the fruits of their productive efforts protected, their incentive to engage in productive activity is eroded. Perhaps more than any other area, this area is essential for the efficient allocation of resources. Countries with major deficiencies in this area are unlikely to prosper regardless of their policies in the other four areas.

**Money supply:** the total amount of money (currency) circulating in a country's economy at a particular time.

**Inflation:** an increase in the general level of prices of goods and services. The purchasing power of the monetary unit, such as the dollar, declines when inflation is present. A leading cause of inflation is the rapid growth of a nation's money supply.

**Trade barrier:** a government-

imposed restraint on the flow of international goods or services. Two common government regulations/policies that restrict international trade are tariffs and quotas.

**Tariff:** a government-imposed tax levied on goods imported into a country. This trade restriction is meant to increase the price of goods and services purchased from overseas, to make the foreign good or service less attractive to consumers in the domestic country.

**Quota:** a government-imposed trade restriction that limits the number, or monetary value, of goods that can be imported or exported during a particular time period.

**Protectionist policies:** policies that restrain trade between countries through methods such as tariffs on imported goods or restrictive quotas, in an attempt to shield a country's domestic industries from foreign competition. Critics argue that protectionism often hurts the people it is intended to protect by slowing economic growth and pushing up prices, making free trade a better alternative.

**Exchange rate:** the price of

one unit of foreign currency in terms of the domestic currency. For example, if it takes \$1.50 to purchase an English pound, the dollar-pound exchange rate is 1.50.

**Capital (physical and human capital):** Physical capital is human-made resources (such as tools, equipment, and structures) used to produce other goods and services. They enhance our ability to produce in the future. Human capital is the collective skills, knowledge, or other intangible assets of individuals that can be used to create economic value for the individuals, their employers, or nation. Education is an example of investment in human capital that pays off in terms of higher productivity.

**Minimum wage:** legislation requiring that workers be paid at least the stated minimum hourly rate of pay. Minimum wage is an example of a price floor; a price floor is a legislated price where the government sets a minimum price that is legally allowed for an exchange, where the new minimum is set above the market price.



## WHAT IS ECONOMIC FREEDOM AND HOW IS THE ECONOMIC FREEDOM OF THE WORLD INDEX MEASURED?

The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

*The Economic Freedom of the World index measures the degree of economic freedom present in five major areas: 1) Size of Government; 2) Legal System and Security of Property Rights; 3) Sound Money; 4) Freedom to Trade Internationally; and 5) Regulation.*

Within the five major areas, there are 24 components in the index. Many of those components are themselves made up of several sub-components. In total, the index comprises 42 distinct variables. All variables come from third party sources, such as the International Country Risk Guide, the Global Competitiveness Report, and the World Bank's Doing Business project, so that the subjective judgments of the authors do not influence the index. This also creates transparency and allows researchers to replicate the index.

Below is a brief overview of the five major areas of the index.

### 1. Size of Government

➕ **What Area 1 measures:** government consumption, transfers and subsidies, government enterprises and investment, and the top marginal tax rate.

➕ **Why Area 1 is included in the EFW index:** When government consumption is a larger share of total spending in an economy, political choice is substituted for personal choice. Therefore, the larger government spending is relative to spending by

individuals, businesses, and households, the lower the amount of economic freedom. Government-owned enterprises are not dependent on consumers for their revenue or on investors for capital, and they often play by a different set of rules than that of the private sector. Therefore, a country's economic freedom is lowered the more resources are directed by government investment as opposed to private investment directing the use of those resources. When governments tax some people in order to transfer wealth to others, the freedom of individuals to keep what they earn decreases, which decreases economic freedom. High marginal tax rates that apply at relatively low income levels are also indicative of reliance upon government. Such rates deny individuals the fruits of their labour. Thus, countries with high marginal tax rates and low income thresholds are rated lower.

### 2. Legal System and Property Rights

➕ **What Area 2 measures:** judicial independence, impartial courts, protection of property rights, military

interference in the rule of law and politics, integrity of the legal system, legal enforcement of contracts, regulatory costs of the sale of real property, reliability of police, and business costs of crime

- + **Why Area 2 is included in the EFW index:** Security of property rights, protected by the rule of law, provides the foundation for economic freedom and the efficient operation of markets. The key ingredients of a legal system consistent with economic freedom are rule of law, security of property rights, an independent judiciary and unbiased court system, and impartial and effective enforcement of the law. Freedom to exchange, for example, is fatally weakened if individuals do not have secure rights to property, including the fruits of their labour. When individuals and businesses lack confidence that contracts will be enforced and the fruits of their productive efforts protected, their incentive to engage in productive activity is eroded. Perhaps more than any other area, this area is essential for the efficient allocation of resources. Countries with major deficiencies in this area are unlikely to prosper regardless of their policies in the other four areas.

### 3. Sound Money

- + **What Area 3 measures:** money growth, standard deviation of inflation, inflation rate of the most recent year, and freedom to own foreign currency bank accounts
- + **Why Area 3 is included in the EFW index:** High and volatile rates of inflation distort relative prices, alter the fundamental terms of long-term contracts, and make it virtually impossible for individuals and businesses to plan sensibly for the future. Sound money is essential to protect property rights and, thus, economic freedom. Inflation erodes the value of property held in monetary instruments. When governments finance their expenditures by creating money, they are, in effect, expropriating the property and violating the economic freedom of their citizens. Furthermore, an absence of sound money undermines gains from trade. This area of the index measures the consistency of monetary policy (or institutions) with long-term price stability, as well as the ease with which other currencies can be used via domestic and foreign bank accounts. In order to earn a high rating in this area, a country must follow policies and adopt institutions that lead to low (and stable) rates of inflation

and avoid regulations that limit the ability to use alternative currencies.

### 4. Freedom to Trade Internationally

- + **What Area 4 measures:** tariffs, regulatory trade barriers, black-market exchange rates, and controls of the movement of capital and people
- + **Why Area 4 is included in the EFW index:** Voluntary exchange is mutually beneficial for both trading partners; hence, trade creates wealth. However, the lobbying of special-interest groups often leads countries to adopt protectionist policies that limit international trade, which decreases a country's economic freedom. The components in this area are designed to measure a wide variety of restraints that affect international exchange: tariffs, quotas, hidden administrative restraints, and controls on exchange rates and the movement of capital. In order to get a high rating in this area, a country must have low tariffs, easy clearance and efficient administration of customs, a freely convertible currency, and few controls on the movement of physical and human capital.

## 5. Regulation

- + **What Area 5 measures:** credit market regulations, labour market regulations, and business regulations
- + **Why Area 5 is included in the EFW index:** When regulations restrict entry into markets and interfere with the freedom to engage in voluntary exchange, they reduce economic freedom. The fifth area of the index focuses on regulatory restraints that limit the freedom of exchange in credit, labour, and product markets. Countries that use a private banking system to allocate credit to private parties and refrain from controlling interest rates receive a higher rating in the credit market

regulations component of Area 5. Many types of labour-market regulation infringe on the economic freedom of employees and employers. Among the more prominent are minimum wages, dismissal regulations, centralized wage setting, extension of union contracts to nonparticipating parties, and conscription. In order to earn high marks in the component rating regulation of the labour market, a country must allow market forces to determine wages and establish the conditions of hiring and firing, and refrain from the use of conscription. Like the regulation of credit and labour markets, the regulation of business activities inhibits economic

freedom. Regulations and bureaucratic procedures that restrain entry and reduce competition will lower a country's economic freedom. A government that uses its power to extract financial payments and reward some businesses at the expense of others will also lower a country's economic freedom.

# Economic Freedom Trivia « STUDENT DIRECTIONS

***You are about to participate in the Economic Freedom Trivia game to see how much you know about what comprises economic freedom. Your teacher will divide the class into teams. The teams will each answer 10 true or false questions.***

1. Each team will select a captain and recorder.
2. After each question, each team will have two minutes to discuss the answer.
3. When your teacher says “Answers please,” each team’s captain will hold up the sign (“TRUE”, or “FALSE”) displaying the answer that was decided by the team. If team members cannot agree on an answer, the majority rules. Your teacher will post the answer after each round, and each team’s recorder will keep track of the team’s points on the score sheet.
4. For a regular question (when a team does not use their “DOUBLE DOWN” sign), they will receive 10 points for a correct answer and -10 points for an incorrect answer.
5. If a team is confident about their answer, the captain may display the team’s “DOUBLE DOWN” sign. If the team’s answer is correct, that team will receive double the points (+20) for their answer. However, an incorrect answer when paired with the “DOUBLE DOWN” sign will result in a double-point penalty (-20 points). The DOUBLE DOWN sign can only be used on two questions, so the team needs to choose wisely when they want to use this special sign.
6. At the end of the game, the team recorders will hand the score sheet in to your teacher, and your teacher will declare the winning team.

## SCORING SYSTEM:

***+ 10 for a correct answer***

***-10 for an incorrect answer***

***+20 for a correct answer when combined with the DOUBLE DOWN sign***

***-20 for an incorrect answer when combined with the DOUBLE DOWN sign***

***The DOUBLE DOWN sign can only be used on two questions.***

## Economic Freedom Trivia « SCORE SHEET

Name of Team: \_\_\_\_\_

Names of Students on Team:

\_\_\_\_\_

\_\_\_\_\_

QUESTION	TEAM ANSWER (CIRCLE TRUE OR FALSE)	CORRECT ANSWER (CIRCLE TRUE OR FALSE)	DOUBLE DOWN SIGN USED? (CIRCLE YES OR NO)	POINTS RECEIVED
1	TRUE or FALSE	TRUE or FALSE	Yes or No	
2	TRUE or FALSE	TRUE or FALSE	Yes or No	
3	TRUE or FALSE	TRUE or FALSE	Yes or No	
4	TRUE or FALSE	TRUE or FALSE	Yes or No	
5	TRUE or FALSE	TRUE or FALSE	Yes or No	
6	TRUE or FALSE	TRUE or FALSE	Yes or No	
7	TRUE or FALSE	TRUE or FALSE	Yes or No	
8	TRUE or FALSE	TRUE or FALSE	Yes or No	
9	TRUE or FALSE	TRUE or FALSE	Yes or No	
10	TRUE or FALSE	TRUE or FALSE	Yes or No	

**TOTAL POINTS:**

# HANDOUT 3.4

# TRUFE

# HANDOUT 3.4

# FALSE

## HANDOUT 3.4

# DOUBLE DOWN



# Economic Freedom Trivia Questions

## ARE THE FOLLOWING STATEMENTS TRUE OR FALSE?

1. When a country's court system is impartial (unbiased) and there is legal enforcement of contracts, people have more economic freedom.
2. People have more economic freedom when the government owns a large portion of the enterprises and resources within a country.
3. When the growth of the money supply is rapid, there is a high degree of economic freedom.
4. People have more economic freedom when the government regulates hiring and firing decisions in the labour market.
5. When a country imposes regulations that restrict the ability of the population to use alternative currencies, economic freedom is lowered.
6. A country has more economic freedom when tariffs on imported goods are put in place in order to protect the domestic firms within the same industry.
7. Government procedures that restrict businesses from entering an industry will lower a country's economic freedom.
8. When the top marginal tax rate is high, wealth is able to be transferred from the wealthy to the poor which will increase economic freedom.
9. When government consumption is large relative to total consumption, economic freedom is lowered.
10. When interest rates are controlled by the government, it lowers economic freedom.

# Economic Freedom Trivia Questions « ANSWER KEY

## ARE THE FOLLOWING STATEMENTS TRUE OR FALSE?

1. When a country's court system is impartial (unbiased) and there is legal enforcement of contracts, people have more economic freedom.  
**True**
2. People have more economic freedom when the government owns a large portion of the enterprises and resources within a country.  
**False**
3. When the growth of the money supply is rapid, there is a high degree of economic freedom.  
**False**
4. People have more economic freedom when the government regulates hiring and firing decisions in the labour market.  
**False**
5. When a country imposes regulations that restrict the ability of the population to use alternative currencies, economic freedom is lowered.  
**True**
6. A country has more economic freedom when tariffs on imported goods are put in place in order to protect the domestic firms within the same industry.  
**False**
7. Government procedures that restrict businesses from entering an industry will lower a country's economic freedom.  
**True**
8. When the top marginal tax rate is high, wealth is able to be transferred from the wealthy to the poor which will increase economic freedom.  
**False**
9. When government consumption is large relative to total consumption, economic freedom is lowered.  
**True**
10. When interest rates are controlled by the government, it lowers economic freedom.  
**True**

## Economic Freedom Trivia Questions « ANSWER EXPLANATION

### ARE THE FOLLOWING STATEMENTS TRUE OR FALSE?

1. When a country's court system is impartial (unbiased) and there is legal enforcement of contracts, people have more economic freedom.  
**True.** Governments that promote economic freedom have laws that even-handedly enforce contracts and protect individuals and their property from people who might use violence, force, or coercion to take what does not belong to them. There should also be limits on the government's ability to seize a person's property.
2. People have more economic freedom when the government owns a large portion of the enterprises and resources within a country.  
**False.** Government-owned enterprises are not dependent on consumers for their revenue or on investors for capital, and they often play by a different set of rules than that of the private sector. Therefore, a country's economic freedom is lowered the more resources are directed by government investment as opposed to private investment directing the use of those resources. Countries that instead rely more on market forces with market prices and voluntary exchange will increase the personal choices available to people by allowing them to make their own consumption and production decisions, which will increase their economic freedom.
3. When the growth of the money supply is rapid, there is a high degree of economic freedom.  
**False.** Rapid growth of the money supply causes inflation. High and volatile rates of inflation distort relative prices, alter the fundamental terms of long-term contracts, and make

it virtually impossible for individuals and businesses to plan sensibly for the future. Sound money is essential to protect property rights and, thus, economic freedom. If money loses its value, it is more difficult for individuals, businesses, and investors to make long-term decisions that are necessary to plan wisely for the future. Inflation erodes the value of property held in monetary instruments. When governments finance their expenditures by creating money, they are, in effect, expropriating the property and violating the economic freedom of their citizens. Furthermore, an absence of sound money undermines gains from trade.

4. People have more economic freedom when the government regulates hiring and firing decisions in the labour market.  
**False.** Labour-market regulations infringe on the economic freedom of employees and employers. Among the more prominent are minimum wages, dismissal regulations, centralized wage setting, extension of union contracts to nonparticipating parties, and conscription. A country that allows market forces to determine wages and establish the conditions of hiring and firing will have greater economic freedom.
5. When a country imposes regulations that restrict the ability of the population to use alternative currencies, economic freedom is lowered.  
**True.** Economic freedom is decreased when a country imposes regulations that restrict the ability of the population to use alternative currencies. In other words, if other currencies can be used via domestic and foreign bank accounts with ease, then its people have more economic freedom.

## Economic Freedom Trivia Questions « ANSWER EXPLANATION

6. A country has more economic freedom when tariffs on imported goods are put in place in order to protect the domestic firms within the same industry.

**False.** *Voluntary exchange is mutually beneficial (a win-win scenario) for both trading partners; hence, trade creates wealth. A country will have more economic freedom when international voluntary exchange is permitted without restrictions such as tariffs, quotas, hidden administrative restraints, and controls on exchange rates and the movement of capital. When the lobbying of special-interest groups leads countries to adopt protectionist policies that limit international trade, a country's economic freedom decreases.*

7. Government procedures that restrict businesses from entering an industry will lower a country's economic freedom.

**True.** *The regulation of business activities inhibits economic freedom. Regulations and bureaucratic procedures that restrain entry and reduce competition will lower a country's economic freedom.*

8. When the top marginal tax rate is high, wealth is able to be transferred from the wealthy to the poor which will increase economic freedom.

**False.** *When governments tax some people in order to transfer wealth to others, the freedom of individuals to keep what they earn decreases, which decreases economic freedom. High marginal tax rates that apply at relatively low income levels are also indicative of reliance upon government. Such rates deny individuals the fruits of their labour. Thus, countries with high marginal tax rates and low income thresholds are rated lower.*

9. When government consumption is large relative to total consumption, economic freedom is lowered.

**True.** *When government consumption is a larger share of total spending in an economy, political choice is substituted for personal choice. Therefore, the larger government spending is relative to spending by individuals, businesses, and households, the lower the amount of economic freedom.*

10. When interest rates are controlled by the government, it lowers economic freedom.

**True.** *Countries that use a private banking system to allocate credit to private parties and refrain from controlling interest rates will have a higher level of economic freedom.*

# LESSON 4

## The Rapid Response Quiz Show: Why is Economic Freedom So Vitally Important?

### THEME:

This lesson explains the difference between political freedom and economic freedom, so that students will begin to understand the difference between political versus economic institutions. This lesson also demonstrates how greater economic freedom is associated with better outcomes when it comes to many measures such as an individual's economic well-being, standard of living, and life satisfaction. To name a few, countries with higher levels of economic freedom see a higher income per capita, larger economic growth rates, higher income for the poorest of the poor in their country, lower poverty rates, a higher life expectancy, more political rights and civil liberties, greater gender equality (less gender inequality), and happier lives.

### DESCRIPTION:

In this lesson, students will learn why economic freedom is so important for the living standards and well-being of individuals. They will learn that having high levels of

economic freedom is not merely associated with having high income levels, but also many other important measures such as life expectancy.

Students read **Handout 4.1**, a reading titled “Why is Economic Freedom So Vitally Important?” **Handout 4.1** explains how economic freedom differs from political freedom. It then describes several well-being measures where more economically free countries outperform less economically free countries. Students can see graphics of how economic freedom relates to these various well-being measures by viewing pages 22-26 of Chapter 1 of the *Economic Freedom of the World 2017 Annual Report* (which can be found at [www.freetheworld.com](http://www.freetheworld.com) if you do not have access to a hard copy of the report). If searching for the annual reports specifically, go directly to <https://www.fraserinstitute.org/studies/economic-freedom>.

