

```
-----  
-----  
name: <unnamed>  
log: /Users/julietafigliolia/Downloads/MEAN/TP4/TP4.log  
log type: text  
opened on: 21 Nov 2017, 22:37:12
```

```
.  
end of do-file
```

```
. do "/var/folders/rj/sy8tgphd0n111tsbx9g0hybh0000gn/T//  
SD02484.000000"
```

```
.  
. *Abrir base de datos del PUNT01  
. use ezanders.dta
```

```
.  
. *PUNT01A  
. gen newt=_n
```

```
. generate t = tm(1980m1) + newt - 1
```

```
. tsset t, monthly  
time variable: t, 1980m1 to 1988m12  
delta: 1 month
```

```
. format t %tm
```

```
. tab t
```

t	Freq.	Percent	Cum.
1980m1	1	0.93	0.93
1980m2	1	0.93	1.85
1980m3	1	0.93	2.78
1980m4	1	0.93	3.70
1980m5	1	0.93	4.63
1980m6	1	0.93	5.56
1980m7	1	0.93	6.48
1980m8	1	0.93	7.41
1980m9	1	0.93	8.33
1980m10	1	0.93	9.26
1980m11	1	0.93	10.19
1980m12	1	0.93	11.11
1981m1	1	0.93	12.04
1981m2	1	0.93	12.96
1981m3	1	0.93	13.89
1981m4	1	0.93	14.81
1981m5	1	0.93	15.74

1981m6	1	0.93	16.67
1981m7	1	0.93	17.59
1981m8	1	0.93	18.52
1981m9	1	0.93	19.44
1981m10	1	0.93	20.37
1981m11	1	0.93	21.30
1981m12	1	0.93	22.22
1982m1	1	0.93	23.15
1982m2	1	0.93	24.07
1982m3	1	0.93	25.00
1982m4	1	0.93	25.93
1982m5	1	0.93	26.85
1982m6	1	0.93	27.78
1982m7	1	0.93	28.70
1982m8	1	0.93	29.63
1982m9	1	0.93	30.56
1982m10	1	0.93	31.48
1982m11	1	0.93	32.41
1982m12	1	0.93	33.33
1983m1	1	0.93	34.26
1983m2	1	0.93	35.19
1983m3	1	0.93	36.11
1983m4	1	0.93	37.04
1983m5	1	0.93	37.96
1983m6	1	0.93	38.89
1983m7	1	0.93	39.81
1983m8	1	0.93	40.74
1983m9	1	0.93	41.67
1983m10	1	0.93	42.59
1983m11	1	0.93	43.52
1983m12	1	0.93	44.44
1984m1	1	0.93	45.37
1984m2	1	0.93	46.30
1984m3	1	0.93	47.22
1984m4	1	0.93	48.15
1984m5	1	0.93	49.07
1984m6	1	0.93	50.00
1984m7	1	0.93	50.93
1984m8	1	0.93	51.85
1984m9	1	0.93	52.78
1984m10	1	0.93	53.70
1984m11	1	0.93	54.63
1984m12	1	0.93	55.56
1985m1	1	0.93	56.48
1985m2	1	0.93	57.41
1985m3	1	0.93	58.33
1985m4	1	0.93	59.26
1985m5	1	0.93	60.19
1985m6	1	0.93	61.11
1985m7	1	0.93	62.04

1985m8	1	0.93	62.96
1985m9	1	0.93	63.89
1985m10	1	0.93	64.81
1985m11	1	0.93	65.74
1985m12	1	0.93	66.67
1986m1	1	0.93	67.59
1986m2	1	0.93	68.52
1986m3	1	0.93	69.44
1986m4	1	0.93	70.37
1986m5	1	0.93	71.30
1986m6	1	0.93	72.22
1986m7	1	0.93	73.15
1986m8	1	0.93	74.07
1986m9	1	0.93	75.00
1986m10	1	0.93	75.93
1986m11	1	0.93	76.85
1986m12	1	0.93	77.78
1987m1	1	0.93	78.70
1987m2	1	0.93	79.63
1987m3	1	0.93	80.56
1987m4	1	0.93	81.48
1987m5	1	0.93	82.41
1987m6	1	0.93	83.33
1987m7	1	0.93	84.26
1987m8	1	0.93	85.19
1987m9	1	0.93	86.11
1987m10	1	0.93	87.04
1987m11	1	0.93	87.96
1987m12	1	0.93	88.89
1988m1	1	0.93	89.81
1988m2	1	0.93	90.74
1988m3	1	0.93	91.67
1988m4	1	0.93	92.59
1988m5	1	0.93	93.52
1988m6	1	0.93	94.44
1988m7	1	0.93	95.37
1988m8	1	0.93	96.30
1988m9	1	0.93	97.22
1988m10	1	0.93	98.15
1988m11	1	0.93	99.07
1988m12	1	0.93	100.00

