



---

**ECONOMICS**

**9772/03**

Paper 3 Investigation

**May/June 2016**

**MARK SCHEME**

Maximum Mark: 40

---

**Published**

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2016 series for most Cambridge IGCSE<sup>®</sup>, Cambridge International A and AS Level components and some Cambridge O Level components.

Page 2	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

## 1 Transport and the Environment

**“Environmental taxes are always the best way to solve the environmental problems caused by transport”**

**To what extent do you agree with this view?**

Candidates should demonstrate that they understand the nature of environmental (‘green’) taxes and the environmental problems caused by transport, notably atmosphere emissions and their impact on health and the climate. They should understand the concept of externalities and recognise the environmental problems caused by transport differ between different type or modes (be they freight vs passenger, or aviation vs car).

A strong answer will use the generalisations in the quote (‘always’, ‘best’, ‘transport’) to develop a richer response, whilst a weaker candidate will not necessarily pick up on such ideas. Good candidates will understand that not all the environmental problems caused by transport are equal across different modes/types of transport and thus require a) intervention to different degrees and b) different styles of intervention may be more suitable. The range of environmental taxes examined and the range of modes of transport discussed will be a key differentiator between candidates, with the weakest generalising across both factors. Good candidates will be able to empirically justify their analysis and judgements, whilst weaker ones will write more of a Paper 2 style hypothetical essay.

Given the nature of the question, there is the scope for candidates to look at alternative policies in a range of ways – for example, an answer could look at more nuanced solutions beyond the traditional neoclassical approach (tax/subsidy/regulate), for example promoting a modal shift via behavioural solutions or work from home technology or a more integrated transport system with car sharing. *However*, the focus *must remain* on whether environmental taxes are better or worse than these alternatives – it is not an opportunity to discuss alternatives in isolation of the specific question asked – candidates should analyse why such alternatives may be better or worse than environmental taxes.

They should use appropriate tools and data to support their arguments, especially when considering the relative merits of whether green taxes are the best approach to solve all environmental problems caused by all transport modes.

A strong response will be able to discuss a range of real world policies (or problems) that have been used (whether in the UK or beyond) and justify which policies are more (or less) suitable than green taxes for different issues arising from different modes of transport. The weakest responses will be couched almost exclusively in economic theory (a Paper 2 style response), whilst a stronger response expected on this paper will be supported by evidence of independent research. Some candidates may question the ability to value the environmental problems, particularly from international modes of transport, given they span geographies and generations.

Analysis will almost certainly be assisted by the use of diagrams, most obviously negative externality diagrams, though only strong candidates will think about production and consumption externalities.

Page 3	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

**Answers may include:**

**Knowledge and understanding** of environmental taxes and the environmental problems associated with transport

Examples:

- Green taxes / environmental taxes – definition, explanation (internalising externalities)
- Transport – railways, airlines, cars, ships, freight, passenger
- Environmental problems, including atmospheric, visual, noise pollution; destruction of greenbelt, ecosystems,

**Application** of the environmental taxes to environmental problems caused by transport (UK or global context are both valid)

Examples:

- Different examples of environmental taxes – Air Passenger Duty; London Congestion Charge; (Singapore) Electronic Road Pricing; Road Tax; Fuel Duty; Vehicle Excise Duty
- Emissions by different modes of transport
- Forecasts for emissions
- Externalities
- Considerations of alternative policies:
- Regulations;
- Subsidies for cleaner technologies / alternatives;
- More integrated transport system

**Analysis** of how environmental taxes can tackle environmental problems caused by transport  
Consideration of theory vs practice; pros vs cons of green taxes:

Environmental impacts beyond the immediate, e.g. construction, use and disposal of transport modes. Differences between different modes, e.g. aviation vs road; passenger vs freight.

Conventional neo classical economics: Pigouvian tax; Tradable Permits

This could:

- Internalise the externality – ‘polluter pays principle’ – and ensure commuters or firms pay for the pollution they cause
- encourage the development of more fuel-efficient transport modes
- help reduce the demand for travel
- raise revenue – hypothecated to other complementary policies
- carrot vs stick approach
- expenditure reducing vs expenditure switching effect of a tax

Enforcement issues; price sensitivity issues; equity vs efficiency trade offs; regressive nature; blunt tool.

Significance of different environmental problems caused by different modes of transport may be analysed.

Part of a wider integrated transport strategy: Three-pillar solution known as ‘Avoid-Shift-Improve’: avoid means cutting out motorised travel altogether; shift means getting people to switch from high-polluting modes to low-polluting ones; and improve is about reducing the harmful environmental impacts of vehicle technology.

Subsidies cleaner alternatives such as electric cars – though virtually no emissions at the point of use, although when the batteries are charged emissions are created at power stations. The drawbacks are that battery technology, although improving, remains heavy and expensive and tend to have a limited range and can take several hours to recharge. This is relative to environmental taxes that raises tax revenue that can be hypothecated to other uses.

Page 4	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

Good candidates are likely to support their analysis with appropriate diagrams as well as relevant and recent data on, for example, emissions.

**Evaluation** of the extent to which environmental taxes are always the best way to solve the environmental problems caused by transport

Basic evaluation will be couched in purely theoretical terms, (e.g. depends on PED, time lags, etc.) whilst the strongest evaluation will be supported with empirical evidence.

At a basic level, candidates will understand that environmental taxes are not always the best way to solve environmental problems but may not be able to differentiate between using different tools for either different types of environmental problems, or for different modes of transport. The evaluation here will be generic and be full of assertions rather than judgements.

The question asks for a judgement as to whether green taxes are the best solution – a good candidate will grapple with this, for example discussing whether price incentives or legislation is the *better* route and *why*. Stronger evaluation will be able to disaggregate the question further, perhaps by recognising that for certain environmental problems such as pollution, green taxes can work, but other problems may require regulation. Stronger candidates will exhibit a nuanced understanding – for example that different modes of transport cause environmental problems to different degrees (e.g. in urban vs rural areas or between electric trains and cars vs lorries and planes – or indeed between countries, e.g. car emissions are more of an issue in UK but shipping emissions more of an issue in Netherlands) and thus require different solutions. In certain sectors, some policies are more effective than others, e.g. in aviation, there is no practical alternative to kerosene, but cleaner buses is a reality on the ground. Certain transport sectors are a bigger concern than others, e.g. Aviation is a big source of CO<sub>2</sub> whilst private transport is a big source of NO<sub>x</sub>.

A discussion of equity vs efficiency may also play an important role in deciding what is meant by the word ‘best’ way to solve environmental problems. It is expected that generalisations and value judgements in the quote will be addressed by candidates, e.g. ‘the best way’ and ‘always’. They may deal with the issue of whose perspective it is deemed to be ‘the best way’, e.g. economists/firms/government, looking at various stakeholders in the economy.

Differentiating between environmental problems caused by the building of transport solutions and those that are caused by the running (and eventual disposal) of transport could also offer some scope for evaluation. Some may go further and debate how easy it is quantify the environmental problems caused by transport, given they often span time frames and generations and geographies.

The time frame under consideration may be a source of evaluation – Behaviour change measures such as providing information on alternative ways of travelling, or encouraging lift sharing, can be implemented relatively quickly compared to provision of transport infrastructure or the development and introduction of cleaner vehicles, and in many cases can be a more cost effective approach.

Strong candidates will be able to discuss relevant alternatives to green taxes, such as legislation, subsidies, and offer a more nuanced argument as to their merits but also their pitfalls – weaker candidates may see alternatives as *necessarily* better than green taxes.

Given the forecast growth in the transport sector – in particular aviation – means the issues will get worse unless tackled.

Page 5	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

The following bullet points note examples of supporting analysis/application that *could* be used by candidates. Note, this is **not** an exhaustive list, nor is it what is *required* to do well, but rather it is an **indicative** list of the kinds of independent research that candidates could use to support their arguments.

*Potential data on environmental polluting transport:*

- Around 25 per cent of domestic carbon dioxide emissions in the UK come from transport.
- In the UK it is estimated that road transport contributes 20–30 per cent of national emissions of air pollutants
- Domestic transport and international transport make up 20 per cent and 7 per cent of total UK greenhouse gas emissions, respectively.
- Road transport makes up just over 90 per cent of all domestic transport emissions, with car travel accounting for over a half (58 per cent) and heavy goods vehicle and light van traffic accounting for just under a third (30 per cent).
- NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>: road vehicles are responsible for 33 per cent, 15 per cent and 18 per cent of the national total emissions, respectively.
- Heavy-duty trucks and buses are the main source (38 per cent) of NO<sub>x</sub> emissions. Diesel cars are now the second-largest (29 per cent) source of NO<sub>x</sub> emissions.
- The change in emissions does vary between the vehicle types. NO<sub>x</sub> emissions from petrol cars have reduced by some 90 per cent, whereas emissions from diesel cars have actually risen by 250 per cent.
- Of the 600 local Air Quality Management Areas declared in the UK – areas which breach UK national air quality objectives – some 95 per cent are a result of transport activity. Some 50 per cent of the total national health impact of air pollution is estimated to be related to urban traffic emissions, amounting to between £4.5 billion and £10.6 billion per year.
- Estimated that across the EU in 2010, air pollution caused over 400,000 premature deaths as well as substantial avoidable sickness, e.g. respiratory problems.
- In UK: Between 1990 and 2009 greenhouse gas (GHG) emissions from transport have increased by 13 per cent.
- Emissions from international transport have grown by 75 per cent between 1990 and 2009.
- Emissions from international aviation in 2009 were more than double 1990 levels (a 110 per cent increase). Emissions from international aviation made up a fifth (20 per cent) of total transport GHG emissions in 2009.

