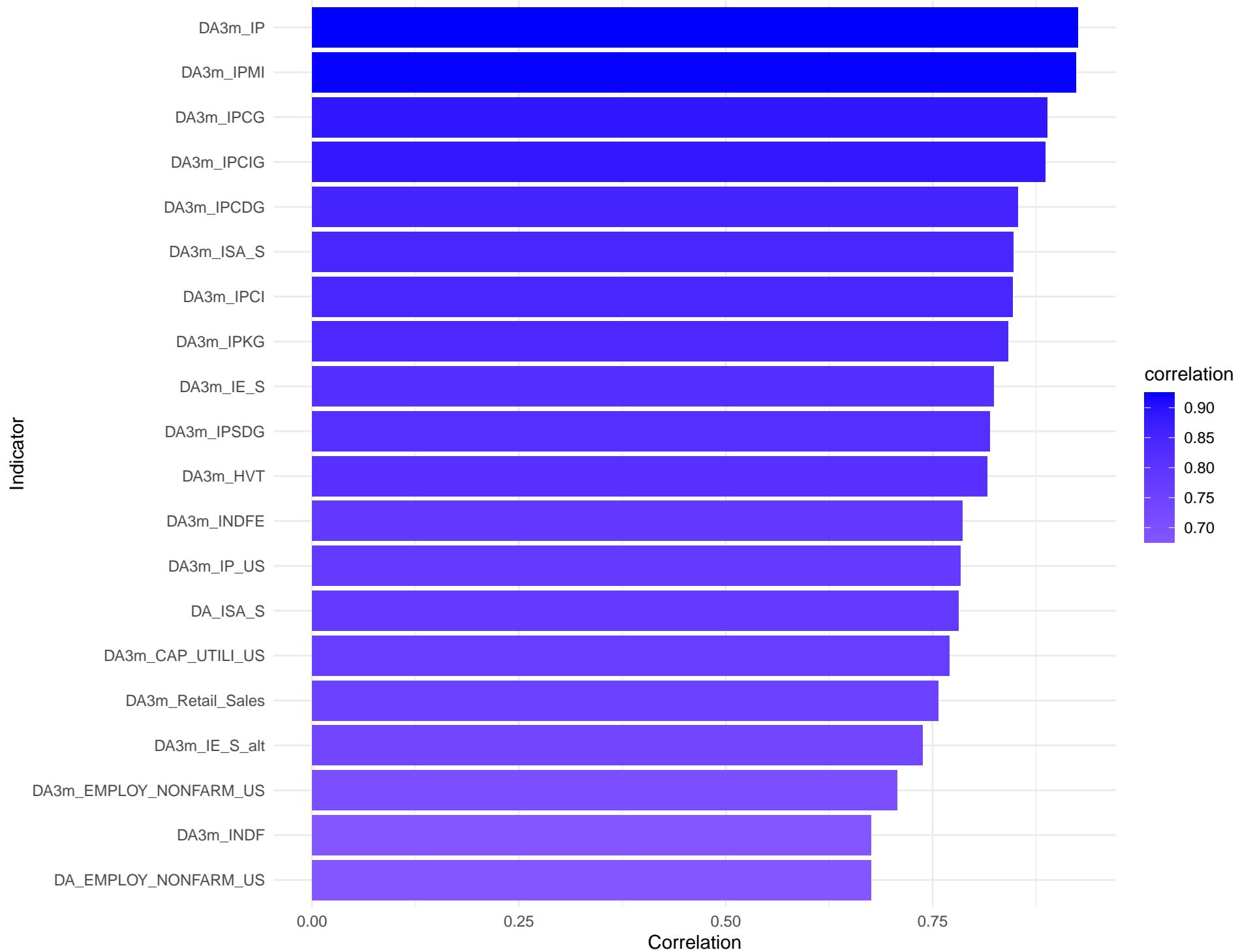
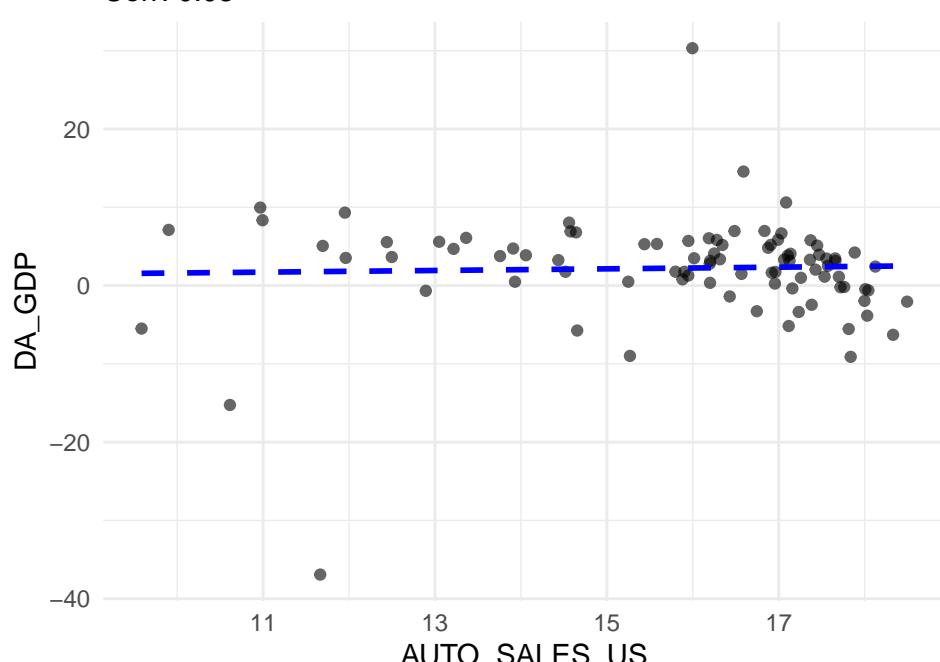


Top 20 Indicators Correlated with Target (Quarterly Aggregated)

