



REPORT SERIES WITH DLOOKR

Data Quality Diagnosis Report

Author:
dlookr package

Version:
0.3.12

March 7, 2020

Contents

1 Diagnose Data	3
1.1 Overview of Diagnosis	3
1.1.1 List of all variables quality	3
1.1.2 Diagnosis of missing data	6
1.1.3 Diagnosis of unique data(Text and Category)	6
1.1.4 Diagnosis of unique data(Numerical)	6
1.2 Detailed data diagnosis	8
1.2.1 Diagnosis of categorical variables	8
1.2.2 Diagnosis of numerical variables	8
1.2.3 List of numerical diagnosis (zero)	13
1.2.4 List of numerical diagnosis (minus)	15
2 Diagnose Outliers	17
2.1 Overview of Diagnosis	17
2.1.1 Diagnosis of numerical variable outliers	17
2.2 Detailed outliers diagnosis	20

Chapter 1

Diagnose Data

1.1 Overview of Diagnosis

1.1.1 List of all variables quality

Table 1.1: Data quality overview table

variables	type	missing (n)	missing (%)	unique (n)	unique (n/N)
í..folioviv	numeric	0	0	73,405	0.983
foliohog	integer	0	0	5	0.000
ubica_geo	integer	0	0	996	0.013
tam_loc	integer	0	0	4	0.000
est_socio	integer	0	0	4	0.000
est_dis	integer	0	0	543	0.007
upm	integer	0	0	8,377	0.112
factor	integer	0	0	1,747	0.023
clase_hog	integer	0	0	5	0.000
sexo_jefe	integer	0	0	2	0.000
edad_jefe	integer	0	0	94	0.001
educa_jefe	integer	0	0	11	0.000
tot_integ	integer	0	0	20	0.000
hombres	integer	0	0	12	0.000
mujeres	integer	0	0	13	0.000
mayores	integer	0	0	14	0.000
menores	integer	0	0	11	0.000
p12_64	integer	0	0	14	0.000
p65mas	integer	0	0	6	0.000
ocupados	integer	0	0	12	0.000
percep_ing	integer	0	0	15	0.000
perc_ocupa	integer	0	0	12	0.000
ing_cor	numeric	0	0	70,771	0.948
ingtrab	numeric	0	0	44,877	0.601
trabajo	numeric	0	0	31,428	0.421
sueldos	numeric	0	0	13,914	0.186
horas_extr	numeric	0	0	1,607	0.022
comisiones	numeric	0	0	1,977	0.026
aguinaldo	numeric	0	0	3,535	0.047
indemtrab	numeric	0	0	406	0.005

Table 1.1: Data quality overview table (*continued*)

variables	type	missing (n)	missing (%)	unique (n)	unique (n/N)
otra_rem	numeric	0	0	2,724	0.036
remu_espec	numeric	0	0	5,022	0.067
negocio	numeric	0	0	15,353	0.206
noagrop	numeric	0	0	11,221	0.150
industria	numeric	0	0	3,623	0.049
comercio	numeric	0	0	5,054	0.068
servicios	numeric	0	0	5,110	0.068
agrope	numeric	0	0	5,196	0.070
agricolas	numeric	0	0	3,195	0.043
pecuarios	numeric	0	0	2,737	0.037
reproduc	numeric	0	0	227	0.003
pesca	numeric	0	0	230	0.003
otros_trab	numeric	0	0	3,252	0.044
rentas	numeric	0	0	3,366	0.045
utilidad	numeric	0	0	2,814	0.038
arrenda	numeric	0	0	741	0.010
transfer	numeric	0	0	32,388	0.434
jubilacion	numeric	0	0	1,994	0.027
becas	numeric	0	0	640	0.009
donativos	numeric	0	0	2,769	0.037
remesas	numeric	0	0	1,424	0.019
bene_gob	numeric	0	0	5,408	0.072
transf_hog	numeric	0	0	9,105	0.122
trans_inst	numeric	0	0	5,949	0.080
estim_alqu	numeric	0	0	245	0.003
otros_ing	numeric	0	0	602	0.008
gasto_mon	numeric	0	0	74,040	0.992
alimentos	numeric	0	0	42,966	0.576
ali_dentro	numeric	0	0	37,797	0.506
cereales	numeric	0	0	10,164	0.136
carnes	numeric	0	0	7,832	0.105
pescado	numeric	0	0	1,445	0.019
leche	numeric	0	0	6,271	0.084
huevo	numeric	0	0	1,635	0.022
aceites	numeric	0	0	1,203	0.016
tuberculo	numeric	0	0	1,971	0.026
verduras	numeric	0	0	8,982	0.120
frutas	numeric	0	0	4,919	0.066
azucar	numeric	0	0	896	0.012
cafe	numeric	0	0	1,164	0.016
especias	numeric	0	0	1,802	0.024
otros_alim	numeric	0	0	4,561	0.061
bebidas	numeric	0	0	4,755	0.064
ali_fuera	numeric	0	0	5,886	0.079
tabaco	numeric	0	0	650	0.009
vesti_calz	numeric	0	0	14,271	0.191
vestido	numeric	0	0	10,626	0.142
calzado	numeric	0	0	4,143	0.056

Table 1.1: Data quality overview table (*continued*)

variables	type	missing (n)	missing (%)	unique (n)	unique (n/N)
vivienda	numeric	0	0	30,645	0.411
alquiler	numeric	0	0	336	0.005
pred_cons	numeric	0	0	2,745	0.037
agua	numeric	0	0	1,528	0.020
energia	numeric	0	0	15,139	0.203
limpieza	numeric	0	0	33,904	0.454
cuidados	numeric	0	0	10,119	0.136
utensilios	numeric	0	0	2,439	0.033
enseres	numeric	0	0	3,040	0.041
salud	numeric	0	0	7,227	0.097
atenc_ambu	numeric	0	0	4,685	0.063
hospital	numeric	0	0	796	0.011
medicinas	numeric	0	0	2,424	0.032
transporte	numeric	0	0	45,820	0.614
publico	numeric	0	0	6,907	0.093
foraneo	numeric	0	0	2,424	0.032
adqui_vehi	numeric	0	0	911	0.012
mantenim	numeric	0	0	10,133	0.136
refaccion	numeric	0	0	2,032	0.027
combus	numeric	0	0	2,738	0.037
comunica	numeric	0	0	5,831	0.078
educa_espa	numeric	0	0	25,259	0.338
educacion	numeric	0	0	13,036	0.175
esparci	numeric	0	0	9,719	0.130
paq_turist	numeric	0	0	696	0.009
personales	numeric	0	0	35,552	0.476
cuida_pers	numeric	0	0	12,595	0.169
acces_pers	numeric	0	0	1,477	0.020
otros_gas	numeric	0	0	4,350	0.058
transf_gas	numeric	0	0	6,691	0.090
percep_tot	numeric	0	0	16,219	0.217
retiro_inv	numeric	0	0	1,165	0.016
prestamos	numeric	0	0	670	0.009
otras_perc	numeric	0	0	1,091	0.015
ero_nm_viv	numeric	0	0	301	0.004
ero_nm_hog	numeric	0	0	11,239	0.151
erogac_tot	numeric	0	0	13,833	0.185
cuota_viv	numeric	0	0	613	0.008
mater_serv	numeric	0	0	2,199	0.029
material	numeric	0	0	1,701	0.023
servicio	numeric	0	0	523	0.007
deposito	numeric	0	0	1,897	0.025
prest_terc	numeric	0	0	482	0.006
pago_tarje	numeric	0	0	1,899	0.025
deudas	numeric	0	0	1,885	0.025
balance	numeric	0	0	3,641	0.049
otras_erog	numeric	0	0	1,590	0.021
smg	numeric	0	0	1	0.000

1.1.2 Diagnosis of missing data

No variables including missing values

1.1.3 Diagnosis of unique data(Text and Category)

No variable with a high proportion greater than 0.5

1.1.4 Diagnosis of unique data(Numerical)

Table 1.2: Variables where the proportion of unique data is less than 0.1

variables	type	missing (n)	missing (%)	unique (n)	unique (n/N)
salud	numeric	0	0	7,227	0.097
publico	numeric	0	0	6,907	0.093
transf_gas	numeric	0	0	6,691	0.090
leche	numeric	0	0	6,271	0.084
trans_inst	numeric	0	0	5,949	0.080
ali_fuera	numeric	0	0	5,886	0.079
comunica	numeric	0	0	5,831	0.078
bene_gob	numeric	0	0	5,408	0.072
agrope	numeric	0	0	5,196	0.070
servicios	numeric	0	0	5,110	0.068
comercio	numeric	0	0	5,054	0.068
remu_espec	numeric	0	0	5,022	0.067
frutas	numeric	0	0	4,919	0.066
bebidas	numeric	0	0	4,755	0.064
atenc_ambu	numeric	0	0	4,685	0.063
otros_alim	numeric	0	0	4,561	0.061
otros_gas	numeric	0	0	4,350	0.058
calzado	numeric	0	0	4,143	0.056
balance	numeric	0	0	3,641	0.049
industria	numeric	0	0	3,623	0.049
aguinaldo	numeric	0	0	3,535	0.047
rentas	numeric	0	0	3,366	0.045
otros_trab	numeric	0	0	3,252	0.044
agricolas	numeric	0	0	3,195	0.043
enseres	numeric	0	0	3,040	0.041
utilidad	numeric	0	0	2,814	0.038
donativos	numeric	0	0	2,769	0.037
pred_cons	numeric	0	0	2,745	0.037
combus	numeric	0	0	2,738	0.037
pecuarios	numeric	0	0	2,737	0.037
otra_rem	numeric	0	0	2,724	0.036
utensilios	numeric	0	0	2,439	0.033
medicinas	numeric	0	0	2,424	0.032
foraneo	numeric	0	0	2,424	0.032
mater_serv	numeric	0	0	2,199	0.029
refaccion	numeric	0	0	2,032	0.027
jubilacion	numeric	0	0	1,994	0.027
comisiones	numeric	0	0	1,977	0.026

Table 1.2: Variables where the proportion of unique data is less than 0.1 (*continued*)

variables	type	missing (n)	missing (%)	unique (n)	unique (n/N)
tuberculo	numeric	0	0	1,971	0.026
pago_tarje	numeric	0	0	1,899	0.025
deposito	numeric	0	0	1,897	0.025
deudas	numeric	0	0	1,885	0.025
especias	numeric	0	0	1,802	0.024
factor	integer	0	0	1,747	0.023
material	numeric	0	0	1,701	0.023
huevo	numeric	0	0	1,635	0.022
horas_extr	numeric	0	0	1,607	0.022
otras_erog	numeric	0	0	1,590	0.021
agua	numeric	0	0	1,528	0.020
acces_pers	numeric	0	0	1,477	0.020
pescado	numeric	0	0	1,445	0.019
remesas	numeric	0	0	1,424	0.019
aceites	numeric	0	0	1,203	0.016
retiro_inv	numeric	0	0	1,165	0.016
cafe	numeric	0	0	1,164	0.016
otras_perc	numeric	0	0	1,091	0.015
ubica_geo	integer	0	0	996	0.013
adqui_vehi	numeric	0	0	911	0.012
azucar	numeric	0	0	896	0.012
hospital	numeric	0	0	796	0.011
arrenda	numeric	0	0	741	0.010
paq_turist	numeric	0	0	696	0.009
prestamos	numeric	0	0	670	0.009
tabaco	numeric	0	0	650	0.009
becas	numeric	0	0	640	0.009
cuota_viv	numeric	0	0	613	0.008
otros_ing	numeric	0	0	602	0.008
est_dis	integer	0	0	543	0.007
servicio	numeric	0	0	523	0.007
prest_terc	numeric	0	0	482	0.006
indemtrab	numeric	0	0	406	0.005
alquiler	numeric	0	0	336	0.005
ero_nm_viv	numeric	0	0	301	0.004
estim_alqu	numeric	0	0	245	0.003
pesca	numeric	0	0	230	0.003
reproduc	numeric	0	0	227	0.003
edad_jefe	integer	0	0	94	0.001
tot_integ	integer	0	0	20	0.000
percep_ing	integer	0	0	15	0.000
mayores	integer	0	0	14	0.000
p12_64	integer	0	0	14	0.000
mujeres	integer	0	0	13	0.000
hombres	integer	0	0	12	0.000
ocupados	integer	0	0	12	0.000
perc_ocupa	integer	0	0	12	0.000

Table 1.2: Variables where the proportion of unique data is less than 0.1 (*continued*)

variables	type	missing (n)	missing (%)	unique (n)	unique (n/N)
educa_jefe	integer	0	0	11	0.000
menores	integer	0	0	11	0.000
p65mas	integer	0	0	6	0.000
foliohog	integer	0	0	5	0.000
clase_hog	integer	0	0	5	0.000
tam_loc	integer	0	0	4	0.000
est_socio	integer	0	0	4	0.000
sexo_jefe	integer	0	0	2	0.000
smg	numeric	0	0	1	0.000

1.2 Detailed data diagnosis

1.2.1 Diagnosis of categorical variables

No categorical variable

1.2.2 Diagnosis of numerical variables

Table 1.3: General list of numerical diagnosis

variables		min	Q1	mean	median	Q3	max	zero	minus	outlier
ii_folioiv	100,013,601.0	8.046809e+08	1.615773e+09	1.562232e+09	2.403852e+09	3.260799e+09	0	0	0	0
foliohog	1.0	1.000000e+00	1.019000e+00	1.000000e+00	1.000000e+00	5.000000e+00	0	0	0	1,242
ubica_geo	1,001.0	8.019000e+03	1.594090e+04	1.512400e+04	2.402800e+04	3.205600e+04	0	0	0	0
tam_loc	1.0	1.000000e+00	2.542000e+00	3.000000e+00	4.000000e+00	4.000000e+00	0	0	0	0
est_socio	1.0	2.000000e+00	2.056000e+00	2.000000e+00	2.000000e+00	4.000000e+00	0	0	0	35,362
est_dis	1.0	1.190000e+02	2.553640e+02	2.480000e+02	3.850000e+02	5.430000e+02	0	0	0	0
upm	1.0	2.273000e+03	4.299807e+03	4.292000e+03	6.385000e+03	8.395000e+03	0	0	0	0
factor	9.0	1.700000e+02	4.654550e+02	3.230000e+02	5.950000e+02	6.727000e+03	0	0	0	4,643
clase_hog	1.0	2.000000e+00	2.148000e+00	2.000000e+00	3.000000e+00	5.000000e+00	0	0	0	275
sexo_jefe	1.0	1.000000e+00	1.274000e+00	1.000000e+00	2.000000e+00	2.000000e+00	0	0	0	0
edad_jefe	14.0	3.800000e+01	4.979600e+01	4.800000e+01	6.100000e+01	1.100000e+02	0	0	0	99
educa_jefe	1.0	4.000000e+00	5.526000e+00	6.000000e+00	7.000000e+00	1.100000e+01	0	0	0	0
tot_integ	1.0	2.000000e+00	3.604000e+00	3.000000e+00	5.000000e+00	2.200000e+01	0	0	0	549
hombres	0.0	1.000000e+00	1.764000e+00	2.000000e+00	2.000000e+00	1.100000e+01	7,026	0	0	5,613
mujeres	0.0	1.000000e+00	1.841000e+00	2.000000e+00	2.000000e+00	1.200000e+01	6,095	0	0	6,429
mayores	1.0	2.000000e+00	2.844000e+00	3.000000e+00	4.000000e+00	1.400000e+01	0	0	0	417
menores	0.0	0.000000e+00	7.610000e-01	0.000000e+00	1.000000e+00	1.100000e+01	40,697	0	0	4,893
p12_64	0.0	2.000000e+00	2.541000e+00	2.000000e+00	3.000000e+00	1.300000e+01	5,791	0	0	12,963
p65mas	0.0	0.000000e+00	3.020000e-01	0.000000e+00	0.000000e+00	5.000000e+00	57,368	0	0	17,279
ocupados	0.0	1.000000e+00	1.696000e+00	2.000000e+00	2.000000e+00	1.100000e+01	6,959	0	0	4,668
percep_ing	0.0	1.000000e+00	2.419000e+00	2.000000e+00	3.000000e+00	1.800000e+01	126	0	0	788
perc_ocupa	0.0	1.000000e+00	1.650000e+00	1.000000e+00	2.000000e+00	1.100000e+01	7,058	0	0	4,135
ing_cor	0.0	2.034539e+04	4.604388e+04	3.357348e+04	5.519646e+04	4.501830e+06	8	0	0	4,700
ingtrab	0.0	9.387290e+03	3.083953e+04	2.229342e+04	4.094019e+04	1.841189e+06	7,599	0	0	3,932
trabajo	0.0	1.377040e+03	2.584474e+04	1.783368e+04	3.569496e+04	1.398566e+06	17,261	0	0	3,304
sueldos	0.0	5.184700e+02	2.209531e+04	1.551381e+04	3.062201e+04	9.590164e+05	18,079	0	0	2,995
horas_extr	0.0	0.000000e+00	2.528130e+02	0.000000e+00	0.000000e+00	1.728587e+05	68,385	0	0	6,262
comisiones	0.0	0.000000e+00	7.232690e+02	0.000000e+00	0.000000e+00	4.255435e+05	68,786	0	0	5,861
aguinaldo	0.0	0.000000e+00	1.162294e+03	0.000000e+00	1.081960e+03	4.395492e+05	43,678	0	0	9,306
indemtrab	0.0	0.000000e+00	1.178330e+02	0.000000e+00	0.000000e+00	3.442623e+05	73,328	0	0	1,319
otra_rem	0.0	0.000000e+00	5.694010e+02	0.000000e+00	0.000000e+00	1.939226e+05	63,721	0	0	10,926
remu_espec	0.0	0.000000e+00	9.238170e+02	0.000000e+00	0.000000e+00	1.018174e+06	61,407	0	0	13,240
negocio	0.0	0.000000e+00	3.658491e+03	0.000000e+00	9.273900e+02	1.223700e+06	52,436	0	0	15,467

Table 1.3: General list of numerical diagnosis (*continued*)

variables	min	Q1	mean	median	Q3	max	zero	minus	outlier
noagrop	0.0	0.000000e+00	2.895946e+03	0.000000e+00	0.000000e+00	9.524803e+05	58,608	0	16,039
industria	0.0	0.000000e+00	6.940120e+02	0.000000e+00	0.000000e+00	2.643261e+05	69,992	0	4,655
comercio	0.0	0.000000e+00	9.685030e+02	0.000000e+00	0.000000e+00	9.524803e+05	68,509	0	6,138
servicios	0.0	0.000000e+00	1.233430e+03	0.000000e+00	0.000000e+00	2.519022e+05	67,975	0	6,672
agrope	0.0	0.000000e+00	7.625450e+02	0.000000e+00	0.000000e+00	1.223700e+06	66,388	0	8,259
agricolas	0.0	0.000000e+00	4.010890e+02	0.000000e+00	0.000000e+00	1.223700e+06	69,250	0	5,397
pecuarios	0.0	0.000000e+00	3.148330e+02	0.000000e+00	0.000000e+00	6.712707e+05	69,908	0	4,739
reproduc	0.0	0.000000e+00	1.221900e+01	0.000000e+00	0.000000e+00	8.448652e+04	74,412	0	235
pesca	0.0	0.000000e+00	3.440400e+01	0.000000e+00	0.000000e+00	1.095642e+05	74,418	0	229
otros_trab	0.0	0.000000e+00	1.336299e+03	0.000000e+00	0.000000e+00	4.932767e+05	59,805	0	14,842
rentas	0.0	0.000000e+00	2.787774e+03	0.000000e+00	0.000000e+00	3.916957e+06	68,580	0	6,067
utilidad	0.0	0.000000e+00	2.266304e+03	0.000000e+00	0.000000e+00	3.282787e+06	71,658	0	2,989
arrenda	0.0	0.000000e+00	5.214700e+02	0.000000e+00	0.000000e+00	8.217391e+05	71,280	0	3,367
transfer	0.0	0.000000e+00	7.592191e+03	2.624510e+03	8.153065e+03	4.490217e+06	20,055	0	6,500
jubilacion	0.0	0.000000e+00	3.210505e+03	0.000000e+00	0.000000e+00	4.490217e+06	63,366	0	11,281
becas	0.0	0.000000e+00	9.365400e+01	0.000000e+00	0.000000e+00	9.737703e+04	71,726	0	2,921
donativos	0.0	0.000000e+00	1.027557e+03	0.000000e+00	0.000000e+00	3.540984e+05	58,074	0	16,573
remesas	0.0	0.000000e+00	5.326640e+02	0.000000e+00	0.000000e+00	1.540761e+05	70,063	0	4,584
bene_gob	0.0	0.000000e+00	8.118100e+02	0.000000e+00	1.394020e+03	3.186884e+04	51,306	0	5,081
transf_hog	0.0	0.000000e+00	1.269120e+03	0.000000e+00	8.709600e+02	3.483871e+05	50,245	0	12,378
trans_inst	0.0	0.000000e+00	6.468820e+02	0.000000e+00	0.000000e+00	1.185261e+06	56,878	0	17,769
estim_alqu	0.0	1.500000e+03	4.783722e+03	3.000000e+03	5.806450e+03	1.800000e+05	10,339	0	4,343
otros_ing	0.0	0.000000e+00	4.066000e+01	0.000000e+00	0.000000e+00	9.782608e+04	72,979	0	1,668
gasto_mon	0.0	1.343633e+04	2.899003e+04	2.211605e+04	3.542794e+04	1.457729e+06	65	0	4,517
alimentos	0.0	5.451330e+03	1.039556e+04	8.777450e+03	1.335201e+04	2.314155e+05	436	0	3,113
ali_dentro	0.0	4.428145e+03	8.273956e+03	7.235930e+03	1.087045e+04	7.851191e+04	799	0	2,398
cereales	0.0	7.328400e+02	1.532573e+03	1.317820e+03	2.069940e+03	1.773636e+04	2,965	0	2,353
carnes	0.0	2.957100e+02	1.768780e+03	1.279260e+03	2.584250e+03	3.818568e+04	15,728	0	2,725
pescado	0.0	0.000000e+00	1.887670e+02	0.000000e+00	0.000000e+00	2.969998e+04	60,984	0	13,663
leche	0.0	1.414200e+02	8.283130e+02	5.592800e+02	1.169970e+03	2.369566e+04	17,399	0	3,492
huevo	0.0	0.000000e+00	3.216540e+02	2.571400e+02	5.142800e+02	1.049142e+04	27,952	0	1,664
aceites	0.0	0.000000e+00	1.247940e+02	0.000000e+00	2.314200e+02	8.948570e+03	52,719	0	4,033
tuberculo	0.0	0.000000e+00	1.420870e+02	0.000000e+00	2.314200e+02	5.245690e+03	42,287	0	3,804

Table 1.3: General list of numerical diagnosis (*continued*)

variables	min	Q1	mean	median	Q3	max	zero	minus	outlier
verduras	0.0	2.571400e+02	9.336710e+02	7.456800e+02	1.349960e+03	2.558561e+04	11,829	0	2,284
frutas	0.0	0.000000e+00	3.366260e+02	0.000000e+00	4.499900e+02	1.785852e+04	38,680	0	6,628
azucar	0.0	0.000000e+00	9.508300e+01	0.000000e+00	1.285700e+02	1.414285e+04	54,438	0	6,996
cafe	0.0	0.000000e+00	8.888100e+01	0.000000e+00	0.000000e+00	1.542857e+04	59,393	0	15,254
especias	0.0	0.000000e+00	8.463600e+01	0.000000e+00	7.714000e+01	6.428560e+03	52,615	0	11,038
otros_alim	0.0	0.000000e+00	1.007642e+03	1.285700e+02	1.285710e+03	6.042855e+04	35,693	0	6,708
bebidas	0.0	1.542800e+02	8.204520e+02	5.399800e+02	1.131420e+03	5.614710e+04	16,438	0	3,547
ali_fuera	0.0	0.000000e+00	2.064818e+03	0.000000e+00	2.378530e+03	2.154598e+05	40,002	0	7,815
tabaco	0.0	0.000000e+00	5.678500e+01	0.000000e+00	0.000000e+00	2.571428e+04	70,820	0	3,827
vesti_calz	0.0	0.000000e+00	1.314032e+03	6.064900e+02	1.618970e+03	1.663043e+05	19,490	0	5,393
vestido	0.0	0.000000e+00	8.085700e+02	2.445600e+02	9.586700e+02	1.173913e+05	28,812	0	6,448
calzado	0.0	0.000000e+00	5.054620e+02	1.917300e+02	6.847700e+02	4.989129e+04	31,871	0	5,356
vivienda	0.0	7.250000e+02	2.526049e+03	1.636450e+03	2.956475e+03	1.740000e+05	2,347	0	5,705
alquiler	0.0	0.000000e+00	7.344060e+02	0.000000e+00	0.000000e+00	1.320000e+05	65,577	0	9,070
pred_cons	0.0	0.000000e+00	1.262200e+02	0.000000e+00	6.000000e+01	1.350000e+05	51,283	0	10,459
agua	0.0	0.000000e+00	3.164080e+02	1.800000e+02	4.200000e+02	3.900000e+04	22,757	0	3,534
energia	0.0	3.900000e+02	1.349015e+03	1.050000e+03	1.865155e+03	5.829851e+04	3,882	0	2,769
limpieza	0.0	5.690000e+02	1.739815e+03	1.007390e+03	1.803580e+03	1.367923e+05	1,193	0	6,980
cuidados	0.0	5.022200e+02	1.288085e+03	8.535100e+02	1.378995e+03	1.196700e+05	1,487	0	5,314
utensilios	0.0	0.000000e+00	1.556110e+02	0.000000e+00	0.000000e+00	1.271739e+05	56,798	0	17,849
enseres	0.0	0.000000e+00	2.961190e+02	0.000000e+00	0.000000e+00	4.284780e+04	57,327	0	17,320
salud	0.0	0.000000e+00	7.977570e+02	2.347000e+01	4.499800e+02	4.558695e+05	35,881	0	9,982
atenc_ambu	0.0	0.000000e+00	5.782680e+02	0.000000e+00	2.885600e+02	4.558695e+05	48,116	0	10,601
hospital	0.0	0.000000e+00	9.817900e+01	0.000000e+00	0.000000e+00	1.584783e+05	72,702	0	1,945
medicinas	0.0	0.000000e+00	1.213100e+02	0.000000e+00	1.956000e+01	1.760870e+05	54,492	0	14,534
transporte	0.0	1.227775e+03	5.918064e+03	3.483860e+03	7.352695e+03	6.285555e+05	5,073	0	4,549
publico	0.0	0.000000e+00	1.378104e+03	3.214000e+02	1.954240e+03	5.389706e+04	34,540	0	5,319
foraneo	0.0	0.000000e+00	2.043050e+02	0.000000e+00	0.000000e+00	2.201087e+05	61,705	0	12,942
adqui_vehi	0.0	0.000000e+00	7.986020e+02	0.000000e+00	0.000000e+00	5.869565e+05	71,593	0	3,054
mantenim	0.0	0.000000e+00	2.310020e+03	0.000000e+00	3.338700e+03	8.477419e+04	39,191	0	5,634
refaccion	0.0	0.000000e+00	1.959070e+02	0.000000e+00	0.000000e+00	2.988397e+04	61,944	0	12,703
combus	0.0	0.000000e+00	2.114113e+03	0.000000e+00	3.000000e+03	8.477419e+04	40,134	0	5,451
comunica	0.0	2.903200e+02	1.227033e+03	6.000000e+02	1.730320e+03	1.377000e+05	13,660	0	3,706

Table 1.3: General list of numerical diagnosis (*continued*)

variables	min	Q1	mean	median	Q3	max	zero	minus	outlier
educa_espa	0.0	0.000000e+00	3.228984e+03	7.826000e+02	3.270015e+03	3.376196e+05	23,339	0	7,811
educacion	0.0	0.000000e+00	2.235123e+03	0.000000e+00	1.924955e+03	3.019465e+05	42,523	0	10,235
esparci	0.0	0.000000e+00	7.181250e+02	0.000000e+00	7.200000e+02	2.485035e+05	38,250	0	6,927
paq_turist	0.0	0.000000e+00	2.757370e+02	0.000000e+00	0.000000e+00	3.228261e+05	69,934	0	4,713
personales	0.0	7.432150e+02	2.219809e+03	1.410000e+03	2.572845e+03	1.605806e+05	866	0	5,549
cuida_pers	0.0	6.648200e+02	1.700109e+03	1.228040e+03	2.136000e+03	1.410764e+05	1,113	0	4,433
acces_pers	0.0	0.000000e+00	9.290700e+01	0.000000e+00	0.000000e+00	5.869565e+04	58,613	0	16,034
otros_gas	0.0	0.000000e+00	4.267920e+02	0.000000e+00	0.000000e+00	1.245163e+05	57,481	0	17,166
transf_gas	0.0	0.000000e+00	8.499650e+02	0.000000e+00	1.222800e+02	2.655094e+05	51,570	0	14,933
percep_tot	0.0	0.000000e+00	3.404854e+03	7.826000e+01	2.442850e+03	1.691782e+07	36,797	0	7,992
retiro_inv	0.0	0.000000e+00	7.611320e+02	0.000000e+00	0.000000e+00	4.919754e+06	67,081	0	7,566
prestamos	0.0	0.000000e+00	4.785650e+02	0.000000e+00	0.000000e+00	5.966851e+05	69,332	0	5,315
otras_perc	0.0	0.000000e+00	8.565650e+02	0.000000e+00	0.000000e+00	1.690608e+07	69,637	0	5,010
ero_nm_viv	0.0	0.000000e+00	3.035900e+01	0.000000e+00	0.000000e+00	7.458563e+04	73,992	0	655
ero_nm_hog	0.0	0.000000e+00	1.278234e+03	0.000000e+00	1.208550e+03	2.455924e+06	44,138	0	9,279
erogac_tot	0.0	0.000000e+00	4.837898e+03	0.000000e+00	3.540980e+03	3.037500e+06	37,976	0	9,710
cuota_viv	0.0	0.000000e+00	6.211360e+02	0.000000e+00	0.000000e+00	2.100000e+05	68,899	0	5,748
mater_serv	0.0	0.000000e+00	3.232630e+02	0.000000e+00	0.000000e+00	5.370166e+05	66,283	0	8,364
material	0.0	0.000000e+00	2.022530e+02	0.000000e+00	0.000000e+00	3.580110e+05	67,678	0	6,969
servicio	0.0	0.000000e+00	1.210110e+02	0.000000e+00	0.000000e+00	1.790055e+05	71,172	0	3,475
deposito	0.0	0.000000e+00	1.908805e+03	0.000000e+00	0.000000e+00	2.934783e+06	59,726	0	14,921
prest_terc	0.0	0.000000e+00	8.191300e+01	0.000000e+00	0.000000e+00	1.249180e+05	72,320	0	2,327
pago_tarje	0.0	0.000000e+00	7.378440e+02	0.000000e+00	0.000000e+00	4.402174e+05	67,529	0	7,118
deudas	0.0	0.000000e+00	4.574230e+02	0.000000e+00	0.000000e+00	4.337552e+05	68,273	0	6,374
balance	0.0	0.000000e+00	3.245830e+02	0.000000e+00	0.000000e+00	2.971321e+05	67,975	0	6,672
otras_erog	0.0	0.000000e+00	3.829310e+02	0.000000e+00	0.000000e+00	5.869565e+05	70,217	0	4,430
smg	7,952.4	7.952400e+03	7.952400e+03	7.952400e+03	7.952400e+03	7.952400e+03	0	0	0

1.2.3 List of numerical diagnosis (zero)

Table 1.4: List of numerical diagnosis (zero)

variables	min	median	max	zero	zero ratio(%)
pesca	0	0.00	109,564.23	74,418	99.693
reproducc	0	0.00	84,486.52	74,412	99.685
ero_nm_viv	0	0.00	74,585.63	73,992	99.123
indemtrab	0	0.00	344,262.29	73,328	98.233
otros_ing	0	0.00	97,826.08	72,979	97.765
hospital	0	0.00	158,478.26	72,702	97.394
prest_terc	0	0.00	124,918.03	72,320	96.883
becas	0	0.00	97,377.03	71,726	96.087
utilidad	0	0.00	3,282,786.88	71,658	95.996
adqui_vehi	0	0.00	586,956.52	71,593	95.909
arrenda	0	0.00	821,739.12	71,280	95.489
servicio	0	0.00	179,005.52	71,172	95.345
tabaco	0	0.00	25,714.28	70,820	94.873
otras_erog	0	0.00	586,956.52	70,217	94.065
remesas	0	0.00	154,076.07	70,063	93.859
industria	0	0.00	264,326.08	69,992	93.764
paq_turist	0	0.00	322,826.08	69,934	93.686
pecuarios	0	0.00	671,270.71	69,908	93.651
otras_perc	0	0.00	16,906,077.34	69,637	93.288
prestamos	0	0.00	596,685.08	69,332	92.880
agricolas	0	0.00	1,223,699.66	69,250	92.770
cuota_viv	0	0.00	210,000.00	68,899	92.300
comisiones	0	0.00	425,543.47	68,786	92.148
rentas	0	0.00	3,916,956.50	68,580	91.872
comercio	0	0.00	952,480.32	68,509	91.777
horas_extr	0	0.00	172,858.69	68,385	91.611
deudas	0	0.00	433,755.24	68,273	91.461
servicios	0	0.00	251,902.17	67,975	91.062
balance	0	0.00	297,132.06	67,975	91.062
material	0	0.00	358,011.04	67,678	90.664
pago_tarje	0	0.00	440,217.39	67,529	90.464
retiro_inv	0	0.00	4,919,754.09	67,081	89.864
agrope	0	0.00	1,223,699.66	66,388	88.936
mater_serv	0	0.00	537,016.56	66,283	88.795
alquiler	0	0.00	132,000.00	65,577	87.849
otra_rem	0	0.00	193,922.65	63,721	85.363
jubilacion	0	0.00	4,490,217.38	63,366	84.888
refaccion	0	0.00	29,883.97	61,944	82.983
foraneo	0	0.00	220,108.69	61,705	82.662
remu_espec	0	0.00	1,018,173.90	61,407	82.263
pescado	0	0.00	29,699.98	60,984	81.697
otros_trab	0	0.00	493,276.72	59,805	80.117
deposito	0	0.00	2,934,782.60	59,726	80.011
cafe	0	0.00	15,428.57	59,393	79.565
acces_pers	0	0.00	58,695.65	58,613	78.520
noagrop	0	0.00	952,480.32	58,608	78.514

Table 1.4: List of numerical diagnosis (zero) (*continued*)

variables	min	median	max	zero	zero ratio(%)
donativos	0	0.00	354,098.36	58,074	77.798
otros_gas	0	0.00	124,516.29	57,481	77.004
p65mas	0	0.00	5.00	57,368	76.852
enseres	0	0.00	42,847.80	57,327	76.797
trans_inst	0	0.00	1,185,260.85	56,878	76.196
utensilios	0	0.00	127,173.91	56,798	76.089
medicinas	0	0.00	176,086.95	54,492	73.000
azucar	0	0.00	14,142.85	54,438	72.927
aceites	0	0.00	8,948.57	52,719	70.624
especias	0	0.00	6,428.56	52,615	70.485
negocio	0	0.00	1,223,699.66	52,436	70.245
transf_gas	0	0.00	265,509.44	51,570	69.085
bene_gob	0	0.00	31,868.84	51,306	68.731
pred_cons	0	0.00	135,000.00	51,283	68.701
transf_hog	0	0.00	348,387.09	50,245	67.310
atenc_ambu	0	0.00	455,869.55	48,116	64.458
ero_nm_hog	0	0.00	2,455,923.90	44,138	59.129
aguinaldo	0	0.00	439,549.17	43,678	58.513
educacion	0	0.00	301,946.52	42,523	56.965
tuberculo	0	0.00	5,245.69	42,287	56.649
menores	0	0.00	11.00	40,697	54.519
combus	0	0.00	84,774.19	40,134	53.765
ali_fuera	0	0.00	215,459.79	40,002	53.588
mantenim	0	0.00	84,774.19	39,191	52.502
frutas	0	0.00	17,858.52	38,680	51.817
esparci	0	0.00	248,503.48	38,250	51.241
erogac_tot	0	0.00	3,037,499.99	37,976	50.874
percep_tot	0	78.26	16,917,816.46	36,797	49.295
salud	0	23.47	455,869.55	35,881	48.068
otros_alim	0	128.57	60,428.55	35,693	47.816
publico	0	321.40	53,897.06	34,540	46.271
calzado	0	191.73	49,891.29	31,871	42.696
vestido	0	244.56	117,391.30	28,812	38.598
huevo	0	257.14	10,491.42	27,952	37.446
educa_espa	0	782.60	337,619.57	23,339	31.266
agua	0	180.00	39,000.00	22,757	30.486
transfer	0	2,624.51	4,490,217.38	20,055	26.866
vesti_calz	0	606.49	166,304.34	19,490	26.110
sueldos	0	15,513.81	959,016.39	18,079	24.219
leche	0	559.28	23,695.66	17,399	23.308
trabajo	0	17,833.68	1,398,565.56	17,261	23.124
bebidas	0	539.98	56,147.10	16,438	22.021
carnes	0	1,279.26	38,185.68	15,728	21.070
comunica	0	600.00	137,700.00	13,660	18.299
verduras	0	745.68	25,585.61	11,829	15.847
estim_alqu	0	3,000.00	180,000.00	10,339	13.851
ingtrab	0	22,293.42	1,841,188.51	7,599	10.180
perc_ocupa	0	1.00	11.00	7,058	9.455

Table 1.4: List of numerical diagnosis (zero) (*continued*)

variables	min	median	max	zero	zero ratio(%)
hombres	0	2.00	11.00	7,026	9.412
ocupados	0	2.00	11.00	6,959	9.323
mujeres	0	2.00	12.00	6,095	8.165
p12_64	0	2.00	13.00	5,791	7.758
transporte	0	3,483.86	628,555.52	5,073	6.796
energia	0	1,050.00	58,298.51	3,882	5.200
cereales	0	1,317.82	17,736.36	2,965	3.972
vivienda	0	1,636.45	174,000.00	2,347	3.144
cuidados	0	853.51	119,670.00	1,487	1.992
limpieza	0	1,007.39	136,792.27	1,193	1.598
cuida_pers	0	1,228.04	141,076.37	1,113	1.491
personales	0	1,410.00	160,580.64	866	1.160
ali_dentro	0	7,235.93	78,511.91	799	1.070
alimentos	0	8,777.45	231,415.46	436	0.584
percep_ing	0	2.00	18.00	126	0.169
gasto_mon	0	22,116.05	1,457,728.55	65	0.087
ing_cor	0	33,573.48	4,501,830.28	8	0.011

1.2.4 List of numerical diagnosis (minus)

No numeric variable with negative value

Chapter 2

Diagnose Outliers

2.1 Overview of Diagnosis

2.1.1 Diagnosis of numerical variable outliers

Table 2.1: Diagnosis of numerical variable outliers

variables	min	median	max	outlier	outlier ratio(%)
est_socio	1	2.00	4.00	35,362	47.372
utensilios	0	0.00	127,173.91	17,849	23.911
trans_inst	0	0.00	1,185,260.85	17,769	23.804
enseres	0	0.00	42,847.80	17,320	23.203
p65mas	0	0.00	5.00	17,279	23.148
otros_gas	0	0.00	124,516.29	17,166	22.996
donativos	0	0.00	354,098.36	16,573	22.202
noagrop	0	0.00	952,480.32	16,039	21.486
acces_pers	0	0.00	58,695.65	16,034	21.480
negocio	0	0.00	1,223,699.66	15,467	20.720
cafe	0	0.00	15,428.57	15,254	20.435
transf_gas	0	0.00	265,509.44	14,933	20.005
deposito	0	0.00	2,934,782.60	14,921	19.989
otros_trab	0	0.00	493,276.72	14,842	19.883
medicinas	0	0.00	176,086.95	14,534	19.470
pescado	0	0.00	29,699.98	13,663	18.303
remu_espec	0	0.00	1,018,173.90	13,240	17.737
p12_64	0	2.00	13.00	12,963	17.366
foraneo	0	0.00	220,108.69	12,942	17.338
refaccion	0	0.00	29,883.97	12,703	17.017
transf_hog	0	0.00	348,387.09	12,378	16.582
jubilacion	0	0.00	4,490,217.38	11,281	15.112
especias	0	0.00	6,428.56	11,038	14.787
otra_rem	0	0.00	193,922.65	10,926	14.637
atenc_ambu	0	0.00	455,869.55	10,601	14.202
pred_cons	0	0.00	135,000.00	10,459	14.011
educacion	0	0.00	301,946.52	10,235	13.711
salud	0	23.47	455,869.55	9,982	13.372
erogac_tot	0	0.00	3,037,499.99	9,710	13.008
aguinaldo	0	0.00	439,549.17	9,306	12.467

Table 2.1: Diagnosis of numerical variable outliers (*continued*)

variables	min	median	max	outlier	outlier ratio(%)
ero_nm_hog	0	0.00	2,455,923.90	9,279	12.431
alquiler	0	0.00	132,000.00	9,070	12.151
mater_serv	0	0.00	537,016.56	8,364	11.205
agrope	0	0.00	1,223,699.66	8,259	11.064
percep_tot	0	78.26	16,917,816.46	7,992	10.706
ali_fuera	0	0.00	215,459.79	7,815	10.469
educa_espa	0	782.60	337,619.57	7,811	10.464
retiro_inv	0	0.00	4,919,754.09	7,566	10.136
pago_tarje	0	0.00	440,217.39	7,118	9.536
azucar	0	0.00	14,142.85	6,996	9.372
limpieza	0	1,007.39	136,792.27	6,980	9.351
material	0	0.00	358,011.04	6,969	9.336
esparci	0	0.00	248,503.48	6,927	9.280
otros_alim	0	128.57	60,428.55	6,708	8.986
servicios	0	0.00	251,902.17	6,672	8.938
balance	0	0.00	297,132.06	6,672	8.938
frutas	0	0.00	17,858.52	6,628	8.879
transfer	0	2,624.51	4,490,217.38	6,500	8.708
vestido	0	244.56	117,391.30	6,448	8.638
mujeres	0	2.00	12.00	6,429	8.613
deudas	0	0.00	433,755.24	6,374	8.539
horas_extr	0	0.00	172,858.69	6,262	8.389
comercio	0	0.00	952,480.32	6,138	8.223
rentas	0	0.00	3,916,956.50	6,067	8.128
comisiones	0	0.00	425,543.47	5,861	7.852
cuota_viv	0	0.00	210,000.00	5,748	7.700
vivienda	0	1,636.45	174,000.00	5,705	7.643
mantenim	0	0.00	84,774.19	5,634	7.548
hombres	0	2.00	11.00	5,613	7.519
personales	0	1,410.00	160,580.64	5,549	7.434
combus	0	0.00	84,774.19	5,451	7.302
agricolas	0	0.00	1,223,699.66	5,397	7.230
vesti_calz	0	606.49	166,304.34	5,393	7.225
calzado	0	191.73	49,891.29	5,356	7.175
publico	0	321.40	53,897.06	5,319	7.126
prestamos	0	0.00	596,685.08	5,315	7.120
cuidados	0	853.51	119,670.00	5,314	7.119
bene_gob	0	0.00	31,868.84	5,081	6.807
otras_perc	0	0.00	16,906,077.34	5,010	6.712
menores	0	0.00	11.00	4,893	6.555
pecuarios	0	0.00	671,270.71	4,739	6.349
paq_turist	0	0.00	322,826.08	4,713	6.314
ing_cor	0	33,573.48	4,501,830.28	4,700	6.296
ocupados	0	2.00	11.00	4,668	6.253
industria	0	0.00	264,326.08	4,655	6.236
factor	9	323.00	6,727.00	4,643	6.220
remesas	0	0.00	154,076.07	4,584	6.141
transporte	0	3,483.86	628,555.52	4,549	6.094

Table 2.1: Diagnosis of numerical variable outliers (*continued*)

variables	min	median	max	outlier	outlier ratio(%)
gasto_mon	0	22,116.05	1,457,728.55	4,517	6.051
cuida_pers	0	1,228.04	141,076.37	4,433	5.939
otras_erog	0	0.00	586,956.52	4,430	5.935
estim_alqu	0	3,000.00	180,000.00	4,343	5.818
perc_ocupa	0	1.00	11.00	4,135	5.539
aceites	0	0.00	8,948.57	4,033	5.403
ingtrab	0	22,293.42	1,841,188.51	3,932	5.267
tabaco	0	0.00	25,714.28	3,827	5.127
tuberculo	0	0.00	5,245.69	3,804	5.096
comunica	0	600.00	137,700.00	3,706	4.965
bebidas	0	539.98	56,147.10	3,547	4.752
agua	0	180.00	39,000.00	3,534	4.734
leche	0	559.28	23,695.66	3,492	4.678
servicio	0	0.00	179,005.52	3,475	4.655
arrenda	0	0.00	821,739.12	3,367	4.511
trabajo	0	17,833.68	1,398,565.56	3,304	4.426
alimentos	0	8,777.45	231,415.46	3,113	4.170
adqui_vehi	0	0.00	586,956.52	3,054	4.091
sueldos	0	15,513.81	959,016.39	2,995	4.012
utilidad	0	0.00	3,282,786.88	2,989	4.004
becas	0	0.00	97,377.03	2,921	3.913
energia	0	1,050.00	58,298.51	2,769	3.709
carnes	0	1,279.26	38,185.68	2,725	3.651
ali_dentro	0	7,235.93	78,511.91	2,398	3.212
cereales	0	1,317.82	17,736.36	2,353	3.152
prest_terc	0	0.00	124,918.03	2,327	3.117
verduras	0	745.68	25,585.61	2,284	3.060
hospital	0	0.00	158,478.26	1,945	2.606
otros_ing	0	0.00	97,826.08	1,668	2.235
huevo	0	257.14	10,491.42	1,664	2.229
indemtrab	0	0.00	344,262.29	1,319	1.767
foliohog	1	1.00	5.00	1,242	1.664
percep_ing	0	2.00	18.00	788	1.056
ero_nm_viv	0	0.00	74,585.63	655	0.877
tot_integ	1	3.00	22.00	549	0.735
mayores	1	3.00	14.00	417	0.559
clase_hog	1	2.00	5.00	275	0.368
reproducc	0	0.00	84,486.52	235	0.315
pesca	0	0.00	109,564.23	229	0.307
edad_jefe	14	48.00	110.00	99	0.133

2.2 Detailed outliers diagnosis

variable : est_socio

Table 2.2: Outliers information of est_socio

Measures	Values
Outliers count	35,362.00
Outliers ratio (%)	47.37
Mean of outliers	2.12
Mean with outliers	2.06
Mean without outliers	2.00

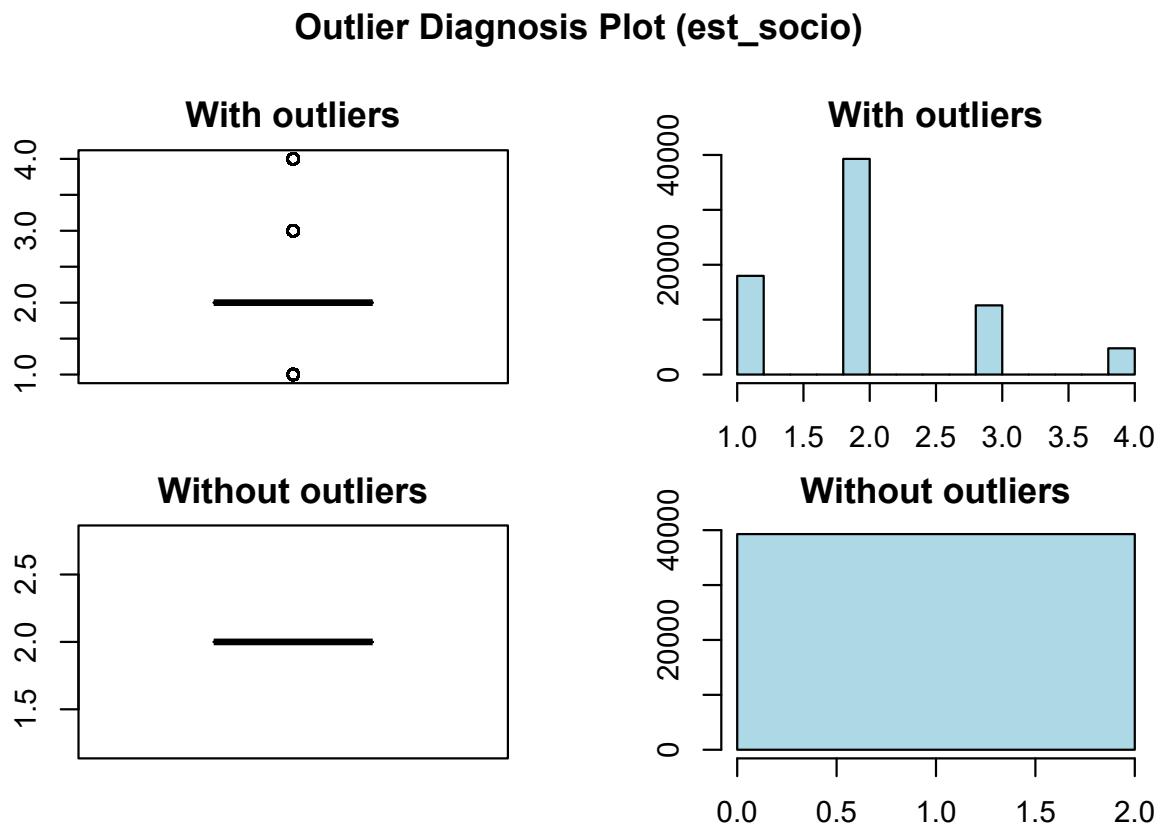


Figure 2.1: Distribution of est_socio

variable : utensilios

Table 2.3: Outliers information of utensilios

Measures	Values
Outliers count	17,849.00
Outliers ratio (%)	23.91
Mean of outliers	650.79
Mean with outliers	155.61
Mean without outliers	0.00

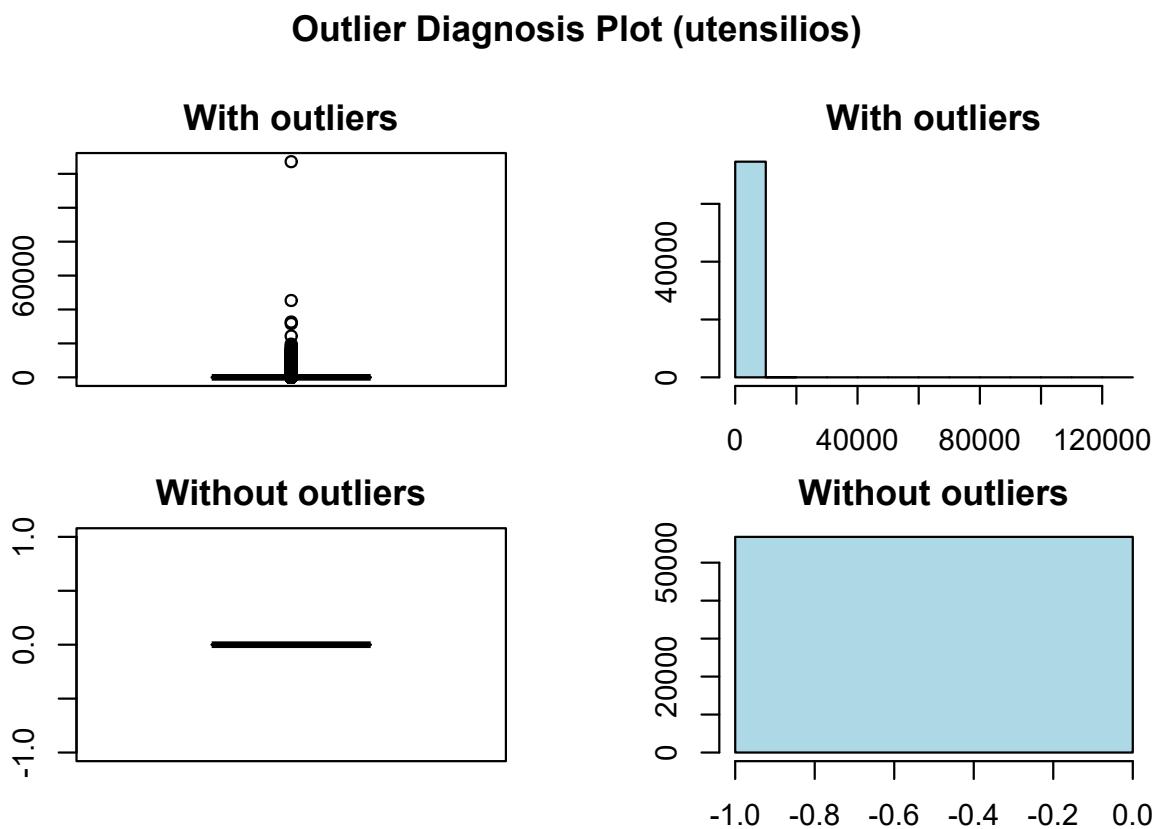


Figure 2.2: Distribution of utensilios

```
variable : trans_inst
```

Table 2.4: Outliers information of trans_inst

Measures	Values
Outliers count	17,769.00
Outliers ratio (%)	23.80
Mean of outliers	2,717.53
Mean with outliers	646.88
Mean without outliers	0.00