*Different modal impacts (UK Environmental Agency):*

- Cars and taxis equate to 11 per cent of all domestic GHG emissions. Heavy goods vehicles 4 per cent. Road equates to 21 per cent, rail 1 per cent.
- CO<sub>2</sub> specifically: 25 per cent from domestic transport; 13 per cent cars and taxis; 5 per cent heavy goods vehicles. 25 per cent road; Household private transport 11 per cent; Transport and storage industries: 15 per cent; Air transport services 7 per cent; road freight 3 per cent
- Carbon monoxide: 27 per cent of total comes from cars and taxis; 2 per cent from motorcycles and mopeds; 2 per cent domestic shipping; 35 per cent from transport sector.
- Nitrogen oxide: 15 per cent cars and taxis; 8 per cent heavy goods vehicles; 3 per cent buses and coaches; 4 per cent rail;
- PM<sub>2.5</sub>: 5 per cent cars and taxis; 2 per cent heavy goods vehicles; 2 per cent rail
- Noise pollution from airports: Heathrow: 459 square km/thousands to 470 between 2000 and 2013. Gatwick: 251 to 244. Manchester 177 to 161. Luton 55 to 71.
- Some environmental problems are greater than others, e.g. PM<sub>2.5</sub> is more dangerous than NO<sub>x</sub>, but policy has been historically focussed on CO<sub>2</sub>.

Page 6	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

*Policies to address the environmental problems:*

- Reducing greenhouse gases from transport will help UK long term goal of reducing the UK's greenhouse gas emissions by at least 80 per cent compared to 1990 levels by 2050.
- Road pricing / Pigouvian Taxes / Polluter Pays Principle / tradable permits:
  - e.g. UK Air Passenger Duty; Fuel Duty; Vehicle Excise Duty; London Congestion Charge; Singapore's ERP.
  - Scope to tailor, e.g. to rural vs urban areas; times of day; types of vehicles.
  - However in UK are often poorly targeted, e.g. blunt instrument and often a fixed cost – which creates incentive for excessive use.
  - Aircraft operators are now included within the European Union Emissions Trading Scheme.
  - Aviation fuel for international flights is exempt from taxation – effectively acts as a subsidy. This also reduces the incentive for airlines to invest in more efficient aircraft. They could be incentivised via a fuel tax.
  - Environmental taxes raised £44.6 billion in the UK in 2014.
  - Despite rising by an average of 5.0 per cent per year since 1993 (in current prices), environmental tax, revenue has remained broadly stable as a percentage of GDP (2.5 per cent in 2014).
  - Hydrocarbon oil duties (including transport fuels) accounted for 60.8 per cent of all environmental taxes in 2014.
  - Households paid an average of £765 in environmental taxes in 2012.
  - In 2014, transport taxes contributed 23.7 per cent of all environmental tax revenue. Motor vehicle taxes paid by households made the most important contribution, accounting for 47.6 per cent of total transport tax revenue in 2014.
  - APD is banded from £13 to £94 depending on distance flown.
  - Fuel duty: petrol/diesel (57.96 p/l); LPG (31.61 p/kg); bio gas (24.7 p/kg);
- To encourage more people to drive ultra-low emissions vehicles, such as electric/hydrogen/hybrids, the UK government:
  - provides grants to those who purchase ultra-low emission vehicles
  - is setting out a framework for the development of a recharging network for electric and plug-in hybrid vehicles (In Norway, electric vehicles have the highest market share in the world – in January 2014 : 10 per cent. Electric vehicles are also exempt from road tolls, public parking charges, vehicle tax, and company car tax, and are able to use bus lanes to avoid congestion).
  - Increase hydrogen refuelling stations: 65 hydrogen refuelling stations by 2015, rising to 330 before 2025 and 1,150 by 2030.
  - continues to give funding to the Plugged-in Places programme.
  - continues to set performance standards on emissions reductions on new vehicles – a new car is c.18 per cent more fuel efficient than the car it replaces.
  - But whilst greener hybrid and electric cars have increased ninefold since 2006 still only account for just 0.5 per cent of entire fleet
- Sustainable biofuels (produced with low impact on the environment) can help reduce greenhouse gas emissions from transport:
  - Natural gas engines for HGVs run on biomethane.
  - 2011 – £10 million of targeted funding to improve air quality in London, including retrofitting buses with pollution reduction technology.
  - the Local Sustainable Transport Fund is providing £600 million between 2011 and 2015 to 96 local transport projects across England
  - putting £8 million into low emission HGVs and their supporting infrastructure

<b>Page 7</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge Pre-U – May/June 2016</b>	<b>9772</b>	<b>03</b>

- Time frame: Electric and hydrogen fuel cell vehicles have costs limitations which limit their sales. In 2012 the UK market share for battery electric cars was 0.06 per cent, and even hybrid cars accounted for a mere 1.2 per cent. Most expect strong sales of plug-in vehicles when breakthroughs in the cost and performance of battery technology are achieved, probably in the 2020–2030 timeframe. Not a short term solution.
- Governmental failure?: The problem in UK is that several departments are responsible for air pollution – which means nobody has taken a lead on it (Joan Walley, Labour MP chairs environmental committee that has released a series of damning reports) – lack of government will to tackle drivers (e.g. Theresa May abolished specific Department for Climate Change)?
- Since 2001 the annual Vehicle Excise Duty (VED) rate for new cars has been determined by CO2 emission figure and the type of fuel used. VED discounts are available for alternatively fuelled cars, e.g. hybrids, gas and biofuels.
- On the fuels side, a Renewable Transport Fuels Obligation has been introduced which requires 5 per cent of road fuels to come from a renewable source.
- The EU has now agreed a mandatory CO2 target for car manufactures. Under this legislation the average emissions of a manufacture’s vehicles sold in Europe is below 130 grams of CO2 per kilometre by 2015, and by 2020 representing a planned reduction of 40 per cent.
- December 2014: Mayor of Paris announced she wanted to ban diesel cars by 2020.
- The UK’s first Low Emissions Zone (LEZ) was established in London in February 2008. A smaller ‘ultra low emission zone’ in London has been proposed for 2020, which would charge all vehicles that are not of a certain standard £12.50 a day. But other countries are more ambitious – 60 such zones exist in Germany.
- Airports: Noise management plans with maximum noise limits and noise insulation schemes are in operation in combination with night flight restrictions. But currently only at Heathrow, Gatwick and Stansted. The International Civil Aviation Organization sets international standards for smoke and certain gaseous pollutants for newly-produced large jet engines. The latest standards came into effect in 2013.

### Theory and Analysis

<p>Level 4 (18–22 marks) Mid mark 20</p>	<p>In this level, there is a strong and significant focus on the quote in the question. There is clear evidence of a thorough knowledge of the different environmental taxes examined across a range of different modes/types of transport, e.g. problems caused by freight vs passenger, and car vs rail vs aviation, etc. The understanding of environmental taxes and other policies is well developed, e.g. understanding the nuances of carrot and stick aspects of taxes. The issue of why some policies may be better or worse than environmental taxes is engaged with well, and integrated into the essay well. Both in their application and limitations, the discussion of empirical evidence is strong here. In this level, candidates may have shown a more sophisticated understanding of policies to address the environmental problems beyond the standard neoclassical vs command-and-control approach.</p> <p>At the top end of this level, development of points is thorough and detailed, with supporting evidence and data, incorporated within an answer with strong economic foundations. The use of theory and analysis is comprehensive, with almost flawless integration of the two into a clearly flowing essay.</p>
--	---