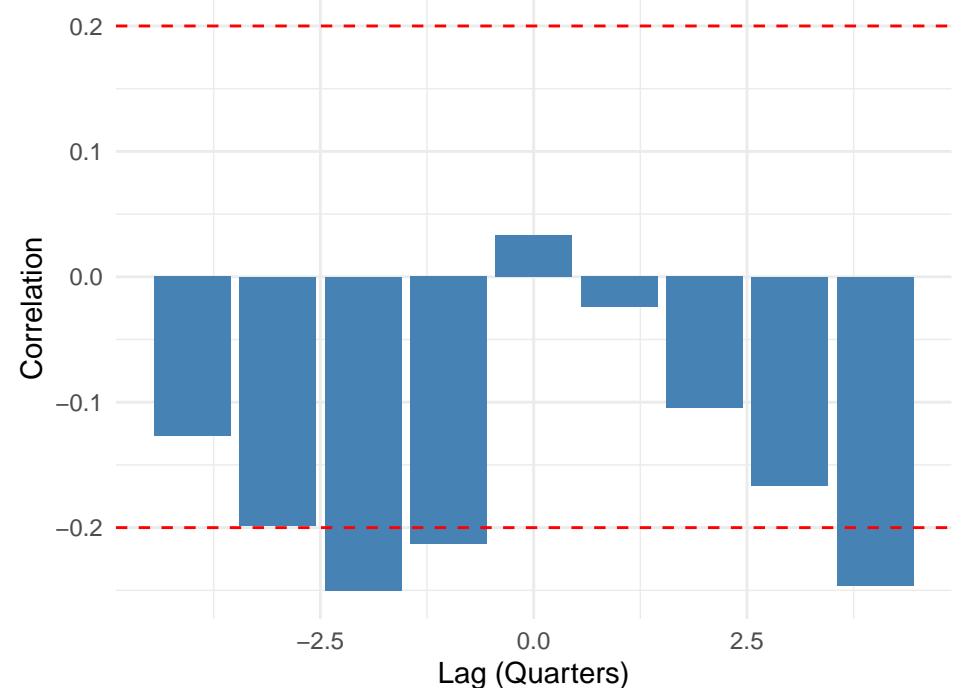


Scatter: AUTO_SALES_US vs Target

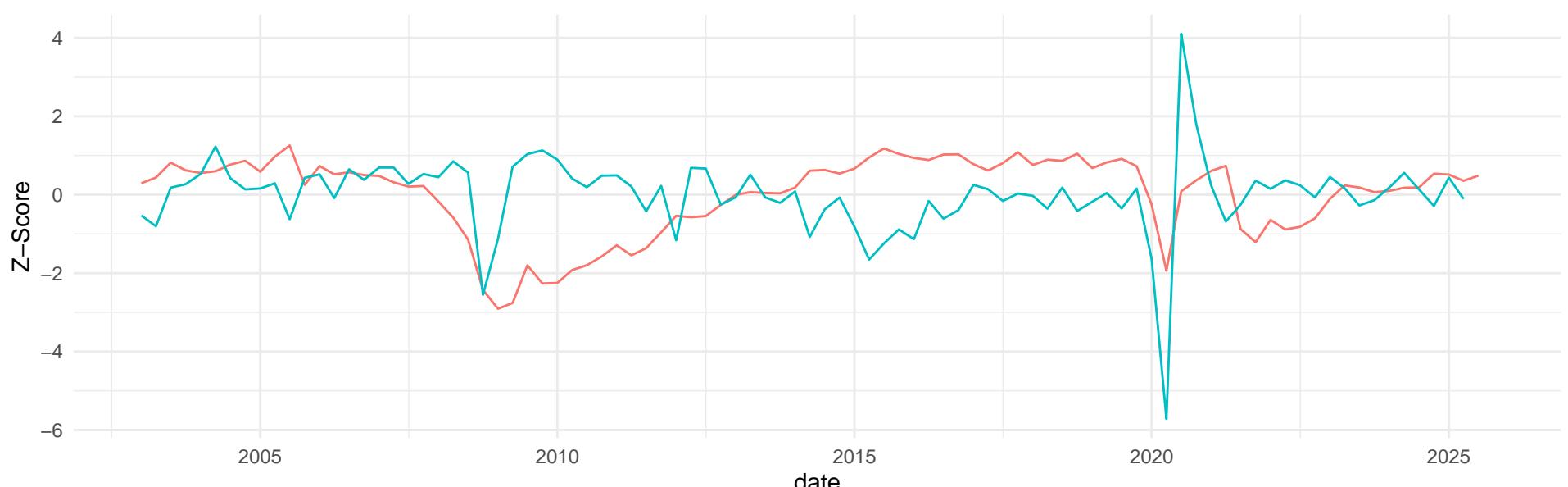
Corr: 0.03



Cross-Correlation (Quarterly Lags): AUTO_SALES_US



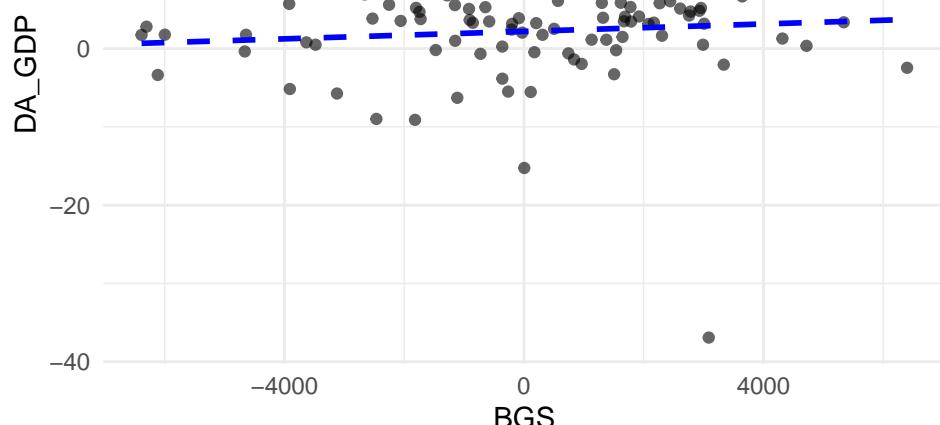
Standardized Time Series: AUTO_SALES_US



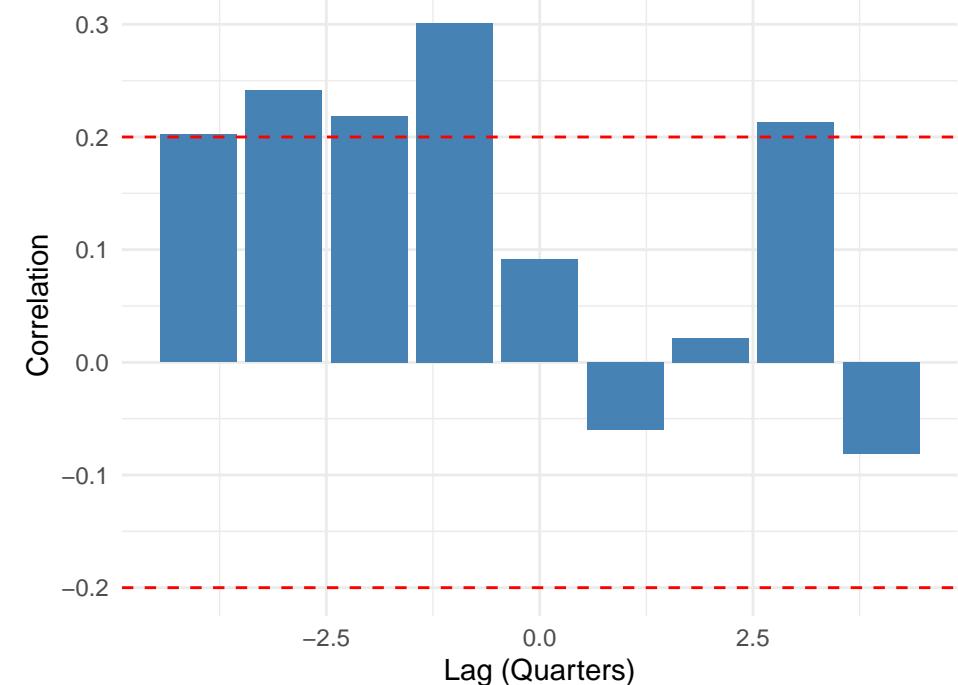
series — ind_scaled — target_scaled

Scatter: BGS vs Target

Corr: 0.09



Cross-Correlation (Quarterly Lags): BGS



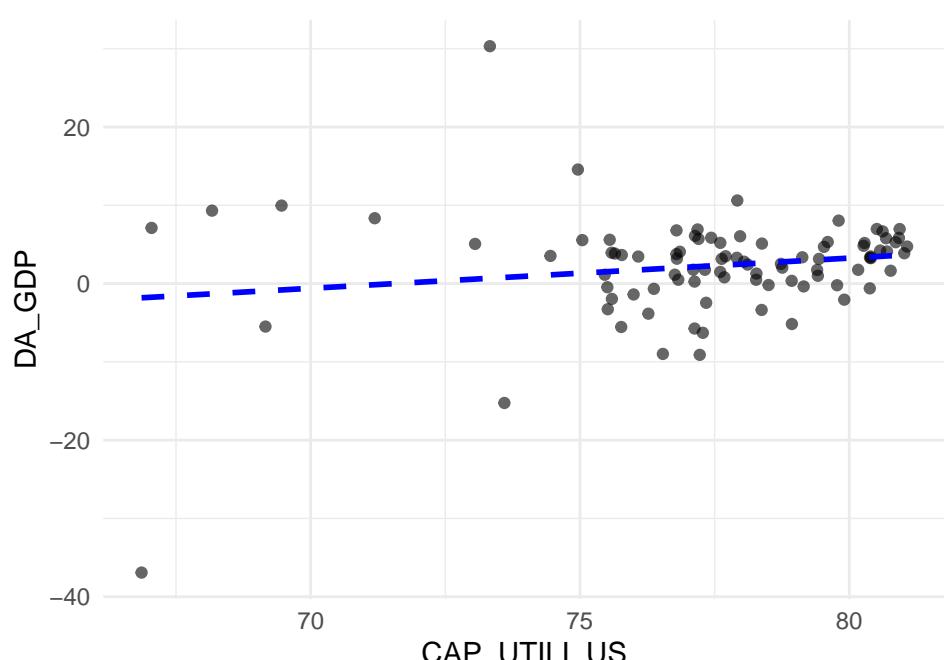
