

November 2015 subject reports

Economics

Overall grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 13	14 - 26	27 - 37	38 - 49	50 - 63	64 - 75	76 - 100

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 14	15 - 28	29 - 38	39 - 49	50 - 61	62 - 73	74 - 100

Higher and standard level internal assessment

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 6	7 - 12	13 - 20	21 - 26	27 - 31	32 - 37	38 - 45

Recommendations for IB procedures, instructions and forms.

This was the third November session for the new syllabus and most centres have adapted well to the criteria. There were a few exceptions, described below. There was a substantial range of performance with some centres producing excellent work. Overall the standard was good, although a few candidates were hampered by weak English or a lack of commitment. A few centres prepared their students poorly, and some were either unaware of the assessment criteria or were hugely generous in the marks given to their students.

A substantial number of portfolios did not include a summary portfolio coversheet with details of source, dates of articles and commentaries, syllabus sections and word counts. A template version of a summary portfolio coversheet, and commentary coversheet are available in the teacher support material. The 3/CS form does not give all the required information on sources, syllabus sections and word-counts.

A number of centres did not accurately complete the 3/CS form. Please check the addition on the reverse side of the 3/CS form, and make sure the forms are signed by student and teacher. The maximum time lapse between the source article and the written commentary is one calendar year. The maximum word count is 750 words but there is no minimum word count. If a commentary is longer than 750 words the moderator will stop reading at 750 words so the candidate could lose marks from their analysis and evaluation. Some centres and candidates have not adjusted to the requirement that footnotes are only used to provide references, but not for definitions. Specific definitions are not required: the important thing is to demonstrate that the terms are understood and to use them accurately.

It is important to carefully follow the rubric requirements. Some candidates lost a mark under criterion F because they did not provide a summary portfolio coversheet with details of the sources, syllabus sections, the date commentaries were written and word counts. It is advisable to give the full URL of the articles used. Articles should be complete, and the parts that the commentary is focusing on should be highlighted. If an article is in another language the candidate must provide a full translation that is comprehensible: Google translate is not always adequate. Filling in the front-page section "Title(s) and dates of work" of the 3/CS form does not replace a summary portfolio coversheet.

It is recommended that teachers include a comment on the portfolio, explaining the marks they have given. These comments should be on a separate sheet: the portfolios should not be

annotated by the teacher. A few teachers marked on the scripts with red pen, which can create confusion if portfolios are moderated a second time.

The range and suitability of the work submitted

Most students followed the rubric requirements and submitted three commentaries from different sources, covering three syllabus sections, within the word count limit. When this does not happen it is important that the teacher takes this into account when assessing the portfolio as it will affect the moderating factor for the centre.

Candidate performance against each criterion

Criterion A: Diagrams

Most candidates included relevant diagrams but these were not always explained well. Too many simply copied generic graphs from textbooks or internet sources without making them specific to the commentary. It is preferable that candidates create their own graphs, either by hand or using computer skills. If candidates have copied graphs they must give the source. Please note that the criterion descriptor assesses whether the candidate “is able to construct and use diagrams” so copy/paste diagrams will not achieve maximum marks.

Candidates should avoid very lengthy descriptions of graphs, especially where these are generic graphs which have been copied.

Some candidates made reference to colours on their graphs but then sent portfolios printed in black and white.

Criterion B: Terminology

Terminology needs to be used appropriately, but this does not mean every term must be defined. Terms like “price elasticity of demand” could be briefly explained with a comment such as “which measures how responsive the quantity demanded is to a change in price”. If precise definitions are copied they must be in quotation marks and a source be given. They must not be in footnotes or they will be ignored. This criterion implies that the candidate displays understanding of the terms used. A number of candidates used an inappropriate dictionary definition for economic terms like deficit or depreciation. Most candidates scored well in this criterion.

Criterion C: Application

This criterion tests whether the candidate has recognized the appropriate economic issues from the chosen article. It is important to make links to the article, and not simply present some economic theory that is faintly relevant. Some candidates made very little reference to the articles, and a few did not understand the articles. A common fault was to choose articles that were far too complex or dealt with issues not in the IB syllabus. Most candidates recognized the appropriate economic issues and scored well in this criterion.

Criterion D: Analysis

This criterion deals with explaining and developing economic theories linked to the article. It is important that the commentary makes repeated references to the article and integrates the theory and practice. An example might be discussing whether taxing alcohol is a better solution to market failure than regulating sales or prohibition.

A common fault was to simply summarize some economic theory without clearly linking to the article. The descriptors for level 2 and 3 distinguish between “appropriate” and “effective” analysis: many commentaries were considered “appropriate” as the analysis was not developed enough.

Criterion E: Evaluation

A key issue here was whether the student “synthesizes his or her analysis”. If candidates have simply paraphrased an article that has already done the analysis and evaluation of an issue it is not possible to get the top levels on this criterion: the evaluation is not of the candidate’s own analysis. Many simply explained an article, generally agreeing with the author.

Too many candidates gave opinions that were not backed up by appropriate economic reasoning. “I think” does not necessarily imply evaluation.

It is not possible to reach the top level unless the candidate considers counter-arguments, and discusses advantages and disadvantages of a policy.

Criterion F: Rubric requirements

It is important to carefully follow the rubric requirements. Some candidates lost a mark under criterion F because they did not provide a summary portfolio coversheet with details of the sources, syllabus sections, the date commentaries were written and word counts.

The descriptor about “different and appropriate sources” was designed to avoid students choosing excerpts from books, tutorial guides, government reports or personal blogs. A number of online media now include opinion columns which are technically “blogs” but these are acceptable if they are in a recognized news media source.

Recommendations for the teaching of future candidates

- The Internal Assessment (IA) should be an integral part of the IB course, not simply a set of assignments at the end of the course. The IA can be valuable to understanding the different parts of the syllabus and is especially important in providing examples that can be used in the externally assessed components. I would recommend that candidates read through their IA as part of their revision.
- It is recommended that the IA be spread across the teaching of the syllabus, with one or two of the commentaries completed in the first year of the course. This reduces stress on candidates in their second year and reduces the risk of incomplete portfolios being presented.
- Teachers should provide guidance in the selection of suitable articles but the choice

must be made by the candidate. Some centres used a very limited selection of sources and topics for their IA, which gave the impression that teachers had selected the articles. Teachers are reminded that they are allowed to give feedback on a first draft of the commentary but the second draft is considered final. A few centres, or candidates, did not appear to have produced a first and subsequent final draft of the commentaries.

