



EXAMINER'S REPORT

MAY 2018

ECONOMICS OF SEA TRANSPORT AND INTERNATIONAL TRADE

General Comments

In general, the Institute's Economics of Sea Transport and International Trade examination results were consistent with previous years,

Fortunately, ICS tutors/ staff can assist candidates at centres, struggling with such issues.

There are a growing number of candidates who continue to produce work that reflect the professionalism alluded to in the past. The typical essay awarded a pass had an introduction, definition of key terms, a sizeable body- consisting of paragraphs, well labelled graphs/diagrams and the use of the world map provided. Candidates also demonstrated an understanding of the following, keywords within a question such as: examine, analyse identify, comment, discuss, describe, predict, apply, explain, compare and contrast.

To those candidates that were not successful this time round, please feel free to contact ICS Headquarters, with your individual request for assistance, as help is readily available.

Please aim to write not less than one and half pages per question, as anything less than that is unlikely to secure a pass.

Study the course material thoroughly and pay particular attention to the definition of key economic concepts and theories such as: Utility and price, elasticity, opportunity cost, economies of scale, law of supply and demand, trade theories, derived demand and the price mechanism.

Q1. Discuss the impact that a sustained rise in crude oil prices would have on shipping and the world economy in the short and medium term.

Candidates that had prepared well for the examination produced good and well balanced essays.

Candidates were required to discuss the impact that a sustained rise in crude oil would have on shipping and the world economy in both the short term and medium term. The discussion needed to be divided into two parts namely; the world economy and the shipping industry centred on the short and medium term impacts.

The ideal starting point to the discussion of this nature, would be an over view of the world economy.

In the short term, candidates were required to consider issues such as the impact of the rise of crude oil prices on the recovery of the OECD countries, increase of food prices, basic household needs, manufacturing and industrial input costs, heating, heavy dependency on oil by major world economies, reduced consumer spending as petrol prices impact motorists.

In the medium-term, candidates needed to consider, the likely impact of higher production costs on global manufacturing and international supply chains, reduced industrial production, and spending on goods and services, reduced regional and international trade and shipping and, the fears of a recession.

On the shipping front, candidates needed to consider the impact of increased bunker prices on shipping operations and costs, reduced earnings and profits, reduced global industrial production and shipping, lay-ups, freight rates, as well as government interventions in the energy sector and initiatives to secure long term, alternative and sustainable energy sources, environmental legislation and its impact on the shipping industry.

Conclusion: centrality of oil, OECD economies dependency on oil, ramifications, recession and world economic development and growth, short/medium term.

Q2. Critically analyse the impact of 'mega ships' on the container liner industry and world shipping.

Candidates that are abreast with current shipping news produced essays that made good reading. Well done!

This question required an overview of the industry. 'Megaships' have led to the creation of new strategic global alliances and, quickened the pace of consolidation in the industry.

The analysis required candidates to look at both the positive and negative aspects of this development.

On the positive side, impacts included issues such as, overwhelming cost advantages of fuel, operational efficiency, reduced construction costs, great economies of scale and increased profitability.

On the negative side, were impacts such consolidation of industry acting as barriers to entry for smaller players, consolidation of containers in hands of fewer players, breaking of competition rules, increased insurance risks for industry, increased transshipments, and disruption of freight forwarders business model.

This question required candidates to produce a balanced critique of the liner industry and the

challenges that megaships have brought to bear on the sector.

Conclusion: megaships, impact on liner industry, consolidation, pros and cons.

Q3. Explain the concept of 'opportunity costs' as it applies to the shipping industry.

This question required candidates to explain the concept as it applies to the shipping industry. Answers should include a concise definition of the concept followed by a brief explanation of the concept. Opportunity cost is 'the value of the next best alternative foregone as the result of making a decision'.

Relevant examples include:

Ship-owner: investment in a new ship or old or second ship.

Charterer; choice of one cargo / route/length of hire or charter and reasons.

Port Agent: choice of one Shipping line, as opposed to another with supporting factors /reasons.

Conclusion: core economic theory and its application to shipping industry.

Q4. Describe the main factors that affect the global supply of ship.

Answers identified the major factors that affect the global supply of ships and skilfully demonstrated how they, individually and collectively affect the supply of ships. The main factors included; global tonnage supply, new deliveries and on order, vessels being scrapped or billed for scrapping, choke points, bunker prices, world commodity demand, levels of global industrial production, seasonal pressures and market speculation and choice of relevant factor and explanation to sum up.

Candidates that attempted this question demonstrated knowledge of subject matter and current shipping news and so, were able to apply theory to practice.

Conclusion: main factors affecting supply of ships and current dynamics.

Q5. Critically analyse the implications and limitations of the theories of comparative advantage.

This question required candidates to write a critical and well balanced critique of the implications and limitations of the theories of comparative Advantage.

A definition of the terms; Inter – industry and Intra industry and comparative advantage would provide a good starting point to the analysis.

Inter – industry occurs when country A exports raw materials to country B and in return, imports from country B manufactured goods.