### LEARNING OUTCOMES:

- + distinguish between economic freedom and political freedom

- + recognize the relationship between economic freedom and various measures of well-being, such as:
  - income per capita, economic growth rates, income for the poorest 10% of each country, poverty rates, life expectancy, political rights, civil liberties, gender equality, and life satisfaction (happiness)

### PROCEDURE:

1. Prepare for “The Rapid Response Quiz Show” activity:
  - + Decide what you want your rapid response indicator to be. You may want to have a bell or some type of buzzer for each team of 3-5 students. A small call bell (think: “ring bell for service”) would work fine. Or, you can simply have students raise their hands to signal they’re ready to answer the question.
  - + Decide whether each team will be writing their answers on a sheet of paper, or whether each team will have a small dry-erase board and dry-erase marker. If using paper, each team will need a marker and 20 sheets of

paper.

- + Make a copy of **Handout 4.1** for each student. Make a copy of **Handout 4.2** (the student directions) for each student, and make a copy of **Handout 4.3** (the score sheet) for each team of 3-5 students. Print a copy of **Resource 4.4** (the questions) and **Resource 4.5** (the answers) for yourself.
- + If you'd like to make the game more competitive, you can award small prizes. The prizes can be inexpensive (such as candy), and the prizes can even cost you nothing monetarily such as awarding the winning team a few bonus points on an upcoming assessment.
- 2. Have each student read **Handout 4.1** prior to playing the Rapid Response Quiz Show game. You may want to assign this reading as homework the day before the game is played in class. Define terms they may not yet know. See this lesson's **Glossary** for examples of terms you may want to go over with your students.
- 3. Give each team a marker and 20 sheets of blank paper, one sheet to be used for each of the 20 questions in the game. (As an alternative, if you have small dry erase boards available then you can give each team one small dry-erase board and one dry-erase marker for them to use for each question.)
- 4. Distribute a copy of **Handout 4.2** and **Handout 4.3** to each

team.

- 5. Tell your students that they will be playing in a Rapid Response Quiz Show to determine who knows the most about how economic freedom relates to important well-being measures. Explain the directions to the game, which are found on **Handout 4.2**. Each team will select one student at a time to be the one to answer the current question. There are 20 questions, or rather, there are 20 statements with a fill-in-the-blank. You will read each statement out loud, and simply say "BLANK" when you come across the fill-in-the-blank. Example: For question #1, you will read out loud: "Individuals in countries that are within the most-free economic freedom quartile are likely to live longer, on average up to BLANK years more than those in the least-free economic freedom quartile." The student who is answering that given question for their team will race to write down their answer as quickly as they can. As soon as they have their answer written down, they will give the rapid response indicator (whether you chose this to be a bell, or raising their hand). The first person to give the rapid response indicator will have the opportunity to win (or lose!) 10 points. Walk over and see what answer they wrote down. Do not show their answer to the rest of the class, because next you

will walk around the room to see whether the other teams answered correctly or not. If the team who gave the rapid response is correct, they are awarded 10 points for their correct rapid response. However, they will have a penalty of 10 points (that is, they will receive -10 points) if their answer is incorrect. Each of the other teams still have an opportunity to earn (or lose) points for this question. Walk around the room and let each team know whether the answer they have written down is correct or not. A team will receive 5 points if they did not give the rapid response indicator first but answered correctly; a team will lose 5 points if they did not give the rapid response indicator first and also answered incorrectly. After you've gone around the room and determined the correctness of each team's answer, announce the correct answer to everyone in the class. Then move on to the next question. At the end of the Rapid Response Game Show, the recorders of each team will bring you their team's score sheet and you will announce a winner. Award a small prize to the winning team if you'd like.

- 6. Play the game!

Start with Question 1. Read the statement out loud, emphasizing the word "BLANK" when you see the fill-in-the-blank.

- + Watch/listen carefully to

determine which team is the first one to give the rapid response indicator.

- + Walk over to the team who gave the rapid response indicator, read the answer that is written on their sign (or on their small dry-erase board), and let them know whether their answer is correct or incorrect.
- + Then walk over to each of the other teams, letting each team know whether their answer is correct.
- + Announce the correct answer.
- + Repeat the process for all 20 questions.
- + At the end of the game, collect the score sheets from the team recorders and declare a winning team. You may want to award small prizes.

## A FINAL THOUGHT:

Ask the students “Now you know that political institutions differ from economic institutions. Why is it important for citizens in a democracy to know what economic freedom is, and the positive impact that higher levels of economic freedom has on many well-being measures?” (*Citizens of a democracy are voters, and a democracy does not guarantee high levels of economic freedom because people can elect representatives that enact policies that diminish the country’s economic freedom. A democratic country is more likely to have policies that*

*promote economic freedom if the voters are economically literate and have a basic understanding of what economic freedom is and how it raises the standards of living in their country.*)

**Going Deeper:** Students may wonder whether higher levels of economic freedom is the key to what is causing a positive impact on the various well-being measures discussed in this lesson, or whether it is another factor such as political freedom. Furthermore, students may wonder whether higher levels of economic freedom is causing a positive impact on indicators such as income per capita, or whether the opposite is true (whether higher levels of income per capita cause higher levels of economic freedom). Tell your students these are very good questions, and there have been countless academic studies using quantitative analysis to determine the answer to these very questions. Studies show that economic freedom is statistically significant in being a determining factor to a vast array of well-being measures, and that the causation is indeed going in the direction of higher levels of economic freedom leading to a positive increase in the well-being measures. If your students are interested in reading and learning more, have them research these topics further. They can start by reading journal articles relating to economic freedom. A few they may find interesting include:

- + “Economic Freedom and the Environment for Economic Growth” by Gwartney, J.

Holcombe, R. and Lawson, R. (1999) *Journal of Institutional and Theoretical Economics* vol 155 (4); pp 643-663.

URL link: [http://myweb.fsu.edu/jdgwartney/Documents/JITE\\_Gwartney\\_1999.pdf](http://myweb.fsu.edu/jdgwartney/Documents/JITE_Gwartney_1999.pdf)

- + “Economic Freedom, Institutional Quality, and Cross-Country Differences in Income and Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (2004). *The CATO Journal* vol 24 (3); pp 205-233.  
URL link: [http://myweb.fsu.edu/jdgwartney/Documents/GwartneyHolcombe\\_LawsonCato2004.pdf](http://myweb.fsu.edu/jdgwartney/Documents/GwartneyHolcombe_LawsonCato2004.pdf)
- + “Institutions and the Impact of Investment on Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (2006). *Kyklos* vol 59 (2); pp 255-273.  
URL link: [http://myweb.fsu.edu/jdgwartney/Documents/GwartneyHolcombe\\_LawsonKYKLOS2006.pdf](http://myweb.fsu.edu/jdgwartney/Documents/GwartneyHolcombe_LawsonKYKLOS2006.pdf)
- + “Economic Freedom and Global Poverty” by Gwartney, J. and Connors, J. (2010). *Accepting the Invisible Hand* ed. Mark D. White, New York: Palgrave Macmillian.  
URL link: [http://myweb.fsu.edu/jdgwartney/Documents/GwartneyConnors-Economic\\_Freedom\\_and\\_Global\\_Poverty.pdf](http://myweb.fsu.edu/jdgwartney/Documents/GwartneyConnors-Economic_Freedom_and_Global_Poverty.pdf)
- + “Does Democratization Facilitate Economic Liberalization?” by Rode, M. and Gwartney, J. (2012). *European Journal of Political Economy* vol 28; pp

607-619.

URL link: [http://myweb.fsu.edu/jdgwartney/Documents/GwartneyRode - Democratization and Liberlization.pdf](http://myweb.fsu.edu/jdgwartney/Documents/GwartneyRode-DemocratizationandLiberlization.pdf)

- + Your students can find more literature on economic freedom by going to: <https://www.fraserinstitute.org/studies/economic-freedom/archive>

## GLOSSARY:

### **Economic institutions:**

Economic institutions are the legal, regulatory, and social constraints that affect the security of property rights, enforcement of contracts, and one's choice of when and how to participate in an exchange. These rules exert a major impact on the incentive to engage in productive activities, innovate, and realize gains from trade—particularly when the trading partners do not know each other.

**Political institutions:** Rules that determine political outcomes and establish the sphere of governmental actions, such as the method of how political leaders are selected and the constraints on their behavior.

**Economic freedom:** The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property

from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

- + **Note: The Economic Freedom of the World (EFW) index** is a respected measure of economic freedom. The *Economic Freedom of the World index*, published by the Fraser Institute, measures the degree of economic freedom present in five major areas: (1) Size of Government; (2) Legal System and Security of Property Rights; (3) Sound Money; (4) Freedom to Trade Internationally; (5) Regulation. Within the five major areas, there are 24 components in the index. Many of those components are themselves made up of several sub-components. In total, the index comprises 42 distinct variables. Each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. When subcomponents are present, the sub-component ratings are averaged to derive the component rating. The component ratings within each area are then averaged to derive ratings for each of

the five areas. In turn, the five area ratings are averaged to derive the summary rating for each country. A country's summary EFW rating ranges from 0 to 10, where a higher rating indicates greater levels of economic freedom. See <https://www.fraserinstitute.org/economic-freedom/approach> for more information on the variables comprised within each area of the EFW index.

**Political freedom:** Political freedom is the presence of political institutions that foster and promote free and fair elections, and constrain the behavior of political leaders. A democratic country has high levels of political freedom, while an autocratic country has low levels of political freedom.

- + **Note:** The following are respected measures of political freedom:
  - > Polity IV is one measure of political freedom, published by the Center for Systemic Peace. Polity IV measures the competitiveness of executive recruitment, the openness of executive recruitment, the constraints on executive authority, and the competitiveness of political participation. It ranges between -10 and 10, where -10 to -6 represents an autocracy, -5 to 5 represents an anocracy, and 6 to 10 represents a democracy. (An anocracy is a regime that has part



democratic and part dictatorship or autocratic features.) Visit <http://www.systemicpeace.org/polityproject.html> to learn more about the Polity IV measure of political rights.

➤ The Political Rights component of the Freedom in the World index, published by Freedom House, is another measure of political freedom. The Freedom in the World index has two main categories: Political Rights and Civil Liberties. A country or territory is assigned two ratings—one for political rights and one for civil liberties—based on its total scores for the political rights questions and civil liberties questions. Each rating ranges from 1 to 7, where 7 represents the smallest degree of freedom and 1 represents the greatest degree of freedom. To provide a greater understanding as to how a Political Rights rating of 1 (democracy) compares to that of 7 (autocracy):

➤ Countries and territories with a Political Rights rating of 1 enjoy a wide range of political rights, including free and fair elections. Candidates who are elected actually rule, political parties are competitive, the opposition plays an important role and enjoys real power, and the interests of minority groups are well

represented in politics and government.

➤ Countries and territories with a rating of 7 have few or no political rights because of severe government oppression, sometimes in combination with civil war. While some are draconian police states, others may lack an authoritative and functioning central government and suffer from extreme violence or rule by regional warlords.

➤ Visit <https://freedomhouse.org/report/methodology-freedom-world-2018> to learn more about Freedom in the World, Freedom House's measure of political rights and civil liberties.

**GDP per capita (i.e. income per capita):** GDP per capita stands for gross domestic product per person. It is a measure of a country's economic output that accounts for its number of people. GDP per capita (PPP) compares GDP on a purchasing power parity basis divided by a country's population.

**Economic growth rate:** the increase in the goods and services produced in an economy, typically a nation, from one period of time to another. It is measured as a percentage increase in real GDP, which is gross domestic product adjusted for inflation.

**Poverty rate:** the ratio of the number of people in a given

area whose income falls below the established poverty line. (Note that there are several poverty line thresholds. To be able to do comparisons across countries, the World Bank defines the extreme poverty rate as the percentage of a population living on \$1.90 a day (PPP constant 2011 US dollars). The World Bank also measures poverty using other income thresholds, such as the moderate poverty rate which is the percentage of a population living on \$3.10 a day (PPP constant 2011 US dollars).

**Life expectancy:** the life expectancy for a given country is the average number of years an individual is expected to live in that country.

**Civil liberties:** Civil liberties guarantee personal freedoms such as freedom of the press, freedom of religion, freedom of speech, etc.

➤ **Note:** The Civil Liberties category of the Freedom in the World index, published by Freedom House, is a respected measure of civil liberties. They measure civil liberties within these four categories: Freedom of Expression and Belief, Associational and Organizational Rights, Rule of Law, and Personal Autonomy and Individual Rights. A country's Civil Liberties rating ranges from 1 to 7, where 7 represents the smallest degree of freedom and 1 represents the greatest degree of freedom. Visit <https://freedomhouse.org/report/methodology->

[freedom-world-2018](#) to learn more about Freedom in the World, Freedom House's measure of political rights and civil liberties.

**Gender equality:** the state of equal ease of access to resources and opportunities regardless of gender, including economic participation and decision-making

➕ **Note:** *The UN's Gender Inequality Index (GII) is a respected measure for this variable. It measures gender-based disadvantage in three dimensions: reproductive health, empowerment, and the labour market. The reproductive health dimension has two indicators, the maternal mortality ratio and the adolescent fertility rate. The empowerment dimension of the index is measured by two indicators, the share of parliamentary seats held by each sex, and higher education attainment levels. The labour market dimension is measured by women's participation in the workforce. Together, these three dimensions comprise the Gender Inequality Index. The index ranges from 0 to 1, 0 representing 0% inequality where women and men fare equally, and 1 representing 100% inequality, indicating women fare poorly compared to men. Visit <http://hdr.undp.org/en/content/gender-inequality-index-gii> to learn more about the UN's Gender Inequality Index, published in the Human Development*

*Report by the United Nations Development Programme (UNDP).*

**Life satisfaction and happiness:** Life satisfaction is a complex term and is sometimes used interchangeably with the emotion of happiness, while others consider them to be two separate concepts. Life satisfaction is defined as one's evaluation of life as a whole, rather than the feelings and emotions that are experienced in the moment. Happiness is an immediate, in-the-moment experience, whereas life satisfaction is happiness that exists when we think about our lives as a whole, looking at the big picture. Life satisfaction has to do with how people feel about their options for the future, and their self-perceived ability to cope with daily life.

➕ **Note:** *The following are respected measures for life satisfaction and/or happiness:*

➤ *The UN's World Happiness Report (part of the Gallup World Poll) has a life evaluation question that asks respondents to rate their own current lives on a 0 to 10 scale, where the best possible life is a 10 and the worst possible life is a 0. Visit <http://worldhappiness.report> for more information.*

➤ *The World Values Survey (WVS) has a question that asks respondents to rate their happiness on a scale of 1 to 4, where 1 is very happy and 4 is not at all happy. The WVS also has a question*

*that asks respondents to rate how satisfied they are with their life as a whole on a 1 to 10 scale, where 1 is completely dissatisfied and 10 is completely satisfied. See <http://www.worldvaluessurvey.org> for more information.*

**Quartile:** one of four equal groups into which a population can be divided according to the distribution of values of a particular variable. A quartile is a quarter (25%) of a group.

# HANDOUT 4.1

## Why is Economic Freedom So Vitally Important?

### ECONOMIC FREEDOM IS NOT THE SAME AS POLITICAL FREEDOM

Political institutions and economic institutions are not the same.

Political freedom measures whether individuals are able to determine who their rulers will be, and how they will be ruled. If individuals have access to free and fair elections, the country will have a high level of political freedom. When the winner of an election is able to peacefully take office, the political party process is competitive, the opposition is able to play a role and have power, and minority groups are well represented, then this is indicative of high levels of political freedom. Countries have low levels of political freedom when they are ruled by one-party or military dictatorships, religious hierarchies, or autocrats. When individuals are subject to government oppression and extreme violence, then they have little to no political freedom.

This differs from economic freedom, which is concerned with an individual's personal choice, voluntary exchange coordinated by markets,

freedom to enter and compete in markets, and the protection of people and their property from aggressors. Although most countries that rank high on the Economic Freedom of the World index are democracies, it is important to note that democratic political procedures do not guarantee economic freedom. This is because voters can (and often do) elect political leaders who pass laws that limit economic freedom. That being said, sometimes an autocratic regime can increase economic freedom.

### HOW ECONOMIC FREEDOM RELATES TO MEASURES OF WELL-BEING

Since 1980, increases in economic freedom have been associated with increases in people's economic well-being, living standards, and life satisfaction. Among the measurements where more economically free countries outperform less economically free countries are:

#### + Income per person (GDP per capita)

In 2015, nations in the top quartile of economic freedom (the most economically free

nations) had an average income per person (GDP per capita) of \$42,463, while nations in the bottom quartile (least economically free) had an average income per person of \$6,036 (PPP constant 2011 US dollars). This means the average person in the most-free quartile is about 7 times as wealthy as the average person in the least-free quartile.

See **Exhibit 1.11** in the *Economic Freedom of the World: 2017 Annual Report*

#### + Economic growth

Between 1990 and 2015, nations in the top quartile of economic freedom had an average growth rate (%) of GDP per capita of 3.35%, compared to 1.66% in the least free quartile (PPP constant 2011 US dollars).

See **Exhibit 1.12** in the *Economic Freedom of the World: 2017 Annual Report*

#### + Average income of the poorest 10% of the population

In 2015, the average income of the poorest 10% of the population in the most-free quartile was \$11,998, compared to \$1,124 for the poorest 10% of the

population in the least-free quartile (PPP constant 2011 US dollars). This means economic freedom isn't only beneficial for the well off, but that more economic freedom also benefits the poorest of the poor in a country! Moreover, note that the average income of the poorest 10% of the population in the most-free quartile (\$11,998) is nearly double that of the average income of the population as a whole in the least-free quartile (\$6,036).

See **Exhibit 1.14** in the *Economic Freedom of the World: 2017 Annual Report*

#### **+ Extreme and Moderate Poverty Rates**

The extreme poverty rate is the percentage of a country's population that lives on \$1.90 per day (PPP constant 2011 US dollars). In 2015, the most-free quartile had less than 1 percent of its population (0.98%) living at the extreme poverty rate. Contrast that with countries that fall within the least-free quartile, which had on average 30.34% of their population living at the extreme poverty rate. The moderate poverty rate is the percentage that lives on \$3.10 per day (PPP constant 2011 US dollars). In 2015, the most-free quartile had 2.26% of its population living at the moderate poverty rate, while the least-free quartile had nearly half of its population (48.90%) living at the moderate poverty rate.