Further comments

It is important to promote academic honesty and to stress the potential consequences of plagiarism. Teachers should take care to verify the authenticity of work presented, ensuring that the language and analysis presented is really that of the candidate.

It is also necessary to remind teachers that providing a candidate with undue assistance is unacceptable. It is part of the candidates' task to find and analyse the article: this should not be carried out by teachers. A number of centres presented samples where many candidates had used the same articles. Teachers could usefully approve the choice of article before candidates write the commentary, or have a system where candidates can ensure they are not choosing the same article.

Teachers should stress the importance of producing three commentaries based on articles from the different sections of the syllabus: micro, macro, international and development economics.

Higher level paper one

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 7	8 - 14	15 - 18	19 - 24	25 - 31	32 - 37	38 - 50

General comments

Feedback from centres was extremely positive. Question 1 was the most popular on the paper and, as a consequence, question 2 was the least popular. Question 3 appeared to pose the greater challenge for those that selected it.

The areas of the programme and examination which appeared difficult for the candidates

Candidates found the inclusion of appropriate examples in their responses challenging with few able to offer, and integrate, appropriate real life examples into their writing.

In question 3 many candidates could not ascertain that increases in potential output referred to the long run aggregate supply.

Many candidates failed to provide clearly drawn and labelled diagrams. This tended to hinder the response, as the diagram is rendered less useful.

The areas of the programme and examination in which candidates appeared well prepared

Candidates appeared to be well versed in the area of market failure, this was evident in responses to question 1. The impact of indirect taxes on producers, consumers and government was also well understood. Candidates were also able to show a confident application of the theory of the firm for question 2. Question 4 responses provided evidence to show that there is a good understanding of the reasoning provided by the monetarist/new classical model to explain why the economy returns to equilibrium in the long run.

The strengths and weaknesses of the candidates in the treatment of individual questions

Question 1

- (a) This proved to be a very popular question. Most candidates were able to provide

appropriate reasons as to why a government might choose to impose taxes on cigarettes. Diagrams were usually well drawn and explained. The existence of externalities and the desire for government revenue were the most common justifications offered for such intervention.

- (b) Lower achieving candidates could identify the affected stakeholders but tended not to develop the impacts in detail with, for example, reference to elasticities. Higher achieving candidates considered the redistributive impacts of indirect taxes and often sought to locate the consequences of such taxes in specific localized examples. Thus it was possible both to address the need for examples and to provide greater detail to the response. In many ways the purpose of an example is to provide a candidate with a scaffold with which to achieve greater depth to their writing.

Question 2

- (a) Although this seemed to be a straightforward question and was well answered by candidates, it was the least popular question on the paper. The role of barriers to entry was well understood although candidates were not always sure that it was a shift in the demand curve that eliminated the abnormal profit in the long run. Diagrams were usually well applied here and candidates appeared to have had lots of practice with this type of diagram.
- (b) This question was well attempted. The use of theory tended to be very clear and precise. This is clearly an area that is being taught well. Responses variously applied the advantages of economies of scale and the uses long run abnormal profits might be put to. Other candidates opted to enlist differing elasticities between the two market structures to separate the supposed degrees of allocative and productive inefficiencies that might exist. Candidates tended not to make use of examples, although there are many firms with significant market, or monopoly power, that could have been referred to in order to make the case.

Question 3

- (a) For many candidates this proved to be a challenging question. This question seemed to be more popular than question 4 and lower achieving candidates seemed to favour it. The point of the question was to test the ability of candidates to associate fiscal policy with improvements to infrastructure and human capital levels. Thus linking fiscal policy to long run increases in potential output and therefore to subsequent increase in long run aggregate supply. A significant number struggled to do this.
- (b) Whilst candidates were usually able to interpret the question accurately and could address the central point, there were few who could offer more than a superficial analysis as to why unemployment might be reduced and income distribution might be more equal as a result of economic growth. A transmission mechanism was identified in the majority of cases, however to evaluate why this may not be the case was less confidently addressed.

Question 4

- (a) This is an area of the syllabus where there has been a significant improvement in understanding. There were many confident responses where candidates accurately related the theory and could see clearly the implications of price changes in restoring equilibrium at the level of long run aggregate supply and full employment.
- (b) Candidates were generally able to address this question effectively. Most chose to look at it from a Keynesian perspective and tended to look at the different stages of aggregate supply in the Keynesian diagram. Many included reference to the monetarist/new classical perspective from part (a) to conclude that inflation was always the result. This was one question where higher achieving candidates were more inclined to apply examples, there were several excellent references to recent policies in a number of countries where attempts to boost aggregate demand have not been inflationary.

Recommendations and guidance for the teaching of future candidates

- Candidates should carefully consider what the question is asking them to do. A significant number respond to economic terms and provide information outside of the context of the question.
- Candidates continue to make inadequate use of examples in their responses. The assessment criteria detailed in the markschemes place significant emphasis on the use of examples by candidates in order to gain access to Level 3 and Level 4. Candidates should be encouraged to read news media to address this.
- The clarity of handwriting continues to decline with some candidates struggling to provide readable responses. A significant number make use of colours in the diagrams they use. They should be advised that examiners cannot see these because the scripts are scanned in black and white before they are marked.
- A number of students mix macroeconomic and microeconomic concepts together in the diagrams they draw. They use labels for both, for example, price and quantity with AD/AS, in the same diagram. This is incorrect and is penalized. Other candidates provide insufficient labels for their diagrams, which makes it difficult to meaningfully refer to what they are supposed to show.

Standard level paper one

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 8	9 - 16	17 - 21	22 - 26	27 - 32	33 - 37	38 - 50

General comments

Feedback from centres was generally positive. One striking characteristic of this session's examination paper was the small number of candidates who attempted question 2 in Section A.

