```
source('RECURSOS-INVESTIGACION/R/camel-getCamelIndNormalizada.R')
source('RECURSOS-INVESTIGACION/R/camel-get-limites-rangos.R')

source('RECURSOS-INVESTIGACION/R/camel-calificacion-indicadores.R')
source('RECURSOS-INVESTIGACION/R/camel-calificacion-entidad.R')
source('RECURSOS-INVESTIGACION/R/camel-tendencia-indicadores.R')
source('RECURSOS-INVESTIGACION/R/camel-plot-functions.R')
source("RECURSOS-INVESTIGACION/R/render-table-basic.R")

if (!('dat' %in% ls())) {dat <- NULL}

datCamelIndNorm <- getDatCamelIndNormalizada(gestionInc=2014,by='ENTIDAD',dat=dat)
```

```
## Loading required package: dplyr
```

```
## Warning: package 'dplyr' was built under R version 4.2.3
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
## Loading required package: openxlsx
```

```
datCamelRangosLimites <- getDatCamelRangosLimites(datCamelIndNorm)
```

```
## Warning in xtfrm.data.frame(x): cannot xtfrm data frames
```

```
## Warning in xtfrm.data.frame(x): cannot xtfrm data frames
```

```
## Warning in xtfrm.data.frame(x): cannot xtfrm data frames
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```
## Warning in xtfrm.data.frame(x): cannot xtfrm data frames
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## Warning in xtfrm.data.frame(x): cannot xtfrm data frames

## Warning in xtfrm.data.frame(x): cannot xtfrm data frames
```

```
datCamelCalificacionIndicadores <-
    getDatCamelCalificacionIndicadores(datCamelIndNorm,datCamelRangosLimites)

datCamelCalificacionEntidad <-
    getDatCamelCalificacionEntidad(datCamelCalificacionIndicadores)
```

Resultados CAMEL del sistema financiero

Resultados indicadores de capital (C - CAMEL)

```
id <- 'C'

datTrendInd <- getDatTrendInd(id, datCamelCalificacionEntidad, FALSE)
```

```
## Loading required package: fpp2

## Registered S3 method overwritten by 'quantmod':
##   method            from
##   as.zoo.data.frame zoo

## -- Attaching packages ---------------------------------------- fpp2 2.5 --

## v ggplot2   3.4.1     v fma       2.5
## v forecast  8.21      v expsmooth 2.3

##
```

```
renderTableBasic(datTrendInd,captionTable = 'Tendencia indicadores de capital (CAMEL)')
```

```
## Loading required package: knitr

## Loading required package: kableExtra

##
## Attaching package: 'kableExtra'

## The following object is masked from 'package:dplyr':
##
##     group_rows
```

Table 1: Tendencia indicadores de capital (CAMEL)

TIPO DE ENTIDAD	TENDENCIA
COO	-0.010549
IID	-0.004614
CCB	-0.002906
IIM	-0.001942
BME	-0.001847
CCM	-0.001481
BFO	-0.001347
CCA	-0.001303
CJN	-0.001192
CSM	-0.001108
CQC	-0.001101
CPX	-0.000940
CCP	-0.000897
BGA	-0.000856
CMG	-0.000832
VL1	-0.000588
ISA	-0.000569
BFS	-0.000485
CFA	-0.000469
BSO	-0.000436
VPG	-0.000432
PEF	-0.000250
ICR	-0.000226
VPR	-0.000193
CME	-0.000113
BIS	-0.000045
CCF	-0.000009
VPZ	0.000000
VPA	0.000000
CSN	0.000000
CAS	0.000000
CMM	0.000000
CMR	0.000000
BNA	0.000000
CEY	0.000000
CLC	0.000000
VPT	0.000000
CVE	0.000000
PLA	0.000000
CIH	0.000029
CJB	0.000053
CSR	0.000091
CST	0.000127
VPY	0.000160
CEC	0.000174
CJP	0.000255
ICI	0.000269
CTR	0.000366
BPR	0.000461
BIE	0.000480
CJO	0.000509
CSP	0.000569
BEC	0.000617
CPG	0.000743
CLS	0.000750

