



Antal blad /  
Number of sheets

06 ✓

# TENTAMEN / EXAMINATION

**Anvisningar:** Skriv din anonymitetskod på varje blad.  
Endast en uppgift får lösas på varje blad.  
Var vänlig skriv tydligt!

**Instructions:** Write your anonymous code on each sheet.  
Answer only one question on each sheet.  
Please write clearly!

Vänligen texta anonymitetskoden i textboxen enligt exempel nedan!  
Please write the Anonymous Code clearly in the textbox like example below!

**Bokstäver/Letters:**

A-B-C-D-E-F-G-H-I-J-K-L-M-N-O  
P-Q-R-S-T-U-V-W-X-Y-Z-Å-Ä-Ö

**Siffror/Numbers:**

0-1-2-3-4-5-6-7-8-9

Exempel: 

A	B	C	1	7	0	-	0	1	7
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NEG001

Kurskod + Kurs / Course Code + Course:

Econometrics

Delkurs / Part course:

Anonymitetskod / Anonymous code =  
Kurskod + kodnr / course code + code number  
NEG001-022 ✓

Tentamensdatum /  
Examination date:  
3/6-16

## Behandlade uppgifter / Solved problems

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
X	X	X	X											
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

## Ifylles av lärare / To be completed by the examiner

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Poäng / Marks gained: 12,38

Betyg / Grade: G

Max poäng / Total marks gained: 20

För Gk poäng / Marks gained to be passed:

Examin. lärare / Kursansvarig signatur / Signature of the examiner

Namnförtydligande / Clarification of the signature

Student name: Beskow, Fredrik  
Anonymity code: NEGB01-22 930222-5033

Points:

1. Total: ~~4,25~~ § 3,375

- a) 0,75
- b) 0
- c) 0
- d) 0,5
- e) 0

2. Total: 2,75

- a) 0,25
- b) 0,5
- c) 1
- d) 0
- e) 1

3. Total: 3

- a) 1
- b) 0
- c) 0,25
- d) 1
- e) 0,75

4. Total: 3,25

- a) 1
- b) 1
- c) 1
- d) 0
- e) 0,25

§

Score on homework: 3,375

Your homework replaces your points earned for question 1.

Total points on exam (taking homework into account): 12,375

Grade: G



Ange anonymitetskod / Write your anonymity code  
(Vid icke anonym tentamen ange kurskod + namn + personnummer)  
(For non-anonymous exams write the course code + name + civic registration number)

NEGB01-022

Löpande sidnr  
Consecutive no:

1

Häftområde

Skriv ej i detta område  
Leave this area blank

1. (a) Given the CLRM, OLS estimators are unbiased, linear and of minimum variance, they are BLUE.

(c) autocorrelation is when there is a "connection" between the observations. They are similar.

(d) Implications are that the estimators are no longer BLUE.

(b) It is applicable due to it being linear and of min. var.

(e) I'm not sure, autocorrelation I instantly think about Durbin Watson which is hard to apply here without some values, so I, sadly, have to pass on this question.

Uppgift nr /  
Question no: 1

Poäng / Points  
awarded:

Lärens  
anteckning  
Examiner's remarks:





Ange anonymitetskod / Write your anonymity code  
(Vid icke anonym tentamen ange kurskod + namn + personnummer)  
(For non-anonymous exams write the course code + name + civic registration number)

NEGB01-022

Löpande sidnr  
Consecutive no:

3

Uppgift nr /  
Question no: 3

Poäng / Points  
awarded:

Lärens  
anteckning  
Examiner's remarks:

Häftområde

Skriv ej i detta område  
Leave this area blank

3. a) 
$$\text{tot. cost} = \beta_1 + \beta_2 \text{output} + \beta_3 \text{output}^2 + \beta_4 \text{output}^3 + u$$
 3 (1)

b) A p-value that low means in a chow test that we can reject "H<sub>0</sub>" that there is no connection between the two groups.

c) I would say it can compare them. The regression for the electronics industry is clearly better with a R<sup>2</sup> value of 0,75 than the automotive industry of 0,48. That said, the two are connected according to b). The amount of TC explained by output is 75% in electronics and 48% in automotive.

d) The problem that can cause this is multicollinearity. With high t-values making them insignificant and still a high R<sup>2</sup> value it might be that we have multicollinearity, something that we do not want.

e) 
$$Y_i = \gamma + X_{2i} + X_{3i} + \beta_1 X_{4i} + u$$





