English Written Examination – C1 9 Credits - February 6th 2018

Instructions: This is a test of your ability to read and understand a text in English and to express yourself in the written language. You have **TWO** hours to complete the exam. **Answer all the questions** as you will lose points for unanswered questions. Make your answers complete and concise (180 – 200 words).
Use your own words and paraphrase where possible. You will get **NO** credit for copying pieces of text.
Write only on official paper with a blue or black pen, not pencil. You may use a monolingual dictionary. Hand in the text with your written answers at the end of the exam.

Free Exchange: Think again - *The Economist*, September 23rd 2017

1. The article talks about how economics teaching is under pressure to change. After reading the text explain why the author thinks university syllabuses follow outdated models and why it is essential that traditional courses in economics should be questioned and opened up to broader perspectives.

2. Explain the following words or phrases (underlined in the text) in the context of the article:
   i) … welcoming heretics back into the fold.
   ii) … in the market always generate a 'deadweight loss'.
   iii) 'The Economy' does not dumb down economics;
   iv) … lessons in the weirdness in economics … .

3. Answer only ONE of the following questions:

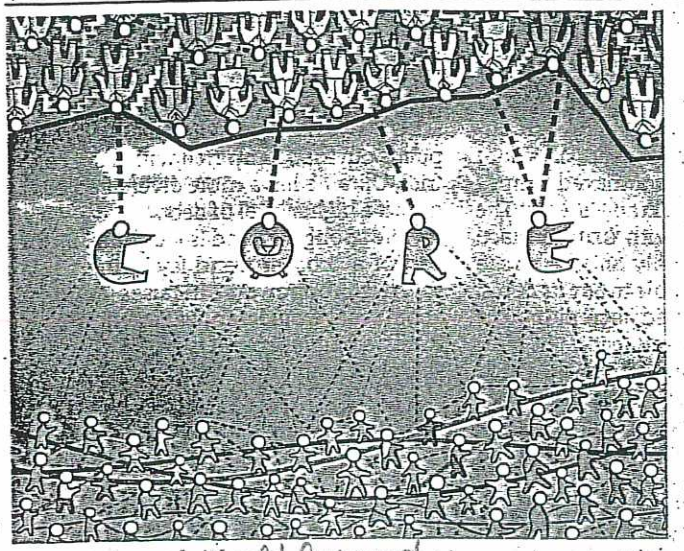
   a) As an economics student can you briefly explain the causes of the last economic crisis?

   b) From your experience would you like to see any changes in your economics courses? What would you like to see more of in your study curriculum?

   c) Economics education worldwide is dominated by neoclassical thinking. Briefly explain neoliberalism theory: is it suitable as a single theory for the recent decade of economic crisis?

Free exchange | Think again

The teaching of economics gets an overdue overhaul



ECONOMISTS can be a haughty bunch. But a decade of trauma has had a chastening effect. They are rethinking old ideas, asking new questions and occasionally welcoming heretics back into the fold. Change, however, has been slow to reach the university economics curriculum. Many institutions still pump students through introductory courses untainted by recent economic history or the market shortcomings it illuminates. A few plucky reformers are working to correct that: a grand and overdue idea. Overhauling the way economics is taught ought to produce students more able to understand the modern world. Even better, it should improve economics itself.

The dismal science it may be, but economics is popular on campus. It accounts for more than 10% of degrees awarded at elite universities each year, by one estimate, and many more students take an introductory class as part of their general-education requirements. Teachers of such courses aim to grab the attention of their glassy-eyed audience, to acquaint students with the basics of the subject and, ideally, to equip them to apply economic reasoning to the real world. Economics teaches that incentives matter and trade-offs are unavoidable. It shows how naive attempts to fix social problems, from poverty to climate change, can have unintended consequences. Introductory economics, at its best, enables people to see the unstated assumptions and hidden costs behind the rosy promises of politicians and businessmen.