Page 8	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

<p>Level 3 (12–17 marks) Mid mark 15</p>	<p>In this level, a clear and thorough attempt is made to answer the specific question set on whether they agree/disagree on whether environmental taxes are the best way to tackle environmental problems from transport. Links between the question being asked and the perspective put forward are clear throughout the essay.</p> <p>At the top end of this level, <i>the answer is applied to the transport sector with clear evidence of research beyond the theoretical</i>. Both the discussion of environmental problems and the discussion of environmental taxes to deal with them are empirically analysed. The analysis of taxes is well applied to the context.</p> <p>At the middle of this level, more than one context is addressed, e.g. a good range of different environmental taxes or different modes of transport are discussed. But there may be obvious undeveloped areas such as only an assertion that alternatives are better than environmental taxes – alternatives proposed may read as prepared issues, disconnected to the specific quote in the question about what is ‘best’.</p> <p>At the lower end of this level, the empirical analysis is likely to be weak and be more theoretical. Either the range of environmental taxes discussed is limited, perhaps generalising them, or only focussing on one tax, e.g. fuel duty; or the range of transport modes discussed is basic, e.g. focussing too heavily on cars. There may be a lack of critical awareness in places.</p>
<p>Level 2 (6–11 marks) Mid mark 9</p>	<p>In this level, either the response is too theoretical and lacks the specific context of the question, or is focussed almost exclusively on the context of transport with empirical evidence but the relevance of the evidence lacks focus and is not coupled with economic analysis relevant to the specific question.</p> <p>At the top end of this level, a generalised attempt to answer the question has been made but candidates fall significantly short on critical awareness or current context. It may be almost exclusively theoretical (and feel like a Paper 2 response). They may make only a superficial attempt to answer the specific question set, and the essay reads more like a prepared list of issues. The analysis of environmental taxes caused by transport may be significantly limited (e.g. by mode or by range of taxes) or not linked to how such taxes address the environmental problems, instead reading as a general discussion on how taxes work. At the lowest end, candidates will simply discuss environmental problems but do not answer the specific question on whether environmental taxes are always the best solution. They may be some inaccuracies or oversimplifications.</p>
<p>Level 1 (1–5 marks) Mid mark 3</p>	<p>There is a limited understanding of the environmental problems caused by transport, or the impact of environmental taxes on transport is not understood.</p>

<b>Page 9</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge Pre-U – May/June 2016</b>	<b>9772</b>	<b>03</b>

**Evaluation:**

Here follows a re-cap of some of the areas that might be included and a breakdown of what will be expected at the various Levels:

Issues include:

- Does it depend on PED – how does this vary across modes and regions?
- Are some environmental problems bigger than others?
- Do some modes of transport cause more problems than others?
- Are some easier to deal with than others?
- Alternatives to green taxes? Which methods are more or less likely to be effective? Why?
- Is there a difference between whether international vs domestic modes can be tackled?
- How do the problems and solutions fit into the wider picture of emissions targets?
- The normative nature of ‘best’ way? For whom?
- ‘Always’ – under what time frame? Short run vs Long run?
- Political will?

Level 3 (13–18 marks) Mid mark 16	Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this Level, there will signs of real in-depth research and/or originality. In all cases there will be a clear conclusion drawn at the end that relates specifically to the set question.
Level 2 (7–12 marks) Mid mark 10	At least two relevant issues will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification.
Level 1 (1–6 marks) Mid mark 4	Some of the issues that could be open to evaluation may be introduced into the discussion but not developed with no attempt to go further than to show an appreciation of the issue – for example, ‘Environmental taxes are important but a mix of policies is needed to tackle different issues with transport’. There is no attempt to draw together the relevant issues in a conclusion.

Page 10	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

## 2 China and the Global Economy

**“To maintain high growth rates, China needs to change. It needs to become a more open market-based economy”.**

**Evaluate the most effective policies for China to achieve this change.**

Candidates should demonstrate their understanding of a more open market-based economy. They may show an understanding of the nature of the previous / current economic model adopted by China and the reasons for the need for change – but the focus should be on evaluating policies as per the question. Problems of the current model may be highlighted from labour shortages to unbalanced growth, but *the question is not purely about constraints on China’s growth (which was a previous year’s question)*, but which policies would be best suited to achieve the transition to an open market economy. Weak candidates are unlikely to grapple with this aspect of the specific question, whereas stronger candidates will.

A range of policies could be examined, but common ones may include exchange rate flexibility, labour market reform, institutional reform, welfare reform, foreign direct investment rules and corporate governance. They should illustrate their answer with specific examples of policies and their effects – for example, strong candidates may show a knowledge of the Third Plenum reforms or the 13<sup>th</sup> 5-Year Plan. Strong candidates will show an understanding of issues such as the Middle Income Trap, and the issues that exist when transitioning from a low-value added goods economy to a higher value-added economy, perhaps in particular with respect to institutions such as intellectual property enforcement.

Whilst weaker candidates will offer some standard evaluation on the relative merits of policies to achieve this change, better candidates will offer stronger value judgements, showing a critical awareness of the Chinese context, e.g. rather than a generic ‘time lag’ style evaluation of policies – for example cultural issues involved in reforming the One Child policy. Critical awareness over the speed and likelihood of change, and the political forces at work may be explored.

Some may choose to debate whether an open market based economy is indeed the best approach in all aspects of the Chinese economy. To maintain high growth rates, the Chinese government may need to address other issues such as income inequality and low consumption – thus some may discuss whether the transition to a new growth model requires more state intervention in the short term in some areas, (such as health care and social welfare) and less in others, or necessitate lower growth rates in the short term. *However*, such challenges to the premise of the question should only be done after the individual policies themselves have been evaluated, as per the specific question asked.

The best candidates will show an understanding that change has indeed begun this transition, both with the 11<sup>th</sup> and 12<sup>th</sup> Year Plans and may even critique whether China ‘needs’ to change and the nature of what this change must involve – for example government intervention needs to evolve, rather than just reduce, e.g. towards better provision of public and merit goods, such as clean drinking water. The weaker candidates will discuss *aims* of changes and the *nature* of the new economic growth model – but be unable to examine specific *policies*, e.g. the need to move to a consumption-led, less corruption driven, less dependence on SOEs model – but with a lack of analysis of a specific *policy* that would help achieve this.

They should be able to come to a clear and supported conclusion on weighing up which policies are most needed in China to move to a free market model, perhaps even prioritising them in chronological order.

They should use appropriate analytical tools and data to support their arguments. Analysis may be assisted by the use of diagrams.

Page 11	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

**Answers may include:**

**Knowledge and understanding** of key concepts:

Examples:

- Open market based economy
- Policies to achieve such a change, e.g. liberalisation, ending subsidies, intellectual property legislation
- “Capitalism/Communism/Socialism with Chinese characteristics”

**Application** of policies:

Examples:

- Exchange rate reform
  - e.g. further liberalisation of managed currency peg
  - e.g. freeing up of capital account
- Trade policies:
  - e.g. Ending tariffs on foreign goods
  - e.g. Ending subsidies to SOEs – banking sector; industrial firms, etc.
  - e.g. allowing state sector defaults
- Labour market reform
  - e.g. reform to the Hukuo system
- FDI
  - Enterprise Zones
  - Ending JVs
  - Privatisation
- Institutional reform
  - e.g. Banking sector reform
  - e.g. Independent PBoC
  - e.g. Intellectual property legislation

**Analysis** of the impact of these policies in terms of effectiveness and wider impacts on helping maintain high growth rates by moving to a more open market-based economy

- Old China model – low-hanging fruit of cheap-labour, investment-led, export-led, catch-up growth. It can no longer rely on imported technology to keep growth strong. Government planning has built up too many inefficiencies, especially in SOEs.
- Privatisation breeding efficiency, reducing deadweight losses, dynamic efficiency, creative destruction, etc.
- Middle Income Trap: lack of institutions and productivity via innovation to move to higher value added services (like Latin America and Middle East in 1960s and 70s, failing to join South Korea and Japan).
- The government’s dominance in key sectors, while earlier an advantage, is in the future likely to act as a constraint on creativity, diseconomies of scale, favouritism, bureaucracy.
- The role of the private sector is critical because innovation at the technology frontier is quite different in nature from catching up technologically. It is not something that can be achieved through government planning.
- Knowledge of the Third Plenum reforms
- Knowledge of the 12<sup>th</sup> Five Year Plan
- World Bank report: China in 2030
- Empirical evidence on reforms and their successes
- Policies to promote more intensive growth (vs extensive growth of earlier growth model).
- Exchange rate policy and effect on imports/exports
- Labour market reforms – to unlock surplus labour and improve productivity
- FDI liberalisation impact on balance of payments
- Banking reforms to improve allocative efficiency of loans

Page 12	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

Candidates may focus on the new nature of China's development model – greener growth, more accountable growth, less corruption, more equal growth for all.

The following bullet points note examples of supporting analysis/application that *could* be used by candidates. Note, this is **not** an exhaustive list, nor is it what is *required* to do well, but rather it is an **indicative** list of the kinds of independent research that candidates could use to support their arguments.

At the Third Plenum in 1978, former leader Deng Xiaoping announced the opening-up of China's economy, spearheading major market-oriented reforms.

In 1993's Third Plenum, former leader Zhu Rongji announced the "socialist market economy" and dismantled a large part of China's state-owned sector.

In 2013 China Third Plenum reforms

- promised the free market would play a bigger role.
- core issue is to straighten out the relationship between government and the market, allowing the market to play a 'decisive role' in allocating resources and improving the government's role
- carry out deep reforms across the economy and the government to reach a "new stage of development".
- encourages foreign investment in China's coastal cities
- Institute stronger systems to check corruption.
- Critical awareness – politics vs rhetoric: The communiqué and the Decision both make clear that state ownership must still play a "leading role" in the economy.

These reforms are certain to be opposed by powerful forces: SOEs, local governments, tycoons, and other beneficiaries of the old system.

