



*Rewarding Learning*

**ADVANCED SUBSIDIARY (AS)**  
**General Certificate of Education**  
**2019**

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# **Economics**

**Assessment Unit AS 2**  
*assessing*  
**Managing the National Economy**



SEC21

**[SEC21]**  
**THURSDAY 16 MAY, MORNING**

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## **TIME**

1 hour 30 minutes.

## **INSTRUCTIONS TO CANDIDATES**

Write your Centre Number and Candidate Number on the Answer Booklet provided.  
Answer **all** questions in Sections **A** and **B** and **one** question in Section **C**.  
You are permitted to use a calculator in this paper.

## **INFORMATION FOR CANDIDATES**

The total mark for this paper is 80.

- Section A: 25 Marks
- Section B: 35 Marks
- Section C: 20 Marks

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

## **ADVICE TO CANDIDATES**

You are advised to take account of the marks for each part question in allocating the available examination time. In questions involving calculations, you are advised to show your workings. Quality of written communication will be assessed in Questions **6**, **7(b)**, **(c)** and **(d)**, **8** and **9**. Quantitative skills will be assessed where appropriate.

## Section A

### Answer all questions (25 marks)

- 1 The table below shows the Consumer Price Index (CPI) for an economy between January 2012 and January 2016.

| Year (January) | CPI   |
|----------------|-------|
| 2012           | 97.8  |
| 2013           | 100.0 |
| 2014           | 106.7 |
| 2015           | 112.5 |
| 2016           | 116.2 |

(a) Identify the base year. [1]

(b) Calculate the annual rate of inflation between January 2015 and January 2016. [2]

- 2 The table below shows the value of sterling against the US dollar and the euro on the 8th August 2017.

| Currency  | Value of £1 |
|-----------|-------------|
| US dollar | \$1.30      |
| Euro      | €1.11       |

Using the information in the table, calculate the value of the euro in US dollars. [2]

- 3 In 2017 the OECD calculated the Gini coefficient for the USA to be 40.8 and for Germany to be 28.3.

Using the information above, sketch a fully labelled diagram to represent the Lorenz curves for the USA and Germany.

[4]

- 4** The table below gives the components of a country's Gross Domestic Product (GDP) in 2017 as measured by the expenditure method. All figures are in billions of US \$.

| Consumption expenditure | Government expenditure | Investment expenditure | Export expenditure | Import expenditure |
|-------------------------|------------------------|------------------------|--------------------|--------------------|
| 10.36                   | 2.97                   | 1.76                   | 1.73               | 2.23               |

- (a) Using the information in the table, calculate GDP at market prices for this economy in 2017. [2]
- (b) Explain how an economist would calculate GDP at factor cost (basic prices) from this figure for GDP at market prices. [2]
- (c) What does the information in the table suggest about the balance of trade in goods and services for this country? [2]

- 5** In quarter 4 of 2016, UK GDP stood at £471,584 mn while GNP (Gross National Product) was £482,897 mn.  
The population of the UK in 2016 was 64.1 million.

- (a) Calculate the Net Primary Income (formerly known as Net Property Income from Abroad, NPIA) figure for the UK in the 4th quarter of 2016. [2]
- (b) Calculate GDP per capita for the UK in Q4 2016. [2]

- 6** Bank of England governor Mark Carney suggested in August 2017 that UK interest rates might have to increase. He argued that this would be necessary to combat inflation which had risen to 2.7%, well above the target set by the Chancellor.

With the aid of an appropriate diagram, analyse the likely impact on the UK economy of a significant increase in the Bank of England base rate. [6]

## Section B: Data Response

### Answer all questions (35 marks)

The following passage was written in August 2017. Read it carefully and answer the questions which follow.

#### 7 UK unemployment hits record lows

##### UK employment and unemployment rates 1st January 2008 to 30th June 2017



Fig. 1

Figures published by the Office for National Statistics (ONS) showed that UK unemployment fell by 64 000 to 1.49 million in the second quarter of 2017. This leaves the UK with an unemployment rate of 4.5%, the lowest it has been since 1975 and one of the lowest in the EU. At the same time the number of people employed rose to almost 32 million or 74.9% of the population aged 16–64, the highest rate since records began in 1971. Unsurprisingly, Conservative ministers have been keen to publicise the figures with Minister for Employment, Damian Hinds, saying the employment figures were “another reminder that our strong economy is giving record numbers of people the chance to find work and as a result is helping the government achieve two of its other core objectives, namely promoting equality of opportunity and reducing the budget deficit”.

