

Statistiques descriptives des variables clé

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Dictionnaire des variables.

Les statistiques descriptives par année.

Moyennes :

annee	s_nig	s_total	q_blanc	q_rouge	q_total	p_blanc	p_rouge	revenu	qk_prod	ql_prod
2012	532.71	9932.25	9818.91	20108.16	559299.67	57.90	57.79	942.24	425722.60	177201.72
2013	532.75	9937.45	8426.86	22206.01	557533.49	73.94	64.66	917.73	475289.67	209489.47
2014	519.08	9897.30	9717.53	22482.11	619663.37	82.31	70.88	929.04	542842.54	238727.02
2015	468.72	9835.61	13260.01	20594.11	629678.83	88.01	76.37	935.90	409088.19	233416.13
2016	466.20	9927.32	13313.53	19245.13	599501.71	83.28	74.53	952.85	503527.03	315884.20
2017	370.03	9803.24	8692.91	9841.47	483986.24	72.03	67.41	963.37	460057.02	368507.95

Variance :

annee	s_nig	s_total	q_blanc	q_rouge	q_total	p_blanc	p_rouge	revenu	qk_prod	ql_prod
2012	1043361.38	386955859.34	1412431531.02	2883252646.05	1331652487300.94	0.00	0.00	0.00	470949549172.93	41009340396.57
2013	1427194.86	389478005.82	571236508.42	7463574770.76	1300607411760.71	0.00	0.00	0.00	616625683955.09	66159445924.66
2014	1057736.13	385979855.89	1000660487.43	3642144579.67	1479984358653.09	0.00	0.00	0.00	817149839911.48	83550909830.82
2015	918544.20	386029875.50	2044354563.93	3832584199.88	1679337190916.28	0.00	0.00	0.00	478522356091.13	79680732342.85
2016	769340.83	387768110.30	3386957695.08	2474027779.56	1531617776697.46	0.00	0.00	0.00	649704148521.73	140144745416.74
2017	573910.61	384137572.80	1595466012.51	638048439.40	884760490114.93	0.00	0.00	0.00	529593130518.92	157776032472.36

Les statistiques descriptives par département.

Les moyennes :

