



GCE A LEVEL

A520U20-1



MONDAY, 6 JUNE 2022 – AFTERNOON

ECONOMICS – A level component 2
Exploring Economic Behaviour

2 hours 30 minutes

A520U201
01

ADDITIONAL MATERIALS

A calculator.

A WJEC pink 16-page answer booklet.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Answer **all** questions.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

You are reminded of the necessity for good English and orderly presentation in your answers.

Answer **all** questions.

1. The only way is up?

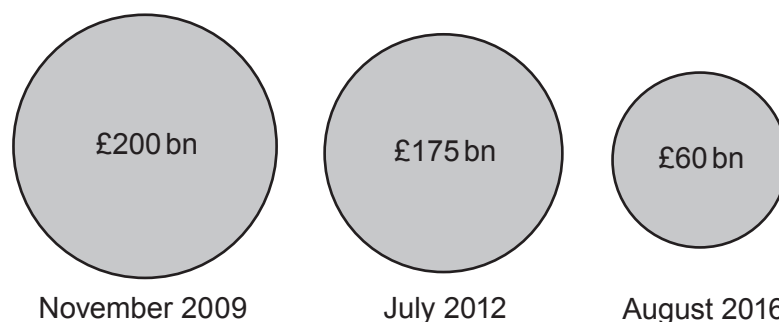
Housebuilders such as Bovis Homes reported record profits in 2018 as the UK housing market continued to expand. Bovis sold 3% more houses in 2018 than in 2017. Profits were also boosted by increased efficiency, which reduced fixed costs.

5 Profits at Bovis in 2018 reflected a long-running rise in average UK house prices, driven by a number of factors. According to Bovis, 'customer demand for new homes [was] supported by attractive mortgage finance and government initiatives to support first-time buyers'.

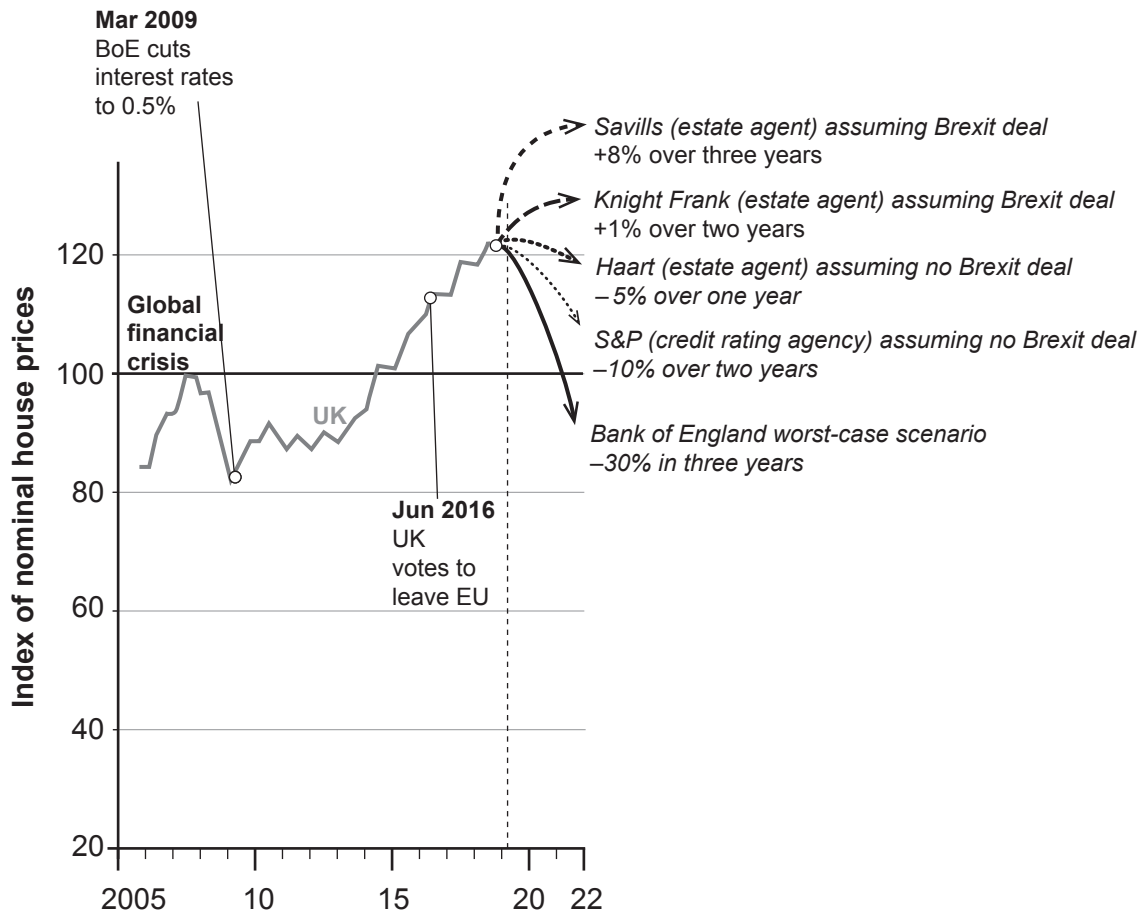
10 Prices over the last 10 years have also been driven up by foreign investment; one consequence of the UK's persistent current account deficit has been overseas investment into UK property of over £30 bn per year. This has increased house prices in London by over 20% in the last 15 years.