This tells us that extreme and moderate poverty has been nearly eradicated in countries with high levels of economic freedom.

See **Exhibit 1.15** in the *Economic Freedom of the World: 2017 Annual Report*

#### **+ Life Expectancy**

Life expectancy is about 80.7 years for individuals living in nations that are in the most-free quartile, while life expectancy for those in the least-free quartile is only about 64.4 years. This means life expectancy is about 16 years longer in countries with the most economic freedom than in countries with the least. Those additional 16 years could mean the difference between living long enough to get to know one's grandchildren or not.

See **Exhibit 1.16** in the *Economic Freedom of the World: 2017 Annual Report*

#### **+ Political Rights and Civil Liberties**

Freedom House measures political rights and civil liberties on a scale from 1 to 7, where 1 is the highest degree of political rights and civil liberties and 7 is the lowest. In 2015, countries in the most economically free quartile had on average a political rights score of 1.7 and a civil liberties score of 1.6, while countries in the least economically free quartile had a political liberties score of 4.5 and a civil liberties score of 4.4.

Remember, when it comes to the scoring of political rights and civil liberties by Freedom House, the closer a country is to a score of 1, the more political rights and/or civil liberties it has, which means greater economic freedom is associated with more political rights and civil liberties.

See **Exhibit 1.16** in the *Economic Freedom of the World: 2017 Annual Report*

#### **+ Gender Inequality**

The UN's Gender Inequality index measures gender-based disadvantage in three dimensions: reproductive health, empowerment, and the labour market. The reproductive health dimension has two indicators, the maternal mortality ratio and the adolescent fertility rate. The empowerment dimension of the index is measured by two indicators, the share of parliamentary seats held by each sex, and higher education attainment levels. The labour market dimension is measured by women's participation in the workforce. Together, these three dimensions comprise the Gender Inequality Index (GII). The index ranges from 0 to 1, 0 representing 0% inequality where women and men fare equally, and 1 representing 100% inequality, indicating women fare poorly compared to men. Countries in the most economically free quartile

scored an average of 0.139 on the Gender Inequality index, and countries in the least economically free quartile scored an average of 0.506. This means men and women tend to fare equally in countries with greater economic freedom.

See **Exhibit 1.18** in the *Economic Freedom of the World: 2017 Annual Report*

### + **Happiness**

The UN's World Happiness index has a life evaluation question that asks the respondents to rate their own current lives on a 0 to 10 scale, where the best

possible life is a 10 and the worst possible life is a 0. Individuals living in countries that are in the most economically free quartile answered 6.70 on average, while individuals living in countries that are in the least economically free quartile answered 4.61 on average. This means that people in countries with greater economic freedom tend to be happier about their lives.

See **Exhibit 1.19** in the *Economic Freedom of the World: 2017 Annual Report*

# Rapid Response Quiz Show « STUDENT DIRECTIONS

***You are about to participate in the Rapid Response Quiz Show game to see how much you know about how economic freedom relates to other important measures. Your teacher will divide the class into teams. The teams will each answer 20 questions.***

- Each team will select a recorder, who will keep track of their team's points on the score sheet (Handout 4.3).
- Each team will decide the order in which they will be answering questions. One student on the team cannot take another turn at answering a question until the rest of their team has also had their turn.
- For each of the 20 questions, your teacher will read you a statement with a missing word, and it is your job to correctly identify what should go in that missing blank.
- The student who is up for their turn to answer for their team will either have a sheet of paper or a small dry-erase board to write their answer. As soon as the answer has been written (legibly), you will indicate you are ready to answer. Your teacher will let you know what the rapid response indicator will be, whether ringing a bell, raising your hand, or some other type of indicator to show you are done and ready to answer.
- The first student to give the rapid response indicator will have the opportunity to answer first. If you are the first student to write down an answer and give the indicator, your teacher will walk over to your team and you'll show your teacher the sheet of paper (or dry-erase board) with your answer. Make sure not to let the other teams see your answer—no matter whether your answer is correct or incorrect—so that they will not have an advantage when they are given the opportunity to give their own answer. If you are the first to give the rapid response indicator and you are correct, you will be awarded 10 points for having a correct answer and having a rapid response. If you are incorrect, then 10 points will be deducted from your team's score.
- After your teacher determines whether the team who gave the rapid response was correct or not, your teacher will move around to the other teams to see whether they arrived at the correct answer or not. Any team who was not the first to give the indicator (i.e. they didn't give the rapid response) but they arrived at the correct answer, will earn 5 points. If they have an incorrect answer (when they were not the first team to give the rapid response indicator) then they will lose 5 points.
- The teacher will then announce that question's correct answer to the entire class.
- Continue this process for each of the 20 questions.
- At the end of the game, the team recorders will hand the score sheet in to your teacher, and your teacher will declare the winning team.

## SCORING SYSTEM:

- + 10 for a correct answer for the team who gave the rapid response (first to answer)**
- + -10 for an incorrect answer for the team who gave the rapid response**
- + +5 for a correct answer for any team who did not give the rapid response**
- + -5 for an incorrect answer for any team who did not give the rapid response**

# Rapid Response Quiz Show « SCORE SHEET

Name of Team: \_\_\_\_\_

Names of Students on Team:

---



---

QUESTION	TEAM ANSWER (CIRCLE WHETHER YOUR TEAM ANSWER WAS CORRECT OR INCORRECT.)	RAPID RESPONSE? (DID YOUR TEAM GIVE THE RAPID RESPONSE?)	POINTS RECEIVED
1	Correct or Incorrect	Yes or No	
2	Correct or Incorrect	Yes or No	
3	Correct or Incorrect	Yes or No	
4	Correct or Incorrect	Yes or No	
5	Correct or Incorrect	Yes or No	
6	Correct or Incorrect	Yes or No	
7	Correct or Incorrect	Yes or No	
8	Correct or Incorrect	Yes or No	
9	Correct or Incorrect	Yes or No	
10	Correct or Incorrect	Yes or No	
11	Correct or Incorrect	Yes or No	
12	Correct or Incorrect	Yes or No	
13	Correct or Incorrect	Yes or No	
14	Correct or Incorrect	Yes or No	
15	Correct or Incorrect	Yes or No	
16	Correct or Incorrect	Yes or No	
17	Correct or Incorrect	Yes or No	
18	Correct or Incorrect	Yes or No	
19	Correct or Incorrect	Yes or No	
20	Correct or Incorrect	Yes or No	

**TOTAL POINTS:**

## The Rapid Response Quiz Show « QUESTIONS

1. Individuals in countries that are within the most-free economic freedom quartile are likely to live longer, on average up to \_\_\_\_ years more than those in the least-free economic freedom quartile.
2. Furthermore, the poorest of the poor in a nation \_\_\_\_\_[benefit OR suffer?] from higher levels of economic freedom.
3. While the least economically free quartile has nearly 30% of its population living in extreme poverty (living off of \$1.90 per day), the most economically free quartile has \_\_\_\_ living in extreme poverty.
4. About \_\_\_\_% of the population in the most economically free quartile is living at the moderate poverty rate.
5. While the most-free quartile had 2.26% of its population living at the moderate poverty rate (living off of \$3.10 per day), \_\_\_\_\_ of the population of countries in the least-free quartile are living in moderate poverty.
6. The average income of the poorest 10% of the population in the most-free quartile is \_\_\_\_\_ that of the average income of the population in the least-free quartile.
7. The average income per person for those in the most economically free quartile is about \_\_\_\_\_ times that of the average person in the least-free quartile.
8. Whether or not a country allows its people to determine who their leaders/rulers will be is known as \_\_\_\_\_ freedom.
9. Countries in the most economically free quartile have notably \_\_\_\_\_ [more OR less?] political rights and civil liberties than those in the least economically free quartile.
10. An individual's personal choice, voluntary exchange coordinated by markets, freedom to enter and compete in markets, and the protection of people and their property from aggressors represent \_\_\_\_\_ freedom.
11. Countries that are in the most economically free quartile have \_\_\_\_\_[higher OR lower?] growth rates than those in the least-free quartile.
12. When the winner of an election is able to peacefully take office, the political party process is competitive, the opposition is able to play a role and have power, and minority groups are well represented, then this is indicative of high levels of \_\_\_\_\_ freedom.
13. Countries have \_\_\_\_ levels of political freedom when they are ruled by one-party or military dictatorships, religious hierarchies, or autocrats.
14. Countries in the most economically free quartile are more likely to treat men and women \_\_\_\_\_ than countries in the least-free quartile.
15. People living in countries that are in the most economically free quartile tend to be \_\_\_\_\_ about their lives than those living in the least-free quartile.
16. Because voters are able to elect political leaders who pass legislation that limits economic freedom, \_\_\_\_\_ does not guarantee high levels of economic freedom.



17. In the most economically free quartile, the average income of the poorest 10% of the population is around \$12,000, while the average income of the poorest 10% of the population in countries in the least-free quartile is only a little over \_\_\_\_\_.
18. Individuals living in the most economically free quartile live on average \_\_\_\_ years.
19. The average economic growth rate for countries in the most economically free quartile is \_\_\_\_\_, compared to a 1.66% growth rate for countries in the least-free quartile.
20. Countries in the most economically free quartile \_\_\_\_\_ those in the least-free quartile in many well-being measurements.

## The Rapid Response Quiz Show « ANSWERS

1. Individuals in countries that are within the most-free economic freedom quartile are likely to live longer, on average up to **16 (an alternative acceptable answer is: “nearly 20”)** years more than those in the least-free economic freedom quartile.
2. Furthermore, the poorest of the poor in a nation **benefit** [benefit OR suffer?] from higher levels of economic freedom.
3. While the least economically free quartile has nearly 30% of its population living in extreme poverty (living off of \$1.90 per day), the most economically free quartile has **0.98% (an alternative acceptable answer is: “less than 1%”)** living in extreme poverty.
4. About **2.26 (accept alternative equivalent answers, such as “less than 3”)** percent of the population in the most economically free quartile is living at the moderate poverty rate.
5. While the most-free quartile had 2.26% of its population living at the moderate poverty rate (living off of \$3.10 per day), **48.90% (alternative acceptable answers include: “nearly 50%” or “nearly half”)** of the population of countries in the least-free quartile are living in moderate poverty.
6. The average income of the poorest 10% of the population in the most-free quartile is **nearly double (accept alternative equivalent answers)** that of the average income of the population in the least-free quartile.
7. The average income per person for those in the most economically free quartile is about **7** times that of the average person in the least-free quartile.
8. Whether or not a country allows its people to determine who their leaders/rulers will be is known as **political** freedom.
9. Countries in the most economically free quartile have notably **more** [more OR less?] political rights and civil liberties than those in the least economically free quartile.
10. An individual’s personal choice, voluntary exchange coordinated by markets, freedom to enter and compete in markets, and the protection of people and their property from aggressors represent **economic** freedom.
11. Countries that are in the most economically free quartile have **higher** [higher OR lower?] growth rates than those in the least-free quartile.
12. When the winner of an election is able to peacefully take office, the political party process is competitive, the opposition is able to play a role and have power, and minority groups are well represented, then this is indicative of high levels of **political** freedom.
13. Countries have **low** levels of political freedom when they are ruled by one-party or military dictatorships, religious hierarchies, or autocrats.
14. Countries in the most economically free quartile are more likely to treat men and women **equally** than countries in the least-free quartile.
15. People living in countries that are in the most economically free quartile tend to be **happier** about their lives than those living in the least-free quartile.

## The Rapid Response Quiz Show « ANSWERS

16. Because voters are able to elect political leaders who pass legislation that limits economic freedom, **democracy** does not guarantee high levels of economic freedom.
17. In the most economically free quartile, the average income of the poorest 10% of the population is around \$12,000, while the average income of the poorest 10% of the population in countries in the least-free quartile is only a little over **\$1,000 (accept alternative equivalent answers; the exact figure is \$1,124)**.
18. Individuals living in the most economically free quartile live on average **80.7 (accept alternative equivalent answers, such as “about 80” or “nearly 81”)** years.
19. The average economic growth rate for countries in the most economically free quartile is **3.35% (accept alternative equivalent answers, such as “greater than 3%”)**, compared to a 1.66% growth rate for countries in the least-free quartile.
20. Countries in the most economically free quartile **outperform (accept alternative equivalent answers such as “exceed” or “surpass”)** those in the least-free quartile in many well-being measurements.

# LESSON 5

## The Rules of the Game: How Policies Influence Incentives

### THEME:

The rules set by institutions affect the incentives of individuals and business owners. Certain rules will cause an individual to want to enter into an industry or expand their business activity, while other laws will cause an individual to want to reduce their business activity or even exit the industry. What does this mean for the economy as a whole? What types of rules will provide the incentive structure necessary for business expansion and thereby an increase in economic growth, income, and living standards? This lesson encourages students to think about how “the rules of the game” (the laws and regulations set in place that individuals and businesses must follow) can alter an individual’s incentive structure. They will learn that the rules that are conducive for more economic freedom are also what is needed to provide the right incentive structure and business environment to encourage economic activity.

### DESCRIPTION:

In this lesson, students look at 20 different policies and determine whether the policy will promote an expansion in business activity in the given industry (in this lesson, the hair salon industry), or whether it is likely to reduce business activity. This lesson is designed to get students to critically think about the effects of a policy (or, the “rules of the game”). Students will begin to question how a given policy will affect an individual’s incentives, how that then influences the individual’s behavior, and what will be the likely impact on the economy. After determining whether each policy is likely to expand or reduce business activity, the students will then participate in a class discussion about which policies provide a positive incentive for the business owners, which policies contribute to increased services offered to consumers, and which policies are conducive to more economic freedom.

### LEARNING OUTCOMES:

- ⊕ identify the secondary effects of a given policy
- recognize how the rules of the game (laws, policies, and regulations) alter an individual’s incentive structure
- identify whether a given law, policy, or regulation is likely to lead to an expansion in business activity or a reduction in business activity
- identify how the expansion or reduction in business activity is likely to impact other economic factors in the long term
- ⊕ identify whether a given law, policy, or regulation provides a positive or negative incentive to a current business owner or worker in the given industry, a positive or negative incentive for individuals considering entering the industry (as an employee or as an entrepreneur wanting to start his/her own business),

and how it will impact the availability of services for consumers

- + determine whether a given law, policy, or regulation is consistent with economic freedom
- recognize how policies consistent with economic freedom work to incentivize individuals and business owners
- + recognize that an expansion in business activity leads to increased income levels and an expansion in economic growth

## PROCEDURE:

1. Prepare for the “Rules of the Game: How Policies Influence Incentives” activity.
- + Obtain enough plastic baggies (or envelopes) where you have one for each team of 3-5 students.
- + Obtain a glue stick, or glue, or tape; enough to where each team will have access to their own adhesive device. Glue sticks are recommended (one glue stick for each team).
- + Make a copy of **Handout 5.1** (the student directions) for each student.
- + Make a copy of **Resource 5.2** for each team. There are two pages to **Resource 5.2**. Cut along the dotted lines on the two pages of **Resource 5.2** so that you have a total of 20 policy “cards” (or rather, mini pieces of paper). Be sure to

shuffle the “cards” to mix up the “reduce business activity” policies (the policies on the first page of **Resource 5.2**) with the “expand business activity” policies (the policies listed on the second page). Then put these 20 policy cards in a plastic baggy (or envelope) so that those 20 cards will stay together. This will be one team’s policy cards. Repeat this process till you have a plastic baggy full of these 20 different policy cards for each team.

- + Make a copy of **Handout 5.3** for each team of 3-5 students. Do not print the two pages of **Handout 5.3** double-sided. The students will need two separate sheets of paper; one for “REDUCE BUSINESS ACTIVITY” and another for “EXPAND BUSINESS ACTIVITY.” (Note: As an alternative to using these two pieces of paper, you could cut a few posterboards in half and give each team one of the half-sized poster board, along with a marker, and then have them draw a line down the middle and write “REDUCE BUSINESS ACTIVITY” on one half and write “EXPAND BUSINESS ACTIVITY” on the other half. This poster board option would give the students more space to work with and it would also serve as a nice visual you could hang in your classroom to showcase to others the in-class activities you hold in your classroom.)
- + Make a copy of **Resource**

**5.4** (the class discussion questions and answers) for yourself, so you can read the discussion questions (and also have the answers handy) when you facilitate the class discussion at the end of the activity.

2. Tell the students that today they will be learning how the “rules of the game” impact an individual’s incentive structure and behavior, and thus business activity and economic growth.
3. Distribute a copy of **Handout 5.1** (student directions) to each student, and go over the directions with them. Explain that when you say “Begin!” each team can open up their plastic baggy of 20 cards that display a different policy on each one. The team is to come to a consensus on whether the given policy will expand or reduce business activity, and then glue that policy card to its appropriate sheet of paper (either the page that reads EXPAND BUSINESS ACTIVITY or the page that reads REDUCE BUSINESS ACTIVITY). Once the team is done, one member of the team will bring the finished product (their two sheets of paper with the policy cards adhered) to you. The winner is the first team to complete the activity with 100% correctness (that is, with each of the 20 policies pasted into their correct category.)
4. Distribute the two pages of **Handout 5.3** to each team

(or, a half-sized poster board and a marker if you chose the poster board option), along with a glue stick and their baggy of 20 different policy cards.

5. Play the game!

+ Say “Begin!”