The areas of the programme and examination which appeared difficult for the candidates

Very few candidates attempted question 2 in Section A which suggests candidates find the concepts of consumer and producer surplus and the way the market allocates resources efficiently quite challenging. The relative accessibility of question 1 might also have been a factor influencing candidates' choice of this question.

In Section B the question about the way interest rates are determined brought some mixed responses with some candidates struggling to apply theory to answer this question. This was the first time this learning outcome had been tested so the problems it caused were not entirely surprising.

The areas of the programme and examination in which candidates appeared well prepared

The performance of candidates on question 1 in both parts (a) and (b) was strong and candidates were obviously comfortable on this area of market failure and the use of indirect taxation to deal with market failure associated with cigarette consumption.

In Section B candidates performed well on question 4 parts (a) and (b) on the impact of rising consumer and business confidence on economic growth and how economic growth might affect living standards.

The strengths and weaknesses of the candidates in the treatment of individual questions

Question 1

- (a) This question was generally well answered by candidates. The highest achieving responses focused on the use of indirect taxation by government to reduce the market failure associated with the consumption of cigarettes. High achieving responses used effective cost and benefit diagrams to illustrate this and supported it with effective examples. Candidates also explained how revenue raising is an aim of indirect taxation on cigarettes.
- (b) Many candidates answered this part well. High achieving responses looked at the impact indirect taxation would have on consumers, producers and government. It was good to see many candidates looking at the negative effect an indirect tax might have on the consumer and producer surplus and how it might increase government tax revenue. This was effectively evaluated by considering the impact price elasticity of demand has on the different stakeholders when an indirect tax is used and the relative merits of alternative policies to combat cigarette consumption.

Question 2

- (a) Very few candidates chose to answer this question. High achieving responses considered how some consumers, for example, would pay a higher price for an airline ticket than the market price they paid and how some producers would sell an airline ticket for less than the market price they received. This was effectively illustrated by showing the consumer and producer surplus on a demand and supply diagram.
- (b) It was important in answering this question to define and explain an 'efficient allocation of resources' and to say how this can be achieved when markets in economy are in equilibrium. This can then be evaluated by considering how market failures might be challenged by different market failures. In the car market, for example, demand and supply could maximize consumer and producer surplus and deliver economic efficiency but this is compromised by the negative externalities associated with car use.

Question 3

- (a) There were some very high achieving answers to this question and some lower achieving ones. It is the first time this learning outcome has been tested specifically in Paper 1 and the responses of candidates perhaps reflected this. The highest achieving answers accurately defined interest rate and explained how interest rates are determined using the demand and supply for money in the economy. The answers were clearly illustrated by a diagram and supported by a real world example. There were some good examples of how quantitative easing by the US Federal Reserve had led to low interest rates in the US.
- (b) There were some very strong answers to this question and the application of monetary policy is something candidates seem to feel confident about. The highest achieving responses clearly explained how reducing interest rates and increasing the supply of money would increase aggregate demand, leading to economic growth and a rise in employment. This was supported with an effective AD/AS diagram and an example such as the fall in unemployment in the US following expansionary monetary policy.

The highest achieving answer went on to evaluate the use of monetary policy to reduce unemployment by considering, for example, the problem of using monetary policy to reduce structural and frictional unemployment.

Question 4

- (a) This was a popular question and there were many strong answers to it. Strong responses clearly defined consumer and business confidence and explained how a rise in confidence would increase aggregate demand and lead to economic growth. High achieving answers would support this with an effective AD/AS diagram and a real world example such as how rising business and consumer confidence in the US economy have led to economic growth.
- (b) The highest achieving answers to this question explained how economic growth might lead to: rising living standards as household incomes increase; rising tax revenues giving the government more funds for expenditure on public services and increased levels of employment. There is not an obvious diagram to support this question but this is where the circular flow of income could be used. Effective evaluation for this question could be the negative impact on living standards of external costs, rising income inequality and rising inflation. Some of the issues China has had with positive and negative consequences of growth for its citizens' living standards would provide good real world examples for this question.

Recommendations and guidance for the teaching of future candidates

- Teachers must prepare candidates to develop effective evaluation/synthesis in response to part (b) questions. Many candidates are not able to progress beyond level 2 of the assessment criteria because they do not evaluate/synthesize the points they make in their answer. There are four possible ways of doing this for an argument made by considering the: advantages and disadvantages; short-term/long-term implications; the impact on different stakeholders and prioritising the points in an argument. The 'prioritising' method of synthesis/evaluation can often be accessed by a final concluding argument. In question 3, for example, a concluding point that monetary policy is only really effective in reducing demand-deficient unemployment and is not really appropriate for structural and frictional unemployment where supply-side policies are more effective.

Higher level paper two

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 5	6 - 10	11 - 13	14 - 18	19 - 24	25 - 29	30 - 40

General comments

This subject report, used in conjunction with the markscheme, is designed to help teachers prepare their candidates for future examinations by clarifying the expectations of the examining team. Since the markscheme outlines the most appropriate responses, this report focuses on the more common errors made by candidates. General comments about examination-writing techniques are similar, if not exactly the same as in previous reports.

The examination seems to have been well-received by those centres that completed the feedback forms. There was some concern that the two questions in Part A were from a similar area of the syllabus. The texts were considered to be accessible to the majority.

The areas of the programme and examination which appeared difficult for the candidates

It would appear that candidates are uncomfortable with questions on the balance of payments.

Costs curves also seem to be a problem. Candidates need to be aware that the (a) to (c) question parts can come from any topic on the syllabus.

The areas of the programme and examination in which candidates appeared well prepared

Candidates seem confident with questions related to changes in aggregate demand.

The strengths and weaknesses of the candidates in the treatment of individual questions

Question 1

This was the least popular question on the paper, with a very small minority of candidates attempting the question. It would appear that candidates are uncomfortable with questions on the balance of payments, in particular, a current account surplus.

- (a) (i) Either candidates knew these components, or they did not – few candidates only recognised only one component or stated them incorrectly.