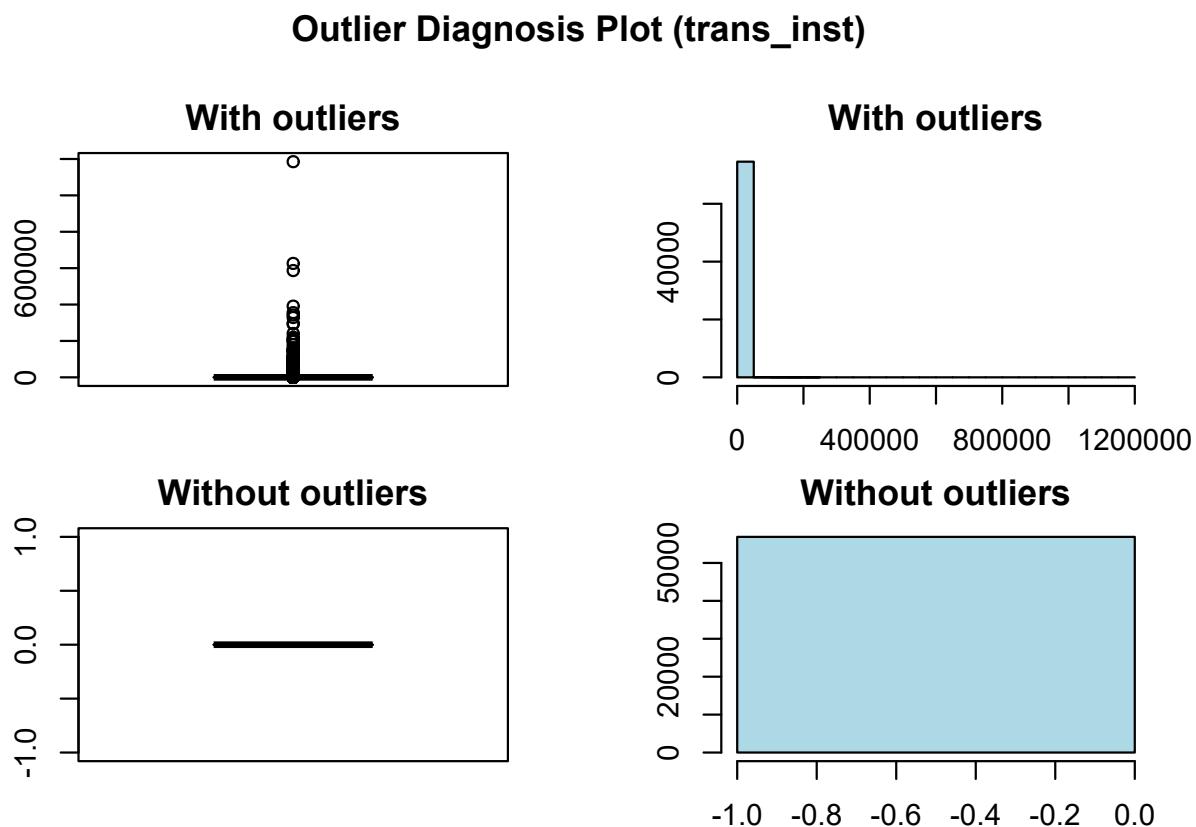


Figure 2.3: Distribution of trans_inst

variable : enseres

Table 2.5: Outliers information of enseres

Measures	Values
Outliers count	17,320.00
Outliers ratio (%)	23.20
Mean of outliers	1,276.23
Mean with outliers	296.12
Mean without outliers	0.00

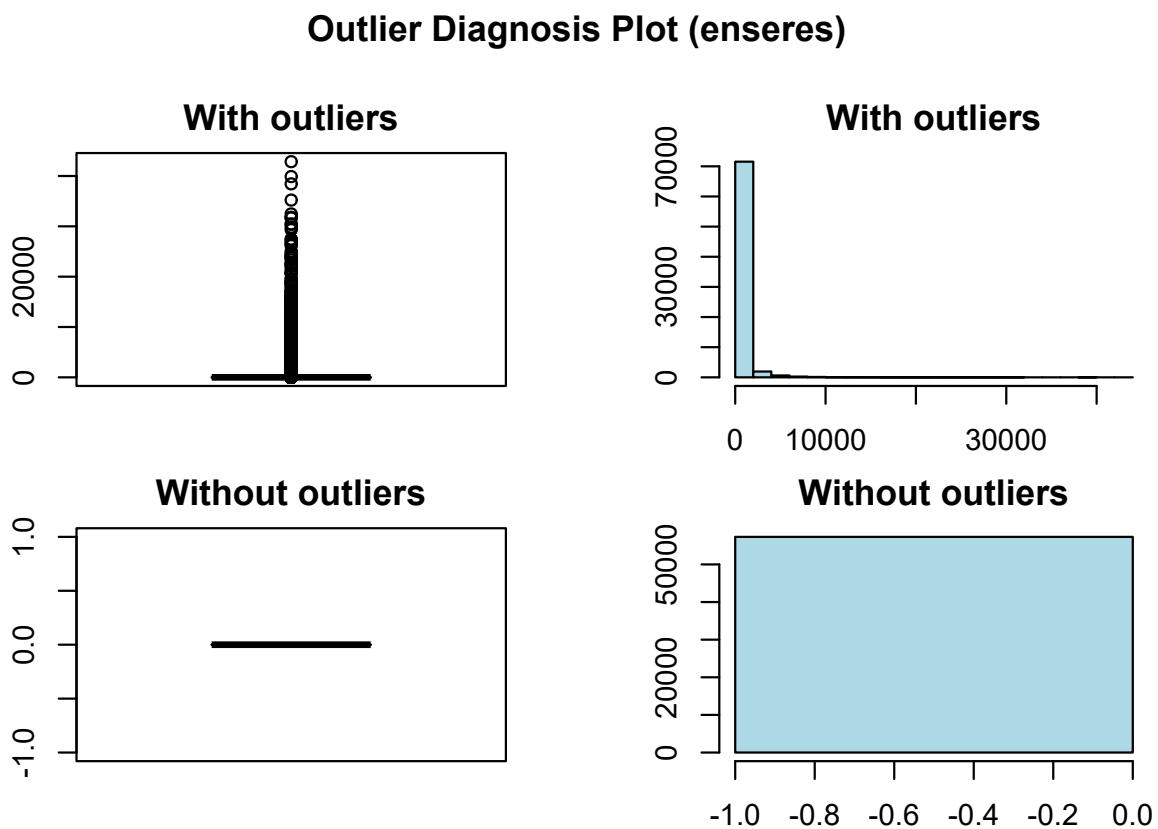


Figure 2.4: Distribution of enseres

```
variable : p65mas
```

Table 2.6: Outliers information of p65mas

Measures	Values
Outliers count	17,279.00
Outliers ratio (%)	23.15
Mean of outliers	1.31
Mean with outliers	0.30
Mean without outliers	0.00

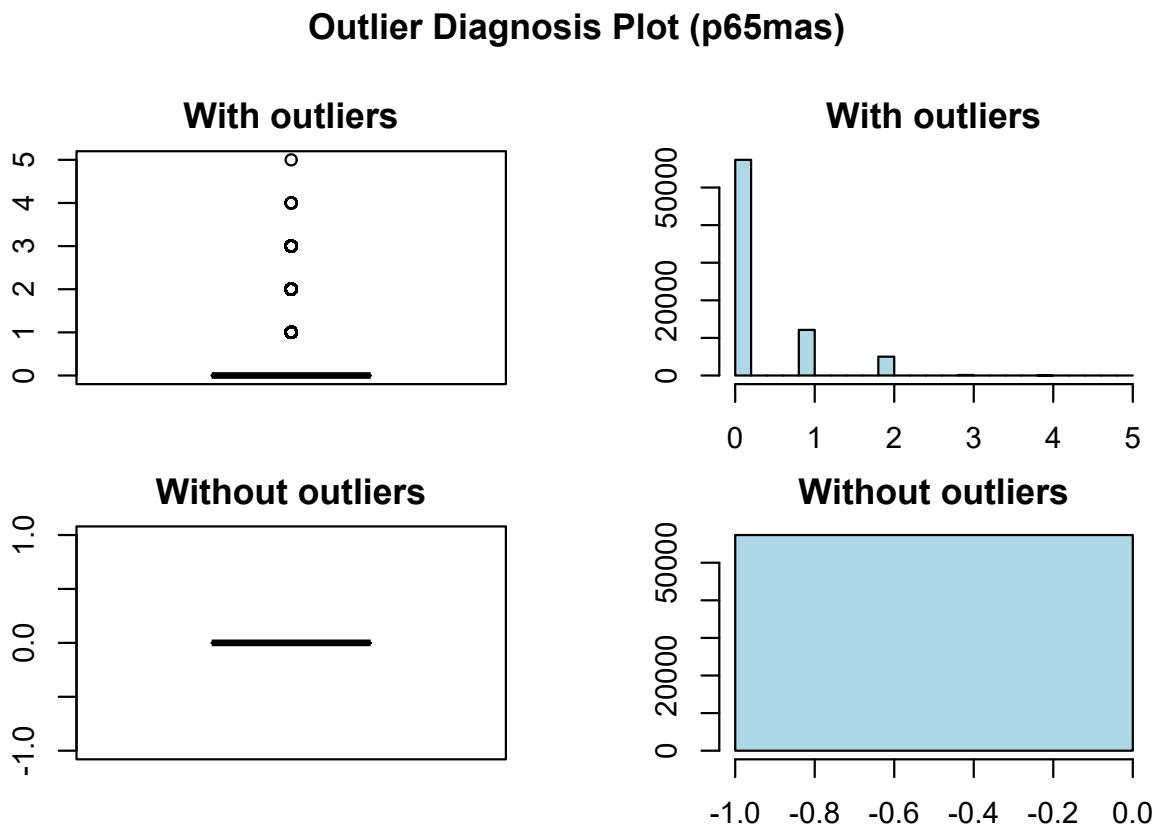


Figure 2.5: Distribution of p65mas

```
variable : otros_gas
```

Table 2.7: Outliers information of otros_gas

Measures	Values
Outliers count	17,166.00
Outliers ratio (%)	23.00
Mean of outliers	1,855.92
Mean with outliers	426.79
Mean without outliers	0.00

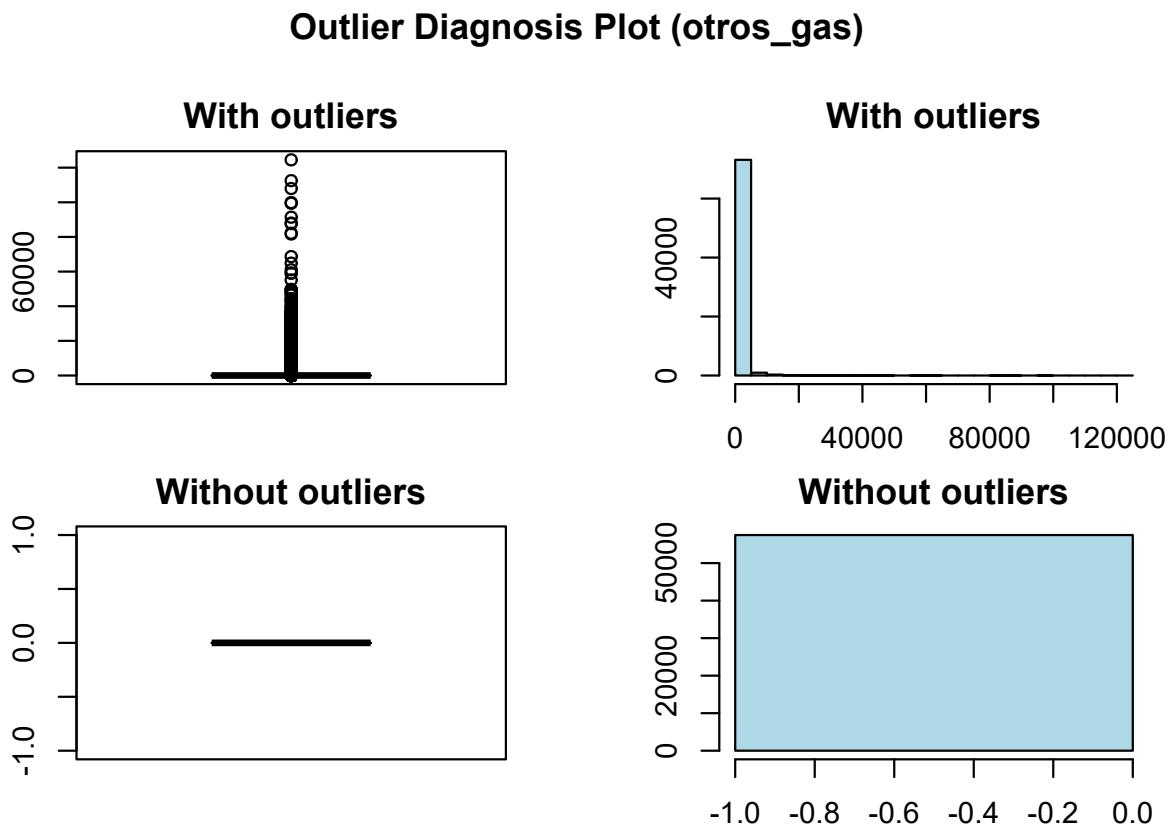


Figure 2.6: Distribution of otros_gas

variable : donativos

Table 2.8: Outliers information of donativos

Measures	Values
Outliers count	16,573.00
Outliers ratio (%)	22.20
Mean of outliers	4,628.25
Mean with outliers	1,027.56
Mean without outliers	0.00

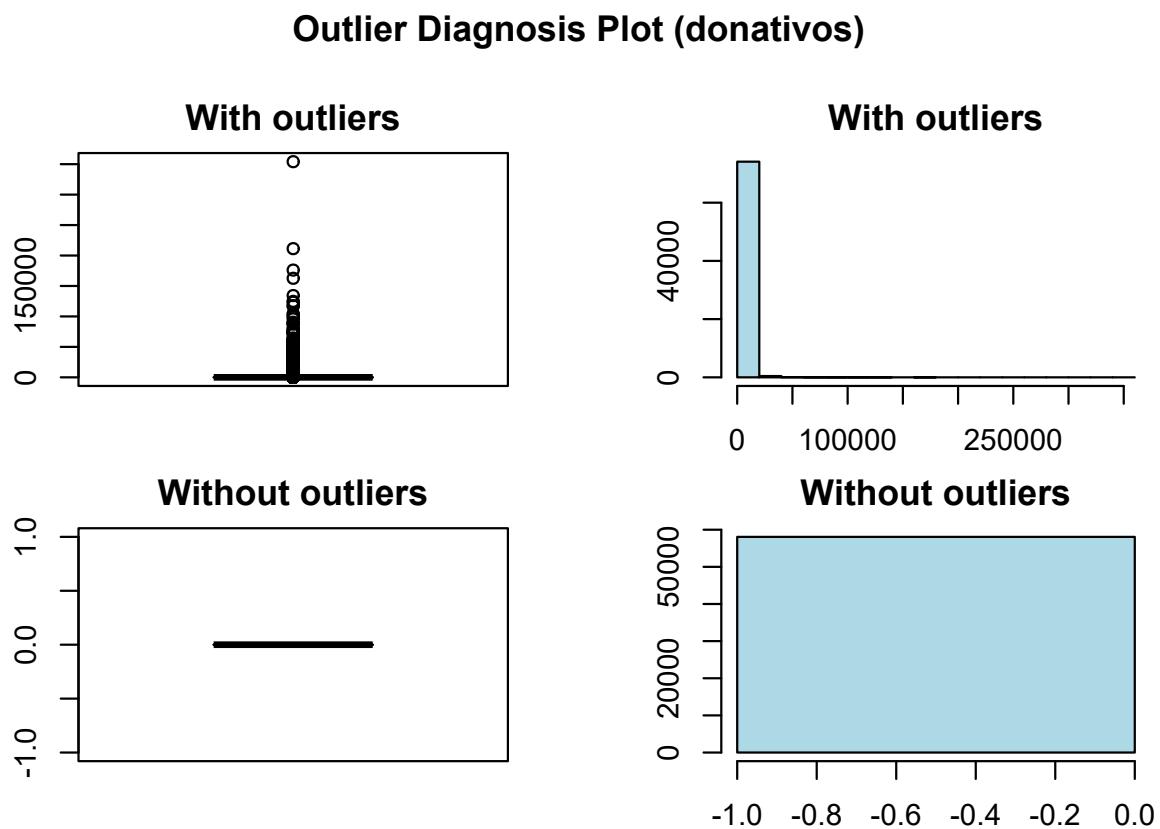


Figure 2.7: Distribution of donativos

variable : noagrop

Table 2.9: Outliers information of noagrop

Measures	Values
Outliers count	16,039.00
Outliers ratio (%)	21.49
Mean of outliers	13,478.00
Mean with outliers	2,895.95
Mean without outliers	0.00

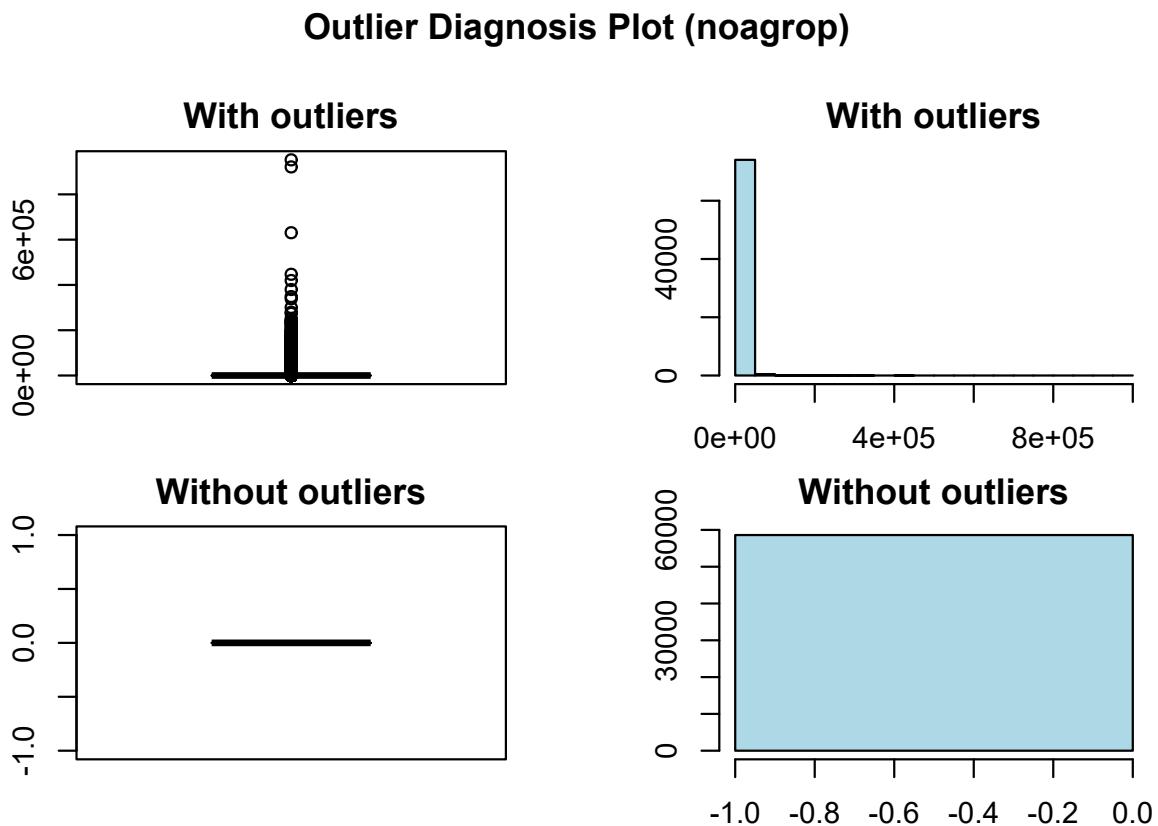


Figure 2.8: Distribution of noagrop

```
variable : acces_pers
```

Table 2.10: Outliers information of acces_pers

Measures	Values
Outliers count	16,034.00
Outliers ratio (%)	21.48
Mean of outliers	432.53
Mean with outliers	92.91
Mean without outliers	0.00

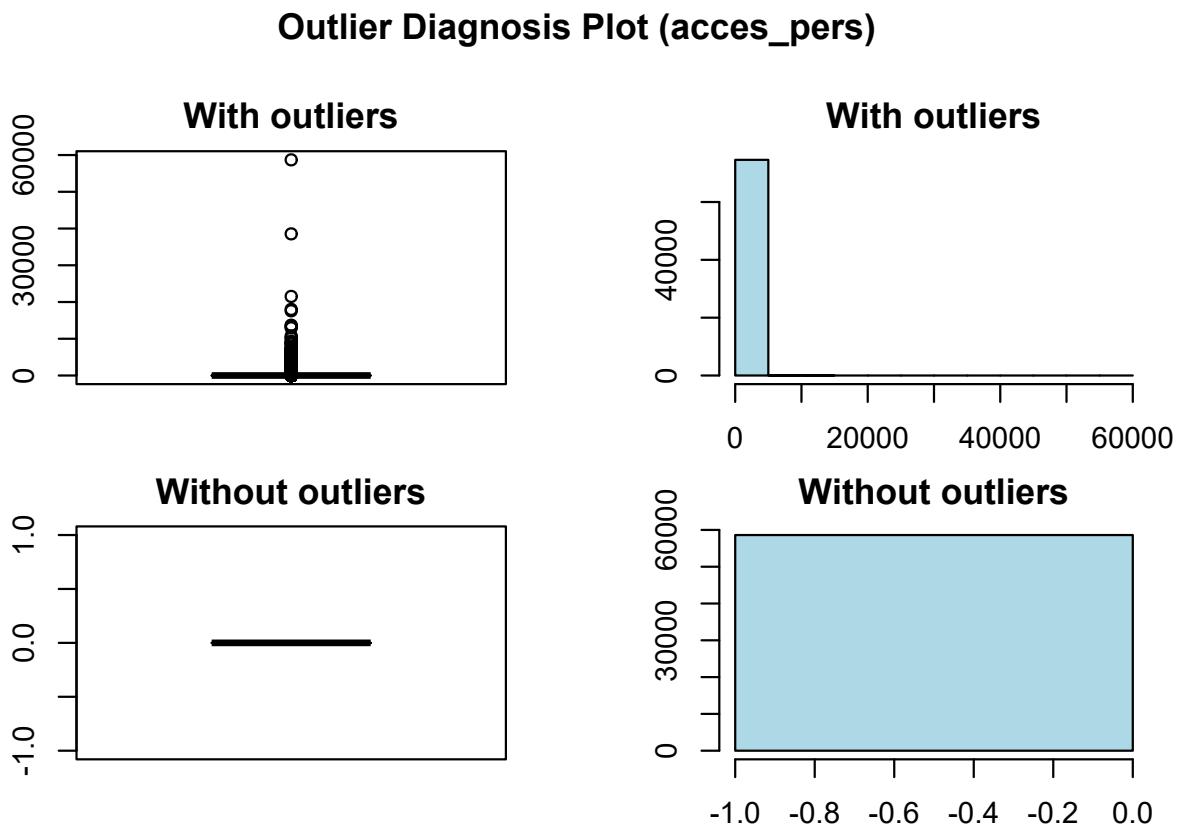


Figure 2.9: Distribution of acces_pers

variable : negocio

Table 2.11: Outliers information of negocio

Measures	Values
Outliers count	15,467.00
Outliers ratio (%)	20.72
Mean of outliers	17,237.12
Mean with outliers	3,658.49
Mean without outliers	109.65

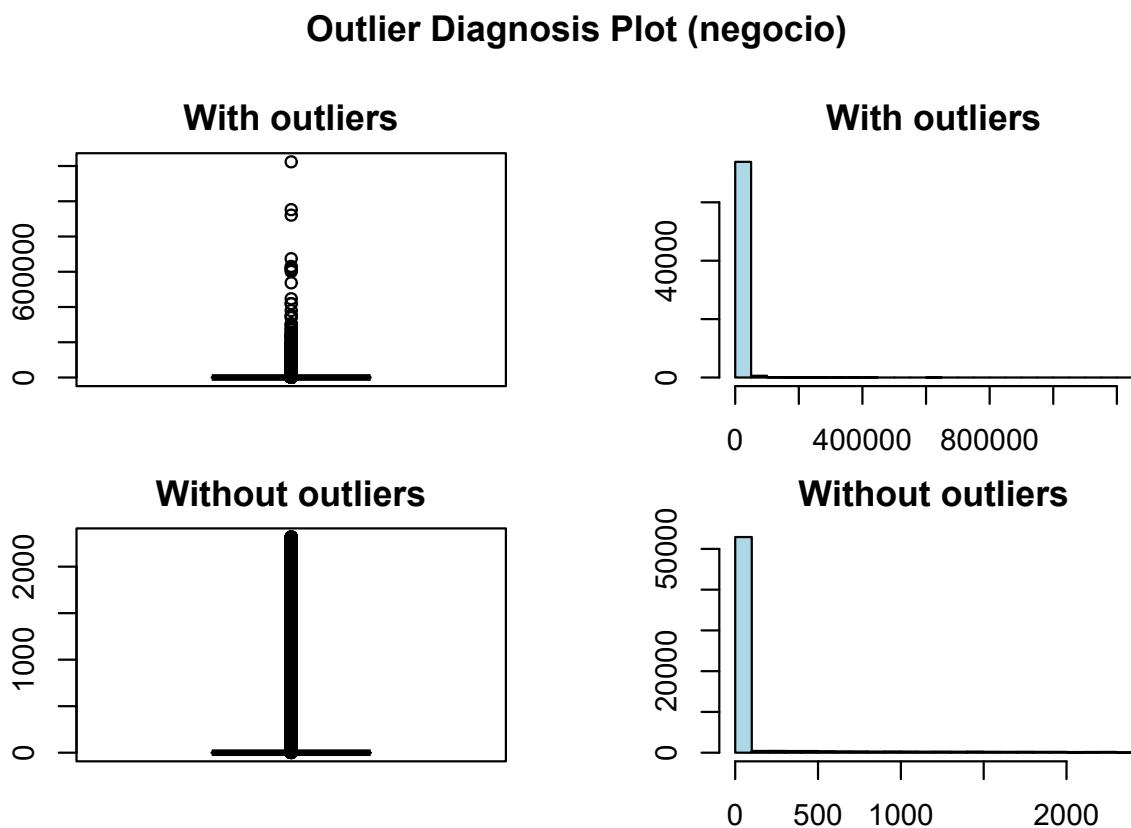


Figure 2.10: Distribution of negocio

variable : cafe

Table 2.12: Outliers information of cafe

Measures	Values
Outliers count	15,254.00
Outliers ratio (%)	20.43
Mean of outliers	434.95
Mean with outliers	88.88
Mean without outliers	0.00

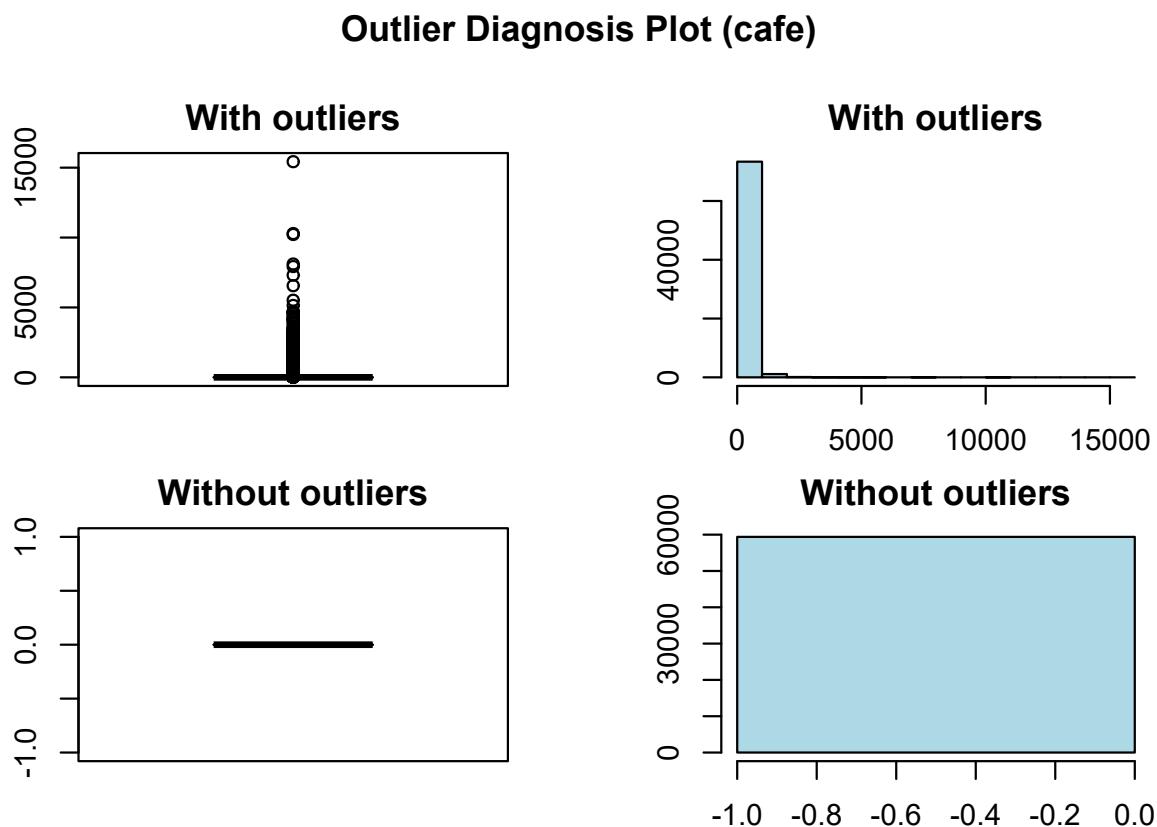


Figure 2.11: Distribution of cafe

variable : transf_gas

Table 2.13: Outliers information of transf_gas

Measures	Values
Outliers count	14,933.00
Outliers ratio (%)	20.00
Mean of outliers	4,176.84
Mean with outliers	849.97
Mean without outliers	18.00

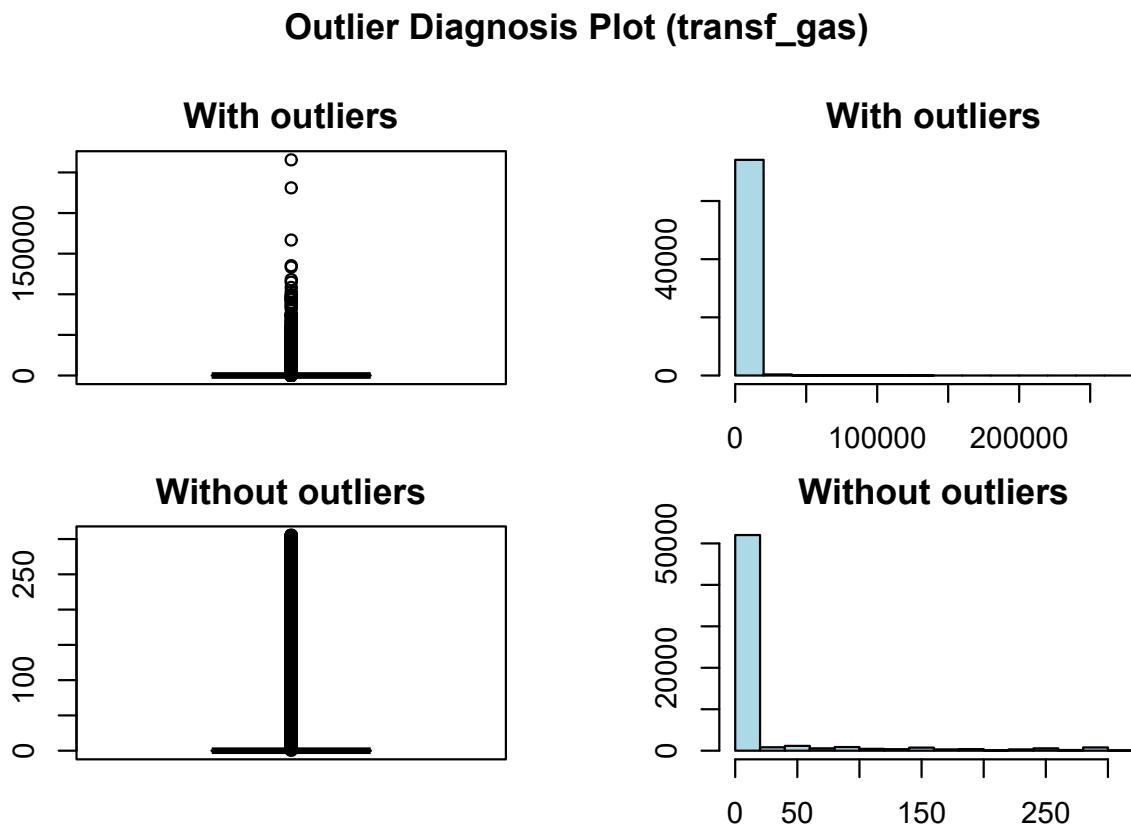


Figure 2.12: Distribution of transf_gas

```
variable : deposito
```

Table 2.14: Outliers information of deposito

Measures	Values
Outliers count	14,921.00
Outliers ratio (%)	19.99
Mean of outliers	9,549.40
Mean with outliers	1,908.80
Mean without outliers	0.00

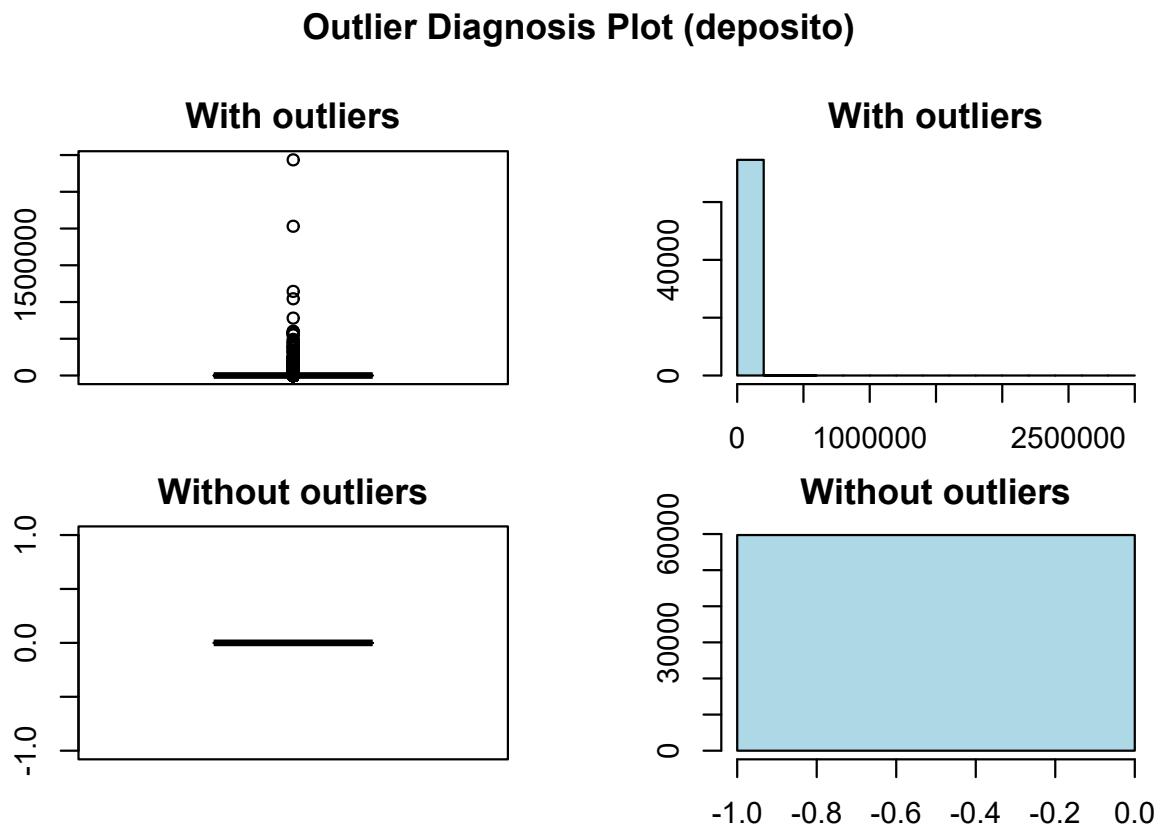


Figure 2.13: Distribution of deposito

variable : otros_trab

Table 2.15: Outliers information of otros_trab

Measures	Values
Outliers count	14,842.00
Outliers ratio (%)	19.88
Mean of outliers	6,720.84
Mean with outliers	1,336.30
Mean without outliers	0.00

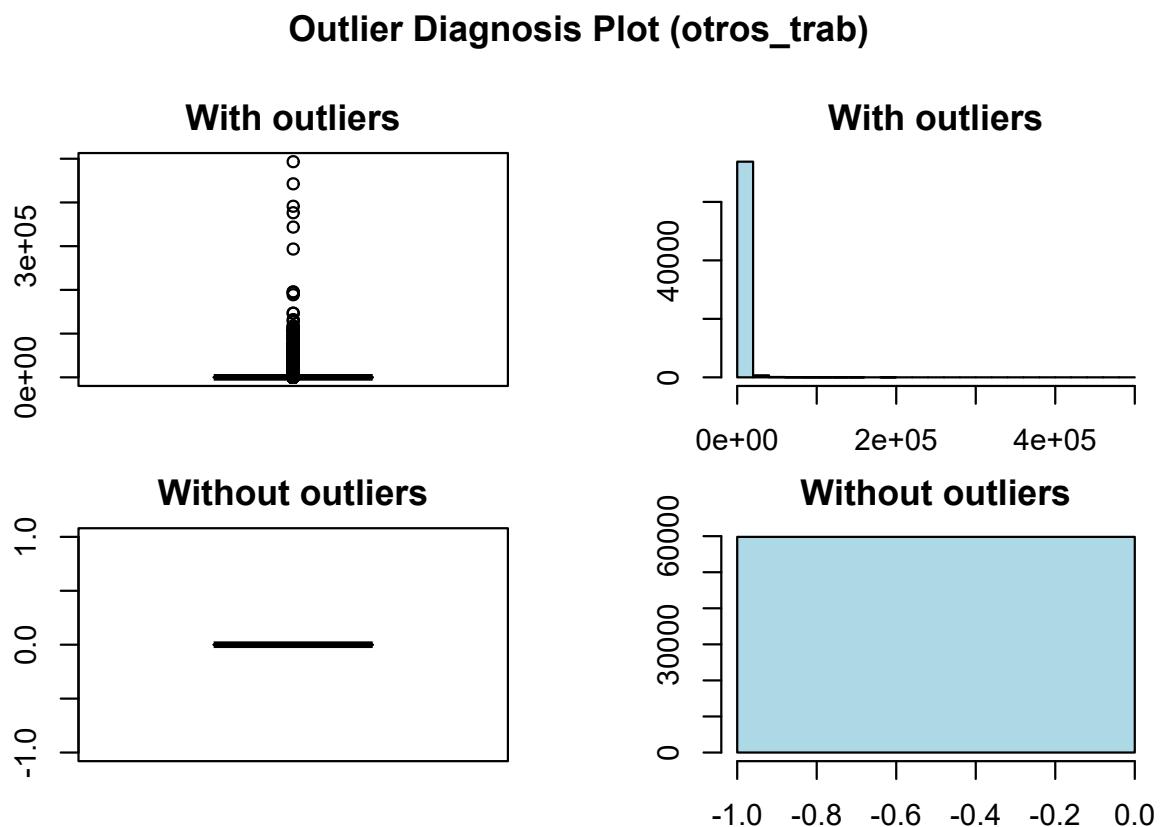


Figure 2.14: Distribution of otros_trab

variable : medicinas

Table 2.16: Outliers information of medicinas

Measures	Values
Outliers count	14,534.00
Outliers ratio (%)	19.47
Mean of outliers	612.92
Mean with outliers	121.31
Mean without outliers	2.45

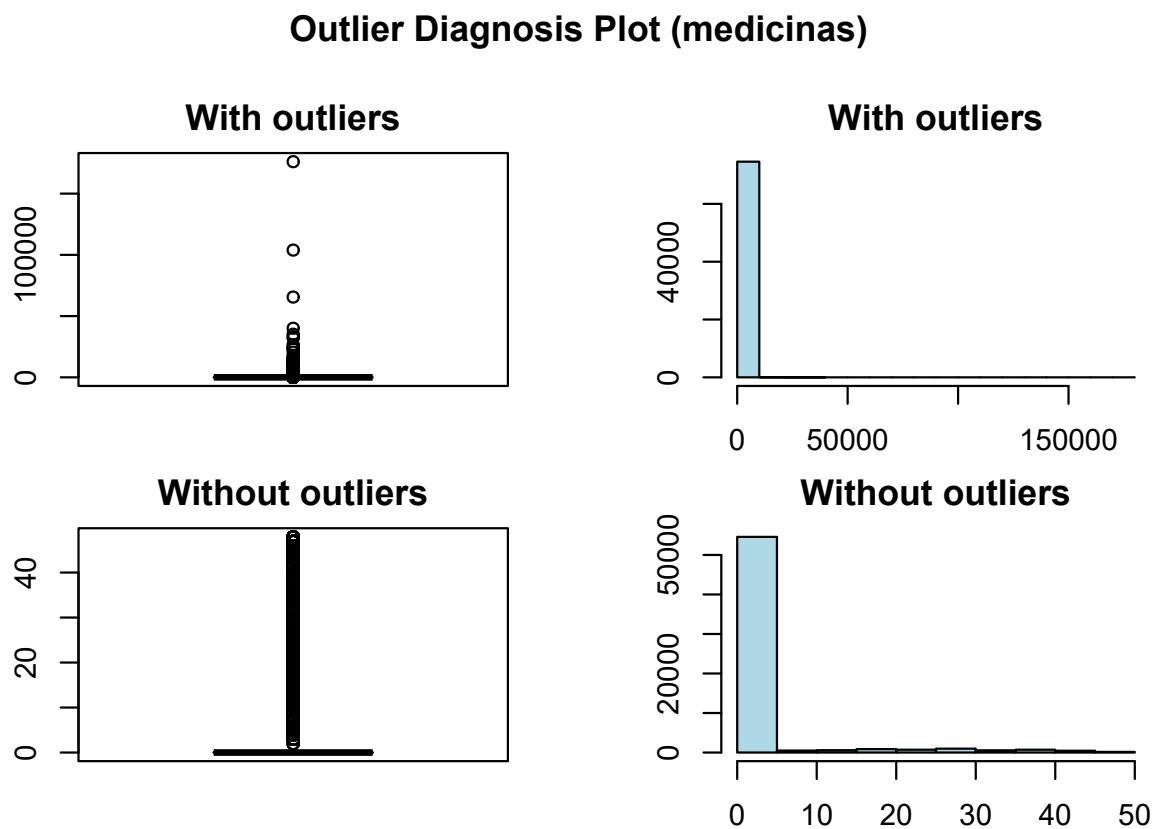


Figure 2.15: Distribution of medicinas

```
variable : pescado
```

Table 2.17: Outliers information of pescado

Measures	Values
Outliers count	13,663.00
Outliers ratio (%)	18.30
Mean of outliers	1,031.32
Mean with outliers	188.77
Mean without outliers	0.00

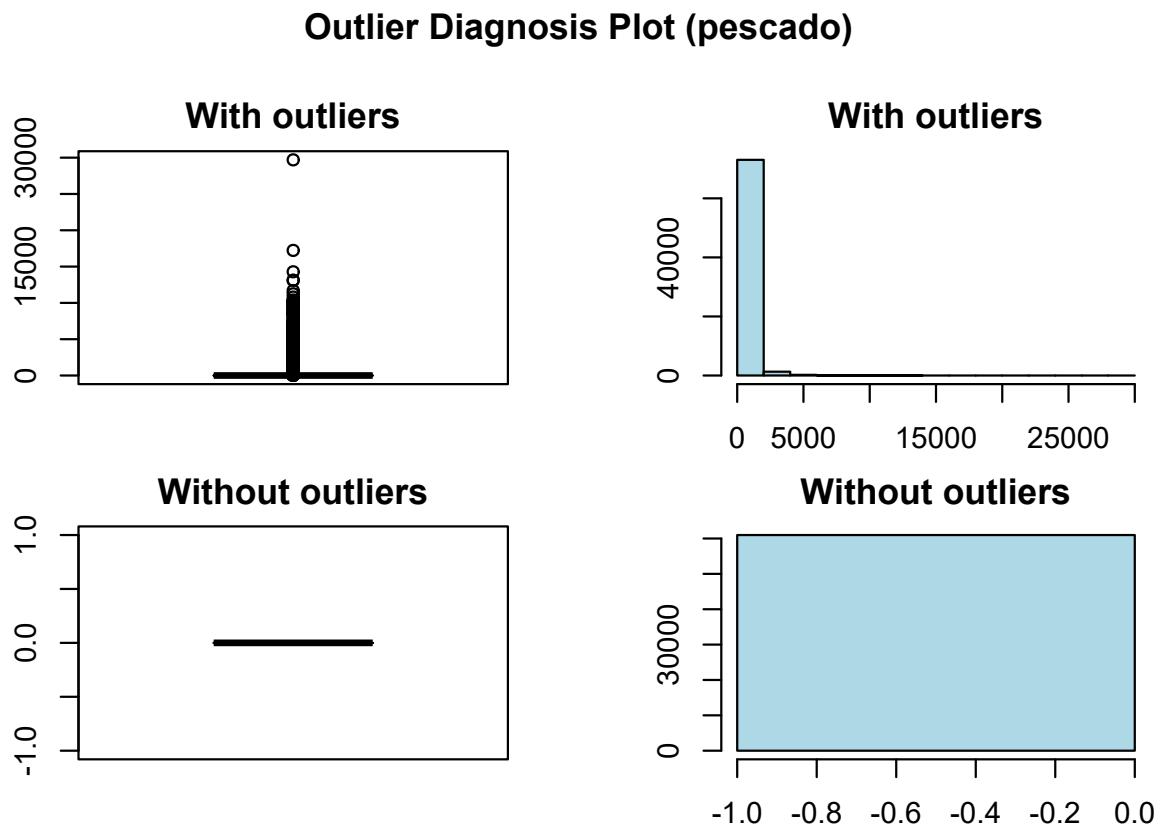


Figure 2.16: Distribution of pescado

```
variable : remu_espec
```

Table 2.18: Outliers information of remu_espec

Measures	Values
Outliers count	13,240.00
Outliers ratio (%)	17.74
Mean of outliers	5,208.47
Mean with outliers	923.82
Mean without outliers	0.00

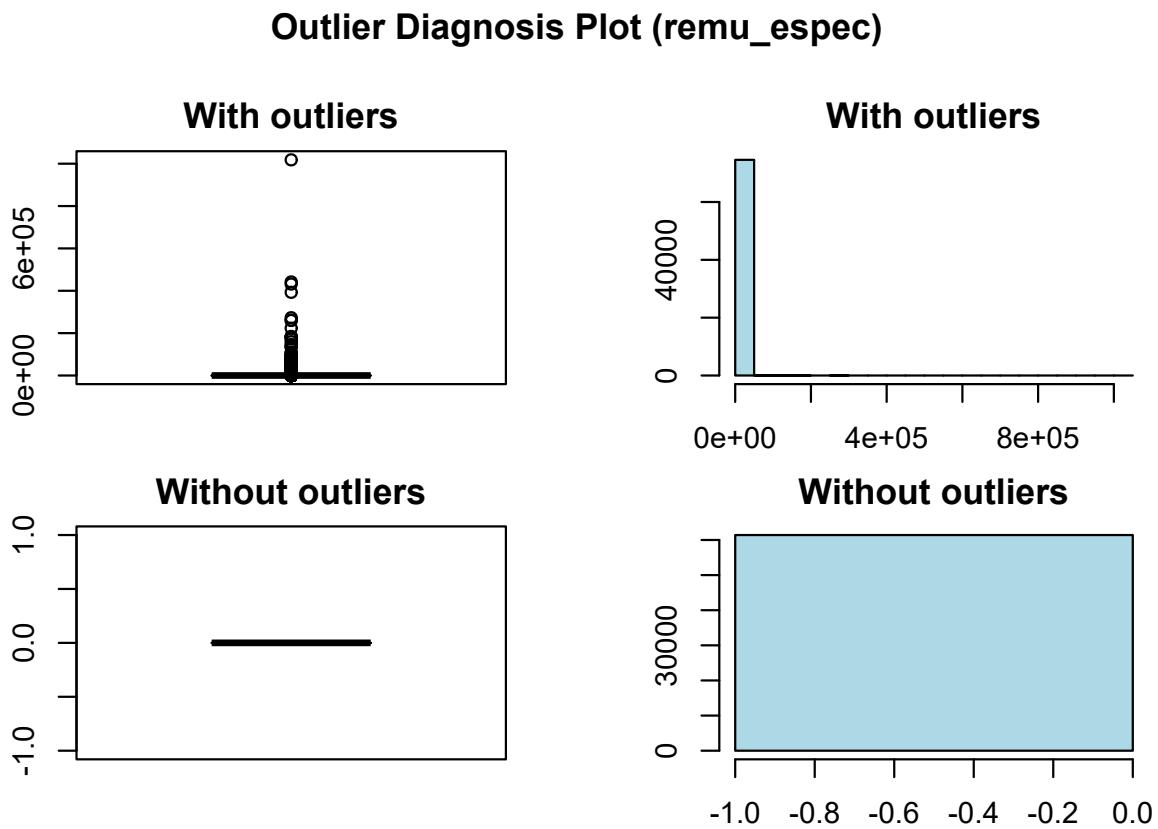


Figure 2.17: Distribution of remu_espec

variable : p12_64

Table 2.19: Outliers information of p12_64

Measures	Values
Outliers count	12,963.00
Outliers ratio (%)	17.37
Mean of outliers	3.06
Mean with outliers	2.54
Mean without outliers	2.43

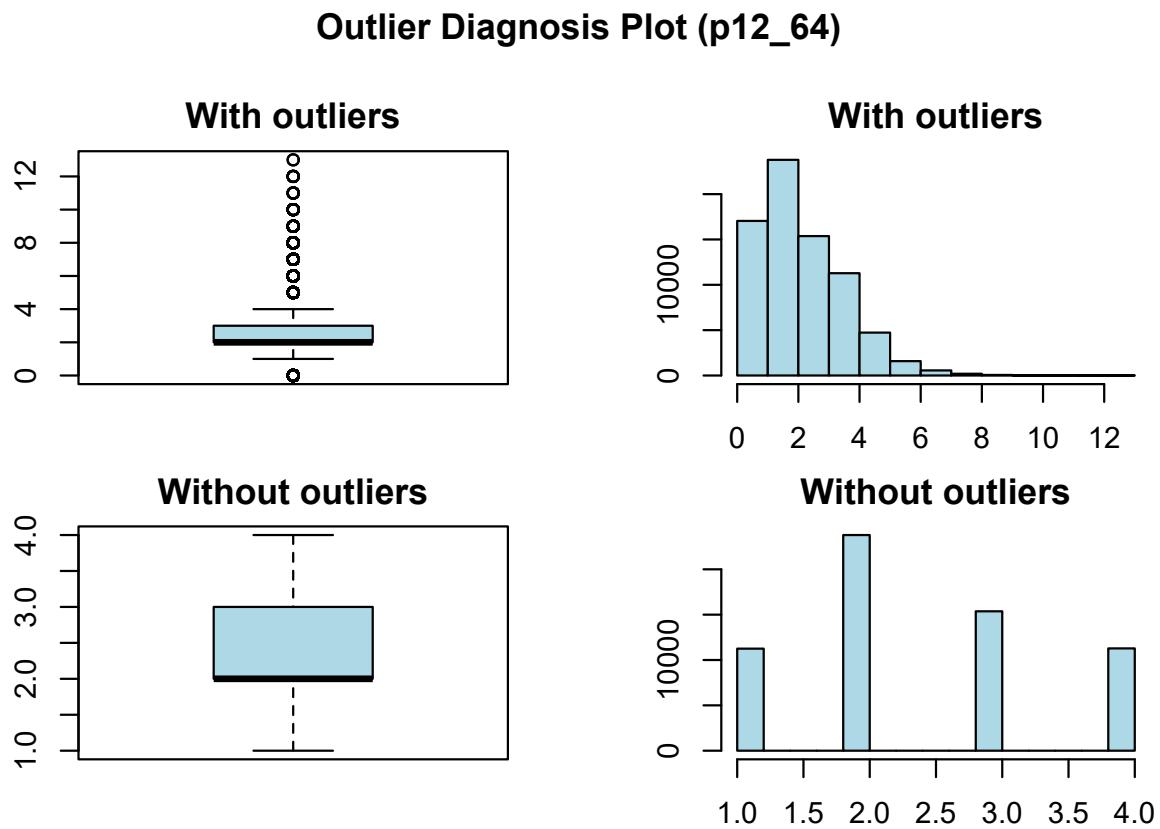


Figure 2.18: Distribution of p12_64

variable : foraneo

Table 2.20: Outliers information of foraneo

Measures	Values
Outliers count	12,942.00
Outliers ratio (%)	17.34
Mean of outliers	1,178.39
Mean with outliers	204.31
Mean without outliers	0.00

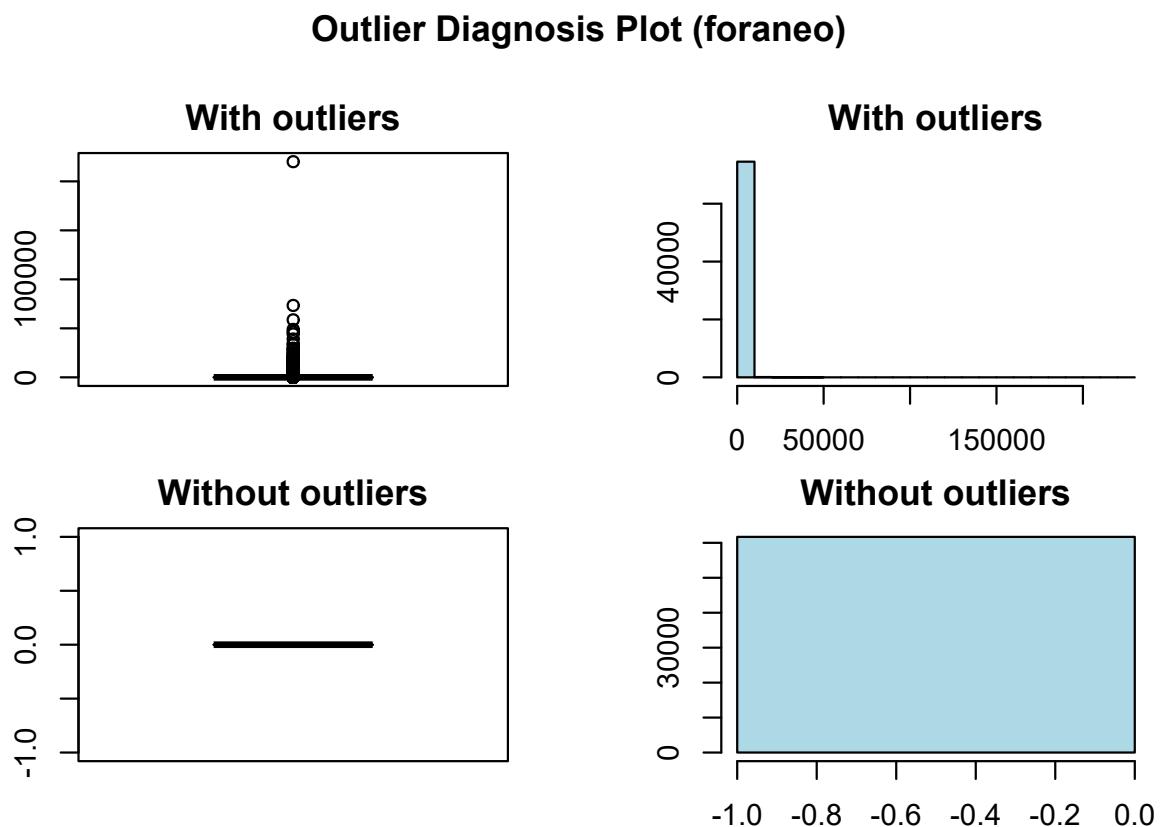


Figure 2.19: Distribution of foraneo

variable : refaccion

Table 2.21: Outliers information of refaccion

Measures	Values
Outliers count	12,703.00
Outliers ratio (%)	17.02
Mean of outliers	1,151.22
Mean with outliers	195.91
Mean without outliers	0.00