1

Not everyone, however, is as upbeat as Minister Hinds about the state of the economy. David Strathern of Strathern Consultancy stated, "Something funny is going on in the UK job market – but it is not a joke! Both employment and unemployment are at record rates yet workers feel no better off. The low levels of unemployment reported by the ONS have not filtered through to wage growth, while inflation has risen as a result of the pound's weakness against the euro. The sum effect of these two factors is that real wages have fallen and are expected to continue to fall until the end of 2018 at the earliest."

2

Reece Bell, also of Strathern Consultancy, is even more downbeat in his assessment of the UK labour market. "The official employment and unemployment figures paint an over-optimistic picture of the UK jobs market," he said. "Many of those who are officially employed are on zero-hours contracts and hence are not employed in any real sense, while there are millions of others who are not in any sort of work but do not meet the criteria to be classified as unemployed. If these under-employed and economically inactive people were included in the figures, the true state of joblessness would be closer to 10 million or 21% of the labour force! It is high time the government stopped trying to fool the electorate with artificial figures of employment and unemployment and got down to the real business of trying to get these 10 million people who currently don't work at all, or don't work as much as they would like, into employment."

3

- (a) Using the information in **Fig.1**, compare the trends in employment and unemployment in the UK between January 2008 and June 2017. [5]
- (b) Explain how falling unemployment could help the government achieve its aim of reducing the budget deficit (paragraph 1). [6]
- (c) Analyse how a reduction in the value of the pound against the euro could cause a reduction in real wages in the UK (paragraph 2). [9]
- (d) Critically examine the view that reducing under-employment and economic inactivity should be the government's number one economic priority. [15]

## Section C: Essays

### Answer one question (20 marks)

- 8 A report from the International Monetary Fund has called upon member countries to make greater use of fiscal policy to encourage economic growth and avoid deflation. The report states that loose monetary policy alone is insufficient to stimulate the world economy and that focused spending on infrastructure projects would create a welcome boost to both AD and AS.

Critically examine the view that the time has come for the UK government to abandon the austerity project and increase government spending to boost the economy. [20]

- 9 Respected economist Joseph Stiglitz has urged governments to abandon GDP as a measure of economic welfare and develop a new measure which truly captures the economic well-being of a nation. In a speech to economy ministers and business leaders in Davos, he stated that “GDP is not a good measure of economic performance or well-being.”

Critically examine the view that governments should cease to measure GDP. [20]

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**THIS IS THE END OF THE QUESTION PAPER**

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## Sources

**Fig.1.....**"UK labour market: June 2017. © Office for National Statistics Contains public sector information licensed under the Open Government Licence v3.0.

**Q7.....**"Adapted from Employment statistics tell skewed story about UK jobs market by Katie Allen, 06 August 2017 © The Guardian

Adapted from UK pay squeeze intensifies as real wages continue to fall, 12 July 2017 © The Guardian

Adapted from Wage growth still lagging behind inflation: ONS by John-Paul Ford Rojas, Business Reporter, 12 July 2017 © Sky News

**Q9.....**Adapted from GDP is not a good measure of wellbeing – it's too materialistic by Joseph Stiglitz, 03 December 2018. © The Guardian

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Answer booklet

Write the question number in the left-hand margin at the start of each answer.