Standardized Time Series: BGS



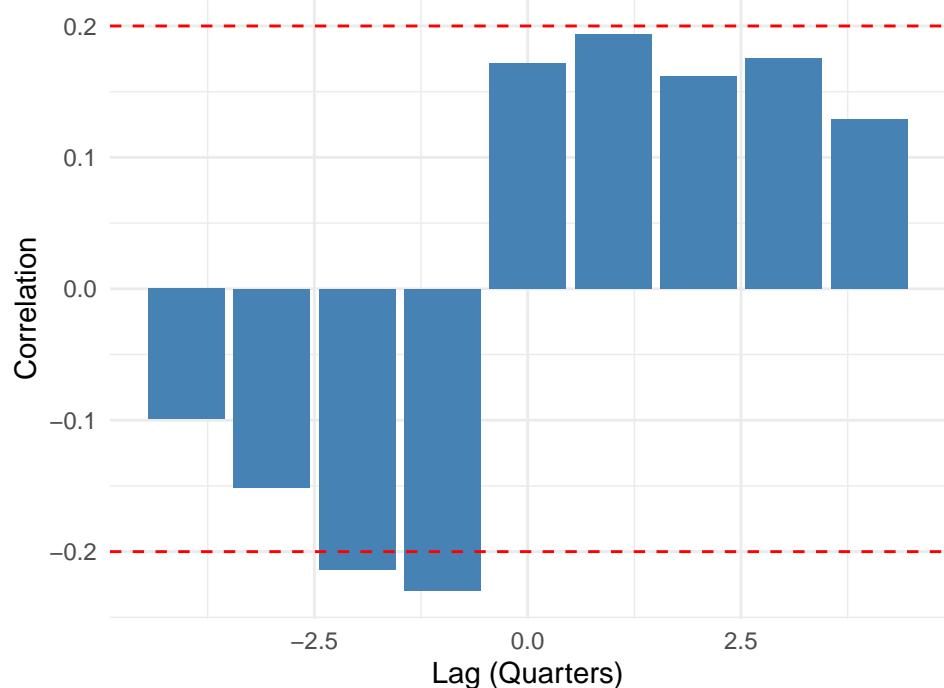
series — ind_scaled — target_scaled

Scatter: CAP_UTILI_US vs Target

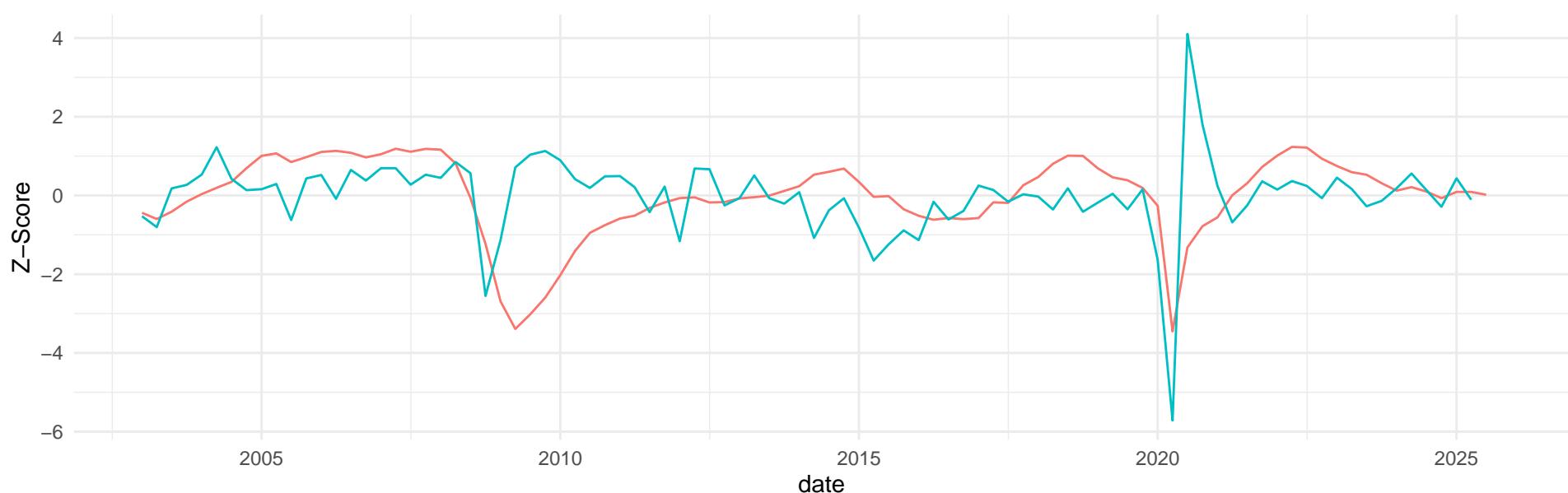
Corr: 0.17



Cross-Correlation (Quarterly Lags): CAP_UTILI_US



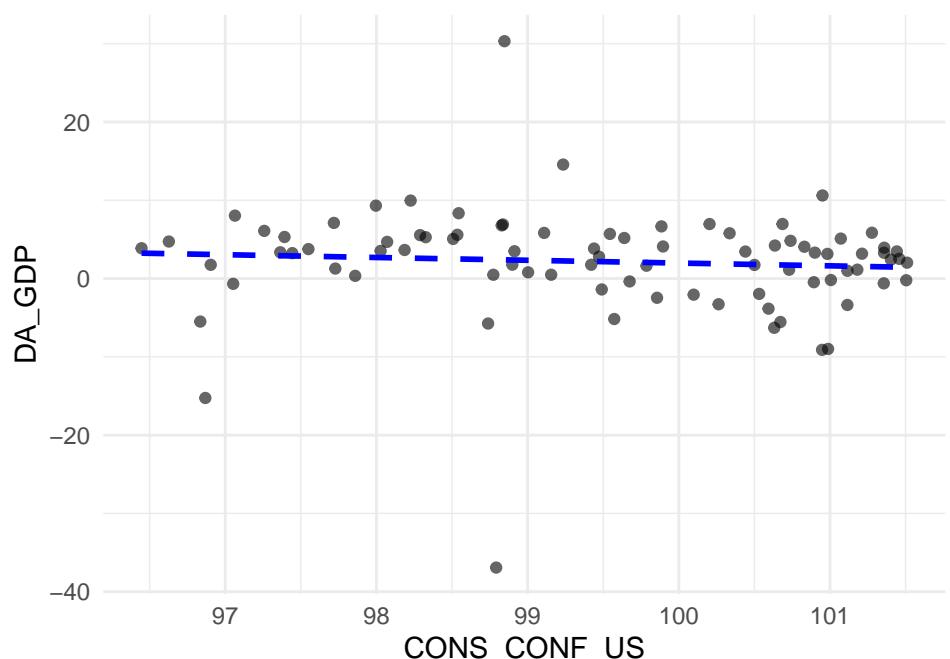
Standardized Time Series: CAP_UTILI_US



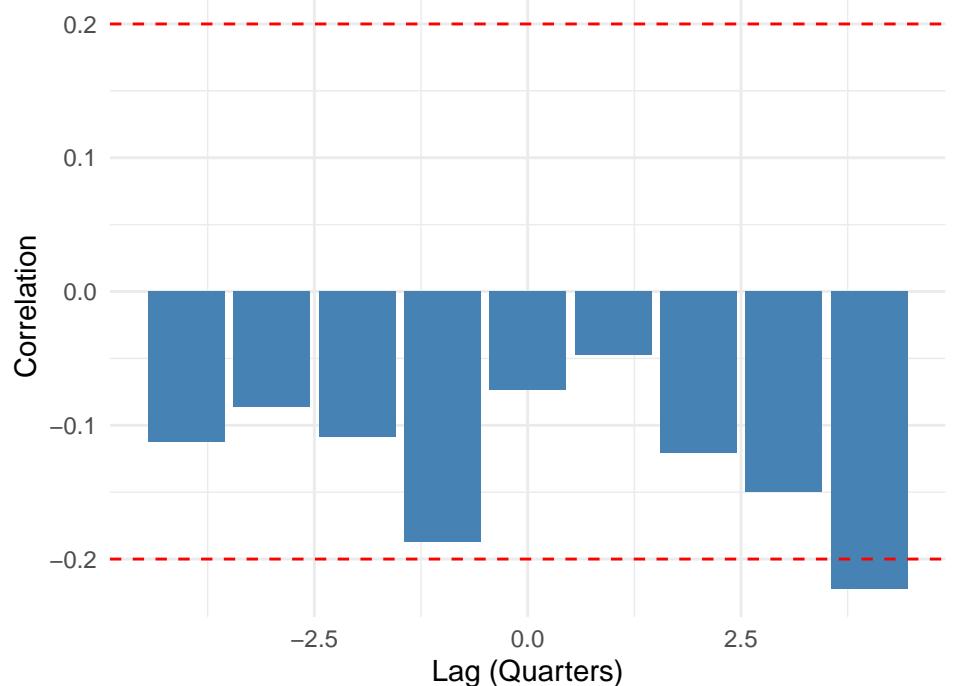
series — ind_scaled — target_scaled

Scatter: CONS_CONF_US vs Target