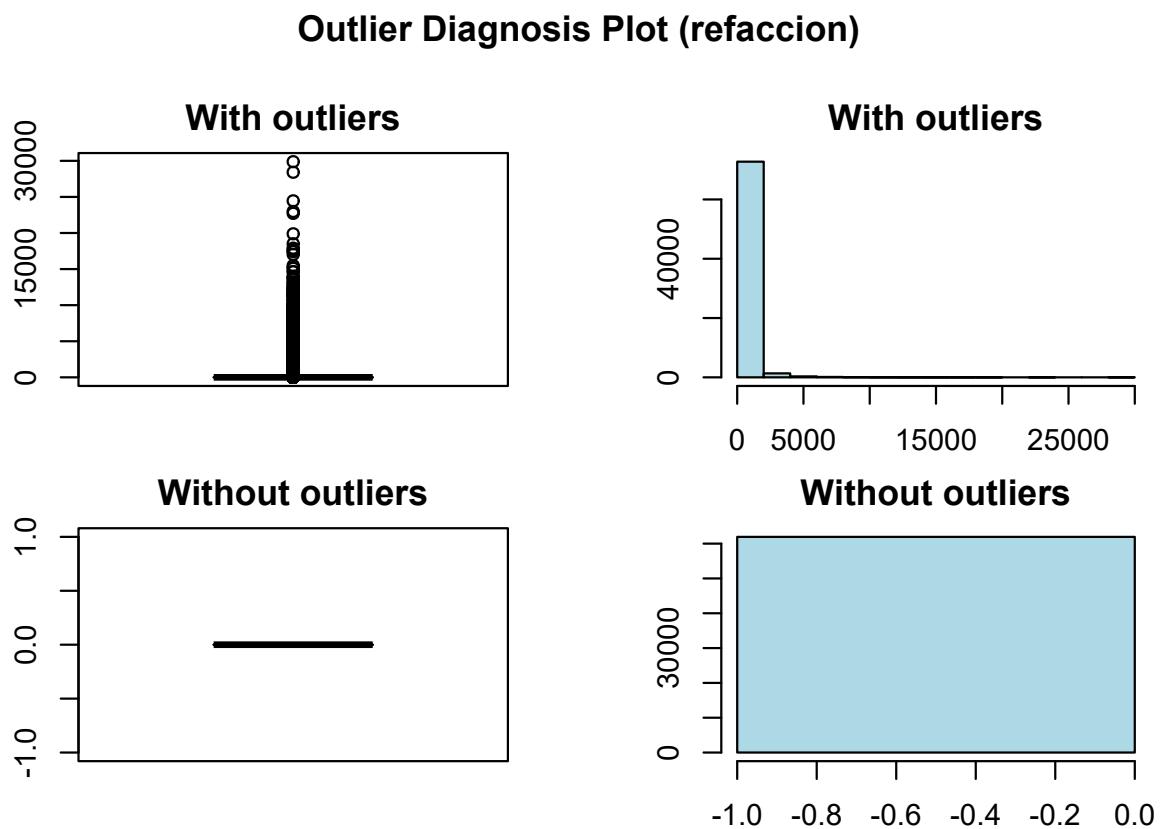


Figure 2.20: Distribution of refaccion

```
variable : transf_hog
```

Table 2.22: Outliers information of transf_hog

Measures	Values
Outliers count	12,378.00
Outliers ratio (%)	16.58
Mean of outliers	6,711.13
Mean with outliers	1,269.12
Mean without outliers	187.34

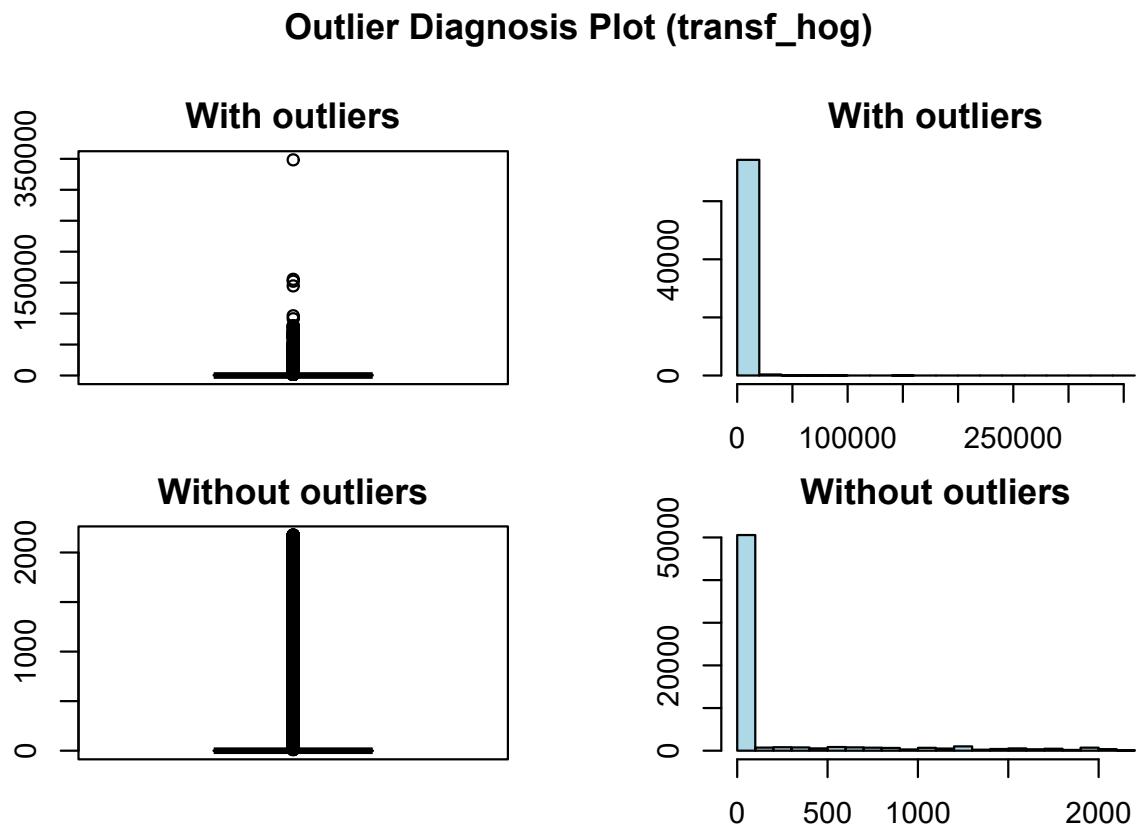


Figure 2.21: Distribution of transf_hog

variable : jubilacion

Table 2.23: Outliers information of jubilacion

Measures	Values
Outliers count	11,281.00
Outliers ratio (%)	15.11
Mean of outliers	21,244.09
Mean with outliers	3,210.50
Mean without outliers	0.00

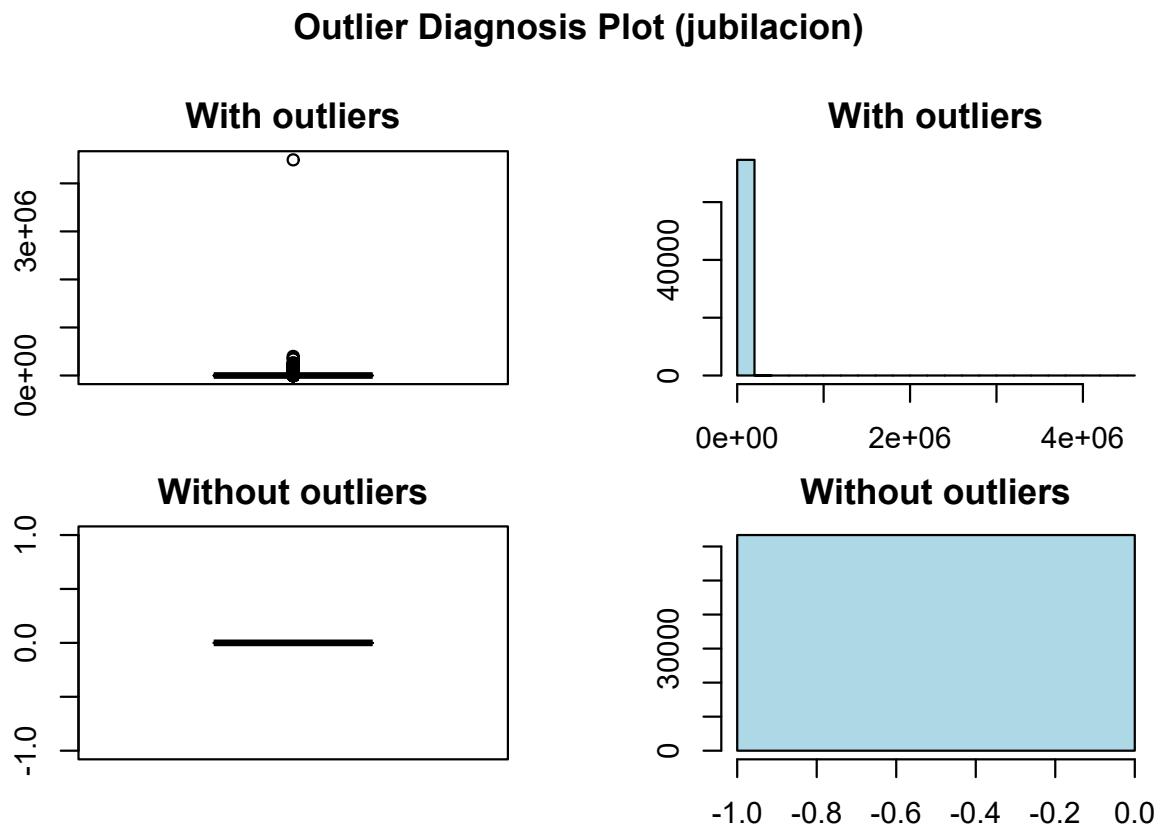


Figure 2.22: Distribution of jubilacion

```
variable : especias
```

Table 2.24: Outliers information of especias

Measures	Values
Outliers count	11,038.00
Outliers ratio (%)	14.79
Mean of outliers	459.38
Mean with outliers	84.64
Mean without outliers	19.61

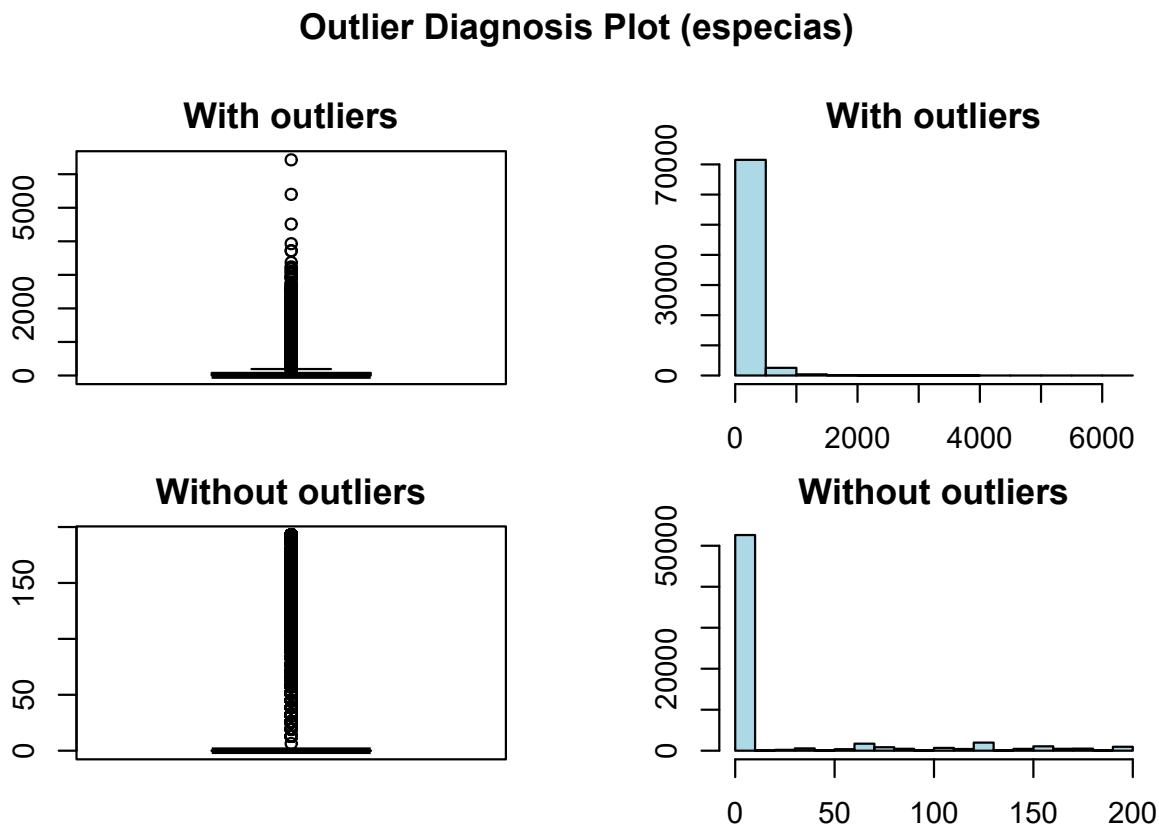


Figure 2.23: Distribution of especias

```
variable : otra_rem
```

Table 2.25: Outliers information of otra_rem

Measures	Values
Outliers count	10,926.00
Outliers ratio (%)	14.64
Mean of outliers	3,890.18
Mean with outliers	569.40
Mean without outliers	0.00

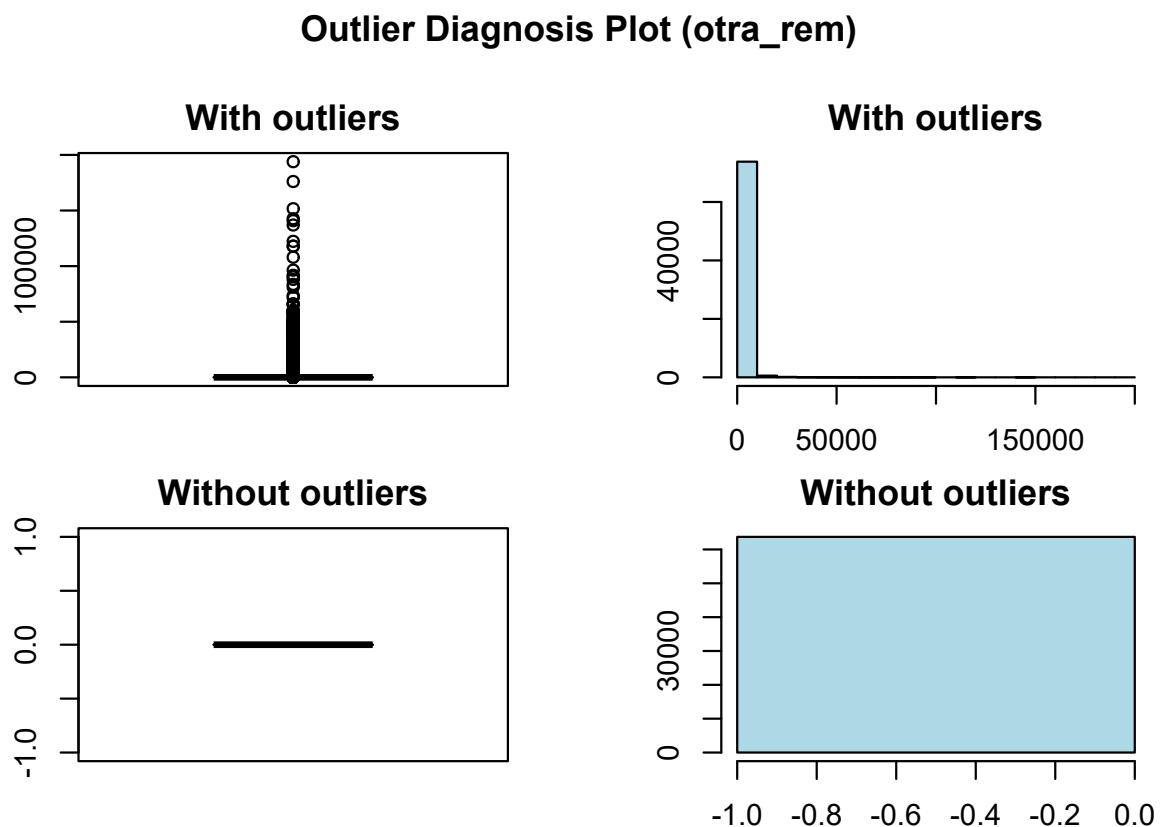


Figure 2.24: Distribution of otra_rem

variable : atenc_ambu

Table 2.26: Outliers information of atenc_ambu

Measures	Values
Outliers count	10,601.00
Outliers ratio (%)	14.20
Mean of outliers	3,604.48
Mean with outliers	578.27
Mean without outliers	77.36

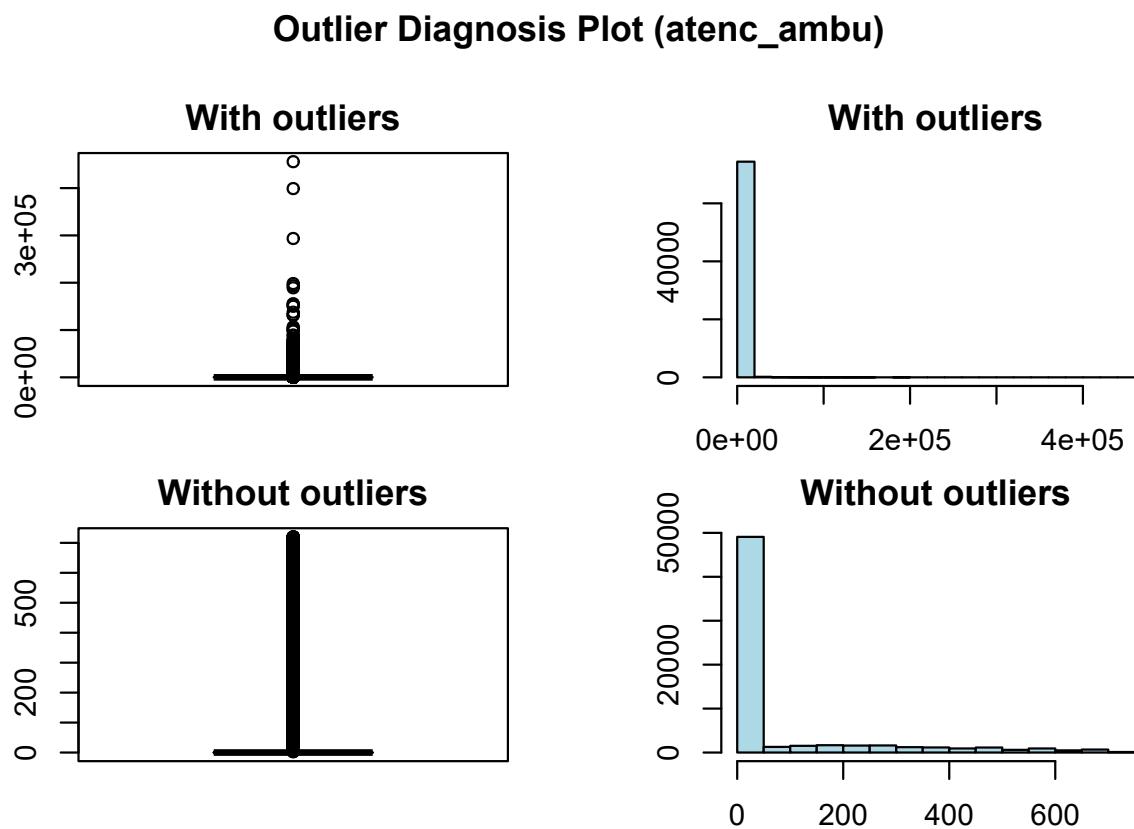


Figure 2.25: Distribution of atenc_ambu

```
variable : pred_cons
```

Table 2.27: Outliers information of pred_cons

Measures	Values
Outliers count	10,459.00
Outliers ratio (%)	14.01
Mean of outliers	801.02
Mean with outliers	126.22
Mean without outliers	16.27

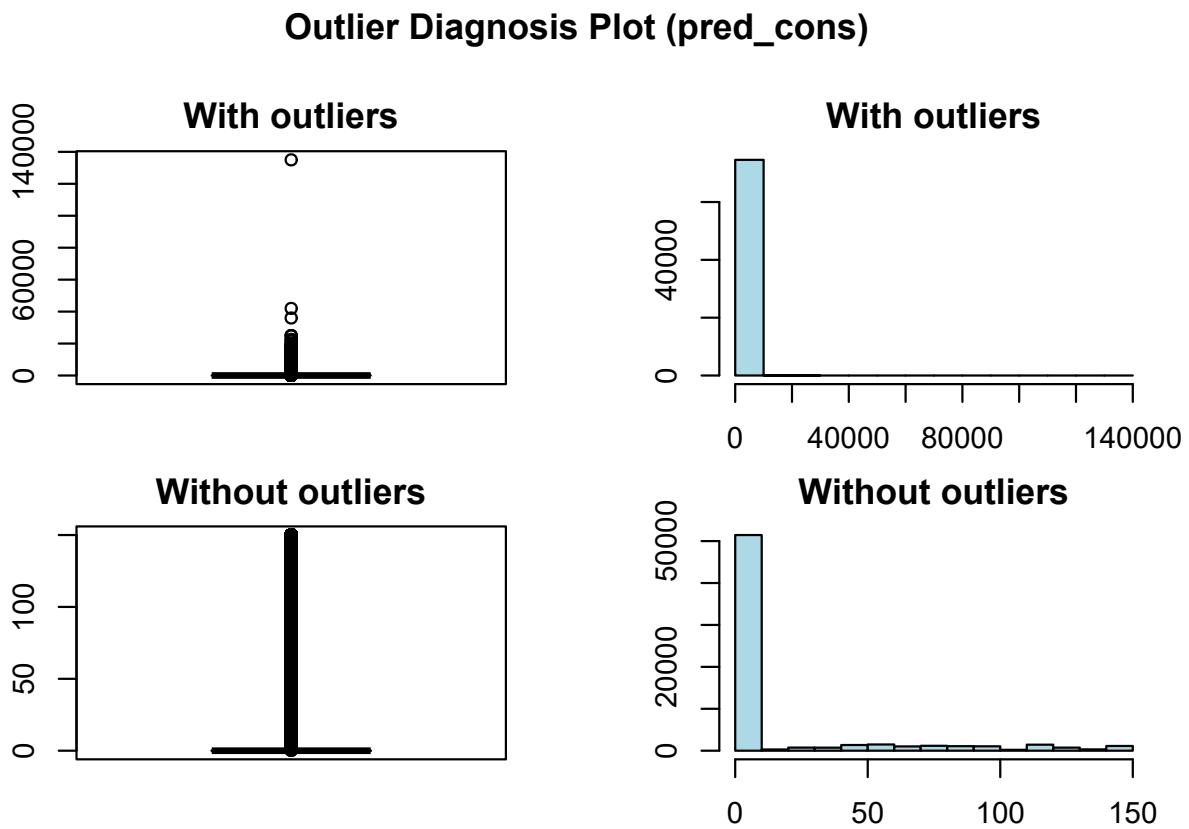


Figure 2.26: Distribution of pred_cons

variable : educacion

Table 2.28: Outliers information of educacion

Measures	Values
Outliers count	10,235.00
Outliers ratio (%)	13.71
Mean of outliers	12,543.35
Mean with outliers	2,235.12
Mean without outliers	597.16

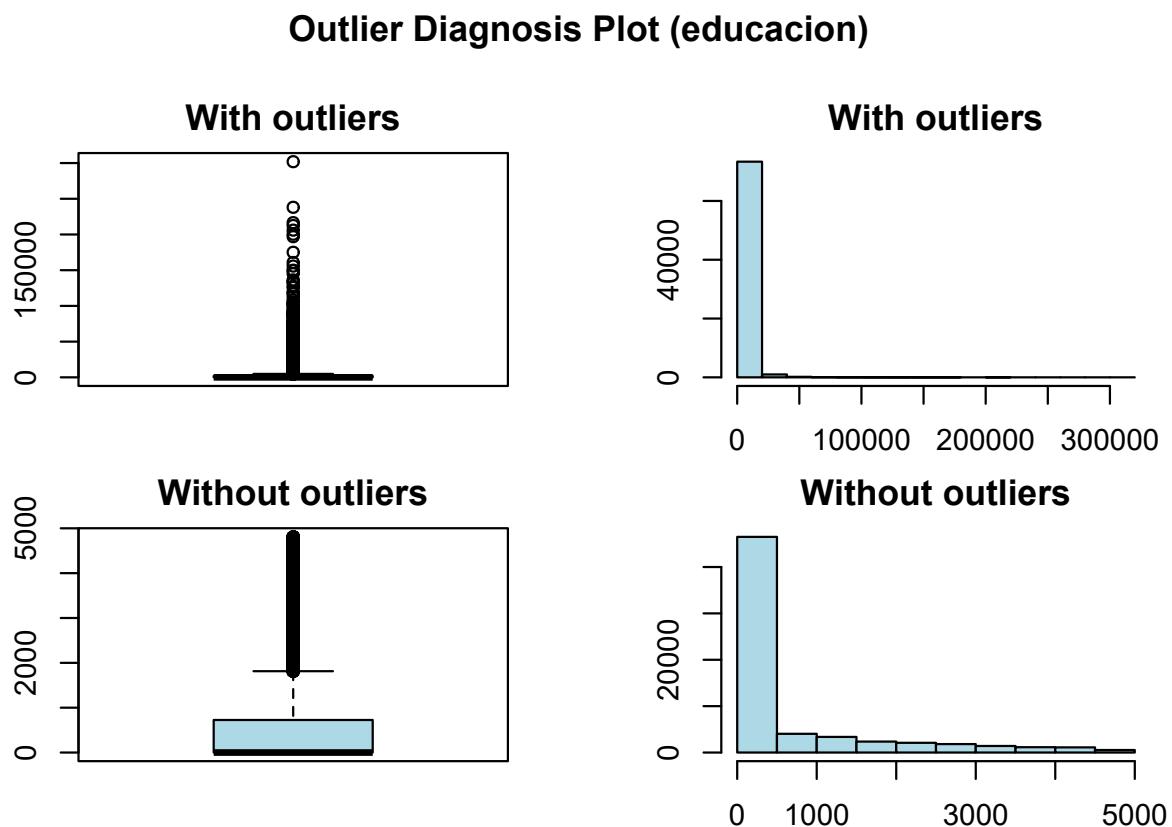


Figure 2.27: Distribution of educacion

variable : salud

Table 2.29: Outliers information of salud

Measures	Values
Outliers count	9,982.00
Outliers ratio (%)	13.37
Mean of outliers	4,990.79
Mean with outliers	797.76
Mean without outliers	150.50

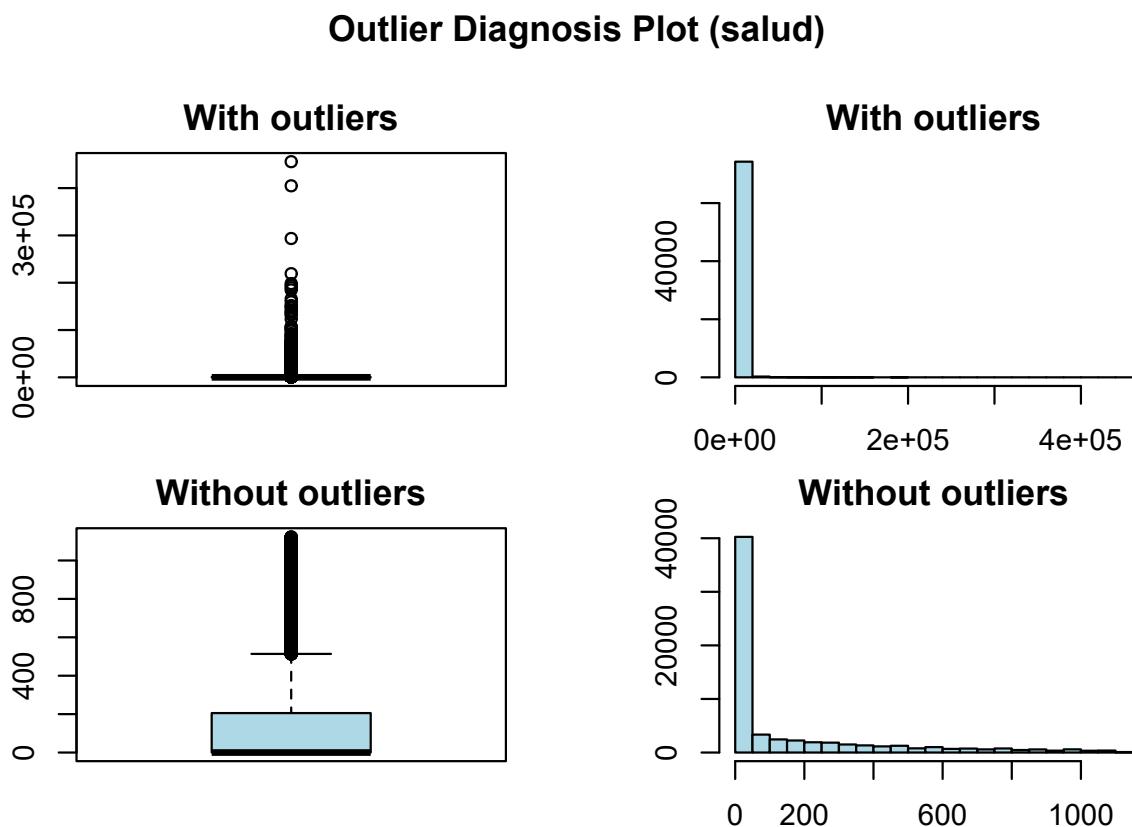


Figure 2.28: Distribution of salud

```
variable : erogac_tot
```

Table 2.30: Outliers information of erogac_tot

Measures	Values
Outliers count	9,710.00
Outliers ratio (%)	13.01
Mean of outliers	29,351.16
Mean with outliers	4,837.90
Mean without outliers	1,172.44

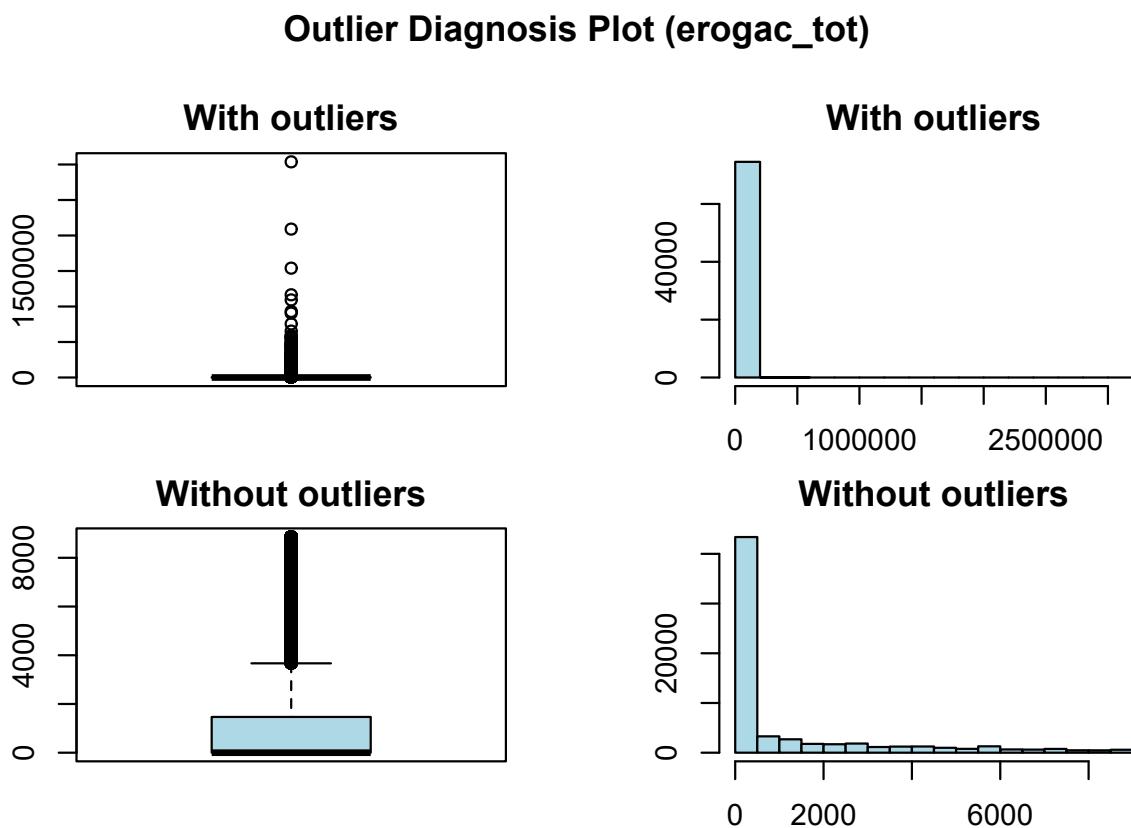


Figure 2.29: Distribution of erogac_tot

variable : aguinaldo

Table 2.31: Outliers information of aguinaldo

Measures	Values
Outliers count	9,306.00
Outliers ratio (%)	12.47
Mean of outliers	6,812.34
Mean with outliers	1,162.29
Mean without outliers	357.60

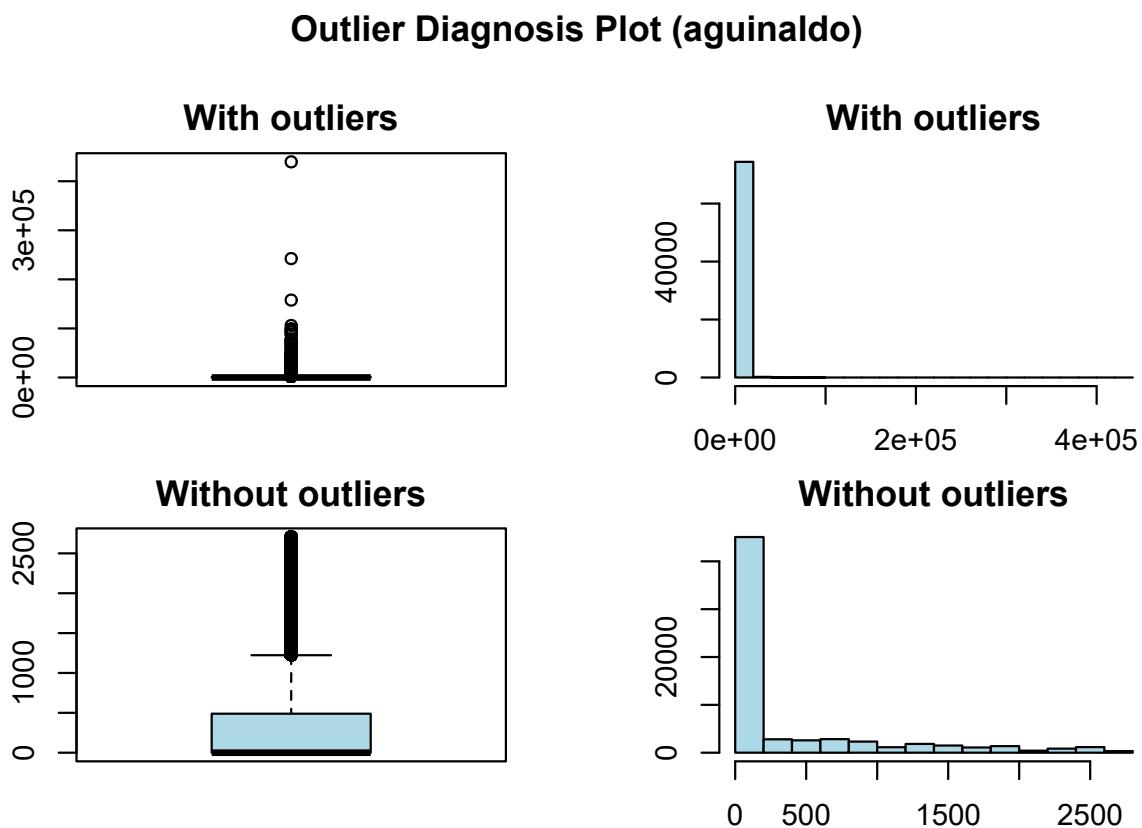


Figure 2.30: Distribution of aguinaldo

```
variable : ero_nm_hog
```

Table 2.32: Outliers information of ero_nm_hog

Measures	Values
Outliers count	9,279.00
Outliers ratio (%)	12.43
Mean of outliers	7,581.94
Mean with outliers	1,278.23
Mean without outliers	383.42

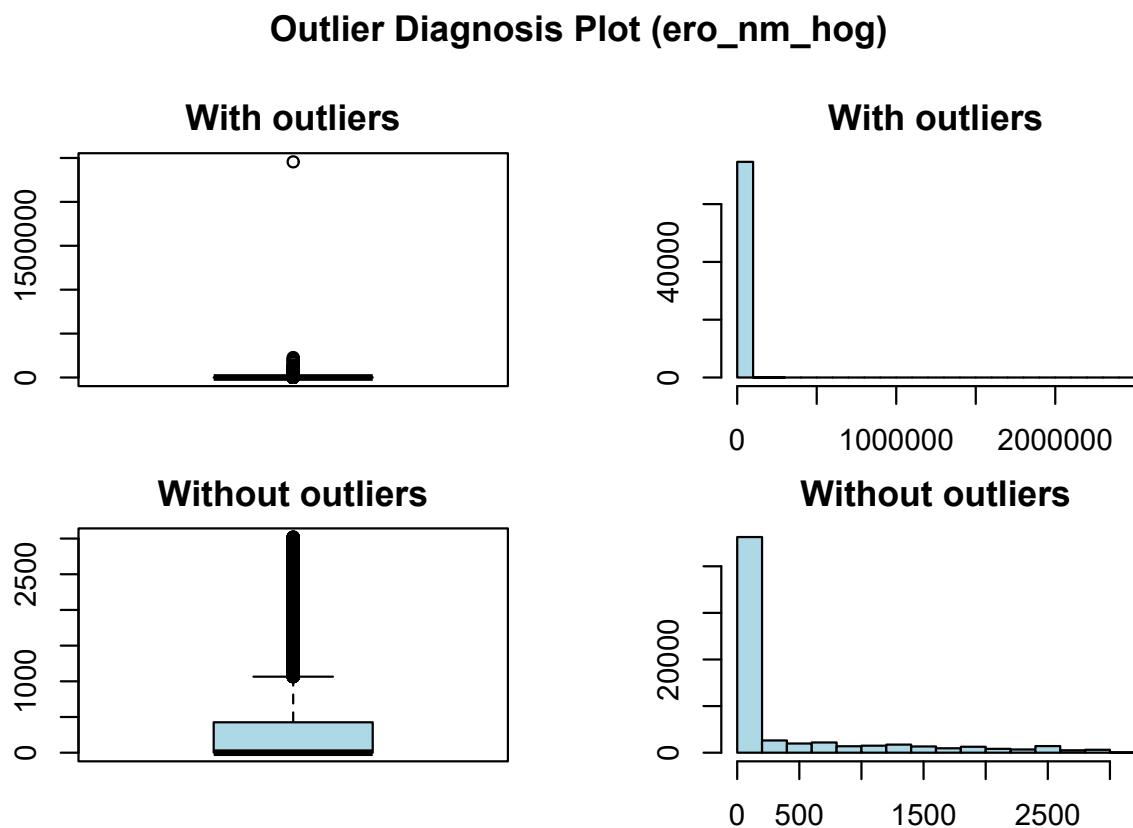


Figure 2.31: Distribution of ero_nm_hog

variable : alquiler

Table 2.33: Outliers information of alquiler

Measures	Values
Outliers count	9,070.00
Outliers ratio (%)	12.15
Mean of outliers	6,044.23
Mean with outliers	734.41
Mean without outliers	0.00

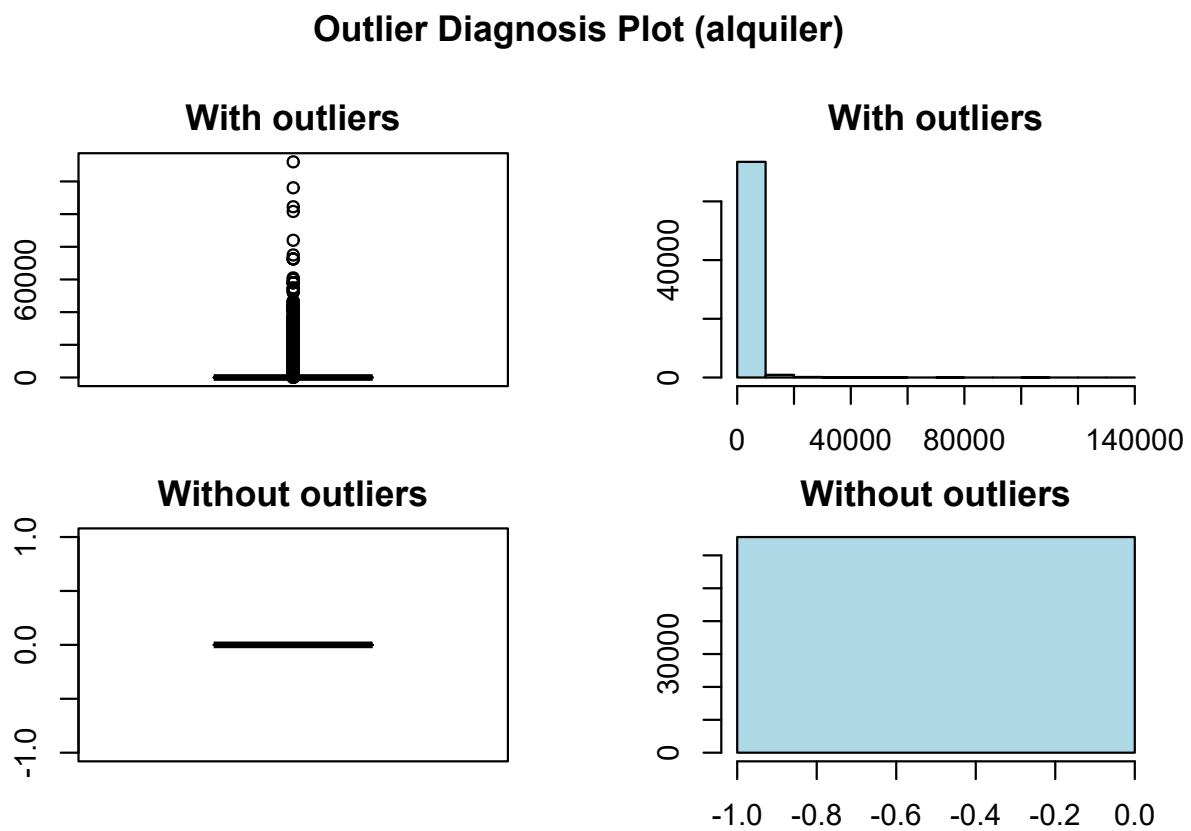


Figure 2.32: Distribution of alquiler

```
variable : mater_serv
```

Table 2.34: Outliers information of mater_serv

Measures	Values
Outliers count	8,364.00
Outliers ratio (%)	11.20
Mean of outliers	2,885.06
Mean with outliers	323.26
Mean without outliers	0.00

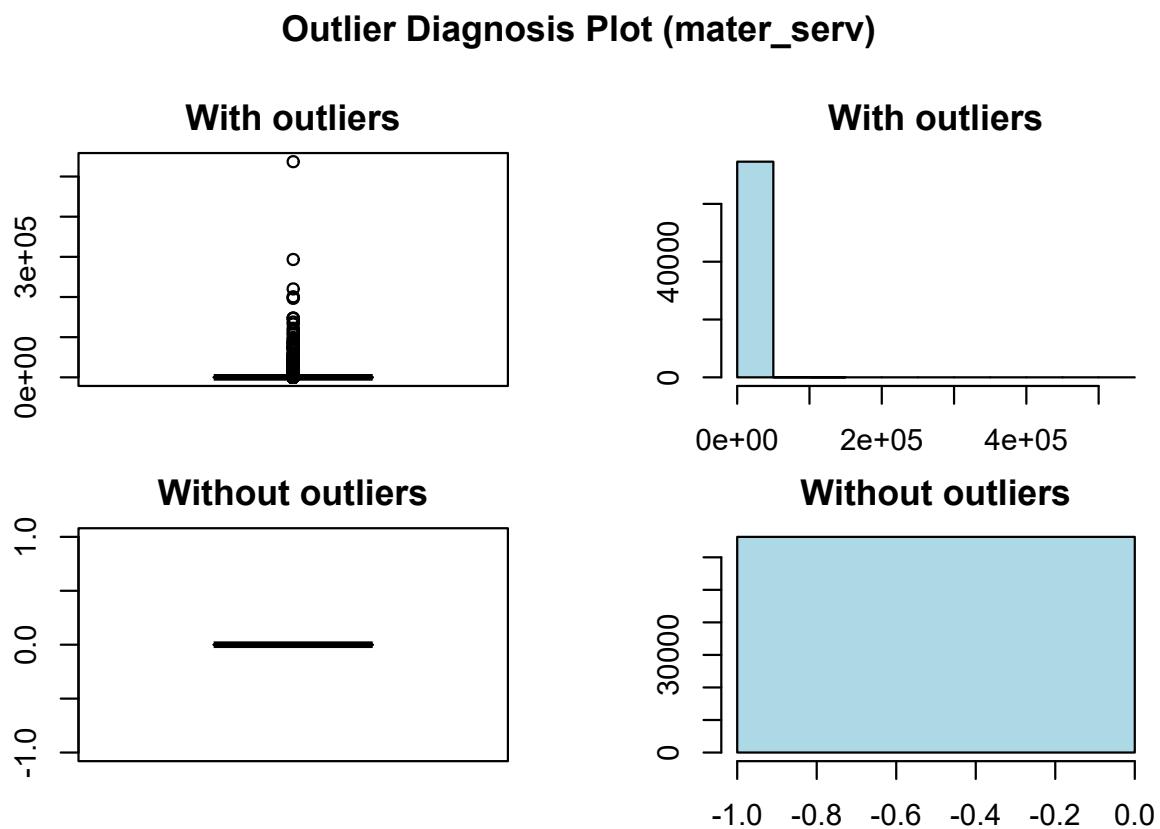


Figure 2.33: Distribution of mater_serv

variable : agrope

Table 2.35: Outliers information of agrope

Measures	Values
Outliers count	8,259.00
Outliers ratio (%)	11.06
Mean of outliers	6,892.09
Mean with outliers	762.55
Mean without outliers	0.00

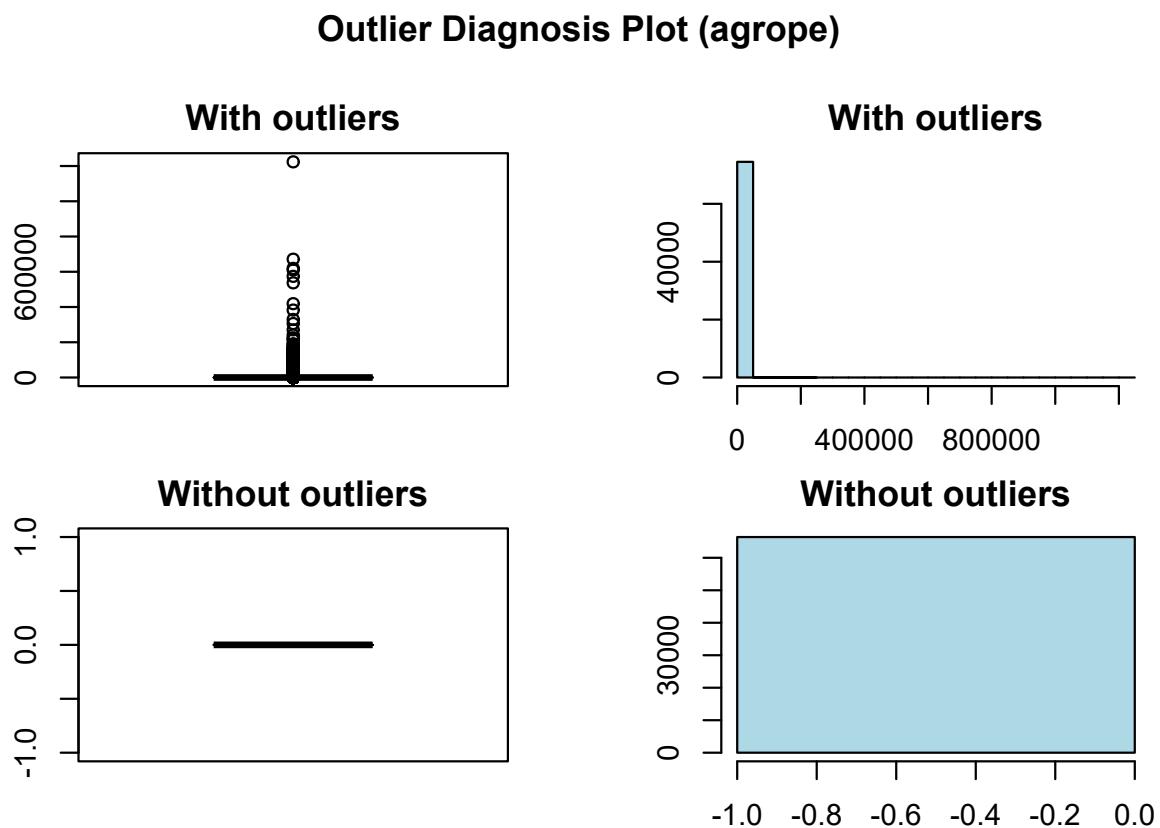


Figure 2.34: Distribution of agrope

```
variable : percep_tot
```

Table 2.36: Outliers information of percep_tot

Measures	Values
Outliers count	7,992.00
Outliers ratio (%)	10.71
Mean of outliers	24,199.70
Mean with outliers	3,404.85
Mean without outliers	911.53

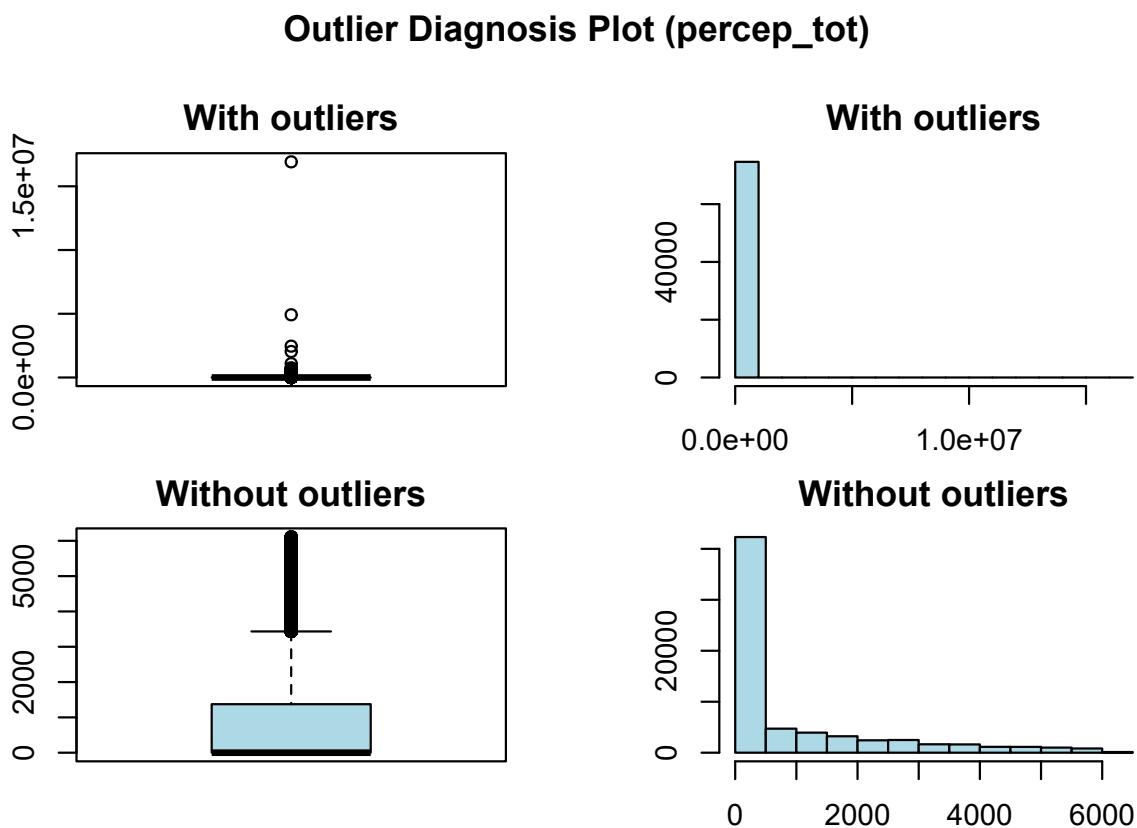


Figure 2.35: Distribution of percep_tot

variable : ali_fuera

Table 2.37: Outliers information of ali_fuera

Measures	Values
Outliers count	7,815.00
Outliers ratio (%)	10.47
Mean of outliers	12,065.99
Mean with outliers	2,064.82
Mean without outliers	895.33