Table 1: Tendencia indicadores de capital (CAMEL) (Continuación)

TIPO DE ENTIDAD	TENDENCIA
IFO	0.000800
BUN	0.000817
BCR	0.000837
BNB	0.000971
IFU	0.001004
BDB	0.001097
CMD	0.001557
CSA	0.001988
CCR	0.002176
CLY	0.002684
IDI	0.002822
PCO	0.003431
BDR	0.003848
IPM	0.004083
CLO	0.005515
CSQ	0.005573
VPD	0.006454
SCO	NA

Resultados indicadores de activos (A - CAMEL)

```
id <- 'A'
```

```
datTrendInd <- getDatTrendInd(id, datCamelCalificacionEntidad, FALSE)
renderTableBasic(datTrendInd,captionTable = 'Tendencia indicadores de activos (CAMEL)')
```

Table 2: Tendencia indicadores de activos (CAMEL)

TIPO DE ENTIDAD	TENDENCIA
IID	-0.001385
IIM	-0.001023
CMM	-0.000655
VPA	-0.000613
CSQ	-0.000516
ICI	-0.000497
PEF	-0.000362
BSO	-0.000282
IPM	-0.000015
CAS	0.000000
VPT	0.000000
IFO	0.000069
BIE	0.000165
BNA	0.000182
BPR	0.000269
IFU	0.000277
VL1	0.000334
BME	0.000346
ISA	0.000383
BFS	0.000419
BUN	0.000525
ICR	0.000599
VPG	0.000603
CMG	0.000680
BIS	0.000812
BFO	0.000844
BGA	0.000922
PCO	0.000943
BNB	0.000981
CMD	0.000983
VPY	0.001008
BEC	0.001008
BCR	0.001217
CPG	0.001235
PLA	0.001235
CJP	0.001462
VPR	0.001550
COO	0.001648
CLS	0.002697
VPD	0.002800
IDI	0.002809
CTR	0.003226
CJB	0.003427
BDR	0.003441
CCR	0.003478
CMR	0.004133

Table 2: Tendencia indicadores de activos (CAMEL) (Continuación)

TIPO DE ENTIDAD	TENDENCIA
CSN	0.004435
CCF	0.004738
CCA	0.005141
CCM	0.005242
CPX	0.005292
CJO	0.005544
CME	0.005670
CJN	0.005897
CCB	0.006099
CEY	0.006439
CSM	0.007712
CST	0.007712
CSP	0.008216
CIH	0.008367
CSA	0.008518
CQC	0.008619
CCP	0.008921
CVE	0.009007
CFA	0.010081
CEC	0.010131
CLC	0.010302
CSR	0.010685
VPZ	0.010714
CLY	0.011316
CLO	0.011581
BDB	0.093750
SCO	NA

Resultados indicadores de administración (M - CAMEL)

```
id <- 'M'
```

```
datTrendInd <- getDatTrendInd(id, datCamelCalificacionEntidad, FALSE)
renderTableBasic(datTrendInd,captionTable = 'Tendencia indicadores de administración (CAMEL)')
```

Table 3: Tendencia indicadores de administración (CAMEL)

TIPO DE ENTIDAD	TENDENCIA
VPZ	-0.011429
IFU	-0.000962
BIE	-0.000919
PLA	-0.000766
CCM	-0.000763
CCP	-0.000695
BFO	-0.000625
BDB	-0.000613
BPR	-0.000603
BSO	-0.000561
CSR	-0.000549
CFA	-0.000430
PEF	-0.000429
ICI	-0.000367
CMG	-0.000359
ICR	-0.000358
ISA	-0.000306
CMR	-0.000286
BGA	-0.000286
IPM	-0.000228
BUN	-0.000212
CIH	-0.000186
CTR	-0.000154
CEC	-0.000152
CSM	-0.000141
CSA	-0.000137
CJN	-0.000091
BEC	-0.000087
CQC	-0.000071
BNB	-0.000053
IID	-0.000024
BIS	-0.000017
VL1	0.000000
CCR	0.000026
CSP	0.000054
CME	0.000061
IFO	0.000067
CCA	0.000095
VPG	0.000134
CMD	0.000182
BME	0.000205
BDR	0.000220
VPT	0.000284
CPG	0.000306
CST	0.000312
CLS	0.000316

