

 NYJC	PRELIM EXAM 2017
	JC2 Economics H3 (9809/01)

**Paper 1 – Case Study and Essay
Tuesday**

27th September 2017

8:00 – 11:15

TIME : 3 hours 15 mins

READ THESE INSTRUCTIONS FIRST

Write your name, class and name of economics tutor in the space provided on the writing paper.

Do not flip the page of this paper until you are told to do so.

Do not use staples, paper clips, glue or correction fluid.

Section A

Answer **all** questions

Section B

Answer **two** questions

The number of marks is given in the brackets at the end of each question or part question. Write your answers on the writing papers provided. At the end of the examination, fasten all your work securely together.

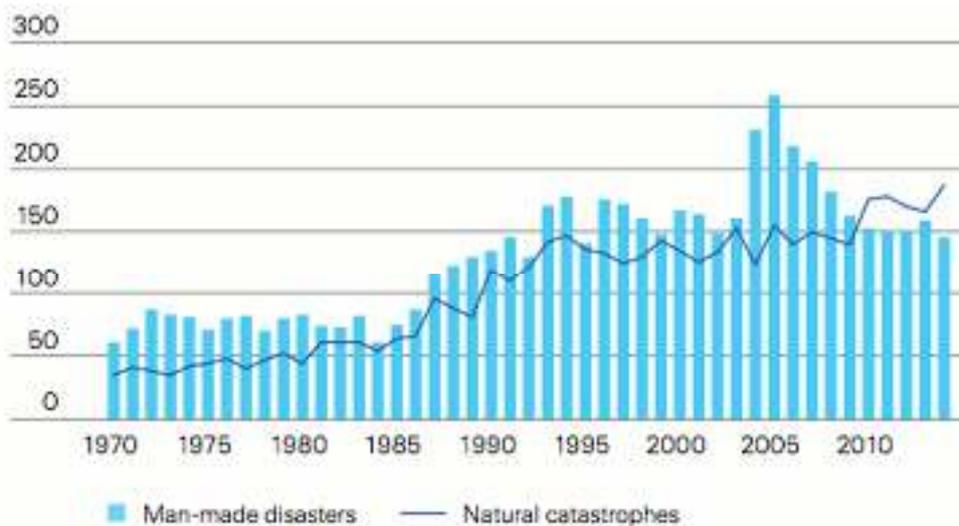
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Section A

Answer **all** questions in this section.