Yet the standard curriculum is hardly calibrated to impart these lessons. Most introductory texts begin with the simplest of models. Workers are paid according to their productivity; trade never makes anyone worse off; and government interventions in the market always generate a "deadweight loss". Practising economists know that these statements are more true at some times than others. But the all-important exceptions are taught quite late in the curriculum—or, often, only in more advanced courses taken by those pursuing an economics degree. Other disciplines are also taught simply at first. New physics students learn mechanics through models stripped of all but the simplest elements. The risk is low, however, that a student who drops a physics course will think he lives in a frictionless vacuum.

Students pay $300 or more for textbooks explaining that in competitive markets the price of a good should fall to the cost of producing an additional unit, and unsurprisingly regurgitate the expected answers. A study of 170 economics modules taught at seven universities found that marks in exams favoured the ability to "operate a model" over proofs of independent judgment.

The CORE project (for Curriculum Open-access Resources in Economics) seeks to change all this. It sprang from student protests in Chile in 2011 over the perceived shortcomings of their lessons. A Chilean professor, Oscar Landerretche, worked with other economists to design a new curriculum. He, Sam Bowles, of the Santa Fe Institute, Wendy Carlin, of University College London (UCL), and Margaret Stevens, of Oxford University, painstakingly knitted contributions from economists around the world into a text that is free, online and offers interactive charts and videos of star economists. That text is the basis of economics modules taught by a small but growing number of instructors.

"The Economy", as the book is economically titled, covers the usual subjects, but in a very different way. It begins with the biggest of big pictures, explaining how capitalism and industrialisation transformed the world, inviting students to contemplate how it arrived at where it is today. Messy complications, from environmental damage to inequality, are placed firmly in the foreground. It explains cost curves, as other introductory texts do, but in the context of the Industrial Revolution, thus exposing students to debates about why industrialisation kicked off when and where it did. Thomas Malthus's ideas are used to teach students the uses and limitations of economic models, combining technical instruction with a valuable lesson from the history of economic thought. "The Economy" does not dumb down economics; it uses maths readily, keeping students engaged through the topicality of the material. Quite early on, students have lessons in the weirdness in economics—from game theory to power dynamics within firms—that makes the subject fascinating and useful but are skimmed over in most introductory courses.

Teaching the CORE curriculum feels like doing honest work, says Rajiv Sethi, of Barnard College, who contributed to the CORE textbook. Academic economists do not hide from students the complications they grapple with in their own research. Homa Zarghamee, also at Barnard, appreciates having to spend less time "unteaching", ie, explaining to students why the perfect-competition result they learned does not actually hold in most cases. A student who does not finish the course will not be left with a misleading idea of economics, she notes.

Esprit de CORE

Early results are promising. Assessments at UCL found that CORE students performed better in subsequent intermediate courses than non-CORE counterparts. Anecdotally, at least, students seem more engaged in CORE courses and graduate assistants less pained by the prospect of teaching them.

The hopes for CORE are much more ambitious than simply providing non-economists exposed to the material with a clearer idea of what economics is all about. The new curriculum may also help departments retain students drawn to economics as a way to understand the world's great challenges, and not simply as a place to play with elegant models. That could mean, eventually, a broader array of perspectives within economics departments, bigger and bolder research questions—and fewer profession-shaking traumas in future. ■

Economist.com/blogs/freeexchange

ENGLISH WRITTEN EXAMINATION **February** 10, 2015

C1/ 9 credits

Instructions: This is a test of your ability to read and understand a text in English and to express yourself in the written language. You have **TWO** hours to complete the exam. **Answer all thequestions,** as you will lose points for unanswered questions. Make your answers complete and concise (180 – 200 words).

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No country for young people *The Economist* (November 22, 2014)

1. The article talks about the present economic situation of secular stagnation and suggests that demographics may play a central role in it. According to the author, how is population affecting the economy?

2. Explain the following words or phrases (underlined in the text) in the context of the article:

(i) ... the rich world's prolonged malaise.

(ii) All else being equal ...

(iii) the first baby boomers qualified for Social Security ...

(iv) they have [...] fewer technological breakthroughs to exploit.