Not a sea change in thinking – the 2003 resolution had already defined the market as "fundamental" to resource allocation. Given this, the latest resolution's most important implication is that it has dispelled any doubt about the new leadership's commitment to the market-oriented reform that Deng initiated in 1978.

Third Plenum Reforms (2014)

- *Market Reforms*
  - The prices of water, oil, natural gas, electricity, transport and telecommunications will become more market-determined, which should open up sectors previously dominated by state-owned enterprises to private and foreign firms. Policymakers will also retreat from micro-level intervention, allowing for freer markets.
  - These reforms should put the minds of foreign companies and investors somewhat at ease – they are essentially levelling the playing field for the private sector. But it seems state-owned enterprises, while less favoured, will stick around and the state will continue to grant these large conglomerates a strong role.
- *Financial Reforms*
  - Financial markets will be freed up, continuing reforms that were already launched prior to the Third Plenum.
  - Interest rate and capital account liberalization will be accelerated, a system of deposit insurance will be set up, and private banks will be allowed for the first time. China's mechanism for setting the exchange rate and its fledgling bankruptcy system will also be improved.
  - Along with market reforms, the changes in the financial markets should improve the ability of private firms to compete with state-owned enterprises.

Page 13	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

- *One-Child Policy Reform*
  - Adverse effects of the policy, including gender ratio disparity and a shrinking work force, have led the government to consider an easing of the policy.
  - Under the newest change to the policy, urban couples will be allowed to have two children, if at least one spouse is an only child. The shift should ease the erosion of China's competitive advantage due to the decline in the labor force, avoid a plummet in the population overall, and aid the country's transition to a consumption-driven economy.
- *Land Reforms*
  - Rural land reform – The restriction on transferring usage rights of rural land that is classified as "for construction" has been lifted, which will benefit both poor rural households and make the process of urbanization smoother.
  - Previously, land sales had to be carried out through local governments – they were able to acquire land at a low price from farmers. Under the reform, the windfall increase in land value would profit the original land owners. But because local governments will lose that revenue, this reform will take some time.
- *Social Welfare Reforms*
  - Reform of the household registration system, 'hukou', will speed up. In third-tier towns and small cities, registration restrictions will be lifted completely while restrictions in medium-sized cities will be gradually relaxed. Being able to obtain hukou will allow rural residents moving to qualifying cities for work to benefit from basic social welfare and affordable housing.

Whilst decreased role in resource allocation, increased role in macroeconomic management, market regulation, public service delivery, supervision of society and environmental protection.

Do Chinese reforms go far enough? Lack of a more aggressive state-sector privatization program – China's declining productivity growth and exploding debt are both substantially due to the bloated SOEs, which take up a disproportionate share of bank credit and other resources but deliver ever lower returns on investment.

*China in 2030 – World Bank report:*

- Structural reforms to strengthen the foundations for a market-based economy by redefining the role of government; reforming and restructuring state enterprises and banks; developing the private sector; promoting competition; and deepening reforms in the land, labour, and financial markets.
- In the enterprise sector, the focus will need to be further reforms of state enterprises (including measures to recalibrate the role of public resources, introduce modern corporate governance practices, such as separating ownership from management, and implement gradual ownership diversification where necessary), private sector development and fewer barriers to entry and exit, and increased competition in all sectors, including in strategic and pillar industries.
- In the financial sector, it would require commercializing the banking system, gradually allowing interest rates to be set by market forces, deepening the capital market, and developing the legal and supervisory infrastructure to ensure financial stability and build the credible foundations for the internationalization of China's financial sector.
- In the labour market, China needs to accelerate phased reforms of the hukou system to ensure that by 2030, Chinese workers can move in response to market signals. It also needs to introduce measures to increase labour force participation rates, rethink wage policy, and use social security instruments (pensions, health, and unemployment insurance) that are portable nationwide.
- Rural land markets need to be overhauled to protect farmer rights and increase efficiency of land use, and policies for acquisition of rural land for urban use must be thoroughly overhauled to prevent urban sprawl, reduce local government dependency on land-related revenues, and address a frequent cause of complaint from farmers.

Page 14	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

### Theory and Analysis

<p>Level 4 (18–22 marks) Mid mark 20</p>	<p>In this level, there is a strong and significant focus on the quote in the question. There is clear evidence of a thorough knowledge of the <i>policies</i> that China could use, and indeed is currently using, to successfully continue its growth rates. A good range of policies is examined looking at a range of areas of the economy, e.g. from trade to investment to demographics. Candidates in this level will understand the nuances of policy changes, perhaps by discussing the relative merits of policies or prioritising the order in which such policies need to be implemented, or the areas where some policies need to be more free market vs other areas. It is clear how the policies identified help to promote a more open, market based economic model and continue their growth rates. The empirical nature of policy changes is well developed, both in their application and limitations.</p> <p>At the top end of this level, development of points is thorough and detailed, with supporting evidence and data, incorporated within an answer with strong economic foundations. The use of theory and analysis is comprehensive, with almost flawless integration of the two into a clearly flowing essay.</p>
<p>Level 3 (12–17 marks) Mid mark 15</p>	<p>In this level, a clear and thorough attempt is made to answer the specific question set on policies that would aid China to sustain its growth rates by moving to a more open market based economy. Links between the question being asked and the perspective put forward are clear throughout the essay. <i>The answer is applied to China with clear evidence of research beyond the theoretical and there is good awareness of the Chinese context.</i></p> <p>At the mid-top end of this level, a good range of different policies are discussed, and the policies are well developed with respect to how they promote a more open, market based model and help to continue China's growth rate. These are supported with good research based judgements, using examples of policies that are (or have been) used by China to undergo this transition.</p> <p>Towards the lower end, the response will be lacking development on how the policies will promote a more open, market-based economy that returns China to high growth rates again. At the lower end of this level, either the range of policies discussed is basic. For example, the link is not developed between how the policy could help China continue its growth with a more open-market focus. There may be a lack of critical awareness in places, e.g. unaware that China's government has already implemented policies on open market reform</p>
<p>Level 2 (6–11 marks) Mid mark 9</p>	<p>In this level, either the response is too theoretical and lacks the specific context of the question, or is focussed almost exclusively on the context of China with empirical evidence but the relevance of the evidence lacks focus and is not coupled with economic analysis relevant to the specific question.</p> <p>In this level, a generalised attempt to answer the question has been made but candidates fall significantly short on critical awareness or current context. They may make only a superficial attempt to answer the specific question set, for example the context of this question may be overlooked, e.g. the nature of an open market based economy may not be looked at, instead focussing on general policies to sustain high growth rates – reading like a pre-prepared response. At the lowest end, the development and analysis of <i>policies</i> will be vague, and candidates will broadly ignore discussing the effectiveness of policies to promote a more <i>open market-based</i> economy with high growth rates.</p>

<b>Page 15</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge Pre-U – May/June 2016</b>	<b>9772</b>	<b>03</b>

Level 1 (1–5 marks) Mid mark 3	There is a lack of understanding of what is meant by a more open market based economy in the Chinese context, and the focus is almost exclusively on the impediments to China’s growth rate, with little engagement with the ‘policies’ aspect of the question – e.g. suggesting China needs to be a consumption-led economy, but with no specific policy on how this may occur.
--------------------------------------	--

**Evaluation** of the most effective policies to achieve a change to a more open market based economy.

At low levels of evaluation, a purely theoretical discussion of effectiveness will be undertaken, with little reference to the Chinese context. This may focus on issues such as cost or time lags. Equally, at lower levels of evaluation, candidates will ignore the specific question which asks them to evaluate their policies, and instead evaluate broader issues of China’s growth agenda. Whilst the latter could be relevant in a conclusion, the specific question must be addressed first.

Stronger evaluation on time lags may be offered with development of issues such as demographic change, e.g. One Child Policy reform has embedded cultural norms to overcome.

Evaluation on limits to privatisation policies – e.g. ‘sacred cows’ regarding privatisation of SOEs – political self-interest and vested interests, short term impacts on GDP and employment and social unrest.

Evaluation on labour reforms – e.g. Hukuo reform requires infrastructure and institutional change in urban areas to be able to have the capacity to handle influx of rural migrants.

Evaluation on exchange rate reforms – e.g. impact on export-led competitiveness, or reverse-J-curve discussion.

Critical awareness over the use of policies will be displayed by good candidates, e.g. Political will vs economic will; rhetoric vs actual. Time frame: transition almost always involves worse growth rates before better. China’s growth will slow to 7pc later this decade and 5pc by the late 2020s even if China embraces deep reform.

Some may choose to argue how more state intervention would be better in the short term to sustain growth rates before a more open market based model is used: e.g. Minimum wage reforms to increase incomes, decrease inequality, sustain growth; or Social safety net, e.g. pension reform or public goods provision – to improve consumption ratio, improve unbalanced growth model. The stronger candidates will show a more subtle awareness of the issue – e.g. that the role of the government’s relationship with the state needs to *evolve*, rather than purely adopting a more laissez-faire government, e.g. While providing relatively fewer “tangible” public goods and services directly, the government will need to provide more intangible public goods and services like systems, rules, and policies, which increase production efficiency, promote competition, facilitate specialization, enhance efficiency, etc.