---

Total	108	100.00
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. sum t

Variable	Obs	Mean	Std. Dev.	Min
Max				

---

```

t |          108          293.5      31.32092          240
347

```

```
. tsline luclms
```

```
. graph export luclms.png, replace
(file luclms.png written in PNG format)
```

```
.
. *PUNT01B
. regress luclms t jan feb mar apr may jun jul aug sep oct nov dec,
noconstant robust
```

```

Linear regression                               Number of obs    =
107                                              F(13, 94)        =
7377.59                                         Prob > F         =
0.0000                                         R-squared        =
0.9981                                         Root MSE        =
= .39611

```

---

	luclms	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
t		-.0138786	.0012913	-10.75	0.000	-.0164426
jan		13.0007	.4179851	31.10	0.000	12.17078
feb		13.00135	.4132712	31.46	0.000	12.18079
mar		12.96229	.4275958	30.31	0.000	12.11329
apr		12.67741	.4306685	29.44	0.000	11.82231
may		12.54144	.4435709	28.27	0.000	11.66072
jun		12.51597	.4385332	28.54	0.000	11.64525
jul		12.56482	.4220103	29.77	0.000	11.72691
aug		12.76	.3924204	32.52	0.000	11.98084
sep		12.35887	.396504	31.17	0.000	11.5716

```

13.14614
13.13285 oct | 12.33882 .3999138 30.85 0.000 11.54478
13.33598 nov | 12.45782 .4422818 28.17 0.000 11.57966
13.66466 dec | 12.77932 .4458996 28.66 0.000 11.89397

```

```

. dfuller luclms, trend regress /*Se comprueba tendencia estocastica y
determinística en la
> serie a un nivel de significancia del 5% */

```

```

Dickey-Fuller test for unit root          Number of obs   =
106

```

```

----- Interpolated Dickey-Fuller
-----
Critical          Test          1% Critical      5% Critical      10%
Value            Statistic          Value            Value
-----
Z(t)             -3.392            -4.038           -3.449
-3.149

```

```

MacKinnon approximate p-value for Z(t) = 0.0525

```

```

-----
D.luclms         |      Coef.  Std. Err.    t    P>|t|    [95% Conf.
Interval]
-----+-----
      luclms     |
      L1.        |  -.1969958  .0580803   -3.39  0.001   -.3121844
-0.0818073
      _trend     |  -.0027124  .0011772   -2.30  0.023   -.005047
-0.0003777
      _cons      |   1.81929   .5468352    3.33  0.001   .7347719
2.903809

```

```

. test jan feb mar apr may jun jul aug sep oct nov dec /*Se comprueba
la significatividad co
> njunta de las dummies mensuales. Hay evidencia a favor de la

```

estacionalidad\*/

- ( 1) jan = 0
- ( 2) feb = 0
- ( 3) mar = 0
- ( 4) apr = 0
- ( 5) may = 0
- ( 6) jun = 0
- ( 7) jul = 0
- ( 8) aug = 0
- ( 9) sep = 0
- (10) oct = 0
- (11) nov = 0
- (12) dec = 0

F( 12, 94) = 102.09  
Prob > F = 0.0000

.  
. \*PUNT01C  
. regress luclms t, robust /\*Se estima el logaritmo de uclms solo en  
función de una tendenci  
> a lineal\*/

Linear regression	Number of obs	=
107	F(1, 105)	=
102.35	Prob > F	=
0.0000	R-squared	=
0.5132	Root MSE	=
= .44012		

---

luclms	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
t	-.0144946	.0014327	-10.12	0.000	-.0173355
_cons	12.84263	.4361035	29.45	0.000	11.97791