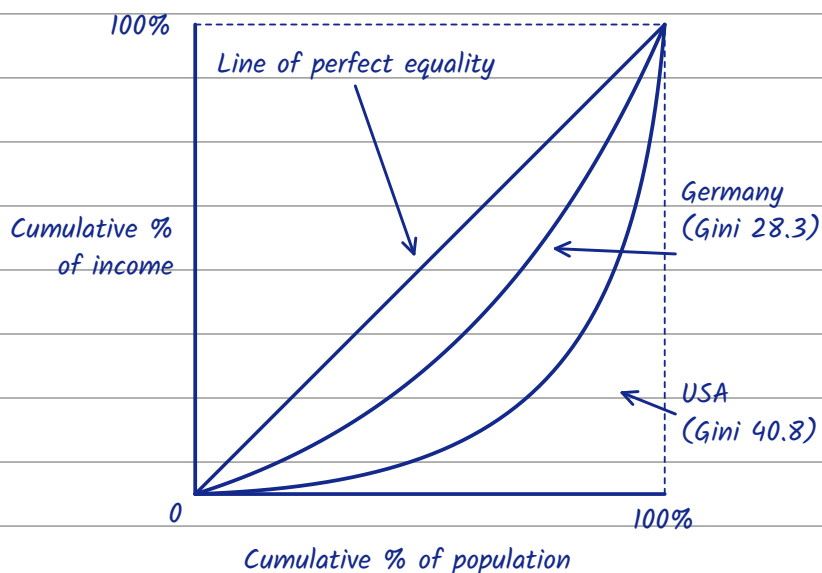
Question  
number

1(a) *The base year is 2013, because the CPI equals 100.0 in that year.*

1(b) *Rate of inflation =  $(116.2 - 112.5) \div 112.5 \times 100$   
 $= 3.7 \div 112.5 \times 100 = 3.29\%$*

2 *£1 = \$1.30 and £1 = €1.11, so €1.11 = \$1.30  
€1 =  $\$1.30 \div 1.11 = \$1.17$  (to 2 d.p.)*

3 *The USA has a higher Gini coefficient (40.8) than Germany (28.3), so income is distributed more unequally in the USA and its Lorenz curve lies further below the line of perfect equality.*



4(a)  *$GDP = C + I + G + (X - M)$   
 $= 10.36 + 1.76 + 2.97 + (1.73 - 2.23) = 15.09 - 0.50 = \$14.59bn$*

4(b)  *$GDP \text{ at factor cost} = GDP \text{ at market prices} - \text{indirect taxes (e.g. VAT and$*

excise duties) + subsidies. Indirect taxes raise market prices above the cost of the factors of production and subsidies lower them, so they must be removed to value output at factor cost.

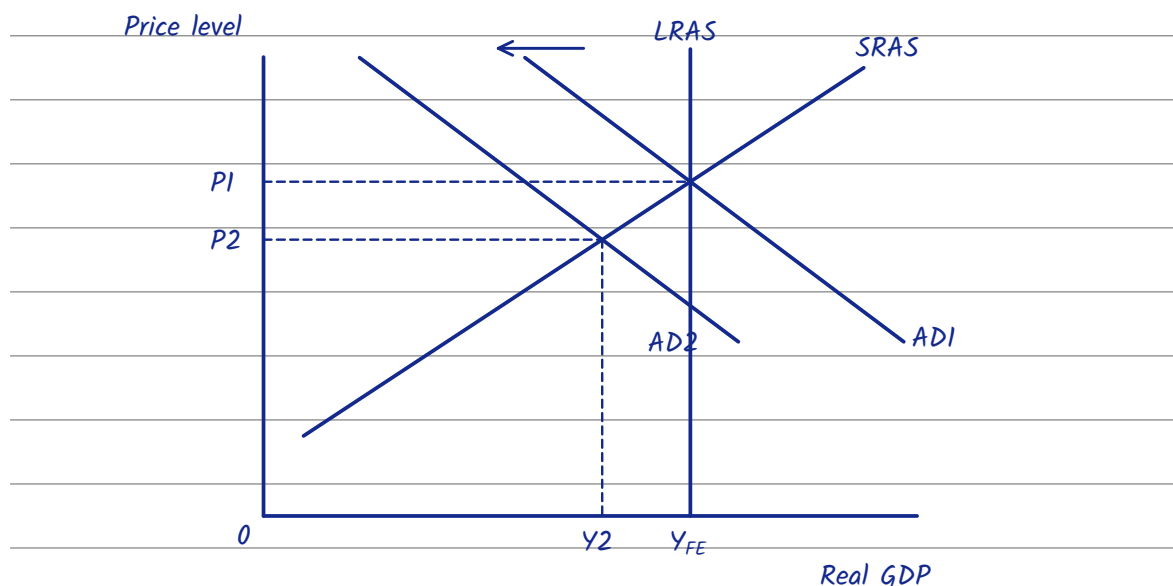
4(c) Exports (\$1.73bn) are less than imports (\$2.23bn), so net exports are negative: the country has a deficit on its balance of trade in goods and services of  $1.73 - 2.23 = -\$0.50\text{bn}$ .