Given the nature of transition that needs to take place, a discussion may be based on gradualism vs shock therapy (e.g. former Eastern European states comparison); and a prioritisation of the order in which policies should be put in place (or the difficulty of doing such a transition).

<b>Page 16</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge Pre-U – May/June 2016</b>	<b>9772</b>	<b>03</b>

Some candidates may wish to challenge whether it is desirable for China to maintain high growth rates of past, and discuss the start of a ‘new normal’ era of greener and more accountable growth. On this point, candidates may show that China has already begun the path to liberalisation and it is not a new policy – China has been slowly dismantling its purely centrally planned economy since 1978, and certainly since the 11th and 12th Year Plans more recently (e.g. fixed exchange rate ended in 2005). However, the challenge to the question is not a scope to ignore the question and simply discuss whether China is or is not slowing down.

Level 3 (13–18 marks) Mid mark 16	Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this Level, there will signs of real in-depth research and/or originality. In all cases there will be a clear conclusion drawn at the end that relates specifically to the set question.
Level 2 (7–12 marks) Mid mark 10	At least two relevant issues will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification.
Level 1 (1–6 marks) Mid mark 4	Some of the issues that could be open to evaluation may be introduced into the discussion but not developed with no attempt to go further than to show an appreciation of the issue – for example, ‘Certain policies are more suitable in the short run whilst others are more politically viable in the long run. And a mix of policies will be needed’. There is no attempt to draw together the relevant issues in a conclusion.

### ***Evaluation***

Here follows a re-cap of some of the areas that might be included and a breakdown of what will be expected at the various Levels.

- Prioritisation of the order in which policies should be put in place
- Time frame: Some policies more important in short run vs long run
- Time lags
- Cost implications
- Different stakeholders – ‘sacred cows’, e.g. SOEs
- Limitations to policies, e.g. unintended short term consequences
- Contextual awareness – has China already been pursuing these changes for over a decade – not a sea change in policy thinking (Third Plenum)? Rhetoric vs actual?
- Is the Middle Income Trap a certainty with the current model?
- Is it desirable for China to maintain high growth rates of past?
- Does China really ‘need’ to become more open?
- Challenge the question: In some areas, does China need a more interventionist approach, e.g. social welfare, minimum wages, etc.
- Weighing up extent to which more openness needs to be pursued – how far does it need to go? A relative term? A mixed economy? Can China achieve significant development within the current economic model?
- Uncertainty surrounding the future – leadership changes, growth of MINTs, etc. – may actually mean China has to be more protectionist, not less?
- Does open economy mean more successful? Is the global trading system actually ‘open’? Rhetoric vs actual: The rest of the world (U.S, Germany, Japan, Europe and historically Singapore) do not operate very open economies if you analyse the data.
- Is a new ‘normal’ the way forward?

<b>Page 17</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge Pre-U – May/June 2016</b>	<b>9772</b>	<b>03</b>

Level 3 (13–18 marks) Mid mark 16	Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this Level, there will signs of real in-depth research and/or originality. In all cases there will be a clear conclusion drawn at the end that relates specifically to the set question.
Level 2 (7–12 marks) Mid mark 10	At least two policies are evaluated in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification. Towards the lower end of this level, the evaluation of <i>policies</i> waxes and wanes.
Level 1 (1–6 marks) Mid mark 4	Some of the issues that could be open to evaluation may be introduced into the discussion but with little development, there is no attempt to go further than to show an appreciation of the issues – for example, ‘China must adopt new policies but certain policies have more time lags and so a mix of policies needs to be used’. In this level a candidate will not evaluate <i>policies</i> at all, but focuses their evaluation too much on more broader issues about China’s growth model / constraints instead. There is no attempt to draw together the relevant issues in a conclusion.

Page 18	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

### 3 *The Millennium Development Goals and the Post-2015 Development Agenda*

**In 2014, the UN completed its initial discussion of the Sustainable Development Goals and put forward 17 goals and 169 targets. To what extent do you agree that by setting such a broad agenda, the UN missed an opportunity to solve the problems of developing countries?**

The Sustainable Development Goals (SDG) landscape is constantly changing, so credit should be given to responses that take this into account and give an updated perspective on the points contained in this mark scheme.

Weak candidates will either give a general account of the Post-2015 Development Agenda (PDA) or focus purely on the specifics of the SDGs (the weakest may even focus on the MDGs) ignoring the specific part of the question which asks candidates to discuss whether the broad agenda represents a missed opportunity to solve the problems of LEDCs. Similarly, whilst a discussion of the specific problems of LEDCs is valid, the answer must come back to the issue of whether the SDG agenda has missed an opportunity to solve these.

The best candidates will be able to support their views with independent research and discuss country specific research. The UN High Level Panel report looks at what the PDA may contain – responses may centre on the nature of these future development aims, but good candidates must relate their arguments back to whether this means the SDGs are a missed opportunity to address the problems of LEDCs. Some candidates may discuss that given the nature and scope of some problems that LEDCs face, the SDGs could never attempt to solve all of them. And thus the SDGs represents a good attempt as we can expect.

Candidates could look at the specific wording in the question such as whether the agenda is 'broad', a 'missed opportunity', etc. The best candidates will make well-argued value judgements. Some may argue that 17 goals and 169 targets is too broad to be of any use, and falls foul of the similar pitfalls to the MDGs. Others may go further and have a more nuanced understanding of the strengths and weaknesses of the PDA – for example, understanding that targets and goals lead to skewed policies (as with the MDG experience) and varied success. But it is too early to tell whether it is a missed opportunity. Further still, some will be able to see where the MDGs succeeded and where there is opportunity for the SDGs to follow suit.

A key differentiator will be candidates who are able to justify their reasoning, e.g. the PDA is focussing once again on MDG-style *goals*, rather than *how* we are going to get there. Not every aspect of development is measurable, and by focussing on what can be measured/targeted, often many aspects are forgotten. The PDA should aim to be more narrow (than say Goal 1 'end poverty in all its forms everywhere') and thus more realistic for governments to aim for.

A good candidate should offer a balanced view, which may come down more on one side than the other, but refrain from being a purely one-sided argument – the PDA/SDGs provide a good starting point from which to discuss the next phase of development that prioritises inclusion and sustainability.

They should use appropriate analytical tools and data to support their arguments. They should be familiar with the debate surrounding the PDA, whilst weaker candidates will give a very prosaic, general understanding of the issue (probably focussing exclusively on what the PDA targets are, rather than whether it is a missed opportunity).

The best responses will offer justification to their arguments, and not just regurgitate the literature. They should have a good understanding of what is meant by development and perhaps extend this to the 'sustainable' and 'development for all' focus of the PDA.

<b>Page 19</b>	<b>Mark Scheme</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>Cambridge Pre-U – May/June 2016</b>	<b>9772</b>	<b>03</b>

They should reach a clear and well-supported conclusion on the extent to which the PDA is a missed opportunity.

Analysis may be assisted by the use of diagrams, for example linking how certain SDGs do alleviate LEDC problems.

**Answers may include:**

**Knowledge and understanding** of SDGs and PDA

Examples:

- The purpose/nature and details of the SDGs
- The nature of PDA and debate surrounding it
- Sustainability and development
- The nature of LEDC's problems

**Application** of SDGs and PDA to promoting development

Examples:

- Findings of the UN High Panel Report;
- UN Zero Draft findings
- Specific examples of SDGs
  - Goal 1. End poverty in all its forms everywhere
  - Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
  - Goal 3. Ensure healthy lives and promote well-being for all at all ages
  - Goal 4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
  - Goal 5. Achieve gender equality and empower all women and girls
  - Goal 6. Ensure availability and sustainable management of water and sanitation for all
  - Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all
  - Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
  - Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
  - Goal 10. Reduce inequality within and among countries
  - Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
  - Goal 12. Ensure sustainable consumption and production patterns
  - Goal 13. Take urgent action to combat climate change and its impacts
  - Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
  - Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
  - Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
  - Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

Page 20	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

**Analysis** of whether the SDGs / PDA is a missed opportunity (candidates could adopt either perspective in the main)

Examples:

- How do the SDGs help achieve sustainable development? Economic growth models: e.g. Harrod-Domar; AK model of human capital development, sustainable economic growth, growth for all.
- Many of the SDGs focus is on problems that are at the heart of LEDCs problems. Which LEDC problems do the SDGs address head on and which are ignored or tackled less directly? Are the key ones covered in the SDGs (e.g. poverty, the environment, inequality)?
- Why is sustainable development important?
- The PDA / SDGs may offer a helpful stepping stone towards development but the time has come to move forward in discussing policies rather than targets.
- The Post-2015 Development Agenda includes clear priorities for action that the international community can rally behind.
- The MDGs show how a goal framework can be used successfully for the SDGs/PDA. The MDGs were 8 goals and 18 targets, complemented by 48 technical indicators. The SDGs are much broader than that (but need not be a missed opportunity). Indeed, that is its strength, that it finally includes a wider range of targets, rather than just the 'low hanging fruit'.
- The more successful targets are also measurable with clear deadlines
- Most targets are set for 2030 – analysis of how the targets help achieve long term sustainable development.
- Problems of monitoring/measuring the SDG progress?
- Do the SDGs/PDA try to do too much? Or not enough?
- Do we need to step back and look at what the aims and objectives of PDA are? Is it economic *growth* or economic *development*?
- How important are goals and targets to helping achieve economic development?
- Are the SDGs/PDA too rushed and need to be managed more slowly?
- More input needed from academics, activists, UN experts, and in-country specific feedback?
- Like the MDGs, the SDGs/PDA is not legally binding, but must be monitored closely.
- Not a missed opportunity as the indicators that track them are broken down in many different ways to ensure no one is left behind.