---

. predict lnuc\_trend /\*Se guarda la prediccion del modelo anterior\*/

(option xb assumed; fitted values)

```
. regress luclms jan feb mar apr may jun jul aug sep oct nov dec,  
noconstant robust /*Se est  
> ima el logaritmo de uclms en función de las 12 dummies mensuales y  
sin constante*/
```

```
Linear regression                               Number of obs   =  
107                                             F(12, 95)      =  
1934.32                                        Prob > F       =  
0.0000                                         R-squared      =  
0.9957                                         Root MSE      =  
= .60018
```

---

	luclms	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
+	jan	9.003653	.1903405	47.30	0.000	8.625779
9.381527	feb	8.990427	.1869557	48.09	0.000	8.619273
9.361581	mar	8.937489	.208723	42.82	0.000	8.523121
9.351856	apr	8.638725	.2253656	38.33	0.000	8.191318
9.086132	may	8.488875	.2317984	36.62	0.000	8.028697
8.949053	jun	8.44953	.2182002	38.72	0.000	8.016347
8.882712	jul	8.484497	.1746413	48.58	0.000	8.13779
8.831204	aug	8.665805	.1501703	57.71	0.000	8.36768
8.963931	sep	8.250795	.1905166	43.31	0.000	7.872571
8.629018	oct	8.216859	.192009	42.79	0.000	7.835673
8.598045	nov	8.321986	.209024	39.81	0.000	7.907021
8.736951	dec	8.712876	.2223232	39.19	0.000	8.271508
9.154243						

---

```

-----
. predict lnuc_sa, resid /*Se guarda la prediccion del modelo
anterior*/
(1 missing value generated)

. tsline luclms lnuc_trend lnuc_sa, title("Comparar la serie luclms,
tendencia lineal y dumm
> ies") legend(order(1 "luclms" 2 "lnuc_trend" 3 "lnuc_sa"))

. graph export luclms_compare.png, replace
(file luclms_compare.png written in PNG format)

```

```

. *ANEXO PUNTO1C:
. regress luclms t

```

Source	SS	df	MS	Number of obs	=
107				F(1, 105)	=
110.71				Prob > F	=
Model	21.4459322	1	21.4459322	R-squared	=
0.0000				Adj R-squared	=
Residual	20.3395167	105	.193709683	Root MSE	=
0.5132					
0.5086					
Total	41.7854489	106	.394202348		
= .44012					

luclms	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
t	-.0144946	.0013776	-10.52	0.000	-.017226 -.0117632
_cons	12.84263	.4058607	31.64	0.000	12.03788 13.64737

```

-----
. gen luclms_t = luclms - ( _b[_cons] + _b[t]*t )
(1 missing value generated)

. tsline luclms_t lnuc_sa

. graph export series_acercadas.png, replace
(file series_acercadas.png written in PNG format)

```



```

. *PUNT01D
. regress luclms ez t jan feb mar apr may jun jul aug sep oct nov dec,
noconstant robust /*S
> e estima el modelo con tendencia, dummies y variable ez*/

```

```

Linear regression                               Number of obs   =
107                                              F(14, 93)      =
10468.84                                         Prob > F       =
0.0000                                          R-squared      =
0.9984                                          Root MSE      =
= .3745

```

---

	luclms	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
	ez	-.5080266	.1291131	-3.93	0.000	-.7644195
	t	-.0067624	.0021512	-3.14	0.002	-.0110343
	jan	11.23346	.5867799	19.14	0.000	10.06824
	feb	11.227	.5873835	19.11	0.000	10.06057
	mar	11.18082	.5897666	18.96	0.000	10.00967
	apr	10.88882	.5964664	18.26	0.000	9.70436
	may	10.74574	.6202411	17.33	0.000	9.51406
	jun	10.71315	.6228081	17.20	0.000	9.476379
	jul	10.75488	.6065397	17.73	0.000	9.550415
	aug	10.94295	.5756192	19.01	0.000	9.799888
	sep	10.53471	.5829777	18.07	0.000	9.377027
	oct	10.50753	.5754706	18.26	0.000	9.364761
	nov	10.61942	.6018296	17.65	0.000	9.424308

```
11.81454
      dec | 10.94828 .5840071 18.75 0.000 9.788553
12.108
```

---

```
-----
. test ez /*Se comprueba la significatividad individual de los
incentivos fiscales sobre el
> pedido de seguros de desempleo*/
```

```
( 1) ez = 0
```

```
      F( 1, 93) = 15.48
      Prob > F = 0.0002
```

```
.
. *FIN PUNT01
.
end of do-file

. exit, clear
```