

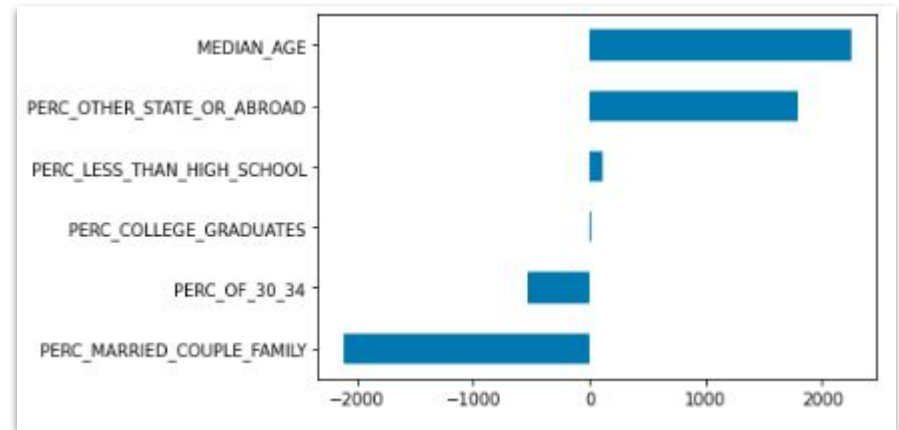
Boston Crimes

Les Experts: L'analyse statistique

Ce qu'on a trouvé

The two most significant regressors:

- MEDIAN_AGE
- PERC_OTHER_STATE_OR_ABROAD



Plus des découvertes

MEDIAN_AGE

There is a 12.8% probability that the median_age is not correlated to the number of incidents.

OTHER_STATE

There is a 2% probability that the population from other states of abroad are not related to incidents.

OLS Regression Results						
Dep. Variable:	NB_INCIDENTS		R-squared:		0.899	
Model:	OLS		Adj. R-squared:		0.777	
Method:	Least Squares		F-statistic:		7.391	
Date:	Tue, 29 Jun 2021		Prob (F-statistic):		0.0222	
Time:	15:41:10		Log-Likelihood:		-114.59	
No. Observations:	12		AIC:		243.2	
Df Residuals:	5		BIC:		246.6	
Df Model:	6					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
Intercept	1.358e+04	6.16e+04	0.220	0.834	-1.45e+05	1.72e+05
MEDIAN_AGE	2252.7344	1237.522	1.820	0.128	-928.416	5433.885
PERC_OF_30_34	-532.9973	468.940	-1.137	0.307	-1738.447	672.452
PERC_MARRIED_COUPLE_FAMILY	-2115.1839	408.344	-5.180	0.004	-3164.866	-1065.502
PERC_OTHER_STATE_OR_ABROAD	1787.6939	532.432	3.358	0.020	419.034	3156.354
PERC_LESS_THAN_HIGH_SCHOOL	112.7375	493.977	0.228	0.829	-1157.072	1382.547
PERC_COLLEGE_GRADUATES	19.4699	458.775	0.042	0.968	-1159.850	1198.790
Omnibus:	6.933	Durbin-Watson:		2.255		
Prob(Omnibus):	0.031	Jarque-Bera (JB):		3.155		
Skew:	1.148	Prob(JB):		0.206		
Kurtosis:	4.020	Cond. No.		2.42e+03		

Pourquoi nous ne brillons pas?

- Primary reason
 - Very small sample size
- Other explanations
 - High-correlation
 - Multicollinearity
 - Combined too many parameters
 - Combined together districts that may not be related

Comment ameliorer ?

- Examine districts one-by-one
- Examine incidents without grouping by district but by indicators