Mortgages in the UK remain cheap partly as a result of the Bank of England's QE (quantitative easing) programme (**Figure 1**), which was further expanded after the results of the Brexit vote in 2016.

Figure 1: UK injections of QE

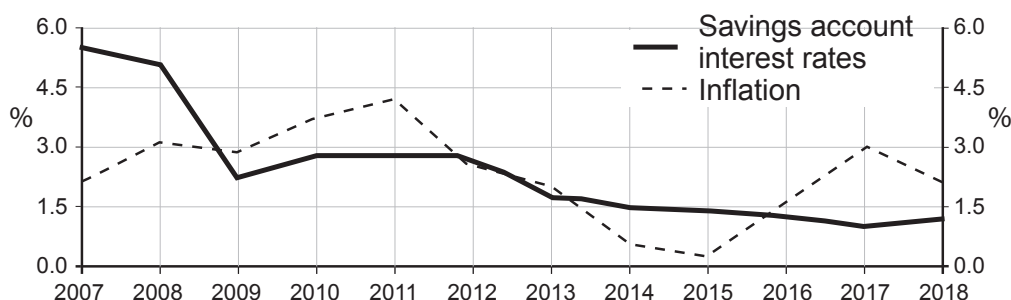


15 This has meant that house prices continued to rise, although there was a fall in some areas and for some property types early in 2019. Some commentators suggest that this may be the beginning of a sharp drop in house prices (**Figure 2**), especially with the Bank of England suggesting that it may begin the process of reversing QE once interest rates rise to 1.5%.

Figure 2: UK House price forecastsA520U201
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QE has been a controversial policy. The Bank of England has argued that the initial £200bn QE programme increased real GDP by 1.5–2 percentage points and increased inflation by 0.75–1.5 percentage points and that the effects of the 2007–08 financial crisis would have been much worse without it. Others argue that the main effect has been on asset prices (**Figure 3**) and government bond yields and that there is little evidence that the cash has made it through to the wider economy, instead encouraging the sort of speculative behaviour that led to the financial crisis in the first place. Critics also argue that QE has reduced interest rates for savers (**Figure 4**) which has led some to invest in riskier assets than they would have done in normal times.

Figure 3: FTSE 100 (Index of UK share prices) (1984=1000)

Figure 4: Savings Account Interest Rates vs Inflation (CPI) (%)

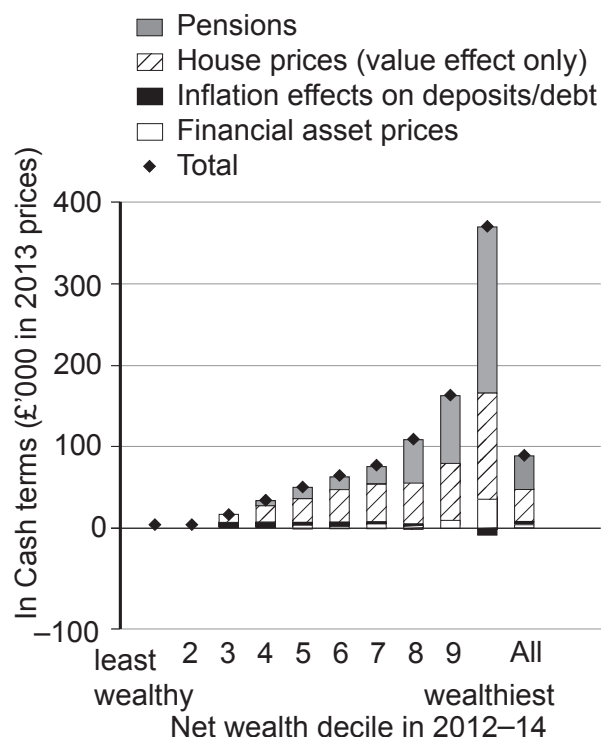
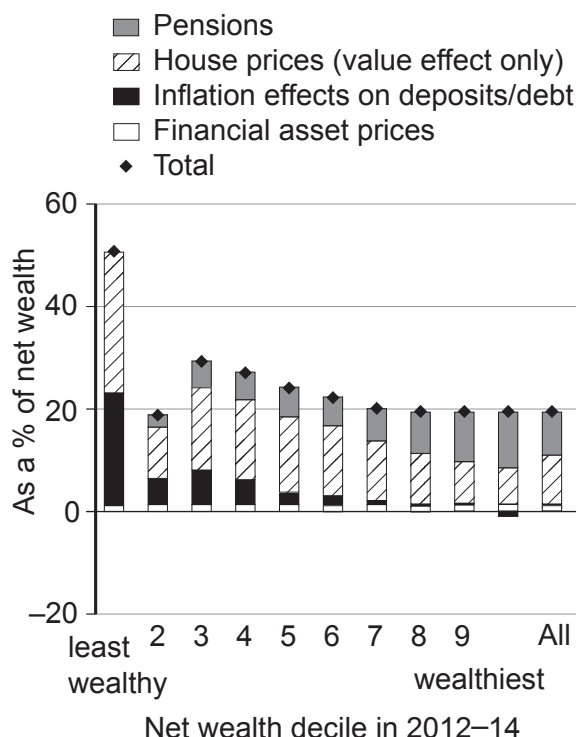
The Bank of England also argues that QE reduced inequality in the UK (**Figure 5**), although the effects have clearly been mixed. The impact on the rental sector hasn't helped, with average private sector rents unaffordable for average working families across half of the UK. Recent research by Shelter (a charity for the homeless) showed that 38% of families with children who are renting privately have cut down on buying food to pay their rent. This issue has led a number of politicians to call for maximum rents to be introduced in the UK, although critics of the scheme say that such schemes simply cause private landlords either to sell (reducing house prices for middle income earners) or to cut back on investments such as home improvements.