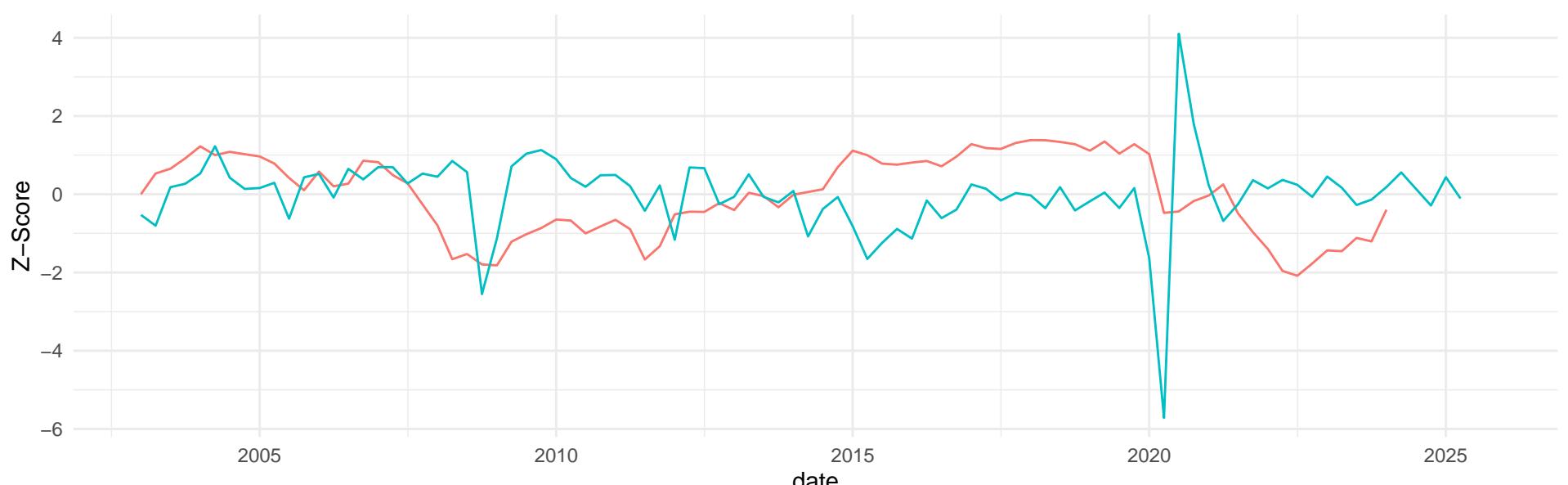
Corr: -0.07



Cross-Correlation (Quarterly Lags): CONS_CONF_US



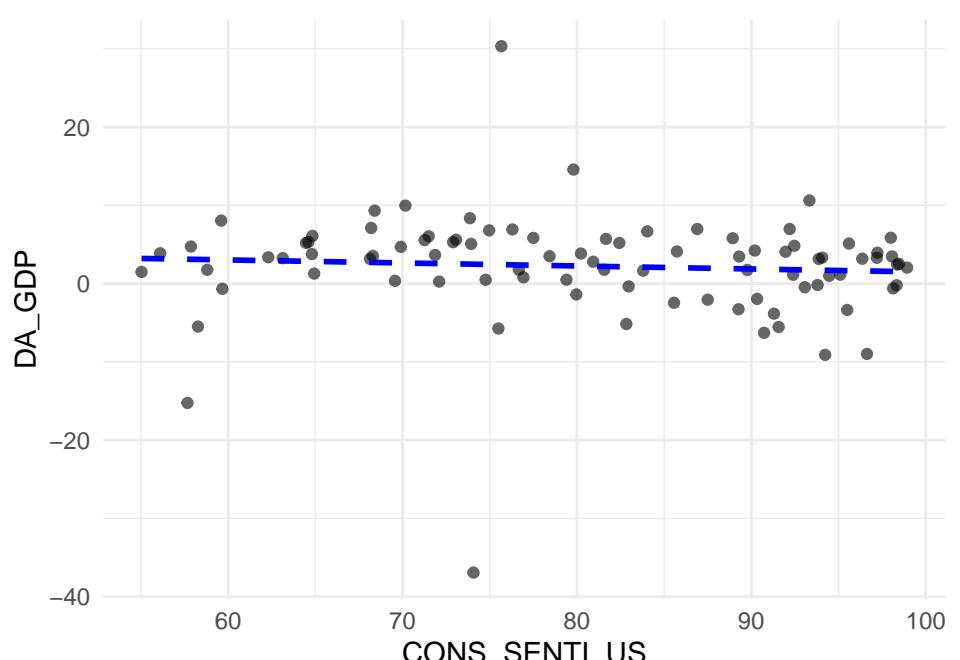
Standardized Time Series: CONS_CONF_US



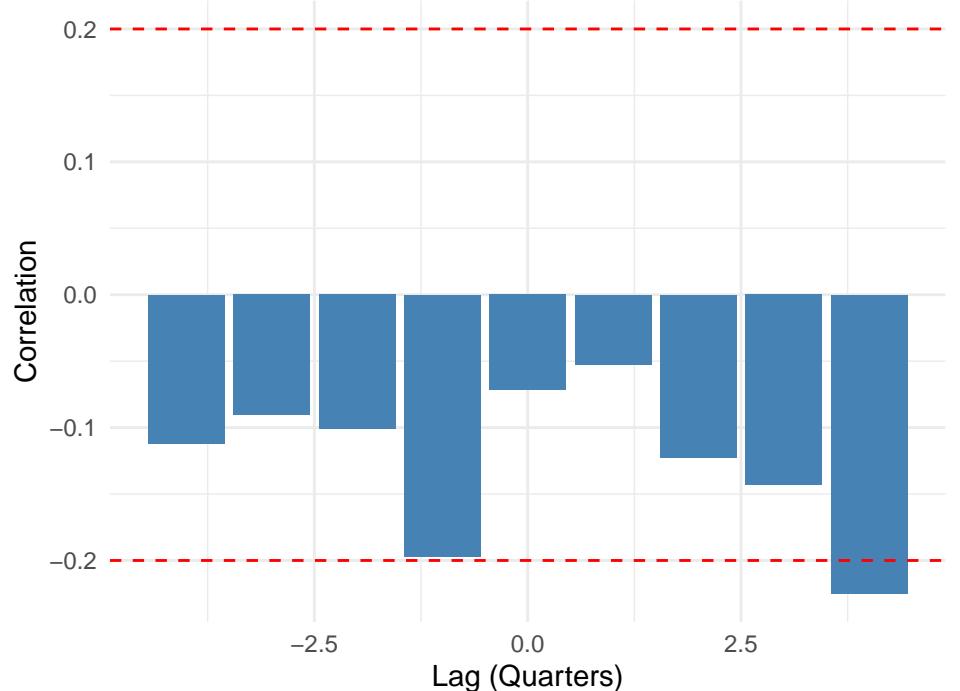
series — ind_scaled — target_scaled

Scatter: CONS_SENTI_US vs Target

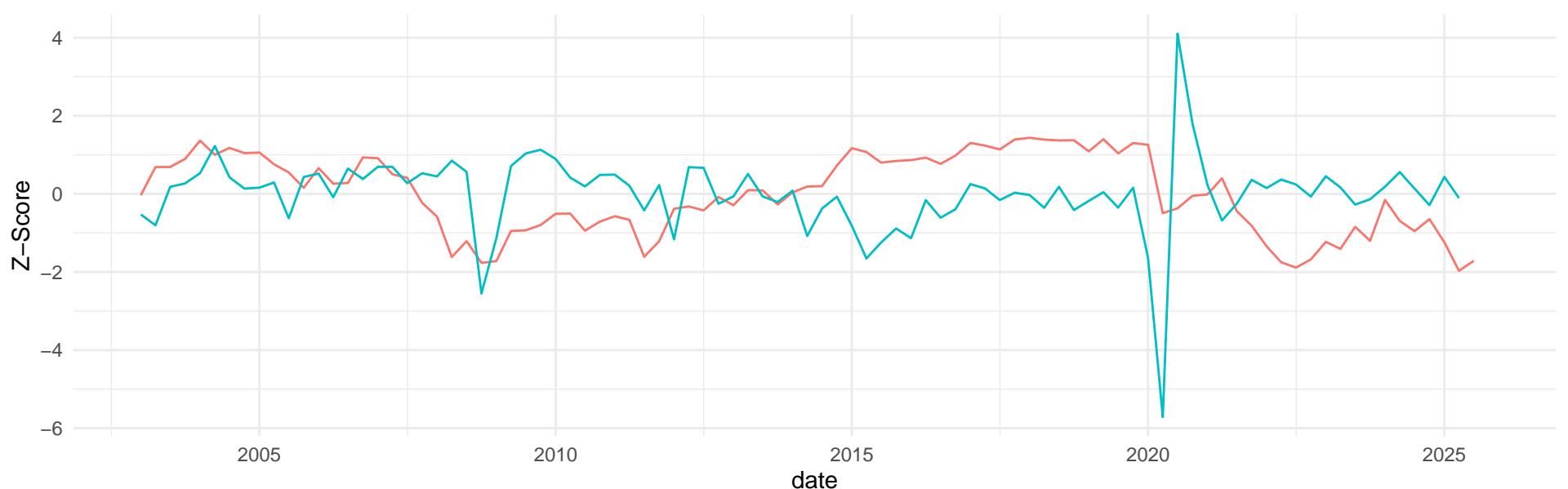
Corr: -0.07



Cross-Correlation (Quarterly Lags): CONS_SENTI_US



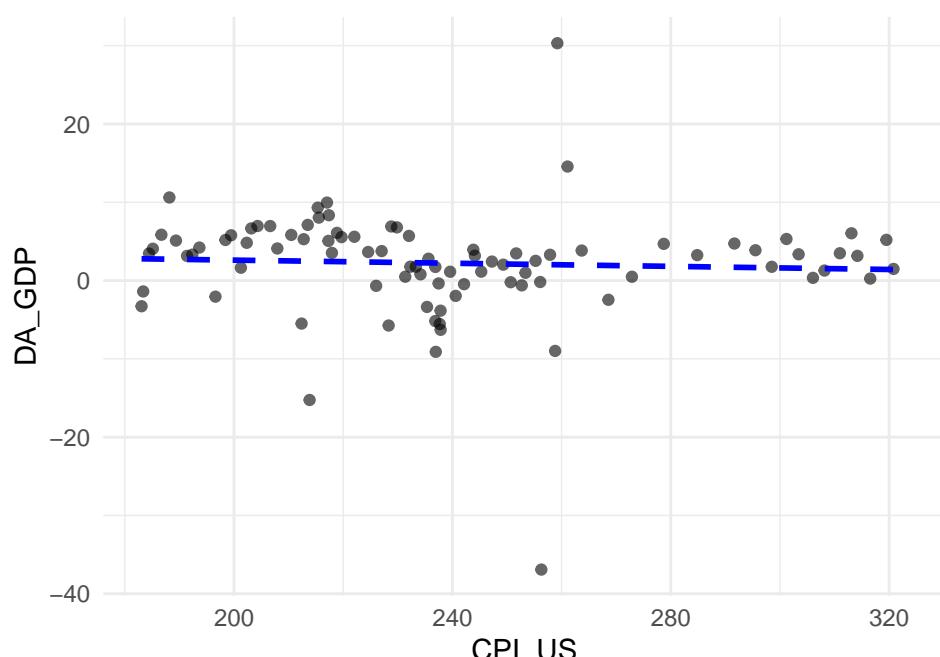