5(a) Net Primary Income =  $\text{GNP} - \text{GDP} = £482,897\text{mn} - £471,584\text{mn} = £11,313\text{mn}$  (a net inflow).

5(b) GDP per capita =  $£471,584\text{mn} \div 64.1\text{mn} = £7,357$  (to the nearest £) for Q4 2016.

6 The Bank of England base rate (Bank Rate) is the interest rate the Bank pays on commercial banks' reserves and charges when it lends to them, so it influences all other interest rates in the economy. It is set by the Monetary Policy Committee to meet the Chancellor's 2% CPI inflation target. With inflation at 2.7%, a significant rise would be contractionary (tight) monetary policy.

A higher base rate raises the cost of borrowing and the reward for saving. Households save more and borrow less to buy credit-financed goods such as cars, and those on variable-rate mortgages face higher repayments, cutting their discretionary income, so consumption (C) falls. House prices may also fall, creating a negative wealth effect. Firms find fewer investment projects profitable because the cost of borrowing rises relative to expected returns, so investment (I) falls. Higher UK interest rates also attract hot money inflows, raising demand for sterling, so the pound appreciates. UK exports become dearer abroad and imports cheaper, so net exports (X - M) fall. As  $\text{AD} = C + I + G + (X - M)$ , AD shifts left from AD1 to AD2.



As the diagram shows, the price level falls from  $P1$  to  $P2$  (in practice inflation falls), so demand-pull pressure eases. The stronger pound also makes imported goods and raw materials cheaper, reducing cost-push inflation, so inflation returns towards the 2% target and real incomes are protected. However, real GDP falls from  $Y_{FE}$  to  $Y2$ , creating a negative output gap: firms need fewer workers, so unemployment rises and economic growth slows, magnified by the negative multiplier effect. Debt interest payments rise for indebted households, firms and the government, worsening the budget deficit, while savers gain. The size of the impact depends on how large the rise is and on time lags of up to two years.

7(a)

Fig. 1 shows an inverse relationship between employment and unemployment: when one rises the other falls (employment rate on the left axis, unemployment rate on the right axis).

Employment: the employment rate was about 73% in January 2008, fell during the recession to a low of about 70% in late 2011 (a fall of 3 percentage points), then rose steadily to a record 74.9% (about 75%) by June 2017, about 2 percentage points above its 2008 level.

Unemployment: the unemployment rate was about 5.2% in January 2008, rose sharply to about 8% by mid 2009 and peaked at about 8.5% in late 2011 to

early 2012, then fell steadily to 4.5% by June 2017, about 4 percentage points below its peak and below its 2008 level.

7(b)

A budget deficit occurs when government spending exceeds tax revenue in a given time period (usually a financial year), so the government must borrow the difference. Falling unemployment, which fell by 64 000 to 1.49 million in Q2 2017 (para 1), helps reduce the deficit in three ways.

Firstly, government spending falls: fewer people claim unemployment-related benefits such as Jobseeker's Allowance or Universal Credit, so transfer payments fall. Unemployment is also linked to poverty and poor health, so spending on housing benefit and the NHS may fall too.

Secondly, direct tax revenue rises: the newly employed earn incomes, so they pay income tax and national insurance contributions, and their employers pay employers' NICs. Firms selling more earn higher profits, raising corporation tax receipts.

Thirdly, indirect tax revenue rises: the newly employed have higher disposable income than they had on benefits, so they spend more, raising VAT and excise duty receipts. Through the multiplier effect this extra spending creates further income and tax revenue.

These automatic stabilisers reduce the cyclical part of the deficit, so with record employment of almost 32 million (74.9%) the government needs to borrow less, slowing the growth of the national debt and its interest payments. However, if many new jobs are low paid or zero-hours (para 3), workers may earn below the personal allowance and still claim in-work benefits, so the improvement is smaller.

