the relevant text. Hand-drawn diagrams are acceptable. Raw data obtained through experimentation, testing or surveys may be included within an appendix. Any material that is not original must be acknowledged.

Criterion J: abstract

The abstract is judged on the clarity with which it presents an overview of the research and the essay, not on the quality of the research question itself, nor on the quality of the argument or the conclusions.

Criterion K: holistic judgment

The most successful essays contain original thoughts and ideas, demonstrating creativity and innovation, normally resulting from practical activity. Outstanding essays demonstrate the student's ability to overcome and solve problems, and consider and evaluate a variety of alternative solutions.

Economics

These subject guidelines should be read in conjunction with the "Introduction", "Outline" and "Details—all essays" sections of this guide.

Overview

An extended essay in economics provides students with an opportunity to undertake in-depth research in economics in an area of personal interest to them. It allows students to develop research skills, to apply economic theory to real-world situations, and to analyse and evaluate the outcomes of their research. The outcome of the research should be a coherent and structured analytical essay that effectively addresses the particular research question.

Choice of topic

Students should undertake an essay that uses the core principles of economics as a basis for researching a particular topic. Students should use a combination of primary and secondary research as the basis for their extended essay, and should apply the accepted theories, tools and techniques of the subject to the topic chosen.

Essays should not be historical. They should be related to economic information that is no more than three years old. Essays that are too retrospective, for example, "What was the impact of the South-East Asian crash on Thailand during 1990–1995?", almost invariably become descriptive.

Students should ensure that their research question can be answered using economic concepts and theories, and that the question does not lean too heavily towards business and management.

The topic chosen should provide opportunities for some critical analysis of the data collected. Topics that depend entirely on summarizing general secondary data should be avoided, as they are likely to lead to an essay that is essentially narrative or descriptive in nature. However, the effective use of relevant secondary data to answer the research question will be fully rewarded by the examiner.

Restricting the scope of the essay will help to ensure a clear focus, and will also provide opportunities for demonstrating detailed economic understanding and critical analysis. Choosing a research question that is made up of more than one question is unlikely to result in a successful essay—for example, "Is the café industry in Vienna an example of oligopoly and, if so, do the cafés collude with each other?" or "What is the effect of interest rate policy on aggregate demand in Greece and what should the government do to increase aggregate demand?". In the first example, the answer to the first part of the question must be affirmative in order to proceed with the essay. If not, the second part of the question cannot be answered. In the second example, the scope of the essay is simply too wide.

The following examples of titles for economics extended essays are intended as guidance only. The pairings illustrate that focused topics (indicated by the first title) should be encouraged rather than broad topics (indicated by the second title).

- "What market form characterizes the petrol supply industry in my area of Madrid?" **is better than** "What is the market structure of the Spanish petroleum industry?".
- "What is the effect of the recent imposition of a minimum wage in Austria on unemployment in the fast food industry in Graz?" **is better than** "What has been the effect of the minimum wage on unemployment in Austria?".
- "To what extent has the fall in the exchange rate of the US dollar affected the tourist industry in Carmel, California?" **is better than** "How has the fall in the exchange rate of the US dollar affected the US economy?".
- "What has been the economic effect of water privatization on the farming industry in my region of Zambia?" **is better than** "How has the privatization of water affected Zambia?".

It may help if the student further defines the topic chosen for study in the form of a research question, followed by a statement of intent that indicates which broad process is going to be used in answering the question. In this way, the approach to the topic chosen may be even further clarified. Some examples of this could be as follows.

Торіс	Pricing at the local supermarket
Research question	Will the recent policy of cutting bakery prices lead to increased revenue for the Safeway supermarket in Ryde, Sydney?
Approach	Primary research is conducted through observation and supported by secondary research, such as company records and textbooks. This results in a detailed examination of elasticity and its relationship with total revenue.
Торіс	The economic impact of privatization
Research question	To what extent did Matav, a Hungarian telecommunications company, become more efficient post- privatization?
Approach	Primary data is collected through interviews with company management (qualitative research) and secondary data is collected by accessing company reports. Economics texts are used for researching the economic theory of privatization.
Торіс	The impact of monetary policy
Research question	Has the Kenyan central bank's policy of interest rate cuts led to a rise in new car sales in Nairobi?
Approach	A consumer questionnaire (quantitative research) is circulated and interviews (qualitative research) are carried out with sales managers of new car firms. Government macroeconomic statistics (secondary research) are also accessed.

Treatment of the topic

It is important that the topic and research question reflect a firm emphasis on economics, and that they do not become directed towards another subject area. Where topics could be approached from different viewpoints, such as business or history, the treatment of material must reflect an approach that uses economic theory and, therefore, meets the subject requirements of economics. Students must choose a research question that can be treated effectively within the word limit and is not of a trivial nature. Research questions that do not allow a systematic and meaningful investigation using relevant economic theory, and do not demonstrate critical analysis and detailed understanding, are unlikely to be suitable in economics. In some instances, it may become clear at an early stage in the research that too little information is available to permit such an investigation. In such cases, a change of focus should be made.