3. Briefly discuss only ONE of the following:

(i) Do you agree with the explanation for the present day secular stagnation presented in the article? Are there any other factors that should be considered?

(ii) In what way are population trends changing? Discuss the factors that are affecting population. You can give examples of different situations in the world.

(iii) Many comparisons have been made between the economic situation of the 1930s and the recent crisis. What are the similarities and the differences between the two situations?

Free exchange | No country for young people

Demography may explain secular stagnation

IN THE late 1930s economists trying to explain how a depression could drag on for nearly a decade wondered if the problem was a shortage of people. "A change-over from an increasing to a declining population may be very disastrous," said John Maynard Keynes in 1937.* The following year another prominent economist, Alvin Hansen, fretted that America was running out of people, territory and new ideas. The result, he said, was "secular stagnation—sick recoveries which die in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable core of unemployment."

A year ago Larry Summers of Harvard University revived the term "secular stagnation" to describe the rich world's prolonged malaise. Weak demand and excess savings were making it impossible to stimulate growth with the usual tool of low short-term interest rates, he argued. Demographics may play a central role in the ailment Mr Summers described—indeed, a more central one than in the 1930s.

An ageing population could hold down growth and interest rates through several channels. The most direct is through the supply of labour. An economy's potential output depends on the number of workers and their productivity. In both Germany and Japan, the working-age population has been shrinking for more than a decade, and the rate of decline will accelerate in coming years (see chart). Britain's potential workforce will stop growing in coming decades; America's will grow at barely a third of the 0.9% rate that prevailed from 2000 to 2013.

All else being equal, a half percentage-point drop in the growth of the labour force will trim economic growth by a similar amount. Such an effect should be felt gradually. But the recession may have accelerated the process by encouraging many workers to take early retirement. In America the first baby boomers qualified for Social Security, the public pension, in 2008, on turning 62. According to several studies, this can probably explain about half the drop since then in the share of the working-age population either working or looking for work, from 66% to below 63%. (This echoes the experience of Japan, which slid into stagnation and deflation in the 1990s around the same time as its working-age population began to shrink.)

The size and age of the population also influences how many customers and workers businesses can tap, and so how much they will invest. Keynes and Hansen worried that a falling population would need fewer of the products American factories made. Contemporary models of economic growth assume that firms need a given stock of capital per worker—equipment, buildings, land and intellectual property—to produce a unit of output. If there are fewer workers to hire, firms will also need less capital.

In a research note, Eugénio Pinto and Stacey Tevlin of the Federal Reserve note that net investment (gross investment minus depreciation) is close to its lowest as a share of the total capital stock since the second world war. This is partly cyclical, since the recession led businesses to curtail expansion plans. But it is also secular. Growth of the capital stock slowed from 3.1% a year in 1994-2003 to 1.6% in the subsequent decade. The economists attribute about a third of the deceleration to slower growth in the workforce, and the rest to less innovation. In other words, businesses are buying less machinery because they have fewer workers to operate it and fewer technological breakthroughs to exploit.

A borrower's world

The third means by which demography can influence growth and interest rates is through saving. Individuals typically borrow heavily in early adulthood to pay for education, a house and babies, save heavily from middle age onwards, and spend those savings in retirement. Coen Teulings of Cambridge University has calculated what various countries' collective savings should be given their demographics. Higher population growth and shorter retirements require less saving; older populations more.

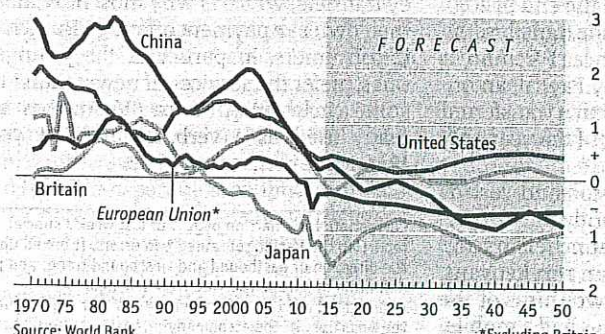
For America, the required stock of savings equalled -228% of GDP in 1970: households should have been borrowers rather than savers since their relative youth and lower life expectancy meant they had ample future income to repay their debts and finance retirement. But as the population aged, its growth slowed and time in retirement lengthened thanks to increased lifespans, the required level of savings rose to 52% of GDP in 2010. For Japan, required savings went from -176% to 119% of GDP in the same period, Germany's from 189% to 325%, and China's from -40% to 86%.