- (ii) Some candidates defined aggregate demand, rather than consumption. Lower achieving responses referred to spending by “people” rather than households or consumers.
- (b) Again, where candidates were familiar with the components of the balance of payments account, they were able to explain both of these factors and clearly distinguish between these two components, noting that one was measured on the current account, and the other on the capital account. However, there were also some very low achieving responses with candidates clearly guessing at definitions.
- (c) This was a straightforward question and most candidates recognised that problems in the eurozone were leading to an increase in the demand, and therefore an appreciation of, the Swiss franc. There was some inevitable mislabelling of the y-axis of the diagram.
- (d) This was a challenging question, as most previous examination papers discuss the consequences of a current account deficit, rather than a current account surplus. Nonetheless, it is a clear learning outcome that needs to be learned. Where candidates had some awareness of the theory, the answers focused mainly on the consequences of the stronger Swiss franc, which was a viable approach.

Question 2

- (a) (i) Most candidates were able to define this term accurately.
- (ii) The IB syllabus treats economic growth in a number of slightly different ways, and so several different definitions were accepted. However, where candidates referred to the most widely-accepted definition of an increase in GDP, it was necessary to include the term ‘real’ for full marks.
- (b) High achieving candidates showed the upwards pressure on the dirham due to an increase in demand, and then showed an increase in supply of the dirham by the central bank through the purchase of foreign currencies. The most common error on this question occurred when candidates were unaware of the distinction between an increase in the supply of the dirham on the foreign exchange market (correct answer) and an increase in the money supply in the domestic market (incorrect answer).
- (c) Many candidates were able to provide definitions of the two terms, but did not make clear the **distinction** between the two. For full marks, it was necessary to note that devaluation occurs in a fixed exchange rate system while depreciation occurs in a floating exchange rate system and devaluation is the result of deliberate action on the part of the central bank, while depreciation occurs as a result of forces.
- (d) This should have been seen as a straightforward evaluation of fixed versus floating exchange rates, and high achieving candidates familiar with the theory were able to analyse the pros and cons of each exchange rate regime. There was a very strong

tendency to simply re-state the points from the text without applying the relevant theory.

Question 3

- (a) (i) Candidates were required to be very precise in their statement of any of the goals. For example, full marks were not awarded for stating that a goal was the eradication of poverty. It was necessary to refer to **extreme** poverty.
- (ii) The vast majority of candidates were able to provide an appropriate definition with some reference to the ability of future generations to meet their needs.
- (b) The majority of candidates recognised that the high HIV/AIDS rate would reduce the quality and/or quantity of the labour force and therefore shift the PPC inwards. Some candidates inaccurately moved from a point on the PPC curve to a point closer to the origin.
- (c) Almost all candidates accurately showed and explained a fall in aggregate demand. As always, some candidates inaccurately labelled the axes.
- (d) A great many candidates delivered standard macroeconomic discussions of market-oriented strategies, presenting answers that would have been more appropriate on a Paper 1 essay examination. They presented arguments related to labour market reforms (reducing the minimum wage, unemployment benefits and trade union power) that are not particularly relevant to Botswana. Those candidates who answered it well were able to critically discuss market-oriented strategies in the context of less economically developed countries. This question is very closely based on the last section of the syllabus, and should be accessible to IB candidates.

Question 4

- (a) (i) Some candidates inaccurately described financial investment.
- (ii) The majority of candidates earned full marks for their definition as a minimum price set by the government.
- (b) Most candidates were able to show an increase in supply and a fall in price, but a great many were not able to make a link to elasticity of demand. Those candidates who were aware that demand for a commodity such as coffee tends to have inelastic demand and could show that this meant that changes in supply would lead to wide price changes were able to earn the full marks.
- (c) Most candidates realised that a form of theory of the firm cost curves diagram was needed, but some candidates drew simple supply and demand diagrams, despite the instructions in the question. A number of candidates remembered that the theory had something to do with fixed and variable costs, but became muddled in the explanation. The most common error stated that farmers continued to produce because they were

able to cover their fixed costs (rather than their variable costs). Any candidates who were able to diagram and explain a price equal to, or above the average variable costs showed very strong application of economic theory. It is important that candidates and teachers are aware that topics outside of Sections 3 and 4 of the syllabus can be tested on this paper.

- (d) High achieving candidates were able to start with a minimum price diagram. This allowed them to develop economic theory. There were some strong responses where candidates were able to critically assess the advantages and disadvantages of government intervention in the context of economic development.

Recommendations and guidance for the teaching of future candidates

Many will note that these suggestions have appeared in previous examiner reports at both the standard and higher level. However, since the expectations have not changed, the advice remains largely the same.

- While the main focus of this paper is on International and Development Economics, it is essential that teachers and candidates are aware that questions on this paper may come from every area of the syllabus.
- Teachers should really encourage their candidates to learn precise definitions, as the use of precise and accurate economic terminology will enhance performance on all assessment components. If the candidates are confident in their knowledge of definitions, they can proceed quickly through the first part of each data response question. To help candidates to develop this important skill, candidates might be encouraged to compile a glossary of terms. Candidates must be taught to include appropriate economic terms in their definitions, in order to distinguish themselves from people who have simply picked up some information without having taken an economics course.
- In part (a) questions, students should be encouraged to write **no more than** two sentences.
- Many part (b) and (c) questions require the use of a diagram, and these are generally all standard diagrams from the syllabus. Candidates would thus benefit if they compiled a glossary of all the diagrams. Where a diagram is used in parts (b) or (c), candidates should be sure to use/explain the diagram by making references to it in the response. The diagram and the explanation must be integrated with each other. Candidates should explain reasons for any changes and use (dotted) lines to the axes and notation such as (q_1 to q_2) or (AD_1 to AD_2) in their written work.
- Where a part (b) or (c) question does not ask for a diagram, candidates should be encouraged to provide definitions of key terms. However, the questions should ask them to do a little more than simply define the terms. For example, they might be asked to distinguish between two factors (e.g. distinguish between devaluation and depreciation). In this case, they should be prepared to comment on a similarity and/or a difference between the two factors.
- Diagrams should not be placed at the end of the examination. They should be drawn exactly where the accompanying explanation is written.