dep	s_nig	s_total	q_blanc	q_rouge	q_total	qk_prod	ql_prod
AIN	226.83	787.33	3676.83	8136.00	38762.67	191264.22	162530.97
AISNE	5.67	2469.33	273.17	8.33	174595.83	449495.82	402870.75
ALLIER	92.33	648.67	452.50	1998.67	23102.17	51146.38	243805.12
ALPES-DE-HAUTE-P	76.33	708.17	356.83	4798.83	40427.33	95595.28	59826.87
ALPES-MARITIMES	14.17	93.33	12.50	190.50	2333.33	24817.62	8684.72
ARDECHE	649.33	10414.83	12678.67	14872.00	547670.50	177868.33	47564.47
ARIEGE	62.83	110.33	19.67	305.33	1990.67	18103.45	40667.62
AUBE	33.33	7087.33	200.33	493.00	492139.17	716451.20	866014.70
AUDE	3868.50	65256.33	47386.00	210895.33	3611322.50	1427894.22	634420.90
AVEYRON	181.83	506.83	123.17	2682.67	14064.83	88610.92	99735.25
BAS-RHIN	41.00	6647.00	1582.83	112.33	471852.33	168080.42	98702.27
BOUCHES-DU-RHONE	260.00	10292.00	5458.00	9462.50	580935.00	487718.83	130373.90
CALVADOS	0.33	5.00	0.50	0.00	152.50	25231.12	72812.62
CANTAL	1.67	9.50	2.83	33.50	215.50	2002.92	20654.95
CHARENTE	765.00	39154.50	12412.50	22500.33	3905777.83	1933038.45	860749.00
CHARENTE-MARITIME	1122.67	38840.17	48158.17	34505.17	4190266.17	1132899.42	660685.87
CHER	84.00	4154.17	376.33	1265.83	228664.67	364791.10	257970.92
CORREZE	85.00	153.83	17.00	1554.00	3444.00	90715.25	27305.47
CORSE-DU-SUD	87.67	863.33	385.67	2913.50	33599.00	42928.28	11854.95
COTE-D'OR	70.00	9513.83	716.17	1152.00	367756.50	507332.58	471919.02
DEUX-SEVRES	221.33	924.00	933.67	5223.67	47423.00	857888.62	393590.75
DORDOGNE	668.17	11668.00	6059.67	16670.00	486323.67	404291.12	213021.10
DOUBS	25.33	37.33	287.33	294.50	850.50	5041.92	51124.32
DROME	301.00	16092.67	982.83	8978.83	736769.17	681054.08	194479.33
EURE-ET-LOIR	0.50	0.50	0.00	5.33	5.33	105010.72	279923.30
GARD	2798.33	52679.17	34287.50	196748.67	3237106.67	2324591.63	662660.17
GERS	3030.33	18220.33	316838.50	35587.50	1643411.00	1113134.45	414625.32
GIRONDE	2037.17	114626.83	14867.17	120286.83	5207923.17	4585469.50	1749507.70
HAUT-RHIN	250.33	4985.83	8480.83	8140.67	329969.67	476882.02	292386.28
HAUTE-CORSE	166.50	1531.17	239.83	4931.33	74839.00	223098.62	97348.98
HAUTE-GARONNE	28.50	28.50	22.33	384.33	406.50	159176.47	173204.97
HAUTE-LOIRE	32.17	108.17	449.00	443.67	5545.17	2164.07	36223.05
HAUTE-MARNE	25.50	125.50	63.00	251.67	4465.17	4240.53	128813.78
HAUTE-SAONE	204.83	301.00	340.33	534.50	2882.50	39358.73	98140.35
HAUTE-SAVOIE	100.00	254.33	3977.33	2043.33	12333.17	51936.98	17232.40
HAUTE-VIENNE	118.83	365.33	115.17	1468.17	11349.50	8237.42	36552.40
HAUTES-ALPES	1.17	7.00	4.00	11.33	215.50	64692.05	18084.02
HAUTES-PYRENEES	23.00	8957.00	955.00	113.67	593145.67	44070.03	41571.12
HERAULT	6019.00	80963.67	81494.83	371057.33	4909163.83	2198114.52	865166.08
INDRE	181.33	571.50	960.33	3383.50	23234.67	65151.07	279653.15
INDRE-ET-LOIRE	594.67	9813.50	8685.17	16179.33	412817.00	609520.92	348263.98
ISERE	275.83	519.83	1660.00	4730.67	17696.00	169465.07	77846.17
JURA	359.00	2353.17	2448.33	2106.83	71622.50	74563.25	56782.82
LANDES	261.50	1635.33	18604.83	3058.33	117350.17	164525.08	183623.27
LOIR-ET-CHER	172.00	1006.33	1748.50	4059.83	36339.33	469644.92	248655.48

Les moyennes (continu) :

dep	s_nig	s_total	q_blanc	q_rouge	q_total	qk_prod	ql_prod
LOIRE	1513.17	11636.17	44850.83	39969.00	526271.17	57926.42	36597.62
LOIRE-ATLANTIQUE	59.33	220.50	78.00	370.33	4713.00	652481.33	375797.03
LOIRET	744.00	6529.33	8814.00	14405.50	280423.83	81254.55	134105.65
LOT	540.67	4954.50	312.67	24258.83	223548.17	234585.03	95350.42
LOT-ET-GARONNE	663.67	6029.50	18103.33	22084.33	350021.17	1024997.10	353618.40
LOZERE	1.67	10.17	4.00	56.00	299.83	1079.77	6903.98
MAINE-ET-LOIRE	1036.00	19406.50	18983.83	26280.00	977119.67	770900.07	447465.73
MARNE	3.17	23685.00	62.17	34.83	1790738.00	1880813.33	1211469.87
MAYENNE	1.50	1.50	42.33	17.17	143.17	12378.82	109070.80
MEURTHE-ET-MOSELLE	79.33	164.33	532.50	809.33	4262.50	19355.02	120427.67
MEUSE	9.33	41.50	306.67	67.50	1890.33	17182.58	202357.63
MOSELLE	46.83	97.83	1063.50	440.50	3020.17	14459.43	166615.83
NIEVRE	49.67	1557.00	362.50	756.83	78879.17	6081.33	16710.72
NORD	1.00	1.00	14.00	15.67	29.67	349976.32	136417.12
OISE	0.33	0.33	7.00	0.33	7.33	79219.00	348654.68
PUY-DE-DOME	189.67	556.50	268.50	3845.67	16498.67	31582.67	81598.80
PYRENEES-ATLANTIQUES	166.83	2525.33	662.17	2974.67	99730.33	239291.40	171345.80
PYRENEES-ORIENTALES	898.50	23449.00	13892.67	18898.00	750195.83	813019.90	243396.58
RHONE	290.17	16838.17	2171.00	10214.17	735931.67	609714.50	222602.98
SAONE-ET-LOIRE	101.67	12977.17	1909.17	1457.50	706172.67	469715.20	370785.38
SARTHE	64.00	209.00	555.50	852.50	5808.00	99495.12	146579.22
SAVOIE	117.17	1892.50	2656.50	2473.00	107981.33	131895.85	33149.57
SEINE-ET-MARNE	0.00	22.83	0.00	0.00	1589.33	26770.07	108734.78
TARN	1036.67	6614.00	23634.33	42211.17	388116.83	221255.15	145144.43
TARN-ET-GARONNE	372.67	1570.67	340.67	14488.00	81474.50	638080.15	312726.10
VAR	465.17	1200.67	2649.33	13215.00	50136.83	1055476.67	248750.23
VAUCLUSE	402.50	27964.17	2394.17	18458.33	1391895.33	2742956.02	678528.50
VENDEE	1624.50	47056.67	14461.67	57767.33	1987956.00	69700.43	197232.60
Vienne	416.17	1382.67	2534.33	7635.00	61826.00	61310.53	342376.33
VOSGES	29.33	29.33	37.50	353.83	391.33	6047.25	36966.00
YONNE	50.67	7437.67	410.00	1057.83	356403.00	359698.87	308424.40