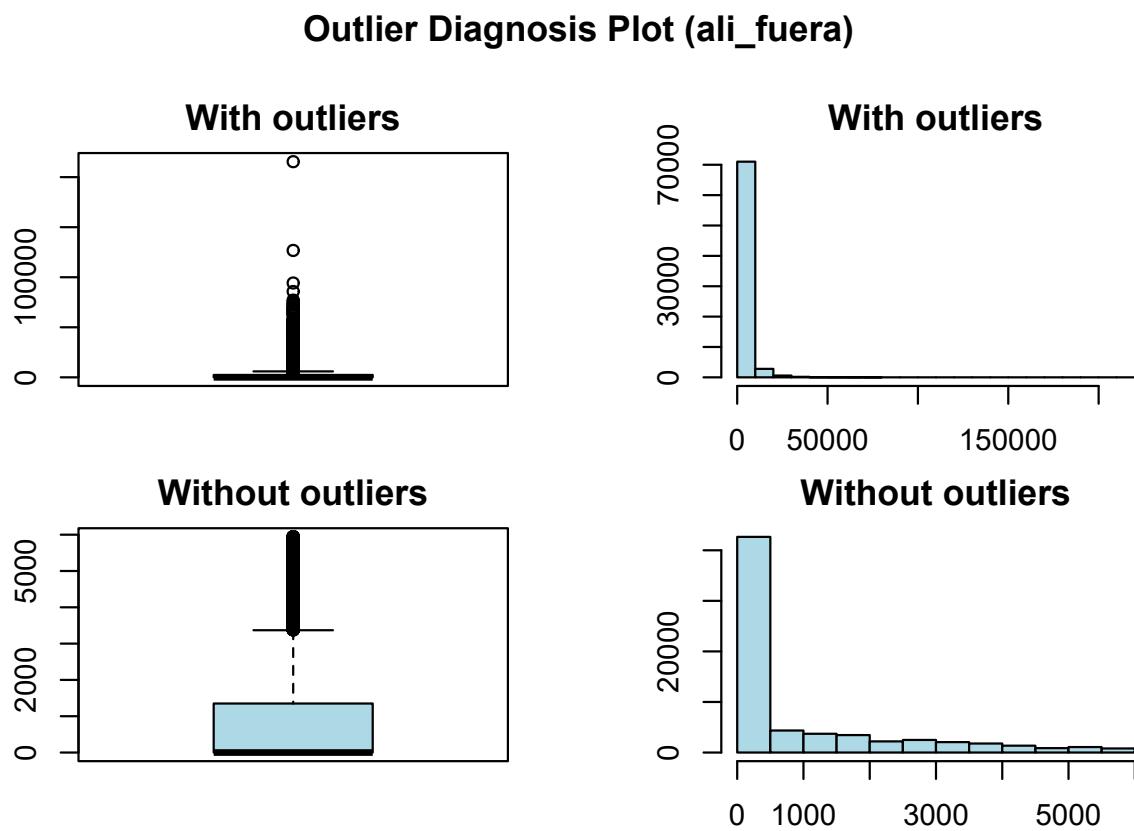


Figure 2.36: Distribution of ali_fuera

variable : educa_espa

Table 2.38: Outliers information of educa_espa

Measures	Values
Outliers count	7,811.00
Outliers ratio (%)	10.46
Mean of outliers	18,573.56
Mean with outliers	3,228.98
Mean without outliers	1,435.69

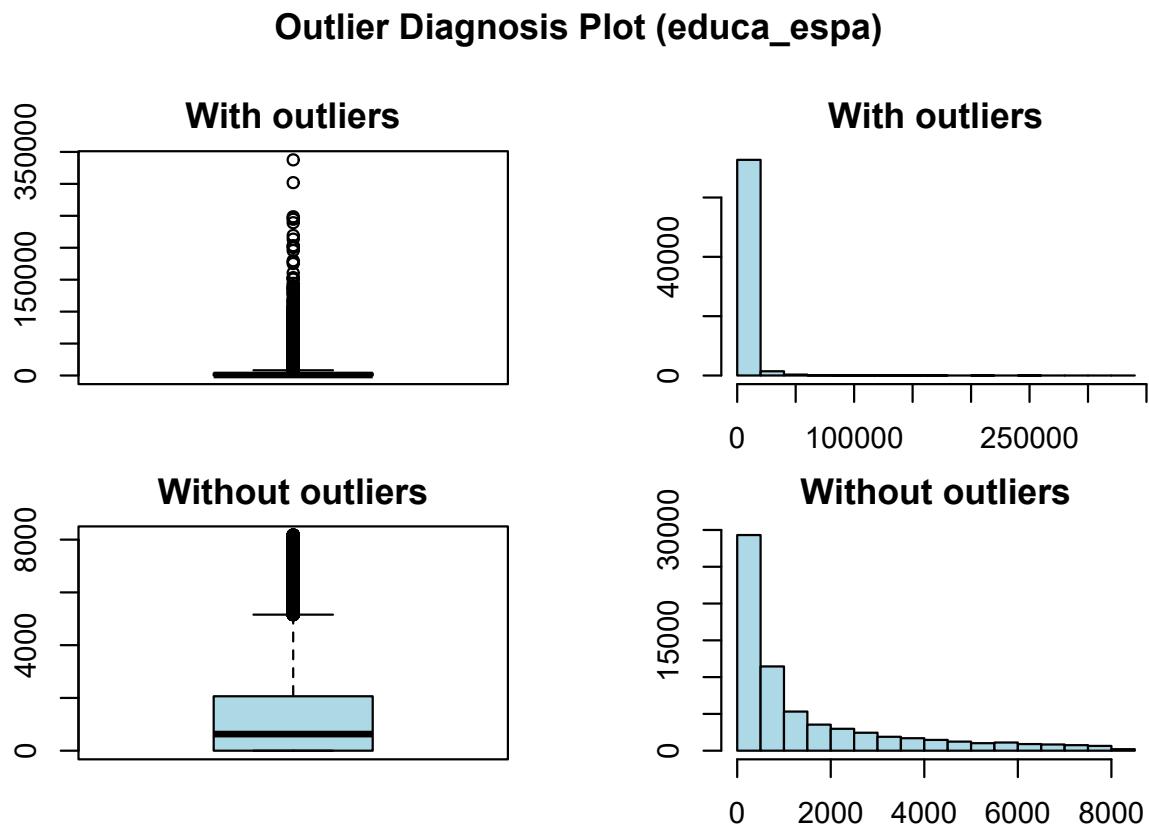


Figure 2.37: Distribution of educa_espa

variable : retiro_inv

Table 2.39: Outliers information of `retiro_inv`

Measures	Values
Outliers count	7,566.00
Outliers ratio (%)	10.14
Mean of outliers	7,509.41
Mean with outliers	761.13
Mean without outliers	0.00

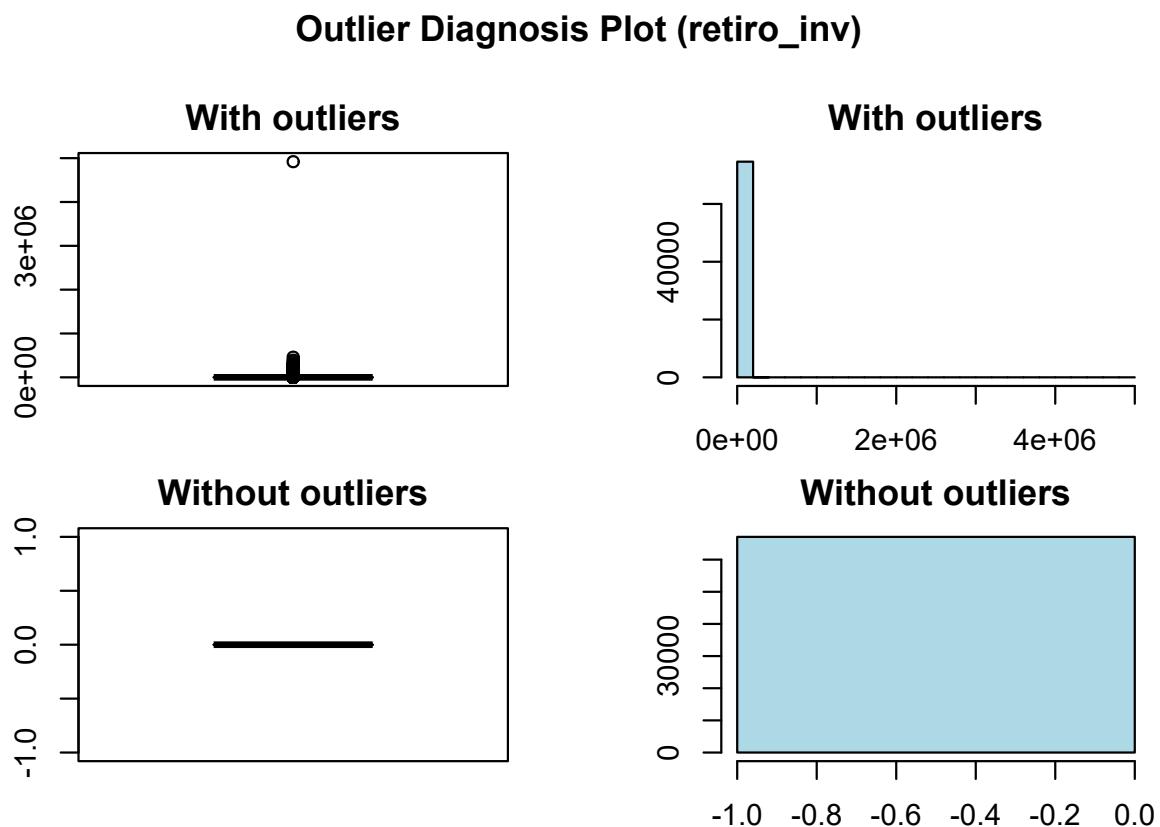


Figure 2.38: Distribution of `retiro_inv`

```
variable : pago_tarje
```

Table 2.40: Outliers information of pago_tarje

Measures	Values
Outliers count	7,118.00
Outliers ratio (%)	9.54
Mean of outliers	7,737.83
Mean with outliers	737.84
Mean without outliers	0.00

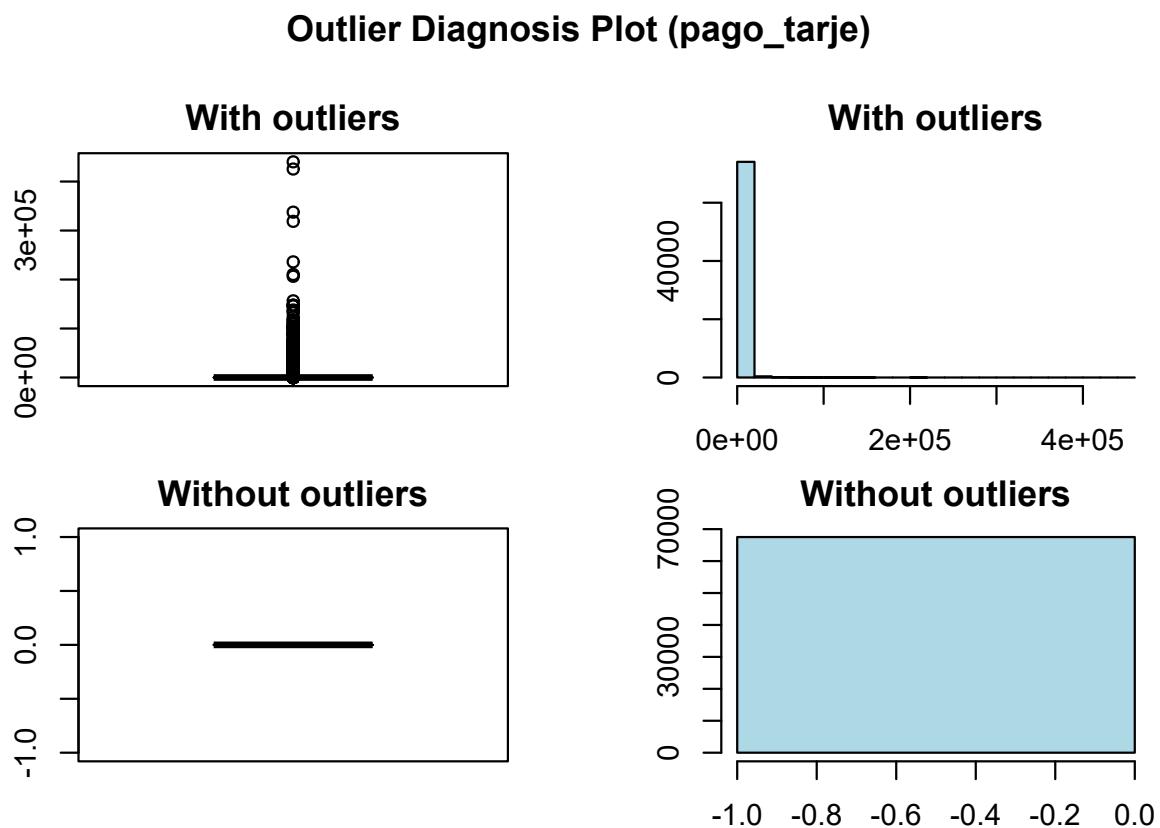


Figure 2.39: Distribution of pago_tarje

variable : azucar

Table 2.41: Outliers information of azucar

Measures	Values
Outliers count	6,996.00
Outliers ratio (%)	9.37
Mean of outliers	597.67
Mean with outliers	95.08
Mean without outliers	43.11

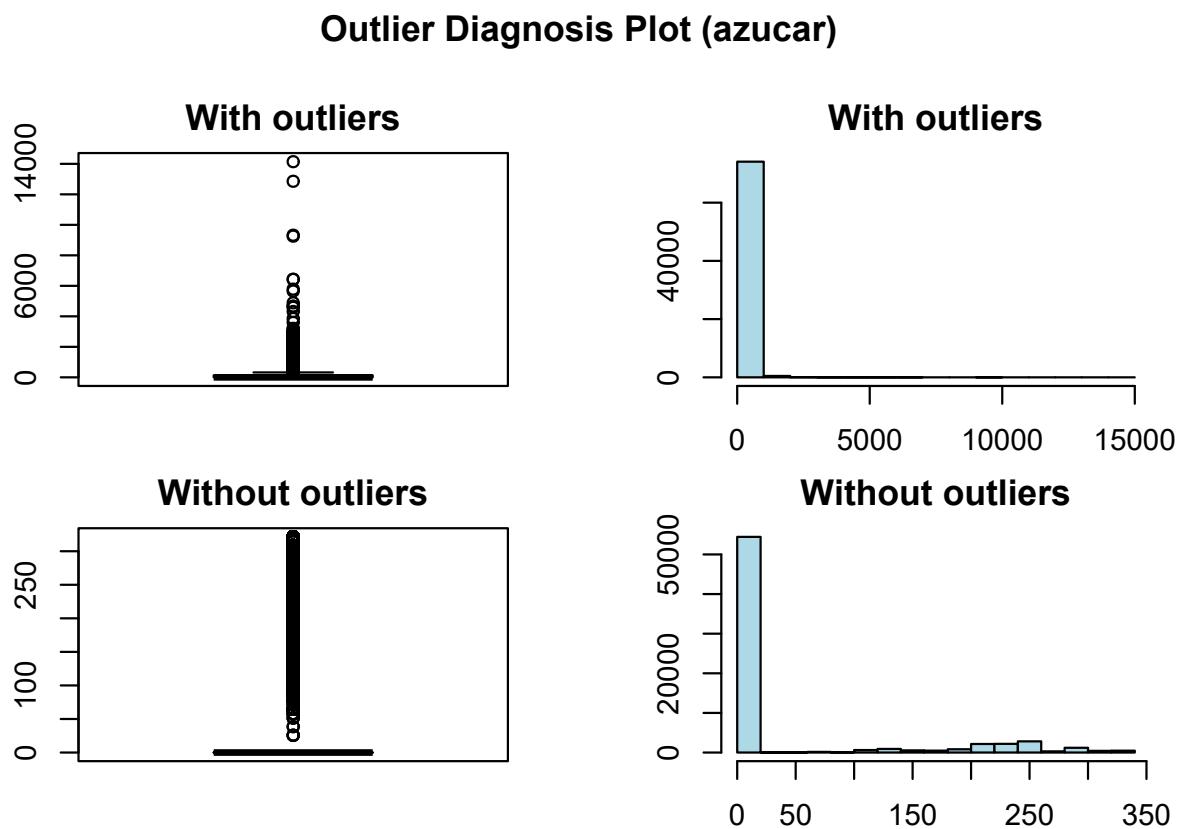


Figure 2.40: Distribution of azucar

```
variable : limpieza
```

Table 2.42: Outliers information of limpieza

Measures	Values
Outliers count	6,980.00
Outliers ratio (%)	9.35
Mean of outliers	7,906.25
Mean with outliers	1,739.81
Mean without outliers	1,103.73

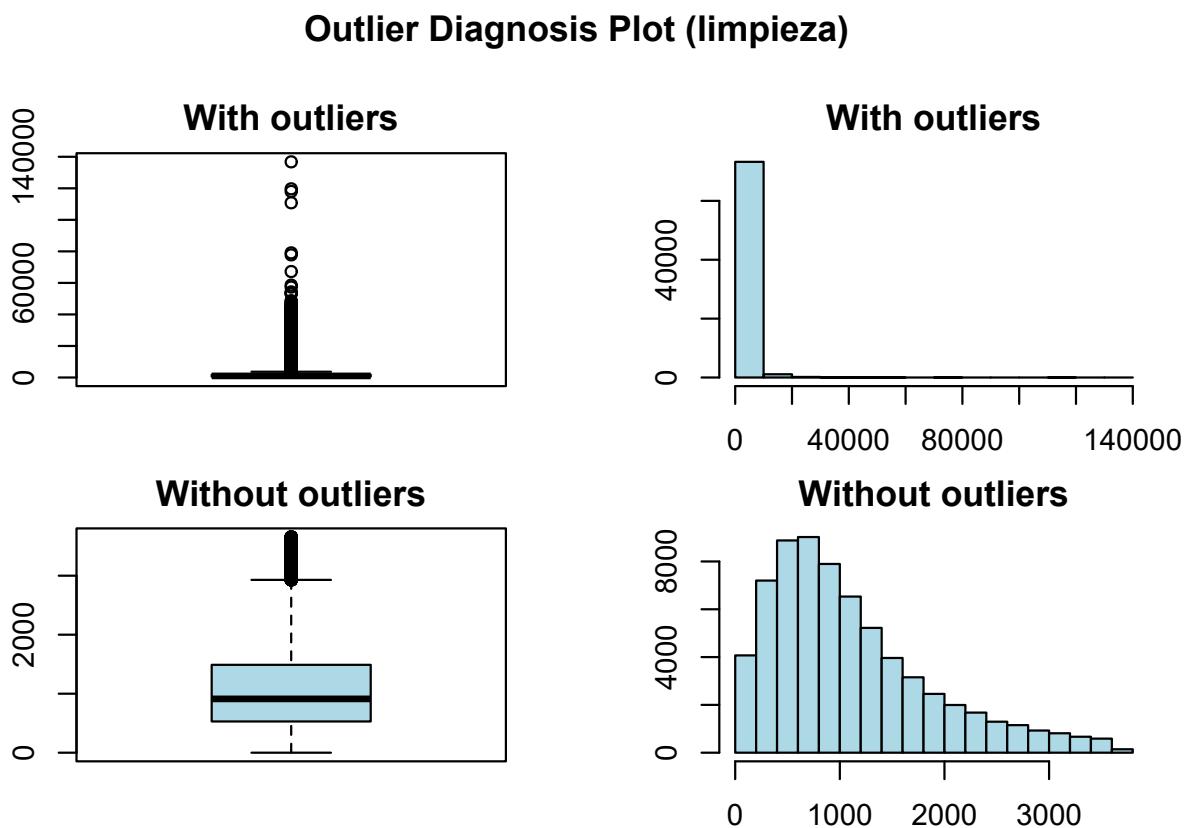


Figure 2.41: Distribution of limpieza

variable : material

Table 2.43: Outliers information of material

Measures	Values
Outliers count	6,969.00
Outliers ratio (%)	9.34
Mean of outliers	2,166.39
Mean with outliers	202.25
Mean without outliers	0.00

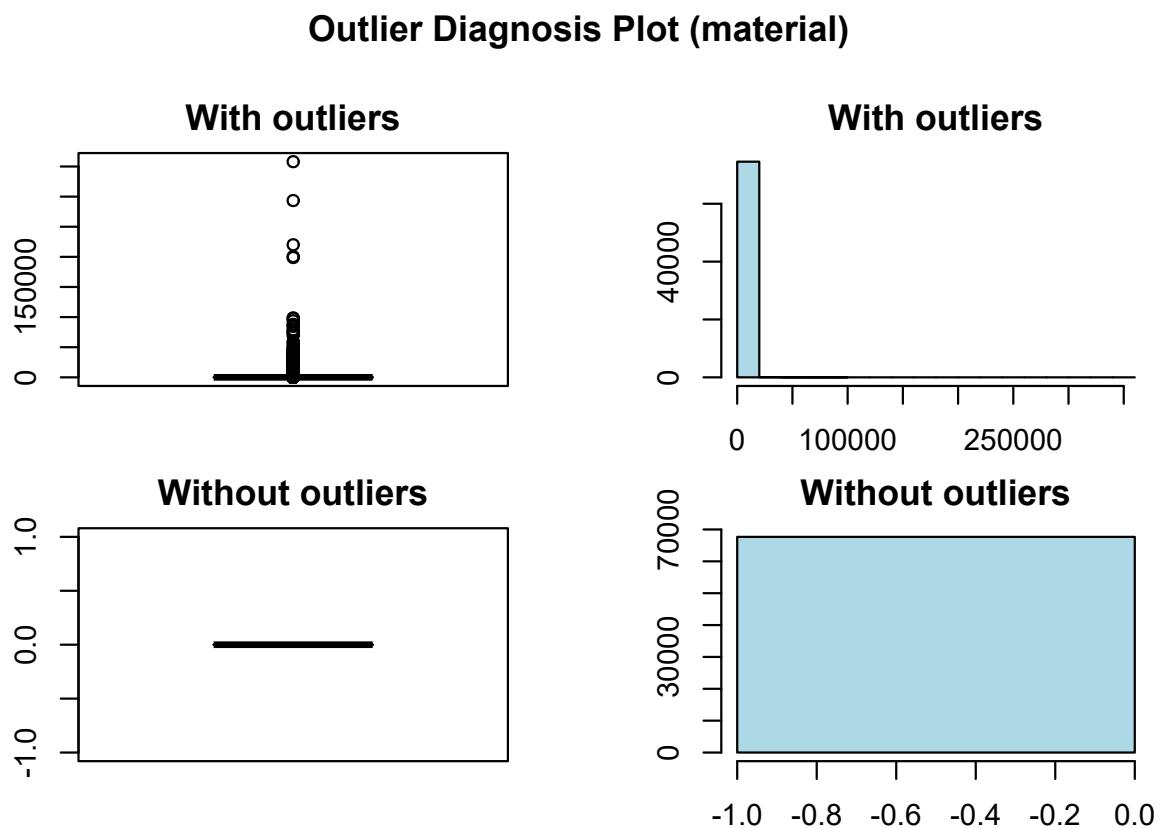


Figure 2.42: Distribution of material

```
variable : esparci
```

Table 2.44: Outliers information of esparci

Measures	Values
Outliers count	6,927.00
Outliers ratio (%)	9.28
Mean of outliers	4,725.72
Mean with outliers	718.12
Mean without outliers	308.19

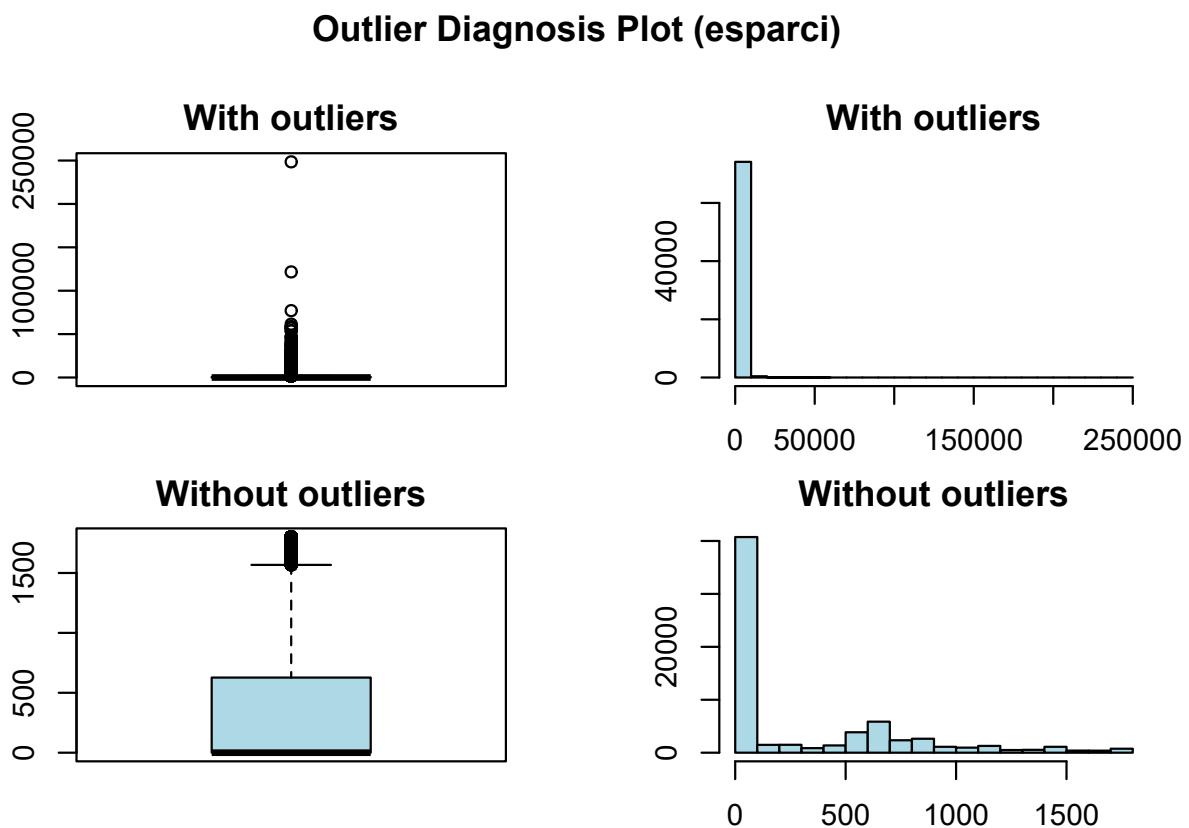


Figure 2.43: Distribution of esparci

variable : otros_alim

Table 2.45: Outliers information of otros_alim

Measures	Values
Outliers count	6,708.00
Outliers ratio (%)	8.99
Mean of outliers	5,604.08
Mean with outliers	1,007.64
Mean without outliers	553.81

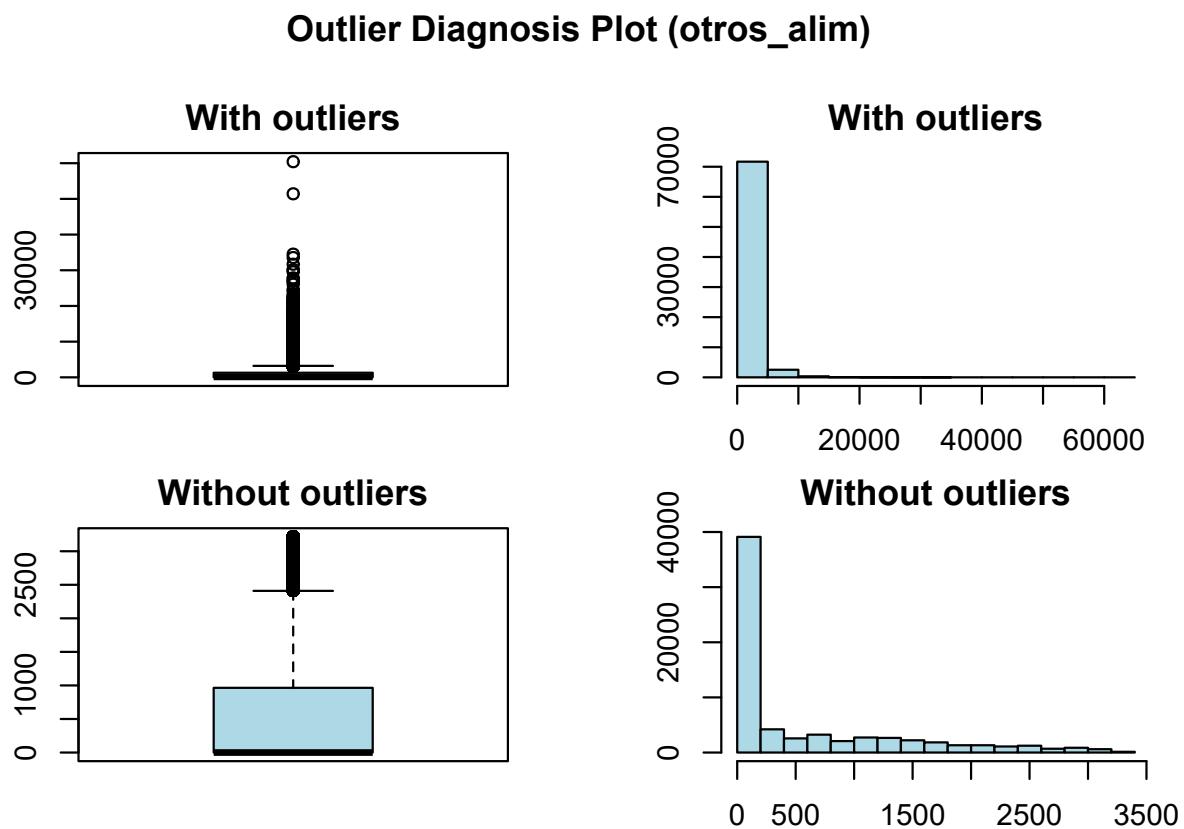


Figure 2.44: Distribution of otros_alim

variable : servicios

Table 2.46: Outliers information of servicios

Measures	Values
Outliers count	6,672.00
Outliers ratio (%)	8.94
Mean of outliers	13,799.74
Mean with outliers	1,233.43
Mean without outliers	0.00

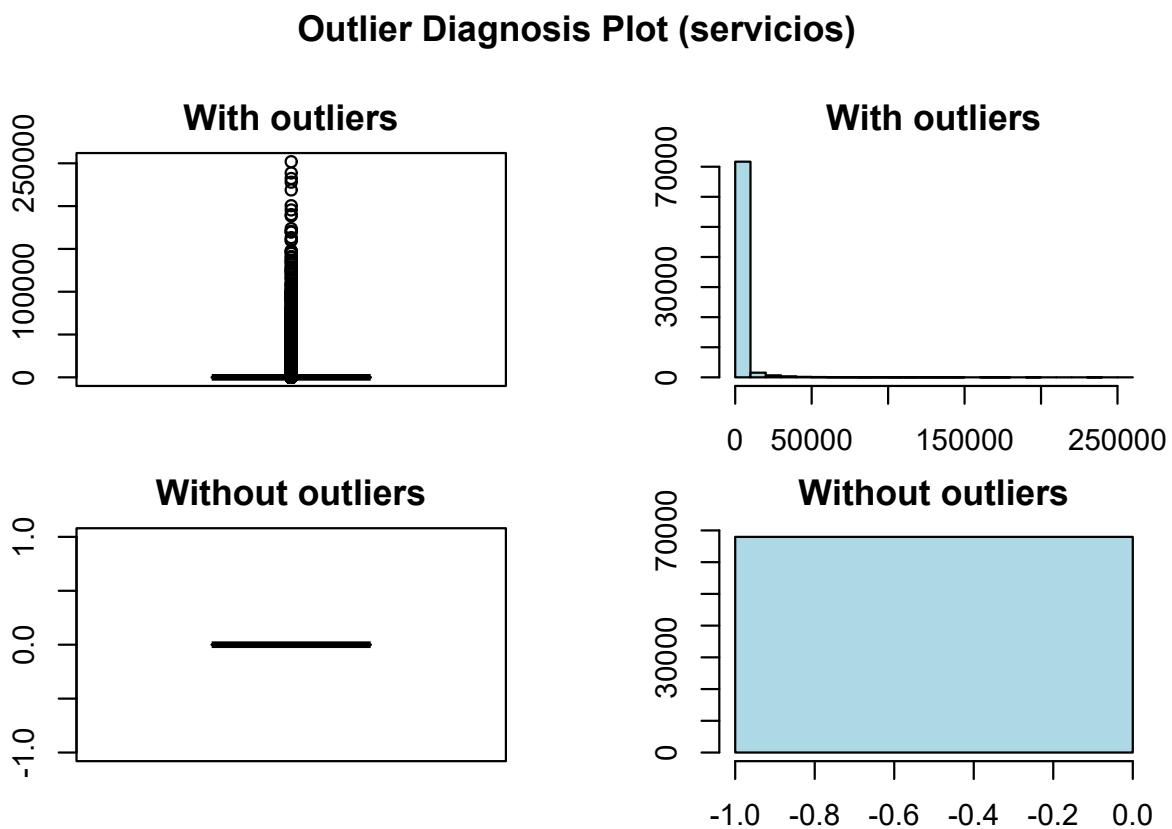


Figure 2.45: Distribution of servicios

variable : balance

Table 2.47: Outliers information of balance

Measures	Values
Outliers count	6,672.00
Outliers ratio (%)	8.94
Mean of outliers	3,631.46
Mean with outliers	324.58
Mean without outliers	0.00

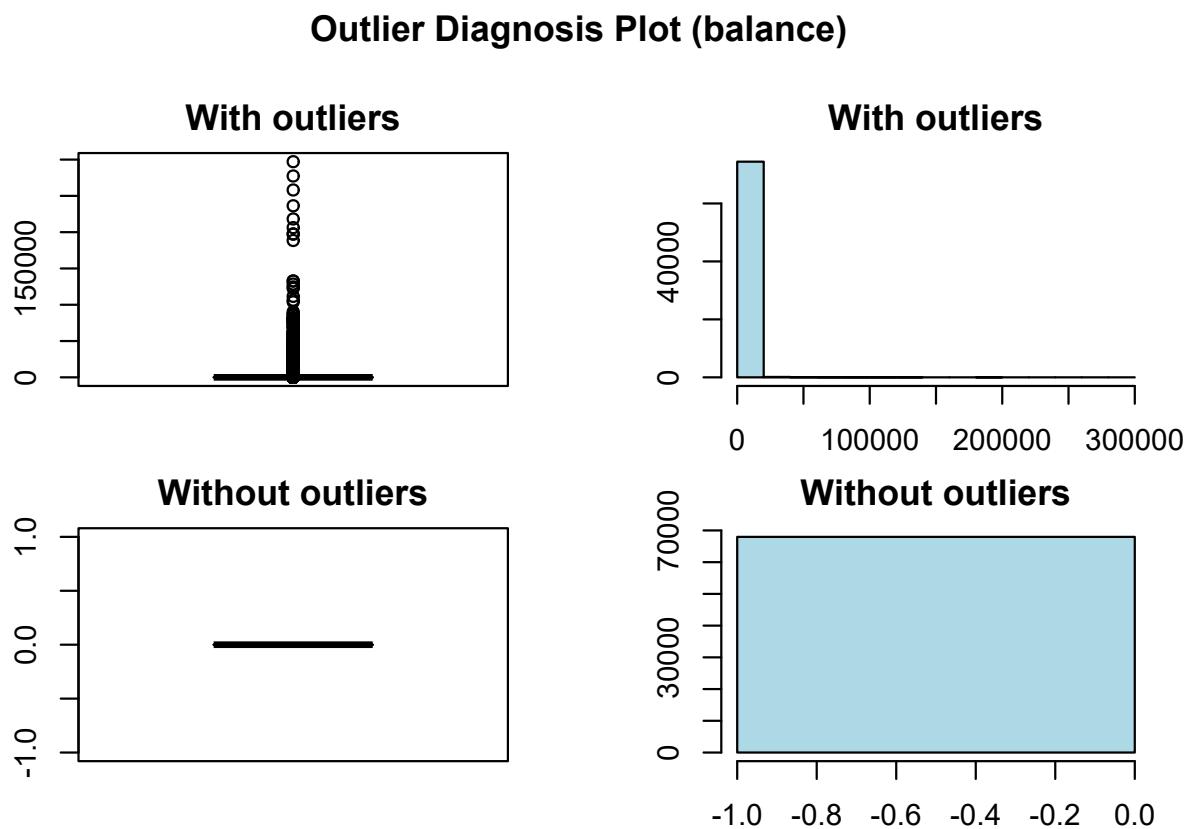


Figure 2.46: Distribution of balance

variable : frutas

Table 2.48: Outliers information of frutas

Measures	Values
Outliers count	6,628.00
Outliers ratio (%)	8.88
Mean of outliers	1,879.15
Mean with outliers	336.63
Mean without outliers	186.32

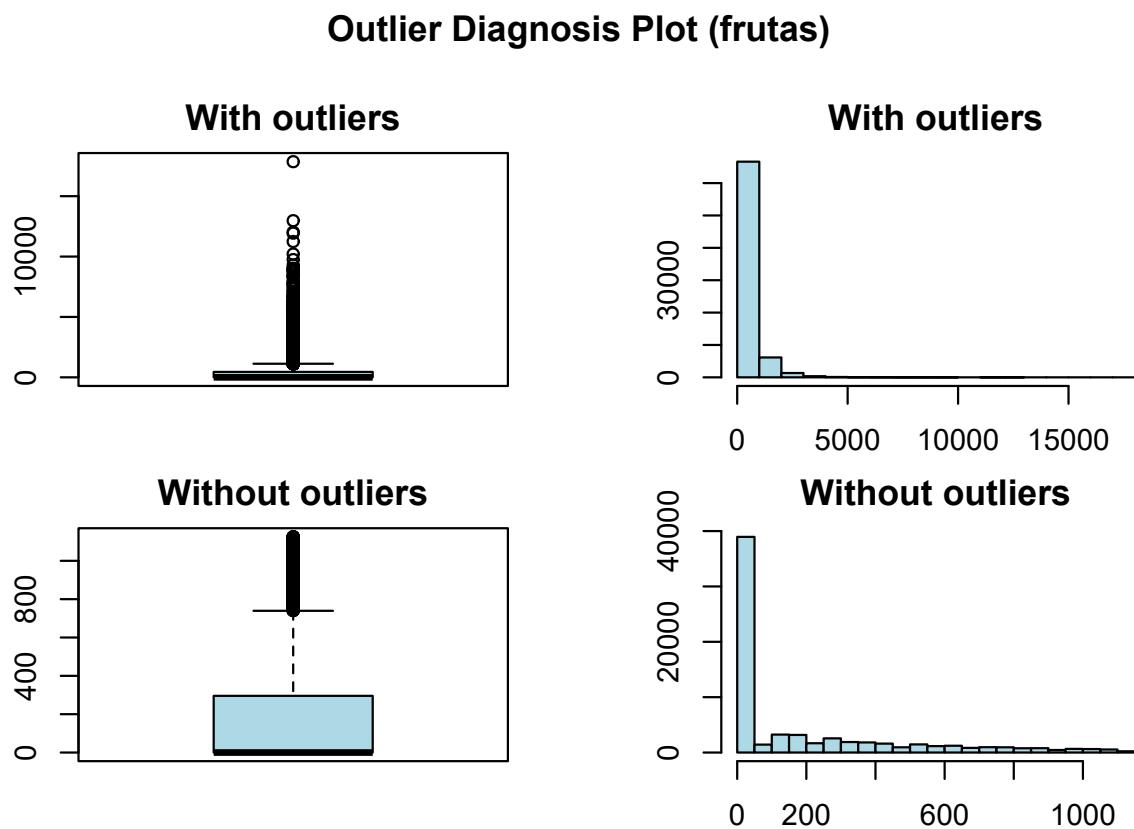


Figure 2.47: Distribution of frutas

variable : transfer

Table 2.49: Outliers information of transfer

Measures	Values
Outliers count	6,500.00
Outliers ratio (%)	8.71
Mean of outliers	46,055.55
Mean with outliers	7,592.19
Mean without outliers	3,923.48

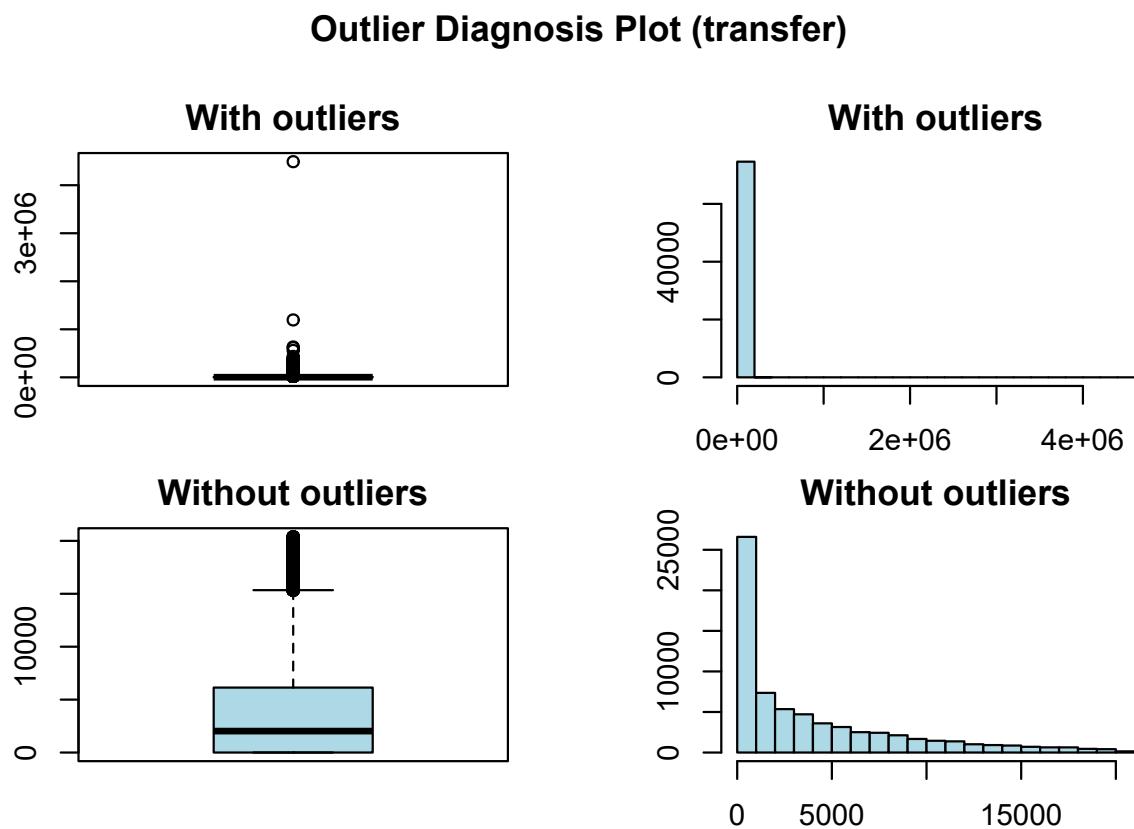


Figure 2.48: Distribution of transfer

variable : vestido

Table 2.50: Outliers information of vestido

Measures	Values
Outliers count	6,448.00
Outliers ratio (%)	8.64
Mean of outliers	4,751.30
Mean with outliers	808.57
Mean without outliers	435.80

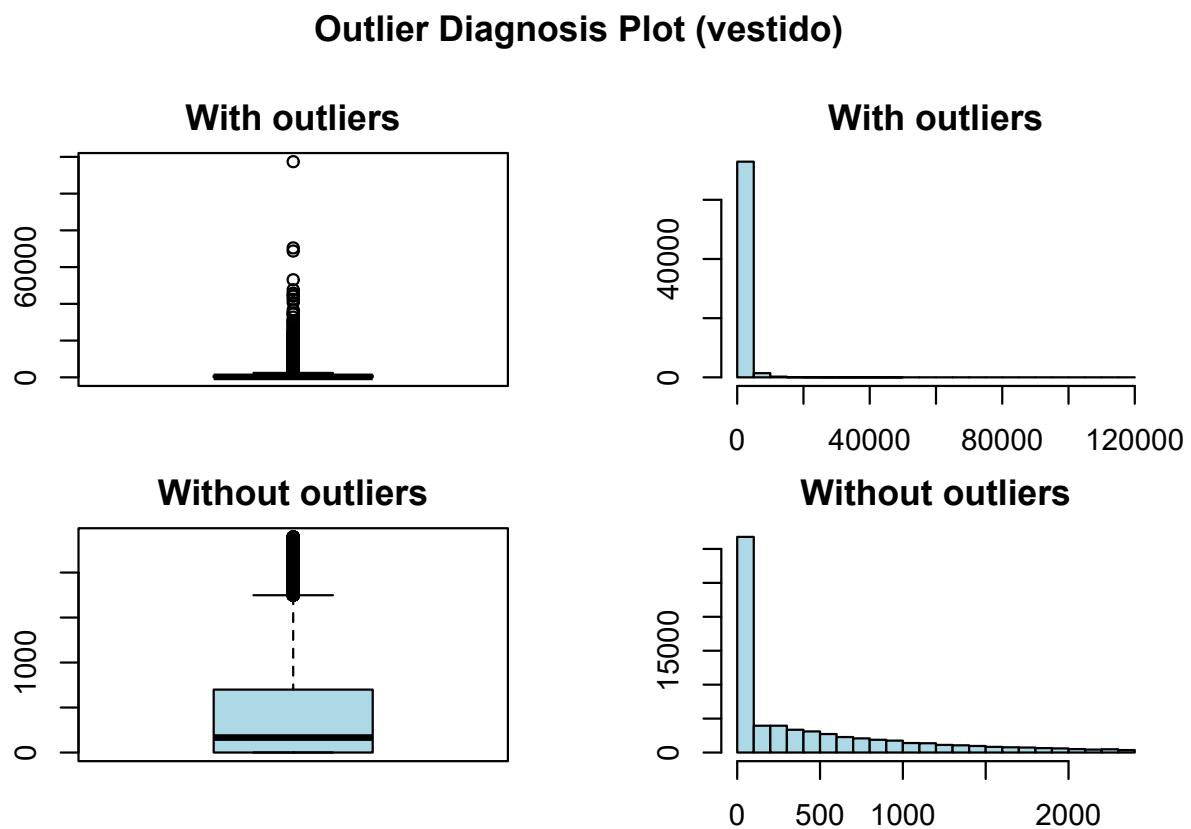


Figure 2.49: Distribution of vestido

variable : mujeres

Table 2.51: Outliers information of mujeres

Measures	Values
Outliers count	6,429.00
Outliers ratio (%)	8.61
Mean of outliers	4.48
Mean with outliers	1.84
Mean without outliers	1.59

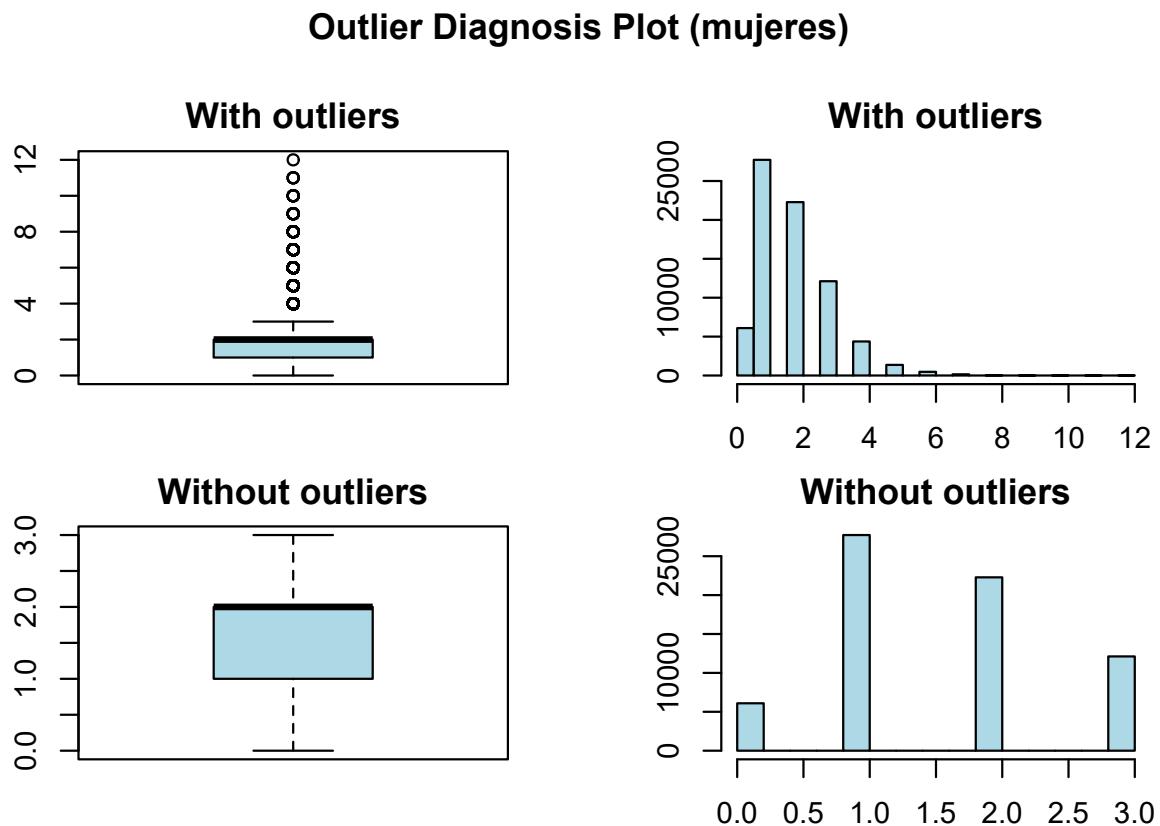


Figure 2.50: Distribution of mujeres

```
variable : deudas
```

Table 2.52: Outliers information of deudas

Measures	Values
Outliers count	6,374.00
Outliers ratio (%)	8.54
Mean of outliers	5,356.96
Mean with outliers	457.42
Mean without outliers	0.00

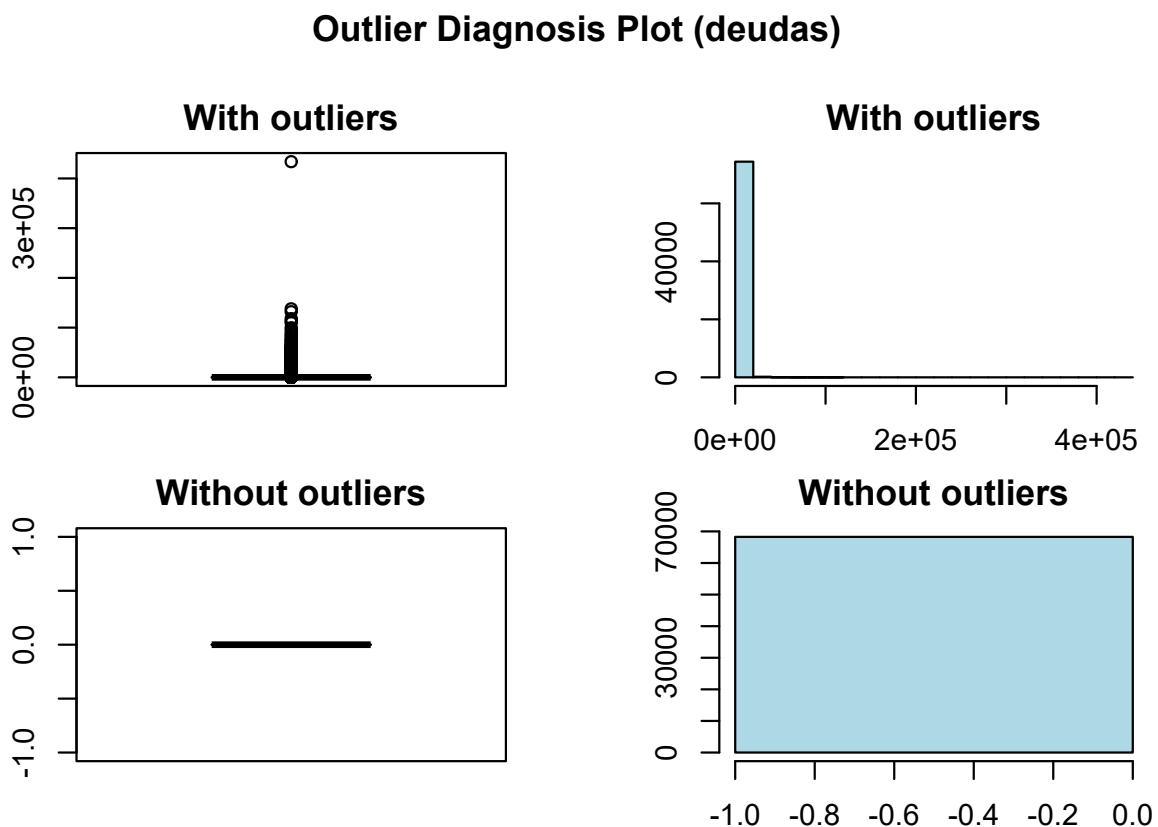


Figure 2.51: Distribution of deudas

variable : horas_extr

Table 2.53: Outliers information of horas_extr

Measures	Values
Outliers count	6,262.00
Outliers ratio (%)	8.39
Mean of outliers	3,013.70
Mean with outliers	252.81
Mean without outliers	0.00