Figure 5: Impacts of QE on household wealth

QE effects: those on lower incomes saw a bigger proportional rise in net wealth ...

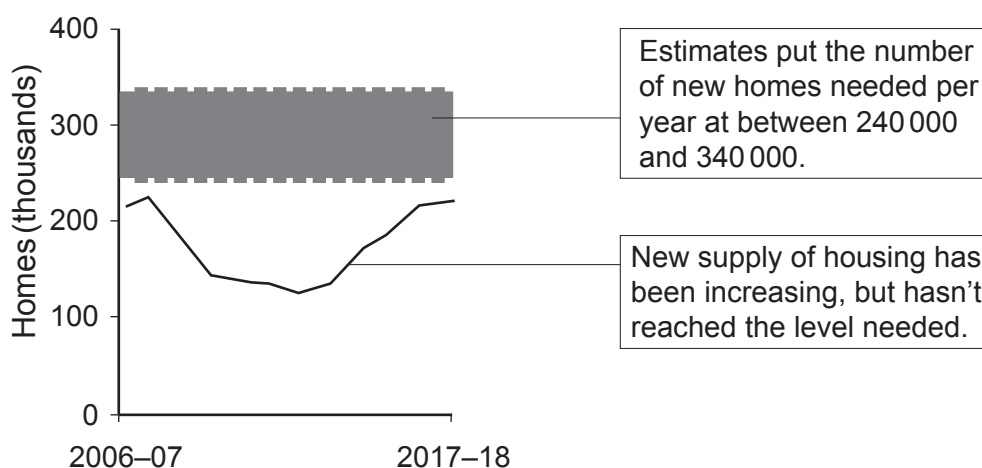
... but wealthier households saw much larger cash gains

Average cumulative real effect of changes in monetary policy on net wealth, 2007 to 2012–14



Some hope for slower house price increases has come from the government's attempts to encourage more housebuilding, especially in the south-east. However, attempts to increase supply have run into a number of difficulties. Restrictions on housebuilding in rural areas have been one factor and a recent report analysing housebuilding companies looked in detail at how these companies deliberately build slowly to keep house prices high in order to maximise their profits from a housing development. These factors have meant that in spite of major efforts to increase housebuilding, demand is still above supply (**Figure 6**).

Figure 6: UK housing demand and housebuilding



The Government acknowledged in December 2018 that the private sector would be unlikely to build enough homes to meet demand, and critics argued that cuts in funding to local government and limitations on their ability to borrow would restrict the amount of social housing that could be built.

The direction of house prices may also depend on Brexit and the nature of it. On the one hand, Brexit might cause the supply of skilled construction workers from abroad to fall, impacting supply. On the other hand, reduced inward migration might mean a fall in the demand for housing. Mark Carney, the former Governor of the Bank of England, suggested that in a worst-case no-deal Brexit scenario, house prices could fall by a third, well and truly ending the housing bubble.

- (a) Using a revenue and costs diagram and with reference to the data, outline why Bovis Homes' profits rose in 2018. [6]
- (b) Explain the link identified in the data between the UK's balance of payments and house prices in the UK. (lines 7–10) [6]
- (c) With reference to the data and using a diagram, discuss whether the Government should introduce maximum rents in the UK rental market. [9]
- (d) Based on the information available in the data (written in March 2019), discuss whether, at that time, house prices were more likely to rise than fall. [8]
- (e) With reference to the data, explain how the Bank of England's QE programme affects households **and** discuss the extent to which it has been beneficial for them. [11]

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2. Australia – out on its own

The last time Australia suffered a recession, the Internet did not exist and people still bought CDs, with Australia even avoiding the worst of the financial crisis of 2008–09. Public sector debt is only 41% of GDP and the healthcare and welfare systems are the envy of many other developed economies. Australia has an HDI of 0.939 and a GDP per capita of \$53 800 – both higher than the UK.

Australia is rich in natural resources and is a major exporter of iron ore, liquefied natural gas (LNG) and coal, as well as agricultural products. Although agriculture and natural resources are only 3% and 5% of GDP respectively. China is Australia's top trading partner and the biggest buyer of its iron ore. However, with the Chinese economy slowing, economic growth in Australia is threatened. Indeed, by the end of 2018 there was concern that Australia was in trouble having entered a 'per capita recession'. Growth in the economy was subdued, reflecting slow-growing household spending and a reduction in investment in housing.

Extract 1: The Australian economy in 2018

- Australia's economy slowed from 4% annualised growth at the start of 2018, to around 1% growth in the second half
- Growth of 2.3% in 2018 was below forecast and placed more pressure on the central bank to cut interest rates
- Australia's economic output shrank 0.2% per capita in the fourth quarter of 2018, after a 0.1% decline in the third

Australia's Treasury Secretary Phil Gaetjens gave an optimistic assessment of the economy, highlighting a growth in mining output, unemployment at a 6-year low and the government's budget returning to surplus in 2019–20. However, he went on to say that the economic outlook was complicated by the prolonged drought in the eastern states and the growing risk to consumption and investment if banks excessively tighten their lending following the Royal Commission on Banking's report into banking misconduct (**Extract 2**). "With income growth expected to increase gradually, household consumption is expected to continue to support economic growth" Mr Gaetjens said. However, because consumer spending was forecast to rise faster than wages, the household savings ratio was expected to decline further. (**Figure 1**).

Extract 2: Royal Commission report into Banking

The recent Royal Commission report into misconduct in the banking and financial services industry followed revelations in the media of a culture of greed within several Australian financial institutions.

The report exposed several scandals, including billing the dead for financial advice, deliberately misleading regulators, lending to those with no capacity to repay, and the profit-motivated selling of misleading financial advice and unnecessary insurance products. However, critics have warned that the Royal Commission has failed to recommend major structural changes or be tougher on individuals and banks that ought to be criminally prosecuted.

Figure 1: Household savings ratio (Savings as a percentage of GDP)



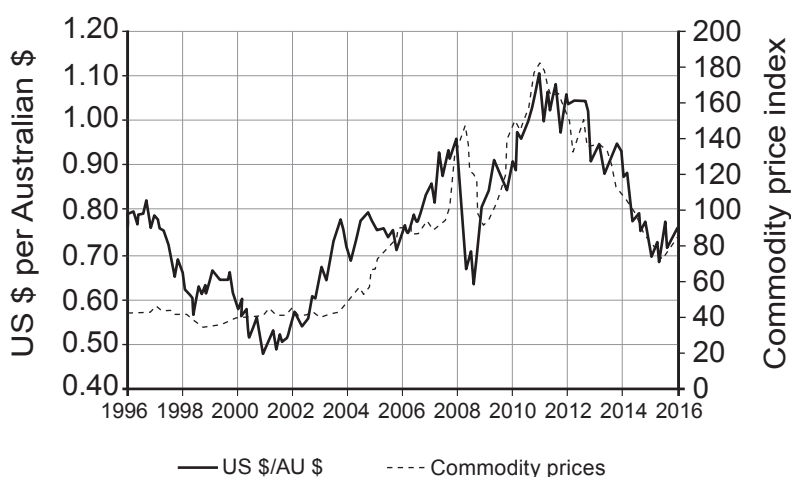
25 The savings ratio is also affected by asset prices. When asset prices are rising people tend to save a smaller proportion of their income, but the reverse happens when asset prices are falling – people become more cautious and save more of their income. The housing market in Australia was weak in 2018 with house prices falling in some areas. By the end of 2018 average Australian house prices were down by 3.5% from their peak.

30 While this can be good news from an affordability point of view, it can also be bad news for consumer spending going forward. However, most households do not immediately change their consumption in response to short-term changes in their wealth according to the governor of the central bank. He also recently suggested interest rates would stay at their record low of 1.5% for the foreseeable future.

35 The value of Australia's coal exports had been forecast to decline sharply over the next 18 months as coal prices fell by 25%. The value of iron ore export earnings was also forecast to decline. On the other hand, the value of Australia's LNG exports was forecast to increase and to overtake coal as Australia's second highest resource export in 2018–19.

40 Like Australia, many developing countries are also well endowed with natural resources such as oil, gas and minerals. However, many suffer from a 'resource curse' tending to have lower growth rates and levels of economic development. Even Australia isn't immune with a clear correlation between commodity prices and exchange rates (**Figure 2**) harming their international competitiveness.

Figure 2: US \$ per Australian \$ and commodity prices



Nevertheless, with almost 40 years without a recession, Australia has apparently avoided the resource curse. Clearly it remains, at least for the moment, out on its own.