The simultaneous effort by so many countries to save for retirement, combined with weak investment, slowing potential growth, fiscal retrenchment, corporate cash hoarding and inequality (which leaves more of the national income in the hands of the high-saving rich) is depressing the "equilibrium" interest rate that brings investment and saving into balance. There is, however, at least one obvious policy fix. "A higher retirement age reduces saving," Mr Teulings and Richard Baldwin of the Graduate Institute in Geneva write in a recent e-book. "There simply is a limit to the extent to which we can save today in exchange for leisure and high consumption tomorrow. Somebody has to do the work tomorrow; we cannot all be retired by that time."

Moreover, at some point, an ageing population starts to use up the savings it has accumulated. Charles Goodhart and Philipp Erfurth of Morgan Stanley note that the ratio of workers to retirees is now plunging in most developed countries and soon will in many emerging markets. Japan is already liquidating the foreign assets its people acquired during their high-saving years; China and South Korea are starting to do so and Germany will soon. This, they predict, will drag real interest rates, which are now negative, back to the historical equilibrium of 2.5-3% by 2025. ■

The vanishing worker

Working-age population, % change on a year earlier



Source: World Bank *Excluding Britain

Online: For an explanation of *secular stagnation* in graphics, visit Economist.com/stag14

* Studies cited in this article can be found at www.economist.com/stagnation14

Economist.com/blogs/freeexchange

ENGLISH WRITTEN EXAMINATION June 5, 2018

C1/ 9 credits

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Who is behind the wheel? *The Economist* (March 3, 2018)

1. According to the article what kind of impacts may the driverless car have on society?

2. Explain the following words or phrases (underlined in the text) in the context of the article:

   (i) They also led to unforeseen harm.
   (ii) Such granular road-pricing ....
   (iii) If all this sounds implausible, ...
   (iv) ... they represent a seismic shift for society.

3. Briefly discuss only ONE of the following:

   (i) What effects has technology had on the economy in recent years? How important is technological progress for an economy?

   (ii) An English proverb says, "Necessity is the mother of invention". Do you agree with this? For example, do you think driverless cars are necessary?

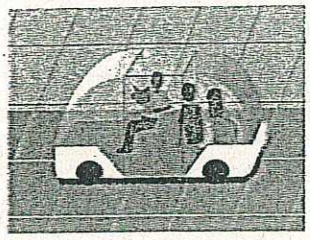
   (iii) Public transport in Rome. What kind of problems do passengers face? What kind of solutions would you suggest?

   (iv) Do you think that technological progress is going too fast for mankind? Give some examples of how people have or have not been able to adapt easily to changes.

Autonomous vehicles

Who is behind the wheel?

Self-driving cars offer great benefits—but could also be a powerful tool of social control



A NEW kind of vehicle is taking to the roads, and people are not sure what to make of it. Is it safe? How will it get along with other road users? Will it really shake up the way we travel? These questions are being asked today about autonomous vehicles (AVs). Exactly the same questions were posed when the first motor cars rumbled onto the roads. By granting drivers unprecedented freedom, automobiles changed the world. They also led to unforeseen harm, from strip malls and urban sprawl to road rage and climate change. Now AVs are poised to rewrite the rules of transport—and there is a danger that the same mistake will be made all over again.

AVs are on the threshold of being able to drive, without human supervision, within limited and carefully mapped areas (see special report). Waymo, the self-driving-car unit of Google's parent company, hopes to launch an autonomous "robotaxi" service in the suburbs of Phoenix, Arizona later this year. General Motors, America's biggest carmaker, plans its own robotaxi service for 2019. On February 26th California said it would abolish the rule that experimental AVs must always have a safety driver on board ready to assume control.