+ When the first team is finished, check their work. Do they have each of the “reduce business activity” policies identified correctly? (Policies B, C, E, G, K, M, N, P, Q, and R). Do they have each of the “expand business activity” policies identified correctly? (Policies A, D, F, H, I, J, L, O, S, and T). If the team has completed the activity with 100% accuracy, declare them as the winning team, and then start the class discussion. However, if the first team to finish the activity has even one policy error, send them back to the drawing board to figure out which one(s) they’ve labeled incorrectly. In the meantime, another team may finish. If so, check the next team’s finished work. If they have completed the activity with 100% accuracy then declare that team as the winner; if not, send them back to keep working too. Repeat this process until you have a winning team that has finished the activity with 100% accuracy.

6. Next, begin the class discussion. Start by going over the answers for each policy (stating which

policies would reduce business activity, and which ones would expand business activity). These are discussion questions #1 and #2 of the Class Discussion Questions (and Answers) found on **Resource 5.4**. Next, read #3 aloud from **Resource 5.4**. Let your students discuss their thoughts before you give them the answer. Do the same for discussion questions #4-6. Finally, read discussion question #7 aloud to your students. After your students have had a chance to discuss this, provide them with the answer. Let them know that for those interested in learning more and researching the topic further, you can point them toward the journal articles listed beneath question #7, which answer such questions empirically.

### A FINAL THOUGHT:

This lesson helps students identify how a policy influences the incentives and actions of individuals, and how that then can impact economic growth and prosperity. Positive incentives encourage individuals to be more productive (as long as private property rights are strongly enforced and marginal tax rates are relatively low, so that individuals know they are able to keep what they earn).

Although some of the policies listed in this activity might seem ridiculous (such as “Policy

B,” the government-approved haircut options), point out to your students that in some countries people do indeed have very little economic freedom—even when it comes to simple things such as a haircut. For example: There are many reports that state there is a small number of state-approved haircuts for men and for women in North Korea. Keep in mind that this is an extreme, given that the citizens of North Korea have very little economic freedom. North Korea isn’t even able to be measured on the EFW index because data isn’t available for this country. Hence, while some policies might sound absurd to us because we are familiar with what it is like to live in a country that falls within the most economically free quartile, this isn’t the case for many people living in the least economically free countries in the world.

This lesson showcases compelling logic: policies that are conducive to economic freedom will foster positive incentives for individuals and create a healthy entrepreneurial environment for an expansion in business activity, which over time leads to higher economic growth rates and income levels. But whether or not economic freedom is the cause of such positive changes—or is merely correlated with such positive changes—is still highly debated. Fortunately, the Economic Freedom of the World (EFW) index provides an unbiased measurement of economic freedom so that economists

can study this issue empirically. If your students show interest in this topic, encourage them to read empirical studies that use the EFW index to explore this topic further, such as these journal articles:

- + “Economic Freedom and the Environment for Economic Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (1999) *Journal of Institutional and Theoretical Economics* vol 155 (4); pp 643-663.  
URL: [http://myweb.fsu.edu/jdgwartney/Documents/JITE\\_Gwartney\\_1999.pdf](http://myweb.fsu.edu/jdgwartney/Documents/JITE_Gwartney_1999.pdf)
- + “Economic Freedom, Institutional Quality, and Cross-Country Differences in Income and Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (2004). *The CATO Journal* vol 24 (3); pp 205-233.  
URL: [http://myweb.fsu.edu/jdgwartney/Documents/Gwartney\\_HolcombeLawsonCato2004.pdf](http://myweb.fsu.edu/jdgwartney/Documents/Gwartney_HolcombeLawsonCato2004.pdf)
- + “Institutions and the Impact of Investment on Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (2006). *Kyklos* vol 59 (2); pp 255-273.  
URL: [http://myweb.fsu.edu/jdgwartney/Documents/Gwartney\\_Holcombe\\_LawsonKYKLOS2006.pdf](http://myweb.fsu.edu/jdgwartney/Documents/Gwartney_Holcombe_LawsonKYKLOS2006.pdf)

## GLOSSARY:

**Incentive:** something that incites or tends to stimulate

to action or greater effort, as a reward offered for increased productivity.

**Entrepreneur:** a person who introduces new products or improved technologies and decides which projects to undertake. A successful entrepreneur’s actions will increase the value of resources and expand the size of the economic pie.

**Secondary effects:** the indirect impact of an event or policy that may not be easily and immediately observable. In the area of policy, these effects are often both unintended and overlooked.

**Economic freedom:** The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

**Economic growth rate:** the increase in the goods and services produced in an economy, typically a nation, from one period of time to

another. It is measured as a percentage increase in real GDP, which is gross domestic product adjusted for inflation.

**GDP per capita (i.e. income per capita):** GDP per capita stands for gross domestic product per person. It is a measure of a country’s economic output that accounts for its number of people. GDP per capita (PPP) compares GDP on a purchasing power parity basis divided by a country’s population.

# The Rules of the Game « STUDENT DIRECTIONS

***You are about to play The Rules of the Game: How Policies Influence Incentives. It is your mission to determine how a given policy will impact business activity in the hair salon industry.***

1. If your teacher is using poster board for this activity, then use your marker to draw a line down the middle of your poster board. Write “REDUCE BUSINESS ACTIVITY” on one half, and write “EXPAND BUSINESS ACTIVITY” on the other half. (Note: If your teacher is not using poster board, then your teacher will give you two sheets of paper, one which says REDUCE BUSINESS ACTIVITY and the other which says EXPAND BUSINESS ACTIVITY.)
2. When your teacher says “Begin!” you will take out the 20 policy cards that are in the plastic baggy your teacher gave to your team. Take a look at the scenario written on each policy card where the government enacts a rule change within the hair salon industry. How would the behavior of the hair salon owners change if that rule was implemented? As quickly as you can, accurately determine how each policy will impact business activity. Will the policy lead to a reduction in business activity, or will the policy lead to an expansion in business activity in the hair salon industry? Use your glue stick (or the adhesive device given to you by your teacher) to glue each policy card into its respective category. (You will determine whether each policy card should be pasted underneath where it says “REDUCE BUSINESS ACTIVITY” or underneath “EXPAND BUSINESS ACTIVITY”.)
3. Your goal is to be the first team to complete this activity with 100% accuracy. If your team finishes first, let your teacher know. Your teacher will check your work. If your team accurately categorized each of the 20 policies, then you will be declared the winner. However, if any of the policy cards are categorized incorrectly then your teacher will send your team back to the drawing board and you’ll need to try to figure out and correct your mistake before another team finishes with 100% accuracy.
4. The first team to finish the activity with 100% accuracy is the winning team!
5. Once your teacher has declared the winning team, you will participate in a class discussion where your teacher will raise several questions relating to this activity.



# RESOURCE 5.2

## The Rules of the Game: How Policies Influence Incentives

<p><b>Policy B:</b> Hair salons may only offer 3 government-approved hair cut options for males, and 3 government-approved hair cut options for females.</p>	<p><b>Policy C:</b> A government agency places a price ceiling (sets a maximum price) on a haircut.</p>
<p><b>Policy E:</b> The government requires all individuals who wish to work with hair to enroll in a 2-semester hair and beauty school before being able to work with hair at a salon.</p>	<p><b>Policy G:</b> The government requires all individuals who want to work in the hair-care industry to pass a nationalized licensing exam before being able to work at a hair salon.</p>
<p><b>Policy K:</b> Non-citizens can work in a hair salon, but only citizens can own a hair salon.</p>	<p><b>Policy M:</b> A new law states that a new stylist must have at least 5 years of experience before moving to another salon.</p>
<p><b>Policy N:</b> The hair salon owner can only sell or transfer her business to someone else upon government approval, which will be dependent upon the current state of the economy.</p>	<p><b>Policy P:</b> The government requires all salon chairs to be less than 7 years old.</p>
<p><b>Policy Q:</b> There are several different agencies that have to approve your hair salon before you may open up your business. This paperwork and approval process takes about 6 months before you can begin your business.</p>	<p><b>Policy R:</b> A new law mandates that there may only be one hair salon per 5-mile radius.</p>

## RESOURCE 5.2

# The Rules of the Game: How Policies Influence Incentives

**Policy A:** Hair salon owners are allowed to offer differentiated products and services (e.g. different hair styles, colour, hair products, etc.)

**Policy F:** Individuals wishing to be a hair stylist may enroll in a hair and beauty school in order to gain skills that might appeal to their future customers, but it is not a governmental requirement.

**Policy I:** Citizens and non-citizens alike can own and operate a hair salon business.

**Policy L:** The hair salon owner can sell or transfer the rights to the business to any individual, at any time, for any agreed-upon price.

**Policy S:** You are able to start up your hair salon business with relative ease; the paperwork and approval process to start your own business takes less than 2 weeks.

**Policy D:** Hair salons can decide and set their own prices for the services they provide.

**Policy H:** Hair stylists can obtain a private certification in hair-care if they would like to showcase their qualifications, but they do not need a government license in order to provide hair services.

**Policy J:** Hair salon owners have autonomy over their own hiring and firing decisions.

**Policy O:** The owner of the salon can make his/her own decision on when is the best time to purchase new equipment for the salon.

**Policy T:** You may open up your hair salon wherever you decide is most fitting, even if it is right next to an existing hair salon.

# HANDOUT 5.3

## The Rules of the Game: How Policies Influence Incentives

*Name of Team:* \_\_\_\_\_

*Names of Students on Team:*

---

---

**REDUCE BUSINESS ACTIVITY**

# HANDOUT 5.3

## The Rules of the Game: How Policies Influence Incentives

Name of Team: \_\_\_\_\_

Names of Students on Team:

\_\_\_\_\_

\_\_\_\_\_

### EXPAND BUSINESS ACTIVITY

# Class Discussion Questions « And Answers

**1. Which policies will reduce business activity?**

**Policies B, C, E, G, K, M, N, P, Q, and R**

- + **Policy B:** Hair salons may only offer 3 government-approved hair cut options for males, and 3 government-approved hair cut options for females.
- + **Policy C:** A government agency places a price ceiling (sets a maximum price) on a haircut.
- + **Policy E:** The government requires all individuals who wish to work with hair to enroll in a 2-semester hair and beauty school before being able to work with hair at a salon.
- + **Policy G:** The government requires all individuals who want to work in the hair-care industry to pass a nationalized licensing exam before being able to work at a hair salon.
- + **Policy K:** Non-citizens can work in a hair salon, but only citizens can own a hair salon.
- + **Policy M:** A new law states that a new stylist must have at least 5 years of experience before moving to another salon.

+ **Policy N:** The hair salon owner can only sell or transfer her business to someone else upon government approval, which will be dependent upon the current state of the economy.

+ **Policy P:** The government requires all salon chairs to be less than 7 years old.

**2. Which policies will expand business activity?**

**Policies A, D, F, H, I, J, L, O, S, and T**

- + **Policy A:** Hair salon owners are allowed to offer differentiated products and services (e.g. different hair styles, colour, hair products, etc.)
- + **Policy D:** Hair salons can decide and set their own prices for the services they provide.
- + **Policy F:** Individuals wishing to be a hair stylist may enroll in a hair and beauty school in order to gain skills that might appeal to their future customers, but it is not a governmental requirement.
- + **Policy H:** Hair stylists can obtain a private certification in hair-care if they would like to showcase their qualifications, but they do not need a government

license in order to provide hair services.

+ **Policy I:** Citizens and non-citizens alike can own and operate a hair salon business.

+ **Policy J:** Hair salon owners have autonomy over their own hiring and firing decisions.

+ **Policy L:** The hair salon owner can sell or transfer the rights to the business to any individual, at any time, for any agreed-upon price.

+ **Policy O:** The owner of the salon can make his/her own decision on when is the best time to purchase new equipment for the salon.

**3. Which policies are negative incentives for the hair salon owners/workers?**

**The same policies that were likely to reduce business activity: Policies B, C, E, G, K, M, N, P, Q, and R**

**4. Which policies are positive incentives for the hair salon owners/workers?**

**The same policies that were conducive for expanding business activity: Policies A, D, F, H, I, J, L, O, S, and T**

# Class Discussion Questions « And Answers

5. **Which policies contribute to increased hair services for consumers?**  
*The same policies that were conducive for expanding business activity: Policies A, D, F, H, I, J, L, O, S, and T*
6. **Which policies are most consistent with economic freedom?**  
*The same policies that were conducive for expanding business activity: Policies A, D, F, H, I, J, L, O, S, and T*
7. **Do policies that are consistent with economic freedom seem to cause a positive incentive structure for individuals to provide additional goods/services and expand their business ventures, leading to increased income levels and economic growth?**

*They appear to be causal. This question continues to be studied in economic research. One can learn more about the relationship between economic freedom and economic growth by reading articles on this topic published in academic journals, such as the following:*

- + “Economic Freedom and the Environment for Economic Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (1999) Journal of Institutional and Theoretical Economics vol 155 (4); pp 643-663.  
 URL link: [http://myweb.fsu.edu/jdgwartney/Documents/JITE\\_Gwartney\\_1999.pdf](http://myweb.fsu.edu/jdgwartney/Documents/JITE_Gwartney_1999.pdf)

- + “Economic Freedom, Institutional Quality, and Cross-Country Differences in Income and Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (2004). The CATO Journal vol 24 (3); pp 205-233.  
 URL link: [http://myweb.fsu.edu/jdgwartney/Documents/Gwartney\\_Holcombe\\_LawsonCato2004.pdf](http://myweb.fsu.edu/jdgwartney/Documents/Gwartney_Holcombe_LawsonCato2004.pdf)
- + “Institutions and the Impact of Investment on Growth” by Gwartney, J. Holcombe, R. and Lawson, R. (2006). Kyklos vol 59 (2); pp 255-273.  
 URL link: [http://myweb.fsu.edu/jdgwartney/Documents/Gwartney\\_Holcombe\\_LawsonKYKLOS2006.pdf](http://myweb.fsu.edu/jdgwartney/Documents/Gwartney_Holcombe_LawsonKYKLOS2006.pdf)

# LESSON 6

## Economic Freedom Runners

### THEME:

Being able to identify whether a policy or factor of the economy will move a country toward **more** economic freedom or less economic freedom is an important ability, if for no other reason than to just be a well-informed citizen in one's own country. (This skill also enables a person to think critically about how a given policy in other nations around the globe will end up impacting that nation.) By practicing this skill, it is more likely to become second-nature for someone to think about whether something they happen to hear is consistent or inconsistent with economic freedom—whether it happens to be while listening to a politician or reporter on the news, reading a newspaper, or talking with a friend.

This lesson gives students an opportunity to practice identifying whether something they hear is consistent or inconsistent with economic freedom. If something is consistent with economic freedom, then it will move a country toward more economic freedom (which would increase the country's EFW score in that area of the index). If something is inconsistent with economic

freedom, then it will make a country less economically free (which would decrease the EFW score in that area of the index). The students are also given an opportunity to dig a little deeper to try to identify within which of the 5 major areas of the EFW index a concept falls. This lesson is designed to train students to start using the economic way of thinking to determine whether something will increase or decrease a country's economic freedom. To do that, they first need to recognize what is consistent with economic freedom, and what is not.

### DESCRIPTION:

The teacher will read a phrase, and one student on each team will race to grab a sign that reads “consistent” or “inconsistent” depending on whether he/she believes the content of the phrase to be consistent or inconsistent with economic freedom. If a team answers that question correctly, they can then attempt to answer within which of the 5 main areas of the EFW index that concept falls.

### LEARNING OUTCOMES:

- + recognize whether a given policy or factor of the economy will move a country toward *more or less* economic freedom
- + identify which of the five main areas of the Economic Freedom of the World index is impacted by a given policy or factor of the economy

### PROCEDURE:

1. Prepare for the “Economic Freedom Runners” activity:
  - + Make a copy of **Handout 6.1** (the student directions) for each student.
  - + Make enough copies of **Handout 6.2** so that you have at least 15 copies for each team of 5-6 students. (Do not print double-sided. For each team of students, you will want about 15 copies of the first page which reads “CONSISTENT” and 15 copies of the second page which reads “INCONSISTENT”).
  - + Make a copy of **Handout 6.3** (the score sheet) for each team.

- + Make a copy of **Visual 6.4**.
  - + Make a copy of **Resource 6.5** (the phrases and answer key) for yourself.
  - + Across the room, place a stack of 15 “Consistent” pages and another stack of 15 “Inconsistent” pages for every team. (That is, each team will have their own two designated stacks of signs, so that the runners from each team will not run in to each other in an attempt to grab the same sign.)
  - + Place each page of **Visual 6.4** (the names of the five major areas of the EFW index) somewhere in the front of the room so the students will know which area number corresponds to the name of each major area.
2. Split the students into teams of 5-6. You may want to offer a small prize to the members of the winning team.
  3. Go over **Handout 6.1** (the student directions) with your students.
  4. Have each team of students form their own line along one side of the room, opposite from the stack of signs. Each team needs to choose the order of their runners prior to the start of the game, and each student on the team must have a turn before another student is the runner again. Each phrase you read from **Resource 6.5** will be one round, and each team can only have one runner per round.

5. Play the game!
  - + Read the first phrase (Round 1) from Resource 6.5 out loud to your students.
  - + Each team’s runner for that round will need to quickly decide whether the phrase is consistent or inconsistent with what they know about economic freedom. The runners will run to the other end of the room and either select a “Consistent” or “Inconsistent” sign from their team’s stacks of paper, and then race back to the rest of their teammates.
  - + Once the runner has brought back the “Consistent” or “Inconsistent” sign to their team, their team will quickly decide whether their teammate runner chose the correct answer. The teammates may not give their input/suggestions to the runner until after the runner has chosen a sign and arrived back to the team. If a team tries to give their runner input on which sign to select prior to the runner bringing back a sign, then that team will lose 5 points and not be able to gain any points till the next round.
    - > If the team agrees with the answer on the sign the runner brought back, then they hold their sign up to submit to you as their final answer.
    - > If the team disagrees with the runner’s answer, then the runner has the option of either heeding

the advice of his/her teammates and running back to grab the opposite sign from the other side of the room and then racing back to his/her team again to hold up the new sign, or disregarding the team’s advice and holding up the original sign he/she grabbed (to submit as the team’s final answer to you).