- Candidates should take about a third of a page to draw their diagrams, and should use a ruler to make sure that it is done neatly so that the information is clear.
- It is the policy that candidates are not allowed to use coloured pens/pencils on their examinations. Therefore, there should not be references to different coloured lines in the diagram, as these will not show up on the scanned examinations. However, they should be sure to use arrows to indicate the direction of change of any variables.
- Diagrams should be made appropriate to the question and/or the market in the question.
- Another general recommendation is that where actual numbers are given in the data, candidates could be encouraged to think about the scale indicated. For example, in part (b) of question 4 the candidates were asked to draw a drop in price of US\$1.50 per lb to less than US\$0.30 per lb, but very few showed awareness of the scale. If they had, they would have realised that the demand had to be very inelastic and the supply shift had to be significant. When real figures are available, candidates should use them.
- Candidates must also be able to distinguish between macroeconomic and microeconomic labelling. Failure to label diagrams correctly prevents students from achieving full marks.
- Candidates must be taught to carefully identify what a question is asking for in parts (b) and (c). They should make sure that their diagrams address the specific question that is asked, rather than write all about every aspect of a diagram.
- Where a diagram is required, the questions now always stipulate which diagram is to be used. Despite this, candidates often draw different ones. This is yet another reason why it is so important to read the question carefully.
- Candidates could be advised to re-read a question once they have finished writing their answer. This can serve as a self-check to make sure that the question is actually answered. In many cases, candidates come very close, but do not actually answer the question set and they would easily get the full marks if they added just one line to present a clear answer to the actual question.
- Candidates must be reminded that to achieve top marks in questions (d), they must make reference to the text. Encourage candidates to use quotation marks, or make references to the paragraphs or texts.
- Part (d) answers also require candidates to apply and develop the economic theory that is relevant to the text. It is not enough to simply mention the relevant theory; answers which reach the top band must illustrate that the candidate can clearly use/apply that theory. Candidates need to show an examiner that they have studied an economics course, not simply that they can use some economic words that appear in a question or in the text. One of the best ways to develop economic theory is to use and illustrate an economic model. Wherever possible, diagrams should be used in part (d) responses. If candidates have drawn a diagram in part (b) or (c) that is relevant, candidates may refer back to the diagram.
- Candidates must be aware of the different command terms that may be employed in part (d) questions and the evaluation/synthesis skills that are being tested. The synthesis/evaluation command terms are 'compare', 'compare and contrast', 'discuss', 'evaluate', 'examine', 'justify', and 'to what extent...' Each of the command terms has an explanation of the depth required in the response given by the IB in the syllabus guide and candidates and teachers need to be aware of these.
- Theory provided in part (d) questions must be directly linked to the text provided to

avoid delivering a pre-learned mini-essay. Candidates should be encouraged to really 'engage' with the text, in order to be able to **apply** the theory.

- Examiners are concerned at the extent to which candidates are uncritically paraphrasing/repeating the texts in their part (d) answers. Candidates should be encouraged to think critically about the information in the text.

Standard level paper two

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 5	6 - 10	11 - 12	13 - 17	18 - 22	23 - 27	28 - 40

General comments

This subject report, used in conjunction with the markscheme, is designed to help teachers prepare their candidates for future examinations by clarifying the expectations of the IB examining team. Since the mark scheme outlines the most appropriate responses, this report focuses on the more common errors made by candidates. General comments about examination-writing techniques are similar, if not exactly the same as in previous reports on economics data-response questions.

The examination seems to have been well-received by those centres that completed the feedback forms. It was considered to be a well-balanced paper, with appropriate syllabus coverage. The texts were considered to be accessible to the majority. There seemed to be very few problems with time management.

The performance of candidates seemed to be fairly equal between the international economics section and the development economics section.

The areas of the programme and examination which appeared difficult for the candidates

This will be addressed in the context of individual questions.

The areas of the programme and examination in which candidates appeared well prepared

This will be addressed in the context of individual questions.

The strengths and weaknesses of the candidates in the treatment of individual questions

Question 1

- (a) (i) Candidates did not have to be word perfect on the functions of the WTO, so long as it was clear that they understood them. However, in many cases, it was clear that this was not a topic that candidates had encountered in the classroom. This is an area that needs addressing.

- (ii) This was generally well answered. Lower achieving responses simply stated that it was selling a good cheaply in another country. The lowest achieving responses did not even introduce the idea of another country, *ie* international trade, and so could not be rewarded.
- (b) Generally well answered, with most candidates drawing an accurate version of one of the three quota diagrams (all were acceptable), and then explaining that a withdrawal of a quota would lead to an increase in imports and a fall in price. Lower achieving responses drew the diagram, but did not use it in their explanation.
- (c) This question was not well answered and many candidates had clearly not read the question properly. They simply saw the word “tariff” and so drew the tariff diagram, even though the question gave a clue by asking for a demand and supply diagram. Solar panels are used in the production of “solar power electricity” and so a tariff on them will lead to an increase in the costs of production in the solar power electricity industry, shifting the supply curve to the left, and causing an increase in price and a decrease in quantity demanded and supplied. If candidates used the market for solar panels and then tied it to the market for solar powered electricity in the explanation, they were fully rewarded. However, if no link was made to the market for solar powered electricity, then reward was not given. A significant number of candidates failed to make the link.
- (d) This question was reasonably well answered, with many candidates aware of the arguments for and against free trade. Stronger candidates gave a balanced response, highlighting the arguments for and against free trade, and supporting them with evidence from the text. Arguments in favour of free trade from the text included lower prices and more choice for consumers, specialization allowing continued growth in global use of clean energy products, prevention of trade wars and retaliation, reduced negative externalities, and the support of emerging economies. Arguments against free trade were dangers of dumping, the protection of emerging industries, the protection of employment, and the maintenance of quality levels.

Lower achieving responses provided a theoretical response relating to free trade, ignoring the text, and so only reached level 2 in the assessment criteria.

Question 2

- (a) (i) Most candidates explained that this was where a country’s currency is fixed against the value of another currency and/or a basket of other currencies and/or gold. Lower achieving responses stated that it was where a country’s currency is fixed by the government.
- (ii) Lower achieving responses explained that it was an increase in GDP (output), omitting the fact that it is measured in ‘real’ output. An increase in actual output is not sufficient.

