

# Economics

## Singapore-Cambridge General Certificate of Education Advanced Level Higher 3 (2021) (Syllabus 9809)

(Updated for examination from 2021)

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The Common Last Topics highlighted in yellow will not be examined in the 2021 A-Level national examination.



# INTRODUCTION

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## Desired Outcomes of Education and Learning of Economics in Singapore

The Desired Outcomes of Education are attributes that educators aspire for every Singaporean to possess upon the completion of his formal education. These outcomes establish a common purpose for educators, and drive the Ministry of Education's policies and programmes.

The person who is schooled in the Singapore Education system embodies the Desired Outcomes of Education. He has a good sense of self-awareness, a sound moral compass, and the necessary skills and knowledge to take on challenges of the future. He is responsible to his family, community and nation. He appreciates the beauty of the world around him, possesses a healthy mind and body, and has a zest for life. In sum, he is:

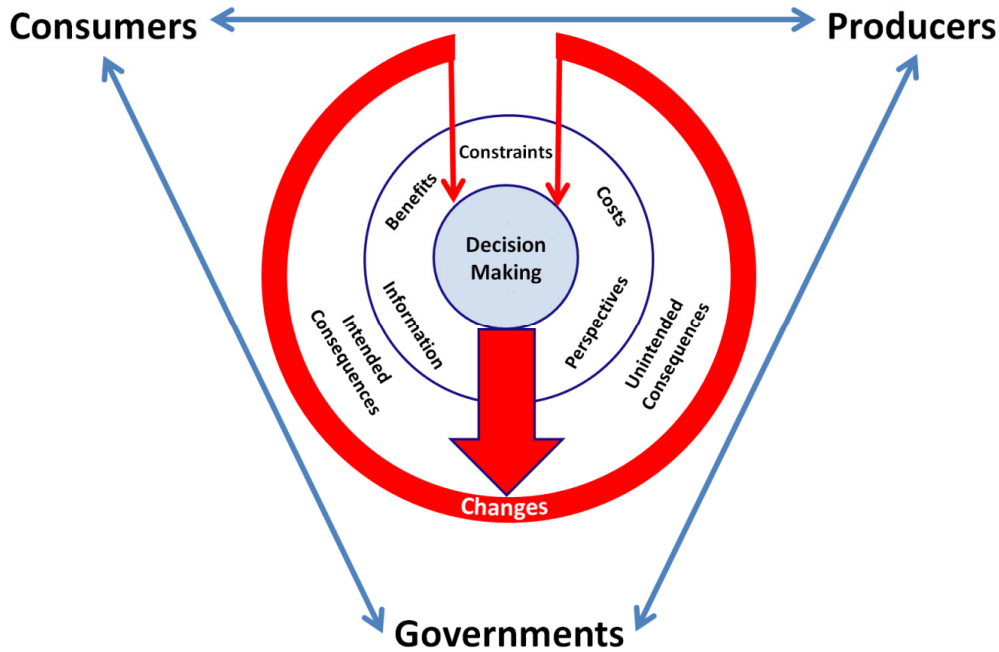
- a **confident person** who has a strong sense of right and wrong, is adaptable and resilient, knows himself, is discerning in judgment, thinks independently and critically, and communicates effectively
- a **self-directed learner** who questions, reflects, perseveres and takes responsibility for his own learning
- an **active contributor** who is able to work effectively in teams, is innovative, exercises initiative, takes calculated risks and strives for excellence
- a **concerned citizen** who is rooted to Singapore, has a strong sense of civic responsibility, is informed about Singapore and the world, and takes an active part in bettering the lives of others around him.

The learning of Economics is aligned to the Desired Outcomes of Education. Through the application of economic concepts, theories and principles, candidates develop the capacity to assess the role of economic agents in the allocation of scarce resources and adopt multiple perspectives in understanding real-world economic issues. Candidates recognise trade-offs and consequences that result from decision-making to arrive at well-reasoned decisions. Candidates thus develop a set of knowledge, skills and values that encourages them to take an active interest in the domestic and global economy as contributing and concerned citizens.

## Disciplinary thinking in A-Level Economics

Globalisation, changing demographics and technological advancements are some of the key driving forces of the future. To help candidates thrive in a fast-changing world, one of the key 21st Century Competencies emphasised in the Economics Curriculum is Sound Reasoning and Decision Making, under the domain of Critical and Inventive Thinking.