Standardized Time Series: CONS_SENTI_US



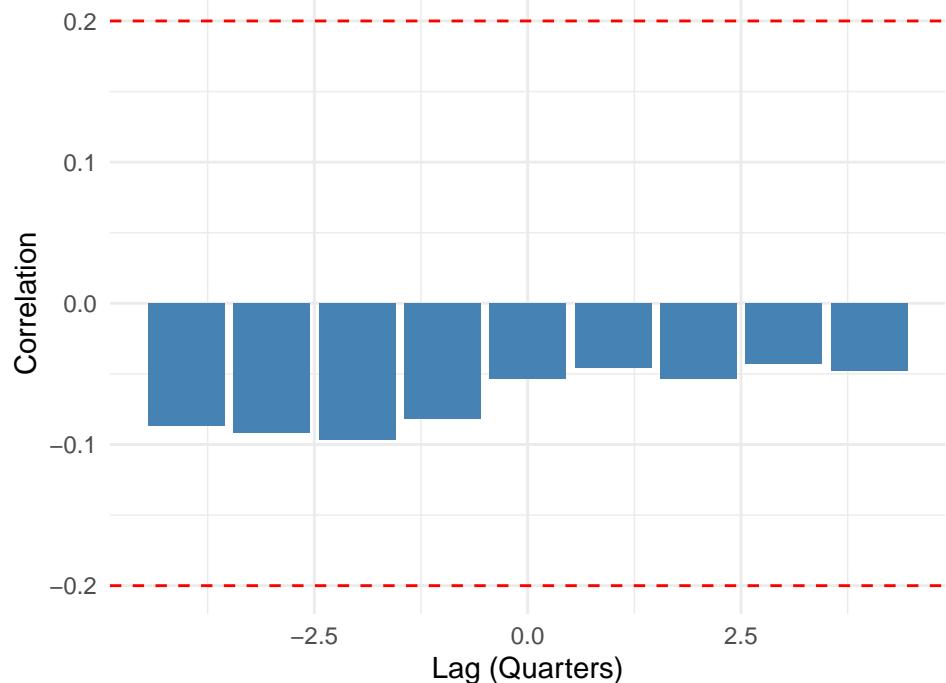
series — ind_scaled — target_scaled

Scatter: CPI_US vs Target

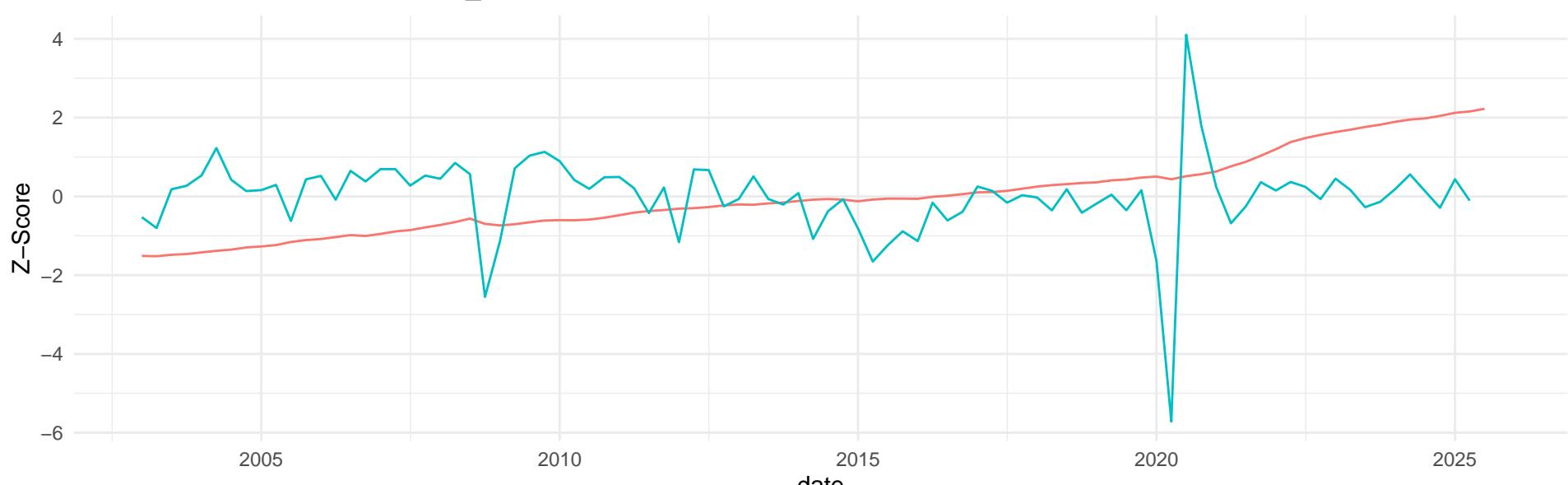
Corr: -0.05



Cross-Correlation (Quarterly Lags): CPI_US



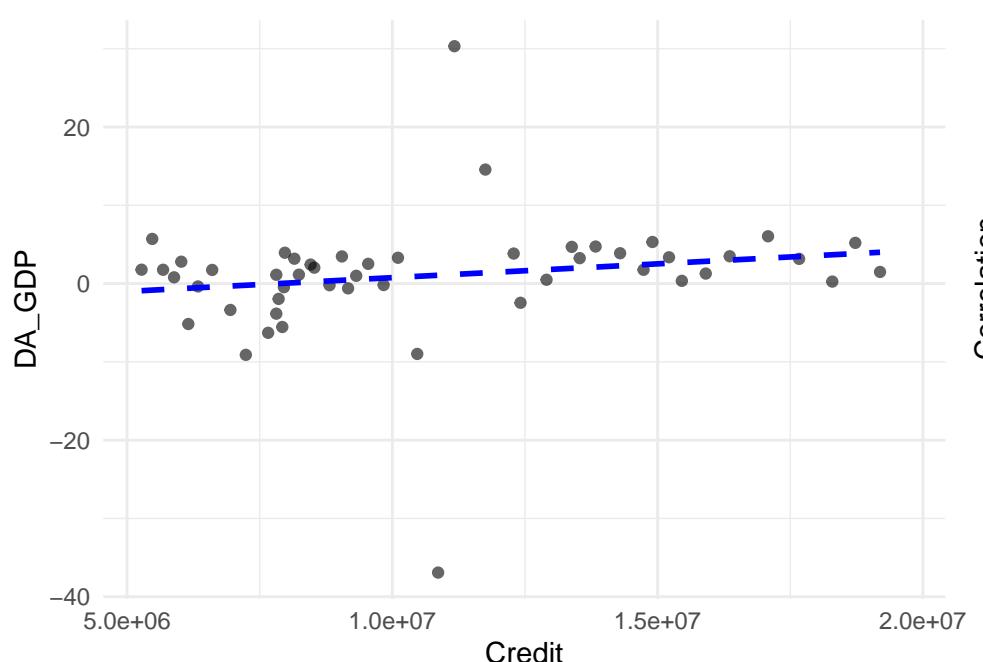
Standardized Time Series: CPI_US



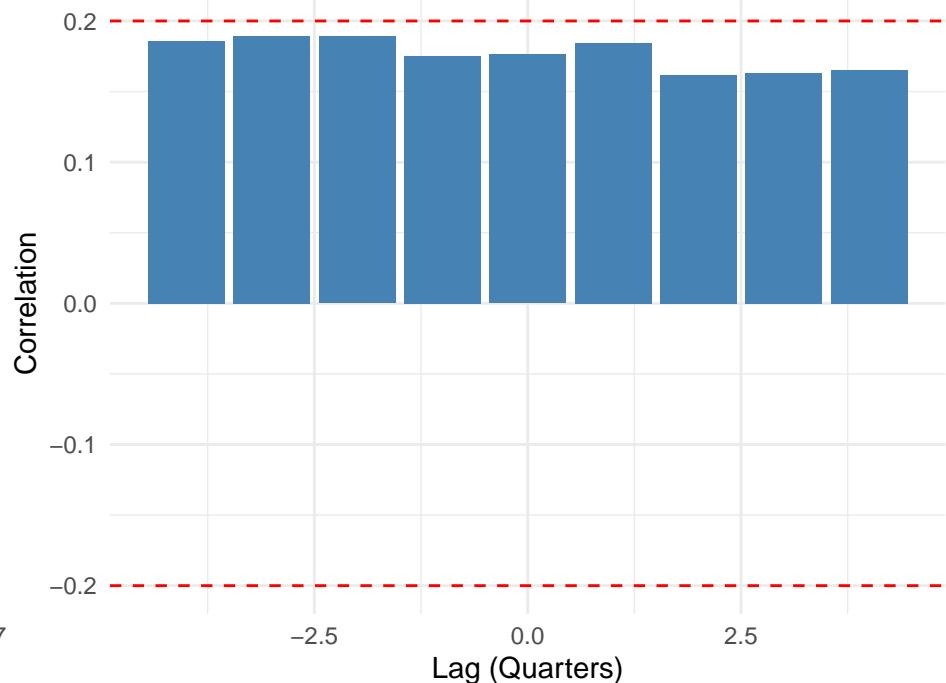
series — ind_scaled — target_scaled

Scatter: Credit vs Target