- (b) This question discriminated well. Higher achieving candidates drew an accurate diagram, with an increase in the supply of the dirham, and explained that the government could achieve this by selling its currency (buying foreign currency) in the international money markets. Lower achieving responses were confused between the domestic demand and supply of money and the international demand and supply of currency.
- (c) This was generally well answered, with many candidates explaining that depreciation is a fall in the value of a currency due to market forces in a floating exchange rate system, whereas devaluation is the fall in the value of a currency, deliberately caused by the central bank (government), in a fixed exchange rate system. Lower achieving responses ignored the actual cause of the fall in value, *ie* market forces versus government intervention.
- (d) Higher achieving candidates gave a balanced response, highlighting the arguments for and against fixed and floating exchange rates, and supporting them with evidence from the text, which was plentiful. Arguments in favour of a fixed system included greater predictability and easier forward planning, advantages relating to inflation (highlighted by the UAE), and discouraging speculation, if the government possesses sufficient foreign currency reserves. Arguments against were the lack of domestic monetary policy freedom (as shown in the UAE), imported inflation (if the exchange rate is fixed at a low level, as in the text), the need for large foreign currency reserves (which was not a problem for Saudi Arabia and the UAE), finding an appropriate level for the exchange rate, and potential conflict with trading partners, if the exchange rate is maintained at too low a level.

Many candidates wrote a theoretical response relating to a fixed versus floating exchange rate, ignoring the text, and so only reached level 2 in the assessment criteria. The ability to synthesize/evaluate, supported by appropriate evidence, is the higher level skill that is being sought in these questions and it is something that candidates need to be able to accomplish if they are to reach the highest levels of achievement.

Question 3

- (a) (i) This question was surprisingly poorly answered, with many candidates clearly not familiar with the term at all. However, most candidates gained a mark by a vague response stating that it was related to unrecorded / illegal / untaxed economic activity.
- (ii) A well answered question, with most candidates explaining that it is the total value of all goods and services produced in an economy in a given time period. Lower achieving responses excluded the term “value”, or failed to mention that it was goods and services.
- (b) Higher achieving candidates defined economic development, stressing the importance of economic and non-economic factors, including health and education, and then went on to explain that the HDI is a composite index covering a range of development

indicators and so is a useful gauge of development. A surprising number of candidates were unable to give the most recent educational components of the HDI, *ie* mean years of schooling and expected years of schooling, and supplied dated and so incorrect components.

- (c) This was generally well answered. Higher achieving candidates produced a diagram showing negative externalities of production and explained that the over-production of palm-oil would result in a socially inefficient level of output, where $MSC > MSB$. Lower achieving responses were confused in drawing the diagram and there was much incorrect labelling relating to the MSC, MPC and MSB curves. The area of welfare loss was often shown incorrectly.
- (d) Higher achieving candidates defined economic growth and economic development at the outset and then identified parts of the text that suggested that economic growth was being achieved, such as the mining sector exports, agricultural potential, and forecast growth rates. They then discussed the likelihood of this growth leading to development in the DRC, considering barriers to development from the text, such as corruption, political instability, conflict, and other problems resulting from these.

The main weakness, as usual, was that some candidates tended not to focus on the specific question, but wrote in a general way about ways to achieve economic development through government growth, or not. This led to very theoretical responses, which only achieved level 2 in the markscheme at best.

Question 4

- (a) (i) Most candidates were able to explain that such loans were a form of aid. Most went on to add specific details, such as charging rates of interest below the market rates, or charging no interest rates, or long periods of repayment (25 to 40 years, or the existence of a grace period, or capable of repayment in local currencies). A number of candidates clearly had no idea of what the loans were and this, types of aid, is an area that would appear to need some attention in a certain centres.
- (ii) This was generally well answered and the vast majority of candidates were able to explain that absolute poverty was where people have insufficient income to meet their basic human needs. Others explained that it was a state of living on less than US\$2 (PPP) (or US\$1.25 or US\$1) per day. Very few candidates had no idea of the meaning of the term.
- (b) This was a generally well answered question, with the majority of candidates drawing an AD/AS diagram, with the AD curve shifting to the right, and explaining that investment is a component of AD and so the increase in investment in the hydroelectric project would increase AD, resulting in higher output and increasing employment. Some candidates answered correctly, but then failed to tie their answers in with the creation of jobs, as requested in the question. Some candidates took an alternative approach, explaining that the lower price of electricity would reduce production costs,

shifting the SRAS curve to the right, also increasing output and employment. If correctly graphed and explained, this response was fully rewarded.

- (c) This question was very well answered. Most candidates showed a PPC diagram with the PPC shifting outward, although labelling of the axes was sometimes an issue. They then explained that improving literacy rates improved the quality of labour, therefore increasing production possibilities.
- (d) Higher achieving responses defined economic development and then considered the strengths and weaknesses associated with the activities of the World Bank in Africa. Strengths included the provision of investment, job creation and economic growth, concessional loans limiting indebtedness, positive implications for sustainable development, improvements in infrastructure, and the development of human capital. Some of the limitations identified included the imposition of injurious lending conditions, undue US influence, different priorities between the donors and the recipients, and the dangers of failure.

However, a large proportion of candidates merely wrote an essay on what is needed to promote economic development, without sufficiently focussing on the role of the World Bank. It appeared that these candidates were actually unaware of what the role of the World Bank is and this may be another area in need of coverage by centres.

Recommendations and guidance for the teaching of future candidates

Many will note that these suggestions have appeared in previous examiner reports at both standard and higher level. However, since the expectations have not changed, the advice remains largely the same.

- Teachers should encourage their candidates to learn precise definitions, as the use of precise and accurate economic terminology will enhance performance on all assessment components. If the candidates are confident in their knowledge of definitions, they can proceed quickly through the first part of each data response question. To help candidates to develop this important skill, candidates might be encouraged to compile a glossary of terms. Candidates must be taught to include appropriate economic terms in their definitions, in order to distinguish themselves from people who have simply picked up some information without having taken an economics course.
- In part (a) questions, candidates should be encouraged to write **no more than** two sentences, for defining, listing, stating, or describing. Some candidates write far too much and then suffer time problems later in the examination paper. Diagrams are certainly **not** required in part (a) questions.
- Many part (b) and (c) questions require the use of a diagram, and these are generally all standard diagrams from the syllabus. Candidates would thus benefit if they compiled a glossary of all the diagrams. Where a diagram is used in parts (b) or (c), candidates should be sure to use/explain the diagram by making references to it in the response. The diagram and the explanation must be integrated with each other. Candidates

should explain reasons for any changes and use (dotted) lines to the axes and notation such as (q_1 to q_2) or (AD_1 to AD_2) in their written work.

