

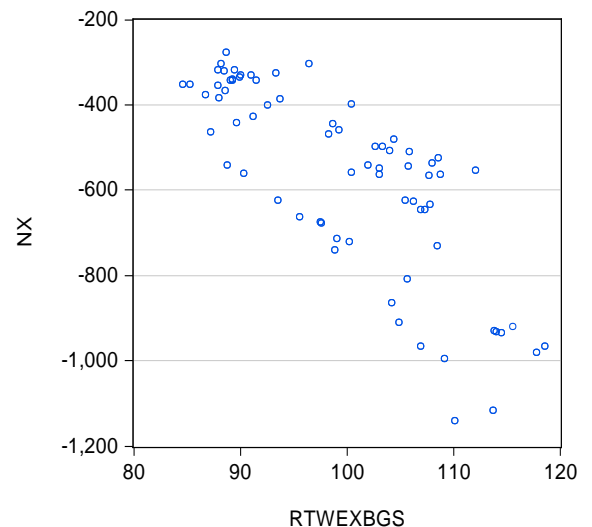
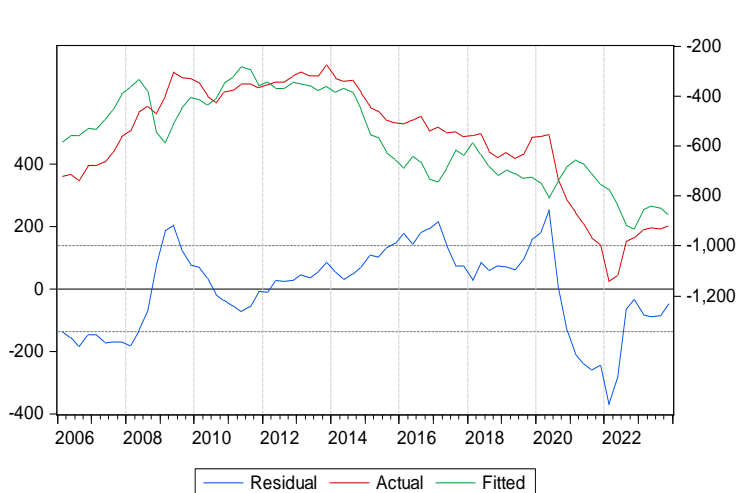
Assignment 1

- The median grade is 92 (see below). So, an answer sheet is somewhat unnecessary. Nonetheless, here are some suggestions/comments.

1. [14 points + 5 bonus] Some of the factors that affect U.S. net exports are as follows. U.S. net exports to its major trading partners might increase if, *ceteris paribus*, the U.S. dollar depreciates (in relation to the currencies of its trading partners), the real GDP per capita in partner countries increases, the real GDP per capita in the U.S. decreases. Then there are other factors such as tariffs, sanctions, pandemics, etc. Think about providing **economic explanations** for the above relationships. Also, apart from omitted variables, there are some other issues regarding the estimated equation below. We will discuss them in class.

Dependent Variable: NX  
Method: Least Squares  
Sample: 2006Q1 2023Q4  
Included observations: 72

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1339.244	175.8447	7.616058	0.0000
RTWEXBGS	-19.15226	1.758889	-10.88884	0.0000
R-squared	0.628779	Mean dependent var	-567.4120	
Adjusted R-squared	0.623476	S.D. dependent var	223.2817	
S.E. of regression	137.0091	Akaike info criterion	12.70536	
Sum squared resid	1314005.	Schwarz criterion	12.76860	
Log likelihood	-455.3929	Hannan-Quinn criter.	12.73053	
F-statistic	118.5668	Durbin-Watson stat	0.197438	
Prob(F-statistic)	0.000000			