Candidates should be rewarded for supporting their analysis with *relevant* diagrams and economic theory. Whilst this question is about whether the PDA is a missed opportunity, there is still scope to use economic theory (for example, LRAS shifts) when looking at certain SDGs and their potential to be very helpful to address LEDC problems.

For the higher empirical marks, candidates should be able to support their answer with relevant research as to the current state of debate in the PDA arena. Disaggregating individual country experiences may be helpful in this regard.

The following bullet points note examples of supporting analysis/application that *could* be used by candidates. Note, this is **not** an exhaustive list, nor is it what is *required* to do well, but rather it is an **indicative** list of the kinds of independent research that candidates could use to support their arguments.

The PDA focuses on 5 key areas: leave no one behind, put sustainable development at the core, transform economies, build peace and effective and accountable institutions, and forge a new global partnership.

Page 21	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

### The Rio+20 outcome document, and The Open Working Group for Sustainable Development Goals

- Rio+20 reaffirmed that there are different approaches, visions, models and tools available to each country, in accordance with its national circumstances and priorities, to achieve sustainable development in its three dimensions which is our overarching goal.
- Rio+20 reaffirmed the commitment to strengthen international cooperation to address the persistent challenges related to sustainable development for all, in particular in developing countries. In this regard, it reaffirmed the need to achieve economic stability, sustained economic growth, the promotion of social equity and the protection of the environment, while enhancing gender equality, women’s empowerment and equal employment for all, and the protection, survival and development of children to their full potential, including through education.
- Are all goals equally observable/quantifiable/realistic?
  - Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development – developed countries to implement fully their ODA commitments, including to provide 0.7 per cent of GNI in ODA to developing countries of which 0.15-0.20 per cent to least-developed countries
  - Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development – by 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information
  - Goal 16.5: substantially reduce corruption and bribery in all its forms

### The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda

- Some of the initial critique of MDGs remain: There is a multiplicity of objectives. The objectives are specified in many different ways. Some objectives are set out in proportional terms (e.g. 4.6 by 2030 ensure that all youth and at least x per cent of adults, both men and women, achieve literacy and numeracy); other objectives are set out in terms of completion (e.g. Goal 6. Ensure availability and sustainable management of water and sanitation for all; 6.1 by 2030, achieve universal and equitable access to safe and affordable drinking water for all; Goal 5. Achieve gender equality and empower all women and girls; 5.1 end all forms of discrimination against all women and girls everywhere) .Yet other objectives are set out as statements of intentions (e.g. 5.a undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources in accordance with national laws)
- Emphasise that in many developing countries, economic growth – even when it’s happening fast – is just not enough to drive poverty eradication. Nationally, policy and financing measures are still needed to support poor people who may not feel the benefits of growth.
- The Post-2015 Agenda must enable every nation to realise its own hopes and plans. We learned from the MDGs that global targets are only effectively executed when they are locally-owned – embedded in national plans as national targets – and this is an important lesson for the new agenda.
- The SDGs/PDA recognise the need for ‘multi-stakeholder partnerships’. They bring together governments (local, city, national), experts, CSOs, businesses, philanthropists, universities and others, to work on a single theme.
- Some framework, even if it is a point of reference, was essential for after 2015. The SDGs / PDA is not an end state but the beginning of the process.

Page 22	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

**Evaluation** of the extent to which the SDGs/PDA is a missed opportunity

At the lowest ends, the weakest candidates will broadly speaking accept the premise of the question arguing that the PDA is right to focus on a wide range of important issues for sustainable development or that it is a definite missed opportunity. There will be a lack of critical awareness and a one-sided approach.

In the higher levels, a candidate will understand the difficulties in creating a sustainable development agenda. They will show critical awareness of the issues, such as creating a homogeneous PDA for such a variegated group of countries. They will be more nuanced in their criticism of the PDA – creating a global PDA is a difficult task, given the highly differentiated degrees of problems LEDCs face. Indeed, are there some problems that the SDGs currently fail to address but that either is beyond the scope of the SDGs / UN or should be included?

Weaker candidates will be general in their critique whilst stronger candidates will evaluate the specific question more explicitly and identify and develop the difficulties of deciding whether it is a missed opportunity. They should understand that until it is set in stone, it cannot be called a missed opportunity, it is too early to tell how the PDA will pan out – even having the discussion around it is a productive step. It is possible that candidates will discuss the limitations of setting so many specific targets against such a broad range of goals – in some respects, creating a PDA for everyone and in doing so, one that is not right for any specific person. Strong candidates should show some balance in their critique of the SDGs – rather than adopting the approach that because the SDGs is more comprehensive than the MDGs, it must be over ambitious. For example the 2014 findings were only the ‘initial discussion’ stage and could change as the PDA progresses and develops. Furthermore, the SDGs includes development issues that were ignored in the MDGs and in this respect is an improvement.

Some candidates may look specifically at the issue of ‘sustainable’ development and focus on how the key areas of have been included in the SDGs (unlike MDGs) – and stress that the SDGs are a starting point. The real challenge now is to see what policy changes can occur to deliver on them.

There may even be an attempt, possibly in a conclusion, to challenge whether the PDA offers any real development for the people on the ground and whether it is simply repeating past mistakes like the MDGs.

Page 23	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

### Theory and Analysis

Level 4 (18–22 marks) Mid mark 20	<p>In this level, the candidate displays a cogent discussion about whether the Post-2015 development discussion is a missed opportunity by aiming for such a broad development agenda. Candidates will offer a balanced view for why it is or is not a missed opportunity, and focus clearly on the link to problems LEDCs face. In this level, nuances are understood surrounding the debate, e.g. an attempt may be made at discussing why sustainability is necessary as a central tenet of the PDA, but that some areas of the SDGs are too ambitious. A good critical awareness is displayed of the nuances behind the PDA / SDG debate, e.g. the issue of quantitative vs qualitative goals. In this level, candidates may choose to offer an alternative to the SDG approach to development.</p> <p>At the top end of this level, development of points is thorough and detailed, with supporting evidence and data, incorporated within an answer with strong economic foundations. The use of theory and analysis is comprehensive, with almost flawless integration of the two into a clearly flowing essay.</p>
Level 3 (12–17 marks) Mid mark 15	<p>In this level, a clear attempt is made to answer the specific question set on whether the PDA is a missed opportunity by focusing on such a broad development agenda. Links between the question being asked and the perspective being put forward are clear. There is a solid understanding of a range of issues, with relevant supporting data. Use of economic theory, terminology and application is correct and regular, though may contain some errors at times.</p> <p>At the top of this level, both sides of the argument are considered but possibly it lacks balance and leaves areas unexplored on one side. However, there is a clear discussion of whether the SDGs help or hinder the constraints LEDCs face. At the middle of this level, a range of perspectives is discussed and a candidate makes a clear attempt to grapple with the ‘missed opportunity’ aspect of the question.</p> <p>At the bottom of this level, candidate may focus on the issues that LEDCs face and how the SDGs help this, but responses may be vague in discussing the issues, e.g. they may lack critical awareness at times, over the issues involved in creating a PDA to address all LEDC problems.</p>
Level 2 (6–11 marks) Mid mark 9	<p>In this level, either the response is too theoretical and lacks the specific context of the question, or is focussed almost exclusively on the context of the PDA/MDGs with empirical evidence but the relevance of the evidence lacks focus and is not coupled with economic analysis relevant to the specific question.</p> <p>At the top end of this level, a generalised attempt to answer the question has been made but candidates fall short on critical awareness or current context. For example, candidates may discuss the problems of LEDCs more generally, and be unable to discuss how the SDGs help with this with supporting empirical examples. They may focus purely on the goals and targets of the post-2015 Development Agenda – but developing arguments aimed at analysing the specific question are cursory at best. At the lower end, they have ignored the specific question set – possibly focussing too much on listing the SDGs, rather than the wider Post-2015 Development Agenda.</p>
Level 1 (1–5 marks) Mid mark 3	<p>There is a lack of understanding of the key issues surrounding the SDGs and Post-2015 Development Agenda; and focusses too much on the MDGs as a pre-rehearsed response.</p>

Page 24	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

### ***Evaluation***

Here follows a re-cap of some of the areas that might be included and a breakdown of what will be expected at the various Levels.

