IMESS DISSERTATION

Note: Please email the completed mark sheet to Year 2 coordinator

(cc Chiara Amini chiara.amini@ucl.ac.uk **and** fiona.rushworth@ucl.ac.uk**)**

Please note that IMESS students are <u>not</u> required to use a particular set of methods (e.g. qualitative, quantitative, or comparative) in their dissertation.

Student:	Ziyi WU
Dissertation title:	'Which Factors Are More Important In Emerging Economies: External or Internal?'

	70+	69-65	60-61	59-55	54-50	<50
	A	B	C	D	E	F
Knowledge *Knowledge of problems involved, e.g. historical and social context, specialist literature on the topic. Evidence of capacity to gather information through a wide and appropriate range of reading, and to digest and process knowledge.*				X		
Analysis & Interpretation *Demonstrates a clear grasp of concepts. Application of appropriate methodology and understanding; willingness to apply an independent approach or interpretation recognition of alternative interpretations; Use of precise terminology and avoidance of ambiguity; avoidance of excessive generalisations or gross oversimplifications.*				X		
Structure & Argument *Demonstrates ability to structure work with clarity, relevance and coherence. Ability to argue a case; clear evidence of analysis and logical thought; recognition of an argument´s limitation or alternative views; Ability to use other evidence to support arguments and structure appropriately.*					X	
Presentation & Documentation *Accurate and consistently presented footnotes and bibliographic references; accuracy of grammar and spelling; correct and clear presentation of charts/graphs/tables or other data. Appropriate and correct referencing throughout. Correct and contextually correct handling of quotations.*						X
Methodology *Understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research.*						X

ECTS Mark:	F	**Charles Mark:**	45	**Marker:** S. Makarova
Deducted for late submission:	0			**Signed:** *Cellach*
Deducted for inadequate referencing:	0			**Date:** 31 August 2020

MARKING GUIDELINES

A (UCL mark 70+) = A (Charles mark- excellent): *Note: marks of over 80 are given rarely and only for truly exceptional pieces of work.* Distinctively sophisticated and focused analysis, critical use of sources and insightful interpretation. Comprehensive understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research.

B (UCL mark 69-65) = B (Charles mark – very good)
C (UCL mark 64-60) = C (Charles mark – good): A high level of analysis, critical use of sources and insightful interpretation. Good understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research. 65 or over equates to a B grade.

D (UCL mark 59-55) = D (Charles mark – satisfactory)
E (UCL mark 54-50) = E (Charles mark – sufficient): Demonstration of a critical use of sources and ability to engage in systematic inquiry. An ability to engage in sustained research work, demonstrating methodological awareness. 55 or over equates to a D grade.

F (UCL mark less than 50) = F (Charles mark - insufficient): Demonstrates failure to use sources and an inadequate ability to engage in systematic inquiry. Inadequate evidence of ability to engage in sustained research work and poor understanding of appropriate research techniques.

Please provide substantive and detailed feedback!

Comments, explaining strengths and weaknesses (_at least 300 words_):

The topic of the dissertation is interesting. Time series econometric approach is used for finding possible long-term relationships and short-run Granger causality between the trade openness, which is considered as an external factor for economies, and indicators of financial markets and institutions that are treated as internal factors, for China, India, South Africa and Russia.

The dissertation consists of five chapters, bibliography and two Appendices with supportive information related to the empirical part (estimation output for Vector Error Correction Models, VECM, and testing for stability of estimated VECMs).

Chapter I gives brief overview of the theories of economic growth and good justification of the choice of countries. Chapter II provides theoretical background for further empirical research. In the first part of this chapter the role of different factors in economic growth is discussed in the broad context of developed and emerging economies, while different external and internal factors that might be detrimental for economic growth are thoroughly and clearly discussed in the second part. In my view, it would be more logical to discuss the factors in the first instance and then explain their role in more specific context of different types of economies. I think, that the dissertation would also benefit from adding theoretical discussion of factors in the specific context of four selected economies.

Chapters III and IV provide empirical analysis of factors for four selected countries. Theoretical set-up of vector error correction modelling is correctly, though quite sketchy, explained. However, implementation of the methodology and explanations are very unclear and simply wrong in many places. There are no even clear description of data sources and time period that was chosen for the analysis. My further concerns related to the analysis in Chapter III are the following:

    1.   Testing for unit roots in selected variables is very unclear. The Augmented Dickey-Fuller (ADF) test is very sensitive to the choice of augmentations and including/not including time trend into tests equation, however there are no details of how results in Table 2 were obtained. The outcomes of the tests are interpreted in a very stretchy way. For example, it is clear that for India and South Africa the null hypotheses of non-stationarity of economic growth (denoted as GDP, which is misleading, in my view) are rejected. However, the Author, while summarising results of this table, prefer to ignore this (please see the first para in section 3.1.3) and bases all further modelling on the wrong assumption of non-stationarity.

It is very surprising to me, that rate of economic growth was found to be non-stationary. Real gross domestic product for a country is generally a non-stationary variable, but it's rate of growth is considered to be stationary. Though time series econometric methodology is used in the dissertation, there is no single time series graph for variables of interest. These graphs should have been given in the very beginning of the work and be a main reference point of the analysis.

    2.   Author transforms all the variables into first differences (wrongly concluding that they all are integrated of order one). However, the interpretation of such transformation for e.g. rate of growth or stock price volatility index (this variable is used but is unexplained in the dissertation, see Table 1) remains unclear.

    3.   Presentation of VEMs in (11)-(14) is incorrect (cointegrating equations seem to be missing).

    4.   Post estimation testing for stability condition in Table 5 seems to be unrelated to the models presented in (11)-(14). There are four variables and two lags in the estimated models (11)-(14), which means that number of eigenvalues for each companion matrix associated with these models is eight. However, in Table 5 there are twelve eigenvalues, which makes me think that they have been obtained for some other VECMs where number of lags included were equal to three (not two).

    5.   The choice of order of VECMs, that is number of included lags, should be explained and absence of autocorrelation in residuals should be tested.

    6.   Wrong interpretation of notation used by econometric/statistical packages: 'D(Y(-2))' is a standard notation for the second lag of the first difference of variable Y, not the second difference of Y, as it is stated by the Author (see the bottom of page 58).

Incorrect and unreliable analysis of order of integration undermines not only VECM in modelling in Chapter III, but all further empirical analysis of Granges causality in Chapter IV and leaves conclusions in Chapter V without empirical justification.

In my view, basic mistakes in interpreting Stata outputs, including irrelevant outputs, absence of description and provisional analysis of empirical data along with vague theoretical discussion in Chapter II and crucial mistakes in econometrics illustrate poor understanding of econometric methodology and inability to engage in sustain research.

Specific questions you would like addressing at the oral defence (_at least 2 questions_):

1. Explain importance of digitalisation in the context of China and South Africa and why this factor was not included in the empirical analysis.

2. Explain graphs on Figure 1 and, in particular, the difference between the last two of them (named as 'Russian Federation (1)' and 'Russian Federation (2)').