- If at all possible, diagrams should not be placed at the end of the examination. They should be drawn exactly where the accompanying explanation is written.
- Candidates should take about a third of a page to draw their diagrams, and should use a ruler to make sure that it is done neatly, so that the information is clear.
- It is the policy that candidates are not allowed to use coloured pens/pencils on their examinations. Therefore there should not be references to different coloured lines in the diagram, as these will not show up when the papers are scanned. However, they should be sure to use arrows to indicate the direction of change of any variables.
- Diagrams should be made appropriate to the question and/or the market in the question. They should not be generic.
- Candidates must be able to distinguish between macroeconomic and microeconomic labelling. Failure to label diagrams correctly prevents candidates from achieving full marks.
- Candidates must be taught to identify what a question is asking for in parts (b) and (c). They should make sure that their diagrams address the specific question that is asked, rather than write all about every aspect of a diagram.
- Where a diagram is required, the questions stipulate which diagram is to be used. Despite this, students often draw different ones. This is yet another reason why it is so important to read the question carefully.
- Candidates could be advised to re-read a question once they have finished writing their answer. This can serve as a self-check to make sure that the question is actually answered. In many cases, candidates come very close, but do not actually answer the question set and they would easily get the full marks if they added just one line to present a clear answer to the actual question.
- Candidates should be reminded that to achieve top marks in part (d) questions, they must make reference to the text. They should be encouraged to use quotation marks, or to make references to the relevant paragraphs or tables.
- Part (d) answers also require candidates to apply and develop the economic theory that is relevant to the text. It is not enough to simply mention the relevant theory; answers which reach the top markband must illustrate that the candidate can clearly use/apply that theory. Candidates need to show an examiner that they have studied an economics course, not simply that they can use some economic words that appear in a question or in the text.
- Candidates must be aware of the different command terms that may be employed in part (d) questions and the evaluation/synthesis skills that are being tested. The synthesis/evaluation command terms are 'compare', 'compare and contrast', 'discuss', 'evaluate', 'examine', 'justify', and 'to what extent...' Each of the command terms has an explanation of the depth required in the response given by the IB in the syllabus guide and candidates and teachers need to be aware of these.
- Theory provided in part (d) questions must be directly linked to the text provided to avoid delivering a pre-learned mini-essay. Candidates should be encouraged to fully 'engage' with the text, in order to be able to **apply** the theory.
- Examiners are concerned at the extent to which candidates are uncritically paraphrasing the texts in their part (d) answers. Candidates should be encouraged to think critically about the information in the text.

Higher level paper three

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 6	7 - 13	14 - 19	20 - 25	26 - 31	32 - 37	38 - 50

General comments

The examination paper was found by candidates to be more difficult than the previous November session papers, although closer to the level of difficulty in May 2015. This was to be expected, given the conscious decision to make the paper harder following the “gentle” introduction, following the standard of the specimen papers, in 2013 and 2014. The paper was appropriate for higher level (HL) IBDP candidates. The component provides an opportunity to examine some of the more difficult HL concepts in a manner which requires precise and accurate responses. It was to be expected that the some aspects would prove to be quite difficult, namely:

- a challenging examination of allocative efficiency (which unfortunately appeared in both question 1 and question 2)
- calculation of the change in consumer surplus (for 2 marks only)
- explanation of how a subsidy sets a mechanism in place for the reallocation of resources
- the significance of PED along the demand curve
- the requirement for a clear explanation of the relationship between nominal GDP, the GDP deflator and real GDP.

However, some areas of weakness were surprising:

- calculation of excess demand/supply at the original price
- calculation of profit at a given level of output
- calculation of the cost of a typical basket of goods (perhaps because “weights” were not included in the table)
- usefulness of a producer price index
- calculation of the rate of unemployment.

Additionally, the number of tasks required in the time available had increased, placing a little more pressure on candidates.

The areas of the programme and examination which appeared difficult for the candidates

- The processes leading to a reallocation of resources following a change in the conditions of supply.
- The meaning of allocative efficiency as it relates to both the level of output and resource allocation.

- The effect on allocative efficiency resulting from a change in market conditions.
- The significance of PED for a profit-maximizing monopolist.
- Calculation of a weighted price index.
- The significance of a producer price index.
- Net property income as it relates to GDP/GNI.
- Manipulation of unemployment statistics.

Many candidates are clearly not used to recognising that a change in demand or supply results in excess demand or supply at the original price.

The market mechanism which results in a reallocation of resources was not explained well in many cases.

It was common for candidates to refer to “satisfaction” or “utility” when describing producer surplus.

It was common for no monetary units to be given when providing a calculation of changes in consumer and producer surplus.

Relatively few candidates recognised that intervention by the government would typically result in a welfare loss (assuming no externalities are present).

Although most candidates knew the condition for allocative efficiency, explaining its meaning proved more difficult.

Explanation of why a profit maximizing monopolist will never choose to operate where demand is inelastic was generally very poor.

Many candidates calculated the cost of an unweighted basket of goods, ignoring the weights given.

Many candidates were clearly unaware that a producer price index might be a leading indicator of inflation.

As figures in question 3 Table 2 were correctly rounded to one decimal place, many candidates took this as a signal to round their answers to one decimal place, despite instructions on the front page of the examination paper.

The use of data provided, and previous answers, was poor, despite clear instructions being given.

Although candidates generally understood that inflation and nominal GDP were the elements of real GDP, few could explain that the relative rates were important for determining whether real GDP would increase over a period of time.

A common error was to use “working age population” as the denominator in the calculation of the unemployment rate.

There were many rounding errors and omission of units (such as a dollar sign).