Les variances :

	dep	s_nig	s_total	q_blanc	q_rouge	q_total	qk_prod	ql_prod
C	AIN	1804.97	1746.27	307601.77	3044716.80	28053485.47	15738092628.93	3369214228.54
	AISNE	2.27	1346.67	16046.97	52.27	1406274147.37	33243261038.89	17475796680.75
	ALLIER	1276.67	1336.27	25205.90	568775.87	22911564.97	357002358.91	93735617580.70
	ALPES-DE-HAUTE-	571.47	1326.97	8667.77	2380697.77	25279677.07	256110681.35	437329501.43
	ALPES-MARITIMES	247.77	261.47	52.30	14045.90	109737.87	4489852.05	2558066.01
	ARDECHE	11032.27	11386.97	24696905.87	47311784.00	9367946522.30	2705401977.29	395760253.54
	ARIEGE	4341.37	3312.67	850.67	16619.87	308277.87	165721227.39	257282859.39
	AUBE	1246.67	7232.67	11749.87	44430.80	12025986444.97	18693879380.93	123166652275.12
	AUDE	698372.30	1772456.27	311528550.80	3597212137.07	75187879986.70	18504588324.12	24230809316.94
	AVEYRON	12810.17	10969.77	3414.17	3230116.27	23420866.97	3732724976.29	1412377604.50
	BAS-RHIN	401.20	867.20	715210.17	3713.07	1747906481.87	1397712381.07	389420566.67
	BOUCHES-DU-RHON	2385.20	207377.20	12417025.60	39483118.70	3889105426.00	6748463387.06	336401814.41
	CALVADOS	0.27	1.20	0.30	0.00	1693.90	19037299.85	1394078721.66
	CANTAL	1.47	1.90	6.17	565.10	4783.10	211011.47	28975110.59
	CHARENTE	34246.00	12520.30	71510555.90	78075562.67	361297729568.97	306679427512.63	98566286832.91
	CHARENTE-MARITI	45011.07	21960.57	435879671.77	83597388.97	133554517941.37	78832197904.54	44987474951.41
	CHER	1412.00	2678.97	22903.07	279400.97	277566942.67	12182747011.68	14777710144.16
	CORREZE	1805.20	1680.97	153.60	629900.00	1724222.40	127480956.90	35481518.33
	CORSE-DU-SUD	95.87	352.27	14646.67	547173.90	14062911.20	62747385.72	10179677.08
	COTE-D'OR	120.80	7845.37	106842.17	456752.80	5543149276.30	9664680144.86	4424811846.37
	DEUX-SEVRES	12466.27	10393.20	144719.47	5000691.47	18059349.60	16462592571.64	12347841622.73
	DORDOGNE	17133.37	83806.00	18832863.07	96595749.60	14003359329.87	6577222063.81	6620921678.97
	DOUBS	461.07	409.47	30215.47	26618.70	92523.10	663020.22	66968002.06
	DROME	8582.80	24624.27	372006.97	30727386.57	12685200592.57	5956760878.45	2942718336.59
	EURE-ET-LOIR	0.30	0.30	0.00	10.67	10.67	1631708958.96	21606266186.96
	GARD	143762.67	39919.77	89598476.70	4273589147.07	117626502136.67	220144771834.49	74803084040.85
	GERS	387141.47	74546.67	15367765347.50	157429745.50	45408834133.20	129109631788.84	18589350421.62
	GIRONDE	205153.37	485446.57	135344643.37	6519612404.17	1366975483281.77	448027224207.16	134428189066.04
	HAUT-RHIN	1137.07	4266.57	6393941.77	17344167.07	675769137.47	11076860638.63	4990655941.23
	HAUTE-CORSE	751.90	9661.37	6605.77	3661767.47	343153324.00	2149221746.88	979034253.38