Clean, dream machines

Assuming the technology can be made to work as AV firms expect, it is not hard to imagine the beginnings of the driverless era. Cost means that self-driving vehicles will at first serve as robotaxis, summoned using a ride-hailing app. That way they get used more, offsetting their costs, and provide transport that is cheaper per mile than owning a car, undermining the case for car ownership, at least for townies. UBS, a bank, reckons that urban car ownership will fall by 70% by 2050. Today's cars sit unused 95% of the time, so a widespread switch to robotaxis would let urban land wasted on parking be reallocated.

AVs would dramatically reduce the number of road deaths and, being electric, cut harmful emissions in places with clean grids. Clever routing, closer spacing between vehicles and dynamic congestion-charging could cut traffic. Like cars before them, AVs will reshape cities (a long commute is easier if you work or sleep en route) and redefine retailing (shops can come to you). Carmakers will face enormous change (see page 59); instead of selling to individuals, they will supply fleet operators, or reinvent themselves as "mobility service" providers.

Economists and urban planners should rejoice because AVs mean that, for the first time, the unwelcome externalities associated with cars can be fully priced in. In particular, dynamic road-tolling and congestion charging, adjusting the cost per kilometre according to the time of day, level of traffic, length of trip and so on, will allow fine-tuning of entire urban-transport systems. By setting taxes and tolls accordingly, planners can subsidise rides in poor districts, for example, or encourage people to use public transport for longer trips. They can also ensure that the roads do not end up full of empty vehicles looking for riders. Such granular road-pricing is the logical conclusion of existing schemes. Some cities already have congestion-charging regimes, subsidise ride-hailing in poor areas ill-served by public transport, or impose per-ride taxes on Uber, Lyft and their kind.

Yet the same tolling schemes that will let city planners minimise congestion or subsidise robotaxi services in underserved "transport deserts" have a darker side—and one to which too little attention has been paid. AVs will offer an extraordinarily subtle policy tool which can, in theory, be used to transform cities; but in the hands of authoritarian governments could also become a powerful means of social control.

Panopticons on wheels

For a start, AVs will record everything that happens in and around them. When a crime is committed, the police will ask nearby cars if they saw anything. Fleet operators will know a great deal about their riders. In one infamous analysis of passenger data, Uber identified one-night stands. If, as seems likely, human-driven cars are gradually banned on safety grounds, passengers could lose the freedom to go anywhere they choose. The risk that not all robotaxis will serve all destinations could open the door to segregation and discrimination. In authoritarian countries, robotaxis could restrict people's movements. If all this sounds implausible, recall that Robert Moses notoriously designed the Southern State Parkway, linking New York City to Long Island's beaches, with low bridges to favour access by rich whites in cars, while discriminating against poor blacks in buses. And China's "social credit" system, which awards points based on people's behaviour, already restricts train travel for those who step out of line.

So as robotaxi services roll out this year, and expand to cover wider areas in more cities in the years to come, there is more to think about than technology and transport policy. Experiments with different pricing schemes, decisions about whether to ban private vehicles from city centres, and license auctions for competing private robotaxi operators sound harmless enough. But collectively they represent a seismic shift for society. Autonomous vehicles offer passengers freedom from accidents, pollution, congestion and the bother of trying to find a parking space. But they will require other freedoms to be given up in return—especially the ability to drive your own vehicle anywhere. Choices about who can go where, when and how are inescapably political in nature.

A century ago cars were seized upon as a solution to the drawbacks of horses, which were clogging city streets with manure. The broader social consequences of cars, both good and bad, were entirely unforeseen. Today the danger is that AVs will be treated merely as a technological solution to the problems associated with cars and that, once again, the wider impacts will be overlooked. AVs have the potential to transform physical transport as radically as packet-switching transformed the delivery of data. But as with the internet, realising their benefits is a matter of politics as well as technology. AVs offer a chance to forge a new and better trade-off between personal mobility and social impact—but only if the lesson of the horseless carriage is applied to the era of the driverless car. ■