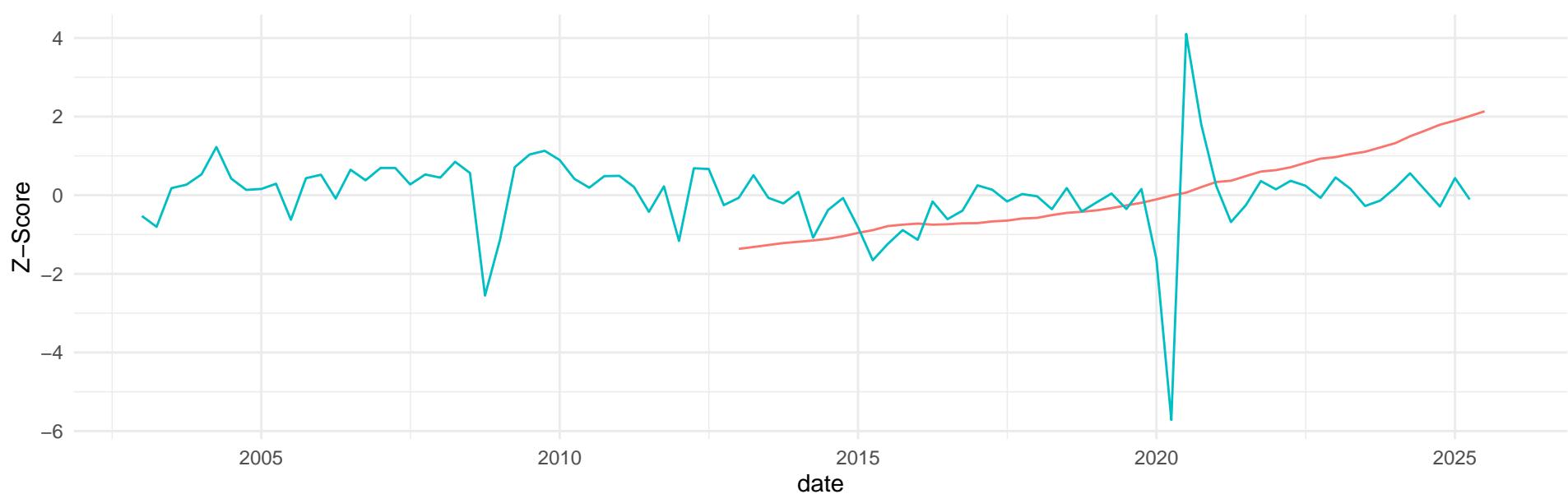
Corr: 0.18



Cross-Correlation (Quarterly Lags): Credit

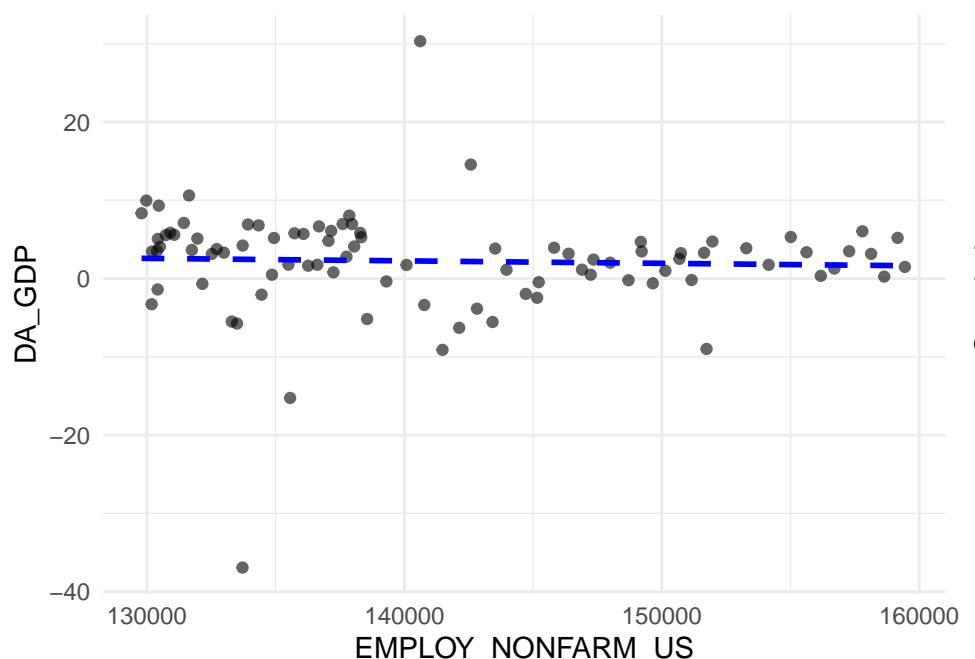


Standardized Time Series: Credit

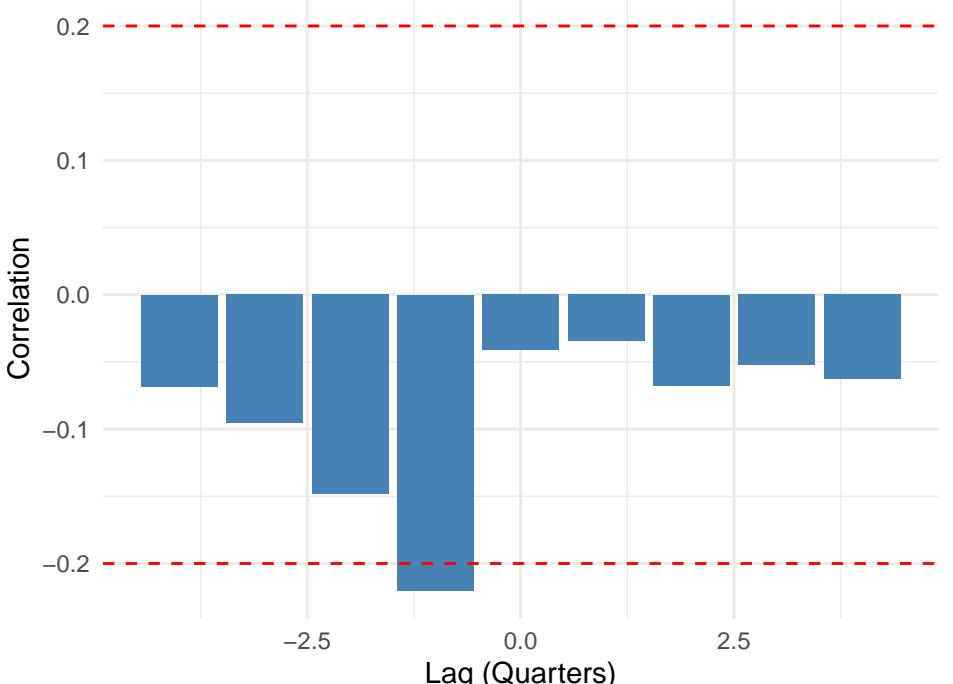


Scatter: EMPLOY_NONFARM_US vs Target

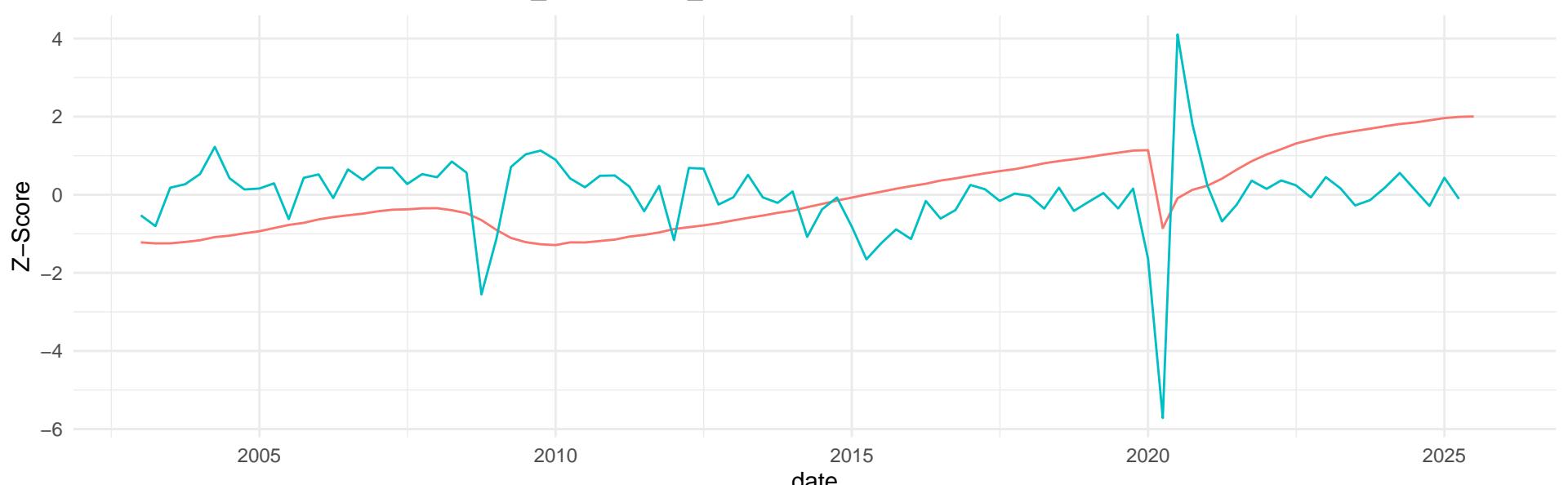
Corr: -0.04



Cross-Correlation (Quarterly Lags): EMPLOY_NONFARM_US



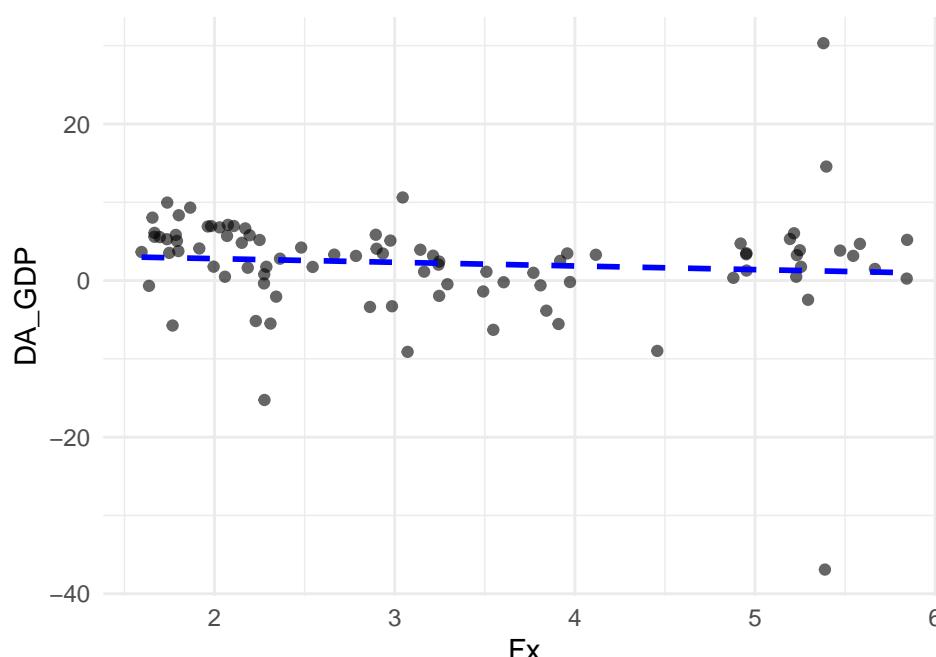
Standardized Time Series: EMPLOY_NONFARM_US