- + Once all teams answer the “consistent” versus “inconsistent” portion of the question, tell the class the correct answer to that question.
- + If a team’s submitted answer is correct and they are the first team to answer it correctly, then they receive 10 points. If the team is correct but they are not the first team to answer it correctly, then they receive 5 points. If any team answers incorrectly, then 5 points will be deducted from that team.
- + Each team that answered the “consistent” versus “inconsistent” portion of the question correctly may also attempt to answer the following question: “Into which of the five major areas of the Economic Freedom of the World index does this concept fall?” (Visual 6.4 should be displayed for them to see, so they are able to view the name of each of the five major areas). The teams have 30 seconds to discuss their answer. If they don’t know the answer,



the team can choose to not answer the EFW Area question (so that they won't gain nor lose any points). If they wish to answer the question, they must write their answer on the back of their sign ("consistent" or "inconsistent" sign for that given phrase) and hold up their written answer when you say "time is up" after 30 seconds.

- + If they correctly answer which EFW Area the concept falls within, then they earn 2 bonus points. If they give an incorrect answer for the Area, then they lose 1 point. A team is only eligible to choose whether to answer which major area the concept falls within if they answered the "consistent" versus "inconsistent" question correctly. If they did not get that part correct, then they aren't eligible to answer the bonus opportunity EFW Area question. (This is because the most important aspect of this activity is understanding what is consistent with economic freedom. Knowing which major area the concept falls within is secondary to identifying whether it is consistent with economic freedom.)
- + Each team's recorder will keep track of their team's points on Handout 6.3 (the score sheet).
- + The next runner on each team then moves up to the start line to get ready for the

next phrase to be read aloud in the next round.

- + This is repeated for all 20 rounds. (So, if there are 5 students on each team for example, then each student would be the runner 4 times.)

## A FINAL THOUGHT:

This lesson gives the students an opportunity to practice identifying whether a policy, rule, etc. is consistent or inconsistent with economic freedom. Encourage your students to recognize when they see/hear of such in the real world as well, and to use their economic reasoning skills to identify whether it will lead to an increase or decrease in economic freedom.

**Going Deeper:** Ask your students to bring in a recent news article discussing a new policy change. (You can limit this to having your students find articles about policy changes in your own country, or you can have them look up a recent policy change that is taking place anywhere around the globe.) Ask the student to bring in the article, as well as a short paragraph explaining how the policy change would impact the country's level of economic freedom. Will the policy result in more economic freedom for that country, or less? (If someone seems to have trouble, suggest that the student look on the internet for a recent policy change that would affect Area

4 of the EFW Index: Freedom to Trade Internationally. Countries are often placing tariffs on the goods being imported into their country, so it will not be hard for students to find an article relating to this topic.)

## GLOSSARY:

**Economic freedom:** The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

**GDP (Gross Domestic Product):** the market value of all final goods and service produced within a country during a specific period of time.

**Capital (physical and human capital):** Physical capital is human-made resources (such as tools, equipment, and structures) used to produce other goods and services. They enhance our ability to produce in the future. Human capital is

the collective skills, knowledge, or other intangible assets of individuals that can be used to create economic value for the individuals, their employers, or nation. Education is an example of investment in human capital that pays off in terms of higher productivity.

**Tariff:** a government-imposed tax levied on goods imported into a country. This trade restriction is meant to increase the price of goods and services purchased from overseas, to make the foreign good or service less attractive to consumers in the domestic country.

**Quota:** a government-imposed trade restriction that limits the number, or monetary value, of goods that can be imported or exported during a particular time period.

# Economic Freedom Runners « STUDENT DIRECTIONS

**You are about to play the “Economic Freedom Runners” game.**

1. Your team will select a recorder to keep track of the points. There are 20 rounds in the game. For each round of the game, you and your teammates will take turns being the “runner.” (When the recorder is taking his/her turn as the runner, then another teammate will document the points for that round.)
2. Your teacher will read a phrase at the beginning of each round. The runner for that round will run to the opposite end of the room where two stacks of signs are designated for your team. One stack of signs will read “CONSISTENT” and the other will read “INCONSISTENT.” It will be up to the runner for that round to decide whether he/she believes the phrase to be consistent or inconsistent with economic freedom (without assistance from teammates). If something is consistent with economic freedom, then it will increase a country’s economic freedom—meaning it will cause a country’s EFW score to increase in its respective area of the EFW index. If something is inconsistent with economic freedom, then it will decrease a country’s economic freedom—meaning

it will cause a country’s EFW score to decrease in its respective area of the EFW index.

3. The runner will select the sign he/she believes to be appropriate, and then run back to the rest of your team. Once the runner has brought back the “CONSISTENT” or “INCONSISTENT” sign to your team, your team will quickly decide whether your teammate runner chose the correct answer. If your team agrees with the answer, then the runner holds up the sign to submit it as the final answer. If your team disagrees with the runner’s answer, then the runner has the option to either heed the advice of his/her teammates and run back to grab the opposite sign from the other side of the room and then race back to his/her team again to hold up the new sign as the final answer, or disregard your team’s advice and hold up the original sign he/she grabbed to submit it as your team’s final answer.

***Note: If your team is caught giving input to your runner prior to the runner bringing back the sign he/she believes to be correct, your team will automatically lose 5 points and won’t be able to earn any points for that round.***

4. Once all teams answer the “consistent” versus “inconsistent” portion of the question, your teacher will tell everyone in the class the correct answer. If your team’s submitted answer for the consistent vs. inconsistent question is correct and you are the first team to answer it correctly, then you receive 10 points. If your team is correct but you are not the first team to answer it correctly, you still will receive 5 points. If your team answers incorrectly, then 5 points will be deducted from your team.
5. Each team that answered the “consistent” versus “inconsistent” portion of the question correctly may also attempt to answer the following question: “Into which of the five major areas of the Economic Freedom of the World index does this concept fall?” Your teacher will display signs in the room which will serve as a reminder of the name of each of the five major areas. Each team eligible to answer the EFW Area question will have 30 seconds to discuss their answer. If your team is eligible to answer but you don’t know the correct answer, you can choose to not answer the EFW Area question (that way you neither gain nor lose any

# Economic Freedom Runners « STUDENT DIRECTIONS

- points). If your team chooses to answer the question, you must write your answer (Area 1, 2, 3, 4, or 5) on the back of the sign your runner grabbed for that round, and hold up your written answer when your teacher says “time is up” after 30 seconds.
6. If your team correctly answers which EFW Area the concept falls within, then you earn 2 bonus points. If you give an incorrect answer for the Area, then you lose 1 point. Your team is only eligible to choose whether to answer which major area the concept falls within if you answered the “consistent” versus “inconsistent” question correctly. If you did not answer that part correctly, then your team is not eligible to answer the bonus opportunity EFW Area question. (This is because the most important aspect of this activity is understanding what is consistent with economic freedom. Knowing within which major area of the EFW index the concept falls is secondary to identifying whether it is consistent with economic freedom.)
  7. Each team’s recorder will keep track of their team’s points on Handout 6.3 (the score sheet).
  8. The next runner on your team will then move up to the start line to get ready for the next phrase to be read aloud in the next round.
  9. This is repeated for all 20 rounds.

## SCORING SYSTEM:

### ***Scoring for the Consistent vs. Inconsistent question:***

- +10 for being the first team to correctly answer the consistent vs. inconsistent question
- +5 for correctly answering the consistent vs. inconsistent question (although not the first team to answer it correctly)
- -5 for incorrectly answering the consistent vs. inconsistent question
- -5 for teammates giving/hinting the answer to their runner prior to the runner bringing a sign back to the team

### ***Scoring for the EFW Area question:***

- 0 points if the team isn’t eligible to answer
- 0 points if an eligible team chooses not to answer the question
- +2 points if an eligible team answers the EFW Area question correctly
- -1 point if an eligible team answers the EFW Area question incorrectly

HANDOUT 6.2

# CONSISTENT

HANDOUT 6.2

# INCONSISTENT

## Economic Freedom Runners « SCORE SHEET

Name of Team: \_\_\_\_\_

Names of Students on Team:

\_\_\_\_\_

\_\_\_\_\_

ROUND	POINTS AWARDED (OR DEDUCTED!) FOR THE CONSISTENT VS INCONSISTENT QUESTION (-5, 5, OR 10)	POINTS AWARDED (OR DEDUCTED!) FOR THE EFW AREA QUESTION (0, -1, OR 2)	TOTAL POINTS PER ROUND
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

**TOTAL POINTS:**

VISUAL 6.4

# EFFW AREA 1 SIZE OF GOVERNMENT



**VISUAL 6.4**

# **EFW AREA 2 LEGAL SYSTEM AND PROPERTY RIGHTS**

**VISUAL 6.4**

# **FEW AREA 3 SOUND MONEY**

## VISUAL 6.4

# EFW AREA 4 FREEDOM TO TRADE INTERNATIONALLY

**VISUAL 6.4**

# **EFFW AREA 5 REGULATION**

## Economic Freedom Runners « QUESTIONABLE PHRASES (AND ANSWER KEY)

### PART 1 OF EACH ROUND:

*Is the phrase consistent or inconsistent with economic freedom?*

### PART 2 OF EACH ROUND (FOR THE TEAMS THAT ARE ELIGIBLE TO ANSWER):

*Into which of the five major areas of the EFW index does the concept fall?*

1. Round 1: “Relatively high rate of growth in the money supply”
  - + Inconsistent
  - + Area 3
2. Round 2: “Private property rights are well protected”
  - + Consistent
  - + Area 2
3. Round 3: “Able to own foreign currency bank accounts”
  - + Consistent
  - + Area 3
4. Round 4: “Adoption of a minimum wage”
  - + Inconsistent
  - + Area 5
5. Round 5: “Government expenditures makes up a majority share of the economy’s GDP”
  - + Inconsistent
  - + Area 1
6. Round 6: “Contracts are legally enforced in an even-handed manner”
  - + Consistent
  - + Area 2
7. Round 7: “Foreigners are allowed to visit”
  - + Consistent
  - + Area 4
8. Round 8: “Number of hours worked is regulated in the labour market”
  - + Inconsistent
  - + Area 5
9. Round 9: “Government investment directs resource use more so than private investment”
  - + Inconsistent
  - + Area 1
10. Round 10: “Refrain from controlling interest rates”
  - + Consistent
  - + Area 5
11. Round 11: “High marginal tax rates at a relatively low income threshold”
  - + Inconsistent
  - + Area 1
12. Round 12: “Low tariffs and/or quotas”
  - + Consistent
  - + Area 4
13. Round 13: “Police are reliable”
  - + Consistent
  - + Area 2
14. Round 14: “Heavy controls on exchange rates and the movement of capital”
  - + Inconsistent
  - + Area 4
15. Round 15: “Hiring and firing restrictions in place”
  - + Inconsistent
  - + Area 5
16. Round 16: “Low compliance costs of importing and exporting”
  - + Consistent
  - + Area 4
17. Round 17: “Foreigners are able to own and invest in capital”
  - + Consistent
  - + Area 4
18. Round 18: “Most banks are privately owned”
  - + Consistent
  - + Area 5
19. Round 19: “Judicial independence and impartial courts”
  - + Consistent
  - + Area 2
20. Round 20: “Subsidies account for a large share of GDP”
  - + Inconsistent
  - + Area 1

# LESSON 7

## Learning The Ropes of Research: EFW on the Web

### THEME:

This lesson teaches students how to utilize the functions of the Fraser Institute's Economic Freedom of the World (EFW) website, <https://www.fraserinstitute.org/economic-freedom/>. This lesson incorporates the use of technology to assist students in being able to quickly and easily identify data points relating to Economic Freedom of the World. Students will also learn how to access the entire Economic Freedom of the World dataset so they can use it in future research if this topic sparks their interest.

### DESCRIPTION:

The students receive a handout which walks them through various functions of the Fraser Institute's Economic Freedom of the World website. The students follow the directions outlined on the handout to identify specific data for the Economic Freedom of the World index including country data for the overall summary EFW score and world ranking, country data relating to the five major areas of the index, and EFW quartile information. Students will learn how to use the EFW map, graphs, and tables, and how to search across time in

addition to across countries. Students will also learn how to access and download the entire EFW dataset as an excel spreadsheet which they can utilize for future research, and learn how to access the EFW Annual Reports as well as other academic literature which uses the Economic Freedom of the World Index as a measure for economic institutions.

### LEARNING OUTCOMES:

- + learn to navigate, efficiently find, and utilize the various data and information available via the Fraser Institute's Economic Freedom of the World (EFW) website
- + find multiple ways to look up the data for a country's EFW score, EFW world rank, a country's area score and area rank (for the five main areas of the EFW index), and how to efficiently compare these data for multiple countries, as well as how to look at the economic freedom of countries over time
- + discover a useful online resource for accessing academic research involving the EFW index as well as the EFW annual reports, and how to download the

entire EFW dataset as an excel spreadsheet to utilize in the future for one's own empirical research

### PROCEDURE:

1. Prepare for the activity.
  - + Make a copy of **Handout 7.1** for each student.
  - + Make a copy of **Resource 7.2** (the answer key) for yourself.
  - + Your students will need access to the internet and an electronic device such as a computer or tablet. If you have access to a computer lab in your school then you and your students can go to the computer lab during the class period you wish to do this as an in-class activity. Or, you may wish to have the students complete this as a homework assignment.
2. Tell your students the importance of being able to use the internet for research, now and in their future education/careers. Tell them they will be participating in an activity that will teach them how to efficiently look up and identify specific pieces of data relating to the Economic Freedom of the World index. Emphasize that being able to efficiently

locate data/information is a highly desired skill by many employers.

3. Distribute a copy of **Handout 7.1** to each student. Have your students follow the step-by-step directions to learn the multitude of functions of the Fraser Institute's Economic Freedom of the World website, and to fill in the missing information within the handout.
4. After your students have completed the exercise, go over the answers as a class. If anyone had trouble with a portion of the activity, project your computer screen for your class to view and show them how to use the website to arrive at the answer with which they struggled.
5. View the “**Going Deeper**” suggestions within “**A Final Thought**” for ideas on how to extend this exercise into a research project for your students.

## A FINAL THOUGHT:

Ask your students what aspects of the website bring additional value to individuals—things that a hardcopy of the EFW map hanging from a wall wouldn't be able to provide on its own? (While the hard copy of the map provides a great visual for the economic freedom of the world in a given year, the data available on the website allows us to look at these countries across time. It also provides many ways to search, locate, and view the

multitude of data. This can come in handy if you need to look up something quickly. The website also provides the dataset as a downloadable excel spreadsheet which is already organized and ready to be used for research, as well as the annual reports and other literature on economic freedom.)

How might this website be used to share knowledge about economic freedom with someone who has never heard of the concept before? (One can direct the individual to this website and tell them to click on “Understanding Economic Freedom” in the top menu bar, and then click the sub-tab “Economic Freedom Basics” to learn the fundamentals about what economic freedom is. Then, if they wish to learn more about how the Economic Freedom of the World index measures economic freedom, they can click on “Methodology” in the top menu bar and then click the sub-tab “Approach” to learn more about the 5 major areas of the index, the 24 components making up those 5 areas, and the 42 distinct variables comprised in those components. If the individual is interested in learning more about the topic, he/she can then explore the other functions of the website to gain a richer understanding of economic freedom.) By sharing the website with others, we can help to spread economic literacy and increase people's knowledge of the importance of having economic institutions that are

conducive to economic freedom.

**Going Deeper:** If you would like to have your students dig a bit deeper into learning how various countries have changed their levels of economic freedom over time, you can have your students do a mini-research project after they complete this activity. For example, you can ask each student to choose 3 countries, and use what they've learned about the functions of the website to compare how these 3 countries relate to each other in terms of their overall level of economic freedom, how they hold up within each of the 5 major areas of the index, as well as how the economic freedom of the 3 countries have changed across times. You could also extend this research project into a larger project where the students also look up various well-being measures for their chosen countries (such as the life-expectancy, the average income, and economic growth rate). Life expectancy, average income (GDP per capita), and growth rates (growth rate (%) of GDP per capita) can all be found by going to [www.WorldBank.org](http://www.WorldBank.org). This would serve as a nice, simple research project where students can practice their data-gathering skills while learning more about a few countries. They could then present their finding to the class in a short 5 or 10 minute presentation, which would give them practice at presenting their findings and being able to articulate their discoveries to others. Or, if you don't want to make this a part of the actual coursework,

you could instead offer this as an extra-credit opportunity. Students love opportunities to earn extra-credit!

## GLOSSARY:

**Economic freedom:** The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

**Economic Freedom of the World (EFW) index:** The Economic Freedom of the World index, published by the Fraser Institute, measures the degree of economic freedom present in five major areas: (1) Size of Government; (2) Legal System and Security of Property Rights; (3) Sound Money; (4) Freedom to Trade Internationally; (5) Regulation. Within the five major areas, there are 24 components in the index. Many of those components are themselves made up of several sub-components. In total, the index comprises 42 distinct variables.

Each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. When subcomponents are present, the sub-component ratings are averaged to derive the component rating. The component ratings within each area are then averaged to derive ratings for each of the five areas. In turn, the five area ratings are averaged to derive the summary rating for each country. A country's summary EFW rating ranges from 0 to 10, where a higher rating indicates greater levels of economic freedom. See <https://www.fraserinstitute.org/economic-freedom/approach> for more information on the variables comprised within each area of the EFW index.

**Quartile:** One of four equal groups into which a population can be divided according to the distribution of values of a particular variable.

**Legal system:** the set of laws of a country and the ways in which they are interpreted and enforced

**Property rights:** the legal ownership determining the rights to use, control, and obtain the benefits from a good or resource. In economics, property rights form the basis for all market exchange, and the allocation of property rights in a society affects the efficiency of resource use.