Les variances (continu) :

dep	s_nig	s_total	q_blanc	q_rouge	q_total	qk_prod	ql_prod
HAUTE-GARONNE	236.30	236.30	157.87	50522.67	53560.30	9251708369.20	7595771923.35
HAUTE-LOIRE	136.17	159.77	36158.80	24382.67	2262856.57	164673.15	44226972.28
HAUTE-MARNE	139.10	191.90	879.20	9842.67	2174611.77	374940.12	761643854.26
HAUTE-SAONE	160016.57	213011.60	20104.27	49429.10	388785.90	1459436608.78	485845522.52
HAUTE-SAVOIE	380.00	244.27	1924733.87	236786.27	4850030.57	379975824.51	24242387.19
HAUTE-VIENNE	5917.77	7414.27	4109.37	916198.17	446828.30	2146535.69	319658531.96
HAUTES-ALPES	0.17	0.00	31.60	60.67	16148.30	266724050.88	16785324.09
HAUTES-PYRENEES	29.60	664.00	57076.40	13584.27	6813217010.67	112148747.98	384053322.09
HERAULT	2336284.80	16255.87	1831264288.17	32905406973.07	390370110944.17	70337955188.85	36909823729.72
INDRE	3547.87	2378.70	285037.47	1034648.30	10721944.27	551437722.04	14826259826.00
INDRE-ET-LOIRE	6332.27	22529.10	5046152.97	9708303.47	4002560509.20	99863039092.03	6452115085.14
ISERE	15924.97	18020.57	161609.20	2236394.67	8570104.00	642632102.01	1987016910.09
JURA	239420.00	253870.97	749975.47	349367.77	290053089.10	579805045.67	322090416.07
LANDES	4127.50	9904.27	107791040.57	1261005.87	310302414.17	1104014765.69	3199190733.30
LOIR-ET-CHER	1746.80	10073.87	260861.50	1628424.97	34011341.47	73252873876.59	18440779505.52
LOIRE	51637.37	258405.37	763749814.97	92268850.00	23130545634.57	65090674.09	48517213.49
LOIRE-ATLANTIQUE	9767.47	11958.70	1243.60	22171.87	2444970.80	12549335318.43	12996932780.84
LOIRET	18275.60	37779.87	4298063.20	27081878.70	3211973057.37	432260084.63	3957435838.13
LOT	29511.47	11865.10	27420.67	259021902.97	5912217812.17	3166499393.93	867876425.30
LOT-ET-GARONNE	5412.27	29741.50	77360293.07	62493818.27	2746843874.17	48641274936.29	7376657804.01
LOZERE	3.47	8.17	70.00	6772.80	10346.97	84156.22	2076561.21
MAINE-ET-LOIRE	5526.00	10091.10	19518083.37	17134404.00	7548590112.67	19134665580.25	11273671253.28
MARNE	4.97	133981.20	2871.37	448.57	87019204824.00	16221248690.96	101668021104.96
MAYENNE	0.30	0.30	133.87	163.77	43666.17	452503.65	1247647049.77
MEURTHE-ET-MOSE	4506.27	3819.47	78211.10	26437.87	1436379.50	8261131.78	1122328669.25
MEUSE	14.67	12.30	4595.87	1612.30	246759.87	5342330.30	2554568903.83
MOSELLE	702.17	2230.97	565459.50	103086.30	2111656.57	6513482.14	1255716935.85
NIEVRE	406.27	3664.00	16262.70	111087.77	160320478.57	1040488.79	109939236.48
NORD	0.00	0.00	70.00	89.87	243.87	58160452030.15	3183082773.57
OISE	0.27	0.27	40.00	0.27	42.27	434558617.52	16067895373.77