Given the importance of decision-making skills, the decision-making approach through an economic lens will be used to front disciplinary thinking in A-Level Economics, with the visual representation and outline as follows.

**A Framework for disciplinary thinking in A-Level Economics**

In light of the central economic problem of scarcity, decision-making is fundamental. Scarcity leads to the inevitability of choices and trade-offs. In the context of the Economics syllabus, decision-making is framed as a process where candidates analyse how decisions are made from the perspectives of different economic agents (consumers, producers and governments), adjusting for dynamic changes where appropriate. Candidates will have to take account of the benefits, constraints, costs, perspectives and other necessary information, while recognising the impact of the intended and unintended consequences arising from the decisions made and the corresponding trade-offs. Candidates will also recognise that decision-making by economic agents can have multifaceted implications, where decisions made by an economic agent can have an impact on other economic agents.

## AIMS

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The syllabus aims to develop in candidates the ability to:

1. critically evaluate economic concepts and theories
2. apply appropriate tools of economic reasoning to analyse the underlying nature of real-world economic issues, and propose hypotheses
3. critically and independently evaluate perspectives and decisions of economic agents
4. formulate and present well-reasoned arguments and strategies to address economic issues.

## ASSESSMENT OBJECTIVES

Candidates are expected to:

### AO1: Interpretation and Evaluation of Information

- Understand and interpret economic information presented in textual, numerical or graphical form
- Make interpretations and valid inferences from information presented and evaluate the reliability of information given.

### AO2: Application, Analysis and Evaluation

- Apply appropriate tools of economic reasoning to propose hypotheses about the underlying nature of real-world economic issues
- Analyse and evaluate critically economic concepts and theories
- Evaluate critically and independently perspectives and decisions made by economic agents
- Synthesise and construct coherent arguments, and propose strategies to address economic issues.

## SCHEME OF ASSESSMENT

### Specification grid

The assessment comprises one compulsory written examination paper with two Sections: Section A (Case Study) and Section B (Essays).

H3 Economics	Description	Overall Marks (Weighting)	Duration
Paper 1 Case Study and Essays	<p><b>Section A: Case Study (30 marks, 30%)</b></p> <p>Candidates are required to answer four compulsory part-questions based on a case study.</p> <p>The case study carries a total of 30 marks.</p> <p>Candidates should spend approximately 1 hour and 15 minutes on Section A (inclusive of reading time).</p>	100 marks (100%)	3 hours 15 minutes
	<p><b>Section B: Essays (70 marks, 70%)</b></p> <p>Candidates answer two questions from a choice of five.</p> <p>Each essay carries 35 marks.</p> <p>Candidates should spend approximately 2 hours on Section B.</p>		
Questions in Section A will test AO1 and AO2 while questions in Section B will test AO2.			

**Description of component****Section A (Case Study)**

The case study will focus on real-world multifaceted economic issues or policies, which may be from one or more themes in the syllabus. It will consist of resource materials from a range of sources. The information may be presented in textual, numerical or graphical form. Resources in textual form will not total more than four pages. There will be four compulsory questions based on the case study.

Candidates may be expected to examine the quality of data and relevance for use in their responses. They are required to analyse and synthesise underlying economic issues presented in the data, critically evaluate perspectives and decisions of economic agents, and to construct coherent arguments using supporting data. Candidates may be required to propose hypotheses and strategies to address the issues, where appropriate.

**Section B (Essays)**

Each essay question may assess knowledge from one or more themes in the syllabus.

Candidates are expected to apply tools of economic reasoning to analyse economic issues, and to critically and independently evaluate the perspectives and decisions of economic agents. They should synthesise and construct coherent economic arguments to arrive at well-reasoned judgements and decisions. Each question will comprise no more than two parts. Questions may be set on real-world context.

Candidates may be required to critically analyse and evaluate economic concepts and theories, and propose hypotheses or strategies to address the issues, where appropriate.

Candidates may be required to integrate knowledge from the different themes.

**Use of calculators**

The use of a calculator as approved by the Singapore Examinations and Assessment Board is allowed.

**SYLLABUS CONTENT**

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The H3 Economics syllabus content is built on the content of the H2 Economics syllabus. Candidates are expected to be familiar with the H2 Economics content.