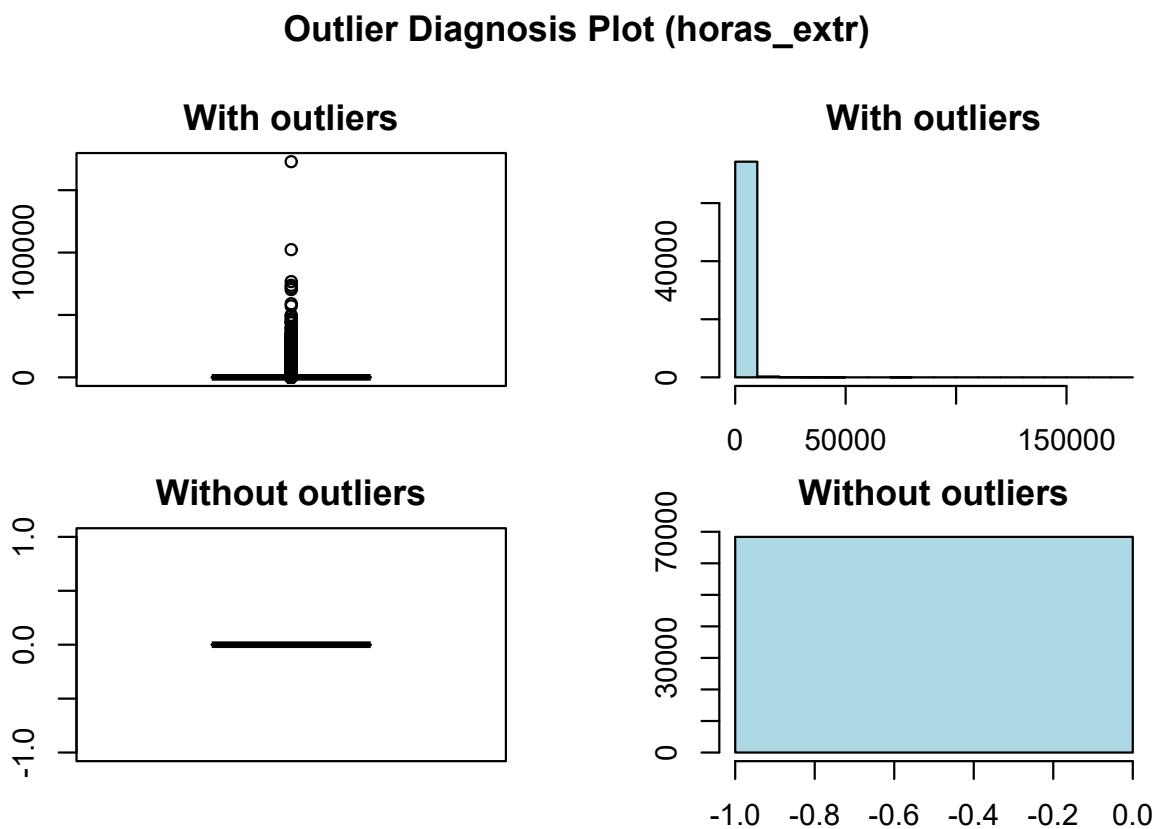


Figure 2.52: Distribution of horas_extr

```
variable : comercio
```

Table 2.54: Outliers information of comercio

Measures	Values
Outliers count	6,138.00
Outliers ratio (%)	8.22
Mean of outliers	11,778.41
Mean with outliers	968.50
Mean without outliers	0.00

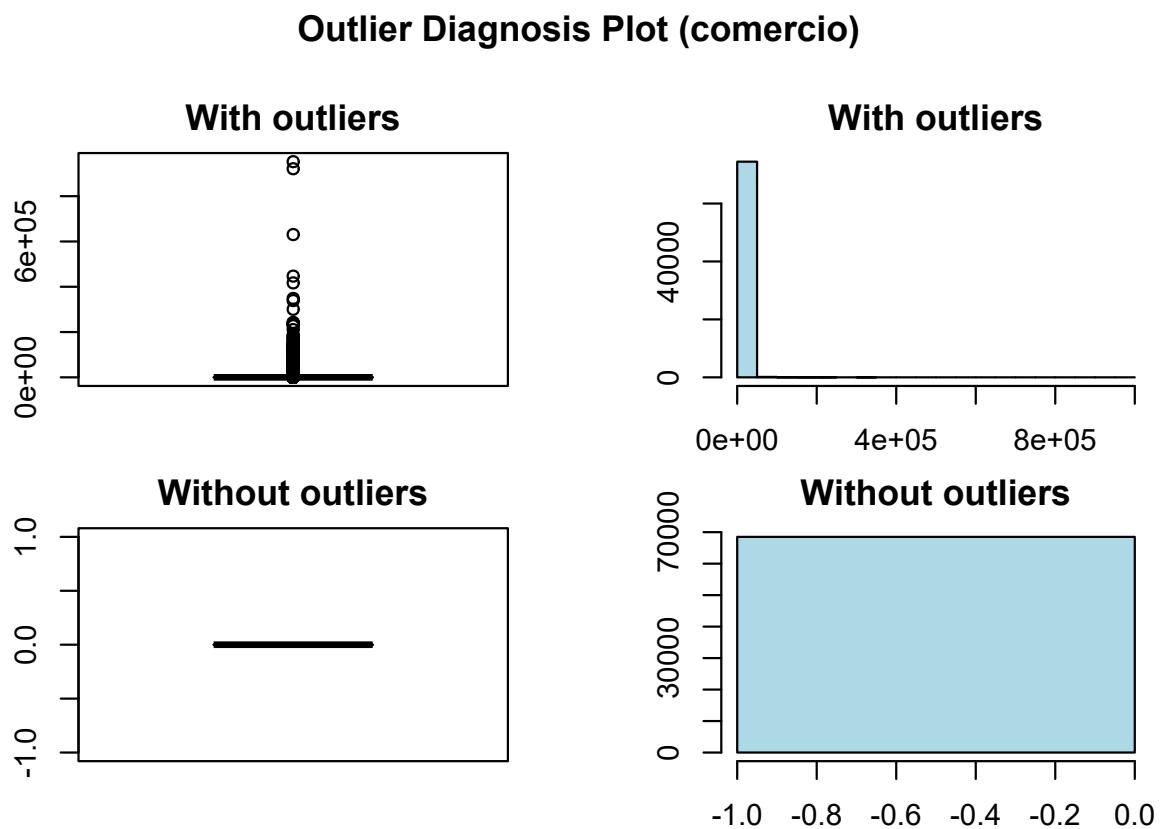


Figure 2.53: Distribution of comercio

variable : rentas

Table 2.55: Outliers information of rentas

Measures	Values
Outliers count	6,067.00
Outliers ratio (%)	8.13
Mean of outliers	34,300.14
Mean with outliers	2,787.77
Mean without outliers	0.00

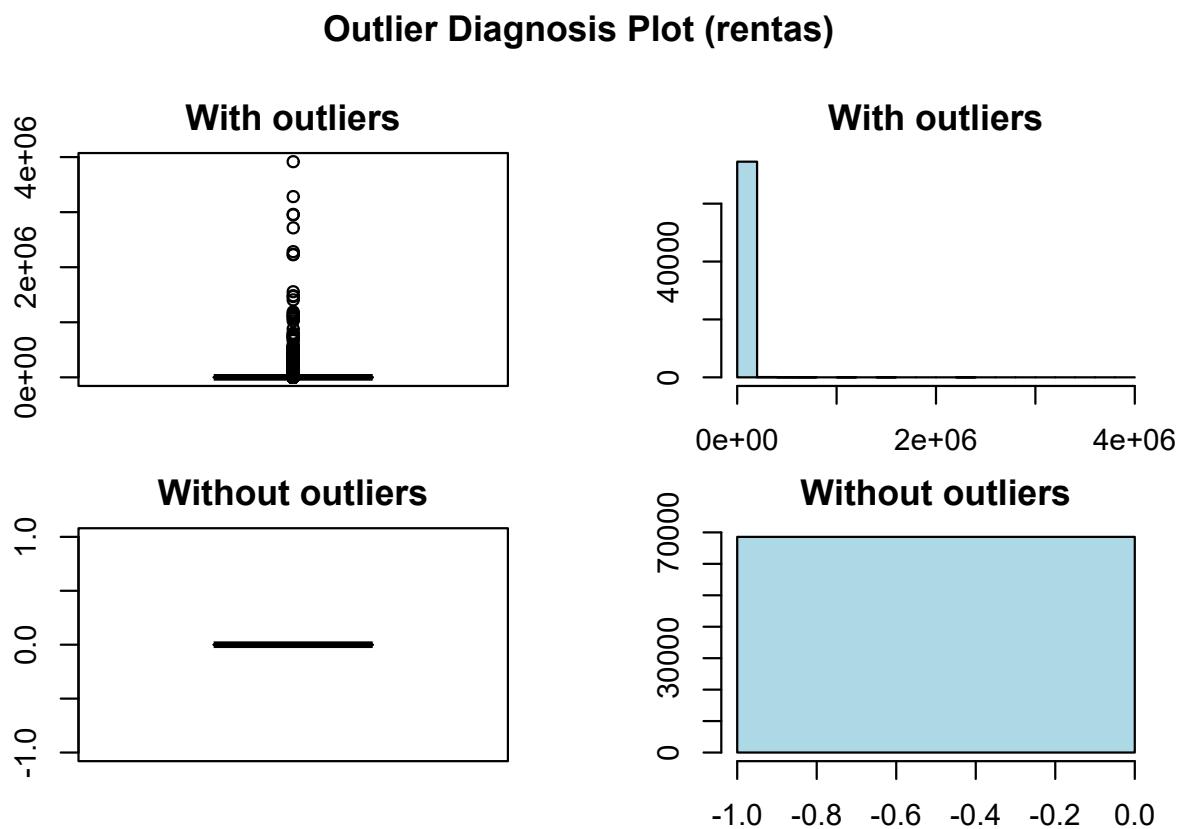


Figure 2.54: Distribution of rentas

variable : comisiones

Table 2.56: Outliers information of comisiones

Measures	Values
Outliers count	5,861.00
Outliers ratio (%)	7.85
Mean of outliers	9,211.72
Mean with outliers	723.27
Mean without outliers	0.00

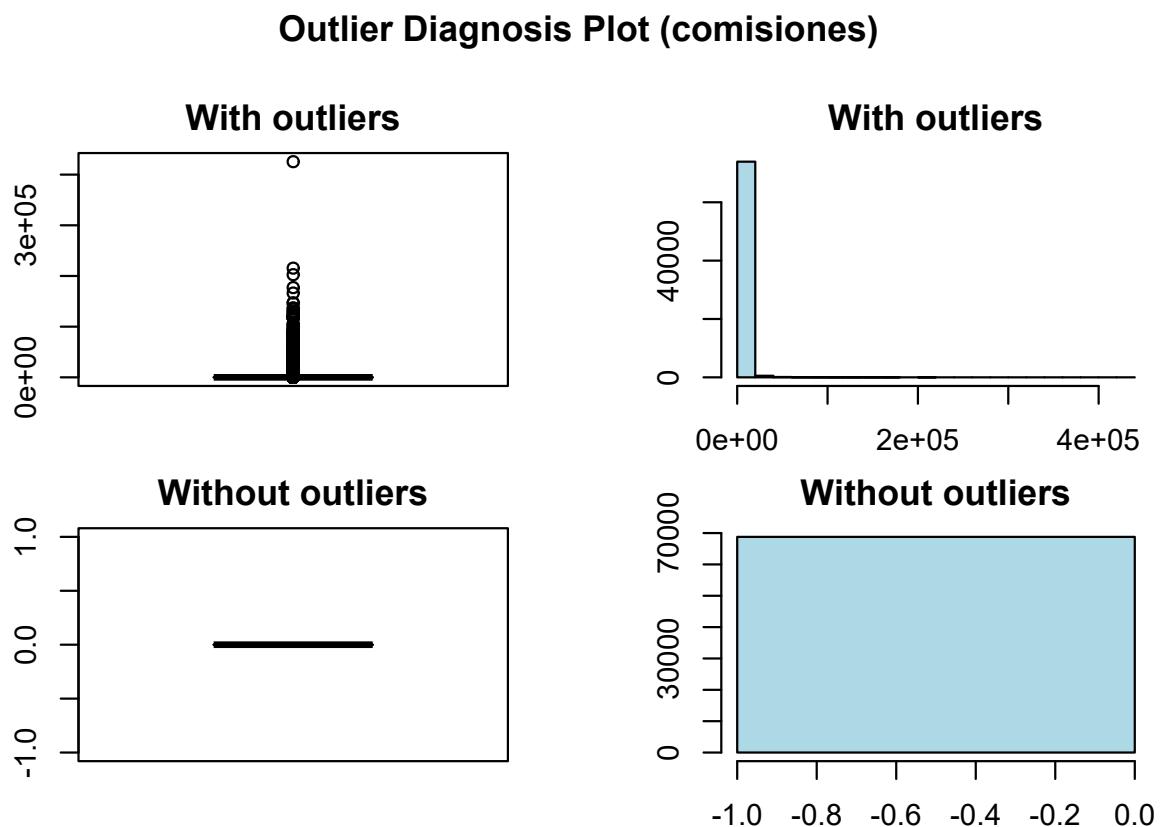


Figure 2.55: Distribution of comisiones

```
variable : cuota_viv
```

Table 2.57: Outliers information of cuota_viv

Measures	Values
Outliers count	5,748.00
Outliers ratio (%)	7.70
Mean of outliers	8,066.44
Mean with outliers	621.14
Mean without outliers	0.00

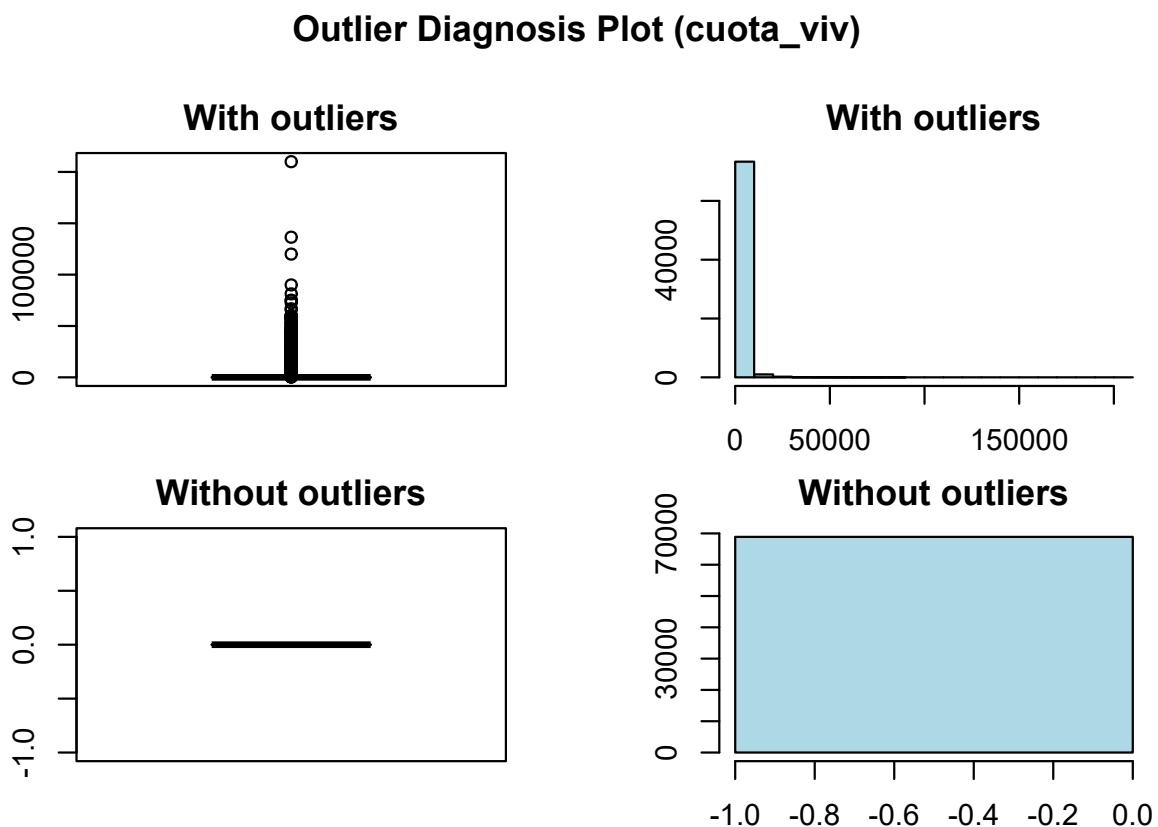


Figure 2.56: Distribution of cuota_viv

variable : vivienda

Table 2.58: Outliers information of vivienda

Measures	Values
Outliers count	5,705.00
Outliers ratio (%)	7.64
Mean of outliers	11,302.78
Mean with outliers	2,526.05
Mean without outliers	1,799.77

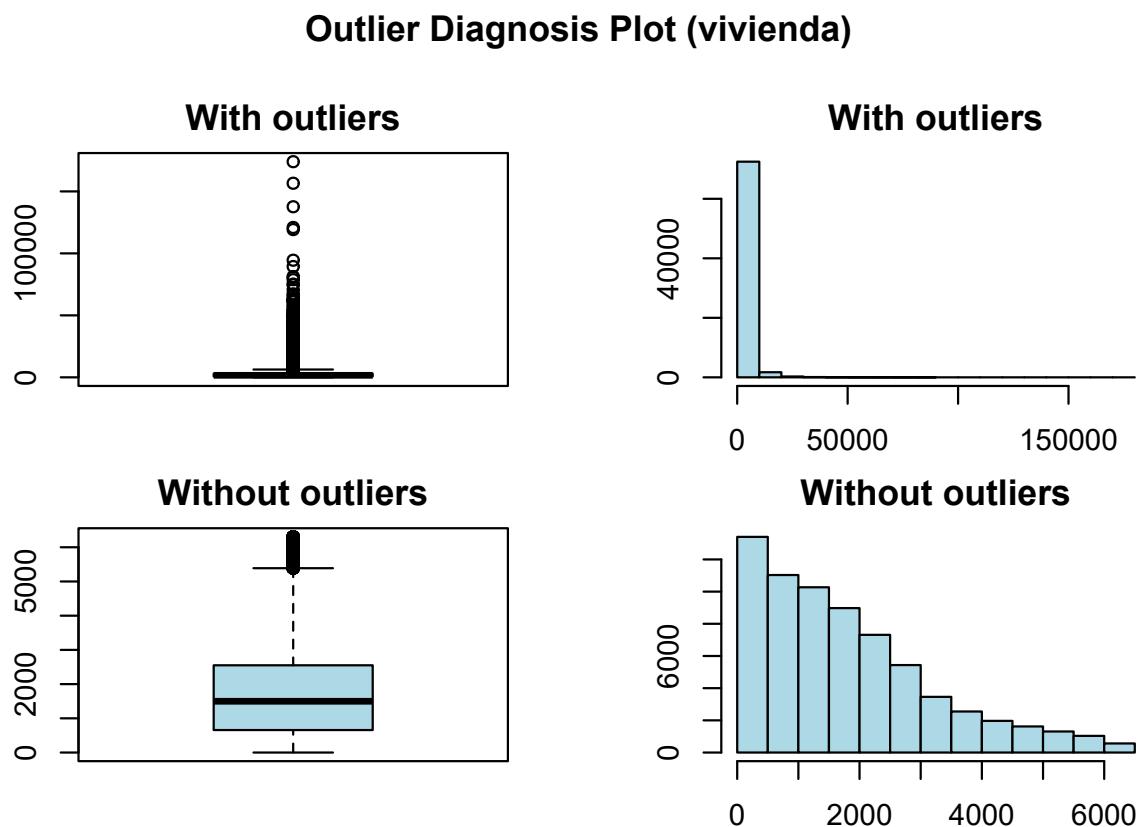


Figure 2.57: Distribution of vivienda

variable : mantenim

Table 2.59: Outliers information of mantenim

Measures	Values
Outliers count	5,634.00
Outliers ratio (%)	7.55
Mean of outliers	13,184.93
Mean with outliers	2,310.02
Mean without outliers	1,422.23

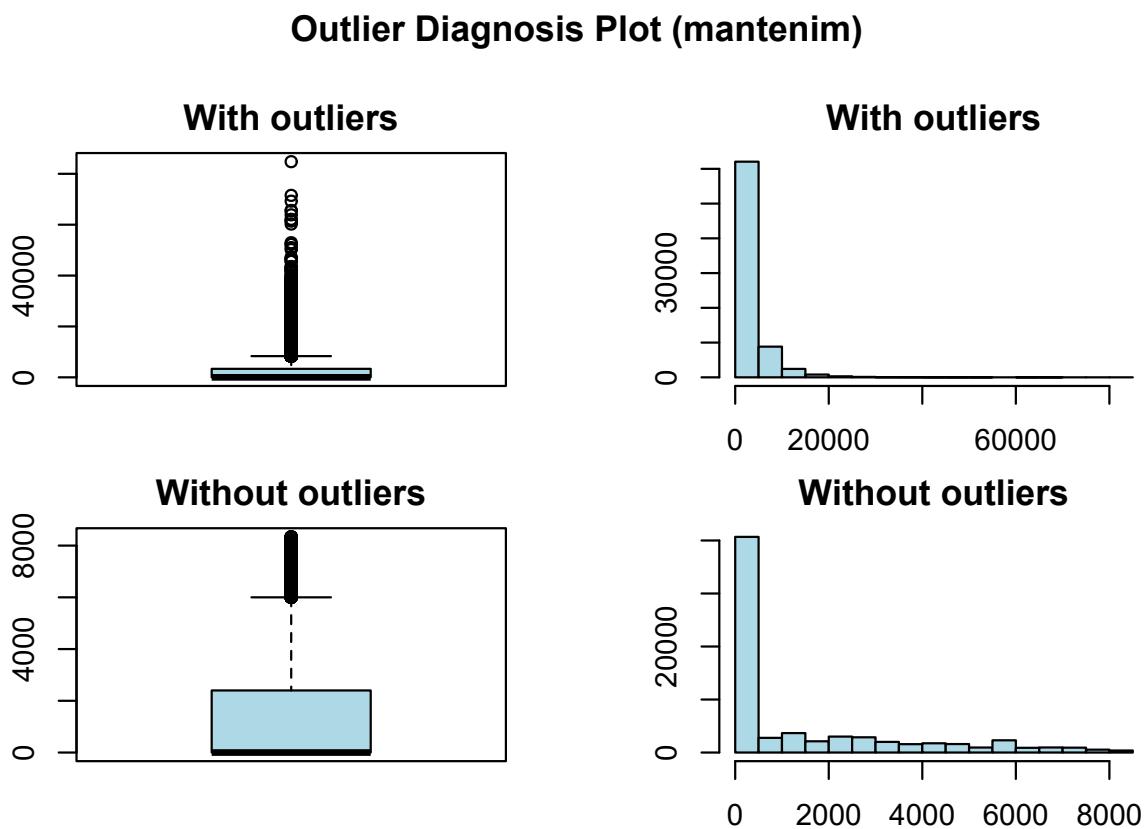


Figure 2.58: Distribution of mantenim

variable : hombres

Table 2.60: Outliers information of hombres

Measures	Values
Outliers count	5,613.00
Outliers ratio (%)	7.52
Mean of outliers	4.42
Mean with outliers	1.76
Mean without outliers	1.55

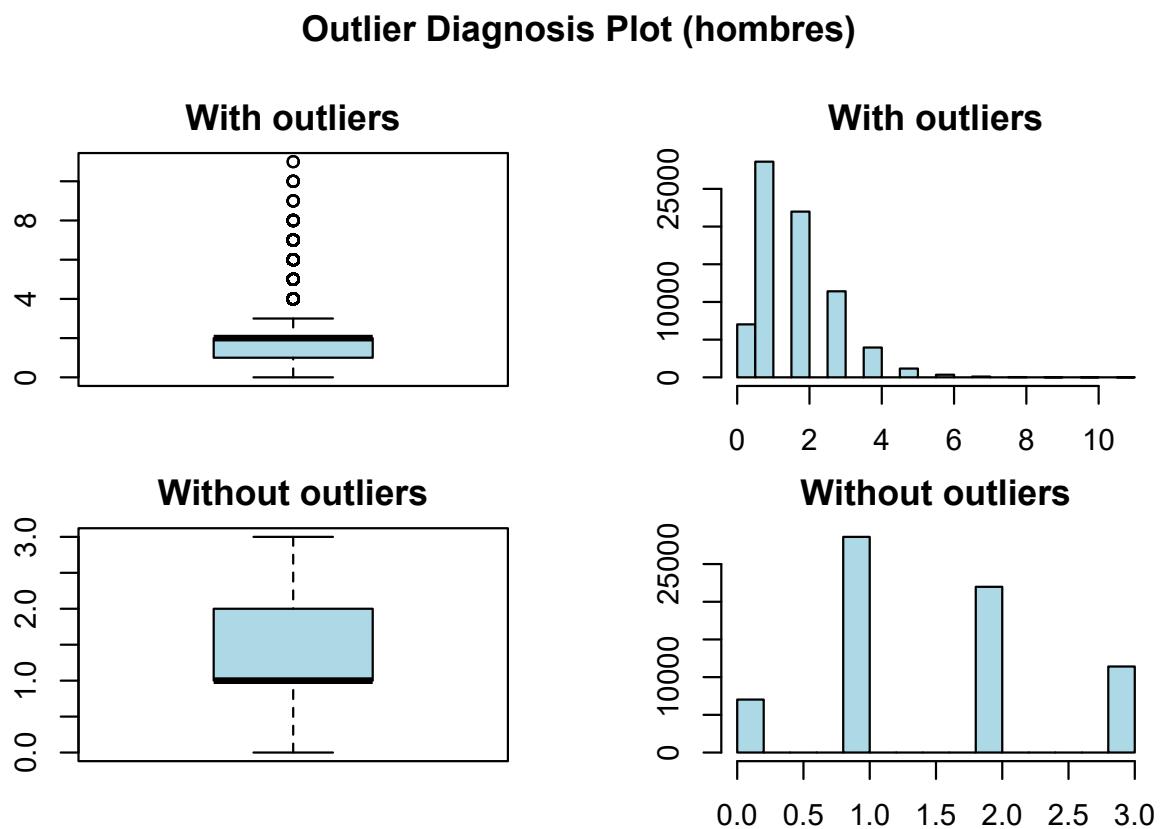


Figure 2.59: Distribution of hombres

variable : personales

Table 2.61: Outliers information of personales

Measures	Values
Outliers count	5,549.00
Outliers ratio (%)	7.43
Mean of outliers	10,019.95
Mean with outliers	2,219.81
Mean without outliers	1,593.41

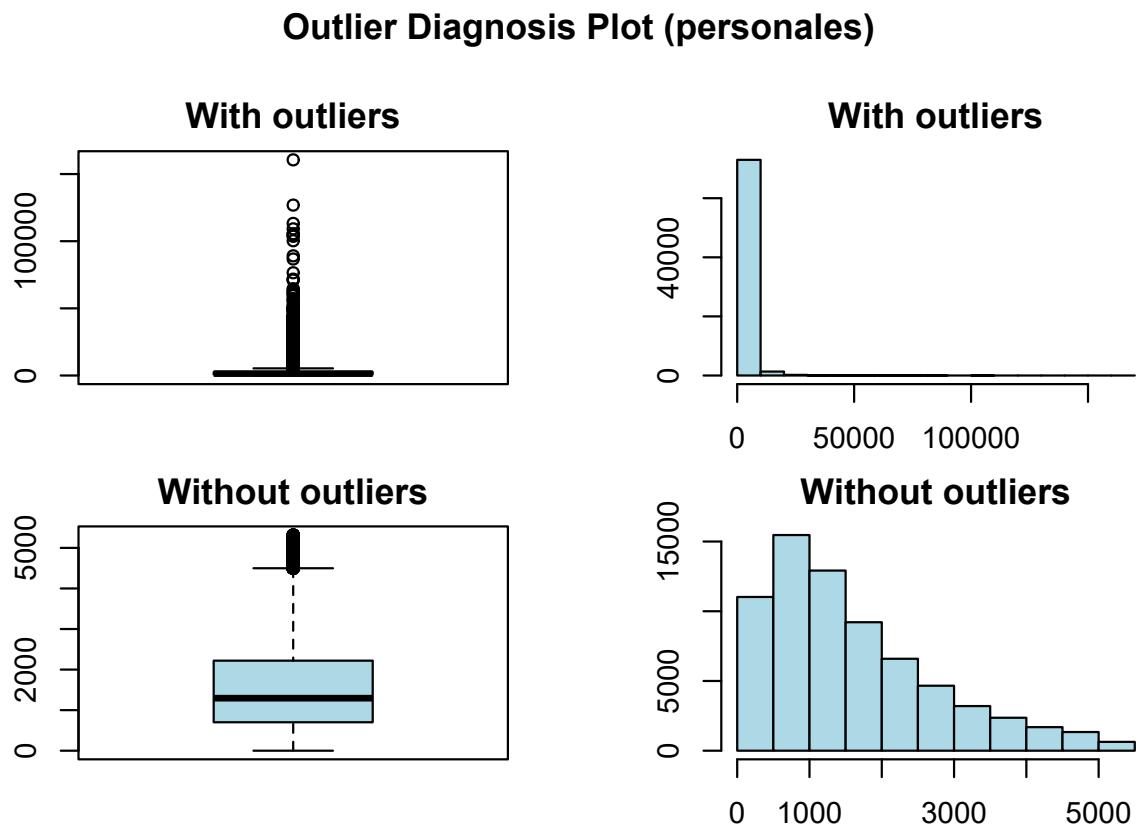


Figure 2.60: Distribution of personales

```
variable : combus
```

Table 2.62: Outliers information of combus

Measures	Values
Outliers count	5,451.00
Outliers ratio (%)	7.30
Mean of outliers	12,256.34
Mean with outliers	2,114.11
Mean without outliers	1,315.15

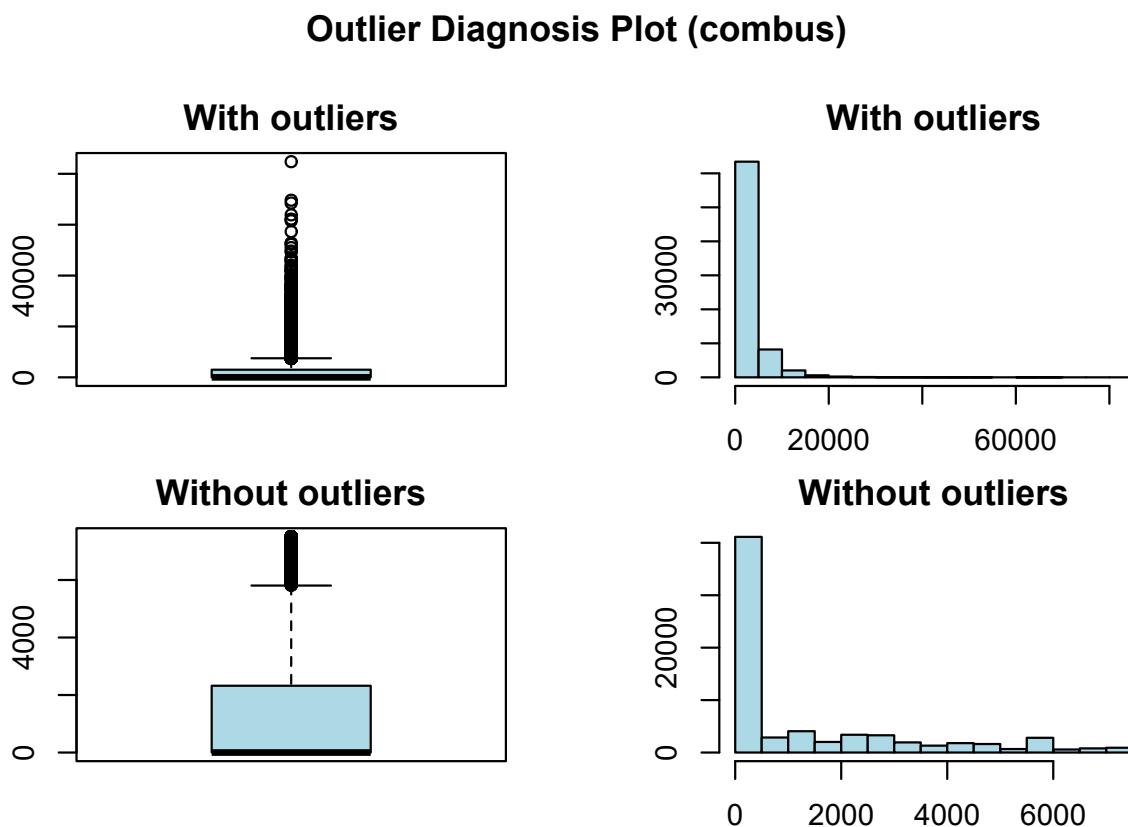


Figure 2.61: Distribution of combus

variable : agricolas

Table 2.63: Outliers information of agricolas

Measures	Values
Outliers count	5,397.00
Outliers ratio (%)	7.23
Mean of outliers	5,547.54
Mean with outliers	401.09
Mean without outliers	0.00

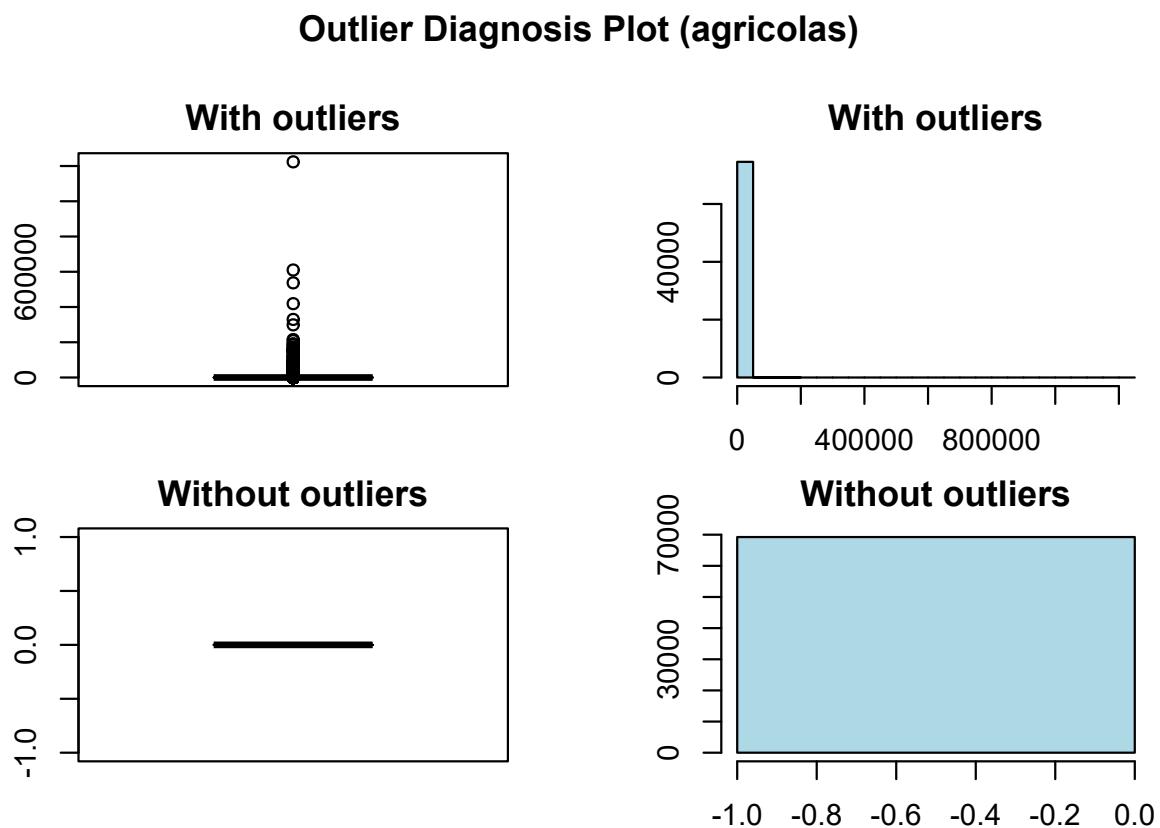


Figure 2.62: Distribution of agricolas

```
variable : vesti_calz
```

Table 2.64: Outliers information of vesti_calz

Measures	Values
Outliers count	5,393.00
Outliers ratio (%)	7.22
Mean of outliers	7,340.91
Mean with outliers	1,314.03
Mean without outliers	844.70

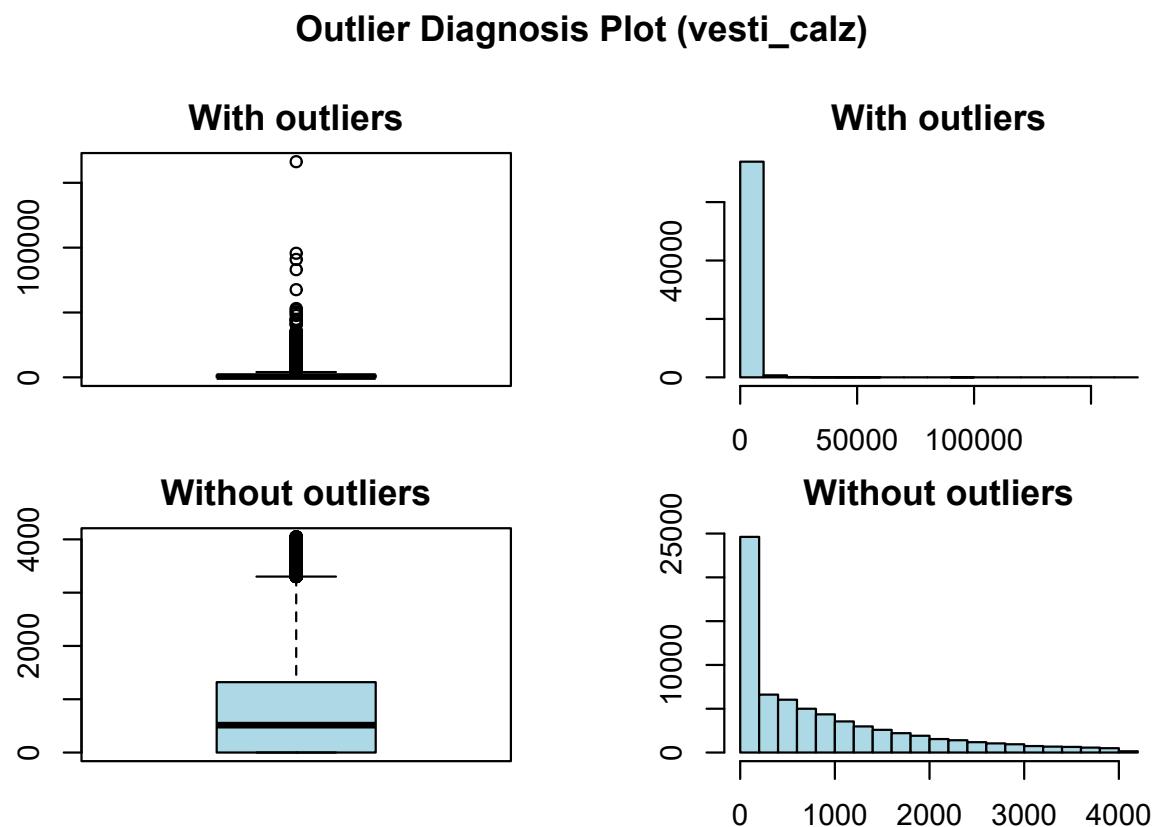


Figure 2.63: Distribution of vesti_calz

variable : calzado

Table 2.65: Outliers information of calzado

Measures	Values
Outliers count	5,356.00
Outliers ratio (%)	7.18
Mean of outliers	2,912.65
Mean with outliers	505.46
Mean without outliers	319.39

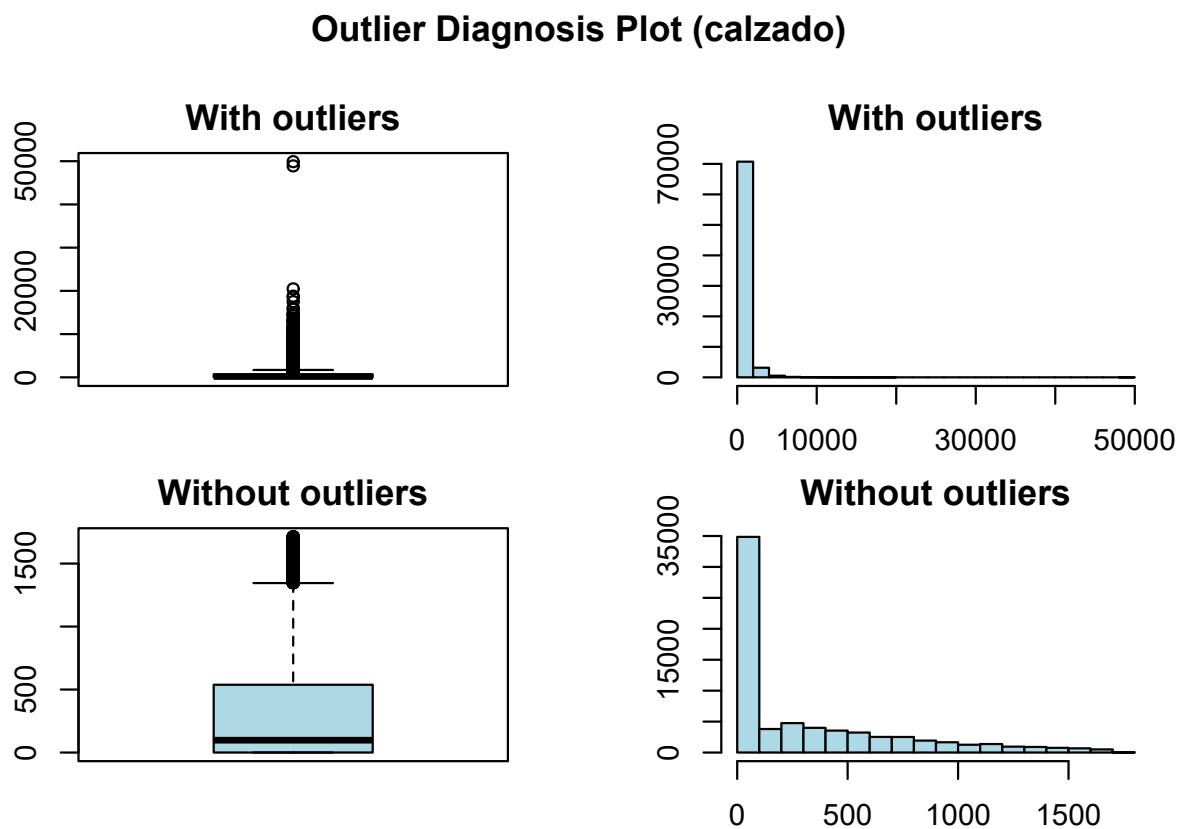


Figure 2.64: Distribution of calzado

```
variable : publico
```

Table 2.66: Outliers information of publico

Measures	Values
Outliers count	5,319.00
Outliers ratio (%)	7.13
Mean of outliers	7,671.46
Mean with outliers	1,378.10
Mean without outliers	895.26

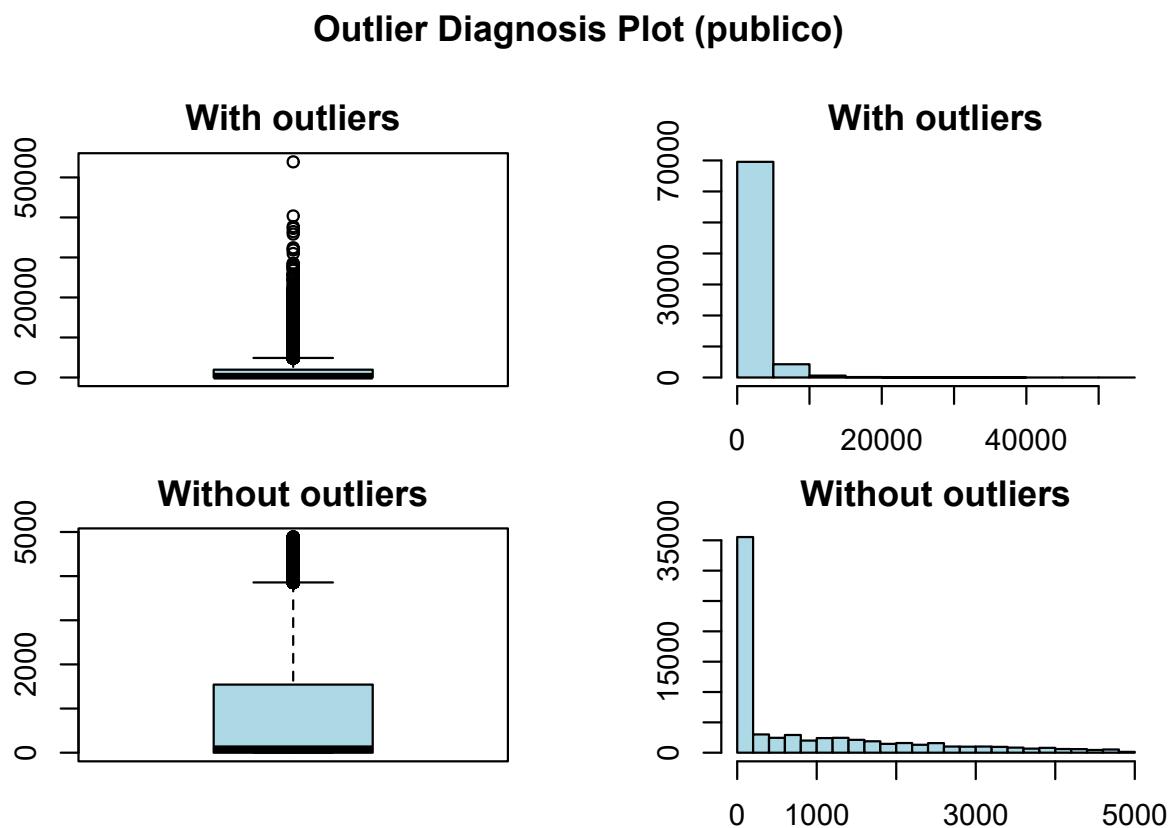


Figure 2.65: Distribution of publico

variable : prestamos

Table 2.67: Outliers information of prestamos

Measures	Values
Outliers count	5,315.00
Outliers ratio (%)	7.12
Mean of outliers	6,721.25
Mean with outliers	478.56
Mean without outliers	0.00

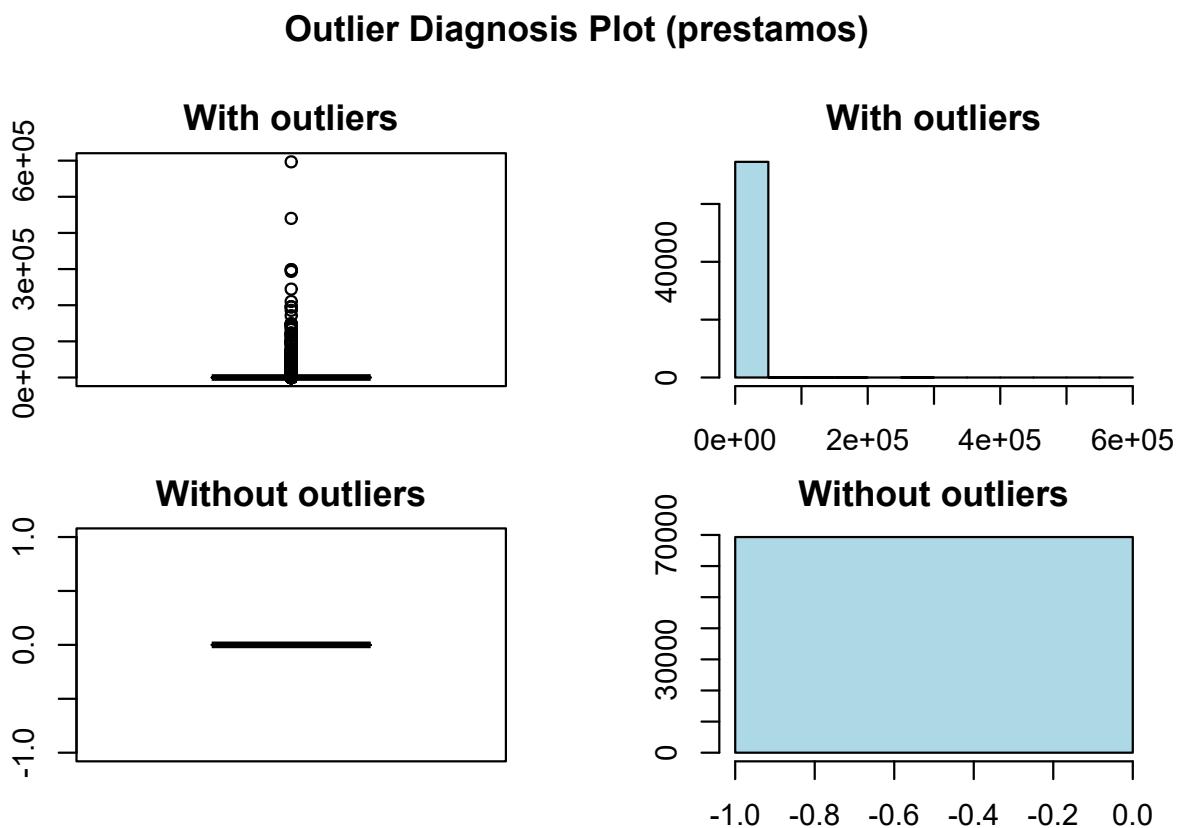


Figure 2.66: Distribution of prestamos

variable : cuidados

Table 2.68: Outliers information of cuidados

Measures	Values
Outliers count	5,314.00
Outliers ratio (%)	7.12
Mean of outliers	6,287.07
Mean with outliers	1,288.08
Mean without outliers	904.94

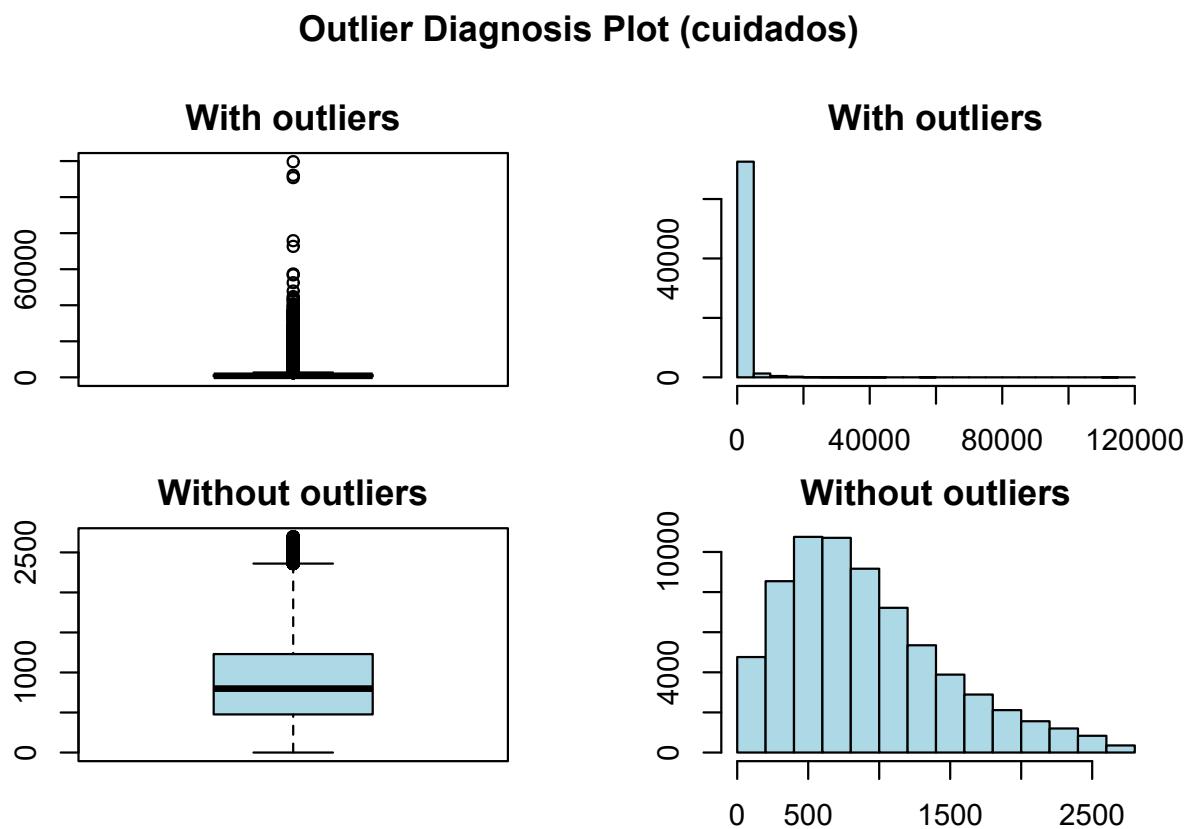


Figure 2.67: Distribution of cuidados

variable : `bene_gob`

Table 2.69: Outliers information of `bene_gob`

Measures	Values
Outliers count	5,081.00
Outliers ratio (%)	6.81
Mean of outliers	5,243.03
Mean with outliers	811.81
Mean without outliers	488.16

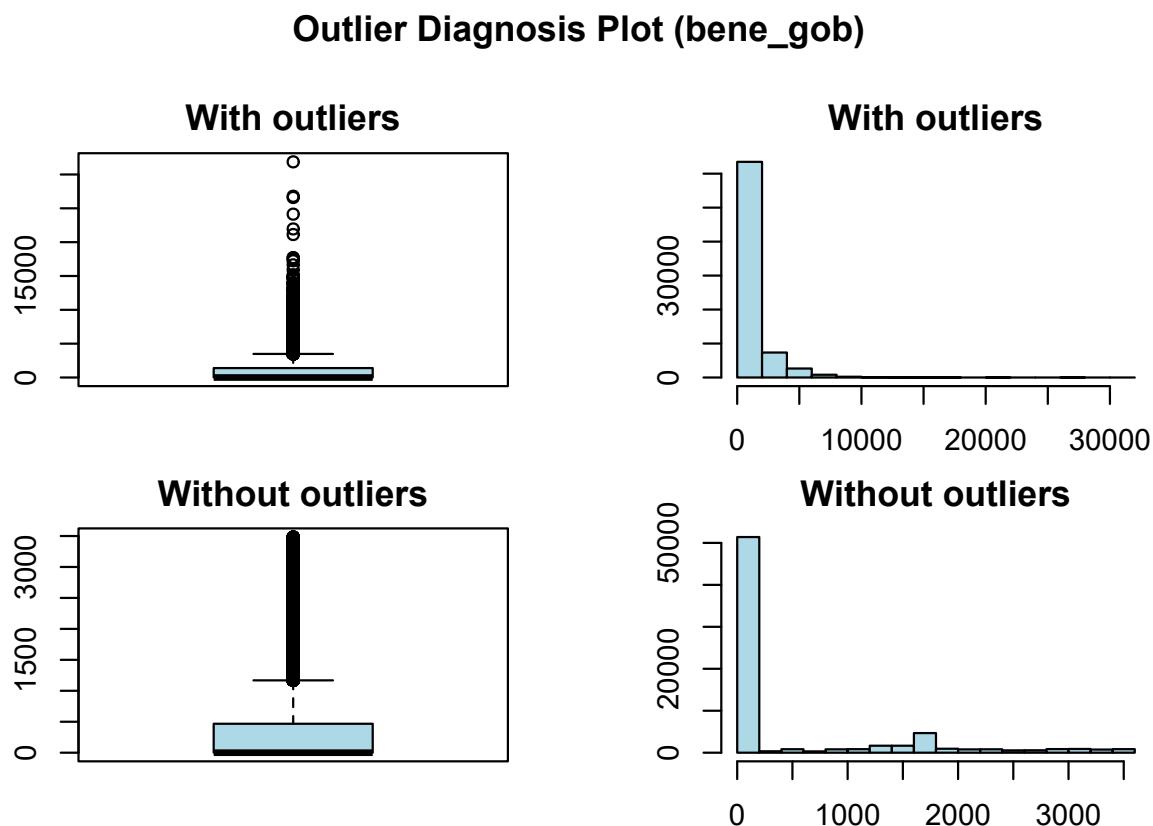


Figure 2.68: Distribution of `bene_gob`

```
variable : otras_perc
```

Table 2.70: Outliers information of otras_perc

Measures	Values
Outliers count	5,010.00
Outliers ratio (%)	6.71
Mean of outliers	12,762.47
Mean with outliers	856.56
Mean without outliers	0.00

