

UNIVERSITY OF WARWICK

Summer Examinations 2015/2016

Topics in Applied Economics 1(b)

Time Allowed: 2 hours plus 15 minutes reading time during which notes may be made (on the question paper) but no answers may be begun.

Answer **FOUR** questions, including (i) **TWO** short-answer questions and **TWO** long-answer questions and (ii) at least **ONE** question from **EACH** section. The paper consists of 3 Sections, one for each Topic. Each Section contains one short-answer question (worth 15 marks) and one long-answer question (worth 35 marks). Answer Section A questions in one booklet, Section B questions in a separate booklet; and Section C questions in a separate booklet.

Approved pocket calculators are allowed.

Read carefully the instructions on the answer book provided and make sure that the particulars required are entered on each answer book. If you answer more questions than are required and do not indicate which answers should be ignored, we will mark the requisite number of answers in the order in which they appear in the answer book(s): answers beyond that number will not be considered.

Section A

1. What are the connections between the Easterlin Paradox and herd behaviour? **(15 marks)**

2. "Human happiness, h , seems approximately to follow a quadratic equation over the lifespan. One possible explanation is that wisdom, w , rises and health, h , declines." What do you think of this explanation, and how would you represent it in diagrams or in algebra? Is such a theory testable? Overall, why do you think happiness is described by a quadratic equation?

(35 marks)

Section B

3. The first empirical studies of conflict correlated economic variables, such as GDP per capita and onset of civil conflict using simple cross country regressions. Briefly explain, why should we be cautious about interpreting these findings causally. How does Miguel et al., 2004 address these concerns? **(15 marks)**

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4. Consider the analysis of civil conflict in Colombia in Dube and Vargas (2013), which was one of the first empirical studies that tried to shed light on the different economic mechanisms driving civil conflict. **(35 marks)**
- (a) Discuss the two economic mechanisms that Dube and Vargas (2013) try to disentangle. **(10 marks)**
 - (b) They focus on oil and coffee production in order to discern these two mechanisms. What are the assumptions required for this to be possible? **(10 marks)**
 - (c) Dube and Vargas (2013), in their empirical analysis exploit commodity price variation and municipality level variation in their commodity intensity. Why do they need to convince you that Colombia is a price taker? How do they do this? **(8 marks)**
 - (d) What policy implications can be drawn from the main results, if governments are interested in reducing civil conflict? How would you test these? **(7 marks)**
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Section C

5. Consider the problem of measuring the impact of a partisan political impact on the economy, for example, the economic effects of a Republican or a Democratic President. Describe the ‘reverse causality’ concern that affects this type of measurement exercise in the context of a stock market event study. How could the use of higher-frequency data (for example, 10-minute changes in stock prices) help disentangle this reverse causality? **(15 marks)**
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6. Consider the hypothetical scenario whereby secret CIA documents describing the timing of political decisions surrounding the surprise US invasion of Panama in 1989 have been released to you for use in your undergraduate research project at Warwick. The documents describe a sequence of preliminary authorizations of espionage and military activities leading up to the invasion. The chosen topic is to test for the presence of insider knowledge about the operations in financial markets at the time. **(35 marks)**
- (a) How do the implications of the ‘efficient markets hypothesis’ facilitate your empirical study? Distinguish the roles of public versus private information in this research design. **(10 marks)**
 - (b) What type of firms would you choose as being sensitive (in terms of their stock prices) to the Panama invasion? **(10 marks)**
 - (c) Write out a simple equation that you would use for empirically testing whether the returns for these firms co-move with the timing of the CIA authorizations? **(8 marks)**
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- (d) Suppose you estimated this equation using a cumulative returns definition (that is, the full, accumulated 3-day shift in stock prices for a 3-day window or the full, accumulated 6-day shift for a 6-day window). The estimated effect for the 3-day model is 0.08 (0.025) while the effect for the 6-day model is 0.09 (0.025) (standard errors are in parentheses). How does the fact that these two estimates are so close together help us to conclude that private information was involved in the shift of stock prices (as opposed to some other influence)? **(7 marks)**
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