

In [29]: `runfile('C:/Users/claire.loupias/Desktop/exercice-3.4.py', wdir='C:/Users/claire.loupias/Desktop')`

OLS Regression Results

```

=====
Dep. Variable:          gift      R-squared:                0.083
Model:                  OLS      Adj. R-squared:           0.083
Method:                 Least Squares  F-statistic:              129.3
Date:                   Wed, 01 Apr 2020  Prob (F-statistic):       3.86e-80
Time:                   16:37:44    Log-Likelihood:           -17446.
No. Observations:      4268      AIC:                      3.490e+04
Df Residuals:          4264      BIC:                      3.492e+04
Df Model:               3
Covariance Type:       nonrobust
=====

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```

=====
              coef    std err          t      P>|t|      [0.025    0.975]
-----
Intercept    -4.5515     0.803    -5.668     0.000    -6.126    -2.977
mailyear      2.1663     0.332     6.526     0.000     1.516     2.817
giftlast      0.0059     0.001     4.138     0.000     0.003     0.009
propresp     15.3586     0.875    17.562     0.000    13.644    17.073
=====

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=====
Omnibus:                 5103.126    Durbin-Watson:           1.667
Prob(Omnibus):           0.000    Jarque-Bera (JB):       941920.719
Skew:                    6.166    Prob(JB):                0.00
Kurtosis:                74.726    Cond. No.                721.
=====

```

Warnings:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

OLS Regression Results

```

=====
Dep. Variable:          gift      R-squared:                0.014
Model:                  OLS      Adj. R-squared:           0.014
Method:                 Least Squares  F-statistic:              59.65
Date:                   Wed, 01 Apr 2020  Prob (F-statistic):       1.40e-14
Time:                   16:37:44    Log-Likelihood:           -17602.
No. Observations:      4268      AIC:                      3.521e+04
Df Residuals:          4266      BIC:                      3.522e+04
Df Model:               1
Covariance Type:       nonrobust
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=====
              coef    std err          t      P>|t|      [0.025    0.975]
-----
Intercept      2.0141     0.739     2.724     0.006     0.564     3.464
mailyear       2.6495     0.343     7.723     0.000     1.977     3.322
=====

```

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=====
Omnibus:                 4951.411    Durbin-Watson:           1.529
Prob(Omnibus):           0.000    Jarque-Bera (JB):       784986.187
Skew:                    5.889    Prob(JB):                0.00
Kurtosis:                68.387    Cond. No.                8.34
=====

```

Warnings:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

OLS Regression Results

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=====
Dep. Variable:          gift    R-squared:                0.201
Model:                 OLS     Adj. R-squared:           0.200
Method:                Least Squares   F-statistic:              267.3
Date:                  Wed, 01 Apr 2020   Prob (F-statistic):      2.82e-205
Time:                  16:37:44    Log-Likelihood:          -17154.
No. Observations:     4268      AIC:                     3.432e+04
Df Residuals:         4263      BIC:                     3.435e+04
Df Model:              4
Covariance Type:      nonrobust
=====

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	coef	std err	t	P> t	[0.025	0.975]
Intercept	-7.3278	0.758	-9.664	0.000	-8.814	-5.841
mailyear	1.2012	0.312	3.845	0.000	0.589	1.814
giftlast	-0.2609	0.011	-24.251	0.000	-0.282	-0.240
propresp	16.2046	0.818	19.821	0.000	14.602	17.807
avggift	0.5269	0.021	24.996	0.000	0.486	0.568

```

=====
Omnibus:                3922.109    Durbin-Watson:           1.787
Prob(Omnibus):          0.000    Jarque-Bera (JB):        698065.217
Skew:                   3.806    Prob(JB):                 0.00
Kurtosis:               65.189    Cond. No.                 814.
=====

```

Warnings:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

La corrélation entre avggift et mailyear est : 0.02133621277079914

La corrélation entre avggift et giftlast est : 0.9921130875847675

La corrélation entre avggift et propresp est : -0.016841744193753644

In [30]: