Centro de Estatística Aplicada

Gustavo Kanno[1]
Rodrigo Marcel Araujo[2]
Victor Ribeiro Baião Decanini[3]

Maio de 2021

Sumário

[1]Número USP: 9795810
[2]Número USP: 9299208
[3]Número USP: 9790502

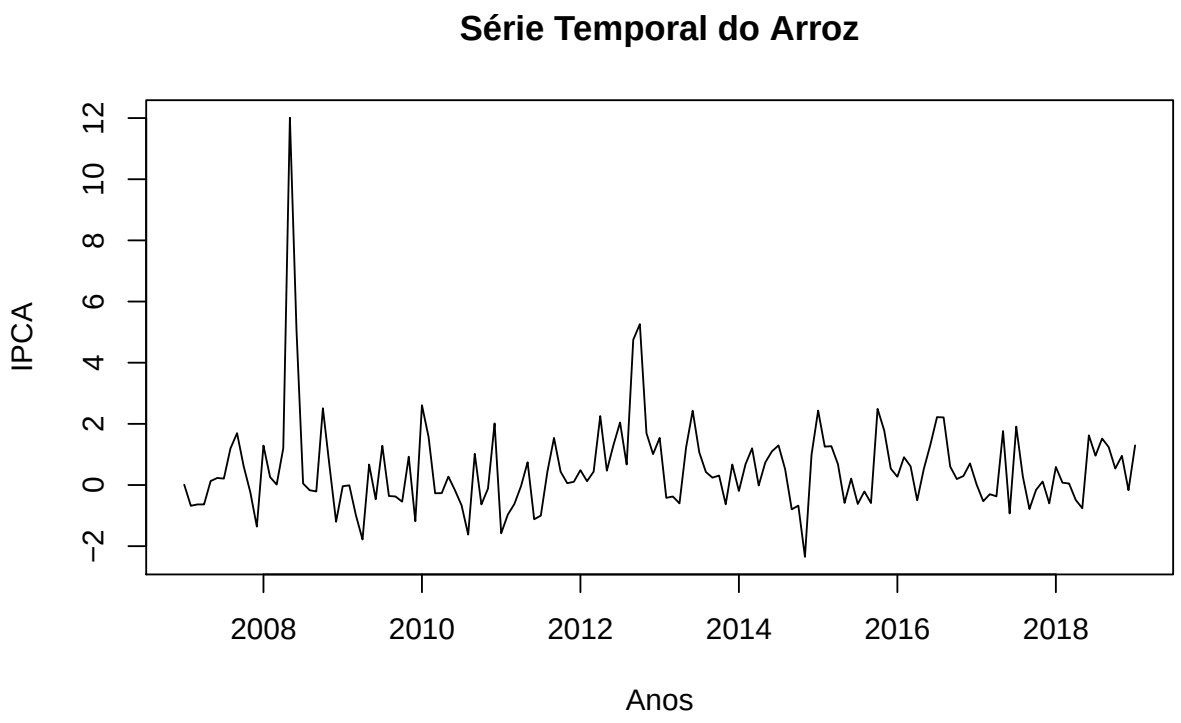
Análise Descritiva

```
setwd("C:\\Users\\Rodrigo Araujo\\Documents\\IME-USP\\CEA 1\\dados")
data = read_xlsx("IPCA_DADOS_AGRUPADOS.xlsx", sheet = 1)
head(data)
```

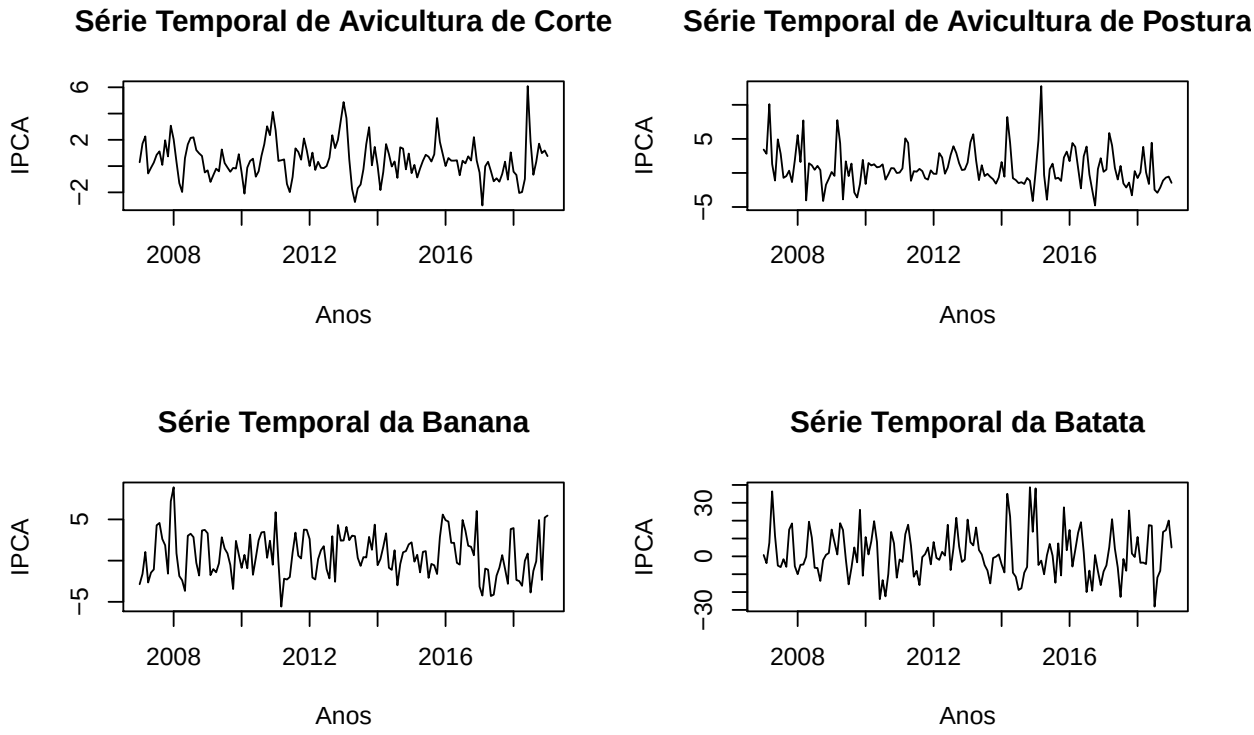
```
## # A tibble: 6 x 24
##   Data                Arroz `Avicultura de ~ `Avicultura de ~ Banana Batata
##   <dttm>              <dbl>            <dbl>            <dbl>  <dbl>  <dbl>
## 1 2007-01-01 00:00:00  0.01             0.295             3.43  -2.86   0.75
## 2 2007-02-01 00:00:00 -0.68             1.71              2.82  -1.62  -3.83
## 3 2007-03-01 00:00:00 -0.635            2.26             10.1    1.05   7.61
## 4 2007-04-01 00:00:00 -0.635           -0.56              1.31  -2.65  36.4
## 5 2007-05-01 00:00:00  0.13            -0.13             -1.11  -1.46  11.6
## 6 2007-06-01 00:00:00  0.230            0.27              4.93  -1.07  -5.17
## # ... with 18 more variables: Bovinocultura <dbl>, `Cacau e produtos` <dbl>,
## #   Café <dbl>, Cebola <dbl>, `Complexo soja` <dbl>, `Complexo
## #   sucroalc.` <dbl>, Feijão <dbl>, Frutas <dbl>, Hortícolas <dbl>,
## #   Indefinido <dbl>, `Laranja e citros` <dbl>, Lácteos <dbl>, Mandioca <dbl>,
## #   Milho <dbl>, Pescado <dbl>, Suinocultura <dbl>, Tomate <dbl>, Trigo <dbl>
```

```
zt0 <- ts(data[,2], frequency = 12, start = 2007, end = 2019)
zt1 <- ts(data[,3], frequency = 12, start = 2007, end = 2019)
zt2 <- ts(data[,4], frequency = 12, start = 2007, end = 2019)
zt3 <- ts(data[,5], frequency = 12, start = 2007, end = 2019)
zt4 <- ts(data[,6], frequency = 12, start = 2007, end = 2019)
zt5 <- ts(data[,7], frequency = 12, start = 2007, end = 2019)
zt6 <- ts(data[,8], frequency = 12, start = 2007, end = 2019)
zt7 <- ts(data[,9], frequency = 12, start = 2007, end = 2019)
zt8 <- ts(data[,10], frequency = 12, start = 2007, end = 2019)
zt9 <- ts(data[,11], frequency = 12, start = 2007, end = 2019)

zt10 <- ts(data[,12], frequency = 12, start = 2007, end = 2019)
zt11 <- ts(data[,13], frequency = 12, start = 2007, end = 2019)
zt12 <- ts(data[,14], frequency = 12, start = 2007, end = 2019)
zt13 <- ts(data[,15], frequency = 12, start = 2007, end = 2019)
zt14 <- ts(data[,16], frequency = 12, start = 2007, end = 2019)
zt15 <- ts(data[,17], frequency = 12, start = 2007, end = 2019)
zt16 <- ts(data[,18], frequency = 12, start = 2007, end = 2019)
zt17 <- ts(data[,19], frequency = 12, start = 2007, end = 2019)
zt18 <- ts(data[,20], frequency = 12, start = 2007, end = 2019)
zt19 <- ts(data[,21], frequency = 12, start = 2007, end = 2019)
zt20 <- ts(data[,22], frequency = 12, start = 2007, end = 2019)
zt21 <- ts(data[,23], frequency = 12, start = 2007, end = 2019)
zt22 <- ts(data[,24], frequency = 12, start = 2007, end = 2019)
```

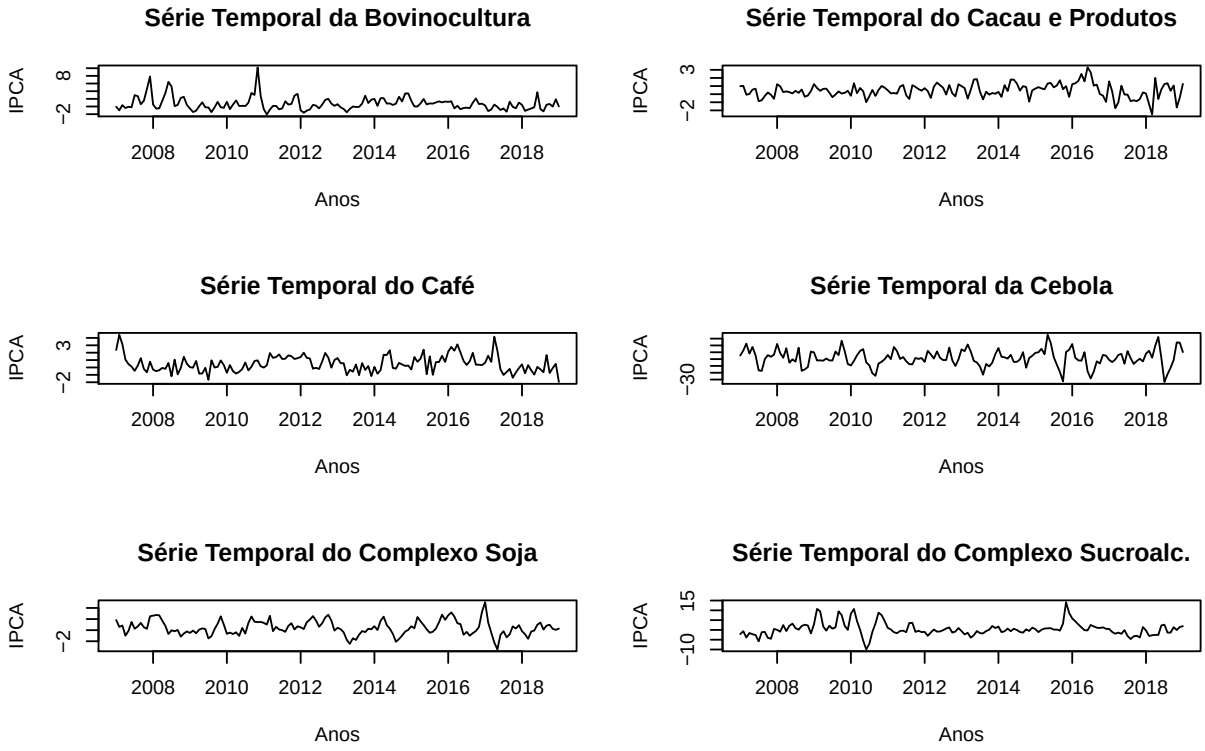
```
plot(zt0,main="Série Temporal do Arroz", xlab= "Anos", ylab="IPCA")
```