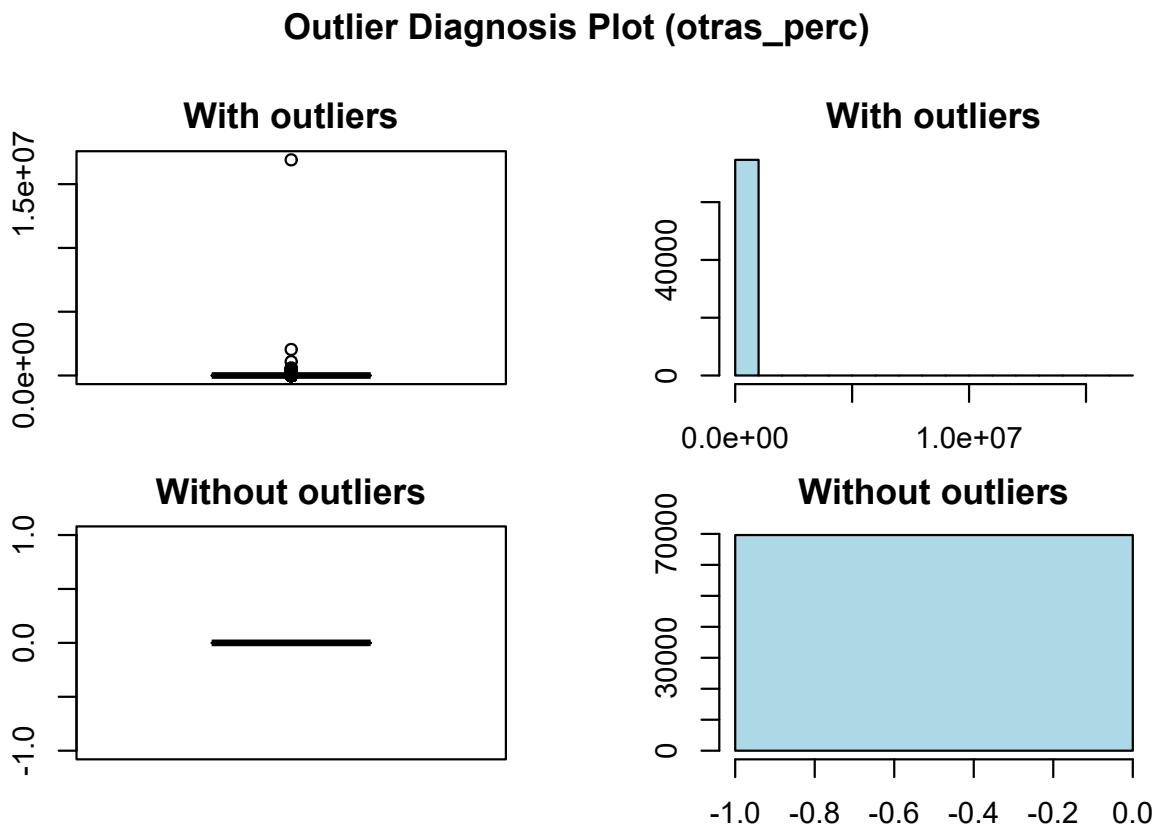


Figure 2.69: Distribution of otras_perc

variable : menores

Table 2.71: Outliers information of menores

Measures	Values
Outliers count	4,893.00
Outliers ratio (%)	6.55
Mean of outliers	3.30
Mean with outliers	0.76
Mean without outliers	0.58

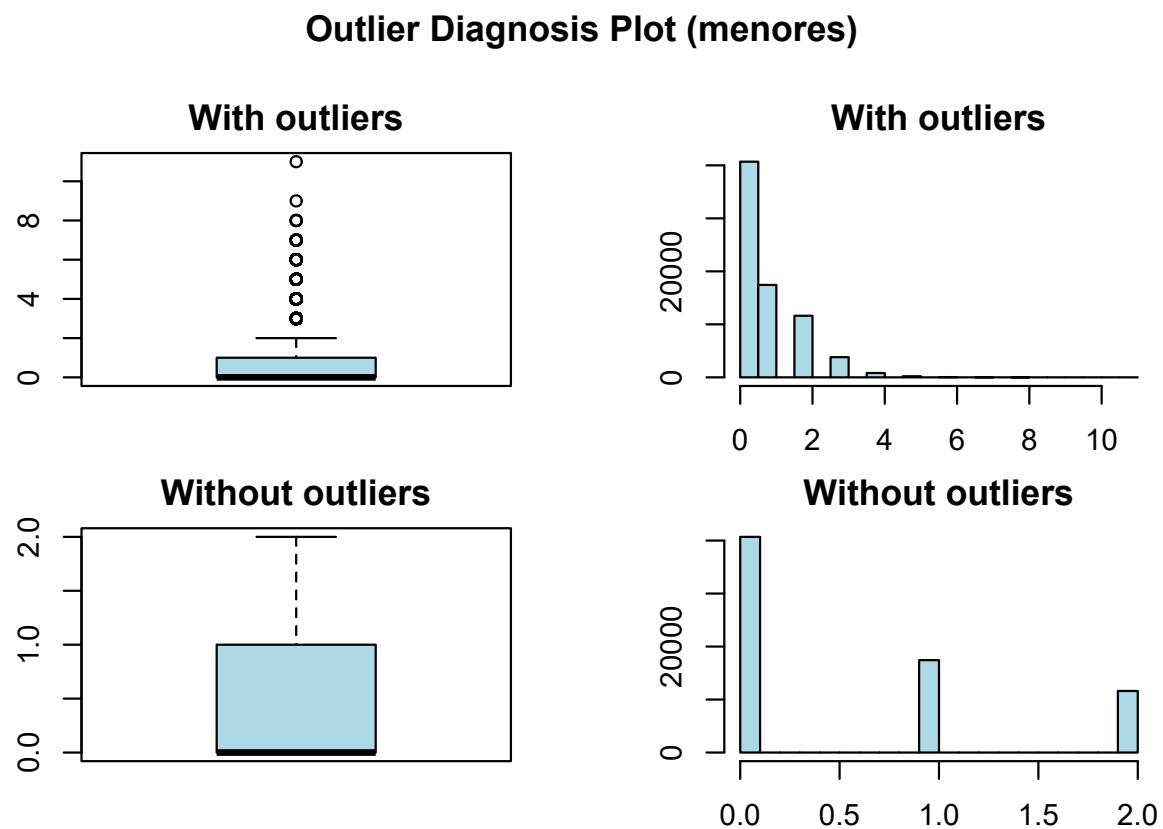


Figure 2.70: Distribution of menores

variable : pecuarios

Table 2.72: Outliers information of pecuarios

Measures	Values
Outliers count	4,739.00
Outliers ratio (%)	6.35
Mean of outliers	4,959.14
Mean with outliers	314.83
Mean without outliers	0.00

Outlier Diagnosis Plot (pecuarios)

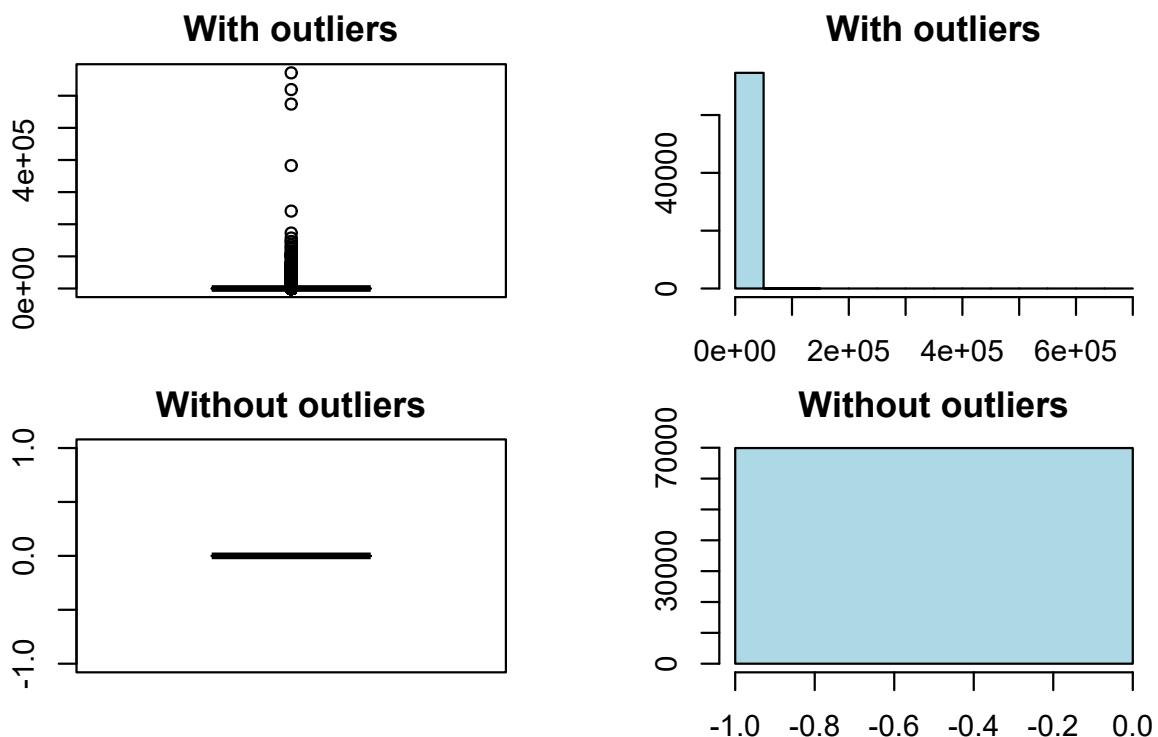


Figure 2.71: Distribution of pecuarios

variable : paq_turist

Table 2.73: Outliers information of paq_turist

Measures	Values
Outliers count	4,713.00
Outliers ratio (%)	6.31
Mean of outliers	4,367.26
Mean with outliers	275.74
Mean without outliers	0.00

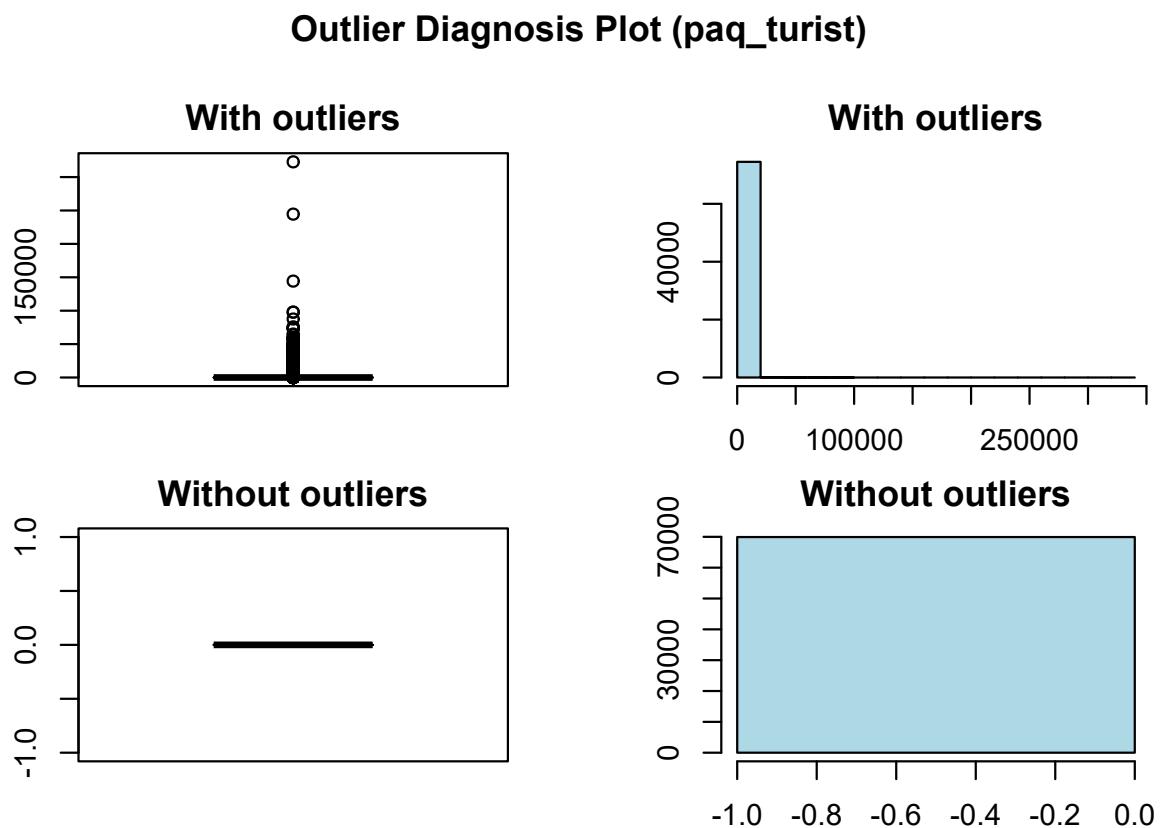


Figure 2.72: Distribution of paq_turist

```
variable : ing_cor
```

Table 2.74: Outliers information of ing.cor

Measures	Values
Outliers count	4,700.00
Outliers ratio (%)	6.30
Mean of outliers	180,463.93
Mean with outliers	46,043.88
Mean without outliers	37,011.69

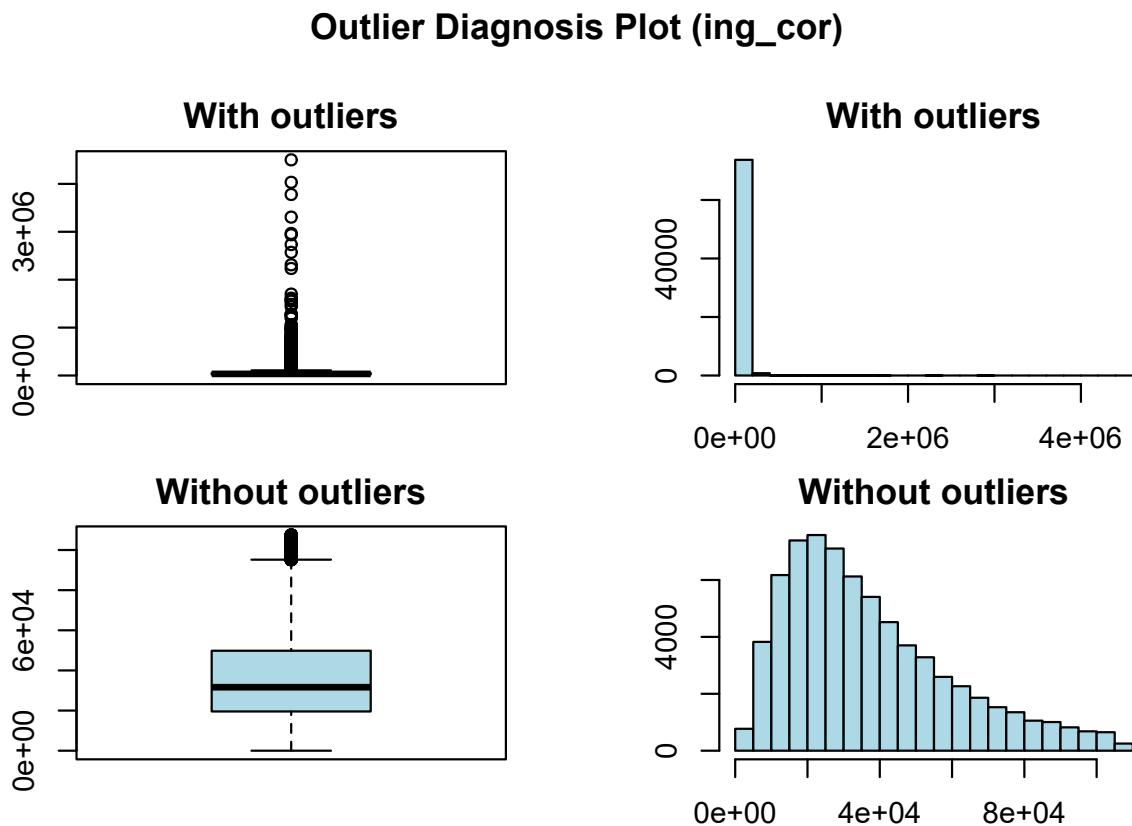


Figure 2.73: Distribution of ing.cor

variable : ocupados

Table 2.75: Outliers information of ocupados

Measures	Values
Outliers count	4,668.00
Outliers ratio (%)	6.25
Mean of outliers	4.41
Mean with outliers	1.70
Mean without outliers	1.51

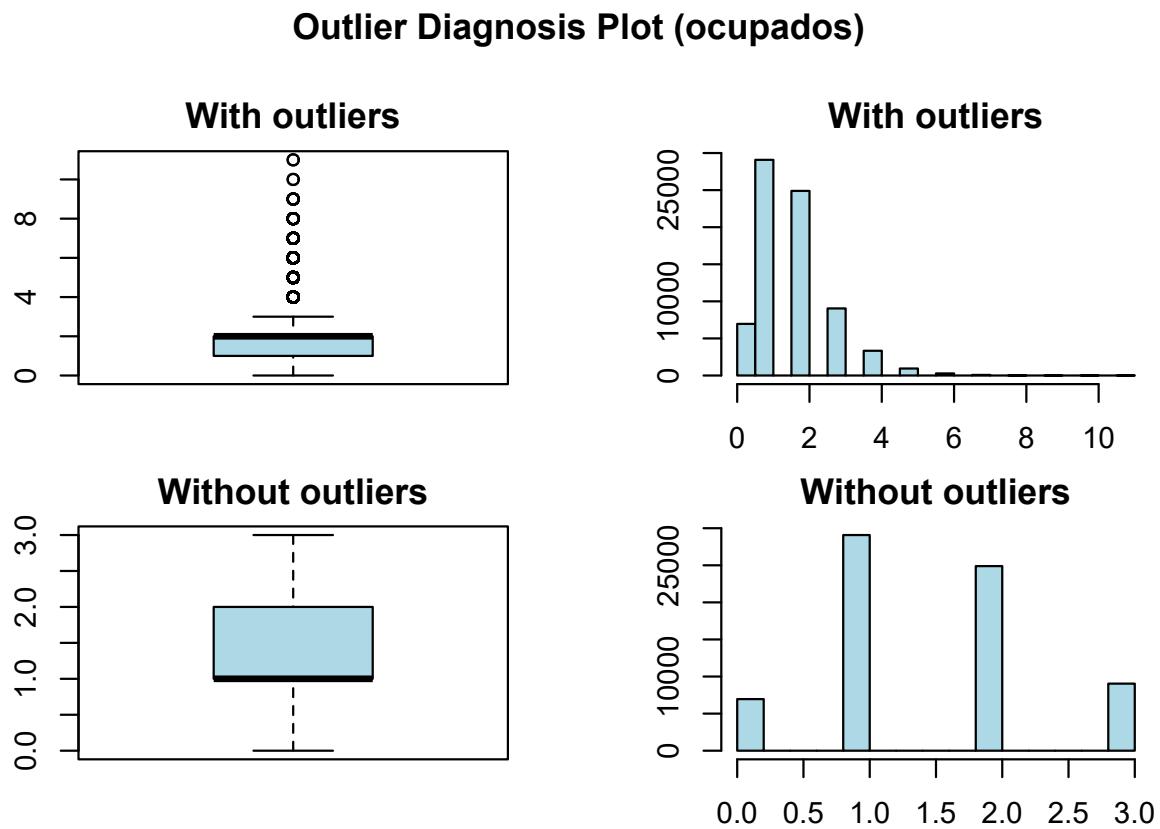


Figure 2.74: Distribution of ocupados

variable : industria

Table 2.76: Outliers information of industria

Measures	Values
Outliers count	4,655.00
Outliers ratio (%)	6.24
Mean of outliers	11,129.09
Mean with outliers	694.01
Mean without outliers	0.00

Outlier Diagnosis Plot (industria)

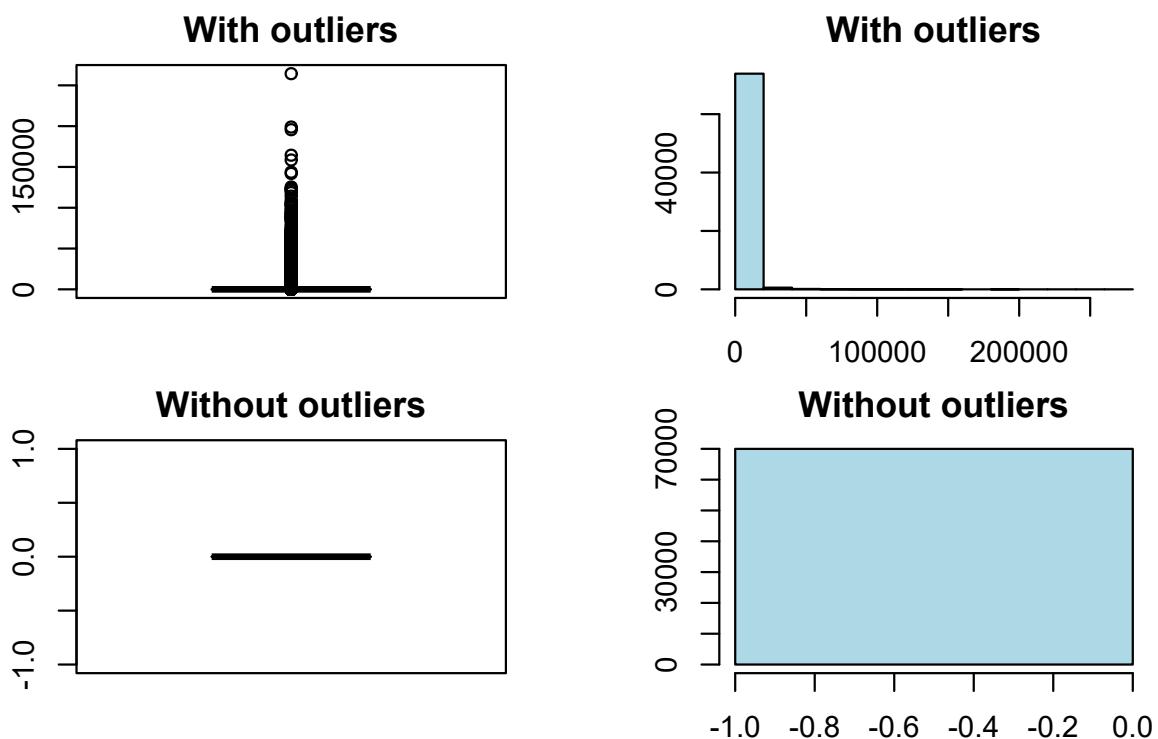


Figure 2.75: Distribution of industria

variable : factor

Table 2.77: Outliers information of factor

Measures	Values
Outliers count	4,643.00
Outliers ratio (%)	6.22
Mean of outliers	1,902.86
Mean with outliers	465.45
Mean without outliers	370.12

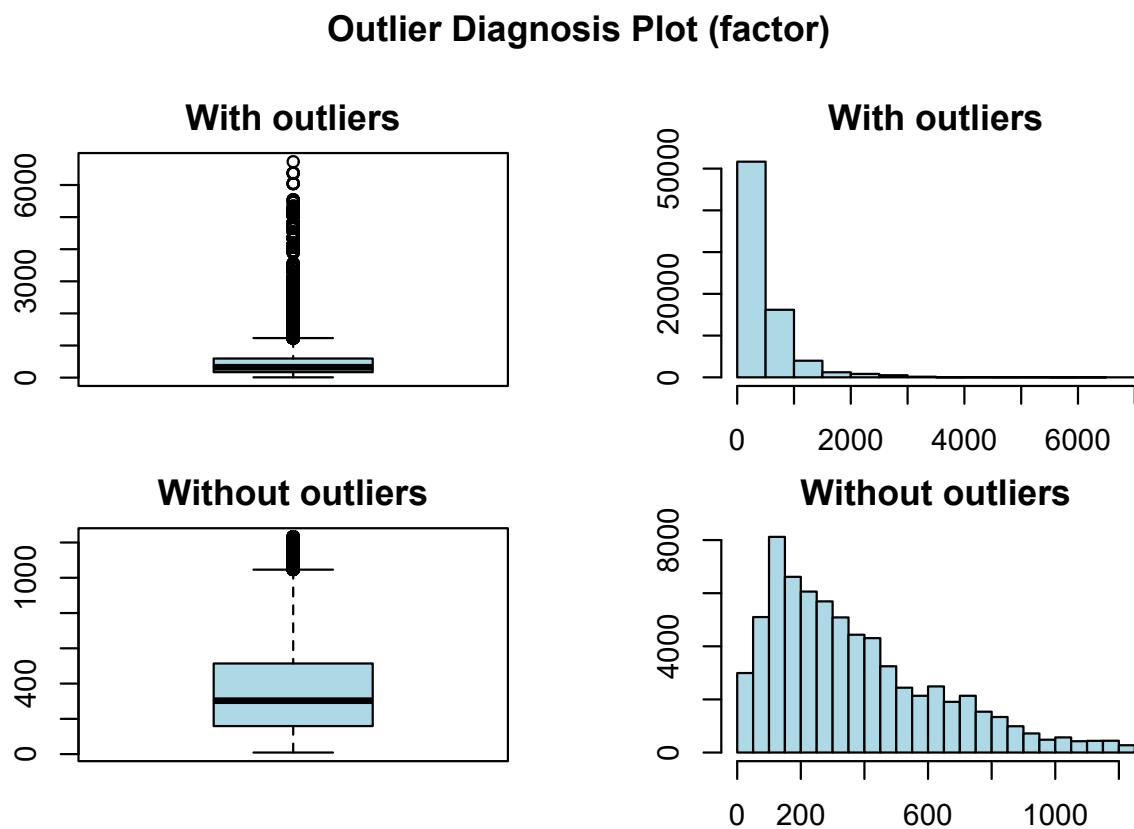


Figure 2.76: Distribution of factor

variable : remesas

Table 2.78: Outliers information of remesas

Measures	Values
Outliers count	4,584.00
Outliers ratio (%)	6.14
Mean of outliers	8,674.04
Mean with outliers	532.66
Mean without outliers	0.00

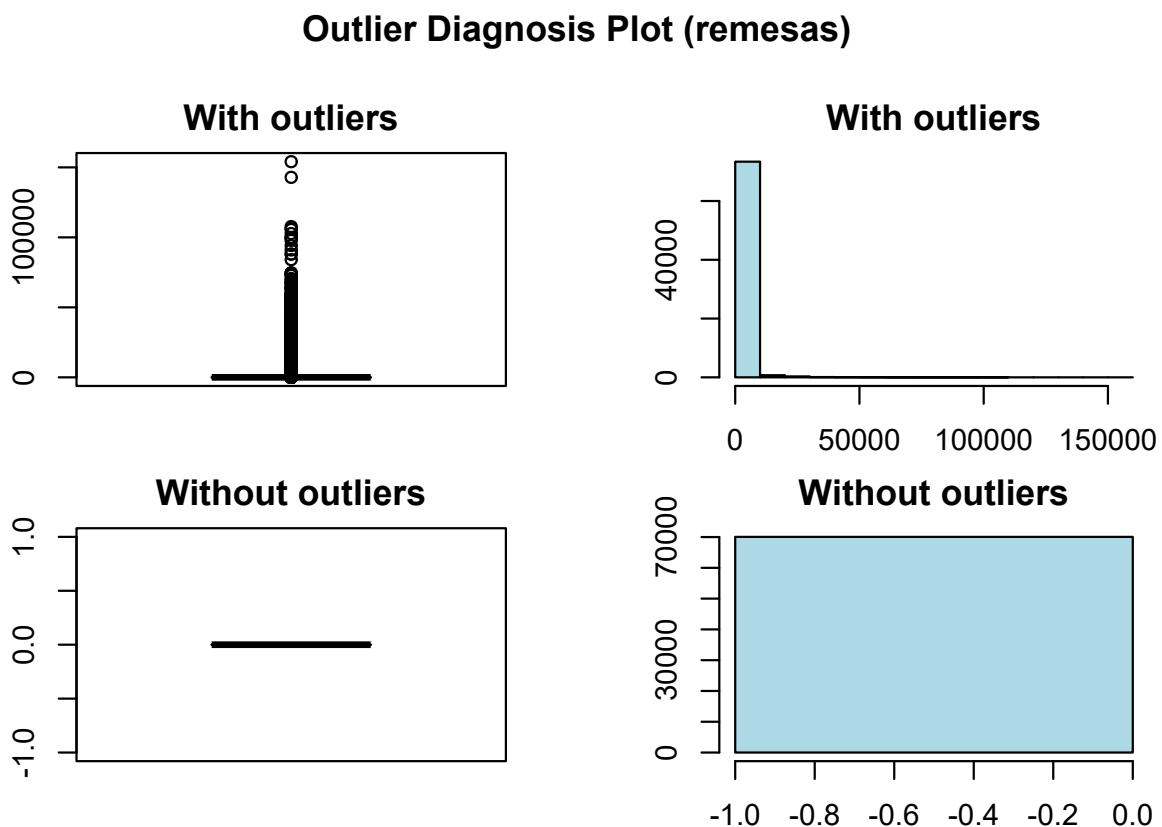


Figure 2.77: Distribution of remesas

variable : transporte

Table 2.79: Outliers information of transporte

Measures	Values
Outliers count	4,549.00
Outliers ratio (%)	6.09
Mean of outliers	31,703.39
Mean with outliers	5,918.06
Mean without outliers	4,244.73

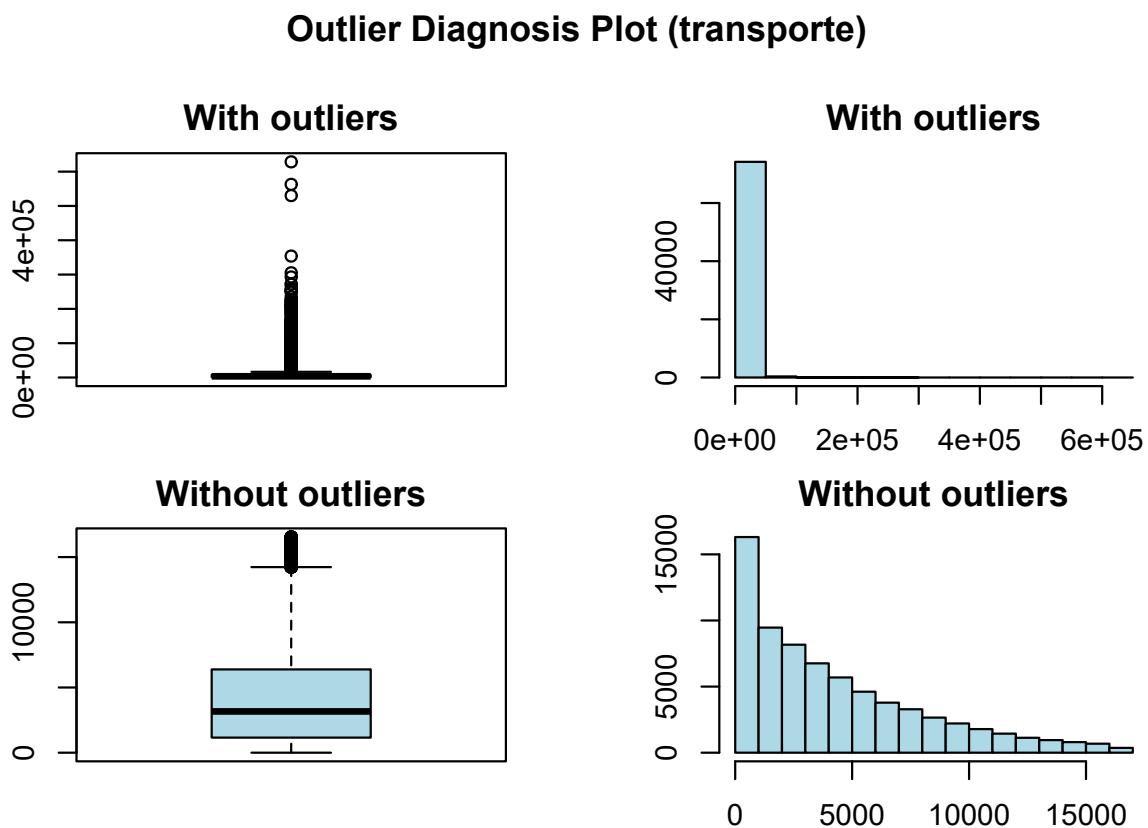


Figure 2.78: Distribution of transporte

```
variable : gasto_mon
```

Table 2.80: Outliers information of gasto_mon

Measures	Values
Outliers count	4,517.00
Outliers ratio (%)	6.05
Mean of outliers	107,422.06
Mean with outliers	28,990.03
Mean without outliers	23,938.31

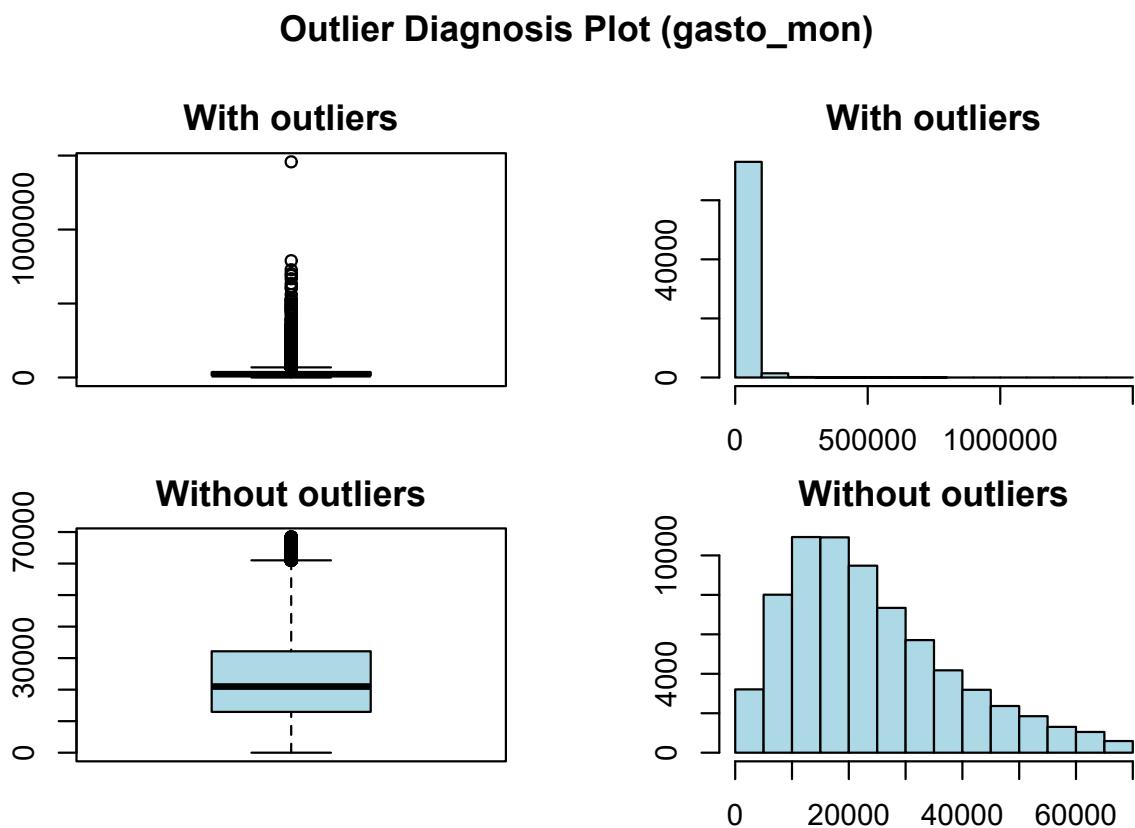


Figure 2.79: Distribution of gasto_mon

variable : cuida_pers

Table 2.81: Outliers information of cuida_pers

Measures	Values
Outliers count	4,433.00
Outliers ratio (%)	5.94
Mean of outliers	6,843.88
Mean with outliers	1,700.11
Mean without outliers	1,375.35

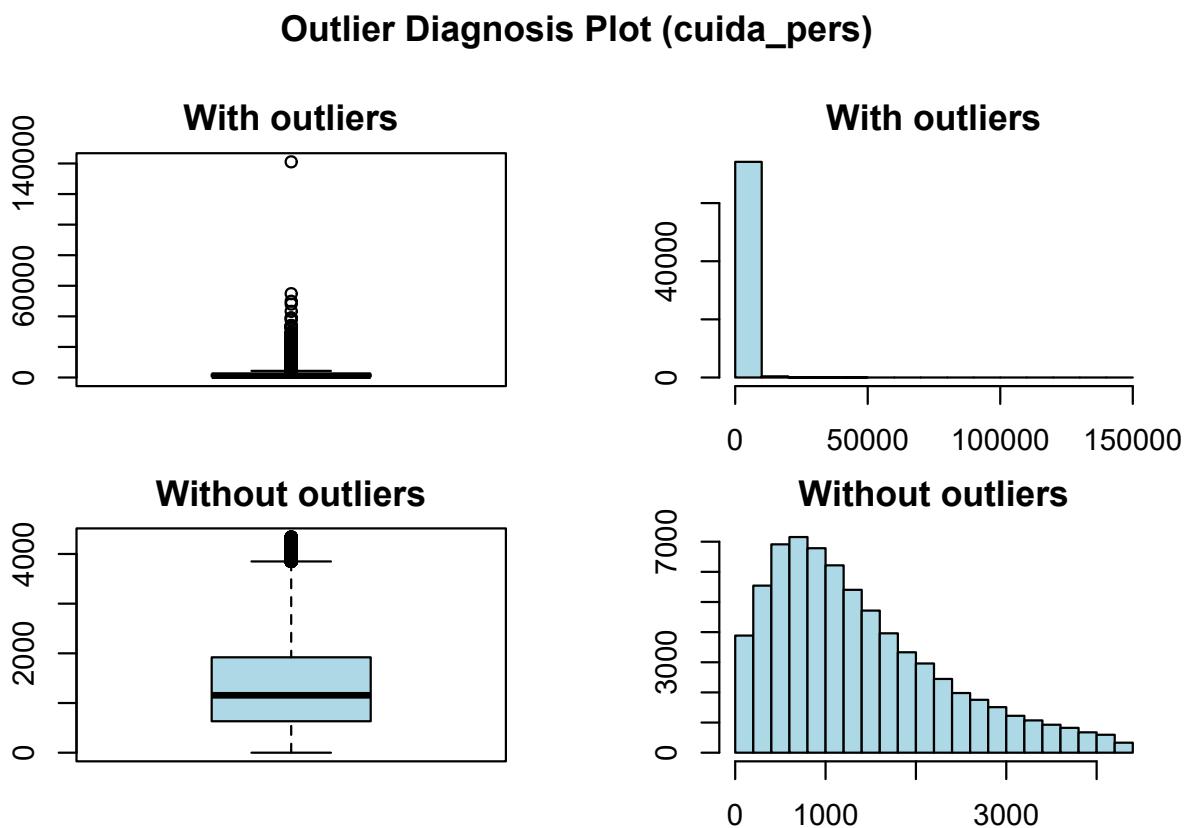


Figure 2.80: Distribution of cuida_pers

```
variable : otras_erog
```

Table 2.82: Outliers information of otras_erog

Measures	Values
Outliers count	4,430.00
Outliers ratio (%)	5.93
Mean of outliers	6,452.51
Mean with outliers	382.93
Mean without outliers	0.00

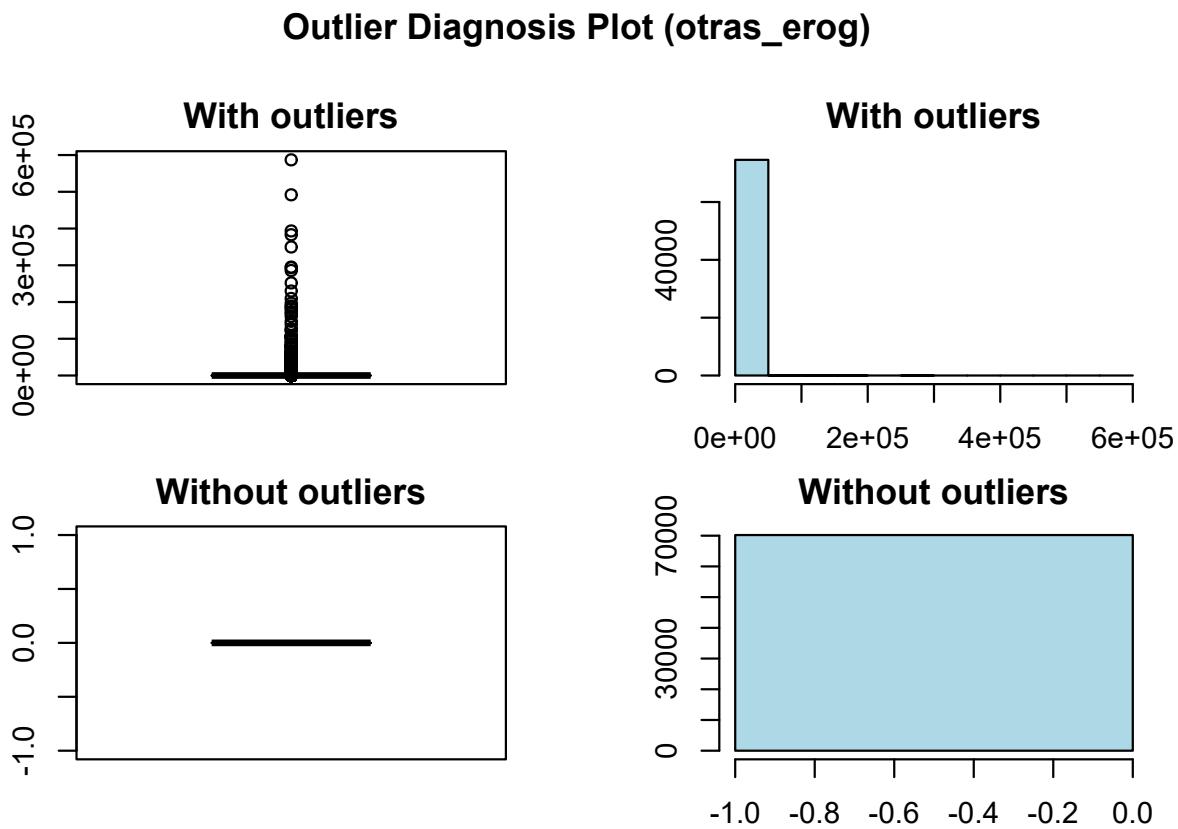


Figure 2.81: Distribution of otras_erog

variable : estim_alqu

Table 2.83: Outliers information of estim_alqu

Measures	Values
Outliers count	4,343.00
Outliers ratio (%)	5.82
Mean of outliers	22,249.37
Mean with outliers	4,783.72
Mean without outliers	3,704.79

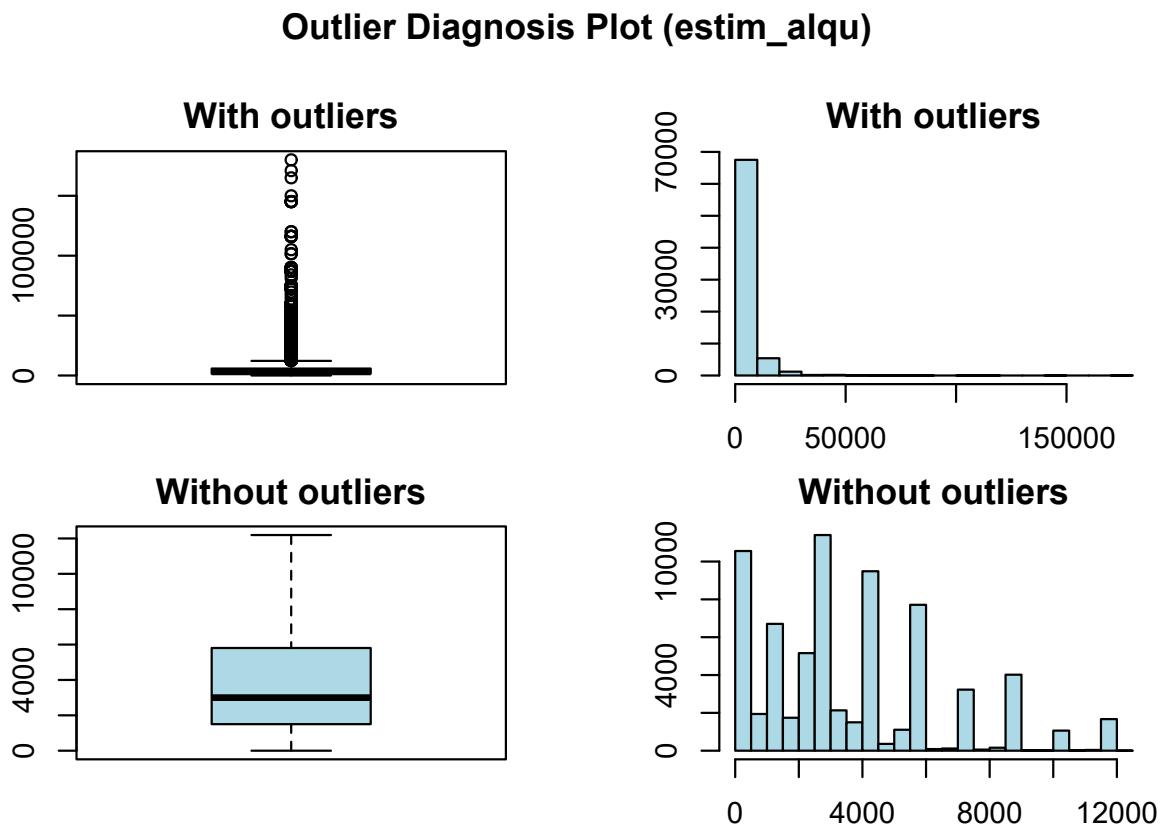


Figure 2.82: Distribution of estim_alqu

```
variable : perc_ocupa
```

Table 2.84: Outliers information of perc_ocupa

Measures	Values
Outliers count	4,135.00
Outliers ratio (%)	5.54
Mean of outliers	4.38
Mean with outliers	1.65
Mean without outliers	1.49

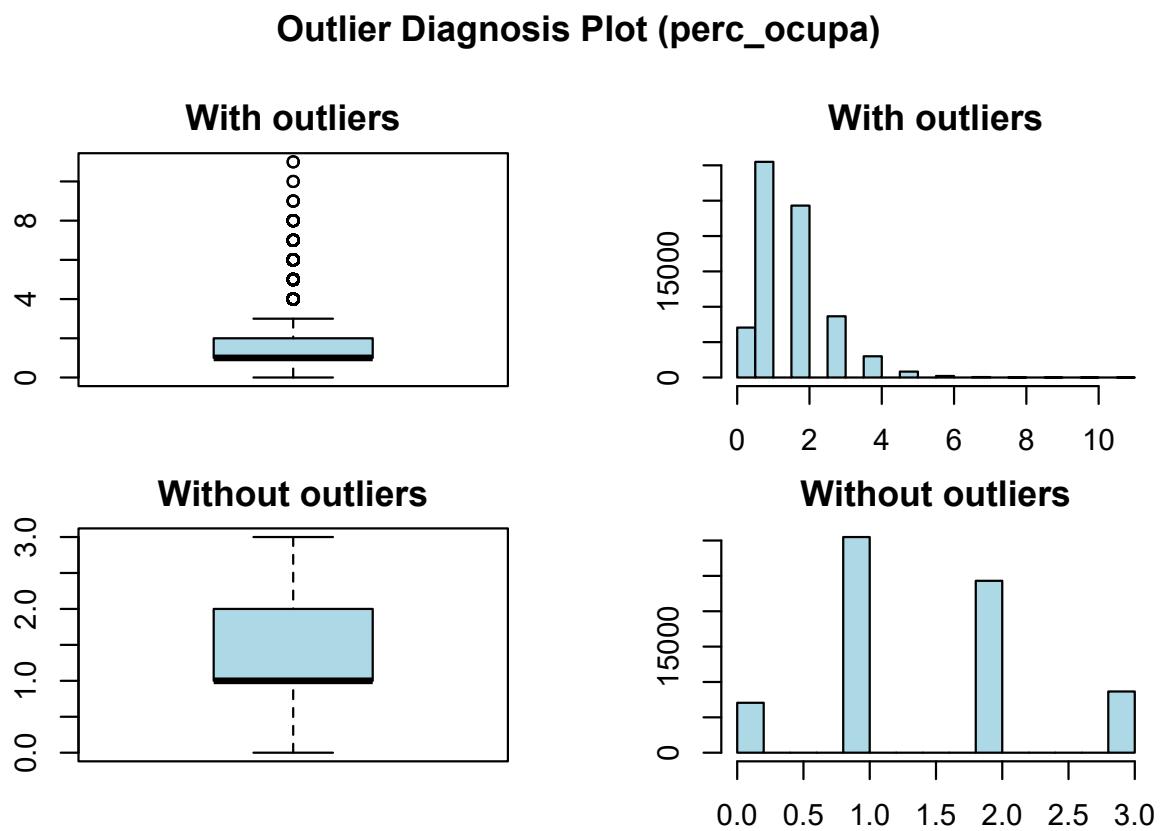


Figure 2.83: Distribution of perc_ocupa

variable : aceites

Table 2.85: Outliers information of aceites

Measures	Values
Outliers count	4,033.00
Outliers ratio (%)	5.40
Mean of outliers	897.46
Mean with outliers	124.79
Mean without outliers	80.66

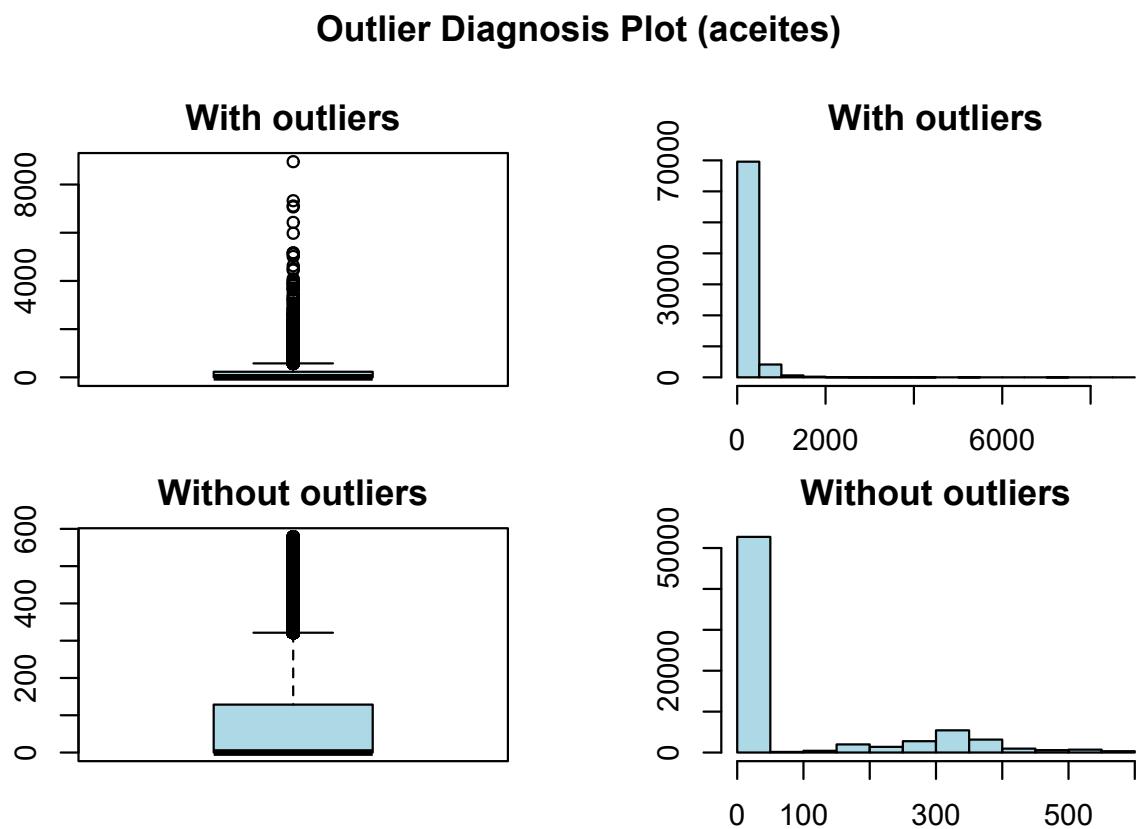


Figure 2.84: Distribution of aceites

```
variable : ingrab
```

Table 2.86: Outliers information of ingrab

Measures	Values
Outliers count	3,932.00
Outliers ratio (%)	5.27
Mean of outliers	136,853.34
Mean with outliers	30,839.53
Mean without outliers	24,944.79