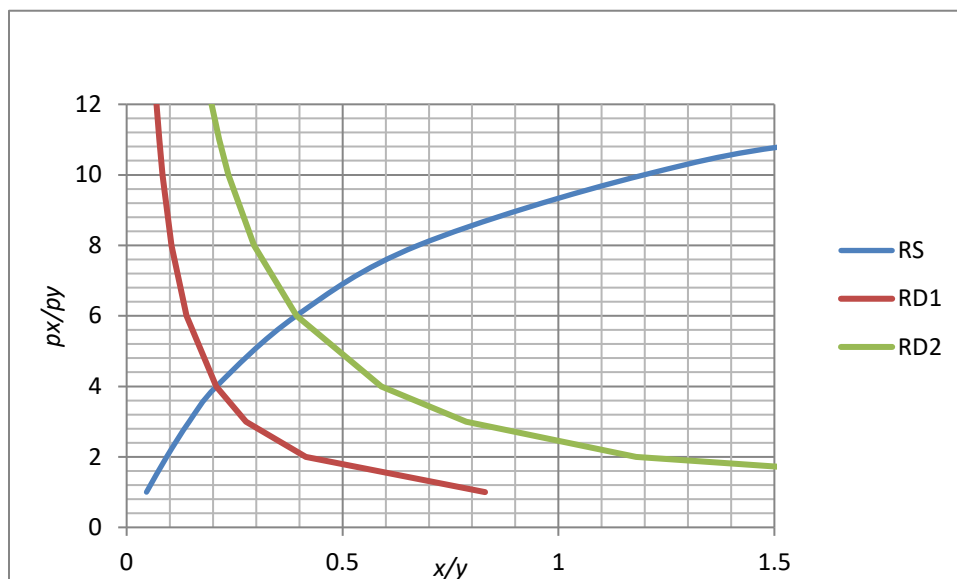


2. [22 points] You need to address *the three specific questions* posed, by *primarily* referencing the four attached papers. For some reason, the policy question, 2c, was not answered well by some of you; ditto, in some cases, 2a. Double-check the four papers!

3. [17 points]

Equilibrium 1: Intersection of *RD1* and *RS*:  $Q_x = 6.00$ ,  $Q_y = 28.84$ ; ratio = 0.21.

Equilibrium 2: Intersection of *RD2* and *RS*:  $Q_x = 7.80$ ,  $Q_y = 19.87$ ; ratio = 0.39.



4. [20 points]

c and d. Note the sections highlighted in red in the text of the question.

e. Very simply, the calculations in c and d show that a country in whose favor the terms of trade have moved, is better off than before. The reverse is true of the other country. In this case Germany has gained at the expense of Spain. Nonetheless both are still better off trading than not.

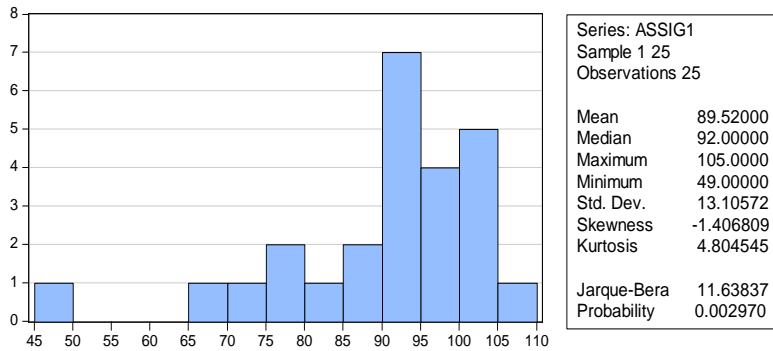
5. [8 points] The most important point here is the fact that in recent years East Asian economies (in particular China and Vietnam) have grown *much faster* than other economies elsewhere in the world. So, using the Gravity

Model  $T_{ij} = A \frac{Y_i Y_j}{D_{ij}}$ , what matters most *in this particular case* is not primarily  $A$ , or  $D_{ij}$ , rather the GDPs of

the East Asian economies. Also, keep in mind the direction of causality. Previously, they were quite small economies, meaning that their markets were too small to import a substantial amount. As they became more wealthy and the consumption demands of their populace rose, they were each able to import more. Thus, while they previously had focused their exports to other rich nations, over time, they became part of the rich nations club and thus were targets for one another's exports. Again, using the gravity model, when, for example, South Korea and Taiwan were both small, the product of their GDPs was quite small. Thus, *despite their proximity*, there was little trade between them. Now that they have both grown considerably, their GDPs predict a substantial amount of trade between them.

6. [19 points] Almost all did very well on this question. Note that you must draw the *RD* curve accurately (you need at least four points to draw the *RD*). Also, you *must* be consistent in your axis designation. That is, if you measure, say, bananas on the horizontal axis for your *PPF*'s (as you were asked to do), then in your *RD/RS* graph you *must* measure  $Q_b/Q_a$  on the horizontal axis of *RD/RS*, **not**  $Q_a/Q_b$ . Also, you must measure  $p_b/p_a$  on the vertical axis, **not**  $p_a/p_b$ . I went over this matter several times in class.

**Statistical Report for Assignment 1 Grades**



105	96	87
103	94	80
101	93	76
101	92	76
101	92	70
101	92	69
98	91	49
97	90	
96	88	