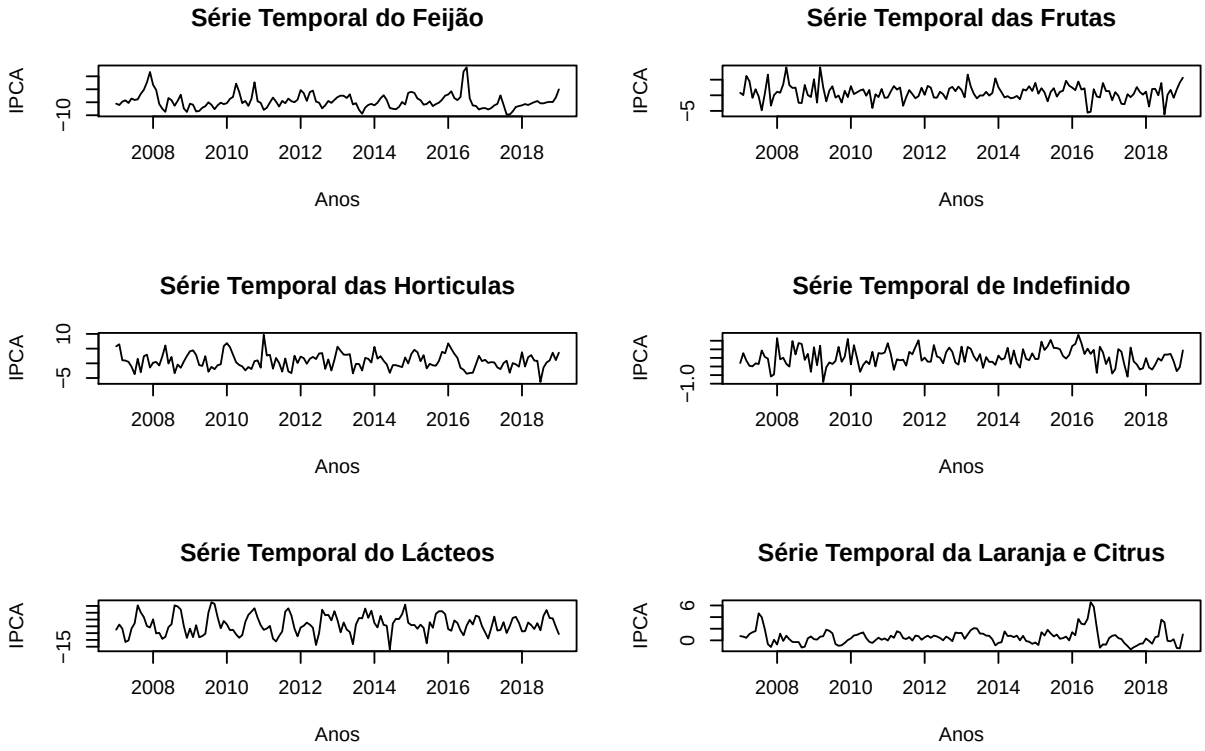

```
par(mfrow = c(2, 2))
plot(zt1,main="Série Temporal de Avicultura de Corte", xlab= "Anos", ylab="IPCA")
plot(zt2,main="Série Temporal de Avicultura de Postura", xlab= "Anos", ylab="IPCA")
plot(zt3,main="Série Temporal da Banana", xlab= "Anos", ylab="IPCA")
plot(zt4,main="Série Temporal da Batata", xlab= "Anos", ylab="IPCA")
```



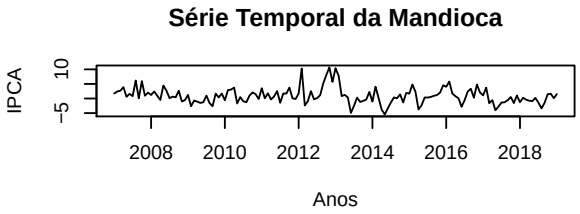

```
par(mfrow = c(3, 2))


plot(zt5,main="Série Temporal da Bovinocultura", xlab= "Anos", ylab="IPCA")
plot(zt6,main="Série Temporal do Cacau e Produtos", xlab= "Anos", ylab="IPCA")
plot(zt7,main="Série Temporal do Café", xlab= "Anos", ylab="IPCA")
plot(zt8,main="Série Temporal da Cebola", xlab= "Anos", ylab="IPCA")
plot(zt9,main="Série Temporal do Complexo Soja", xlab= "Anos", ylab="IPCA")
plot(zt10,main="Série Temporal do Complexo Sucroalc.", xlab= "Anos", ylab="IPCA")
```