- (a) With reference to **Extract 1**, outline the difference between a GDP recession and a 'per capita' recession. [4]
- (b) Discuss the possible effects of the changes in the household savings ratio shown in **Figure 1** on Australian households and the Australian economy. [8]
- (c) Based on the information available in the data (written May 2019) assess the extent to which consumer spending in Australia was likely to continue to grow. [10]
- (d) With reference to **Extract 2**, explain the need for regulation of financial systems. [8]
- (e) To what extent is being 'well endowed with natural resources' (line 38) always a barrier to economic development? Use the data and your own knowledge to support your answer. [10]

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Answer booklet

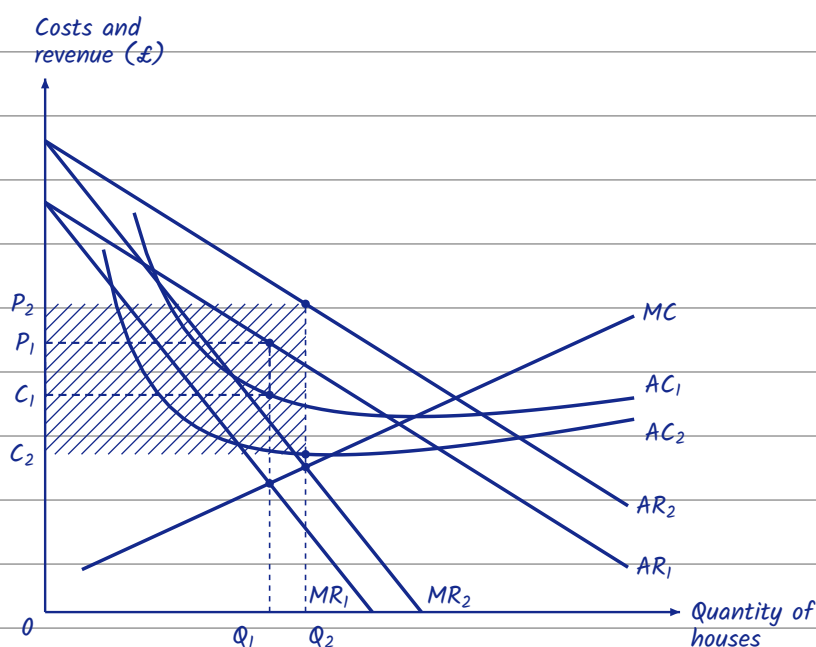
Write the question number in the left-hand margin at the start of each answer.

Question
number

1 (a)

Supernormal profit is total revenue minus total cost, or $(AR - AC) \times Q$. Two changes raised Bovis's profits in 2018. First, demand for new homes rose: the housing market continued to expand, supported by attractive (cheap) mortgage finance, government schemes for first-time buyers and overseas investment in UK property (lines 5 to 9). This shifts AR and MR to the right, from AR_1 and MR_1 to AR_2 and MR_2 . Profit-maximising output, where $MC = MR$, rises from Q_1 to Q_2 (Bovis sold 3% more houses) and price rises from P_1 to P_2 , so total revenue rises.

Second, increased efficiency reduced fixed costs (lines 3 to 4). This shifts average cost down from AC_1 to AC_2 , but MC is unchanged because marginal cost does not depend on fixed costs.



As the diagram shows, price is higher and average cost is lower, so profit per house rises from $P_1 - C_1$ to $P_2 - C_2$ and is earned on more houses.

Supernormal profit rises from the dashed rectangle $P_1 C_1 \times Q_1$ to the larger

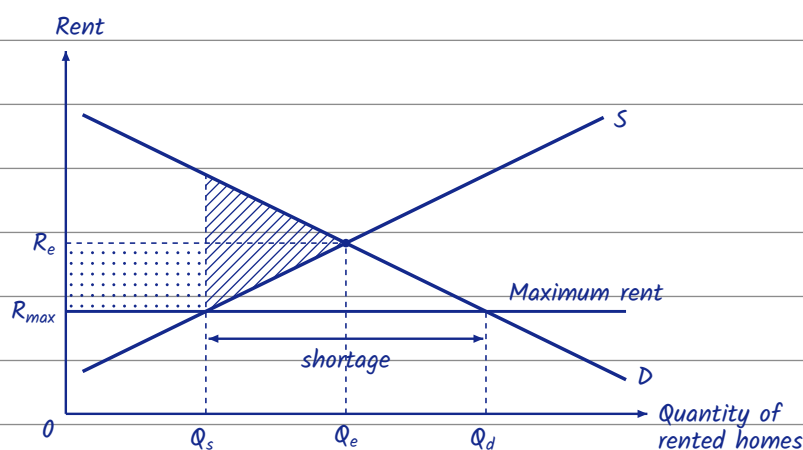
hatched rectangle $P_2C_2 \times Q_2$, explaining the record profits.

