

Intro 100 at BMCC – Final Exam

Directions: You must complete all parts of this exam. Read each question carefully and think your way through each problem. Don't lose points due to carelessness. **Points will be deducted for irrelevant information and/or if your answer is incomprehensible.**

Failure to comply with the Rules on Group Work will result in failure on the exam.

Part I – 100 points – It is the year 1994. You're an economic advisor to Leonid Kuchma, the newly elected president of Ukraine. He asks you for advice on fiscal and monetary policy. Examine the economic indicators below and answer the questions that follow.

Ukraine: Selected Economic Indicators, 1991-1993

year	output growth (percentage change in real GDP)	unemployment rate (percentage of the labor force)	government budget balance (percentage of GDP)	inflation rate (percentage change in consumer prices)
1991	- 11.6	0.0	-	161
1992	- 13.7	0.2	- 25.4	2,730
1993	- 14.2	0.3	- 16.2	10,155

Source: Aslund, Anders (2002). *Building Capitalism*.

To finance a budget deficit, a country's Treasury Dept. (or Ministry of Finance) must issue and sell government bonds. Under normal circumstances, the bonds would be purchased by private investors. In Ukraine's case however, private investors would not buy the bonds, so its central bank "printed money" and bought them.

- (35 points) **EXPLAIN** why the central bank's purchases of government bonds will NOT increase aggregate output and **EXPLAIN** why their purchases will only increase the price level.
- To end the hyperinflation, the central bank must contract the money supply (i.e. it has to stop buying so many government bonds):
 - (8 points) Assume that the expected inflation rate does not change quickly. Given that assumption, **EXPLAIN** how contractionary monetary policy will affect real and nominal interest rates.
 - (3 points) Using your answer to the previous question, **EXPLAIN** how contractionary monetary policy will affect planned investment in the short run.
 - (3 points) Using your answer to the previous question, **EXPLAIN** how contractionary monetary policy will affect equilibrium aggregate output in the short run.
- To end the hyperinflation, the Ukrainian parliament must cut the budget deficit (i.e. raise taxes and cut government purchases), so that it no longer has to issue so many bonds:
 - (3 points) **EXPLAIN** how contractionary fiscal policy will affect consumption in the short run.
 - (7 points) If the Ukrainian parliament cuts the budget deficit, fewer bonds will be issued. **EXPLAIN** how contractionary fiscal policy will affect the price of bonds and how the change in the price of bonds will affect the real and nominal interest rates.
 - (3 points) Using your answer to the previous question, **EXPLAIN** how contractionary fiscal policy will affect planned investment in the short run.
 - (3 points) Using your answer to the previous questions, **EXPLAIN** how contractionary fiscal policy will affect equilibrium aggregate output in the short run.
- (35 points) Using the Solow Model, **EXPLAIN** how reducing the budget deficit will affect Ukraine's saving rate and **EXPLAIN** how the change in the saving rate will affect the steady-state level of output per worker.

Please send type-written answers by regular mail by Wed. 16 Dec. 2009.

Rules on Group Work

I strongly encourage you to work with your classmates on every assignment that I give you. You learn more when a classmate criticizes your solution to a problem and forces you to find a new method of solution.

“Working with” however does not mean “copy from.”

You learn nothing by copying a classmate's answer.

Obviously, there will be many occasions when you and a classmate agree on an answer, but the thought process by which you both arrived at the same answer will differ.

Therefore, please work together on every assignment that I give you, but do not submit identical answers. The answers that you submit may be similar, but the thought process embodied in your answers must differ.

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Email at your Own Risk

Any take-home assignment (such as a make-up exam) should be submitted to me during regular class hours. If you cannot attend class that day, ask a friend to submit it for you.

I will also accept assignments submitted to me by email or left in my box at the Department Office.

Keep in mind however that email does not always work perfectly. There is a low (but not insignificant) probability that the email will not be delivered to me. There is also a low (but not insignificant) probability that an assignment left in my box will disappear.

I will not be held accountable for vanishing emails. Nor will I be held accountable for assignments devoured by the mailbox gremlin. You assume ALL of the risk associated with email and/or mailbox submissions. If I don't receive it, it's your problem, not mine.

Exam Submission Instructions

Please mail your exams to the following address:

Eric Doviak
1608 Ocean Pkwy., apt. 4C
Brooklyn, NY 11230

Please send your exams by regular mail. I would like to receive all of the exams by Wed. 16 Dec.

Because some of you have expressed concern that your exam will “get lost in the mail,” I will take an inventory of the exams that I have received and post the names of students from whom I have not received an exam to my website. If you find your name on that list, then you will have until Fri. 18 Dec. to submit it to me.

Please note: I want to **RECEIVE** your exam no later than Fri. 18 Dec. The postmark is irrelevant.

For those of you who fear the US Postal Service so much that you would prefer to deliver your exam in person. (Yes, it has happened before): please note that I live in apartment 4C.

Finally, for those of you who do not know how to use the US Postal Service, I have included some directions on the next page.

How to Use the US Postal Service

During the transit strike, students were unable to take their final exams on the scheduled date, so I asked them to submit their answers to the exam questions by regular mail (just as you are).

I never thought I would have to send an email like this ...

-----Forwarded Message-----

From: Eric Doviak

Sent: Dec 28, 2005 2:26 PM

To:

Subject: how to use the US Postal Service

Students,

Most of you seem to have a pretty good knowledge of how to use the US Postal Service. Here are a few hints for those of you who don't:

1. **Write my name and address** on the front of the envelope in the center -- Most of you managed to perform that task with relative ease. I'm proud!
2. **Afix a 37 cent stamp** to the front of the envelope in the upper right hand corner -- You all did stellar job on this task. Of course, I would have no idea if you didn't, because (in that case) the post office wouldn't deliver it to me.
3. **Write your name and address** on the front of the envelope in the upper left hand corner -- this task proved too difficult for many of you. We'll have to work on this next semester.
4. **Write your name on the exam** that you are submitting -- this was another difficult task for some of you.

Now provided that you followed either instruction #3 or #4, it wasn't too difficult to figure out who sent the enclosed exam to me. There was however one student who didn't follow either one of the last two instructions -- and I have no idea who it is.

So will the student who sent an envelope from First Meridian Mortgage please claim your exam!

Let me also express my deepest gratitude to those of you who sent me your exam by certified mail. I think of you each time I walk 10 blocks to the post office, wait on line for 15 minutes, wait for the clerk to find your envelope, sign a slip of paper and then walk 10 blocks back home.

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Many of you have asked me to send you a note when I receive your exam. That would be feasible if only a few of you were sending me an exam, but it is not feasible when 70 of you are sending me an exam. I will contact you if I do not receive your exam.

I have received most of your exams by now and I'll start grading them in the next day or two.

All the best for a Happy New Year,

- Eric Doviak