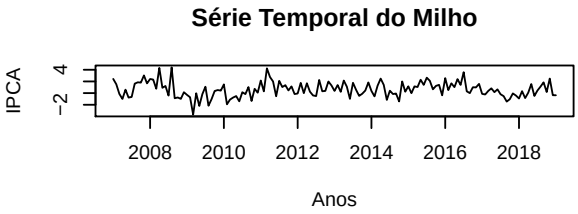


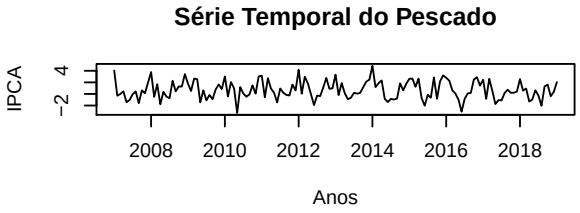

```
par(mfrow = c(3, 2))


plot(zt11,main="Série Temporal do Feijão", xlab= "Anos", ylab="IPCA")
plot(zt12,main="Série Temporal das Frutas", xlab= "Anos", ylab="IPCA")
plot(zt13,main="Série Temporal das Horticulas", xlab= "Anos", ylab="IPCA")
plot(zt14,main="Série Temporal de Indefinido", xlab= "Anos", ylab="IPCA")
plot(zt15,main="Série Temporal do Lácteos", xlab= "Anos", ylab="IPCA")
plot(zt16,main="Série Temporal da Laranja e Citrus", xlab= "Anos", ylab="IPCA")
```

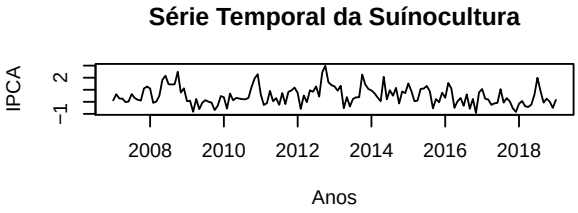


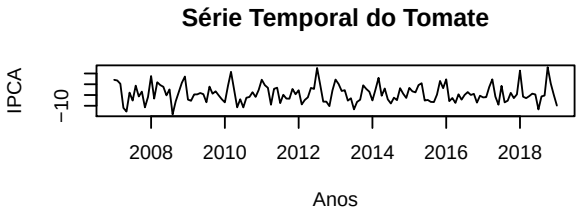

```r
par(mfrow = c(3, 2))


plot(zt17,main="Série Temporal da Mandioca", xlab= "Anos", ylab="IPCA")
plot(zt18,main="Série Temporal do Milho", xlab= "Anos", ylab="IPCA")
plot(zt19,main="Série Temporal do Pescado", xlab= "Anos", ylab="IPCA")
plot(zt20,main="Série Temporal da Suínocultura", xlab= "Anos", ylab="IPCA")
plot(zt21,main="Série Temporal do Tomate", xlab= "Anos", ylab="IPCA")
plot(zt22,main="Série Temporal do Trigo", xlab= "Anos", ylab="IPCA")
```

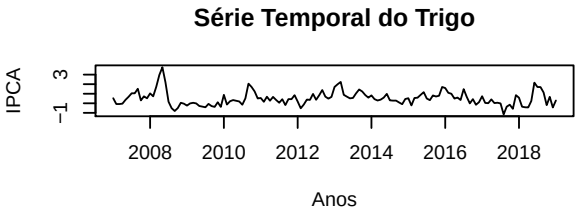

Série Temporal da Mandioca
IPCA
−5
10
2008
2010
2012
2014
2016
2018
Anos


Série Temporal do Milho
IPCA
−2
4
2008
2010
2012
2014
2016
2018
Anos


Série Temporal do Pescado
IPCA
−2
4
2008
2010
2012
2014
2016
2018
Anos


Série Temporal da Suínocultura
IPCA
−1
2
2008
2010
2012
2014
2016
2018
Anos


Série Temporal do Tomate
IPCA
−10
2008
2010
2012
2014
2016
2018
Anos


Série Temporal do Trigo
IPCA
−1
3
2008
2010
2012
2014
2016
2018
Anos