7(c)

Real wages are money (nominal) wages adjusted for inflation, showing the quantity of goods and services that wages can buy, i.e. their purchasing power.

Approximately,  $\% \text{ change in real wages} = \% \text{ change in money wages} - \text{rate of inflation}$ . Inflation is a sustained rise in the general price level, measured in the

UK by the Consumer Prices Index (CPI), which records the monthly price of a representative basket of goods and services weighted by household spending.

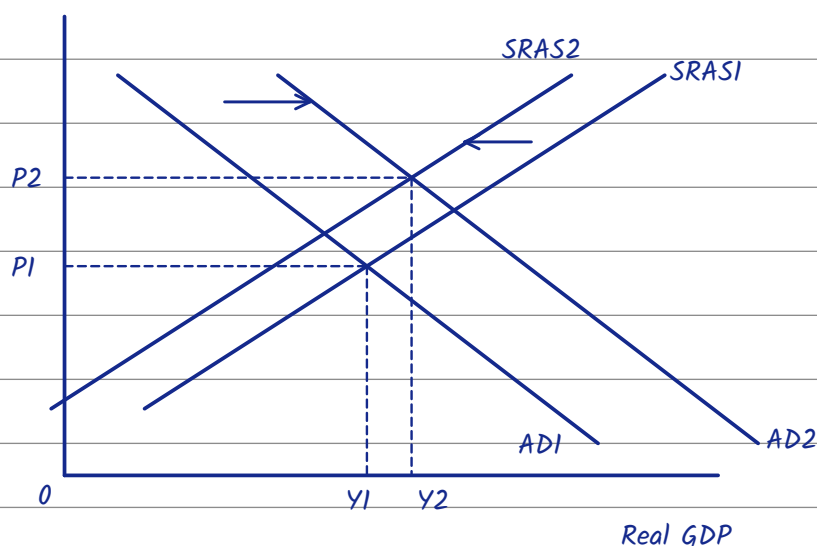
Real wages fall when inflation exceeds money wage growth, as in 2017, when low unemployment had not 'filtered through to wage growth' (para 2).

A fall in the value of the pound against the euro (a depreciation) raises inflation in three ways. Firstly, imports from the eurozone become more expensive in pounds. For example, if £1 falls from €1.40 to €1.10, a €11 bottle of French wine rises in price from about £7.86 to £10. Imported consumer goods are in the CPI basket, so the CPI rises directly.

Secondly, imported raw materials, components and energy such as oil become dearer, raising firms' costs of production. Firms pass these on as higher prices, causing cost-push inflation: SRAS shifts left from SRAS1 to SRAS2.

Thirdly, UK goods become cheaper in euros and imports dearer, so UK firms are more price competitive. Assuming demand is price elastic, net exports rise and AD shifts right from AD1 to AD2, creating demand-pull inflation, especially as unemployment of only 4.5% suggests the economy is close to full capacity.

Price level



As the diagram shows, both effects raise the price level from  $P_1$  to  $P_2$ . If money wages rise by 2% but inflation is 2.7%, real wages fall by about 0.7%: each pound earned buys fewer goods and services, so household purchasing power and living standards fall. Real wages fall further because workers have

little bargaining power: with many on zero-hours contracts and high under-employment (para 3), there is spare capacity in the labour market, so firms need not raise money wages and wages lag behind prices. This is why real wages are expected to keep falling until the end of 2018 (para 2). However, the size of the fall depends on how far the pound falls, the import content of the CPI basket and whether firms absorb higher costs in their profit margins. In the long run, if the depreciation boosts exports and the demand for labour, money wages may rise and real wages recover.