**+ Note:** *Legal System and Property Rights is Area 2 of the Economic Freedom of the World index.*

➤ *Protection of persons and their rightfully acquired property is a central element of economic freedom and a civil society. Indeed, it is the most important function of government. Area 2 focuses on this issue. The key ingredients of a legal system consistent with economic freedom are rule of law, security of property rights, an independent and unbiased judiciary, and impartial and effective enforcement of the law. The nine components in Area 2 are indicators of how effectively the protective functions of government are performed. These components are from three primary sources.*

➤ *Security of property rights, protected by the rule of law, provides the foundation for both economic freedom and the efficient operation of markets. Freedom to exchange, for example, is fatally weakened if individuals do not have secure rights to property, including the fruits of their labour. When individuals and businesses lack confidence that contracts will be enforced and the fruits of their productive efforts protected, their incentive to engage in productive activity is eroded. Perhaps more than any other area, this area is essential for the efficient allocation of resources. Countries with major deficiencies in this area are unlikely to prosper regardless of their policies in the other four areas.*



## Learning The Ropes of Research « EFW ON THE WEB

### GETTING TO KNOW FRASER'S EFW WEBSITE AND ITS FUNCTIONS

1. Go to [www.FreeTheWorld.com](http://www.FreeTheWorld.com). (You will be redirected to <https://www.fraserinstitute.org/economic-freedom>).
2. The site will bring you to a page with the EFW world map with colour-coded quartiles.
  - + What colour represents the most-free quartile?  
\_\_\_\_\_
  - + What colour represents the second quartile?  
\_\_\_\_\_
  - + What colour represents the third quartile?  
\_\_\_\_\_
  - + What colour represents the least-free quartile?  
\_\_\_\_\_
3. The site will likely pull up the map with the most recent year's data. (The most recent data available will be for 2 years prior to the current year). Drag the timeline cursor at the bottom of the map to where it is set to the year 2015.
  - + What colour is Canada?  
\_\_\_\_\_

- + What does this mean?  
\_\_\_\_\_
4. Leaving the year set to 2015, hover over Canada on the map.
    - + What was Canada's EFW score in 2015?  
\_\_\_\_\_
    - + What was Canada's EFW world rank in 2015?  
\_\_\_\_\_
  5. Move the timeline cursor to where the map is set on the year 2005. Hover over Canada.
    - + What was Canada's EFW score in 2005?  
\_\_\_\_\_
    - + What was Canada's EFW world rank in 2005?  
\_\_\_\_\_
  6. Drag the timeline cursor to where the map is set on the year 1970. Then push the "PLAY" button to the left of the timeline.
  7. Now let's compare two countries, Canada and the United States. Drag the timeline cursor back to the year 2015. While still on the map page, type "Canada" into the country search bar within the map itself. Canada will pop up as an option; click it. Now type "United States" into that same country search bar within the map.

The United States will pop up as an option; click it. Look at the box to the left of the map. There are two tabs within this box: "World Rankings" and "Country Info." Click "Country Info" so you can now compare Canada to the United States.

- + For the year 2015, how did Canada compare to the U.S. when it comes to the two countries' overall EFW score (that is, the summary score—not the scores for the individual 5 major areas), and their EFW world rank?

	EFW Score (summary score)	EFW World Rank
Canada		
United States		

- + As you can see, Canada and the U.S. tied for its EFW score and EFW world rank in 2015. However, this doesn't mean that these countries are identical when it comes to what economic freedom looks like in each country. The EFW Area Scores (for the 5 major areas of the EFW index) still differ for each country, as do their area rankings. Fill out the table on the following page to compare how Canada and the United States fared when it comes to the individual

## Learning The Ropes of Research « EFW ON THE WEB

EFW Major Area	CANADA		UNITED STATES	
	EFW Area Score (out of 10)	EFW Area World Rank	EFW Area Score (out of 10)	EFW Area World Rank
Size of Government				
Legal System and Property Rights				
Sound Money				
Freedom to Trade Internationally				
Regulation				

5 major areas of the EFW index. For the year 2015, how did Canada compare to the U.S. for its scores for the individual 5 major areas of the EFW index? What were their world ranks for the individual 5 major areas of the EFW index?

- Now click on “Graph” in the top menu bar (to the right of where it reads “Map” in the menu bar). Canada and the United States should still be in the country search bar that is now directly above the line graph. Scroll down until you can view the full line graph. You’ll see how the EFW score for Canada and the United States has changed over time. Note that to the left of the graph you have the ability to change the type of graph from a line graph to a bar graph. Note that to the right of the graph, you can use the filter

to view how these countries scored over time in each of the individual 5 major areas of the EFW, besides viewing how the EFW summary score changed over time. Choose the “Regulation” filter to the right of the graph.

- Who had a higher economic freedom score in the Regulation category in 1970, Canada or the U.S.? \_\_\_\_\_
- Which of these two countries had the higher economic freedom score in the Regulation category in 2015? \_\_\_\_\_
- Staying on the “Graph” page, change the filter from the “Regulation” category to the “Freedom to Trade Internationally” category.
- What trend do you see for both the United States and Canada over time within this

area of the EFW index?

---



---



---



---

- Now click on “Dataset” in the top menu bar. Canada and the United States should still be in the country search bar that is now directly above the table displaying the EFW data. Note that this too allows you to select different years using the timeline which is now found directly above the data table and country search bar. To start out, the data table will display given countries and year along with the countries’ EFW world rank, overall EFW summary score, and their scores for each of the individual 5 major areas of the EFW index. You can also choose to display only

specific major areas at a time by clicking the dropdown labeled “Indicators” and unchecking any of the 5 major areas. Or, you can choose to filter the data in other ways. At the moment, “Custom” is selected in the “Filter By” dropdown box directly to the left of the country search bar, above the data table. This is because we already have Canada and the United States entered into the country search bar, so the “Filter By” dropdown to the left of the country search bar is set to “Custom” because this is a customized search. However, we can change that “Filter By” dropdown box from “Custom” to: “All Countries & Indicators,” or “Economic Freedom Quartile,” or “Top 10 Countries.” Select “All Countries & Indicators” from this “Filter By” dropdown box. Now the site will display all the data for each country measured by the EFW index, for the given year that is selected. (We still have 2015 selected, but remember you can change the year by using the “Select Specific Year” timeline above the data table.) You’ll see that the data table is organized in such a way where the countries (economies) that are the most economically free are at the top of the table, all the way down to the least-free economies at the bottom of the table. You’ll note that the

overall EFW world rank and the overall EFW summary score are colour coordinated where they are blue for the most-free economies, green for the economies in the 2nd quartile, orange for those in the 3rd quartile, and red for those in the least-free quartile. This provides an easy visual of a country’s overall level of economic freedom while you’re looking at the data.

+ Which economy is the most economically free (world rank of 1), and what is its overall EFW score for 2015?

---

+ Which country within the 2nd quartile has the most economic freedom? What is its EFW score for 2015? What is this country’s EFW world rank for 2015?

---

+ Out of the countries in the 2nd quartile, who has the least economic freedom? What is the EFW score for 2015? What is the EFW world rank for 2015? (Hint: Look at the data carefully before answering.)

---

---

---

---

+ Which country holds the 100th world rank in the year 2015? Which economic freedom quartile is this?

---

11. You can change the order in which the data in the data table is displayed by clicking the title of a given column in the data table. For example, if you click the title “Overall Score,” within the data table, then it will reorganize the data so that the least-free economy is at the very top of the data table, and the most-free economy is now at the very bottom. Click “Overall Score” and watch what happens. You should see red figures for “Overall Rank” and “Overall Score” now at the top of the data table, indicating the least-free economies are now at the top of the data table.

+ Which country (for which there is available data) has the least-free economy? What is this country’s overall EFW score for 2015?

---

+ Which individual area (out of the 5 major areas of the EFW index) did this country score the poorest?

---

12. You can change the directional order to have the data organized in terms of any of the titles of the columns across the top. Let’s choose to organize the data in terms of the major

# HANDOUT 7.1

area “Legal System and Property Rights.” “Simply click Legal System & Property Rights” once. It will display the country who performed best in this area at the very top, and the country who performed worst in this area will be at the very bottom. (Note that if you accidentally click “Legal System & Property Rights” again then it will place the country who performed the worst in this area at the top of the data table, with the country with the best score at the bottom of the table. A simple way to double-check yourself is noting what colours are being shown for the “Overall Rank” and “Overall Score” (since you know that blue and green will represent countries with freer economies, while orange and red represent countries with little economic freedom). Hence, if you only clicked “Legal Systems & Property Rights” once then you should see a country with blue data at the top of the table.

- + Which country scored best (had the highest score) in the Legal System & Property Rights area in 2015? What was the country’s score in this individual area (Legal

System & Property Rights)? What was this country’s overall world rank?  
\_\_\_\_\_

- + What country had the lowest score in the Legal System & Property Rights area in 2015? What was the country’s score in this individual area? What was this country’s overall world rank?  
\_\_\_\_\_

- Note that you can download the entire data set by clicking the “Download Entire Dataset” button located to the top-left of this page, above the data table. This will download the entire economic freedom dataset, including sub-indicators. Or, you can choose to download a filtered dataset by clicking the “Download Filtered Dataset” button, located above the data table in the upper right-hand corner. The Economic Freedom of the World dataset will be an excellent resource for you if you wish to do research in the future where you’re performing a cross-country analysis and need to account for economic institutions.

- Go to the “Filter By” dropdown options again and click “Economic Freedom

Quartile” this time. Notice that the 4 quartiles “Most Free,” “2nd Quartile,” “3rd Quartile,” and “Least Free” are now displayed along the top of the data table. If you click one of the quartile buttons, it will un-check that button and remove that quartile’s entries from the data table. Click “Most Free” and “Least Free” so that these two quartiles are removed from the data table, leaving only the countries within the 2nd quartile and 3rd quartile remaining. Now click the category (column name along the top of the data table) called “Freedom to Trade Internationally” so that it sorts the countries in the 2nd and 3rd quartiles according to this major area.

- + When it comes specifically to the freedom to trade internationally, which 3rd quartile country is more economically free in this area than Bulgaria, a 2nd quartile country? Fill out the following information for that country in the top row of the table below, and the respective information for Bulgaria in the bottom row.

Country	Freedom to Trade Internationally (area score)	EFW Score (summary score)	EFW World Rank	EFW Quartile
Bulgaria				

- 15.** Go to the “Filter By” dropdown box and select “Top 10 Countries.” Click the column name of “Overall Score” (or you can instead click “Overall Rank”) so that the table organizes itself in terms of the overall EFW score/rank.
- +** Which 10 countries have the highest levels of economic freedom for the year 2015?

EFW World Rank	Country
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

- 16.** Now click on “Research” in the top menu bar, and then click the sub-tab that says “Publications and Commentaries.” You will find the latest edition of the Economic Freedom of the World Annual Report here. You can download the full publication as a PDF to read later, by clicking “Read the Full Publication.” Click the “Read More” button within

the area discussing the latest annual EFW report, and you’ll be able to read a summary of each of the chapters within the most recent annual report, among other highlights from this year’s report.

- 17.** Remaining on the page (when we clicked on the main tab “Research” and then the subtab of “Publications & Commentaries”), now scroll down. You’ll find other annual reports and datasets of other indexes, such as Economic Freedom of North America, Economic Freedom of the Arab World, the Human Freedom Index, the previous year’s Economic Freedom of the World Annual Report. Now scroll all the way to the bottom of this page. Click on “Economic Freedom Research Archive.” This will open up a page that brings you to previous years’ annual reports of Economic Freedom of the World (and the other aforementioned indexes), as well as other literature on economic freedom.
- 18.** Reflect on what you’ve learned how to do in this activity.
- +** What is your favorite aspect of the EFW website? Why?

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

## Getting to Know Fraser's EFW Website and its Functions « ANSWER KEY

1. Go to [www.FreeTheWorld.com](http://www.FreeTheWorld.com). (You will be redirected to <https://www.fraserinstitute.org/economic-freedom>).
2. The site will bring you to a page with the EFW world map with colour-coded quartiles.
  - + What colour represents the most-free quartile? **Blue**
  - + What colour represents the second quartile? **Green**
  - + What colour represents the third quartile? **Orange**
  - + What colour represents the least-free quartile? **Red**
3. The site will likely pull up the map with the most recent year's data. (The most recent data available will be for 2 years prior to the current year). Drag the timeline cursor at the bottom of the map to where it is set to the year 2015.
  - + What colour is Canada? **Blue**
  - + What does this mean? **This means Canada is in the most economically free quartile.**
4. Leaving the year set to 2015, hover over Canada on the map.
  - + What was Canada's EFW score in 2015? **7.94 (out of 10)**
  - + What was Canada's EFW

world rank in 2015? **11th**

5. Move the timeline cursor to where the map is set on the year 2005. Hover over Canada.
  - + What was Canada's EFW score in 2005? **8.12 (out of 10)**
  - + What was Canada's EFW world rank in 2005? **9th**
6. Drag the timeline cursor to where the map is set on the year 1970. Then push the "PLAY" button to the left of the timeline.
7. Now let's compare two countries, Canada and the United States. Drag the timeline cursor back to the year 2015. While still on the map page, type "Canada" into the country search bar within the map itself. Canada will pop up as an option; click it. Now type "United States" into that same country search bar within the map. The United States will pop up as an option; click it. Look at the box to the left of the map. There are two tabs within this box: "World Rankings" and "Country Info." Click "Country Info" so you can now compare Canada to the United States.
  - + For the year 2015, how did Canada compare to the U.S. when it comes to the

two countries' overall EFW score (that is, the summary score—not the scores for the individual 5 major areas), and their EFW world rank?

	EFW Score (summary score)	EFW World Rank
<b>Canada</b>	7.94	11th
<b>United States</b>	7.94	11th

- + As you can see, Canada and the U.S. tied for its EFW score and EFW world rank in 2015. However, this doesn't mean that these countries are identical when it comes to what economic freedom looks like in each country. The EFW Area Scores (for the 5 major areas of the EFW index) still differ for each country, as do their area rankings. Fill out the table below to compare how Canada and the United States fared when it comes to the individual 5 major areas of the EFW index. For the year 2015, how did Canada compare to the U.S. for its scores for the individual 5 major areas of the EFW index? What were their world ranks for the individual 5 major areas of the EFW index? (see the following page).

## Getting to Know Fraser's EFW Website and its Functions « ANSWER KEY

EFW Major Area	CANADA		UNITED STATES	
	EFW Area Score (out of 10)	EFW Area World Rank	EFW Area Score (out of 10)	EFW Area World Rank
Size of Government	5.87	104th	6.43	79th
Legal System and Property Rights	7.85	16th	7.23	22nd
Sound Money	9.58	29th	9.76	6th
Freedom to Trade Internationally	7.87	44th	7.54	62nd
Regulation	8.55	9th	8.77	5th

8. Now click on “Graph” in the top menu bar (to the right of where it reads “Map” in the menu bar). Canada and the United States should still be in the country search bar that is now directly above the line graph. Scroll down until you can view the full line graph. You’ll see how the EFW score for Canada and the United States has changed over time. Note that to the left of the graph you have the ability to change the type of graph from a line graph to a bar graph. Note that to the right of the graph, you can use the filter to view how these countries scored over time in each of the individual 5 major areas of the EFW, besides viewing how the EFW summary score changed over time. Choose the “Regulation” filter to the right of the graph.

+ Who had a higher economic

freedom score in the Regulation category in 1970, Canada or the U.S.? **Canada**

+ Which of these two countries had the higher economic freedom score in the Regulation category in 2015? **United States**

9. Staying on the “Graph” page, change the filter from the “Regulation” category to the “Freedom to Trade Internationally” category.

+ What trend do you see for both the United States and Canada over time within this area of the EFW index? **Over time (from 1970 to 2015), both the U.S. and Canada have become less economically free when it comes to the freedom to trade internationally.**

10. Now click on “Dataset” in the top menu bar. Canada and the United States should still be in the country search

bar that is now directly above the table displaying the EFW data. Note that this too allows you to select different years using the timeline which is now found directly above the data table and country search bar. To start out, the data table will display given countries and year along with the countries’ EFW world rank, overall EFW summary score, and their scores for each of the individual 5 major areas of the EFW index. You can also choose to display only specific major areas at a time by clicking the dropdown labeled “Indicators” and unchecking any of the 5 major areas. Or, you can choose to filter the data in other ways. At the moment, “Custom” is selected in the “Filter By” dropdown box directly to the left of the country search bar, above the data table. This is because we already have Canada

## Getting to Know Fraser's EFW Website and its Functions « ANSWER KEY

and the United States entered into the country search bar, so the “Filter By” dropdown to the left of the country search bar is set to “Custom” because this is a customized search. However, we can change that “Filter By” dropdown box from “Custom” to: “All Countries & Indicators,” or “Economic Freedom Quartile,” or “Top 10 Countries.” Select “All Countries & Indicators” from this “Filter By” dropdown box. Now the site will display all the data for each country measured by the EFW index, for the given year that is selected. (We still have 2015 selected, but remember you can change the year by using the “Select Specific Year” timeline above the data table.) You’ll see that the data table is organized in such a way where the countries (economies) that are the most economically free are at the top of the table, all the way down to the least-free economies at the bottom of the table. You’ll note that the overall EFW world rank and the overall EFW summary score are colour coordinated where they are blue for the most-free economies, green for the economies in the 2nd quartile, orange for those in the 3rd quartile, and red for those in the least-free quartile. This provides an easy visual of a country’s

overall level of economic freedom while you’re looking at the data.

- + Which economy is the most economically free (world rank of 1), and what is its overall EFW score for 2015? **Hong Kong; EFW score of 8.97**
  - + Which country within the 2nd quartile has the most economic freedom? What is its EFW score for 2015? What is this country’s EFW world rank for 2015? **Czech Republic; EFW score of 7.46; world rank of 42**
  - + Out of the countries in the 2nd quartile, who has the least economic freedom? What is the EFW score for 2015? What is the EFW world rank for 2015? (Hint: Look at the data carefully before answering.) **Lebanon and Paraguay are tied with an EFW score of 6.91 and a world rank of 78**
  - + Which country holds the 100th world rank in the year 2015? Which economic freedom quartile is this? **Russia; the 3rd EFW quartile**
11. You can change the order in which the data in the data table is displayed by clicking the title of a given column in the data table. For example, if you click the title “Overall Score,” within the data table, then it will reorganize the data so that the least-free

economy is at the very top of the data table, and the most-free economy is now at the very bottom. Click “Overall Score” and watch what happens. You should see red figures for “Overall Rank” and “Overall Score” now at the top of the data table, indicating the least-free economies are now at the top of the data table.