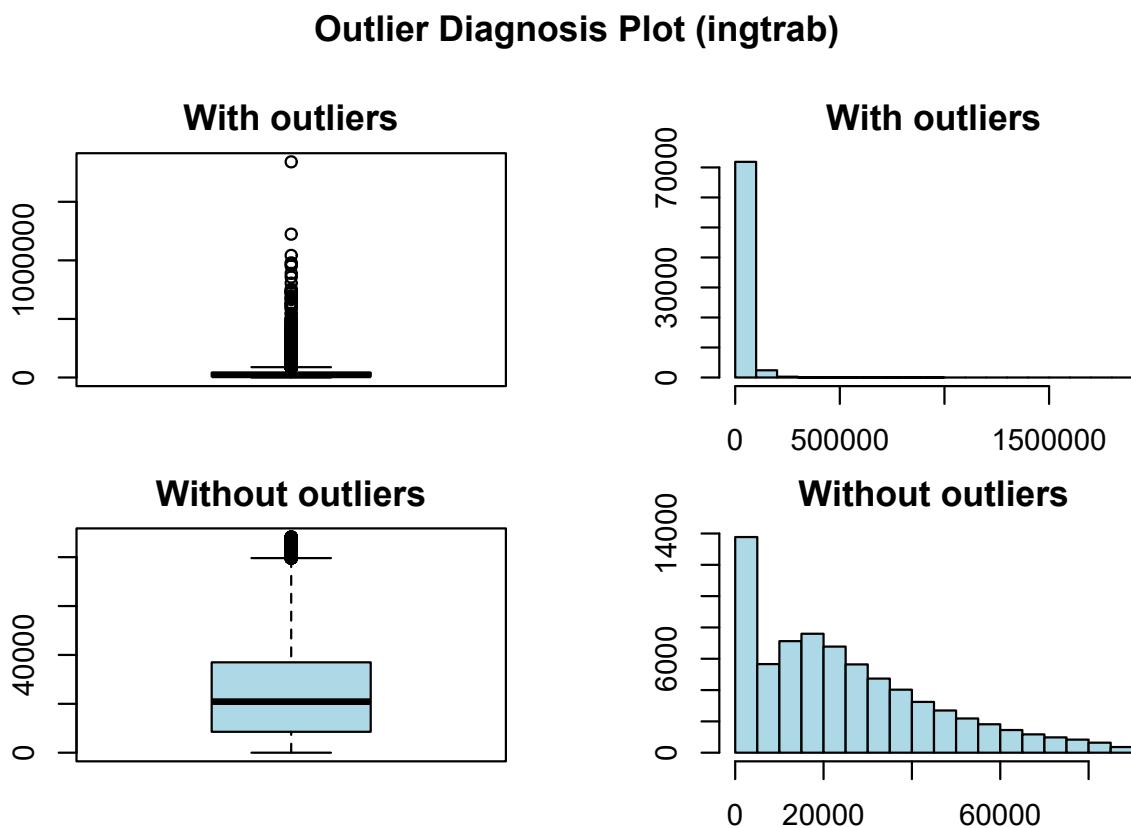


Figure 2.85: Distribution of ingrab

variable : tabaco

Table 2.87: Outliers information of tabaco

Measures	Values
Outliers count	3,827.00
Outliers ratio (%)	5.13
Mean of outliers	1,107.60
Mean with outliers	56.78
Mean without outliers	0.00

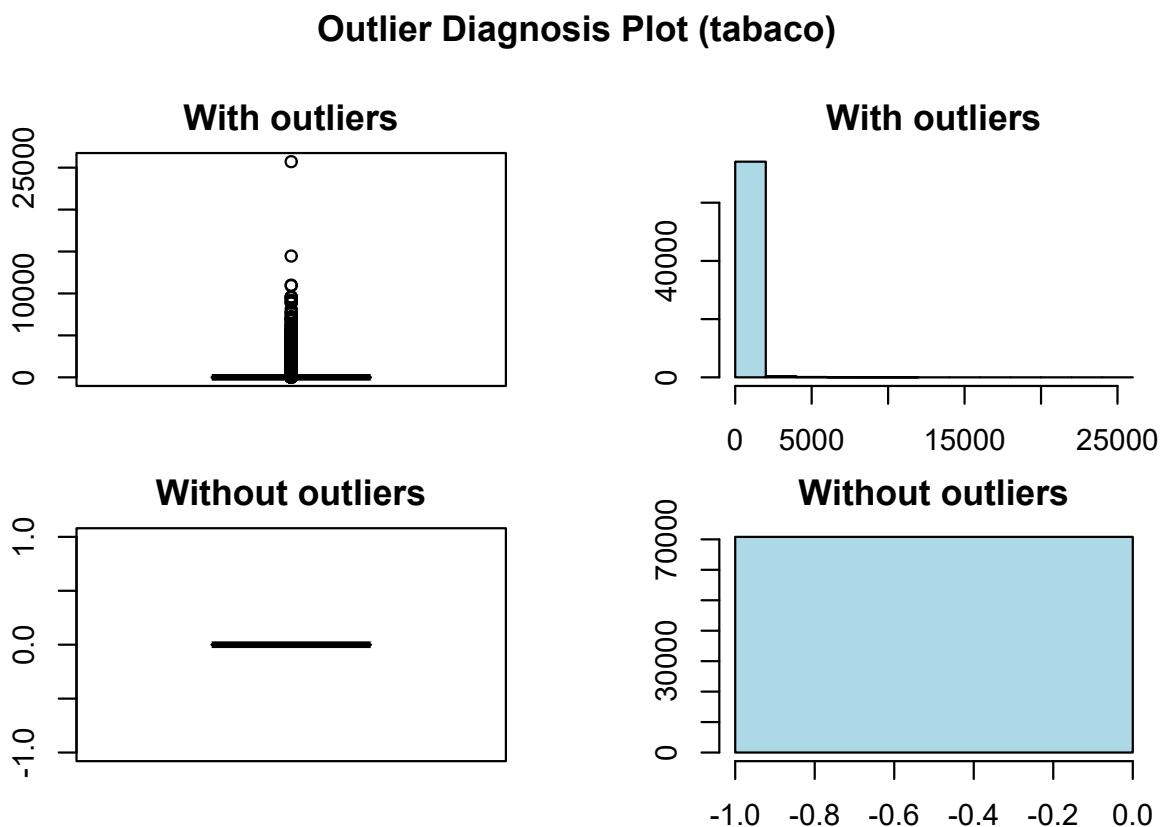


Figure 2.86: Distribution of tabaco

variable : tuberculo

Table 2.88: Outliers information of tuberculo

Measures	Values
Outliers count	3,804.00
Outliers ratio (%)	5.10
Mean of outliers	847.12
Mean with outliers	142.09
Mean without outliers	104.23

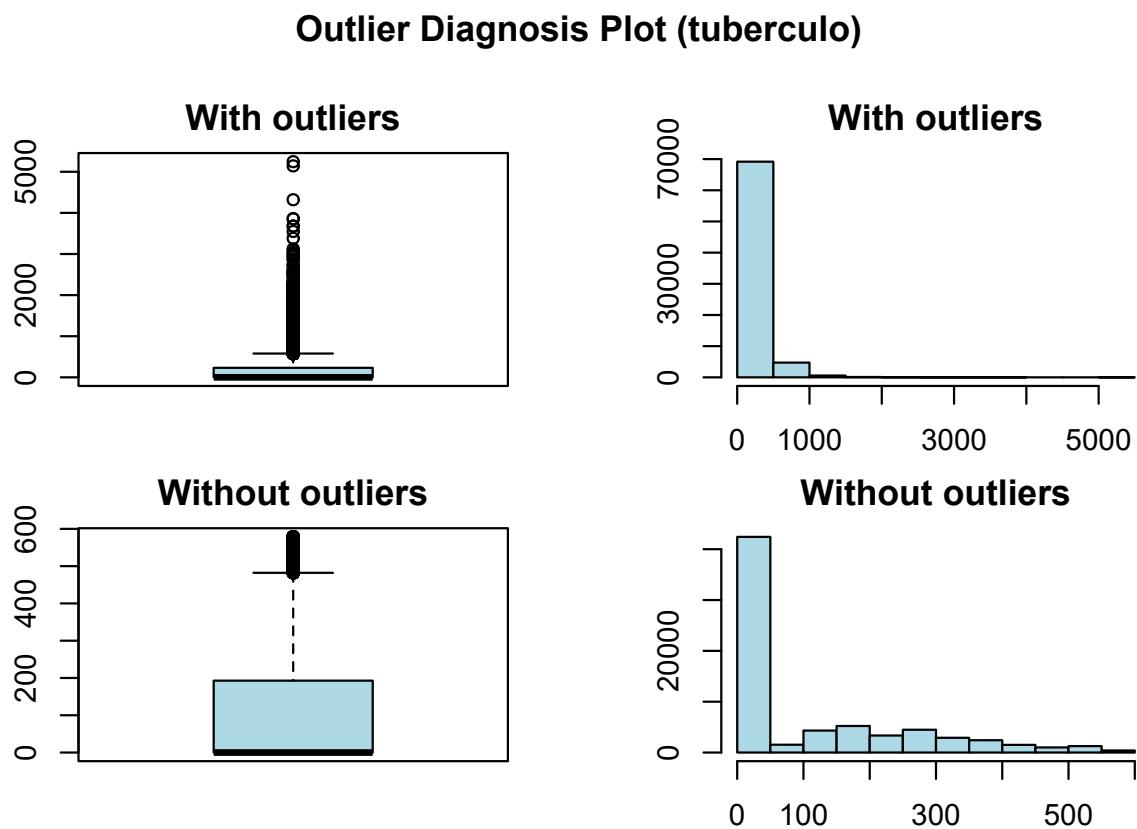


Figure 2.87: Distribution of tuberculo

variable : comunica

Table 2.89: Outliers information of comunica

Measures	Values
Outliers count	3,706.00
Outliers ratio (%)	4.96
Mean of outliers	6,795.06
Mean with outliers	1,227.03
Mean without outliers	936.16

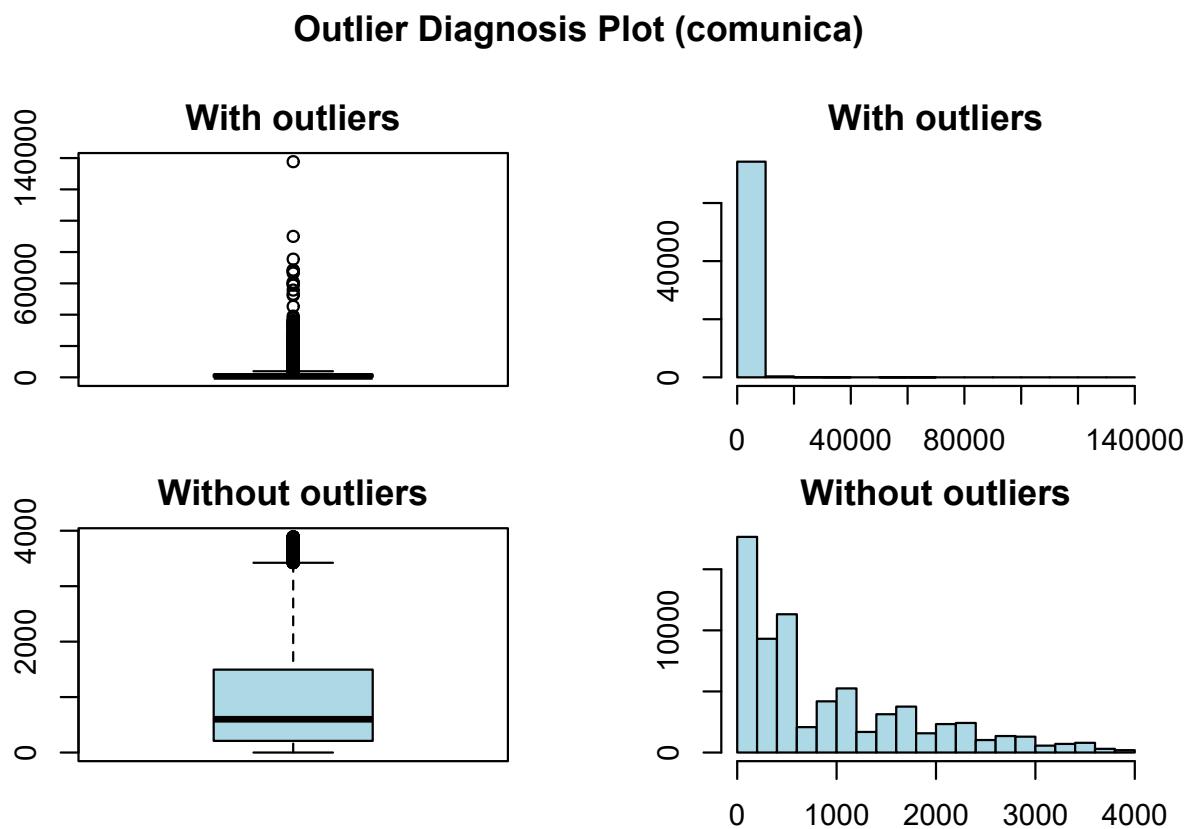


Figure 2.88: Distribution of comunica

variable : bebidas

Table 2.90: Outliers information of bebidas

Measures	Values
Outliers count	3,547.00
Outliers ratio (%)	4.75
Mean of outliers	4,160.27
Mean with outliers	820.45
Mean without outliers	653.84

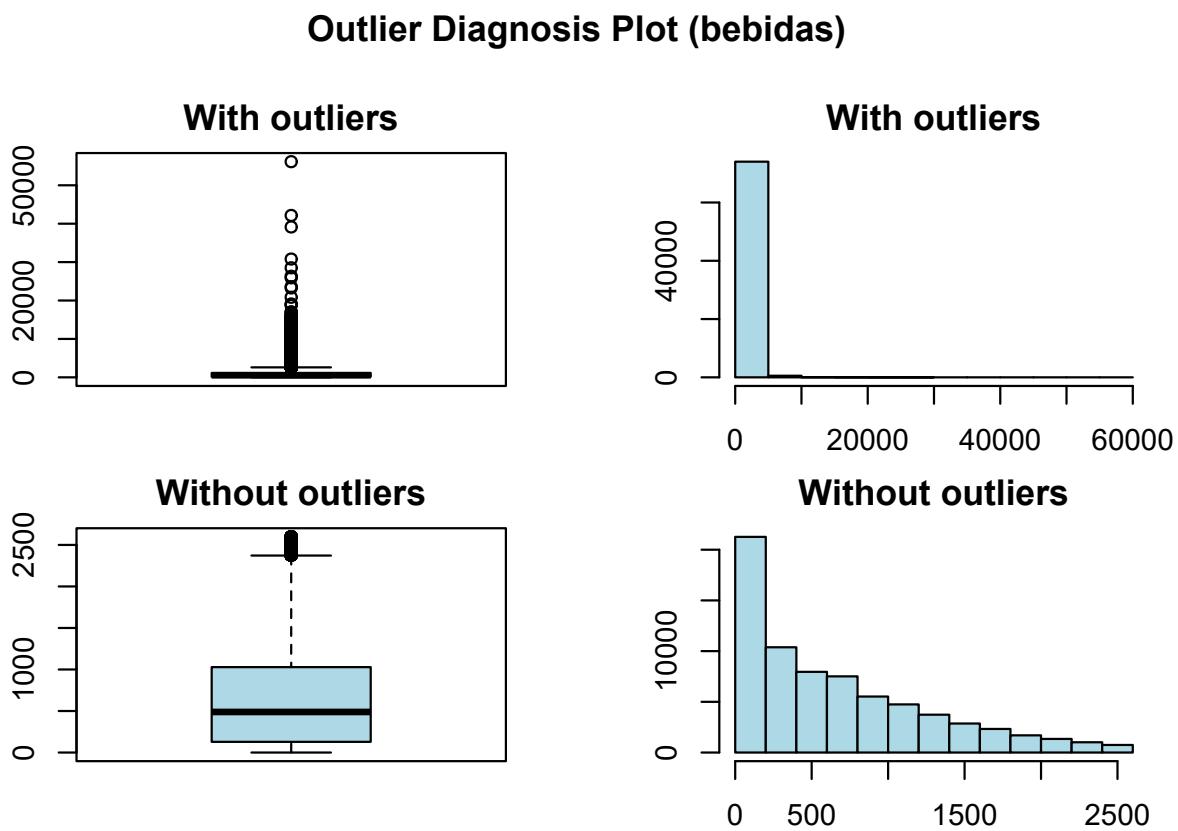


Figure 2.89: Distribution of bebidas

variable : agua

Table 2.91: Outliers information of agua

Measures	Values
Outliers count	3,534.00
Outliers ratio (%)	4.73
Mean of outliers	1,990.29
Mean with outliers	316.41
Mean without outliers	233.22

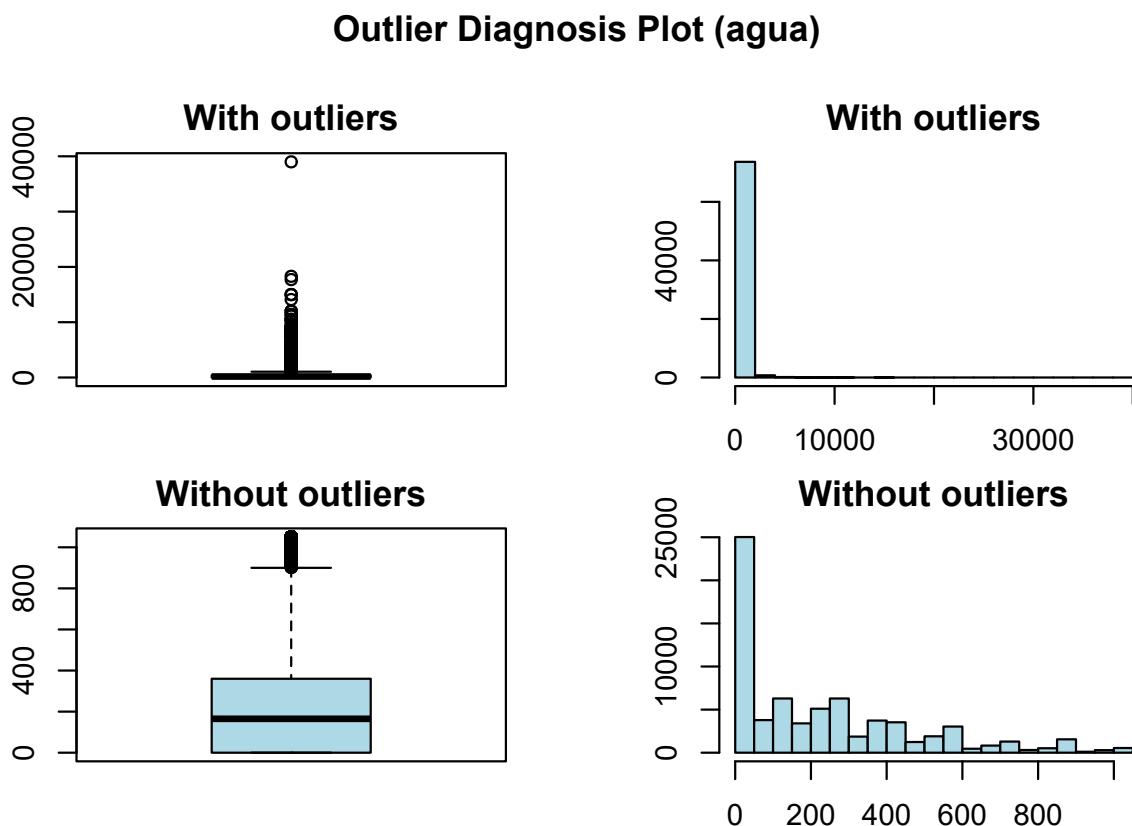


Figure 2.90: Distribution of agua

variable : leche

Table 2.92: Outliers information of leche

Measures	Values
Outliers count	3,492.00
Outliers ratio (%)	4.68
Mean of outliers	3,934.75
Mean with outliers	828.31
Mean without outliers	675.86

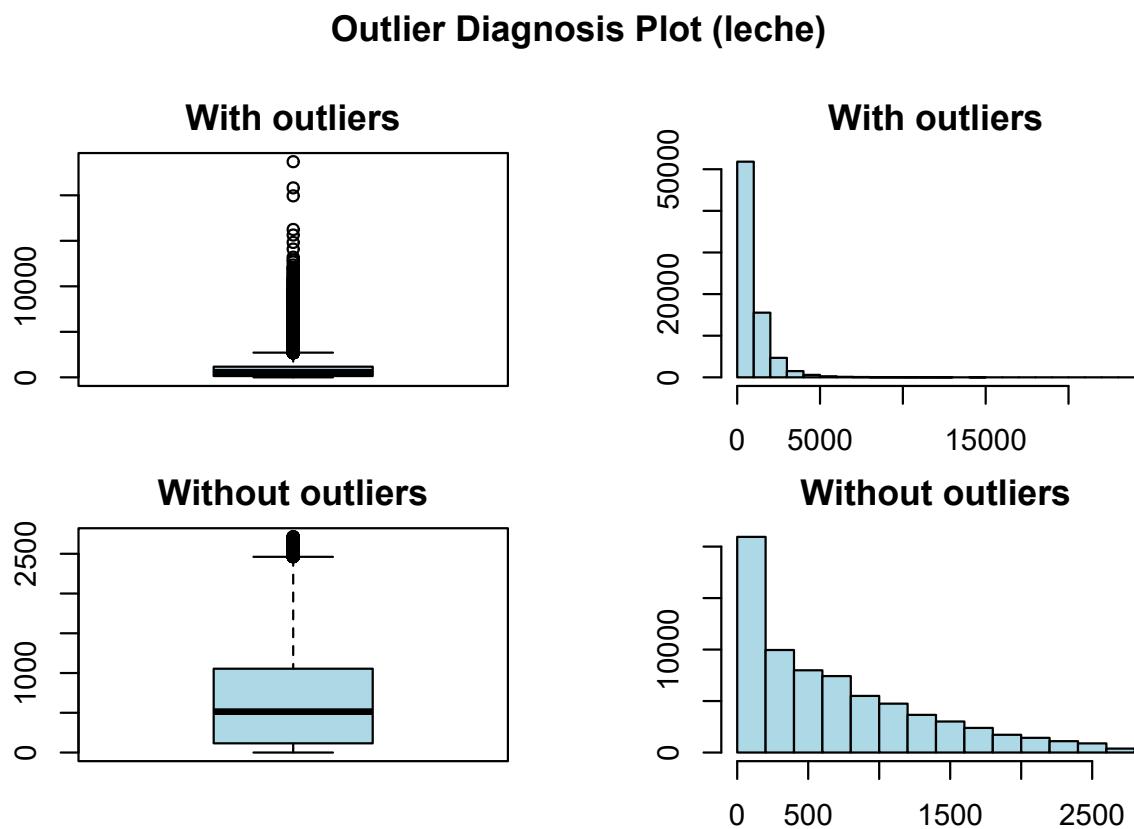


Figure 2.91: Distribution of leche

variable : servicio

Table 2.93: Outliers information of servicio

Measures	Values
Outliers count	3,475.00
Outliers ratio (%)	4.66
Mean of outliers	2,599.45
Mean with outliers	121.01
Mean without outliers	0.00



Figure 2.92: Distribution of servicio

```
variable : arrenda
```

Table 2.94: Outliers information of arrenda

Measures	Values
Outliers count	3,367.00
Outliers ratio (%)	4.51
Mean of outliers	11,561.09
Mean with outliers	521.47
Mean without outliers	0.00

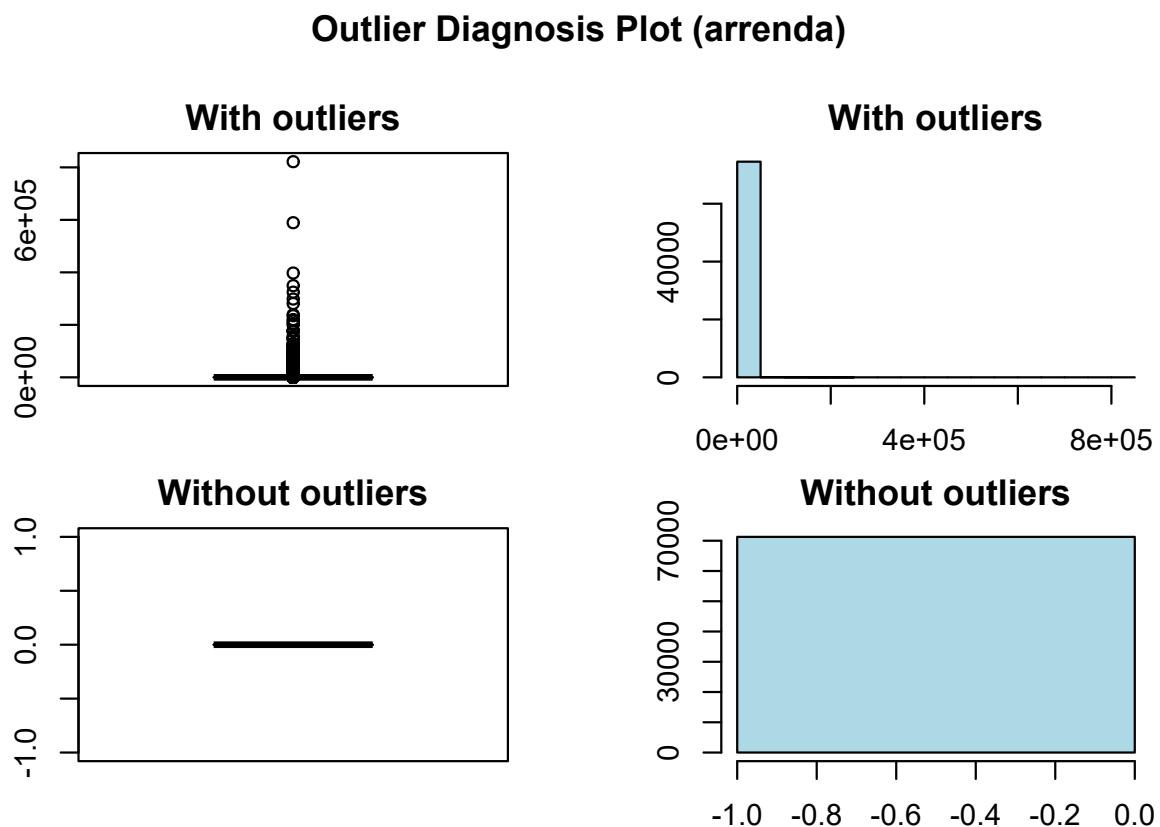


Figure 2.93: Distribution of arrenda

variable : trabajo

Table 2.95: Outliers information of trabajo

Measures	Values
Outliers count	3,304.00
Outliers ratio (%)	4.43
Mean of outliers	133,047.56
Mean with outliers	25,844.74
Mean without outliers	20,880.02

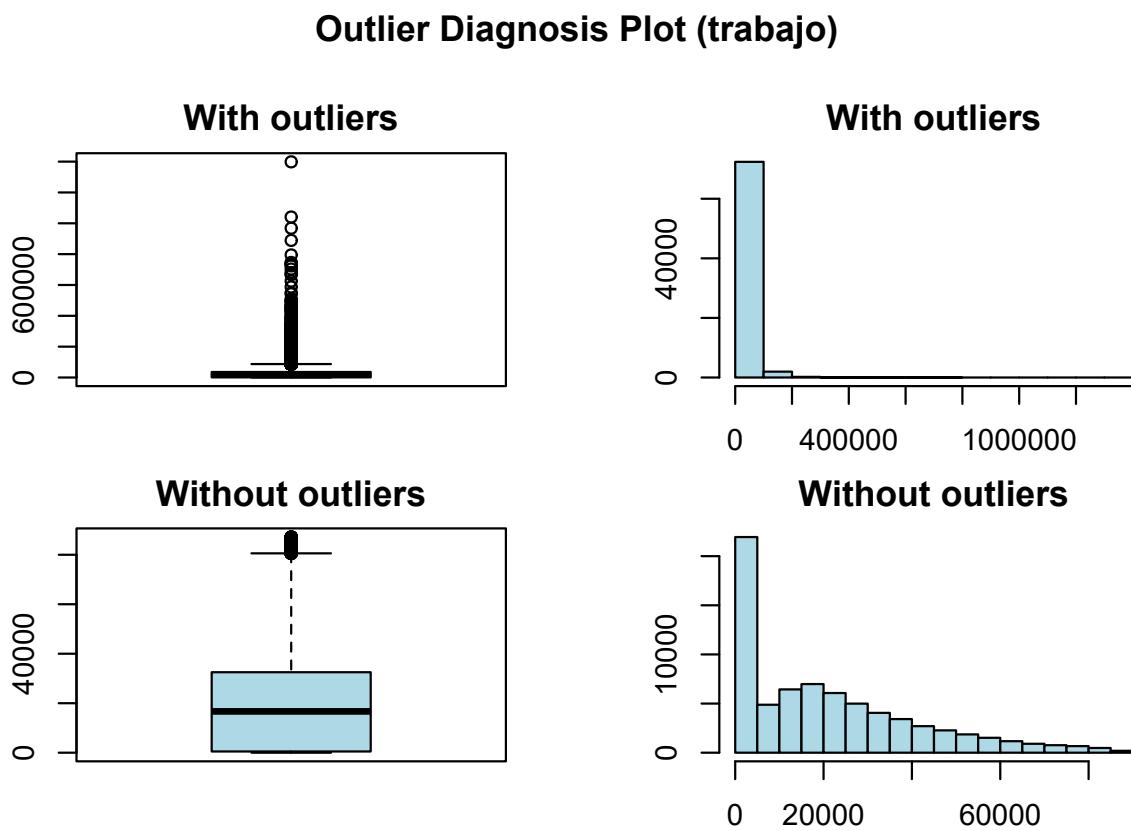


Figure 2.94: Distribution of trabajo

variable : alimentos

Table 2.96: Outliers information of alimentos

Measures	Values
Outliers count	3,113.00
Outliers ratio (%)	4.17
Mean of outliers	34,051.11
Mean with outliers	10,395.56
Mean without outliers	9,366.12

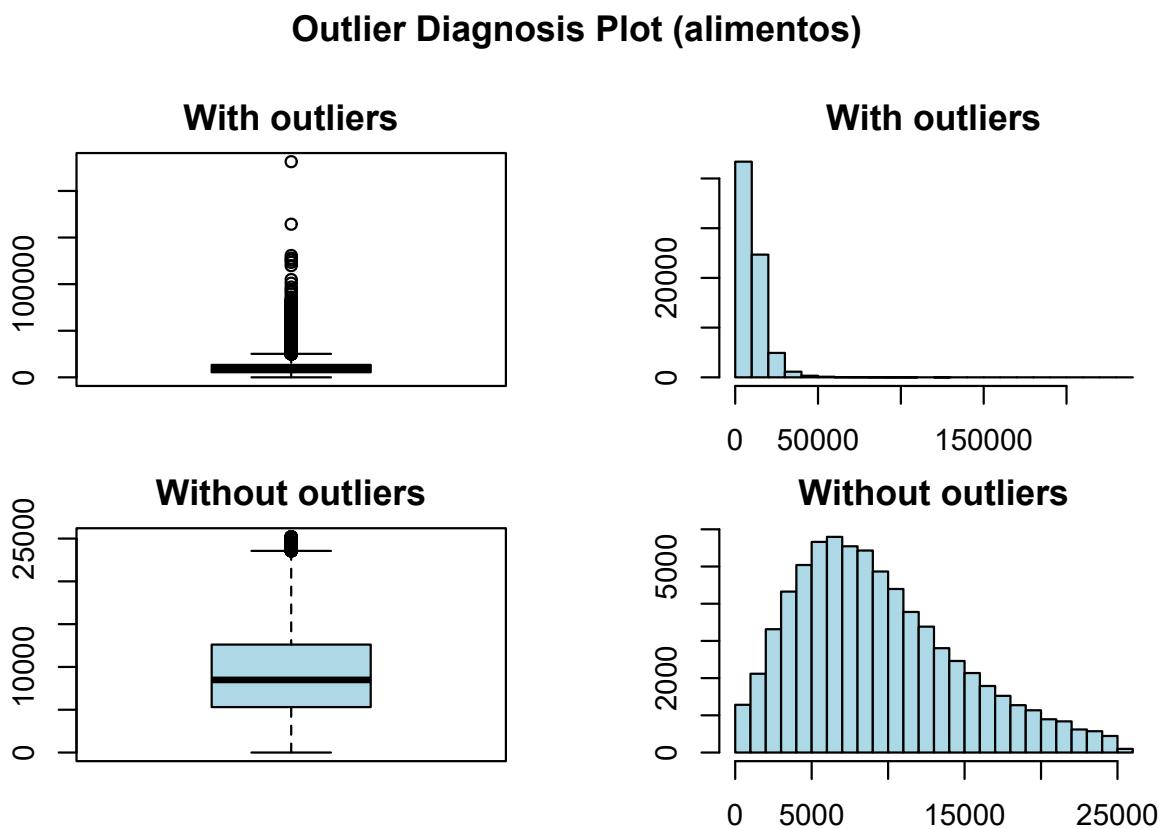


Figure 2.95: Distribution of alimentos

```
variable : adqui_veh1
```

Table 2.97: Outliers information of adqui_veh1

Measures	Values
Outliers count	3,054.00
Outliers ratio (%)	4.09
Mean of outliers	19,519.72
Mean with outliers	798.60
Mean without outliers	0.00

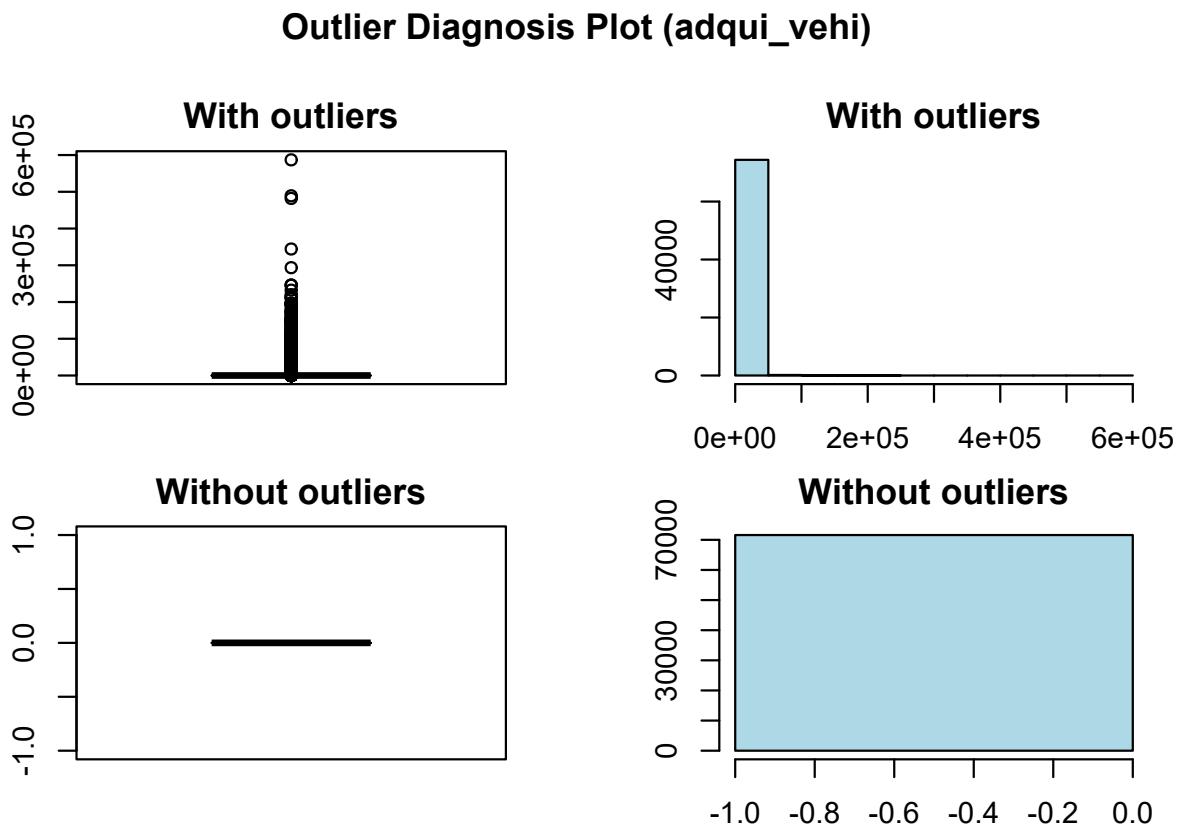


Figure 2.96: Distribution of adqui_veh1

variable : sueldos

Table 2.98: Outliers information of sueldos

Measures	Values
Outliers count	2,995.00
Outliers ratio (%)	4.01
Mean of outliers	115,843.52
Mean with outliers	22,095.31
Mean without outliers	18,176.71

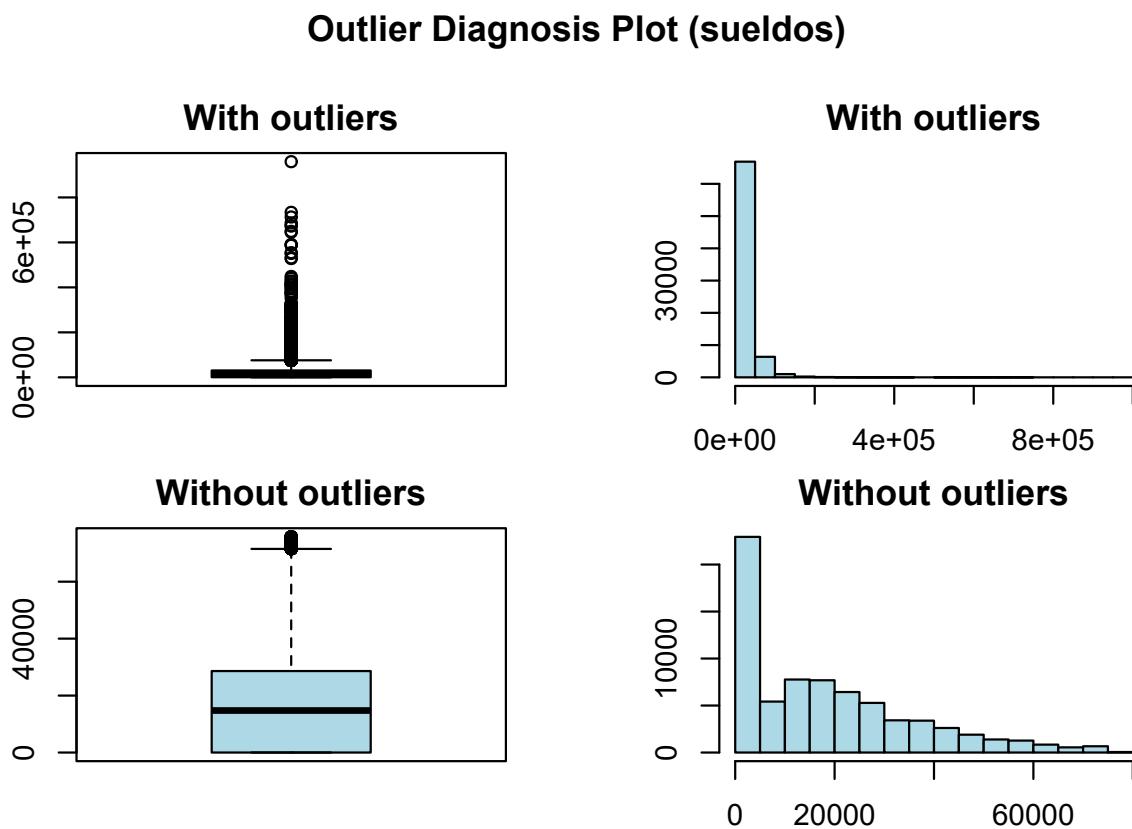


Figure 2.97: Distribution of sueldos

variable : utilidad

Table 2.99: Outliers information of utilidad

Measures	Values
Outliers count	2,989.00
Outliers ratio (%)	4.00
Mean of outliers	56,598.46
Mean with outliers	2,266.30
Mean without outliers	0.00

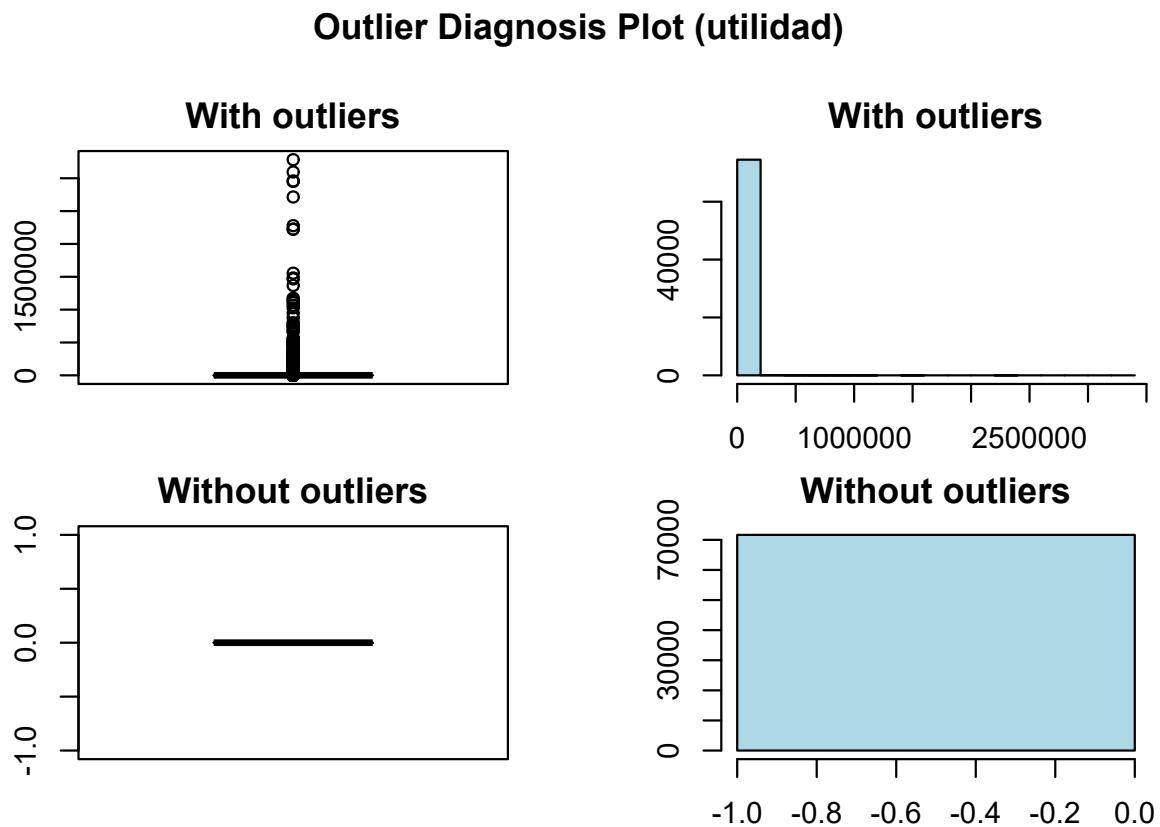


Figure 2.98: Distribution of utilidad

variable : becas

Table 2.100: Outliers information of becas

Measures	Values
Outliers count	2,921.00
Outliers ratio (%)	3.91
Mean of outliers	2,393.36
Mean with outliers	93.65
Mean without outliers	0.00

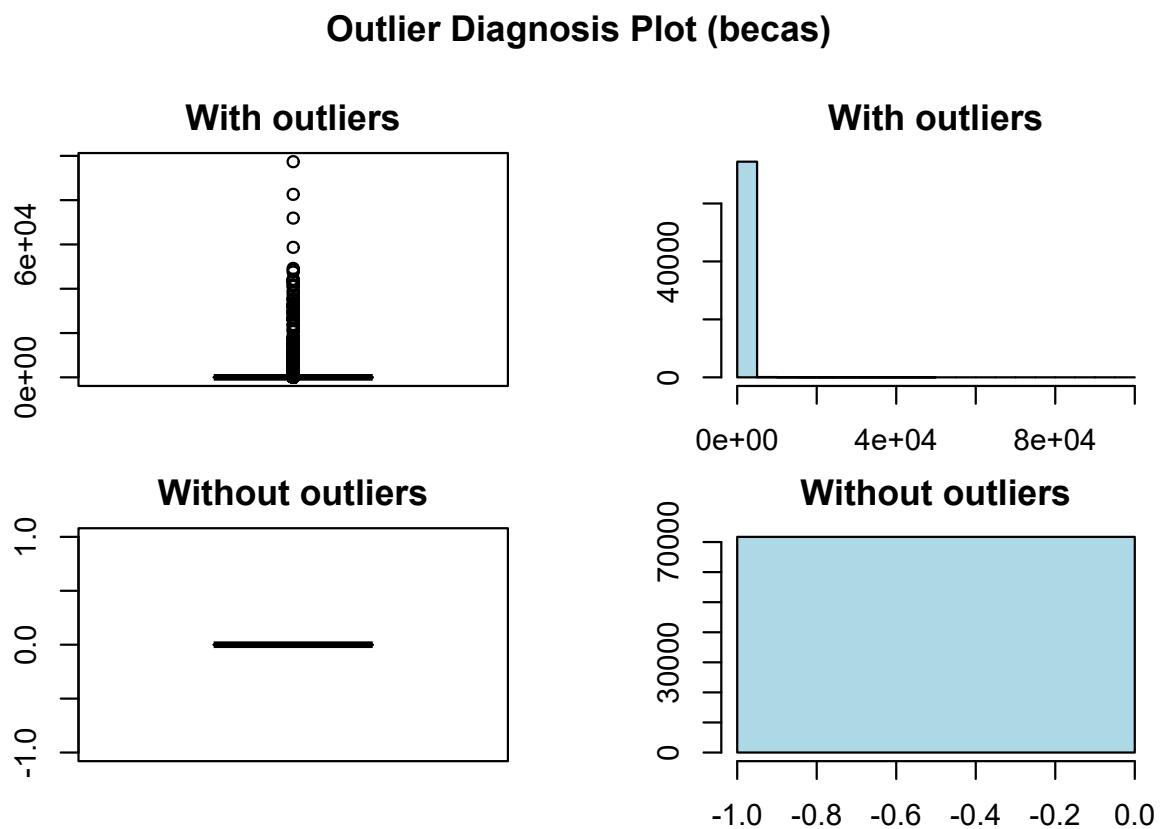


Figure 2.99: Distribution of becas

variable : energia

Table 2.101: Outliers information of energia

Measures	Values
Outliers count	2,769.00
Outliers ratio (%)	3.71
Mean of outliers	6,190.47
Mean with outliers	1,349.01
Mean without outliers	1,162.50

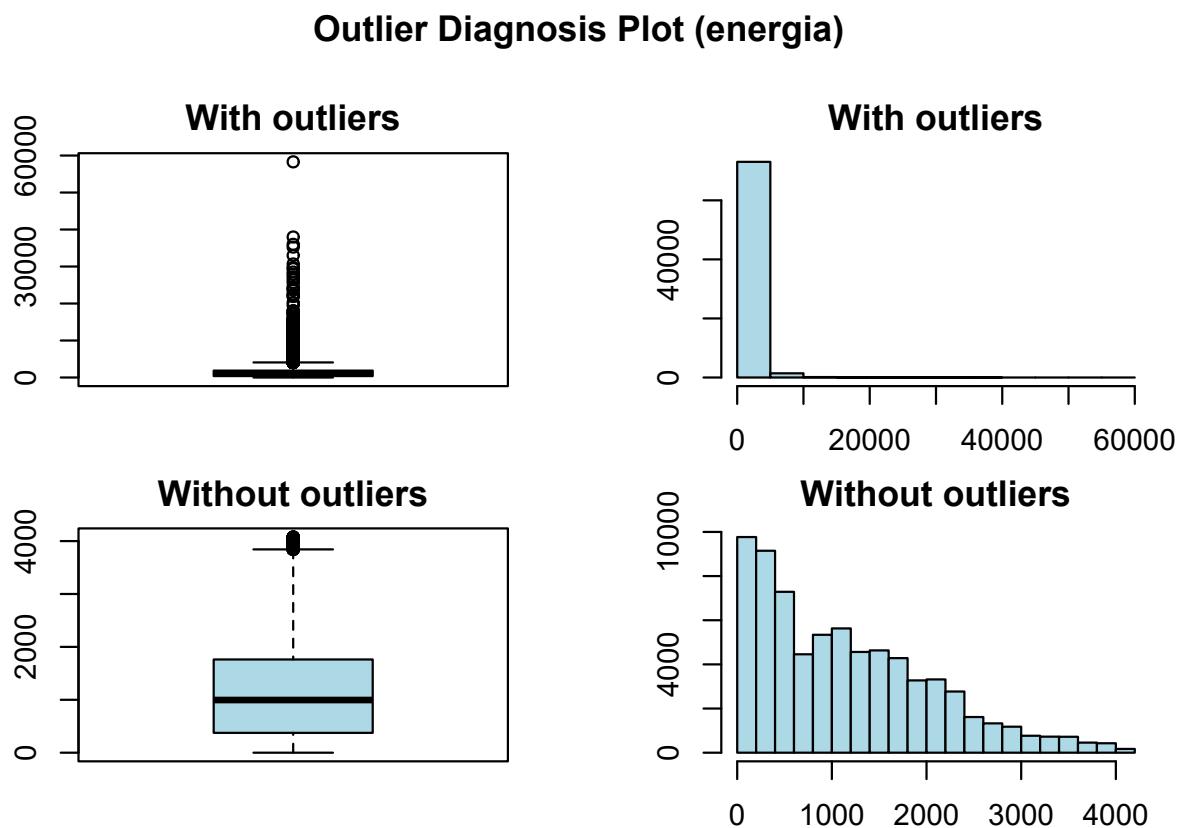


Figure 2.100: Distribution of energia

```
variable : carnes
```

Table 2.102: Outliers information of carnes

Measures	Values
Outliers count	2,725.00
Outliers ratio (%)	3.65
Mean of outliers	8,072.39
Mean with outliers	1,768.78
Mean without outliers	1,529.95

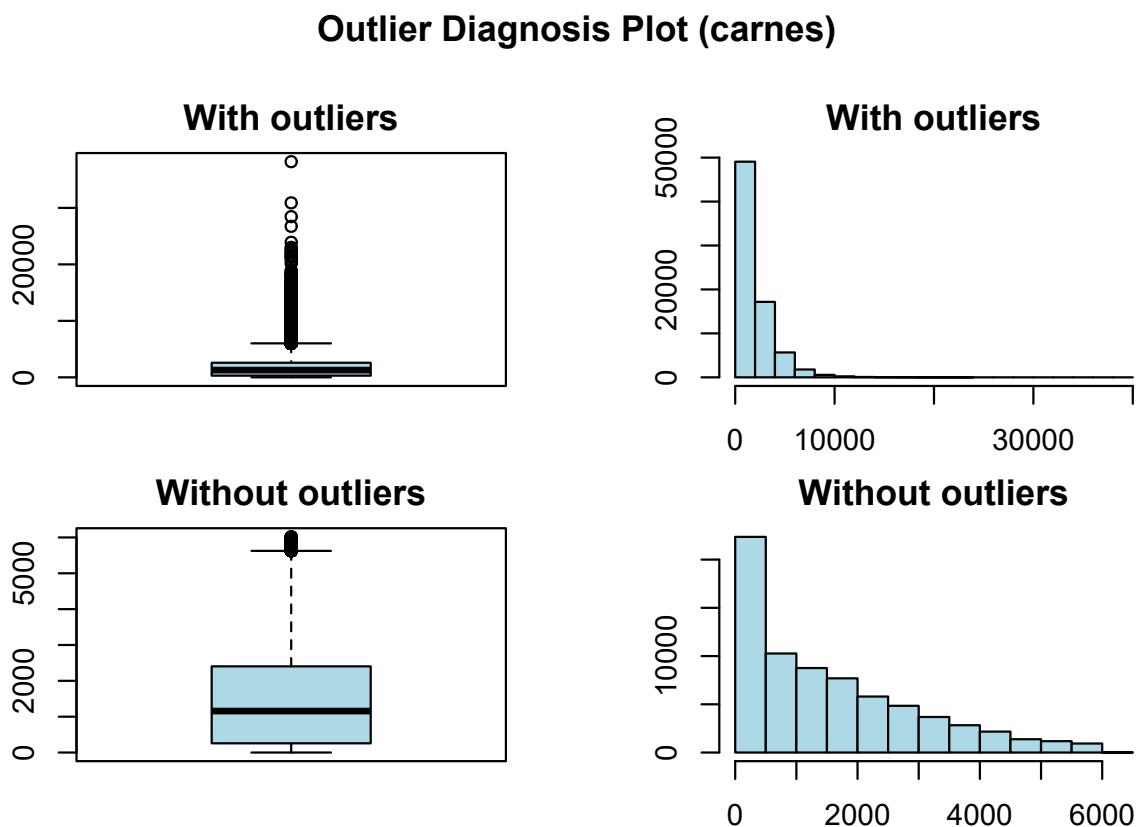


Figure 2.101: Distribution of carnes

variable : ali_dentro

Table 2.103: Outliers information of ali_dentro

Measures	Values
Outliers count	2,398.00
Outliers ratio (%)	3.21
Mean of outliers	26,337.97
Mean with outliers	8,273.96
Mean without outliers	7,674.40