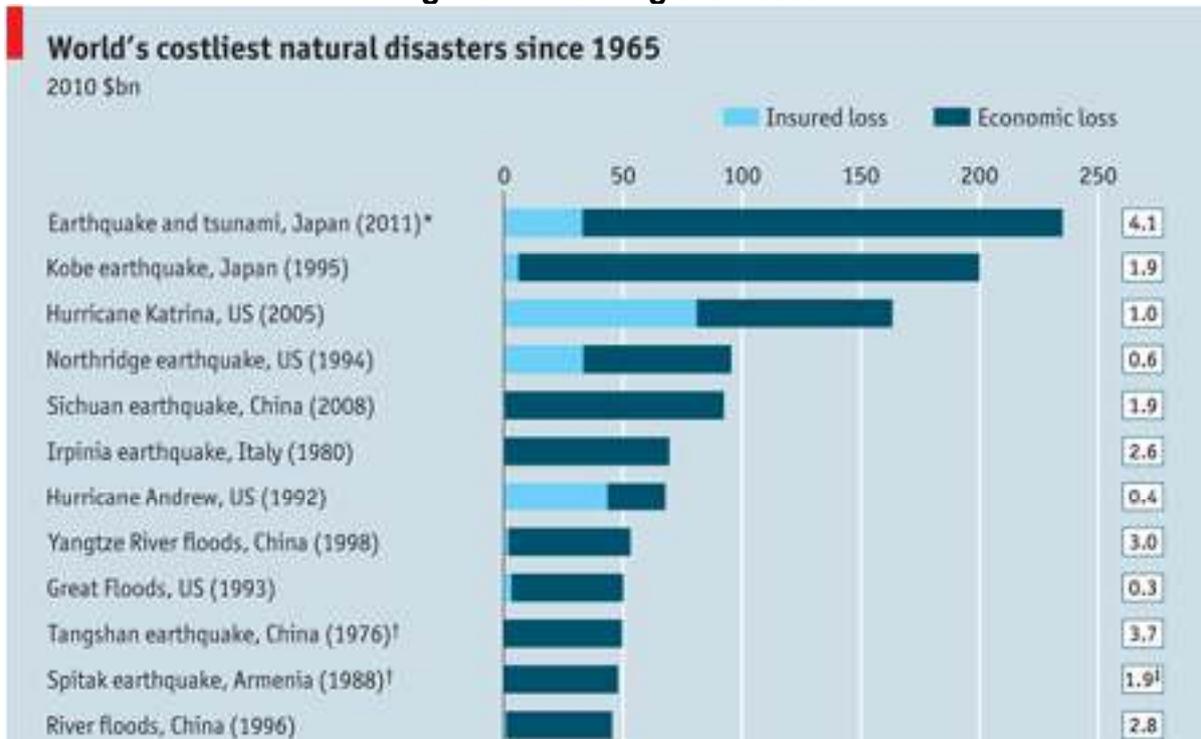
1 Disasters and Its Consequences

Figure 1 Number of catastrophe and man-made disaster events



Source: Swiss Re Economic Research & Consulting and Cat Perils, 2015

Figure 2 Counting the costs



Source: The Economist, 2012

Figure 3: The 10 populations most exposed to natural hazards



Source: Verisk Maplecroft, 2016

Extract 1: Extreme weather pushes food prices higher

Among the economic havoc brought by this winter's extreme weather, none has been more severe than the impact on the global food supply chain. Over the past few years, rising global demand for crops and production shortfalls have whittled grain surpluses to historically low levels. As extreme weather continues to cut production, those surpluses have shrunk further and forced prices higher.

When countries that usually produce surpluses have to turn around and buy grain, that tightens supplies further. Russia recently extended a ban on wheat exports imposed in August after wildfires sparked by drought caused widespread crop damage. Extreme weather conditions have cut into crop production around the world. Floods in Australia that began in December have cut wheat production by \$1 billion, according to government estimates. Banana and sugar cane plantations also sustained serious damage.

Pakistani farmers suffered an estimated \$500 million in crop damage from monsoon rains that covered as much as a quarter of the country. Flooding also has damaged crops in Brazil and central Europe.

"Growers have taken quite a bit of economic loss of vegetables and citrus crops," said Jim Reif, chief meteorologist at U.S. Weather Consultants in Fort Myers, Fla. "We've had four or five critical cold events down here in central and southwest Florida that have damaged crops."

Source: NBC News, 2015

Extract 2: Natural disasters and consequences

The reported global cost of natural disasters has risen significantly, with a 15-fold increase between the 1950s and 1990s. These disasters pushed the total damage caused by natural catastrophes to US\$175 billion in 2016. The costliest disasters were in Asia. Two earthquakes in Japan combined to produce US\$31 billion in losses, while floods that struck China during the summer caused US\$20 billion in damage.

Natural disasters and public finance

Natural disasters cause significant budgetary pressures, with both narrowly fiscal short-term impacts and wider long-term development implications. Reallocation is the primary fiscal response to disaster. Disasters are likely to result in additional expenditure to meet costs of repair and rehabilitation of public property and to provide support for the victims. Public revenue may also be affected. Disasters can cause government revenue to fall, since lowered levels of economic activity, including possible net declines in imports and exports, imply reduced direct and indirect tax revenue. Publicly owned enterprises may experience disaster-related losses, placing additional burden on government losses.

On the positive note, post-disaster investment may result in high levels of economic activity. Rehabilitation and reconstruction also provide an opportunity for necessary but neglected repairs for the upgrading of facilities.

Information on natural hazards and disaster reduction

The availability of good-quality, trustworthy data is a necessary condition for effective management of natural disaster risk. Evidence provides clear examples of how strengthening of information systems and the application of information in risk management have reduced the economic and human suffering inflicted by extreme events. The cyclone warning system in Bangladesh is widely recognised as a successful instance of disaster reduction. The meteorological forecasts provide earlier and more precise advice on imminent storms. This information has been translated into warnings with increasing effectiveness, thus allowing precautionary evacuations of at risk people to shelters and livestock to protective mounds.

Research into global climatic processes is a classic example of public good, Meteorological information on tropical storms is close to the theoretical case of a public good. Case studies also highlight situations in which the public good framework breaks down, as when there is rivalry among users of information (for example, between countries that share a river system).

Non-excludability is a common source of problems with coordination and financing because of the incentive to free-ride. All countries likely to be affected by disasters that benefit from good information should contribute to the costs of provision. But there are problems of valuation, and also differences in ability to pay for good information.