- + Which country (for which there is available data) has the least-free economy? What is this country’s overall EFW score for 2015? **Venezuela; EFW score 2.92**
  - + Which individual area (out of the 5 major areas of the EFW index) did this country score the poorest? **Sound Money; (Side-note: It is not surprising that Venezuela performed the poorest in the area of having sound money, given all the articles and news reports in recent years about the terrible inflation crisis happening within Venezuela).**
12. You can change the directional order to have the data organized in terms of any of the titles of the columns across the top. Let’s choose to organize the data in terms of the major area “Legal System and Property Rights.” “Simply click Legal System & Property Rights” once. It will display the most



## Getting to Know Fraser’s EFW Website and its Functions « ANSWER KEY

country who performed best in this area at the very top, and the country who performed worst in this area will be at the very bottom. (Note that if you accidentally click “Legal System & Property Rights” again then it will place the country who performed the worst in this area at the top of the data table, with the country with the best score at the bottom of the table. A simple way to double-check yourself is noting what colours are being shown for the “Overall Rank” and “Overall Score” (since you know that blue and green will represent countries with freer economies, while orange and red represent countries with little economic freedom). Hence, if you only clicked “Legal Systems & Property Rights” once then you should see a country with blue data at the top of the table.

- + Which country scored best (had the highest score) in the Legal System & Property Rights area in 2015? What was the country’s score in this individual area (Legal System & Property Rights)? What was this country’s overall world rank? **Finland; score of 8.88**

### for Legal System & Property Rights; world rank of 17

- + What country had the lowest score in the Legal System & Property Rights area in 2015? What was the country’s score in this individual area? What was this country’s overall world rank? **Central African Republic; 1.85 for Legal System & Property Rights; overall world rank of 158**
13. Note that you can download the entire data set by clicking the “Download Entire Dataset” button located to the top-left of this page, above the data table. This will download the entire economic freedom dataset, including sub-indicators. Or, you can choose to download a filtered dataset by clicking the “Download Filtered Dataset” button, located above the data table in the upper right-hand corner. The Economic Freedom of the World dataset will be an excellent resource for you if you wish to do research in the future where you’re performing a cross-country analysis and need to account for economic institutions.

- 14. Go to the “Filter By”

dropdown options again and click “Economic Freedom Quartile” this time. Notice that the 4 quartiles “Most Free,” “2nd Quartile,” “3rd Quartile,” and “Least Free” are now displayed along the top of the data table. If you click one of the quartile buttons, it will un-check that button and remove that quartile’s entries from the data table. Click “Most Free” and “Least Free” so that these two quartiles are removed from the data table, leaving only the countries within the 2nd quartile and 3rd quartile remaining. Now click the category (column name along the top of the data table) called “Freedom to Trade Internationally” so that it sorts the countries in the 2nd and 3rd quartiles according to this major area.

- + When it comes specifically to the freedom to trade internationally, which 3rd quartile country is more economically free in this area than Bulgaria, a 2nd quartile country? Fill out the following information for that country in the top row of the table below, and the respective information for Bulgaria in the bottom row.

Country	Freedom to Trade Internationally (area score)	EFW Score (summary score)	EFW World Rank	EFW Quartile
Montenegro	8.14	6.77	85th	3rd Quartile
Bulgaria	8.13	7.39	48th	2nd Quartile

## Getting to Know Fraser's EFW Website and its Functions « ANSWER KEY

15. Go to the “Filter By” dropdown box and select “Top 10 Countries.” Click the column name of “Overall Score” (or you can instead click “Overall Rank”) so that the table organizes itself in terms of the overall EFW score/rank.
- + Which 10 countries have the highest levels of economic freedom for the year 2015?

EFW World Rank	Country
1	Hong Kong
2	Singapore
3	New Zealand
4	Switzerland
5	Ireland
6	United Kingdom
7	Mauritius
8	Georgia
9	Australia
10	Estonia

16. Now click on “Research” in the top menu bar, and then click the sub-tab that says “Publications and Commentaries.” You will find the latest edition of the Economic Freedom of the World Annual Report here. You can download the full

publication as a PDF to read later, by clicking “Read the Full Publication.” Click the “Read More” button within the area discussing the latest annual EFW report, and you’ll be able to read a summary of each of the chapters within the most recent annual report, among other highlights from this year’s report.

17. Remaining on the page (when we clicked on the main tab “Research” and then the subtab of “Publications & Commentaries”), now scroll down. You’ll find other annual reports and datasets of other indexes, such as Economic Freedom of North America, Economic Freedom of the Arab World, the Human Freedom Index, the previous year’s Economic Freedom of the World Annual Report. Now scroll all the way to the bottom of this page. Click on “Economic Freedom Research Archive.” This will open up a page that brings you to previous years’ annual reports of Economic Freedom of the World (and the other aforementioned indexes), as well as other literature on economic freedom.
18. Reflect on what you’ve learned how to do in this activity.
- + What is your favorite aspect of the EFW website? Why?

*Answers will vary.*

# LESSON 8

## Economic Freedom Line

### THEME:

This lesson is designed to get students to compare data for a given country to that of others, and to use that information to try to infer how economically free that country is likely to be. The students are not told the real-world name of their country till the very end of the activity, so they won't be biased from knowing additional information about a given country; they will only know the pieces of data presented in their "country card." This activity will challenge students to question preconceived thoughts. They will learn that while there are general trends when it comes to how two variables correlate (such as more economic freedom being associated with higher incomes), there will always be a few shocking outliers that do not fit standard mold.

### DESCRIPTION:

In this lesson, students look at their country cards which contain the following information for their given country (using 2015 data from the World Bank Development Indicators): GDP per capita, life expectancy, and the time (number of days) required to

start a business. They are not told the real-world name of their country. Students are given 5 minutes to place themselves in the EFW quartile in which they think they belong. Then the teacher informs the students of the correct EFW quartile in which they each belong. The students are given another 5 minutes to try to determine their EFW rank relative to the others in the classroom. At the end of the activity, the teacher informs the students of their actual EFW world rank, as well as the real-world name of their country. This will no doubt spark a class discussion, as students are likely to be shocked by a couple of the results.

### LEARNING OUTCOMES:

- + attain practice using critical thinking skills to combine and utilize knowledge gained in previous lessons in an attempt to determine a given country's level of economic freedom when given other data points
- + discover a few shocking outcomes
- realize that while a general trend or correlation speaks for most cases and can be

helpful to gain understanding about how two variables generally relate to each other, it does not mean that said trend will hold true in every single scenario

### PROCEDURE:

1. Prepare for the "Economic Freedom Line" activity.
  - + Make one copy of **Resource 8.1**, **Visual 8.2**, and **Visual 8.3**.
  - + Make a copy of **Handout 8.4** (student directions) for each student in class.
  - + Make a copy of **Resource 8.5** (answer key) for yourself.
  - + Cut the country cards along the dotted lines in **Resource 8.1**.
2. Look at **Resource 8.5** (the answer key) to determine which countries you want to assign to your students. There should be more than enough countries listed so that you'll be able to assign a different country to each student in your classroom, which means some country cards won't be used. Use the key in **Resource 8.5** to select a variety of countries so that all your students won't end up having a country in the

most-free quartile. (Example: Select a few countries from each of the four EFW quartiles so that there is a nice variety. Furthermore, it is a good idea to select a few countries from the most-free quartile that students will expect to rank high in economic freedom, but to also include a few countries from the most-free quartile that students will not expect to be ranked so high in economic freedom (such as Rwanda, Georgia, Estonia, or Guatemala.) In the instances where the economic freedom quartile is unexpected for a given country, it will challenge the students to reconsider any preconceived notions they may have—and they may even be enticed to do a little further research on these countries on their own! The four pages of country cards are organized in such a way where you will have a nice variety of countries from each of the four quartiles even if you were to just cut, separate, and pass out the country cards in the order they appear within the four pages of country cards. The first page also includes one of the “surprise” countries (Rwanda, aka “Country L.”) It is recommended that you put a surprise country such as “Country L” at the top of your stack of country cards you will be passing out, to ensure this will be a topic of discussion within the activity.

3. Once you’ve decided which countries to use from

**Resource 8.1** (depending on how many students are in your classroom), separate these country cards from the rest. Go ahead and highlight these specific countries on your copy of **Resource 8.5** (the answer key) so that you’ll be able to easily identify the country name, rank, and quartile information for the countries you assign to your students.

4. Place the two graphs in **Visual 8.2** within a spot in your classroom that all your students will be able to walk up to and view during the activity.
5. Tape the 4 economic freedom quartile signs from **Visual 8.3** along a wall of your room where students will be able to congregate. Hang the most-free quartile on the wall where it is on the far-left, and then hang the 2nd quartile sign a good amount of space to its right, place the 3rd quartile sign further toward the right, and tape the least-free quartile on the far right side of the wall.
6. Go over **Handout 8.4** (student directions) with your class.
  - + Tell your students you will give them a card with information about a real-world country, but the card does not tell the name of the country. They are going to make an educated guess as to which economic freedom quartile they believe their country belongs. Show your students where each

economic freedom quartile will be gathering (designate the left-most portion of the room as the most-free quartile, the 2nd quartile to its right, the 3rd quartile further to the right, and the least-free quartile the furthest to the right, so that the students will arrange themselves from most-free to least-free). Give them 5 minutes to compare the information in their card with the information within their classmates’ country cards, as well as the information provided in the two graphs in **Visual 8.2**. Tell your students that their goal is to be in the correct quartile when the 5-minute time limit is up.

- + When you pass out the cards, pass them out face-down and tell your students not to look at their country card’s information until everyone has their country card and you say “Begin!”
7. Play the game!
    - + Say “Begin!” and start your 5-minute timer.
    - + When 4 minutes and 30 seconds has passed, announce that there is only 30 seconds left and so everyone needs to move to the quartile they think they belong to, if they haven’t already.
    - + Once 5 minutes is up, shout “Time is up!”
    - + Announce which quartile each student should be in, still without giving away

the country's real name yet. Example: Have each student say their country's coded name such as "Country A." Reference **Resource 8.5** (your answer key) and Inform that student that "Country A" is in the most-free quartile. (Again, you're not yet telling the student the country's real name or the country's EFW rank yet; you're only telling them the quartile to which they belong). Have the student move over to the most-free quartile if he/she isn't already standing in that area. Do this for each student in the classroom.

- + Once everyone is now standing in their correct quartile (after you've told each student where he/she belongs), ask your students if they can try to organize themselves from most economically free to least economically free—this time not just by quartiles but by rank. (The higher ranking countries within each quartile should then be to the left of their given quartile, and the countries they believe to have less economic freedom should be more to the right within their given quartile.) Tell your students they have 5 more minutes to again compare what they know about their own country with what they know about the other students' countries within their own quartile. Tell your students at the end of the 5 minutes, they should have one line formed across the room and they want to try to arrange

themselves as best they can from the most economically free to the least economically free (that is, in terms of a country's EFW world rank).

- + Yell "Begin!" and put your timer on another 5 minutes.
  - + When 4 minutes and 30 seconds has passed, announce that there is only 30 seconds left and so everyone needs to finalize their positions in the Economic Freedom Line.
  - + Once 5 minutes is up, shout "Time is up!"
  - + Your students should now be in a straight line across the length of the classroom. Have each student give you their country "coded name" again (example: Country A, Country B, etc.) Ask each student if he/she wants to take a guess as to which real world country they are. After a student guesses their country's real name, tell each student the actual (real-world) name of their assigned country, as well as the country's true EFW world rank. Once they know their actual EFW rank, have your students reorganize themselves to where they are correctly lined up from most economically free to least economically free.
8. Start a class discussion.
- + Ask your students how their country's actual quartile and actual EFW rank differs from what they originally thought it would be. Which ones had an EFW quartile (and rank)

that was expected? Which countries had surprising results?

- + Ask your students what else they found enlightening or surprising about this exercise. If the topic intrigues them, encourage your students to do their own research on a specific country or how economic freedom relates to a given subject area.

## A FINAL THOUGHT:

This lesson will likely make students question what they know about certain countries. A few examples of countries that are in the most economically free quartile that will likely be shocking to students include: Rwanda, Georgia, and Estonia. Emphasize to your students that the country cards tell us that the average income in Rwanda is only \$1,655, the average income in Georgia is only \$9,016, and the average income in Estonia is only \$27,345. And yet each of these countries are in the most economically free quartile—Rwanda with a world rank of 31, Georgia with a world rank of 8, and Estonia with a world rank of 10. Note: One reason why these three economically free countries haven't seen a positive impact in certain well-being measures that we would expect to be positively impacted (such as average income), is because they only recently adopted institutions and policies that are consistent with economic freedom. It

takes time after the adoption of new institutions for well-being measures to be impacted.

If your students haven't already made the realization, point out that this means that Georgia and Estonia are more economically free (in 2015) than Canada and the United States. In 2015, Canada and the U.S. tied with an EFW world rank of 11. Ask your students what they think of this information? Not long ago, Canada and the U.S. were both in the "Top 10" most economically free countries. Ask your students what they think Canada and the U.S. should do in order to increase their levels of economic freedom.

Your students might also wonder why certain countries have very high average income levels even though they are not even in the most economically free quartile. (Example: This activity shows us that Qatar's average income in 2015 was \$132,938 even though it is only in the 2nd economic freedom quartile. Kuwait has an average income of \$70,107, even though it is only in the 3rd economic freedom quartile. Why? One major reason is because these countries are big oil producers. If your students are curious about this, you may want to encourage your students to research these countries further.

If a student is really interested in a topic relating to economic freedom, encourage the student to utilize the Fraser Institute's EFW website, [www.FreeTheWorld.com](http://www.FreeTheWorld.com), to learn more, or to even do their own

quantitative research using the EFW dataset.

**Going Deeper:** As a homework assignment, ask your students to research the country they were given in the Economic Freedom Line activity. You can decide how thorough you'd like your students' country reports to be, but a couple ideas you could implement include: Ask your students to write a 5 (or 10) page paper on their assigned country, and to give a 5-minute oral presentation to the rest of the class. You may want to emphasize certain factors for your students to include in their reports, such as:

- + the EFW score of the country over time (you can decide the specific time frame, and whether you want the students to include graphs of the data in their report)
- + the country's EFW area ratings (the five major areas that comprise the EFW) over time
- + common economic and well-being measures for the most recent year, such as:
  - > GDP per capita, economic growth, life expectancy, and the poverty rate
- + Depending on the length of the report, you may also want to suggest that your students look into a few more variables, such as:
  - > political rights and civil liberties, gender inequality, and life satisfaction / happiness.

+ Your students will be using databases to gather data for the above variables. You will likely want to give them guidance on what sources and websites they should be visiting to gather these data; see Lesson 4 for reputable sources for these key variables.

+ You can also encourage them to research their country even further by finding current articles about the economic status of their country, the plight or success of the greater population of their citizenry, etc. The issues that the economically free countries are facing will be vastly different than the problems the least economically free countries are facing. Example: Gender equality may be one of the main present-day concerns for economically free countries, while the least economically free countries are more likely to be more concerned with survival issues such as desperate hunger, clean water sources, and diseases such as malaria, HIV/AIDS, etc.

You could also include "questions for thought" to guide your students' research. Examples include:

+ Which of the 5 major areas of the EFW index did the country perform best (for the most recent year's available data)? Which of the 5 major areas of the EFW index did the country perform worst?

- + Has the country's EFW score changed much in recent years? How about over the past 2 decades? If so, which major areas of the EFW index changed the most during that time period, to cause the change in the country's overall EFW score?
- + How does your country measure up when it comes to common well-being measures? Is there a positive or negative relationship between the level of economic freedom in your country and each measure of well-being you're analyzing? Make sure that you are looking at data from the same year when comparing different variables.
- + Is this somewhere you would want to live?
- + After reading current articles about the country: What are a couple of the main problems that this country is struggling with today? Are these the same types of problems that countries on the opposite end of the economic freedom spectrum are facing?

## GLOSSARY:

**Economic freedom:** The cornerstones of economic freedom are (1) personal choice, (2) voluntary exchange coordinated by markets, (3) freedom to enter and compete in markets, and (4) protection of persons and their property

from aggression by others. Individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Individuals are free to choose, trade, cooperate with others, and compete as they see fit.

**Economic Freedom of the World (EFW) index:** The Economic Freedom of the World index, published by the Fraser Institute, measures the degree of economic freedom present in five major areas: (1) Size of Government; (2) Legal System and Security of Property Rights; (3) Sound Money; (4) Freedom to Trade Internationally; (5) Regulation. Within the five major areas, there are 24 components in the index. Many of those components are themselves made up of several sub-components. In total, the index comprises 42 distinct variables. Each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. When subcomponents are present, the sub-component ratings are averaged to derive the component rating. The component ratings within each area are then averaged to derive ratings for each of the five areas. In turn, the five area ratings are averaged to derive the summary rating for each

country. A country's summary EFW rating ranges from 0 to 10, where a higher rating indicates greater levels of economic freedom. See <https://www.fraserinstitute.org/economic-freedom/approach> for more information on the variables comprised within each area of the EFW index.

**Quartile:** one of four equal groups into which a population can be divided according to the distribution of values of a particular variable.

**GDP per capita (i.e. income per capita):** GDP per capita stands for gross domestic product per person. It is a measure of a country's economic output that accounts for its number of people. GDP per capita (PPP) compares GDP on a purchasing power parity basis divided by a country's population.

**PPP (Purchasing Power Parity):** Purchasing Power Parity (PPP) is an economic theory that compares different countries' currencies through a market "basket of goods" approach. According to this concept, two currencies are in equilibrium or at par when a market basket of goods (taking into account the exchange rate) is priced the same in both countries.

