

# **Introductory Economics**

## **Introdução à Economia**

### **Problems**

**2021/2022**

**3rd Quarter (P3)**

#### **3. Inflation, unemployment, and inequality**

**3. Inflação, desemprego e desigualdade**

**3.1.** The following table shows the annual inflation rate (the GDP deflator) of Japan, the UK, China, and Nauru in the period 2016–2019. (Adapted from CORE, The Economy)

|       | 2016   | 2017  | 2018  | 2019   |
|-------|--------|-------|-------|--------|
| Japan | –1.9%  | –1.7% | –0.8% | –0.3%  |
| UK    | 1.6%   | 2.0%  | 1.6%  | 1.9%   |
| China | 6.9%   | 8.2%  | 2.4%  | 2.2%   |
| Nauru | –18.2% | 18.1% | 24.1% | –21.7% |

Based on this information, which of the following statements is correct?

- a. Japan experienced a persistent period of disinflation between 2016 and 2019.
- b. In the UK the price of goods and services remained stable between 2016 and 2019.
- c. China has been experiencing deflationary pressure between 2017 and 2019.
- d. Nauru’s price level at the end of 2019 is lower than it was at the start of 2016.

**3.2.** What is the difference between price level and inflation?

**3.3.** “Core inflation is less volatile than other measures of inflation that include all goods and services.” Comment.

**3.4.** Hyperinflations are extremely rare in countries whose central banks are independent of the rest of the government. Why might this be so? (Adapted from Mankiw, Principles of Economics)

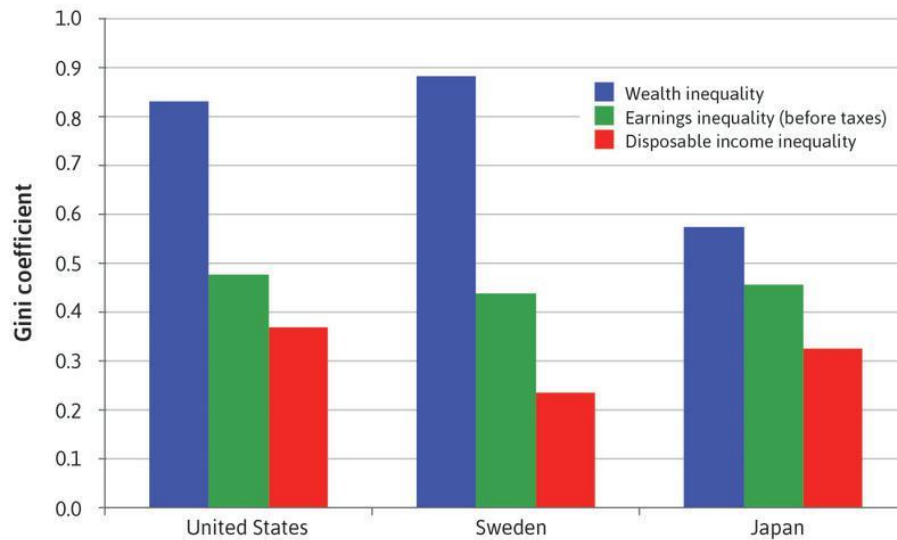
**3.5.** Which of the following statements is correct? (Adapted from CORE, The Economy)

- a. participation rate = employed ÷ labor force.
- b. unemployment rate = unemployed ÷ population of working age
- c. employment rate = employed ÷ population of working age
- d. employment rate + unemployment rate = 1

**3.6.** Draw two models of a Lorenz Curve: one representing a nation with a very small degree of income inequality and the other representing a nation with a high degree of income inequality. Relate with the Gini index.

**3.7.** If a nation's Gini coefficient is 25.0, what does that say about income inequality in this nation?

**3.8.** Figure 1 shows the inequality in wealth, earnings, and disposable income in the US, Sweden, and Japan using the Gini coefficient. Based on this information, which of the statements are correct? (Adapted from CORE, The Economy)



**Figure 1**

- a. Wealth is much more unequally distributed than earnings in all three countries.
- b. Sweden is an unambiguously more unequal society than Japan.
- c. Of the three countries, the US is the most unequal society.
- d. Sweden attains its relatively equal disposable income distribution through its system of taxes and transfers.