The areas of the programme and examination in which candidates appeared well prepared

- Candidates were able to plot supply curves and interpret the results.
- Calculation of the effects on stakeholders (of a subsidy) was generally good, although lower achieving candidates struggled.
- Understanding of a monopoly diagram, and the relationships/concepts within, was generally good.
- Calculation of PED was generally good, although as in previous sessions there was a significant number of errors.
- Calculation of the rate of inflation from a given CPI was generally good.
- Calculation of real GDP, and subsequently of the rate of growth, was good.
- Candidates could generally explain how the GDP deflator adjusted nominal GDP to provide real GDP.
- Most candidates were able to outline a difficulty of measuring unemployment and two economic consequences of unemployment.

The strengths and weaknesses of the candidates in the treatment of individual questions

Question 1

- (a) (i) done very well.
- (ii) done very well.
- (iii) done well by the vast majority, with a few careless errors, such as mixing demand and supply, and providing an answer of \$17.
- (b) (i) done very well.
- (ii) generally done poorly. Many candidates subtracted the original equilibrium quantity from the new quantity.
- (iii) done very well.
- (c) Candidates were expected to state that a subsidy would effectively reduce costs of production and/or that it would increase profitability, leading to an increase in supply. The role of price was ignored by many. Although many candidates recognised that an increase in the level of output would require more resources to be allocated to production, a significant number simply stated that lower costs would provide more resources to the firm, which could use these resources for other things.

Some candidates attempted to explain how the excess supply and resulting fall in price would lead to a contraction in supply (along the new curve) but became confused when presenting the overall effect that output would increase following the subsidy.

- (d) (i) Most candidates recognised that producer surplus relates to the difference between

selling price and the price at which the producer is willing to sell, although it was common to refer to this difference as “utility” or “satisfaction”.

(ii) Generally well done, although with a significant number of candidates making the error of multiplying the subsidy per unit by the change in quantity.

(iii) Generally well done. It is clear that many candidates were well-practiced in such calculations. Many candidates omitted a \$ sign.

(iv) Generally well done.

(e) Many candidates assumed that a new market equilibrium would result in a different position of allocative efficiency; others took into account only the changes in consumer and producer surplus, and ignored the effect of government spending. As a consequence it was common for incorrect conclusions to be drawn.

Question 2

(a) Generally done very well.

(b) Generally done well. An answer of “17” was given, rather than 17 000, fairly often.

(c) Lower achieving candidates struggled, although the majority were able to provide the correct solution. It was common for “\$153” to be given, rather than “\$153 000”.

(d) Generally done well, although lower achieving candidates attempted to explain by writing that it is because “MR cuts the X-axis”, rather than indicating that $MR = 0$ at this point.

(e) Candidates found difficulty in articulating the meaning, rather than the condition for, allocative efficiency. Many indicated that the term refers to “the production of goods mostly wanted/preferred by consumers”, or that it is “where consumer surplus equals producer surplus”. Reference to resources was often missing.

(f) Generally done well – even if candidates did not know the meaning of the term, they knew the condition so were able to answer correctly.

(g) It was common for candidates to write that productive efficiency exists where costs are lowest, rather than costs per unit. Most candidates knew the condition, although lower achieving responses simply stated that it is “where $AC = MC$ ”.

(h) Generally done well, with the usual errors of inverting the formula or using the final figure as the denominator when calculating a percentage change.

(i) The majority of candidates appeared to be unaware that $PED = 1$ at the level of output when revenue is maximized. Higher achieving candidates provided excellent responses.

- (j) Few candidates were able to explain that, when faced with inelastic demand, an increase in price will increase revenue and decrease costs, thus leading to higher profit. A common approach was to focus on the effect of a decrease in price when demand is inelastic, and focusing on revenue only. Although such answers contained some merit, they did not explain the incentive to move away from the initial position.

Question 3

- (a) (i) Many candidates simply added the prices, and so produced the cost of an unweighted basket. (\$58.65 and \$60.15).
- (ii) Although the majority of candidates were able to calculate the CPI, a significant number calculated the relative cost of the basket from one year to the next but did not multiply by 100.
- (iii) Generally well done, although many candidates used the raw costs of the basket, rather than the CPIs.
- (b) A minority of candidates recognised that a producer price index may serve as a leading indicator of consumer price inflation. The majority were content with describing a producer price index, and suggesting an incorrect use.
- (c) (i) The majority of candidates were able to calculate real GDP, but did not provide an answer correct to 2 decimal places. The two values given in the table were correctly given to one decimal place.
- (ii) Higher achieving candidates were able to state that net property income might be negative, while most were able to refer to income being sent abroad.
- (iii) Generally done well.
- (iv) Generally done well, although some candidates gave an answer of “2008” possibly believing that this correctly describes the year 2008-09.
- (v) Although most candidates realised that real GDP could decrease while nominal GDP was increasing because of inflation, few successfully used the data provided and previous answer, while only the highest achieving candidates explained that the relative rates of nominal GDP and change in the price deflator were crucial.
- (d) (i) It was extremely disappointing to see the majority of candidates use “working age population” as the denominator, hence producing an incorrect response.
- (ii) Almost all candidates were able to refer correctly to hidden unemployment or another source of difficulty.

(iii) The majority of candidates were awarded full marks. The most common error was to provide social/personal effects, such as crime, vandalism or depression.

Recommendations and guidance for the teaching of future candidates

- Candidates should be reminded to show units and round correctly. It would be helpful if teachers could insist on rounding to 2 decimal places throughout the course, not just in assessment activities.
- Candidates should be reminded that answers must be written in the spaces provided, or on additional sheets. Writing below the specified box may not be seen by examiners.
- Teachers should make candidates aware of the need for clear explanation of more complex concepts such as the price mechanism or the significance of PED for the profit-maximizing monopolist.
- Teachers should be mindful that any of the learning outcomes stated in the subject guide may be examined. For example, candidates should have been able to provide an outline of the possible usefulness of a producer price index.
- Candidates should be reminded to refer to a diagram/data directly when asked to do so in the question.
- Candidates should be made aware of the requirements of addressing the command term “explain” when attempting the 4 mark questions. Explanations should be clear and logical.
- The concept of allocative efficiency merits greater attention in the teaching process.