**Life expectancy:** the life expectancy for a given country is the average number of years an individual is expected to live in that country.

## Country Data Cards « SEPARATE AND PASS OUT TO STUDENTS

### Country A

GDP per capita (PPP constant 2011 US\$) in 2015: **\$53,463**

Life Expectancy at birth, as of 2015: **84.3 years**

Time required to start a business, as of 2015: **1.5 days**

### Country L

GDP per capita (PPP constant 2011 US\$) in 2015: **\$1,655**

Life Expectancy at birth, as of 2015: **64.5 years**

Time required to start a business, as of 2015: **6 days**

### Country C

GDP per capita (PPP constant 2011 US\$) in 2015: **\$14,533**

Life Expectancy at birth, as of 2015: **74.7 years**

Time required to start a business, as of 2015: **83 days**

### Country B

GDP per capita (PPP constant 2011 US\$) in 2015: **\$42,983**

Life Expectancy at birth, as of 2015: **82.1 years**

Time required to start a business, as of 2015: **1.5 days**

### Country Q

GDP per capita (PPP constant 2011 US\$) in 2015: **\$16,490**

Life Expectancy at birth, as of 2015: **76.9 years**

Time required to start a business, as of 2015: **8.4 days**

### Country N

GDP per capita (PPP constant 2011 US\$) in 2015: **\$16,563**

Life Expectancy at birth, as of 2015: **74.4 years**

Time required to start a business, as of 2015: **186 days**

### Country FF

GDP per capita (PPP constant 2011 US\$) in 2015: **\$43,631**

Life Expectancy at birth, as of 2015: **82.5 years**

Time required to start a business, as of 2015: **2.5 days**

### Country T

GDP per capita (PPP constant 2011 US\$) in 2015: **\$24,124**

Life Expectancy at birth, as of 2015: **70.9 years**

Time required to start a business, as of 2015: **10.5 days**



## Country Data Cards « SEPARATE AND PASS OUT TO STUDENTS

### Country E

GDP per capita (PPP constant 2011 US\$) in 2015: **\$132,938**

Life Expectancy at birth, as of 2015: **78.8 years**

Time required to start a business, as of 2015: **8.7 days**

### Country J

GDP per capita (PPP constant 2011 US\$) in 2015: **\$9,016**

Life Expectancy at birth, as of 2015: **74.8 years**

Time required to start a business, as of 2015: **3 days**

### Country G

Income per capita in 2015: **\$52,704**

Life Expectancy at birth, as of 2015: **78.7 years**

Time required to start a business, as of 2015: **5.6 days**

### Country D

GDP per capita (PPP constant 2011 US\$) in 2015: **\$80,192**

Life Expectancy at birth, as of 2015: **82.6 years**

Time required to start a business, as of 2015: **2.5 days**

### Country U

GDP per capita (PPP constant 2011 US\$) in 2015: **\$32,219**

Life Expectancy at birth, as of 2015: **83.4 years**

Time required to start a business, as of 2015: **14 days**

### Country V

GDP per capita (PPP constant 2011 US\$) in 2015: **\$1,530**

Life Expectancy at birth, as of 2015: **64.6 years**

Time required to start a business, as of 2015: **35 days**

### Country W

GDP per capita (PPP constant 2011 US\$) in 2015: **\$2,901**

Life Expectancy at birth, as of 2015: **62.1 years**

Time required to start a business, as of 2015: **26 days**

### Country X

GDP per capita (PPP constant 2011 US\$) in 2015: **\$19,460**

Life Expectancy at birth, as of 2015: **75.4 years**

Time required to start a business, as of 2015: **7.5 days**

## Country Data Cards « SEPARATE AND PASS OUT TO STUDENTS

<p><b>Country I</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$13,572</b></p> <p>Life Expectancy at birth, as of 2015: <b>76 years</b></p> <p>Time required to start a business, as of 2015: <b>31.4 days</b></p>	<p><b>Country BB</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$4,706</b></p> <p>Life Expectancy at birth, as of 2015: <b>66.4 years</b></p> <p>Time required to start a business, as of 2015: <b>19 days</b></p>
<p><b>Country H</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$5,733</b></p> <p>Life Expectancy at birth, as of 2015: <b>68.3 years</b></p> <p>Time required to start a business, as of 2015: <b>28 days</b></p>	<p><b>Country Z</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$30,381</b></p> <p>Life Expectancy at birth, as of 2015: <b>79.5 years</b></p> <p>Time required to start a business, as of 2015: <b>15 days</b></p>
<p><b>Country K</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$27,345</b></p> <p>Life Expectancy at birth, as of 2015: <b>77.1 years</b></p> <p>Time required to start a business, as of 2015: <b>3.5 days</b></p>	<p><b>Country AA</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$38,509</b></p> <p>Life Expectancy at birth, as of 2015: <b>81.6 years</b></p> <p>Time required to start a business, as of 2015: <b>4.5 days</b></p>
<p><b>Country R</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$34,387</b></p> <p>Life Expectancy at birth, as of 2015: <b>82.2 years</b></p> <p>Time required to start a business, as of 2015: <b>4 days</b></p>	<p><b>Country Y</b></p> <p>GDP per capita (PPP constant 2011 US\$) in 2015: <b>\$61,378</b></p> <p>Life Expectancy at birth, as of 2015: <b>81.5 years</b></p> <p>Time required to start a business, as of 2015: <b>6 days</b></p>

## Country Data Cards « SEPARATE AND PASS OUT TO STUDENTS

### Country M

GDP per capita (PPP constant 2011 US\$) in 2015: **\$22,197**

Life Expectancy at birth, as of 2015: **81.8 years**

Time required to start a business, as of 2015: **5.5 days**

### Country S

GDP per capita (PPP constant 2011 US\$) in 2010: **\$23,522**

Life Expectancy at birth, as of 2015: **72 years**

Time required to start a business, as of 2015: **11 days**

### Country O

GDP per capita (PPP constant 2011 US\$) in 2015: **\$18,864**

Life Expectancy at birth, as of 2015: **74.4 years**

Time required to start a business, as of 2015: **6.5 days**

### Country CC

GDP per capita (PPP constant 2011 US\$) in 2015: **\$35,159**

Life Expectancy at birth, as of 2015: **81.5 years**

Time required to start a business, as of 2015: **0.5 days**

### Country P

GDP per capita (PPP constant 2011 US\$) in 2015: **\$19,102**

Life Expectancy at birth, as of 2015: **76.3 years**

Time required to start a business, as of 2015: **25 days**

### Country DD

GDP per capita (PPP constant 2011 US\$) in 2015: **\$56,517**

Life Expectancy at birth, as of 2015: **83.2 years**

Time required to start a business, as of 2015: **10 days**

### Country EE

GDP per capita (PPP constant 2011 US\$) in 2015: **\$7,253**

Life Expectancy at birth, as of 2015: **72 years**

Time required to start a business, as of 2015: **19.5 days**

### Country F

GDP per capita (PPP constant 2011 US\$) in 2015: **\$70,107**

Life Expectancy at birth, as of 2015: **74.9 years**

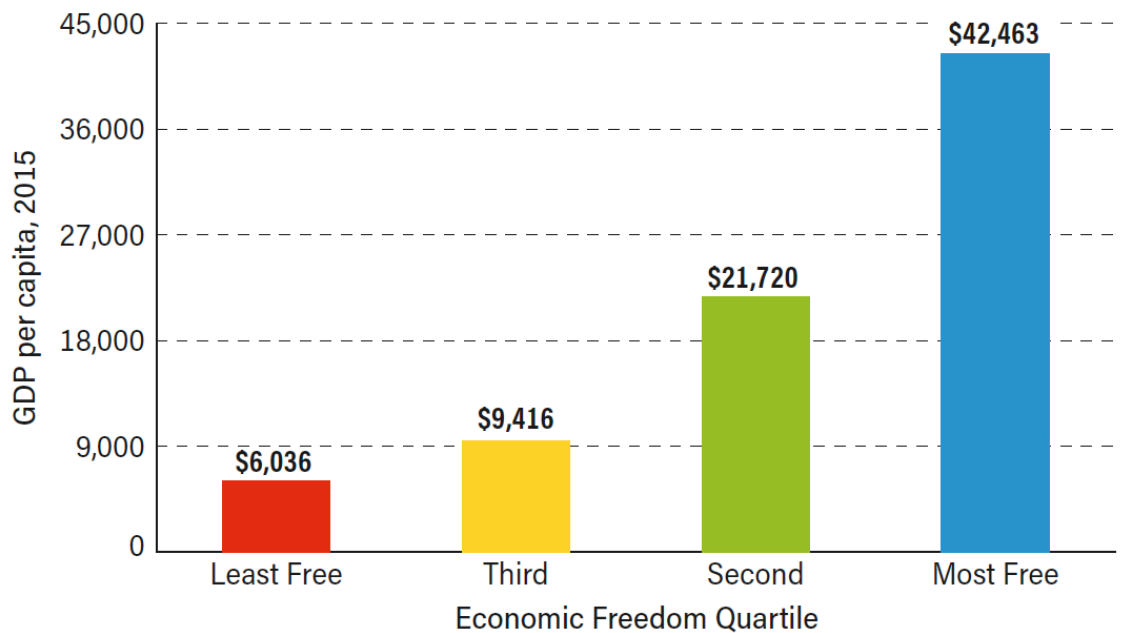
Time required to start a business, as of 2015: **31.4 days**

# VISUAL 8.2

## Exhibit 1.11 from the Economic Freedom of the World 2017 Annual Report:

### Exhibit 1.11: Economic Freedom and Income per Capita

Countries with greater economic freedom have substantially higher per-capita incomes.



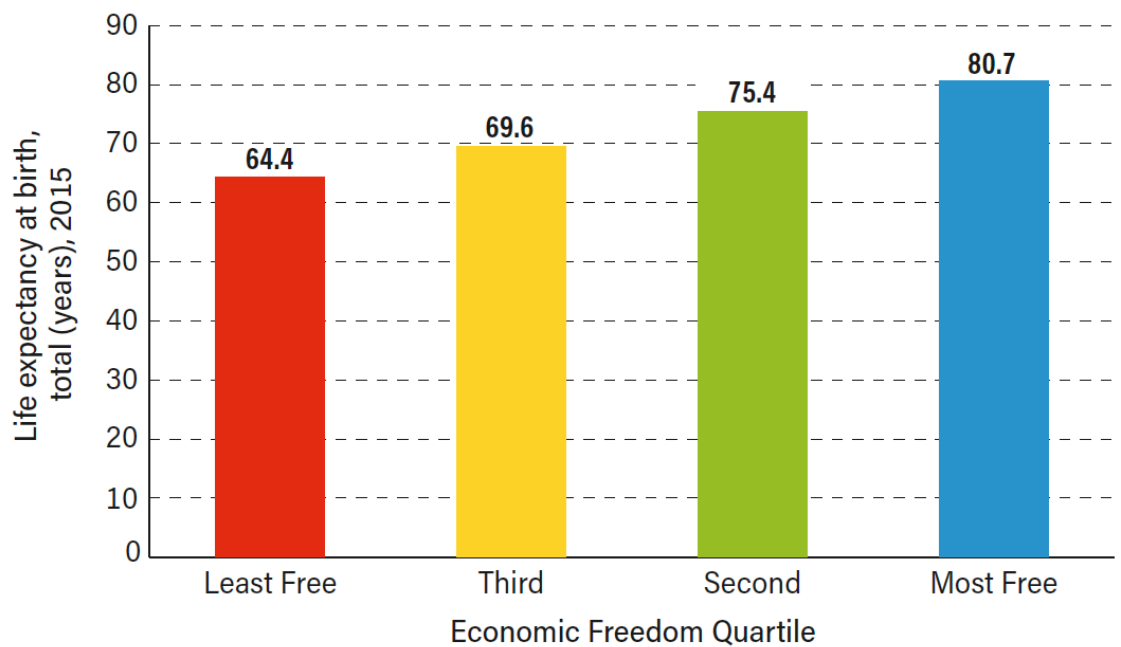
Note: Income = GDP per capita, (PPP constant 2011 US\$), 2015.

Sources: *Economic Freedom of the World: 2017 Annual Report*; World Bank, 2017, *World Development Indicators*.

## Exhibit 1.16 from the Economic Freedom of the World 2017 Annual Report:

**Exhibit 1.16: Economic Freedom and Life Expectancy**

*Life expectancy is about 20 years longer in countries with the most economic freedom than in countries with the least.*



Sources: *Economic Freedom of the World: 2017 Annual Report*; World Bank, 2017, *World Development Indicators*.

## VISUAL 8.3

EFW  
MOST-FREE  
QUARTILE

## VISUAL 8.3

EFW  
2ND  
QUARTILE

## VISUAL 8.3

EFW  
3RD  
QUARTILE



VISUAL 8.3

EFW

LEAST-FREE  
QUARTILE

## Economic Freedom Line « STUDENT DIRECTIONS

**You will be participating in the “Economic Freedom Line” activity.**

You will be given a card telling you three pieces of information about a given country. The card will not say which country it represents, but it will tell you the following for your country:

- + GDP per capita (PPP constant 2011 US\$) in 2015
- + Life Expectancy at birth, as of 2015 (measured in years)
- + Time required to start a business, as of 2015 (measured in number of days)

These data come from the World Bank Development Indicators.

**Note:**

- + The data for the variable of time (number of days) required to start a business *is* one of the 42 distinct variables used to create the EFW index. (This variable from the World Bank Development Indicators is used for the “starting a business” variable within Area 5C of the EFW index (which covers business regulations).
- + Keep in mind that the data you see on your country card for GDP per capita

(PPP constant 2011 US\$) and the data you see for life expectancy at birth are *not components of economic freedom*, and therefore they are *not* variables used to comprise the EFW index. Rather, they are included on your country card to serve as an additional reference point to help you know more about your given country. You’ve already learned in previous lessons that higher levels of economic freedom are associated with higher levels of many well-being measures (including income per capita as well as life expectancy). Use what you know so far about how a country’s level of economic freedom tends to relate to the GDP per capita within that country, and what you know so far about how a country’s level of economic freedom tends to relate to life expectancy in that country. To jog your memory on these two well-being measures, view Visual 8.2. One graph shows the average GDP per capita for the countries within each EFW quartile, and the other shows the average life expectancy for the countries within each EFW quartile. Keep these graphs in mind as you do the activity.

When your teacher gives you your country card, leave it face-down until your teacher says “Begin!” At this point you may flip your country card over and review the data. You and your classmates will have 5 minutes to try to determine in which Economic Freedom of the World quartile you belong. Your teacher has four signs placed in your classroom, designating a specific area of the classroom for each of the four quartiles. Compare the information in your card with that of your classmates’ country cards, as well as the graphs in the room (Visual 8.2) showing how each EFW quartile relates to GDP per capita and how each quartile relates to life expectancy.

Once your teacher calls “time is up,” listen to your teacher to find out what happens in the next part of this activity.

# Economic Freedom Line « ANSWER KEY

*The following is the correct order in which your students should be lined up, by the end of the second part of the activity. If they're out of order, help arrange them in the correct order according to EFW world rank, so that they form an "Economic Freedom Line" (in order of most economically free to least economically free, based on 2015 data).*

*The following are arranged in order of most-free to least-free:*

**COUNTRY A** = Hong Kong  
EFW rank 1 (most-free quartile)

**COUNTRY D** = Singapore  
EFW rank 2 (most-free quartile)

**COUNTRY CC** = New Zealand  
EFW rank 3 (most-free quartile)

**COUNTRY DD** = Switzerland  
EFW rank 4 (most-free quartile)

**COUNTRY Y** = Ireland  
EFW rank 5 (most-free quartile)

**COUNTRY AA** = United Kingdom  
EFW rank 6 (most-free quartile)

**COUNTRY O** = Mauritius  
EFW rank 7 (most-free quartile)

**COUNTRY J** = Georgia  
EFW rank 8 (most-free quartile)

**COUNTRY FF** = Australia  
EFW rank 9 (most-free quartile)

**COUNTRY K** = Estonia  
EFW rank 10 (most-free quartile)

**COUNTRY B** = Canada  
EFW rank 11 (most-free quartile)

**COUNTRY G** = United States  
EFW rank 11 (most-free quartile)

**COUNTRY M** = Chile  
EFW rank 15 (most-free quartile)

**COUNTRY EE** = Guatemala  
EFW rank 23 (most-free quartile)

**COUNTRY L** = Rwanda  
EFW rank 31 (most-free quartile)

**COUNTRY R** = South Korea  
EFW rank 32 (most-free quartile)

**COUNTRY U** = Spain  
EFW rank 36 (most-free quartile)

**COUNTRY Z** = Czech Republic  
EFW rank 42 (2nd quartile)

**COUNTRY E** = Qatar  
EFW rank 45 (2nd quartile)

**COUNTRY S** = Kazakhstan  
EFW rank 66 (2nd quartile)

**COUNTRY W** = Kenya  
EFW rank 70 (2nd quartile)

**COUNTRY Q** = Mexico  
EFW rank 76 (2nd quartile)

**COUNTRY X** = Turkey  
EFW rank 81 (3rd quartile)

**COUNTRY H** = India  
EFW rank 95 (3rd quartile)

**COUNTRY F** = Kuwait  
EFW rank 97 (3rd quartile)

**COUNTRY T** = Russia  
EFW rank 100 (3rd quartile)

**COUNTRY I** = China  
EFW rank 112 (3rd quartile)

**COUNTRY P** = Argentina  
EFW rank 125  
(least-free quartile)

**COUNTRY BB** = Pakistan  
EFW rank 127  
(least-free quartile)

**COUNTRY C** = Brazil  
EFW rank 137  
(least-free quartile)

**COUNTRY V** = Ethiopia  
EFW rank 146  
(least-free quartile)

**COUNTRY N** = Venezuela  
EFW rank 159  
(least-free quartile)