Issues include:

- A missed opportunity – vs what alternative?
- Too soon to tell if it is a missed opportunity?
- Is sustainability the key development issue going forward or are there others?
- Is the very idea of a single development agenda to address all LEDCs issues in a global economy flawed?
- Is it a broad agenda really? The PDA High Panel discussion focuses on two issues: sustainability **and** inequality. Arguably the most important?
- Should there be universal goals, but national targets?
- Flaw of MDGs was that they didn't focus on inclusive development for all – should the PDA focus targets for all income and social groups?
- Are all goals quantifiable?
- Is goal-setting a poor methodology for elaborating an international agenda?
- How to unify global goals with national plans for development?
- Is the PDA making the same mistakes as the MDGs in terms of target setting and generalisations across countries?
- Is the PDA trying to please too many people – is it being designed to be all things to all people?
- Are policies needed more than targets?
- Ends need to be focussed on more than means?
- Short term vs long term considerations – is it a missed opportunity for the current generation?

Level 3 (13–18 marks) Mid mark 16	Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this Level, there will signs of real in-depth research and/or originality. In all cases there will be a clear conclusion drawn at the end that relates specifically to the set question.
Level 2 (7–12 marks) Mid mark 10	At least two relevant issues will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification.
Level 1 (1–6 marks) Mid mark 4	Some of the issues that could be open to evaluation may be introduced into the discussion but not developed with no attempt to go further than to show an appreciation of the issue – for example, ‘the SDGs are too ambitious because they have too many goals and targets’. There is no attempt to draw together the relevant issues in a conclusion.

Page 25	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

#### 4 Behavioural Economics and Government Policy

**“People are not rational. Economic policy makers should not assume they are”.**

**With the aid of examples, assess how far behavioural economics can go in improving economic policy making.**

Candidates should demonstrate a clear understanding of the Behavioural Economics (B.E) field; and both its relevance and limitations in being able to applied to improve economic policy making. The question asks explicitly for examples, and good candidates will be able to cite areas where assuming bounded rationality or cognitive biases has helped to improve economic policy making and focus on the flaws/strengths of such policies – the quality of the examples offered will differentiate responses, with the weaker responses focussing on less academically rigorous policies/B.E experiments.

Rationality (or its absence), and the nature of *homo economicus* is likely to be discussed to highlight the flaws in standard economic policy making. Examples of cognitive biases such as heuristics (e.g. confirmation bias, framing, anchoring, Prospect Theory, herding) and irrationality is likely be covered. Weaker candidates are likely to simply regurgitate such concepts. Stronger candidates will address the question more specifically, for example they are likely to provide a comparison of how incorporating cognitive biases and bounded rationality into policy making can *improve outcomes* more than the traditional approach assuming rationality. This latter step in the analysis will be a key differentiator between candidates, as weaker ones will simply imply it is a better outcome, whereas stronger candidates will explain how it is better, e.g. B.E allows for more efficient outcomes, more cost effective outcomes, quicker changes in behaviour, more politically-palatable outcomes, more feasible policies, etc.

The best responses will incorporate evidence to support their arguments, perhaps making reference to specific randomized control trials and policy making, whilst the weaker candidates may struggle with this aspect of the question.

A good differentiator will be candidates who attempt to assess the ‘how far’ aspect of the question, rather than purely agreeing that B.E can improve all aspects of economic policy making. Some may even attempt to offer some defence of the traditional ‘rational’ approach in certain aspects of policy making – for example areas where people can make rational choices. Weaker candidates may offer a more superficial analysis, perhaps based on anecdotal evidence whereas stronger candidates may understand that though we know that people are not rational, it is not easy to incorporate that into policy making.

Understanding that there are cognitive biases and bounded rationality clearly helps make more realistic government economic policy. But only the strongest of candidates will have the confidence to criticise the B.E literature in a sophisticated manner, for example by pointing out that most B.E trials in an academic setting occur with WEIRD populations (Western, Educated, Industrialised, Rich and Democratic societies) – Duflo & Banerjee’s Poor Economics being a notable exception.

B.E may help to achieve more palatable economic policies rather than politically difficult ones, e.g. to reduce electricity usage, showing households how much their neighbour uses is more acceptable (if less effective), than a tax on energy. Thus B.E may create less effective but more feasible policies.

A one-sided viewpoint – either that by incorporating B.E into policy making, B.E will certainly improve outcomes; or that B.E is too flawed to improve economic policy making is likely to be a weak evaluative response.

Page 26	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

Stronger candidates will adopt a more nuanced approach that the degree to which economic policy making can improve may differ between countries, governments and different areas of policy making, e.g. micro vs macro policy – perhaps using examples from international experiences.

The weakest candidates may ignore making a judgement on the specific question of how far B.E can go in improving economic policy making and see it as an opportunity to discuss the B.E literature in general, with no reference to its relevance to government economic policy. Strong candidates are expected to present specific lessons from B.E to help support their points, e.g. perhaps from Nudge by Thaler/Sunstein, or Poor Economics by Duflo/Banerjee, or more policy-specific findings from for example, the Behavioural Insights Team (UK); Social and Behavioural Sciences Team (U.S) and crucially look at how far B.E can go towards improving economic policy making.

There are no set examples expected but innovative, original examples and case studies used to support their points will be rewarded well as part of their independent investigation. Use of relevant diagrams are to be rewarded, but is not a pre-requisite to do well on this question. They should reach a clear and well-supported conclusion on the extent to which Behavioural Economics and the rejection of rationality could improve economic policy making.

**Answers may include:**

**Knowledge and understanding** of behavioural economics

Examples:

- The discipline of B.E which differentiates it from ‘standard’ economics
- Rationality vs bounded rationality
- B.E concepts such as nudges, framing, libertarian paternalism, time inconsistent preferences, information failures, bounded rationality, Prospect theory

**Application** of behavioural economics to improving government economic policy

The U.S and UK government has formed a Behavioural Insights Team (aka ‘SBST’ in the U.S and the ‘BIT’ in UK)

There are numerous ways in which B.E has been used to implement economic policy making to address issues, e.g. organ donations, retirement savings, health eating. There is scope here for candidates to discuss and show all manner of wider research:

- Randomised Control Trials (RCTs)
- Specific examples from recent research
- Anecdotal evidence

**Analysis** of how B.E has helped (or can help) government economic policy making decisions

B.E has helped create a more real understanding of how the human mind operates and moves away from the limiting assumption of homo economicus of traditional models.

Given bounded rationality, economic problems may require a more novel approach such as appealing to psychological factors in creating economic policy (e.g. nudges).

B.E helps look at the actual source of the problem differently and thus effects policy design, e.g. time inconsistent preferences won’t usually be affected by a tax.

B.E allows for more efficient outcomes, more cost effective outcomes, quicker changes in behaviour, more politically-palatable outcomes, more feasible policies, etc.

Page 27	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

Different approaches, e.g.:

- The U.S SBST – as a way to facilitate advances in “social and behavioral sciences” to justify directed improvements in public policies that are specifically designed to coerce the general public through the use of propaganda.
- The U.K Nudge Unit – as a way “to influence British policies through insights from Behavioral Economics in order to achieve the coalition Government’s goal of finding ‘intelligent ways to encourage, support and enable people to make better choices for themselves’.”
- RCTs and B.E allow modest gains at very low cost.
- B.E offers ‘radical incrementalism’ which is so much more important than a grand proposal
- “I’ve always said that if you want one unifying theory of economic behaviour, you won’t do better than the neoclassical model, which is not particularly good at describing actual decision making.” (Thaler)

Specific examples both anecdotal and more scientific findings – with a link to how they can influence government economic policy making

**The list below is not meant to be exhaustive, and nor would a candidate be expected to cover all of them** – but offers **guidance** to relevant areas. Candidates should support their answer with independent research as to how B.E has the potential to help government economic policy making – (rather than purely regurgitating case studies).

There are plenty of examples in the B.E literature bounded rationality and cognitive biases. Many are linked to how policy making could thus improve. Below are some examples:

Expecting rational behaviour can cause poor policy design:

- Cognitive biases cause people to forget to take their medication for controllable diseases such as diabetes/HIV. E.g. in the US, GlowCaps – pill bottles that light up if not opened at the right time have reduced the problem. Helps reduce long-term burden on state healthcare by preventing problems worsening.
- Poor families in the U.S receive food stamps that enable them to buy food, at the beginning of the month in a lump sum, but people overspend in the first part of the month. Switching to weekly payments could improve decision making.
- Kahnemann’s cognitive biases – ‘rules of thumb’. Since people are bounded rational, more choice is not necessarily better. Choice simplification could enhance solutions, e.g. A study in South Africa found that reducing the number of combinations of interest rates/loan duration led to an increase in uptake of loans.
- To overcome time inconsistent preferences:
- In UK – new auto-enrollment for pensions (default bias) – helps reduce burden on government in later life, helps with time inconsistent preferences, helps with poverty issues in old age
- In Peru and Bolivia, savings rates increased simply by providing timely text message reminders stressing a specific goal (e.g. a house, an electrical appliance) vs a general savings pot.
- Framing Effects – People are more responsive when informed of what they lose by inaction than when told how much it benefits them. This insight can help the design of programs on vaccination (a significant problem in certain countries (e.g. U.S) stressing the ill-effects from not vaccinating may be more effective than emphasizing how healthy the child will be if she is vaccinated. See also Duflo & Banerjee for LEDC issues on this.
- “Social proof” policy interventions, e.g. use of default bias and herding to address organ donation policies
- Consumer indebtedness:
- Nudges (e.g. text messages) to help with bill payments for councils.