The syllabus content comprises three core themes:

- Theme 1: Rationality in Decision-Making
- Theme 2: Firms, Strategies and Market Failure
- Theme 3: Globalisation and Economic Performance

The syllabus content provides a thematic approach to the understanding of Economics. The concepts and issues specified in the syllabus should be taught in the context of Singapore and the global economy where appropriate. Theme 1 encourages a more thorough study of decision-making by economic agents, through examining in greater depth the idea of rationality and how behavioural economics affects decision-making. Theme 2 looks at firms' strategies and market failure with a microeconomic focus. Theme 3 examines globalisation and economic performance in advanced and emerging economies with a macroeconomic emphasis.

Candidates should have an awareness of the nature and significance of Economics as a social science (as compared to the natural sciences) and the foundations of economic analysis (models, evidence and statistical analysis). Using the disciplinary thinking framework in A-Level Economics which focuses on decision-making, candidates will have the opportunity to explain, analyse and apply economic concepts and theories through the core themes. Candidates will also evaluate economic issues and policy choices in a

real-world context. Candidates are expected to demonstrate a broad conceptual overview and deep understanding of Economics as a discipline. Candidates should also have a good knowledge of recent economic trends and development.

### Theme 1: Rationality in Decision-Making

Theme 1 engages candidates in a more in-depth study of the decision-making process learnt in the H2 Economics syllabus. Candidates will examine both the rational and irrational decision-making processes of individuals by understanding elements of behavioural economics such as sunk cost fallacy, saliency bias and loss aversion, and how these might influence the decision-making process of consumers, producers and governments.

#### 1.1 Rationality in Decision-Making

##### 1.1.1 Rational decision-making

- a. Weighing of marginal costs and benefits\*
- b. Maximisation of self-interest by economic agents

*Note:*

*\*A broad understanding of discounting and shadow-pricing will suffice. Detailed technical analysis of the above concepts is not required.*

##### 1.1.2 Behavioural economics and its impact on decision-making by economic agents\*

- a. Sunk cost fallacy
- b. Saliency bias
- c. Loss aversion
  - Status quo bias
  - Endowment effect
- d. Giving behaviour in economic agents\*

*Notes:*

*\* Technical analyses of behavioural theories and models are not required.*

*\* An awareness of altruistic and non-altruistic reasons behind giving behaviour will suffice.*

##### 1.1.3 Use of information in decision-making by economic agents

- a. Plausibility of assumptions
  - Ceteris paribus assumption
- b. Common logical fallacies
  - Fallacy of composition
  - Post-hoc fallacy
  - Conjunction fallacy
- c. Statistical limitations
  - Misleading comparison
  - Selection bias

**Theme 2: Firms, Strategies and Market Failure**

Theme 2 examines strategies and decisions made by firms and their impact on profitability, efficiency and welfare issues. These strategies include those required to develop competitive advantage and to counter risk, uncertainty and asymmetric information. Candidates will be able to critically evaluate market failure and associated policy effectiveness, with particular reference to quasi-public goods and asymmetric information.

**2.1 Firms and Strategies**

2.1.1 Strategies and decisions of firms and their impact on profitability, efficiency and welfare

- a. Strategies and decisions of firms – advertising and branding, research and development, innovation, outsourcing, patents and other entry limiting behaviour
- b. Strategies with respect to other firms' decisions (including game theory and the economics of cooperation: prisoner's dilemma, Nash equilibrium)\*
- c. Strategies to develop competitive advantage (e.g. cost strategy, differentiation strategy) in consideration of the nature and competitive intensity of the market using analysis of the following:
  - Competitive rivalry within an industry, bargaining power of suppliers, bargaining power of customers, threat of new entrants and threat of substitute products

*Note:*

*\* Only analysis of equilibrium in pure strategies for game theory is required. Detailed technical analyses of game theory are not required.*

**2.2 Market Failure**

2.2.1 Quasi-public goods

- a. Issue of common resources (the tragedy of the commons) and significance of clearly-defined property rights
  - Coase Theorem, marketable permits and their limitations in regulating externalities
- b. Club goods

2.2.2 Uncertainty and asymmetric information

- a. Uncertainty and attitudes to risk (risk-averse, risk neutral and risk-inclined)\*
- b. Asymmetric information\* in relation to problems of adverse selection, moral hazard and principal-agent problem in product, insurance and labour markets
- c. Effects of uncertainty and asymmetric information on the decisions made by economic agents
- d. Strategies and measures to address problems of risk and uncertainty, and asymmetric information including insurance, monitoring, co-payment, signalling, screening and efficiency wages

*Note:*

*\*Detailed technical analyses of risk, uncertainty, and asymmetric information are not required.*

**Theme 3: Globalisation and Economic Performance**

Theme 3 examines the impact of globalisation on (i) advanced economies and (ii) emerging economies. Candidates will examine the economic effects of Multinational Enterprises (MNEs) and foreign direct investment (FDI), particularly on the host country. Candidates will also explore recent global economic trends and the effects of globalisation, with a focus on advanced and emerging economies. In addition, candidates will examine the macroeconomic differences between these economies, and evaluate the differences in the policies and strategies employed to achieve macroeconomic aims and manage economic issues which include unemployment, inflation, current account deficits and government debt.

**3.1 Globalisation, Multinational Enterprises and Economies****3.1.1 Multinational Enterprises (MNEs) and their economic effects**

- a. Vertical, horizontal and conglomerate integration in relation to MNEs
- b. Foreign direct investment (FDI) and its motives
- c. Impact of MNEs in relation to employment, technology transfer, national sovereignty, balance of payments, taxation, transfer pricing, outsourcing, and intra-industry and inter-industry trade

**3.1.2 Globalisation and its economic effects**

- a. Impact on competitiveness, outsourcing, employment labour mobility, capital flows, exchange rates, balance of payments, economic growth and development, and implications on national policies
- b. Effects on economies at various stages of development, with focus on advanced and emerging economies

**3.2 Economic Performance and Policies****3.2.1 Economic performance of advanced and emerging economies**

- a. Economic growth in advanced and emerging economies\*
- b. Other economic performance indicators in advanced and emerging economies, including unemployment, inflation, current account positions, and government budgetary positions
- c. Other standard of living indicators

*Note:*

*\*A broad understanding of the role of economic institutions in achieving sustainable and/or inclusive growth is useful, including institutions which promote innovation, investment and equitable income distribution. An awareness of the Solow-Swan and Romer economic growth models and their usefulness and limitations in explaining recent economic growth trends in advanced and emerging economies will suffice. Technical analysis of the models is not required.*

**3.2.2 Economic policies of advanced and emerging economies**

- a. Economic policies in advanced and emerging economies, including policies to prevent recessions or falling economic growth rates, lower stagnation risks, attain fiscal sustainability and consolidation\*, manage capital flow risks, increase domestic consumption, and ensure continuing economic growth rates
- b. Key economic issues between advanced and emerging economies\*

*Notes:*

*\*Detailed technical analyses of fiscal sustainability and consolidation are not required.*

*\*An awareness of some key economic issues between advanced and emerging economies, including possible exploitation of the emerging economies' natural resources by advanced economies, is required. Technical analysis is not required.*



## APPENDIX

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### Recommended Reading

#### General Textbooks:

	Author	Title	Publisher
1	Case, Karl E and Fair, Ray (2016)	Principles of Economics, 12th edition	Prentice Hall
2	Carbaugh, Robert J (2016)	Contemporary Economics, An Applications Approach, 8th edition	Routledge
3	Mankiw, G (2018)	Principles of Economics, 8th edition	Cengage Learning
4	McEachern, William A (2012)	Contemporary Economics, 3rd edition	South-Western College Publishing
5	Sloman, John, et al. (2018)	Economics, 10th revised edition	Pearson Education

#### General Reading on Economics:

	Author	Title	Publisher
1	Buchholz, Todd (2007)	New Ideas from Dead Economists, revised edition	Plume
2	Friedman, Milton and Rose (1990)	Free to Choose, reprint	Harcourt
3	Hausman, Daniel M (1992)	The Inexact and Separate Science of Economics	Cambridge University Press
4	Mayer, Thomas (2009)	Invitation to Economics	Wiley-Blackwell
5	Schelling, Thomas (2006)	Micromotives and Macrobehaviour, revised edition	W. W. Norton & Company
6	Taleb, Nassim (2001)	Foiled by Randomness, 2nd edition	Random House
7	Taleb, Nassim (2010)	The Black Swan, 2nd edition	Random House

#### Readings on the Singapore Economy:

	Author	Title	Publisher
1	Chia, Wai Mun and Sng, Hui Ying (2008)	Singapore and Asia in a Globalized World: Contemporary Economic Issues and Policies	World Scientific
2	Choy, Keen Meng (2012)	Studies on the Singapore Economy	World Scientific
3	Ghesquiere, Henri (2006)	Singapore's Success: Engineering Economic Growth	Thomson
4	Tan, Say Tin et al. (2009)	Economics in Public Policies – The Singapore Story	Marshall Cavendish Education