1 (b)

The balance of payments records all transactions between UK residents and the rest of the world. The current account records trade in goods and services, primary income (such as investment income) and secondary income (transfers). The capital and financial account records flows of direct and portfolio investment and changes in reserves. With a floating exchange rate the balance of payments must balance overall: total inflows of currency equal total outflows. The UK has a persistent current account deficit (line 8): it spends more on imports and income paid abroad than it earns, so more pounds flow out of the UK than flow in. This deficit must be matched by a surplus on the financial account, meaning net inflows of capital, as foreigners use the pounds they have earned to buy UK assets. One attractive asset is UK property, so part of the deficit is financed by overseas investment into UK property of over £30bn a year (lines 8 to 9). This adds to the demand for housing while supply is inelastic, as housebuilding remains below the level needed (Figure 6), so house prices are driven up, by over 20% in London in the last 15 years (lines 9 to 10). The link is: current account deficit → financial account surplus → foreign purchases of UK property → higher UK house prices.

1 (c)

A maximum rent is a legal ceiling set below the free market equilibrium rent, so landlords cannot charge more than $R_{\max}$.



As the diagram shows, the free market rent is R_e with Q_e properties let. At R_{max} landlords supply only Q_s while Q_d households want to rent, so there is a shortage of Q_s to Q_d . Tenants who still find a property gain the dotted rectangle of consumer surplus, transferred from landlords, so producer surplus falls to the area between R_{max} and supply, and the hatched triangle is the deadweight welfare loss from the Q_s to Q_e lettings that no longer take place. There is a strong case for a maximum rent. Average private sector rents are unaffordable for average working families across half of the UK (lines 28 to 30), and 38% of families with children renting privately have cut down on buying food to pay their rent (lines 30 to 31). A cap raises tenants' real disposable income and reduces poverty. Where housing is scarce, demand is price inelastic and landlords have market power, so a cap prevents the exploitation of vulnerable tenants and is more equitable.

However, critics say landlords respond by selling (lines 32 to 34), so the supply of rented housing contracts towards Q_s , worsening the shortage and possibly homelessness among the families the policy aims to help. The fall in producer surplus reduces landlords' return, so they cut back on investments such as home improvements (lines 34 to 35) and quality deteriorates. With excess demand, homes are rationed by non-price means such as waiting lists, contacts or discrimination, so the gains often go to well-informed middle-income tenants rather than the poorest, and black markets may appear. Above all, a cap treats the symptom, not the cause: 240 000 to 340 000 new homes are needed each year but only about 220 000 were built in 2017 to 18 (Figure 6). On the other hand, landlords selling would reduce house prices for middle-income earners (line 34), so some renters could buy, meaning part of the effect is a shift from renting to owning rather than lost homes.

Overall, the effect depends on how far below equilibrium R_{max} is set and on the elasticity of supply, which is greater in the long run, so the shortage grows over time. A modest cap on rent increases could protect families as a temporary measure, but a strict national maximum rent would shrink and worsen the

rental stock. On balance, the Government should not introduce maximum rents as its main policy; it should increase supply, for example by allowing councils to borrow to build social housing (lines 44 to 46), with targeted housing benefit for poorer families.

1 (d)

There are strong reasons why prices were more likely to keep rising. Demand persistently exceeds supply: 240 000 to 340 000 new homes are needed each year, but only about 220 000 were built in 2017 to 18 (Figure 6). Supply is likely to stay inelastic because of restrictions on rural building, cuts to local government funding that limit social housing (lines 44 to 46) and builders deliberately building slowly to keep prices high (lines 39 to 41). On the demand side, mortgages remain cheap because of QE, and the Bank would only begin reversing QE once interest rates reach 1.5% (line 17), well above the 0.75% Bank Rate in 2019. Help for first-time buyers continues and, while the current account deficit persists, over £30bn a year of foreign investment flows into UK property, with London attractive as a financial centre. If there is a Brexit deal, Savills forecasts +8% over three years and Knight Frank +1% over two years (Figure 2). Rising prices also create expectations of further rises, so bubbles tend to be self-fuelling.

On the other hand, prices had already started to fall in some areas and for some property types early in 2019 (lines 14 to 15). The house price index rose from about 83 in 2009 to about 122 in 2019 (Figure 2), almost 50%, far faster than incomes, so affordability is stretched and this looks like a bubble.

Most forecasts in Figure 2 predict a fall in a no-deal Brexit: Haart -5% in one year, S&P -10% over two years and the Bank of England worst case -30% in three years, in line with Carney's warning of a fall of a third (lines 50 to 52). Reduced inward migration would reduce demand (lines 49 to 50) and uncertainty could deter foreign buyers. The factors that pushed prices up, such as QE and low mortgage rates, may fade.

However, Brexit works both ways: fewer skilled construction workers from abroad

would reduce supply (lines 47 to 49), which pushes prices up and offsets the fall in demand. The outcome also depends on the region: prices may fall in London and the south-east, where the boom was strongest, but keep rising in other areas, and the Bank of England figure is a worst-case stress test, not a forecast.

On balance, at March 2019 national house prices were more likely to rise slowly than fall, because the fundamental shortage of supply and cheap credit were set to continue. A significant fall was likely only in the less probable no-deal scenario, and mainly in London.