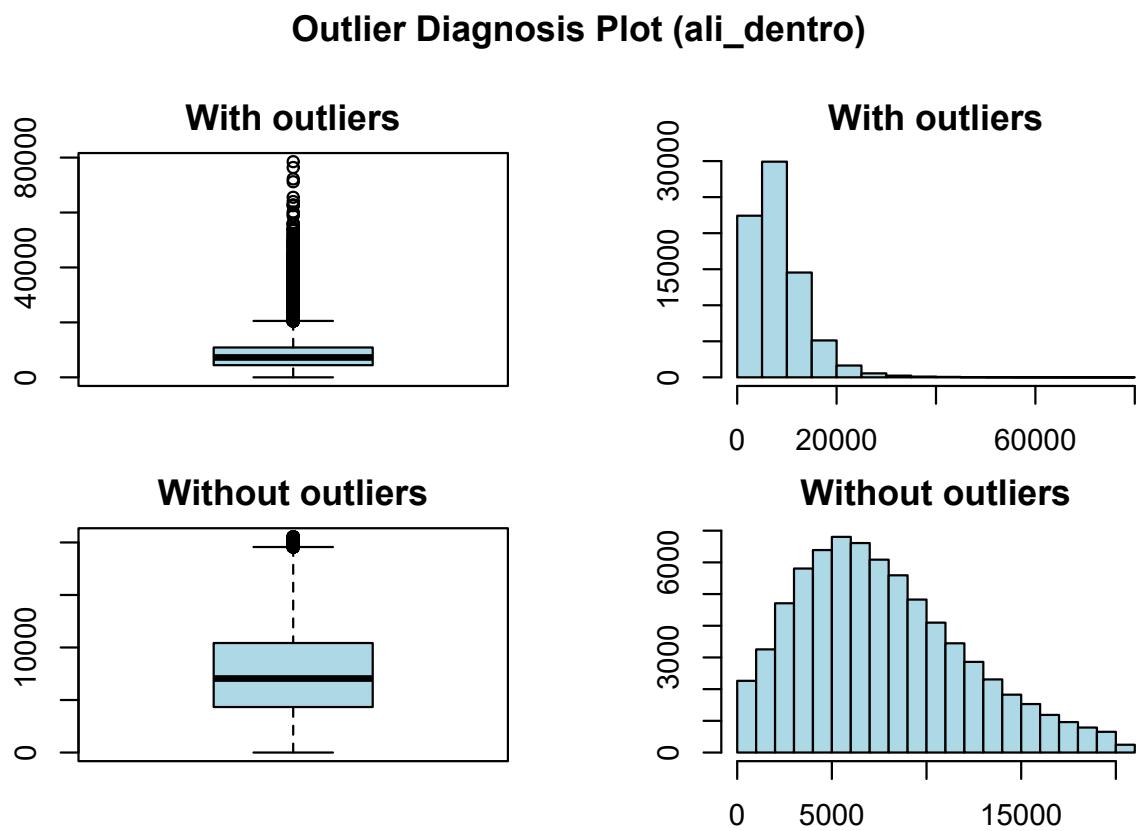


Figure 2.102: Distribution of ali_dentro

variable : cereales

Table 2.104: Outliers information of cereales

Measures	Values
Outliers count	2,353.00
Outliers ratio (%)	3.15
Mean of outliers	5,238.42
Mean with outliers	1,532.57
Mean without outliers	1,411.96

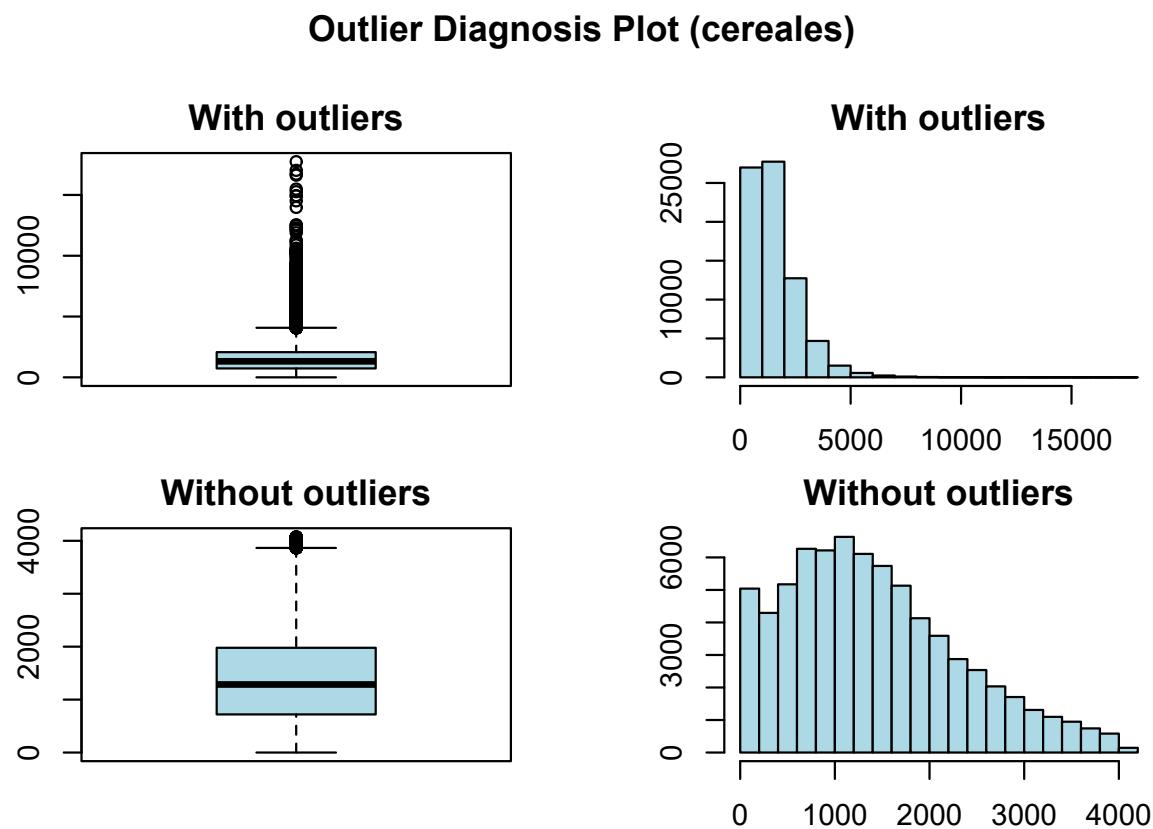


Figure 2.103: Distribution of cereales

variable : prest_terc

Table 2.105: Outliers information of prest_terc

Measures	Values
Outliers count	2,327.00
Outliers ratio (%)	3.12
Mean of outliers	2,627.67
Mean with outliers	81.91
Mean without outliers	0.00

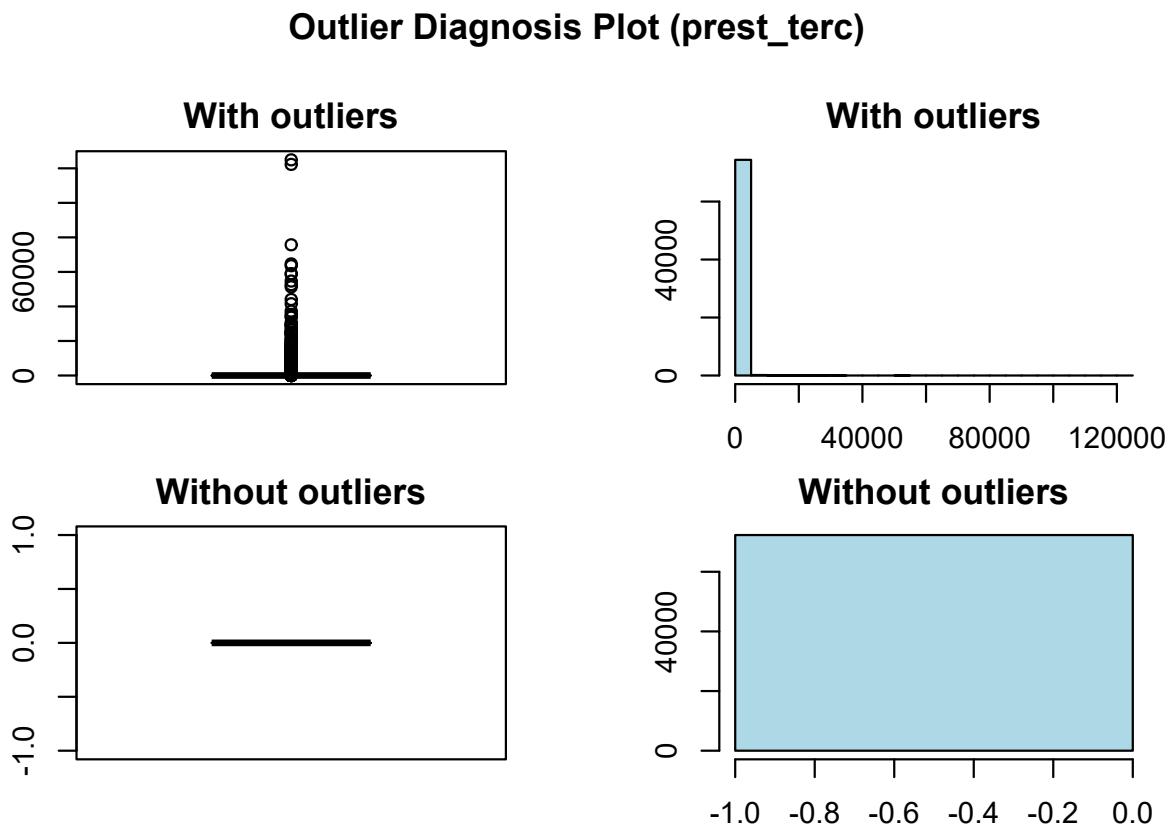


Figure 2.104: Distribution of prest_terc

variable : verduras

Table 2.106: Outliers information of verduras

Measures	Values
Outliers count	2,284.00
Outliers ratio (%)	3.06
Mean of outliers	3,937.41
Mean with outliers	933.67
Mean without outliers	838.86

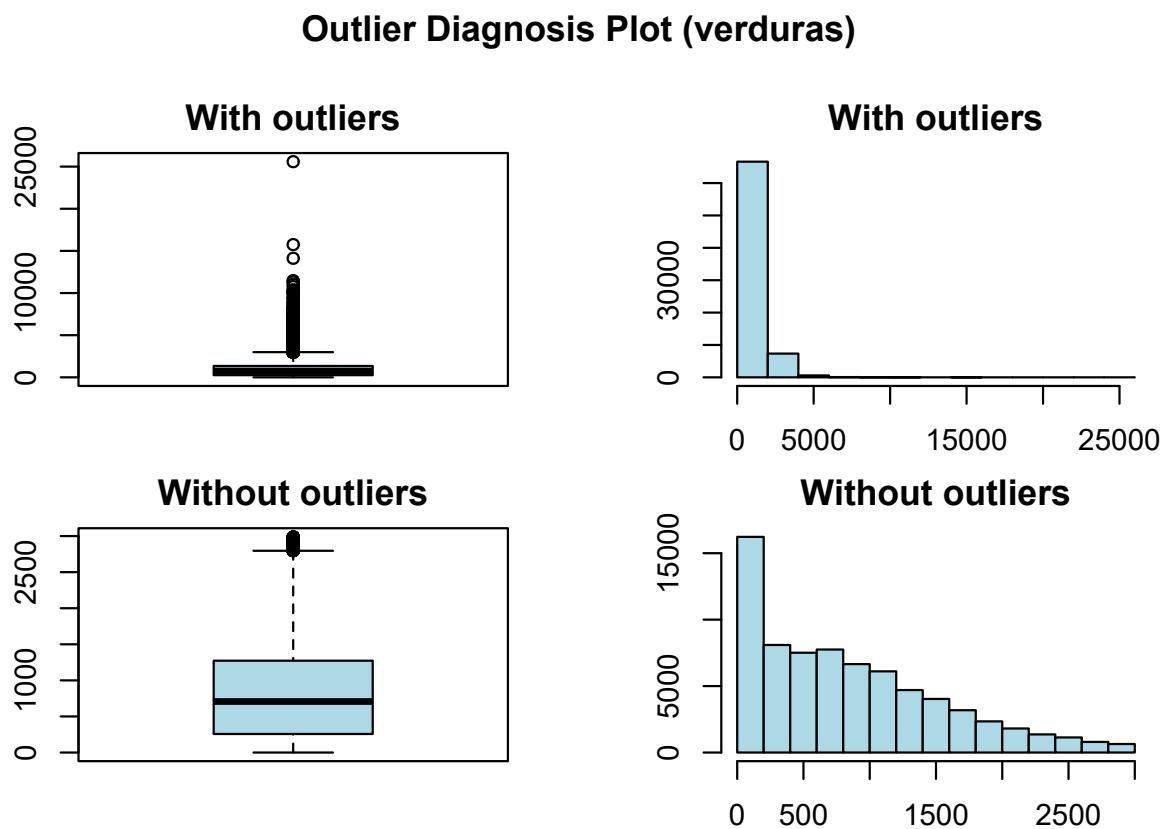


Figure 2.105: Distribution of verduras

variable : hospital

Table 2.107: Outliers information of hospital

Measures	Values
Outliers count	1,945.00
Outliers ratio (%)	2.61
Mean of outliers	3,768.00
Mean with outliers	98.18
Mean without outliers	0.00

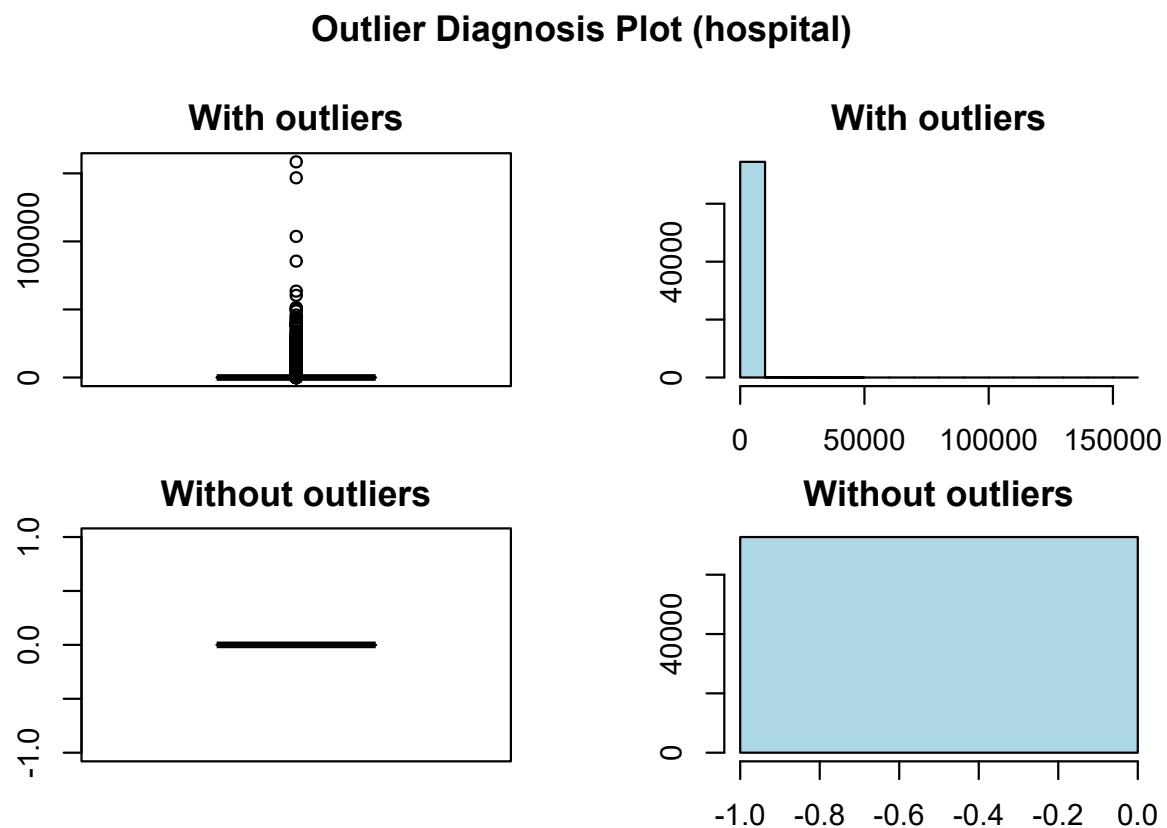


Figure 2.106: Distribution of hospital

```
variable : otros_ing
```

Table 2.108: Outliers information of otros_ing

Measures	Values
Outliers count	1,668.00
Outliers ratio (%)	2.23
Mean of outliers	1,819.62
Mean with outliers	40.66
Mean without outliers	0.00

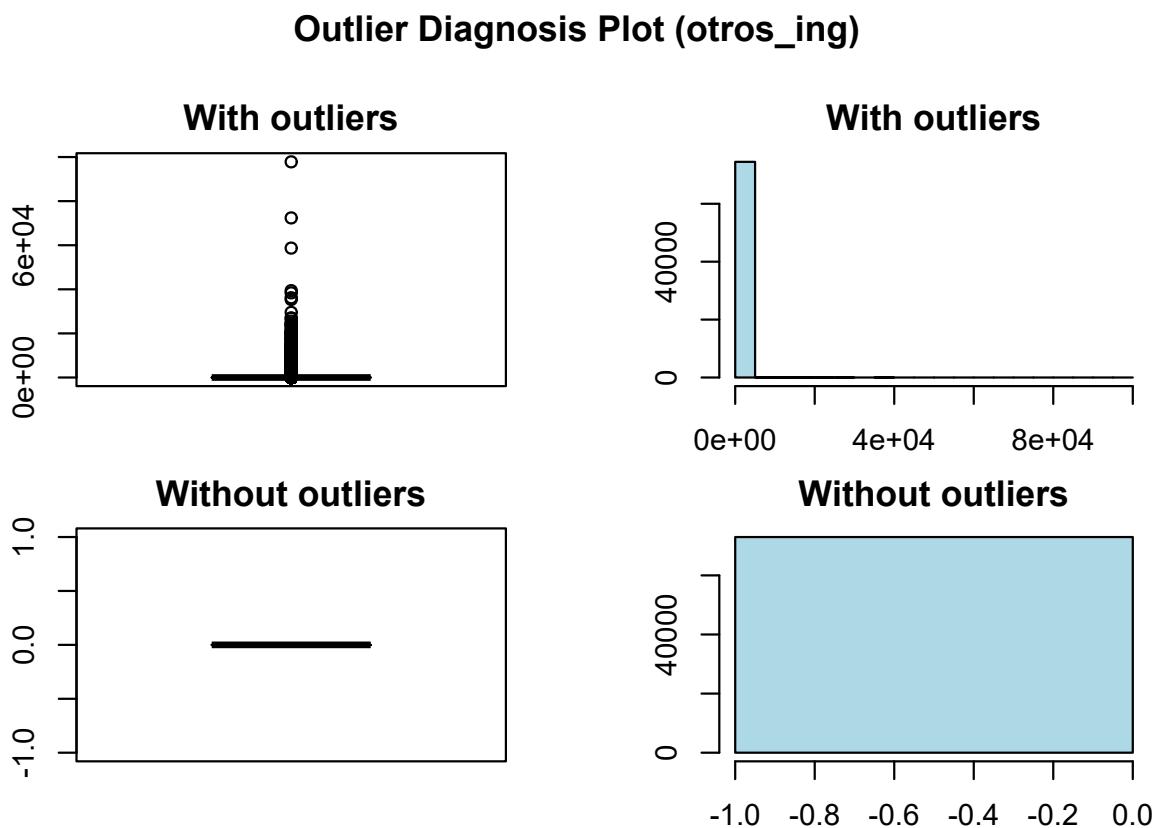


Figure 2.107: Distribution of otros_ing

variable : huevo

Table 2.109: Outliers information of huevo

Measures	Values
Outliers count	1,664.00
Outliers ratio (%)	2.23
Mean of outliers	1,651.22
Mean with outliers	321.65
Mean without outliers	291.34

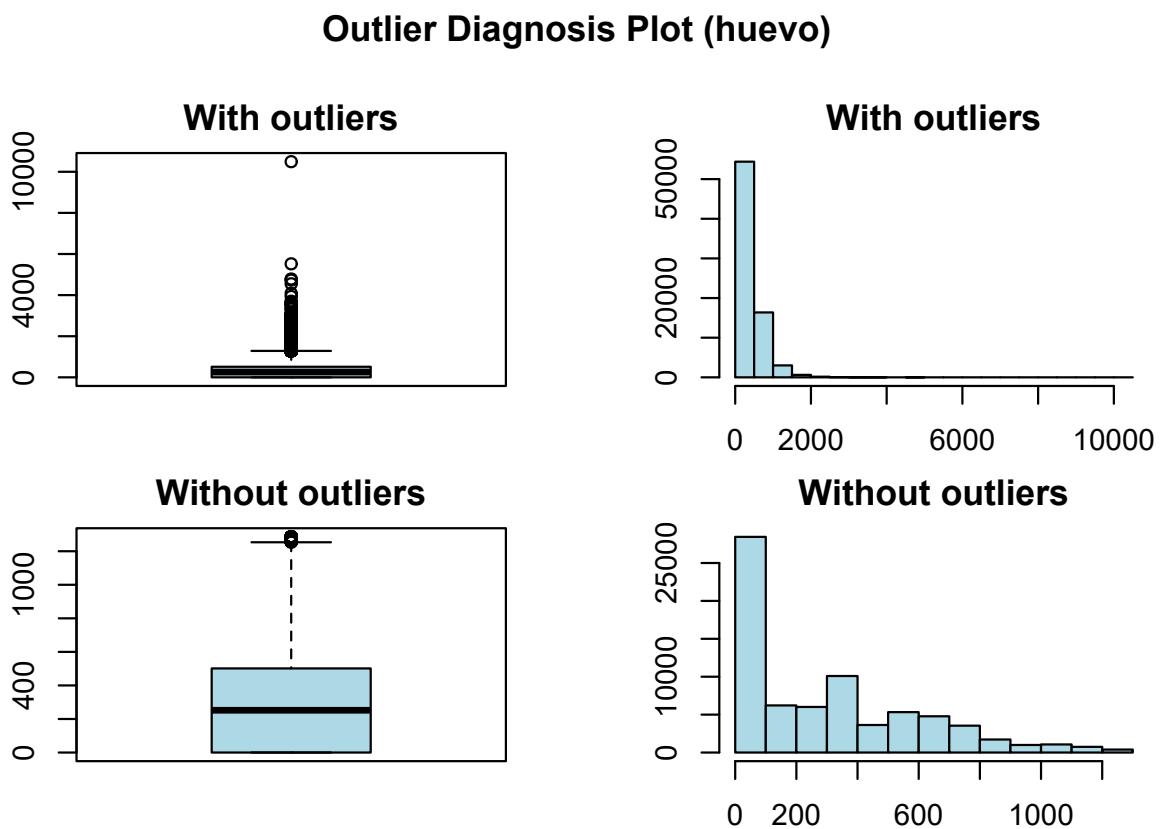


Figure 2.108: Distribution of huevo

variable : indemtrab

Table 2.110: Outliers information of indemtrab

Measures	Values
Outliers count	1,319.00
Outliers ratio (%)	1.77
Mean of outliers	6,668.58
Mean with outliers	117.83
Mean without outliers	0.00

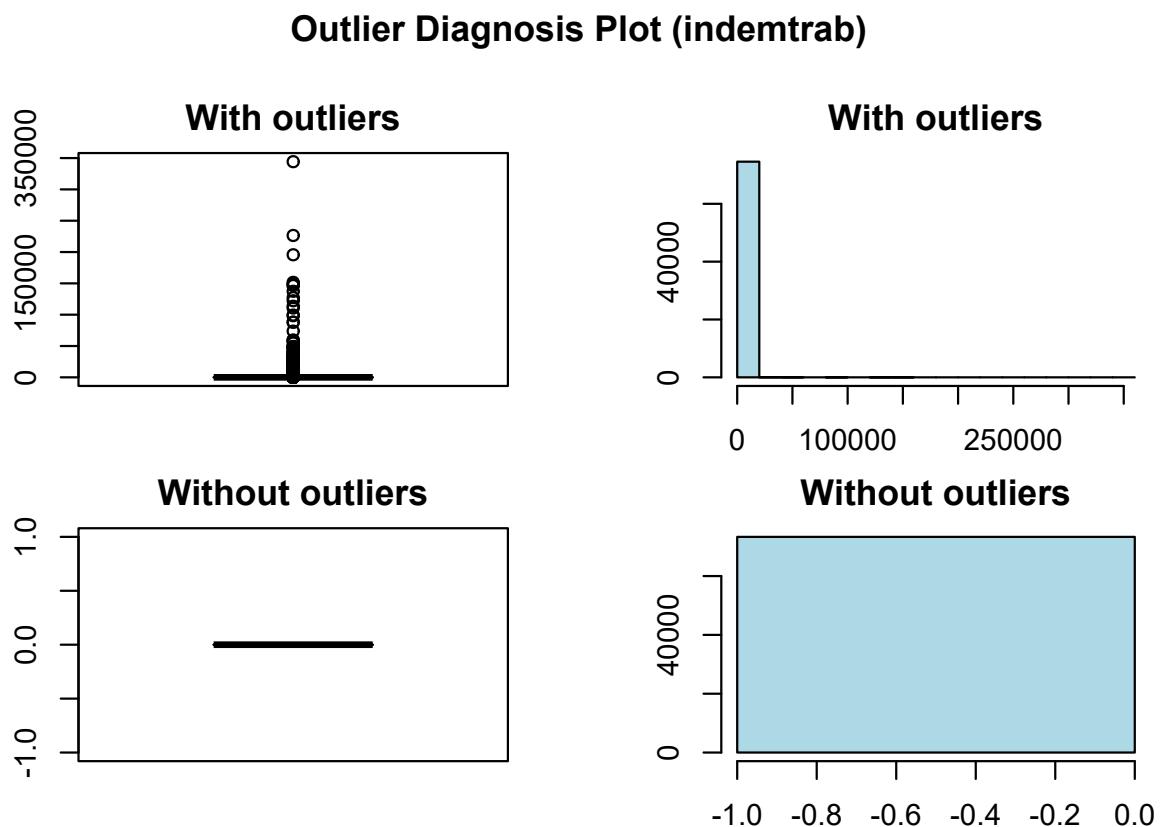


Figure 2.109: Distribution of indemtrab

variable : foliohog

Table 2.111: Outliers information of foliohog

Measures	Values
Outliers count	1,242.00
Outliers ratio (%)	1.66
Mean of outliers	2.17
Mean with outliers	1.02
Mean without outliers	1.00

Outlier Diagnosis Plot (foliohog)

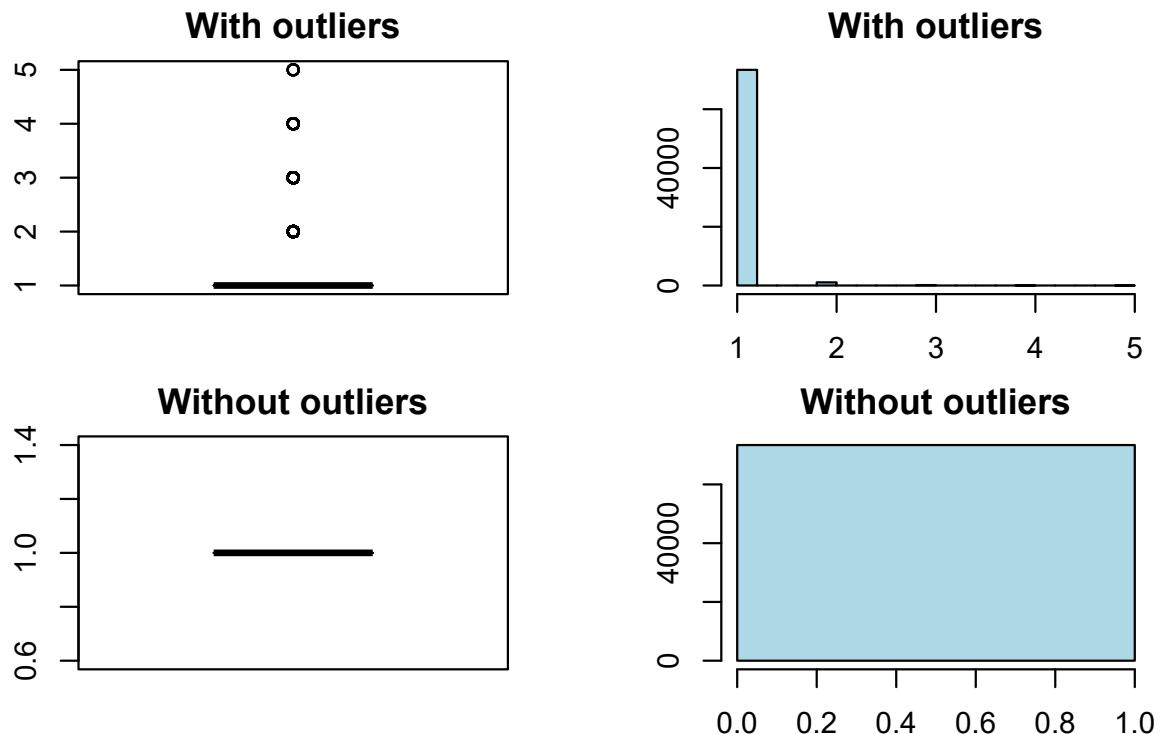


Figure 2.110: Distribution of foliohog

```
variable : percep_ing
```

Table 2.112: Outliers information of percep_ing

Measures	Values
Outliers count	788.00
Outliers ratio (%)	1.06
Mean of outliers	7.61
Mean with outliers	2.42
Mean without outliers	2.36

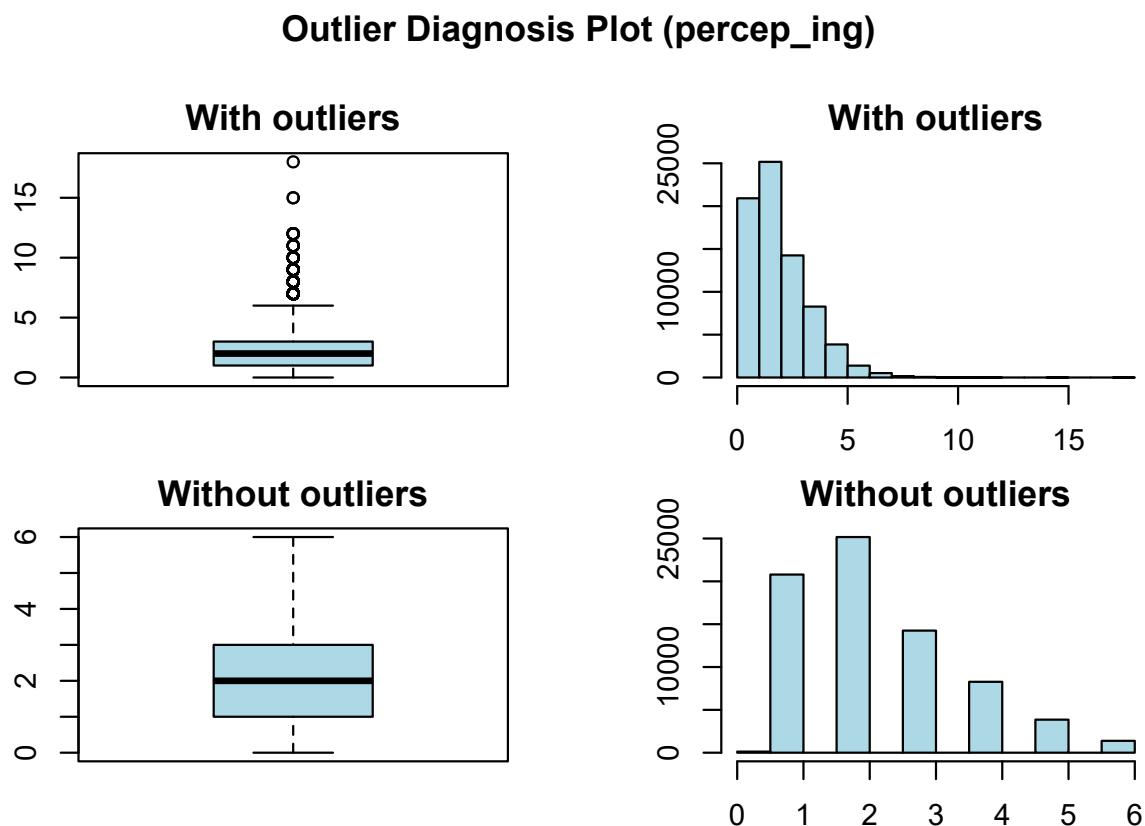


Figure 2.111: Distribution of percep_ing

variable : ero_nm_viv

Table 2.113: Outliers information of ero_nm_viv

Measures	Values
Outliers count	655.00
Outliers ratio (%)	0.88
Mean of outliers	3,459.88
Mean with outliers	30.36
Mean without outliers	0.00

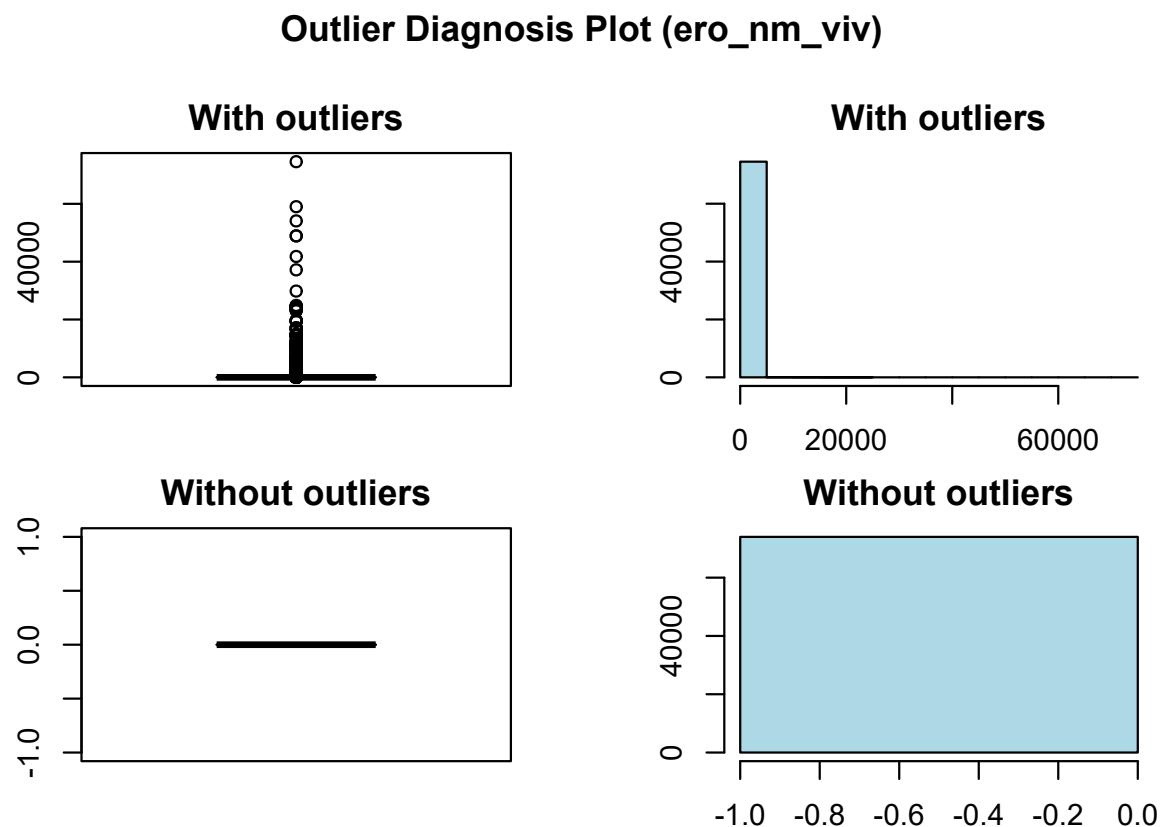


Figure 2.112: Distribution of ero_nm_viv

```
variable : tot_integ
```

Table 2.114: Outliers information of tot_integ

Measures	Values
Outliers count	549.00
Outliers ratio (%)	0.74
Mean of outliers	11.13
Mean with outliers	3.60
Mean without outliers	3.55

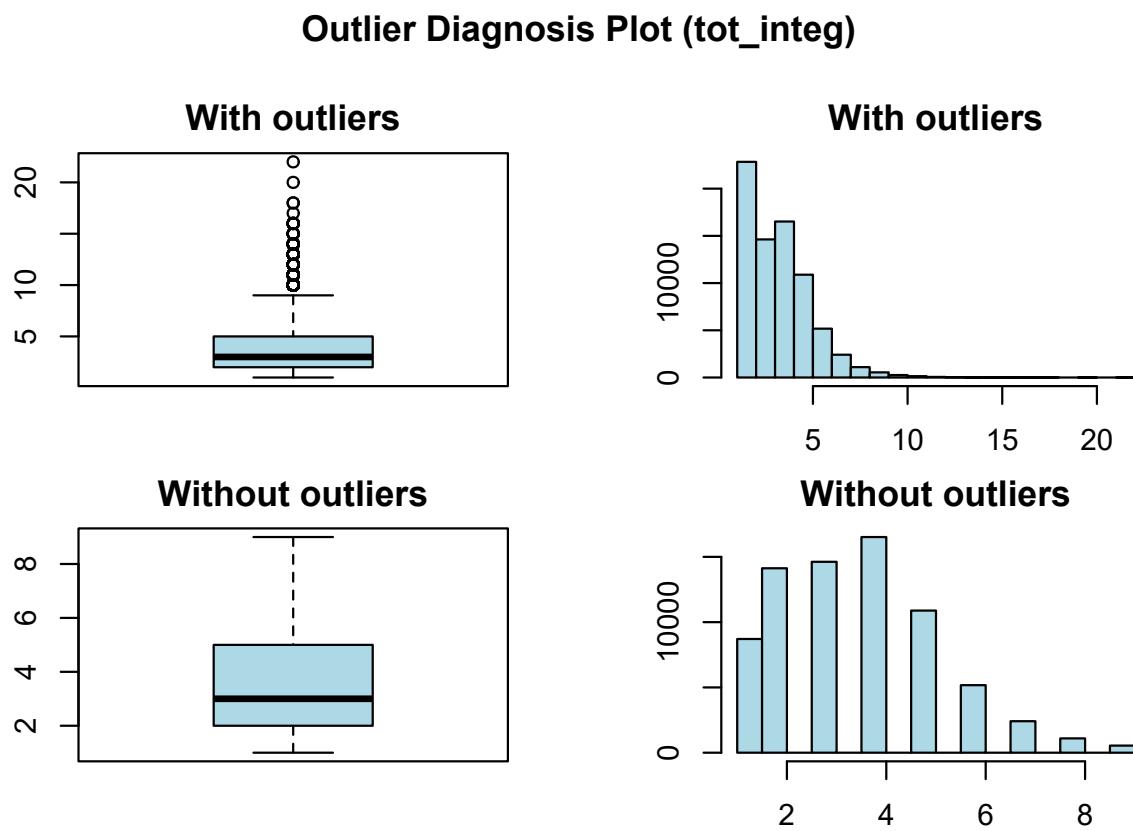


Figure 2.113: Distribution of tot_integ

variable : mayores

Table 2.115: Outliers information of mayores

Measures	Values
Outliers count	417.00
Outliers ratio (%)	0.56
Mean of outliers	8.64
Mean with outliers	2.84
Mean without outliers	2.81

Outlier Diagnosis Plot (mayores)

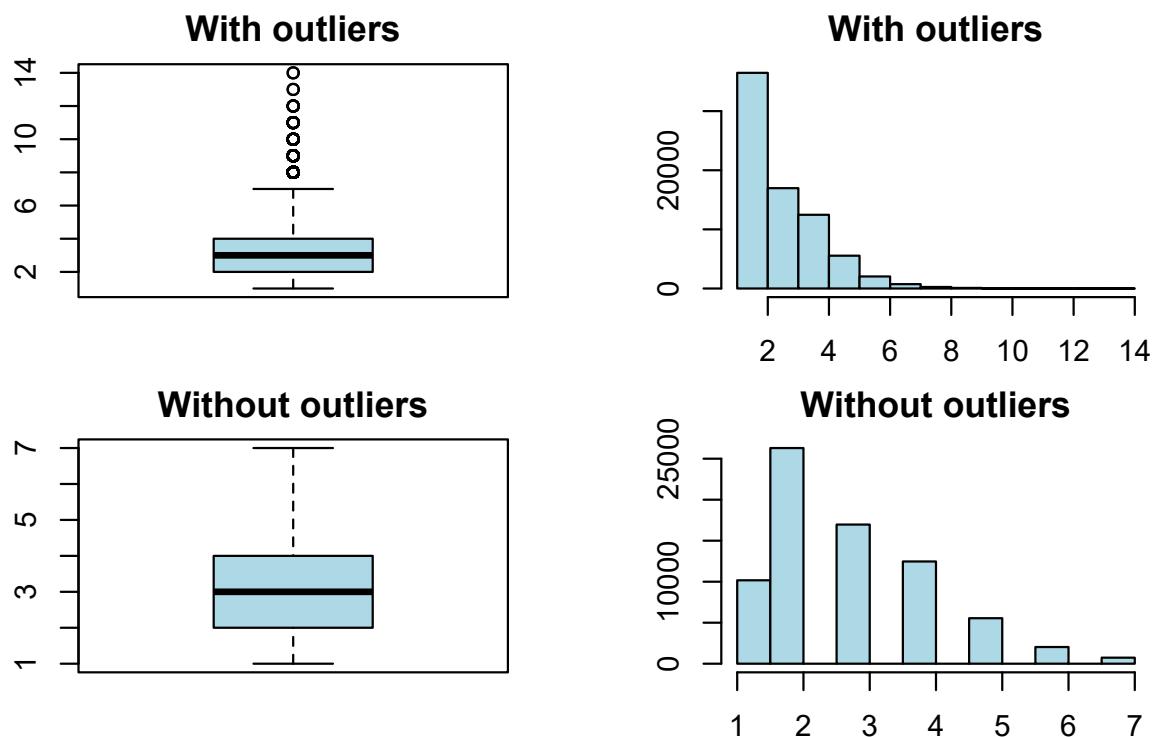


Figure 2.114: Distribution of mayores

```
variable : clase_hog
```

Table 2.116: Outliers information of clase_hog

Measures	Values
Outliers count	275.00
Outliers ratio (%)	0.37
Mean of outliers	5.00
Mean with outliers	2.15
Mean without outliers	2.14

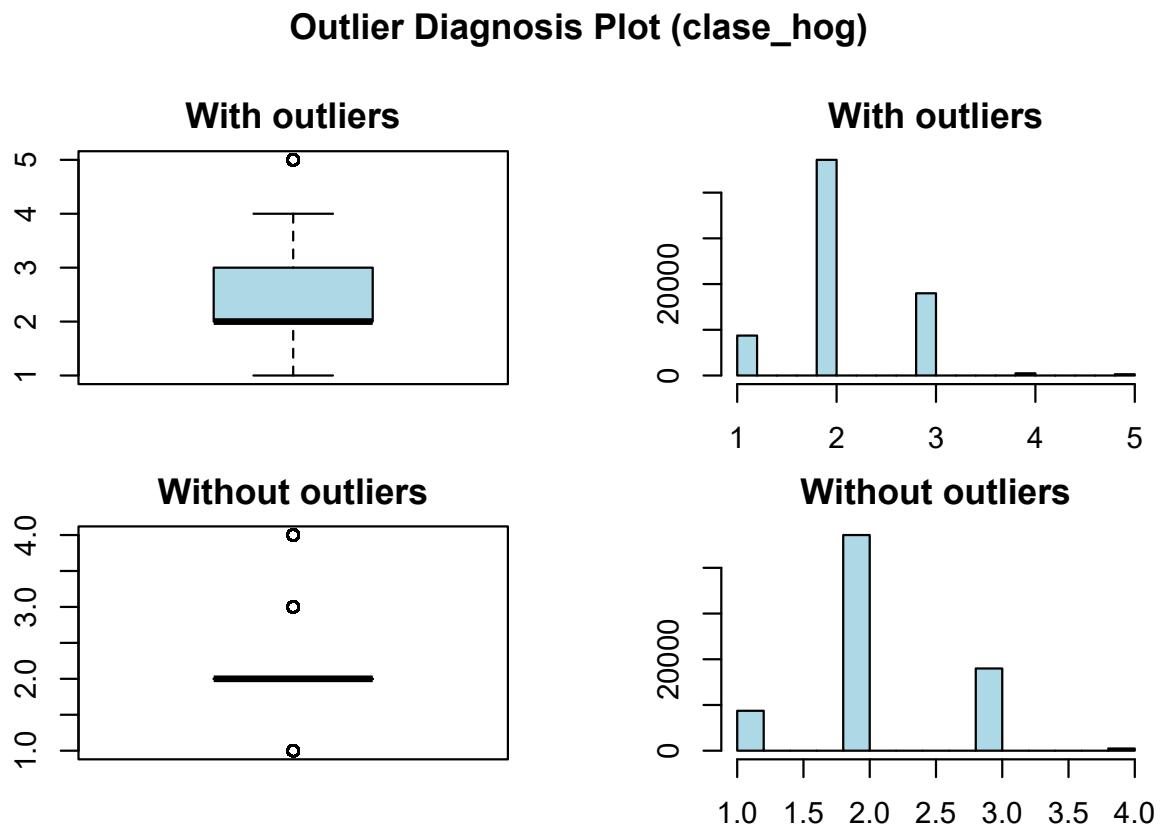


Figure 2.115: Distribution of clase_hog

variable : reproducc

Table 2.117: Outliers information of reproducc

Measures	Values
Outliers count	235.00
Outliers ratio (%)	0.31
Mean of outliers	3,881.42
Mean with outliers	12.22
Mean without outliers	0.00

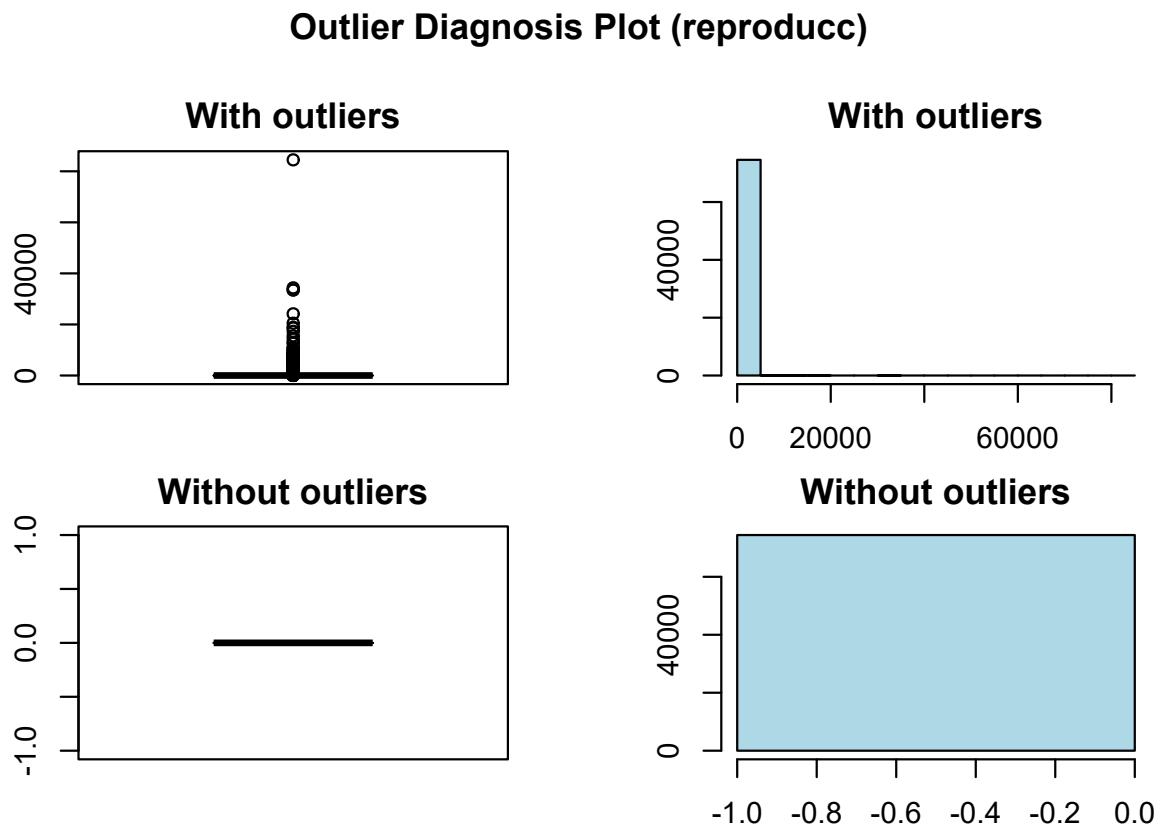


Figure 2.116: Distribution of reproducc

```
variable : pesca
```

Table 2.118: Outliers information of pesca

Measures	Values
Outliers count	229.00
Outliers ratio (%)	0.31
Mean of outliers	11,214.79
Mean with outliers	34.40
Mean without outliers	0.00

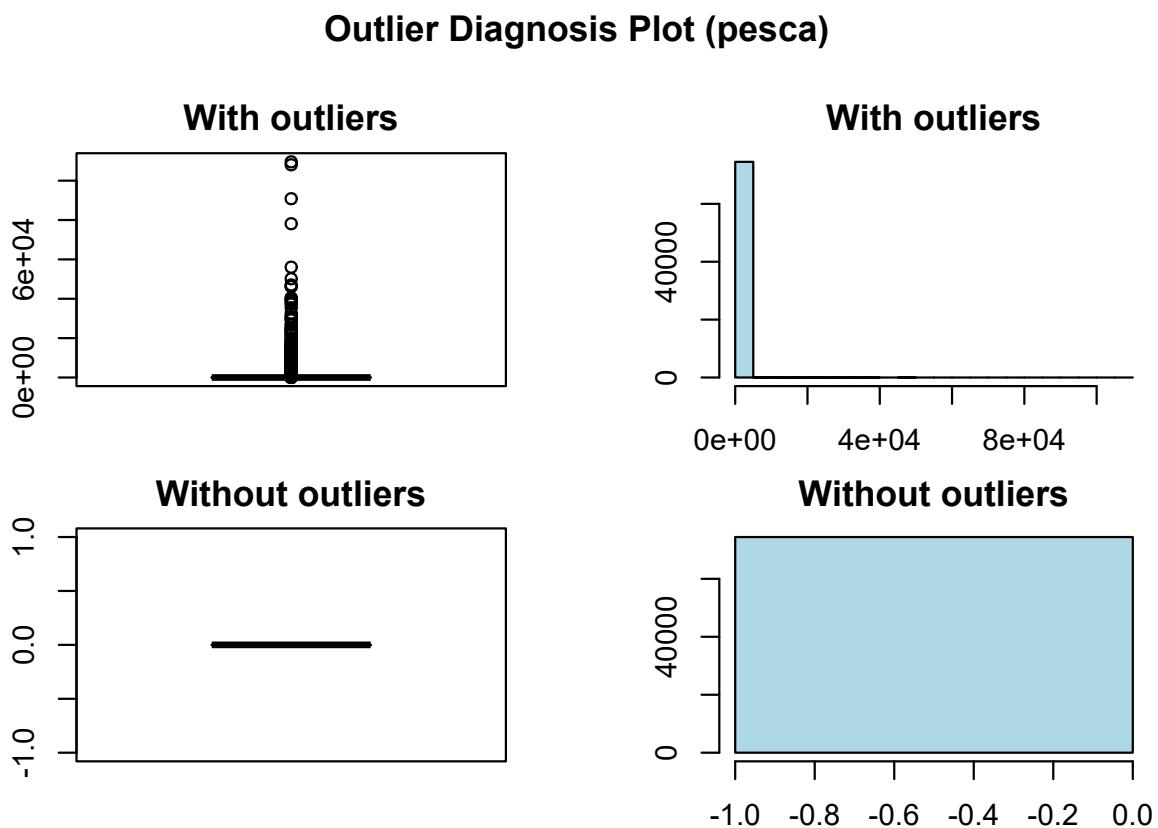


Figure 2.117: Distribution of pesca

```
variable : edad_jefe
```

Table 2.119: Outliers information of edad_jefe

Measures	Values
Outliers count	99.00
Outliers ratio (%)	0.13
Mean of outliers	98.41
Mean with outliers	49.80
Mean without outliers	49.73

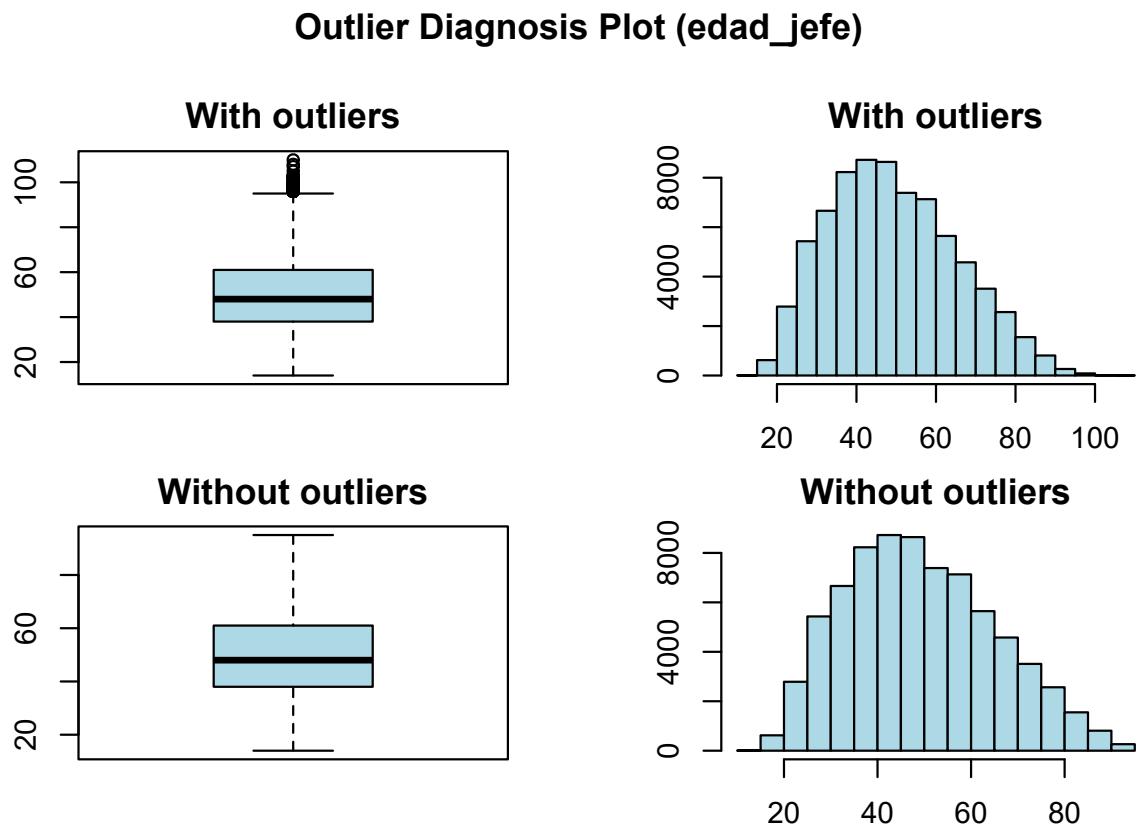


Figure 2.118: Distribution of edad_jefe