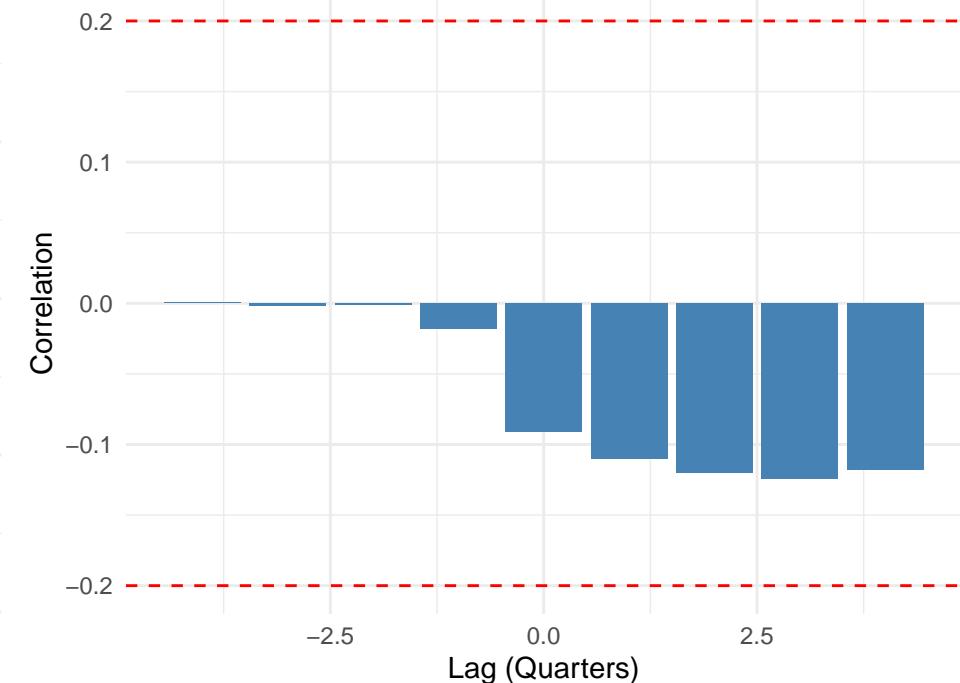
series — ind_scaled — target_scaled

Scatter: Fx vs Target

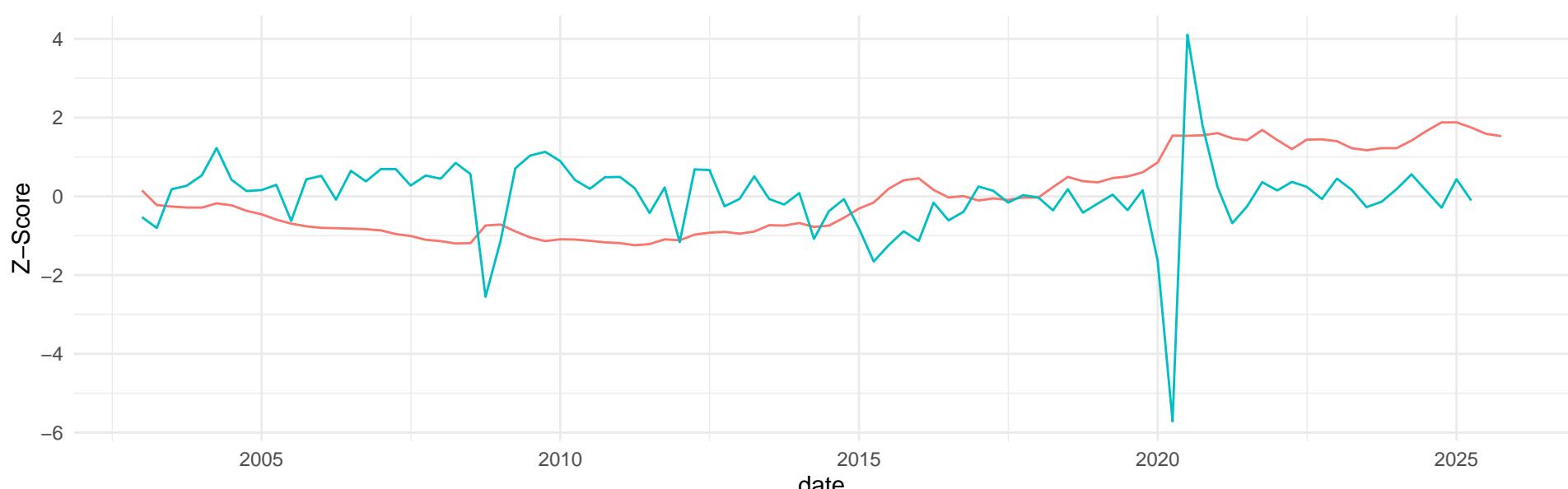
Corr: -0.09



Cross-Correlation (Quarterly Lags): Fx



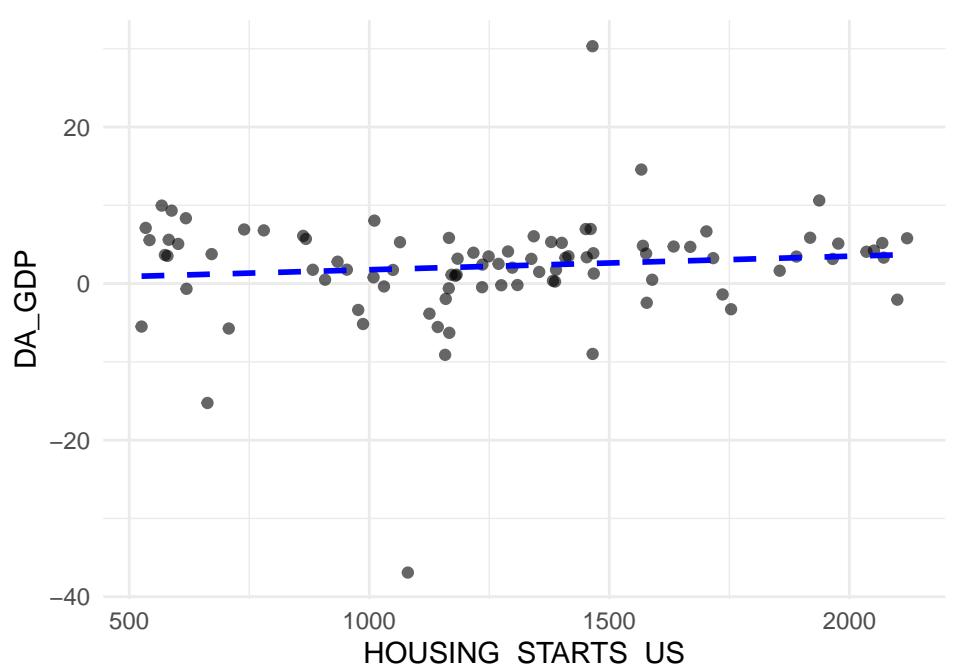
Standardized Time Series: Fx



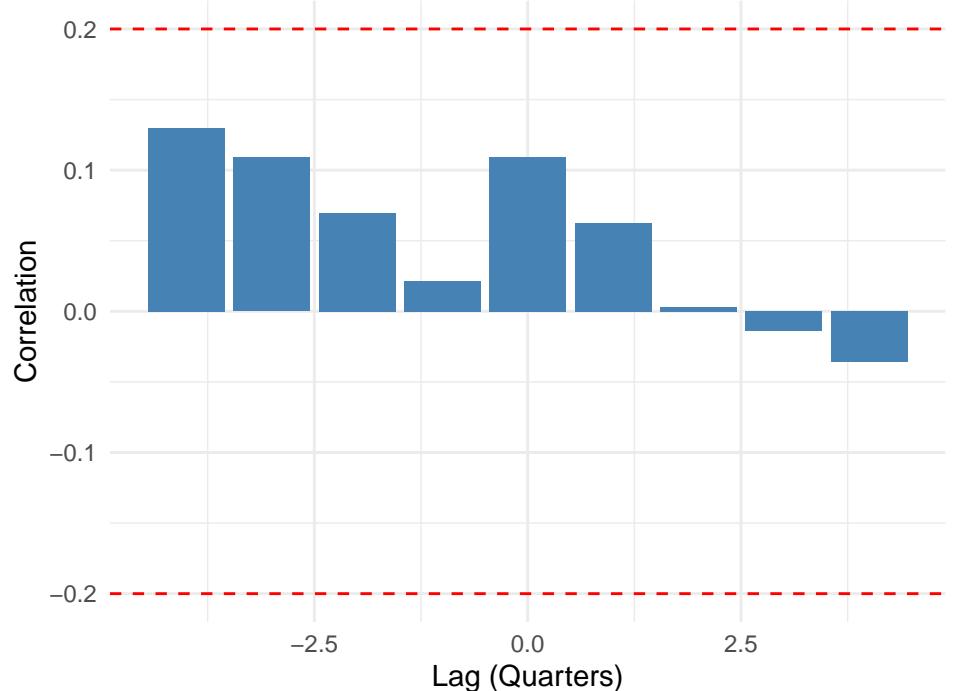
series — ind_scaled — target_scaled

Scatter: HOUSING_STARTS_US vs Target

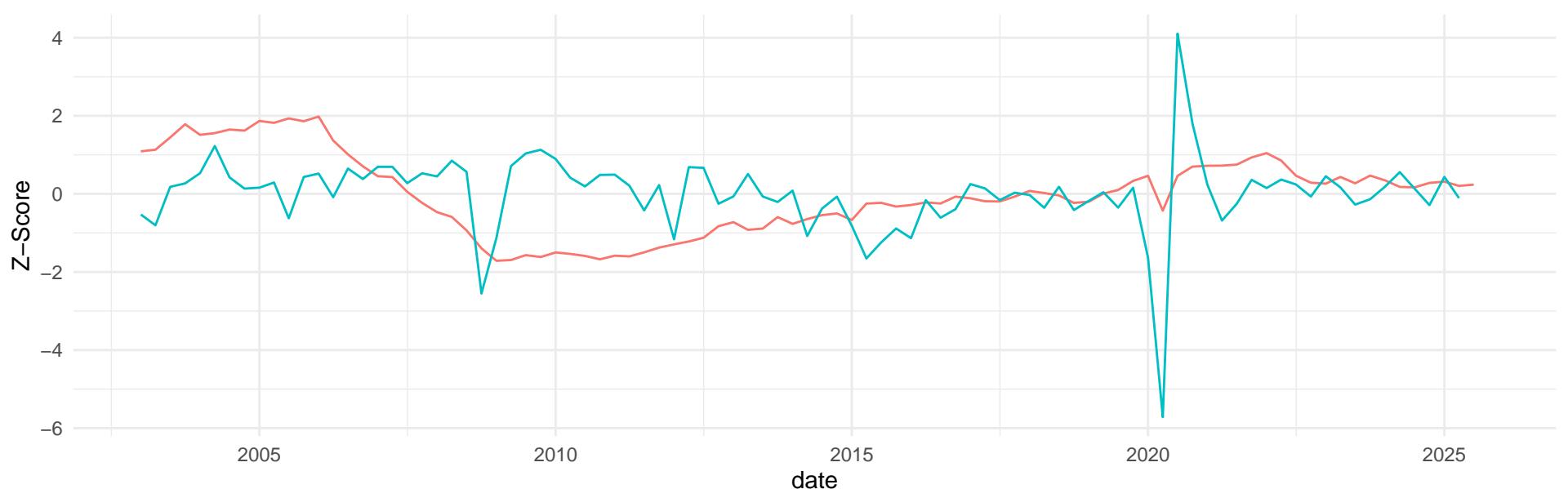
Corr: 0.11