1 (e)

QE is an asset purchase scheme: the Bank of England creates new money electronically and buys assets, mainly government bonds, from financial institutions. It injected £200bn in November 2009, £175bn in July 2012 and £60bn in August 2016 (Figure 1), £435bn in total. The purchases raise bond prices and reduce bond yields, so long-term interest rates fall. The sellers, such as pension funds, reinvest the cash in other assets such as shares and property, raising their prices (portfolio rebalancing), and the extra liquidity makes banks more willing to lend, so mortgages are cheap (line 11). Through wealth effects, cheaper borrowing and higher confidence, households spend more and AD rises. Households have benefited in several ways. The Bank estimates the first £200bn raised real GDP by 1.5 to 2 percentage points (lines 18 to 20), protecting jobs, especially for low-skilled workers who find it hardest to find new work.

Homeowners gained as the house price index rose from about 83 in 2009 to about 122 by 2018 (Figure 2), and borrowers have lower mortgage payments and more discretionary income. The FTSE 100 rose from about 3800 in 2009 to about 7700 in 2018 (Figure 3), so pension funds grew. Figure 5 shows the least wealthy decile gained most proportionally, about 50% of net wealth against about 20% for the others.

However, savers have lost. Savings rates fell from about 5.5% in 2007 to about 2.2% in 2009 and about 1% by 2017, below inflation in most years (for

example 2.8% against 4.2% in 2011 and 1% against 3% in 2017, Figure 4), so real interest rates were negative, hurting retired people living off savings, and some moved into riskier assets (lines 25 to 26). In cash terms the gains went to the rich: the wealthiest decile gained about £370 000 while the least wealthy gained almost nothing (Figure 5), so the 50% is a large share of a tiny base, probably a few homeowners. Higher house prices price young people out, adding to unaffordable rents (lines 28 to 31), little cash reached the wider economy (lines 22 to 23), and recent buyers risk negative equity if prices fall by up to 30% (Figure 2).

Overall, whether QE has been beneficial depends on the household: homeowners with mortgages and pensions have gained, while renters, young people and savers have lost. It also depends on the counterfactual, since without QE the recession would have been deeper and unemployment, which hurts poorer households most, higher. QE was therefore beneficial in the short run in 2009, but later rounds raised asset prices more than output, so the benefit is limited and very unequal.

2 (a)

A GDP recession is when real GDP falls for two or more consecutive quarters. A per capita recession is when real GDP per head falls for two consecutive quarters, which happens when GDP grows more slowly than the population. Australia was not in a GDP recession, as GDP still grew by 2.3% in 2018, slowing to around 1% annualised in the second half (Extract 1). However, output per capita shrank 0.1% in the third quarter and 0.2% in the fourth, two consecutive quarters, so it was in a per capita recession: population grew faster than GDP.

2 (b)

The household savings ratio is the proportion of income saved rather than spent (here savings as a percentage of GDP), not the absolute amount saved. Figure 1 shows it falling from about 10% in 2012 to about 2.5% at the end of 2018. For households, the falling ratio means consumer spending has risen faster than

wages (lines 21 to 23), which maintains living standards despite weak income growth. However, low precautionary savings leave households vulnerable to job loss or emergencies, less is saved for big-ticket items and pensions, causing problems later in life, and spending financed by borrowing raises household debt and the risk of default. Borrowers are vulnerable to interest rate rises, although with rates at a record low of 1.5% expected to stay (lines 32 to 33) this risk is small for now.

For the economy, consumption is the largest component of AD. A lower savings ratio means a smaller leakage from the circular flow, raising C and, via a higher MPC, the multiplier, which helped keep growth positive at 2.3% in 2018 as housing investment fell and China slowed, avoiding a GDP recession. However, less saving reduces the supply of loanable funds, which can raise the cost of finance and reduce investment; the Harrod-Domar model suggests this lowers long-run growth. Debt-fuelled consumption risks a credit bubble, and if banks tighten lending after the Royal Commission (line 18), spending could fall sharply. Inflation risk is low as growth is weak.

In the short term the fall is beneficial for the economy, supporting AD when Australia is close to recession. For households the risks are greater: at only about 2.5% there is little buffer left and the ratio cannot keep falling, so future spending growth will depend on wages.

2 (c)

Consumer spending is household spending on goods and services, the largest component of AD. It depends on disposable income, interest rates, wealth, confidence and the availability of credit.

Several factors suggest it would continue to grow. The Treasury expected income growth to increase gradually and consumption to keep supporting growth (lines 20 to 21). Interest rates were at a record low of 1.5% and expected to stay there (lines 32 to 33), so borrowing is cheap and saving unattractive.

Unemployment was at a 6-year low (line 15), supporting incomes and confidence, and mining output was growing, with LNG export values forecast to

rise and overtake coal (lines 36 to 37), raising incomes in that sector. The central bank governor argued that households do not immediately change consumption in response to short-term changes in wealth (lines 30 to 32), so the 3.5% fall in house prices may have little effect, and the economy was still growing at 2.3%.