Page 28	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

- In the USA, B.E has led to changes in the way credit cards bills must describe the balance due – not just reporting the minimum due but also how long it would take to pay off the balance at that amount
- Relativity matters – e.g. Comparing a person’s behaviour to his neighbour is an effective way to alter behaviour. E.g., U.S households who got letters comparing their own electricity/water consumption to that of homes in the neighbourhood reduced their consumption by same amount as if the cost of power had risen 20 per cent. Such **nudges** are more effective than standard information failure responses asking people to use water carefully.
- How people can be paternalistically nudged: if healthy food is put on an eye-level in a school canteen, pupils are more likely to choose them. Purchases made by physical currency induces healthier choice selections than those made by credit cards.
- Low fertiliser use – not due to cost barriers (thus subsidies ineffective) but due to procrastination. Studies have shown that home delivery increases use by 70 per cent.
- Time inconsistent preferences and procrastination means many problems can be solved by pre-commitment devices. E.g. farmers in Malawi used restrictive accounts to solve their tendency to spend harvest proceeds too quickly, resulting in a lack of funds for investment in the next agricultural season.
- Time inconsistent preferences also gives an insight into how to address low savings, e.g., to develop products that turn saving into an “impulse purchase” by making it possible to buy savings at the store alongside a weekly shop, like a mobile top-up.
- In 2012, study by the University of Bristol on how altering the shape of beer glasses affects people’s drinking speeds – such an example is arguably more gimmicky and probably unlikely to change any particular government economic policy focus
- Use of status quo bias on saving for retirement – research shows that it can boost savings by over 40 per cent – has real consequences for government economic policy, e.g. already adopted in US pension policy
- The UK Government’s Behavioural report in 2013 on the lessons of B.E on Charitable Giving

### **Evaluation** of how far B.E can improve economic policy making

At the lowest end, the weakest candidates will accept the premise of the question arguing that B.E is a panacea and incorporating bounded rationality will improve economic policy making.

At the middle end, candidates will understand that there are practical barriers that may stop bounded rationality from B.E from being adopted in reality into policies, for various reasons (e.g. cost, commitment, policy myopia, credibility, and political traction).

At the top end, candidates will attempt to grapple with the ‘how far’ aspect of the question and attempt to make a judgement on the extent to which B.E can improve economic policy making. Candidates will be able to offer a well-balance critique of B.E but understanding its usefulness too for economic policy making. Good answers will be able to justify their reasoning as to whether the field is overhyped, trivial, unreliable or of use for specific issues. Strong candidates will avoid making broad generalisations and understand that there is room for B.E to augment certain policies whilst add less value to other areas.

The strongest candidates will be able to offer a critical eye over the field of B.E. Independent research will be a key differentiator to supporting such evaluation. Carefully designed public interventions can improve outcomes. But the ultimate effectiveness of such interventions relies on thorough understanding of the forces that shape behaviours. A multitude of measures can be used to change people’s behaviour: monetary incentives, fines, legal punishment, educational measures, and nudges. While all of these measures (and more) can be effective, their relative effectiveness strongly depends on specific contexts, social norms, and individual characteristics of the targeted population/policy.

Page 29	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

The best may offer reasons where B.E does not improve economic policy making on a cost-benefit analysis on the specific intervention, e.g. do behavioural biases average out over a large population.

### Theory and Analysis

Level 4 (18–22 marks) Mid mark 20	<p>In this level, there is a strong and significant focus on the quote in the question. Nuances of the question are picked up on, e.g. Distinctions may be made between ways in which B.E can be used to improve economic policy making and how <i>far</i> this can go. The response has a nuanced discussion of how government economic policies can be enhanced by Behavioural Economics, and specifically analyse the issue of rationality as presented in the quote. Candidates do not generalise all of B.E but understand how some areas have more relevance than others, with a focus on the more advanced B.E ideas, e.g. Prospect Theory.</p> <p>At the top end of this level, development of points is thorough and detailed, with supporting evidence and data, incorporated within an answer with strong economic foundations. The use of theory and analysis is comprehensive, with almost flawless integration of the two into a clearly flowing essay.</p>
Level 3 (12–17 marks) Mid mark 15	<p>In this level, a clear attempt is made to answer the specific question set on whether B.E can improve economic policy making. Links between the question being asked and the perspective put forward are clear throughout the essay. There is a solid understanding of a range of behavioural economics issues, with relevant supporting research.</p> <p>Candidates have a good understanding of a range of B.E issues and how incorporating these into policy making would <i>improve</i> outcomes. However, the response may leave some areas undeveloped, for example perhaps the range of issues examined is limited.</p> <p>At the middle of this level, links to improving policy making may require further development, whilst at the bottom of this level, the essay remains narrow in range of issues examined – either in the range of ‘pop’ behavioural economics issues discussed or the policy implications.</p> <p>Use of economic theory, terminology and application is correct and regular, though may contain some errors at times. A range of perspectives is discussed but may lack critical awareness or <i>supporting independent research may lack depth</i> for example the aid of examples leaves areas unexplored.</p>
Level 2 (6–11 marks) Mid mark 9	<p>In this level, either the response is too theoretical and lacks the specific context of the question, or is focussed almost exclusively on the context of B.E with empirical evidence but the relevance of the evidence lacks focus and is not coupled with economic analysis relevant to the specific question.</p> <p>At the top end of this level, a generalised attempt to answer the question has been made but candidates fall short on critical awareness. They may make only a superficial attempt to answer the specific question set, for example not looking at the link between B.E and policy making.</p> <p>At the bottom of this level, the focus may not be on whether B.E can improve economic policy making, instead adopting just a general list and explanation of behavioural concepts. The answer broadly ignores the specific question and read like a pre-prepared essay.</p>
Level 1 (1–5 marks) Mid mark 3	<p>There is a scattergun approach to discussing a range of B.E concepts but it lacks a coherent response to the specific question set.</p>

Page 30	Mark Scheme	Syllabus	Paper
	Cambridge Pre-U – May/June 2016	9772	03

### Evaluation

Here follows a re-cap of some of the areas that might be included and a breakdown of what will be expected at the various Levels.

- ‘Improve’ by what metric? Cost? Outcome? Value for money? Efficiency?
- Are the two approaches mutually exclusive? To discard the basic neoclassical framework of economics totally may throw away some useful policies.
- Methodology: how does incorporating rationality actually help improve situations – do we conduct more Ariely-style lab experiments, or more natural experiments by the Behavioural Insights Unit?
- Not all B.E findings stand up to generalised scrutiny – e.g. some special case results emerge which can’t always be applied to economic policy.
- Just as *homo economicus* is flawed, attempts to formulate general laws of human behaviour via B.E may never be more than a rough guide to policy. B.E ends up making some broad generalisations too.
- Rhetoric vs actual – assuming rationality is flawed, but incorporating bounded rationality not without its issues, e.g. Debate over B.E’s predictive power in all areas of the economy.
- Is B.E going the same way as neoclassical economics, e.g. hyperbolic discounting to explain human psychology of short termism?
- Risk of government failure: Incorporating B.E is one thing, *improving outcomes* is another. Is it a given that taking in B.E insights will definitely help create good economic policy, or could they themselves be subject to error and failure? E.g. in 2008, the UK government rejected the opt-out solution for organ donations, citing mistrust issues.
- Ethical issues, e.g. against nudging, libertarian paternalism.
- Some B.E experiments yield obvious results (e.g. that a letter from the tax authorities encourages quicker payment) – is this particularly new or useful?
- Can we generalise to a whole field or to all economic policy making? Some sensible-sounding interventions have no effect, while others have very large effects.
- A discussion of the time frame under consideration SR vs LR – B.E is still an upcoming field that is yet to be fully incorporated into government thinking.
- Critical awareness of B.E (e.g. WEIRD samples) – difficult to make generalisations – a case-by-case decision needed.

Level 3 (13–18 marks) Mid mark 16	Given the length of this paper, to achieve this level of evaluation there must be significant and comprehensive coverage of several relevant areas. At the top end of this Level, there will signs of real in-depth research and/or originality. In all cases there will be a clear conclusion drawn at the end that relates specifically to the set question.
Level 2 (7–12 marks) Mid mark 10	At least two relevant areas of policy making will be considered in reasonable depth but the overall scope of evaluation leaves areas unexplored and conclusions may lack any rigorous justification.
Level 1 (1–6 marks) Mid mark 4	Some of the issues that could be open to evaluation may be introduced into the discussion but with little development, there is no attempt to go further than to show an appreciation of the issues – for example, ‘People are not rational, and although B.E’s assumption of bounded rationality can improve economic policy making, it is limited in some areas due to practical issues’. There is no attempt to draw together the relevant issues in a conclusion.