Table 3: Tendencia indicadores de administración (CAMEL) (Continuación)

TIPO DE ENTIDAD	TENDENCIA
BCR	0.000339
BFS	0.000340
CMM	0.000361
CPX	0.000425
CJO	0.000445
CLY	0.000568
CCB	0.000585
CCF	0.000606
CJP	0.000654
CJB	0.000658
CAS	0.000759
CSQ	0.000774
IDI	0.000822
BNA	0.001153
VPR	0.001159
IIM	0.001180
VPA	0.001348
PCO	0.001356
VPD	0.001553
VPY	0.002122
CSN	0.002748
CLO	0.005588
COO	0.006044
CVE	0.007941
CLC	0.009451
SCO	0.010000
CEY	0.010000

Resultados indicadores de beneficios (E - CAMEL)

```
id <- 'E'
```

```
datTrendInd <- getDatTrendInd(id, datCamelCalificacionEntidad, FALSE)
renderTableBasic(datTrendInd,captionTable = 'Tendencia indicadores de beneficios o rendimiento (CAMEL)')
```

Table 4: Tendencia indicadores de beneficios o rendimiento (CAMEL)

TIPO DE ENTIDAD	TENDENCIA
IFO	-0.004240
CLC	-0.002143
IID	-0.001899
VPT	-0.001334
CCP	-0.001050
CMG	-0.001039
VL1	-0.000644
CME	-0.000624
ISA	-0.000484
CMD	-0.000467
CMM	-0.000439
CCM	-0.000439
CSM	-0.000413
CCA	-0.000269
CFA	-0.000083
CMR	-0.000016
CQC	-0.000014
VPA	0.000000
SCO	0.000000
CJN	0.000009
VPG	0.000026
CCR	0.000239
BDB	0.000241
CSP	0.000309
ICI	0.000339
CSA	0.000360
BPR	0.000376
BGA	0.000459
CIH	0.000472
CTR	0.000529
BSO	0.000543
CJO	0.000557
PEF	0.000580
IFU	0.000665
BIE	0.000667
PLA	0.000817
BUN	0.000853
CPX	0.000920
CEC	0.000924
CSR	0.000957
CPG	0.000971
BIS	0.000972
CJB	0.001051
BFO	0.001066
BEC	0.001073
BNB	0.001133

Table 4: Tendencia indicadores de beneficios o rendimiento (CAMEL) (Continuación)

TIPO DE ENTIDAD	TENDENCIA
BME	0.001153
CCB	0.001183
CJP	0.001256
BNA	0.001312
BDR	0.001374
BCR	0.001409
IIM	0.001438
CLY	0.001488
CAS	0.001538
VPR	0.001710
VPD	0.002009
CLS	0.002020
ICR	0.002033
CCF	0.002227
BFS	0.002235
CST	0.002247
IDI	0.002663
PCO	0.003046
CSN	0.004035
IPM	0.004883
VPZ	0.006429
CLO	0.007500
CSQ	0.007972
VPY	0.008606
CVE	0.009926
CEY	0.020000
COO	0.021923

Resultados indicadores de liquidez (L - CAMEL)

```
id <- 'L'
```

```
datTrendInd <- getDatTrendInd(id, datCamelCalificacionEntidad, FALSE)
renderTableBasic(datTrendInd,captionTable = 'Tendencia indicadores de liquidez (CAMEL)')
```

Table 5: Tendencia indicadores de liquidez (CAMEL)

