

Economic Dynamics: Final Examination

Your Name: _____

Date: 7 December 2020

During the examination, you are expected to conduct yourself ethically.

Part 1 (80%) procedures:

1. One member of your team should email one copy of the team project in PDF format to david.wheat@uib **and either** novikaj@ukma.edu.ua **or** olisk@ukr.net
2. Attach a cover page that includes the names of each team member and a brief description of each team member's contribution to the project ('who did what?').

Part 2 (20%) procedures:

1. As a condition of being allowed to take this exam and having it graded, you must not communicate in any way—including electronic communication— with another person, except the person administering the exam (the 'proctor').
2. Answer the questions on the next page by typing in the space provided.
3. **'Sign' this honor pledge with an electronic signature or by typing your name in the space:**
I did my own work on Part 2 this exam. I did not receive help during the exam, and I did not give help to anyone else. I understand that if I 'sign' this pledge falsely, I will not qualify for a passing grade on the exam and I will not qualify for course credit.

signature (above)

4. When finished, attach both pages of this document to emails addressed to: david.wheat@uib **and either** novikaj@ukma.edu.ua **or** olisk@ukr.net

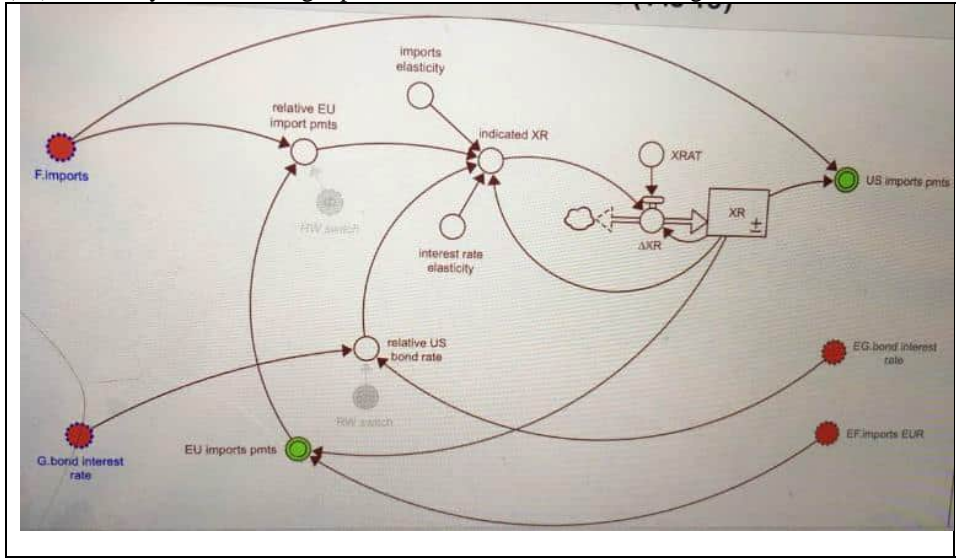
Your name: _____

Part 2

#1. Partial Model Testing (14%)

(1a) Briefly describe the purpose of 'partial model testing' and the general procedure for doing a partial model test.

(1b) Assume you were doing a partial model test for this exchange rate sub-model.



What data would you need?

What parameters would you estimate?

Which variable would you compare with historical data?

#2. Unit Consistency (6%)

<p style="text-align: center;">Taylor Rule = $r = p + .5y + .5(p - 2) + 2$</p> <p>where</p> <ul style="list-style-type: none"> r is the federal funds rate, p is the rate of inflation over the previous four quarters y is the percent deviation of real GDP from a target. <p style="text-align: center;"><u>2-percent "equilibrium" real rate</u></p>	<p>That is,</p> <p>output gap $y = 100(Y - Y^*)/Y^*$ where</p> <ul style="list-style-type: none"> Y is real GDP, and Y* is trend real GDP (equals 2.2 percent per year from 1984.1 through 1992.3).
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(2a) In the Taylor Rule above, what are the units for ...

<ul style="list-style-type: none"> • the federal funds rate? • the output gap? 	<ul style="list-style-type: none"> • inflation and inflation target? • the equilibrium real rate?
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(2b) Here is a more general Taylor Rule equation: $r = p + Ay + B(p - 2) + 2$
 where A and B have replaced the '0.5' coefficients.

To make this equation 'unit consistent', what units are needed ...
for A?
for B?