



Worksheet 6: Effects of numerical changes answers

- 1 A firm increase the price of its product by 10 per cent, which results in a 23 per cent increase in its revenue.
 - What is the likely effect on the firm's profit, other things being equal?
It will increase (higher revenue while keeping costs unchanged).
 - What is the PED for the firm's product? $PED < 1$. An increase in price caused TR to increase.
 - What conclusion can you draw on:
 - The range of substitutes to the firm's product? *Few/not close, since $PED < 1$.*
 - The proportion of income the product takes? *Small, since $PED < 1$.*
- 2 A country's economic growth slows down from 3 per cent to 2.2 per cent per year.
 - What is the effect on:
 - The country's GDP/national output? *It increased.*
 - The unemployment rate? *It decreased.*
 - Is the country now in recession? *No, output increased.*
 - What is one demand-side and one supply-side factor that could have caused this economic growth?
Demand-side: increase in AD caused by, e.g. increased government spending.
Supply-side: increase in AS caused by, e.g. increase in productivity.
- 3 The current annual rate of inflation is 3 per cent.
 - What is the effect on:
 - The price level: *It increased.*
 - The value of money: *It fell.*
 - The cost of living: *It increased.*
 - The price competitiveness of the country's exports? *It decreases.*
 - Is this a one-time increase in prices? *No, it is continuous.*
 - If the rate of inflation in the previous year was 5 per cent, does this mean the price level fell in the current year? *No, it increased but more slowly than last year.*
- 4 A country experiences deflation of -2 per cent.
 - What is the effect on:
 - The price level: *It decreased.*
 - The value of money: *It increased.*
 - The cost of living: *It decreased.*
 - The price competitiveness of the country's exports? *It increased.*
 - Is this a one-time decrease in prices? *No, it is continuous.*
- 5 A trade union negotiates a 7 per cent increase in workers' wages. In the same year the rate of inflation amounts to 4 per cent.
 - Does it mean ALL workers in the economy receive a wage increase? *No, just the trade union members.*
 - What type of inflation is likely to occur? *Cost-push due to the higher wages, which increase firms' costs of production.*
 - Did the 4 per cent inflation rate weaken or strengthen the trade union's request for a wage rise?
It strengthened it, as it increased the trade union's bargaining power due to inflation causing a fall in workers' real incomes.
 - What happened to the real incomes of the workers from the trade union? And what happened to the real incomes of non-unionised workers who did not receive a pay rise? *Real incomes of the trade union workers increased by 3 per cent. Real incomes of non-unionised workers fell by 4 per cent.*



- 6 An individual earns 2 per cent interest on a deposit at a time when inflation is 5 per cent.
- What is the real interest on this deposit? *Negative 3 per cent.*
 - Does the deposit form part of the individual's income or wealth? What about the interest on the deposit – is it income or wealth? *It is a part of wealth. The interest rate generates an income flow.*
- 7 The rate of unemployment in Country A is 8 per cent. The rate of unemployment in Country B is 10 per cent.
- What is the formula for unemployment rate?
$$\frac{\text{Unemployment rate} = (\text{Number of unemployed workers})}{\text{Labour force}} \times 100\%$$
 - Does this mean there are more individuals unemployed in Country B? What else do you need to know to decide how many individuals are unemployed in each country?
No, it only means a larger percent of the labour force is unemployed. The size of the labour force is needed to calculate how many workers are unemployed.
 - Which country is using its resources (labour) more efficiently? *Country A.*
 - What are the employment rates in each country?
Country A – 92 per cent; Country B – 90 per cent.
 - Are all working age individuals in these countries part of the labour force? What information do you need to decide? *Most likely no. The labour force participation rate for each country is necessary.*
- 8 A country experienced net emigration of 200 000 people per year.
- What can you conclude about the immigration flow to the country? *It is lower than the emigration flow.*
 - What might have caused the net emigration? *e.g. individuals emigrating abroad to look for better job opportunities, war conflicts.*
 - What happened to the country's population size? *It decreased, other things being equal.*
 - If, for the same period, the country experienced growth in population, what might be the reason?
Birth rates exceeded death rates.
- 9 Country A is a developing country and its dependency ratio is higher than the dependency ratio of Country B, which is a developed economy.
- Does this mean Country A has a larger population size than Country B? *Not necessarily.*
 - What can you conclude about the population structure in each country? *Country A probably has a larger percentage of young individuals, while Country B probably has an ageing population.*
 - Other things being equal, what is likely to happen to the labour market in each country in the long run?
Country A's labour force is likely to increase once young dependents enter the labour market, while Country B's labour force is likely to decrease due to an ageing population and as more workers retire.
 - What is the effect of the higher dependency ratio in Country A on its resources? *There is greater pressure on resources to sustain young dependents.*



- 10 The HDI of Norway is 0.96 and the HDI of Cuba is 0.76.
- What can you conclude about the standards of living in each country? *Norway has a better standard of living than Cuba.*
 - What factors might have caused the difference in HDIs? *Norway may have a higher average income and/or longer life expectancy and/or higher mean years of schooling.*
 - If, for the same period, Cuba had longer average years of schooling, what could explain the higher HDI in Norway? *Norway may have higher average incomes and longer life expectancy.*
 - If, for the same period, Cuba had longer average years of schooling, does this necessarily mean the quality of education there is better than in Norway? *Not necessarily – longer mean years of schooling means learners stay in education longer but its quality could be poor.*
- 11 The Balance of Trade of a country = $-\$36$ million.
- What is the BoT position? *BoT is in deficit.*
 - What could have caused the negative value? *Import value > Export value.*
 - Does this necessarily mean the country imported a larger quantity/amount of goods/services than it exported? *No, the BoT measures values, not quantities.*
 - Does the BoT value necessarily mean the country's Current Account is also in deficit? Why (not)? *Not necessarily, as the other CA components (Primary and Secondary income) may be in greater surpluses.*
 - Does the BoT value necessarily mean the country's Balance of Payments is also in deficit? Why (not)? *Not necessarily, as the other components of the BoP (Capital and Financial account) may be in greater surpluses.*