Students may be encouraged to carry out original research on a topic within any of the syllabus sections in the current *Economics guide*. One advantage of doing an essay on a microeconomics topic is the ability to carry out primary research in the form of surveys, questionnaires or interviews. Nonetheless, it is also possible to carry out a highly successful analysis of a question related to macroeconomics, international economics or development economics, as long as the data and information collected are used to construct a clear, reasoned argument in response to a sufficiently narrow research question. The main danger of choosing a question from these areas is in choosing a research question that is inappropriately wide. In addition, it is very important that the question is original and has not already been answered in secondary sources. In this case, the danger would be that the student might simply present a summary of secondary sources rather than a new reasoned argument.

Students should integrate relevant economic theory with the evidence obtained through the research. An essay that delivers the theory as a separate section of the essay and does not apply it to the specific research question is unlikely to be successful in terms of analysis using the theory.

Good critical analysis and evaluation can be demonstrated through sound assessment and judgment of the extent to which the relevant theory is useful in answering the research question.

An extended essay in economics is a formal essay, so students must be sure to adopt **one** of the common standards of presentation of research essays.

Interpreting the assessment criteria

Criterion A: research question

In economics, it is strongly recommended that the research question is stated in the form of a question: this is a reliable way of avoiding excessively descriptive essays. It must be possible to answer the question using contemporary economic theory. It must be clearly focused and sufficiently narrow so that it is possible to answer it within the word limit. The question should not be trivial, nor should the answer to the question be patently obvious. It should not be a "double-barrelled" question with two parts or a "yes/no" question.

Criterion B: introduction

The introduction should explain succinctly the significance of the subject, why it is worthy of investigation, and how the research question is appropriate for economic analysis. The introduction should not be seen as an excuse for padding out an essay with a lengthy superficial account of the reasons for choosing the subject. The student's personal experience or particular opinion is rarely relevant here.

Criterion C: investigation

The range of resources available will be influenced by various factors, but above all by the topic. At the very least, there should be some evidence that appropriate economic sources have been consulted.

Wherever possible, primary sources should be used, with secondary sources as evidential support. Statistical data collected from books or the internet (for example, from national statistical agencies, the IMF, the ILO, the World Bank, the WTO) may be very valuable and can be effectively used to answer the question.

If surveys are carried out, the questions must reflect appropriate and sensible economic analysis. For example, any conclusions about the elasticity of demand for a good would be highly suspect if a survey asked about the hypothetical change in a quantity demanded based on a hypothetical change in price.

Good planning may be demonstrated by the use of appropriate information to support a well-structured argument. The essay should not include theory or information that is not used to answer the research question directly. For example, it would not be appropriate to include large sections of textbook economic theory without showing how and why the theory can be applied to the particular research question.

Criterion D: knowledge and understanding of the topic studied

Having chosen a topic of interest and carried out an appropriate amount of research, the student should be able to demonstrate in-depth knowledge of the topic. This is another reason why the research question has to be suitably focused. The essay should be comprehensive and thorough.

Axes and curves/lines on diagrams should be fully labelled. Relationships between curves/lines should be accurately drawn. For example, the relationship between marginal and average values should always show the correct mathematical link. If appropriate, there should be an appreciation of the ideological underpinning of a diagram. For example, an essay looking at demand management as a way of reducing unemployment should use an appropriate AS curve.

Criterion E: reasoned argument

It should be evident throughout the entire essay that the research question is being answered. Relevant economic theory, concepts and data/information must be integrated in a logical and coherent manner. A valid and persuasive argument needs to be developed in a clear and structured way, with some awareness that there may be alternative viewpoints.

Criterion F: application of analytical and evaluative skills appropriate to the subject

Data/information must be used in the context of appropriate economic concepts and theories. Effective analysis occurs if the information gathered is examined using economic theories. Essays that are highly descriptive will score poorly here.

Students should show critical awareness of the validity of their information and the possible limitations of their argument. Very importantly, the essay should clearly note any assumptions that have been made in setting out the argument and reaching the conclusions.

Diagrams should rarely be included if there is no evidence to support their relevance to the research question. For example, an essay looking at a non-collusive oligopoly should not indiscriminately include a kinked demand curve if there is no evidence of the behaviour associated with such a curve.

If theories or diagrams are included that are not supported by evidence, the student should note that the situation might be explained by the theory, but that there is no evidence to prove firmly that the theory is valid. For example, where it appears that a firm is operating in a monopolistically competitive market and is not making abnormal profits but the student does not have proof of this, then the explanation should make clear that it is an assumption and that it has not been empirically proven.

Diagrams must be integrated into the essay. Real data should be used on diagrams wherever possible. For example, if the essay is about using taxes to reduce the negative externalities caused by smoking in Canada, then the y-axis should show "the price of cigarettes (C\$ per package)" and any real numbers (for example, 25% tax) should show on the diagram. When real values are known, they should be shown.

Criterion G: use of language appropriate to the subject

It is extremely important that economic terminology is used and that definitions of key terms are provided. This will clearly enhance the academic tone of the essay.

Definitions should be precise. For example, a discussion of elasticity should refer to percentage or proportionate changes as opposed to "big" or "small" changes.