TIPO DE ENTIDAD	TENDENCIA
VPZ	-0.008571
VPA	-0.007353
CSN	-0.006847
CEY	-0.005455
COO	-0.003516
BDR	-0.002429
IPM	-0.002110
IID	-0.001971
CLS	-0.000780
IFU	-0.000776
PEF	-0.000750
CPG	-0.000711
ISA	-0.000689
IIM	-0.000613
CJN	-0.000482
ICI	-0.000203
CTR	-0.000107
CCR	-0.000080
ICR	-0.000004
BNA	0.000000
SCO	0.000000
BSO	0.000000
VPD	0.000000
CLO	0.000000
CVE	0.000000
IFO	0.000040
BIE	0.000040
CSM	0.000070
CPX	0.000127
CMR	0.000237
CQC	0.000304
BFO	0.000310
CMD	0.000320
CCP	0.000391
CSR	0.000468
CJP	0.000496
CME	0.000546
CCB	0.000631
PCO	0.000640
CAS	0.000687
CEC	0.000719
VPG	0.000847
VL1	0.000909
CMM	0.000947
PLA	0.001048
IDI	0.001094

Table 5: Tendencia indicadores de liquidez (CAMEL) (Continuación)

TIPO DE ENTIDAD	TENDENCIA
CJO	0.001146
CMG	0.001158
VPR	0.001269
CIH	0.001388
CFA	0.001394
BUN	0.001397
CLY	0.001461
CJB	0.001539
BFS	0.001571
CCF	0.001624
BPR	0.001638
BCR	0.001643
VPT	0.001683
CCM	0.001731
BNB	0.001833
CSA	0.001841
BEC	0.001901
CST	0.002107
VPY	0.002205
CCA	0.002617
BIS	0.002750
CLC	0.002857
CSQ	0.003096
CSP	0.003164
BGA	0.003399
BME	0.003432
BDB	0.003674

Calificación CAMEL

```
id <- 'CAMEL'
```

```
datTrendInd <- getDatTrendInd(id, datCamelCalificacionEntidad, FALSE)
renderTableBasic(datTrendInd,captionTable = 'Tendencia CAMEL por tipo de entidad')
```

Table 6: Tendencia CAMEL por tipo de entidad

TIPO DE ENTIDAD	TENDENCIA
IID	-0.010566
VPA	-0.006618
CMG	-0.005307
IFO	-0.003967
VPZ	-0.002857
ISA	-0.001399
PEF	-0.001211
IIM	-0.001063
BSO	-0.000757
ICI	-0.000570
CCM	-0.000363
VL1	0.000011
BFO	0.000210
BIE	0.000411
IFU	0.000459
VPT	0.000634
VPG	0.001178
ICR	0.002116
BPR	0.002131
PLA	0.002334
BNA	0.002614
CLS	0.002918
CSP	0.002984
BME	0.003211
CST	0.003236
BUN	0.003333
BGA	0.003619
CJP	0.003639
CPX	0.004042
BFS	0.004072
BIS	0.004427
BEC	0.004491
BNB	0.004846
CSN	0.005171
BCR	0.005409
VPR	0.005493
CCR	0.005675
CAS	0.006190
BDR	0.006268
CJN	0.006633
IPM	0.006639
CPG	0.007374
CMM	0.007742
CQC	0.008962
CJO	0.009355
PCO	0.009415

Table 6: Tendencia CAMEL por tipo de entidad (Continuación)

TIPO DE ENTIDAD	TENDENCIA
CMD	0.009420
CCP	0.010030
CTR	0.010413
CMR	0.010645
IDI	0.010937
CME	0.011588
CJB	0.012399
VPD	0.012817
CCA	0.013276
CLY	0.013493
CSM	0.013619
CCF	0.013710
CSA	0.013780
VPY	0.014100
COO	0.015549
CEC	0.015827
CFA	0.016149
CSQ	0.016899
CCB	0.018498
CLC	0.020467
CIH	0.021230
CSR	0.022913
CVE	0.026875
CLO	0.030184
CEY	0.030985
BDB	0.143750
SCO	NA