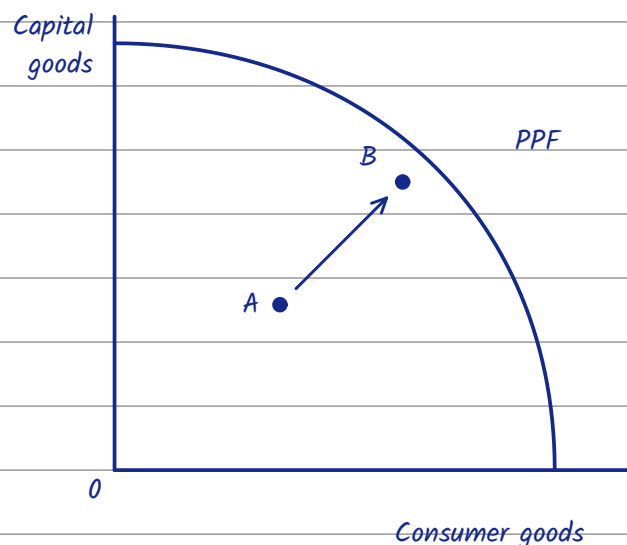
7(d)

Under-employment occurs when people are in work but want to work more hours than they are offered, or work in jobs below their skill level, for example many on zero-hours contracts. The economically inactive are people of working age (16 to 64) who are neither in work nor actively seeking work, so they are not counted as unemployed under the ILO definition (without work, available to start within two weeks and having looked for work in the last four weeks). Reece Bell claims that including these groups gives almost 10 million people, or 21% of the labour force, compared with official unemployment of only 1.49 million, or 4.5% (para 3).

There are strong arguments for making this the number one priority.

Under-employed and inactive workers are wasted scarce resources: the economy is producing at a point such as A inside its production possibility frontier rather than at a point such as B on it (see the diagram below). Bringing these people into productive work increases actual output and economic growth without needing any new resources, closing the negative output gap. Higher incomes raise living standards and consumption, and through the multiplier boost AD further. It would also improve government finances: inactive people often claim benefits such as Employment and Support Allowance and pay little income tax or national insurance, so getting them into work would reduce the budget deficit, which Damian Hinds sees as a core objective (para 1). In addition, long periods outside work cause hysteresis, as skills become outdated, reducing labour

productivity and the long-run productive potential (LRAS). Under-employment and inactivity are concentrated among the low skilled, the disabled and deprived regions, so tackling them would also reduce poverty and income inequality, promote equality of opportunity and improve social cohesion, reducing crime and ill health. Finally, the low official unemployment rate may lead the government to think the labour market is healthy and neglect these hidden problems.



However, there are strong counter-arguments. Firstly, economic inactivity is not always a problem; it includes students in full-time education, who are building human capital and will raise productivity in future, early retirees and people caring for family members. Some workers also choose zero-hours contracts because the flexibility suits them, such as students and parents. So the 10 million figure overstates the problem and the true number who want more work is much lower.

Secondly, reducing them may be costly and slow. The causes are often structural; lack of skills, poor health, disability, caring responsibilities and a lack of affordable childcare. Supply-side policies such as training schemes, subsidised childcare, health support and benefit reforms to improve work incentives cost a great deal, add to government spending in the short run and take years to work, with no guarantee of success. Boosting AD instead risks inflation, as unemployment is already at its lowest since 1975.

Thirdly, there are other urgent objectives. In 2017 inflation was rising because of

the weak pound and real wages were falling (para 2), the budget deficit was still large, productivity growth was weak and Brexit created uncertainty for growth. Policies to raise employment may conflict with these: for example, reducing inflation may require higher interest rates, which would reduce AD and the demand for labour.

Overall, whether reducing under-employment and inactivity should be the number one priority depends on how many of the 10 million genuinely want more work, the cost and effectiveness of the policies available and the time scale. In the short run, controlling inflation to stop the fall in real wages may be more urgent. However, in the long run, getting people who want to work into work raises growth, productivity, tax revenue and equality at the same time, so it supports the other objectives rather than conflicting with them. It should therefore be a top priority, pursued through targeted supply-side policies, but not necessarily the number one priority above stable inflation at a time when real wages are falling.

9

Gross Domestic Product (GDP) is the total value of goods and services produced within a country's borders in a given time period, usually a year. It can be measured by the output, income or expenditure method, where  $GDP = C + I + G + (X - M)$ . Real GDP per capita (GDP adjusted for inflation and divided by the population) is the usual indicator of economic performance and living standards. Economic welfare, however, is the overall well-being of the population, which depends on many things besides income. Stiglitz argues that GDP is not a good measure of either, but the question is whether governments should stop measuring it altogether.