However, there are strong reasons to expect slower growth. Household spending was already slow-growing (line 12). Spending has grown faster than wages only because the savings ratio fell from about 10% to about 2.5% (Figure 1), so with little room left, consumption cannot outgrow sluggish wages for long and rising debt limits further borrowing. House prices fell 3.5% from their peak, a negative wealth effect that makes people cautious and save more (lines 24 to 28). Banks may excessively tighten lending after the Royal Commission (lines 17 to 19), restricting credit. Output per capita fell by 0.1% and 0.2% in the last two quarters of 2018 (Extract 1), so incomes per person were falling. The drought in the eastern states hits farm incomes, and coal export values were forecast to fall sharply as coal prices fell 25%, with iron ore also down as China slows (lines 34 to 36), reducing incomes in mining regions with negative multiplier effects. With rates already at 1.5%, there is little room to cut them further.

The size of these effects matters: agriculture and natural resources are only 3% and 5% of GDP, so the drought and falling commodity prices have a limited direct effect on national consumption. Total spending can also keep growing simply because the population is growing, even if spending per head stagnates. The time scale matters too: in the short run low rates and high employment support spending, but in the long run spending is constrained by wage growth. On balance, consumer spending was likely to continue to grow, but slowly, roughly in line with incomes and population rather than faster, with a real risk of stagnation if banks tighten credit sharply.

2 (d)

Financial regulation means authorities such as the central bank and regulators

imposing rules on financial institutions: minimum capital and liquidity requirements, standards of conduct, controls on which products can be sold and to whom, rules on providing information, and investigation and punishment of misconduct such as mis-selling.

Regulation is needed because of asymmetric information. Banks know far more about their products than customers, so they can exploit them for profit.

Extract 2 reports misleading financial advice, unnecessary insurance products sold for profit (similar to PPI mis-selling in the UK) and even billing the dead for financial advice. Customers cannot judge quality, so resources are misallocated, trust falls and people may avoid useful financial products. Disclosure rules, product controls and compensation schemes protect consumers.

Second, the profit motive and a culture of greed lead to excessive risk-taking, such as lending to those with no capacity to repay, like the sub-prime lending behind the 2007 to 08 financial crisis. Moral hazard makes this worse: banks that are "too big to fail" expect to be rescued by the government, so they take bigger risks. Defaults then cause bank failures, and because banks are interconnected the costs spread to third parties: a negative externality, as credit dries up, output and jobs fall and taxpayers fund bailouts. Capital and liquidity ratios and affordability checks reduce this systemic risk.

Third, consumers act irrationally: they can be overconfident, short-sighted and follow the herd, borrowing too much and fuelling speculative bubbles, so safeguards are needed.

Finally, firms deliberately misled regulators, which shows regulation only works if it is enforced with real penalties to change incentives. Critics argue the Royal Commission failed to recommend structural change or criminal prosecution, so misconduct may continue. However, regulation must be proportionate, as excessive tightening of lending (line 18) could harm consumption and investment.

curse is the tendency for resource-rich countries to have lower growth rates and levels of development (lines 38 to 40).

There are several reasons resources can be a barrier. Dutch disease: commodity exports raise demand for the currency, causing an appreciation. Figure 2 shows the Australian dollar rising from about US\$0.48 in 2001 to about US\$1.08 in 2011 as the commodity price index rose from about 40 to about 180, which makes manufacturing and other exports less competitive (lines 40 to 42) and can cause deindustrialisation. Primary products have low PED and PES, so prices are volatile: coal prices fell 25% (line 35), making export earnings and tax revenue unstable. The Prebisch-Singer hypothesis suggests their low income elasticity causes a long-run decline in the terms of trade. Dependence on one buyer adds risk, as China's slowdown threatens Australian growth (lines 8 to 10). Mining is capital-intensive and creates few jobs, reduces the incentive to diversify or educate the workforce, and is often foreign-owned, so profits are repatriated. Most seriously, resource rents encourage corruption and conflict over ownership, as in Nigeria, the DRC and Venezuela, so revenues are captured by elites instead of funding development.

However, resources are not always a barrier. Australia has gone almost 40 years without a recession, has an HDI of 0.939 and GDP per capita of \$53 800, both higher than the UK, and public debt of only 41% of GDP (lines 1 to 5).

Agriculture and resources are only 3% and 5% of GDP, so the economy is diversified and resources add export earnings without dominating. Norway saves its oil revenues in a sovereign wealth fund invested abroad, limiting currency appreciation and spreading the benefits over generations, while Botswana, with about 40% of GDP from diamonds, has grown strongly. Resources provide the foreign currency and tax revenue to fill the savings gap in the Harrod-Domar model and fund education and infrastructure. What matters is the quality of institutions: low corruption, clear property rights, transparent financial flows, auctioning extraction rights and a sound macroeconomic framework. Even Australia is not immune, as Figure 2 shows, but rising LNG exports offset

Question
number

falling coal.

Overall, being well endowed with natural resources is not always a barrier to development. The curse is mainly a failure of governance and policy rather than of the resources themselves. It is a barrier where institutions are weak and the economy depends on one or two commodities, but with good governance, diversification and prudent use of revenues, resources support development, as Australia, Norway and Botswana show.