Source: adapted from Economic and Financial Impacts of Natural Disasters: an Assessment of Their Effects and Options for Mitigation, The World Bank

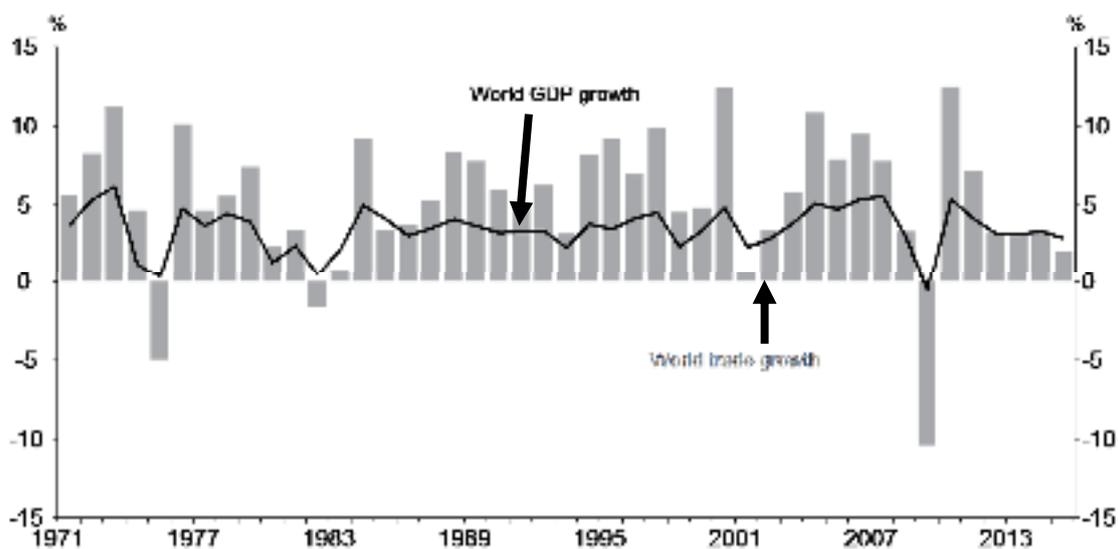
Extract 3: How natural disasters affects economic growth

Large sudden natural disasters such as earthquakes, tsunamis, hurricanes, and floods generate destruction on impact, both to people killing, injuring and rendering homeless and to physical capital by destroying property and public infrastructure. Much research in both the social and natural sciences has been devoted to increasing our ability to predict disasters and prepare for them; though the economic research on natural disasters and their consequences on GDP is fairly limited.

On the one hand, the destruction of capital leads to reduced productive capacity that will lead to lower GDP growth until the reconstruction is complete. On the other hand, the fiscal reconstruction stimulus, and the additional demand for investment to replace destroyed capital leads to a boost in economic activity. Other potential short-run effects can lead to either reduction in growth (e.g., increased perception of future disasters leads to decrease in investment demand) or to a boom (e.g., upgrading of production networks demolishes inefficiencies of the old regime). These shocks may also be catalysts for adoption of new technologies that may be beneficial in generating (especially long-term) growth.

Source: Natural Disaster and Economic Growth, 2009

Figure 4: World GDP Growth



Source: OECD, 2016

Questions

- (a) With reference to Figures 1,2 and 3, explain the trends and impact of man-made disasters and natural catastrophes. [6]
- (b) Explain how disasters and catastrophes can permanently affect comparative advantage and globalisation. [6]
- (c) Assess the contribution economics has made to the study of how to resolve the problem of who pays for “natural hazard information”. [8]
- (d) Using Solow and Romer Growth Models, discuss the long run effects of natural disasters and catastrophes on economic growth. [10]

Section B

Answer **two** questions from this section

- 2 “Policy makers nudge consumers toward their long-term best interests and marketers nudge consumers away from their long-term best interests, usually by manipulating consumers into buying more than they would if they were being economically rational.” Discuss this view. [35]

- 3 The International Labour Organisation (ILO) Director-General, Guy Ryder asserts that migrant labour make significant and essential contributions to the economic, social and cultural developments of their host countries. However, some governments of host countries would claim that increased global labour mobility has caused its own set of problems.

Discuss how asymmetric information in the labour market, for migrant labour in particular, may result in potential problems and assess measures that may be implemented to counter the problems caused.

[35]

- 4 Significant interest in understanding how innovation impacts the firms and economy started to gather in economics during the 1980s. Prior to this, the general consensus in economics was that innovation just “happened” and improved the economy through technological change.

Assess the extent to which game theory has improved our understanding of the impact of innovation by firms on profits and economic welfare.

[35]

- 5 “Over the past century, resource rich economies like oil rich Nigeria and Venezuela have performed poorly whereas resource poor countries like Singapore, South Korea and Hong Kong notably have performed well economically”.

Assess the possible reasons for this phenomenon.

[35]

- 6 Explain the benefits derived by emerging economies from the presence of multinational enterprises and evaluate the conflicts within these economies caused by their presence. [35]