Les variances (continu) :

dep	s_nig	s_total	q_blanc	q_rouge	q_total	qk_prod	ql_prod
PUY-DE-DOME	9832.67	20059.10	7290.70	2900338.67	10081752.67	29675744.16	792468837.10
PYRENEES-ATLANT	6334.97	6299.47	30595.77	672133.47	177383284.67	7420331583.87	4466187666.08
PYRENEES-ORIENT	57733.50	2051548.00	49397923.07	46663060.40	5635140410.57	121971954542.20	12145908510.61
RHONE	758.17	184459.37	490711.60	25971170.97	11775652003.07	9697995609.44	7556383224.03
SAONE-ET-LOIRE	363.07	11749.77	124450.57	64709.90	4111358964.67	4329022560.04	26341241684.67
SARTHE	566.40	652.00	43653.90	121428.70	2460554.80	1379459740.06	1786525088.69
SAVOIE	580.97	1775.10	648827.50	569267.20	59238052.27	128625837.04	102823981.54
SEINE-ET-MARNE	0.00	4.17	0.00	0.00	66873.87	14948053.69	3710784518.56
TARN	16098.27	20720.40	36725222.67	205675002.17	3664704568.57	295467296.69	1673701512.81
TARN-ET-GARONNE	10317.87	5613.07	14312.27	29278077.60	304158630.70	33051489070.37	43336113273.74
VAR	50286.97	50045.47	977532.27	42462836.00	93364174.17	8420413058.73	3201434257.81
VAUCLUSE	4281.10	37158.17	679420.17	19714762.27	18596663177.07	62615585824.53	22201338368.33
VENDEE	39454.70	2798730.27	52985699.07	739563031.87	110725624018.80	22801769.30	5112114469.07
VIENNE	28743.77	28190.27	4460128.27	10568753.60	56477742.40	201053328.57	9191621370.50
VOSGES	731.87	731.87	4458.70	42329.77	51107.47	2624212.81	569054437.91
YONNE	349.87	37843.47	24918.80	249181.37	9203167296.00	2890778180.65	7846047939.59

Corrélation.

Code pour agréger les variables au niveau d'année :

```
pvpv = pvp %>%
filter(annee > 2012) %>%
group_by(annee) %>%
summarise(s = log(sum(s_nig)),
          q = log(sum(q_blanc) + sum(q_rouge)),
          p = log(mean(p_blanc + p_rouge)/2),
          r = log(mean(revenu)),
          qk = log(sum(qk_prod)),
          ql = log(sum(ql_prod)))
```

Résultats :

	annee	s	q	p	r	qk	ql
1	2012	10.61	14.64	4.06	6.85	17.29	16.42
2	2013	10.61	14.66	4.24	6.82	17.40	16.58
3	2014	10.58	14.71	4.34	6.83	17.54	16.71
4	2015	10.48	14.76	4.41	6.84	17.25	16.69
5	2016	10.48	14.72	4.37	6.86	17.46	16.99
6	2017	10.24	14.16	4.24	6.87	17.37	17.15
Variance	3.50	0.02	0.05	0.02	0.00	0.01	0.07

Tableau de corrélation :

	annee	s	q	p	r	qk	ql
annee	1.00	-0.89	-0.51	0.59	0.71	0.14	0.97
s	-0.89	1.00	0.81	-0.22	-0.81	0.12	-0.88
q	-0.51	0.81	1.00	0.30	-0.64	0.07	-0.60
p	0.59	-0.22	0.30	1.00	-0.04	0.28	0.46
r	0.71	-0.81	-0.64	-0.04	1.00	-0.13	0.72
qk	0.14	0.12	0.07	0.28	-0.13	1.00	0.30
ql	0.97	-0.88	-0.60	0.46	0.72	0.30	1.00

Premières estimations des équations structurelles.

Quantité :

	<i>Dependent variable :</i>
	q
s	4.069 (2.228)
r	-1.175 (7.810)
qk	-1.768 (1.486)
ql	1.605 (1.195)
Constant	-16.234 (63.874)
Observations	6
R ²	0.878
Adjusted R ²	0.388
Residual Std. Error	0.176 (df = 1)
F Statistic	1.794 (df = 4 ; 1)
<i>Note :</i>	*p<0.1 ; **p<0.05 ; ***p<0.01

Prix :

<i>Dependent variable :</i>	
	p
s	1.400 (1.994)
r	-5.816 (6.992)
qk	-0.973 (1.330)
ql	1.241 (1.069)
Constant	25.505 (57.181)
Observations	6
R ²	0.691
Adjusted R ²	-0.545
Residual Std. Error	0.157 (df = 1)
F Statistic	0.559 (df = 4 ; 1)
<i>Note :</i>	*p<0.1 ; **p<0.05 ; ***p<0.01