**Theme 1: Rationality in Decision-Making**

	<b>Author</b>	<b>Title</b>	<b>Publisher</b>
1	Ariely, Dan (2010)	Predictably Irrational, Revised and Expanded Edition: The Hidden Forces That Shape Our Decisions,	Harper Perennial
2	Kahnemann, Daniel (2013)	Thinking, Fast and Slow	Farrar, Straus and Giroux
3	Low, Donald (2011)	Behavioural Economics and Policy Design: Examples from Singapore	World Scientific Publishing Company
4	Thaler, Richard and Sunstein, Cass (2009)	Nudge: Improving Decisions about Health, Wealth and Happiness	Penguin UK
5	Kolm, Serge-Christophe and Ythier, Jean Mercier (2006)	Handbook of the Economics of Giving, Altruism and Reciprocity: Foundations	Elsevier B.V.

**Theme 2: Firms, Strategies and Market Failure**

	<b>Author</b>	<b>Title</b>	<b>Publisher</b>
1	Anderson, David A. (2013)	Environmental Economics and Natural Resource Management, 4th edition	Routledge
2	Besanko, David, et al. (2012)	Economics of Strategy, 6th edition	John Wiley & Sons
3	Davis, Morton D (2012)	Game Theory: A Nontechnical Introduction	Dover Publications
4	Dixit, Avinash, et al. (2014)	Games of Strategy, 4th edition	W. W. Norton & Company
5	Dixit, Avinash K and Nalebuff, Barry J (2010)	The Art of Strategy: A Game Theorist's Guide to Success in Business and Life	W. W. Norton & Company
6	Frank, Robert (2014)	Microeconomics and Behavior, 9th revised edition	McGraw Hill Higher Education
7	Kay, John (2003)	The Truth about Market: Their Genius, Their Limits, Their Follies	Allen Lane
8	Miller, Roger LeRoy, et al. (2017)	Economics of Public Issues, 20th edition	Addison Wesley
9	Magretta, Joan (2011)	Understanding Michael Porter: The Essential Guide to Competition and Strategy	Harvard Business Review Press
10	McGuigan, James R, et al. (2016)	Managerial Economics: Applications, Strategies and Tactics, 14th edition	South-Western College Publishing
11	Porter, Michael (1998)	Competitive advantage: Creating and sustaining superior performance, 2nd edition	New York: Free Press

**Theme 3: Globalisation and Economic Performance**

	<b>Author</b>	<b>Title</b>	<b>Publisher</b>
1	Acemoglu, Darren, and Robinson, James A (2012)	Why nations fail: The origins of power, prosperity and poverty	New York: Crown Business
2	Coyle, Diane (2011)	The Economics of Enough	Princeton University Press
3	Dicken, Peter (2015)	Global Shift, 7th edition	The Guilford Press
4	Dunning, John H. and Lundan, Sarianna M (2008)	Multinational Enterprises and the Global Economy, 2nd Edition	Edward Elgar Publishing
5	Galbraith, John K (1998)	The Affluent Society	Mariner Books
6	Heinberg, Richard (2011)	The End of Growth	New Society Publishers
7	International Monetary Fund	World Economic Outlook	IMF Publication Services
8	Krugman, Paul (1995)	Peddling Prosperity: Economic Sense and Nonsense in an Age of Diminished Expectations	W. W. Norton & Company
9	Neo, Boon Siong and Chen, Geraldine (2007)	Dynamic Governance	World Scientific
10	Prestowitz, Clyde (2013)	Three Billion New Capitalists: The Great Shift of Wealth and Power to the East	Basic Books
11	Sachs, Jeffrey D (2011)	Common Wealth: Economics for a Crowded Planet	Penguin UK
12	Sachs, Jeffrey D (2011)	The End of Poverty	Penguin UK
13	Stiglitz, Joseph (2003)	Globalization and its Discontents	W. W. Norton & Company
14	Stiglitz, Joseph (2007)	Making Globalization Work	W. W. Norton & Company
15	Todaro, Michael and Smith, Stephen (2014)	Economic Development, 12th edition	Trans-Atlantic Publications
16	Weil, David (2012)	Economic Growth, 3rd edition	Prentice Hall
17	Friedman, Thomas L (2007)	The World Is Flat 3.0: A Brief History of the Twenty-First Century	Douglas and McIntyre (2013) Limited