There are many reasons why GDP is a poor measure of welfare. Firstly, it is inaccurate. Collecting data from millions of firms and households is huge and complex, and the ONS frequently revises its figures to correct errors and omissions. In addition, the hidden (black) economy, where workers and firms do not declare income to avoid tax, is left out: it may be 10 to 15% of GDP in the

UK and over 30% in Greece, so comparisons between countries are distorted.

Secondly, non-marketed output is excluded. Growing your own vegetables, painting your own house, caring for relatives and voluntary work add to welfare but are not counted, whereas paying someone else to do them is. In developing countries, where much production is for subsistence, GDP understates living standards.

Thirdly, public services are valued at the cost of providing them, not at their true value: if the NHS or schools provided the same service more efficiently at lower cost, GDP would fall, suggesting welfare had fallen when it had not.

Fourthly, GDP takes no account of what is produced or its quality. Increased spending on defence, prisons or clearing up after a flood raises GDP but does not raise welfare. Improvements in quality, such as smartphones that are far more powerful for the same price, and free digital services such as search engines, are not fully captured. Nor does GDP include leisure: if output rises only because people work longer hours, welfare may not rise.

Fifthly, GDP ignores externalities and sustainability. Increased spending on petrol raises GDP but also increases pollution and congestion, which reduce welfare and are not deducted. Running down natural resources such as oil and forests counts as income, so high GDP growth today may come at the expense of future generations.

Finally, GDP gives no indication of the distribution of income. Average GDP per capita may rise while most of the gains go to a very few: the USA has a much higher GDP per capita than Germany, but also a much higher Gini coefficient (40.8 against 28.3 in 2017), so the typical household may not be better off.

Because of these problems, alternative measures have been developed. The Human Development Index (HDI) combines life expectancy, education (mean and expected years of schooling) and GNI per capita at PPP. The Genuine Progress Indicator and the Index of Sustainable Economic Welfare adjust spending for income inequality, pollution, resource depletion and unpaid work. The ONS Measuring National Well-being programme asks people about their life satisfaction and happiness, and Bhutan measures Gross National Happiness.

Supporters such as Stiglitz argue that these give a truer picture of welfare.

However, there are strong reasons why governments should not cease to measure GDP. Firstly, GDP was never designed to measure welfare: it measures the level of economic activity, and for that it is essential. Changes in real GDP show the economic cycle, so governments and the Bank of England use it to identify recessions (two consecutive quarters of negative growth) and estimate the output gap, which guides fiscal and monetary policy, for example setting interest rates to meet the inflation target. Firms use GDP forecasts to plan investment, and key indicators such as the budget deficit and national debt are measured as a percentage of GDP, as are the EU fiscal rules.

Secondly, GDP is objective and internationally comparable. It is calculated using agreed UN and IMF conventions and can be converted at purchasing power parity to allow for differences in the cost of living. By contrast, the alternative measures are normative: deciding what to include and how to weight life expectancy against income, or to put a money value on pollution, involves value judgements, and happiness surveys are subjective and influenced by culture and expectations. Even the HDI includes GNI per capita, which cannot be calculated without national income accounts.

Thirdly, GDP is closely linked to welfare in practice. Countries with higher real GDP per capita usually have higher life expectancy, better education and healthcare and lower poverty, because higher output generates the incomes and tax revenues that pay for public services. Economic growth has been the main way that billions of people have escaped absolute poverty.

In conclusion, Stiglitz is right that GDP is a poor measure of economic welfare when used on its own, especially when comparing countries with different sizes of hidden economy, income distribution and environmental damage. However, it does not follow that governments should cease to measure it. GDP remains the best available measure of economic activity, without which governments could not manage the economy, and the alternatives are not yet proven to be more accurate and are themselves open to criticism as normative. The best approach

*depends on the purpose: for macroeconomic management GDP is essential, while for judging welfare it should be supplemented by a dashboard of indicators such as the HDI, the Gini coefficient, environmental measures and well-being surveys. Therefore governments should continue to measure GDP, but stop treating it as the single measure of a nation's success.*