Intra – industry: is trade by countries in the same type of goods eg cars.

Comparative Advantage, basically an extension of Adam Smith 's principle of division of labour, countries specialise in producing goods that they are good at , export the surplus and import goods produced more efficiently by other countries.

The ability of a party to produce a particular good or service at a lower marginal and opportunity cost over another.

Candidates needed to mention that; international trade is the exchange of capital goods and services across international borders or territories, and that trading partners reap mutual gains when each nation specialises in goods for which it holds a comparative advantage and engages in trade for other goods, but that there costs as well such, Dutch disease, diseconomies of scale, cost of trade and static comparative advantage.

Conclusion; inter- intra industry trade pros and cons of free trade.

Q6. Answer BOTH parts of the question:

- a) Describe the world tanker market, providing three examples of typical cargoes.**
- b) Explain how the growth in pipelines globally is likely to affect the market in the future. Use the world provided to support your answer.**

This two part question required candidates to provide three examples of typical cargoes such as-crude oil and refined oil products, the chemical sea-borne trades consisting of- petroleum products derived from organic chemicals, sulphuric acid and phosphoric acids derived from inorganic chemicals and vegetable oils, animal oils and bio-fuels. Exporters for example Arabia Gulf, West Africa and Russia as well importers – being all countries.

Answers then went on to discuss the growing shale gas industry , history of its emergence in the US , impact on global energy prices , OPEC and the future of oil and the growing role and importance of alternative renewable energy sources .

Part B required candidates to explain how the growth in oil pipelines is likely to affect the oil and gas industry in the future, by making reference to new, existing and expanding pipeline projects in Russia, Europe, the USA, Canada and other parts of the world.

Essays that provided specific examples of current pipeline developments such as the New Dakota Pipeline; Laurel pipelines, East Siberia –Pacific Ocean Pipeline and the Nord Stream 2 natural gas pipeline, secured marks. Candidates produced detailed maps in support of their answers. Use of the world map provided was required; therefore, maximum marks could not be secured without the use of the map.

Maritime geography is an essential part of the business and practice of shipping and international trade and should therefore, be accorded its rightful place in the study of the Economics of Sea Transport and International Trade.

Conclusion. Typical cargoes, market dynamics and current developments.

Q7. Explain why the understanding of the supply demand model is critical to ship management success. Use graph to support your answer.

Candidates used well drawn and labelled graphs that candidates used to support their answers. Well done. Well drawn graphs are a clear demonstration of candidates' grasp of theory and practice and help candidates' secure maximum marks.

This two part question was designed to test candidates' knowledge of the theory Supply and Demand, which is perhaps one of the most fundamental concepts of economics and the backbone of a market economy and its application to the successful operation of a shipping business.

Candidates were required to explain:

Demand refers to how much (quantity) of a product or service is desired by buyers. The quantity demanded being the amount of a product people are willing to buy at a certain price; the relationship between price and quantity demanded is known as the demand relationship.

Supply represents how much the market can offer and the quantity supplied refers to the amount of a certain good producers are willing to supply when receiving a certain price. The correlation between price and how much of a good or service is supplied to the market is known as the supply relationship. Price, therefore, is a reflection of supply and demand.

It is upon this platform, that candidates could now explain how the understanding of this basic concept, applies to the successful operation and management of a profitable and sustainable shipping business, how the global supply and demand of goods and services, derived demand of shipping, world economic activity, the global spread of resources/commodities, supply of shipping services, international trade theories, foreign currency and freight rate mechanisms and the four major shipping markets all interact to create the commercial environment in which shipping operates and seeks to make a success.

Conclusion: Supply and demand model, laws, shipping sectors, and its application to success of shipping.

Q.8. Explain 'elasticity of supply'. Use a graph to support your answer.

This question required candidates to explain the concept of 'elasticity of supply'. The definition of the term 'elasticity of supply' would be an ideal starting point.

'Elasticity of Supply' measures the responsiveness of the quantity supplied to a change in the price of a good, with all other factors remaining the same and a more formal definition of Elasticity of supply is: $(\% \text{ change in quantity supplied}) / (\% \text{ change in price})$.

The number that is obtained from this calculation is expected to be positive or zero, but never zero. It will be positive if the supply of tonne-miles or cargo tonnes moved per unit period increases with an increase in the freight rate.

It will zero, if despite the increase in the freight rate, there is no observable increase in tons of cargo moved or tonne-miles performed.

It is at this stage that practical examples of the above could be introduced, followed by the Identification of the determinants of price elasticity of supply, which are: the existence of the naturally occurring raw materials needed for production, the length of the production process, the production spare capacity (the more spare capacity there is in the industry the easier it should be to increase output if the price goes up), the time period and the factor immobility (the ease of resources to move into the industry) and the storage capacity of the merchants.

Conclusion: concept of elasticity of supply in the short run.

Candidates were required to use graph to illustrate their answers, eg 'Modelling Demand and Supply in Short- Run.'