Cross-Correlation (Quarterly Lags): HOUSING_STARTS_US



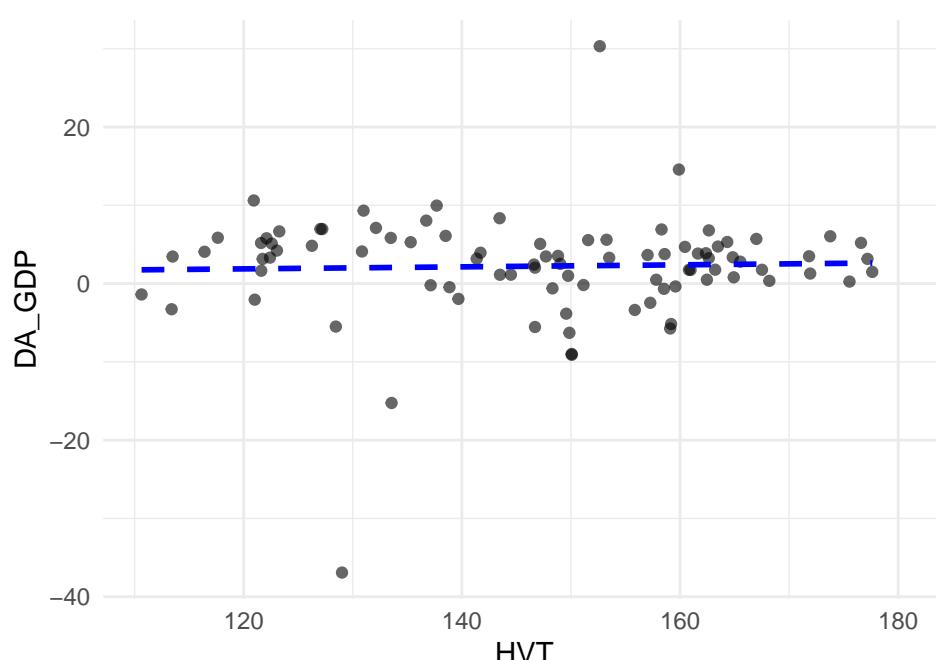
Standardized Time Series: HOUSING_STARTS_US



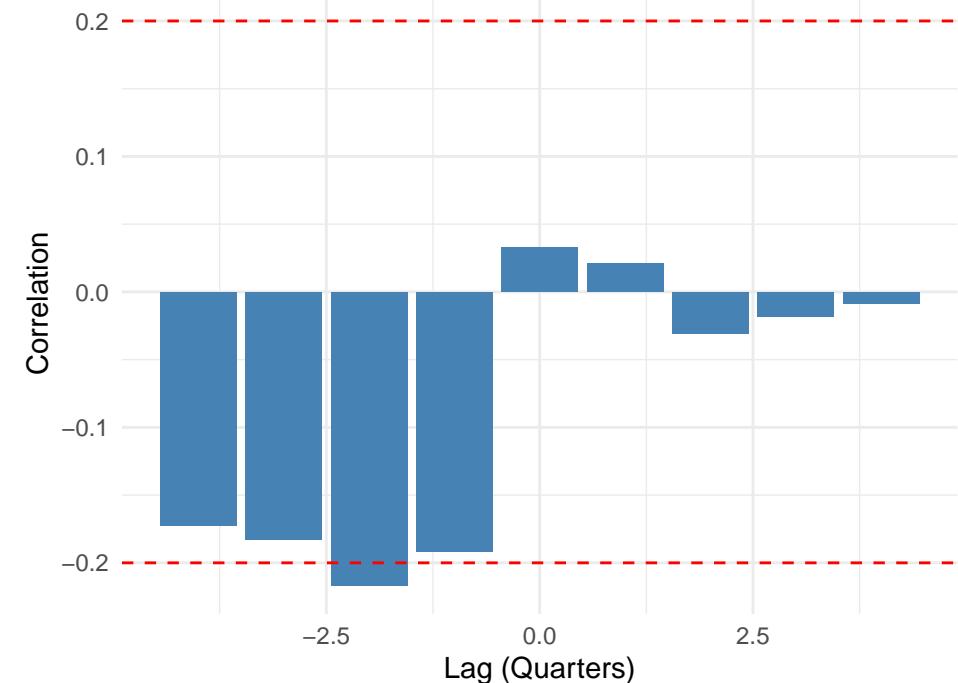
series — ind_scaled — target_scaled

Scatter: HVT vs Target

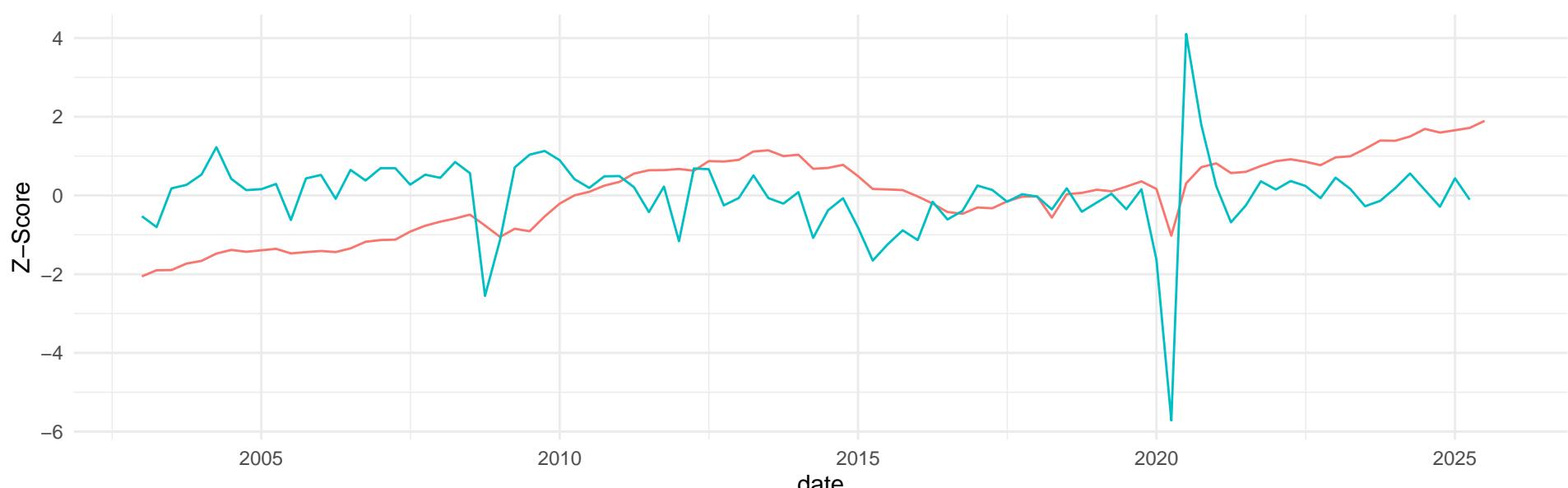
Corr: 0.03



Cross-Correlation (Quarterly Lags): HVT



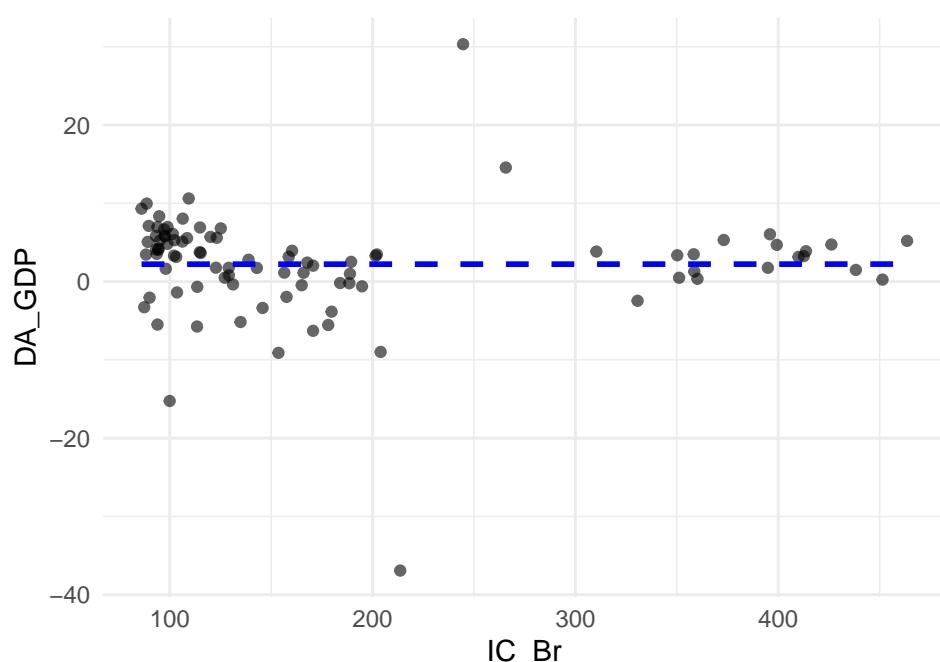
Standardized Time Series: HVT



series — ind_scaled — target_scaled

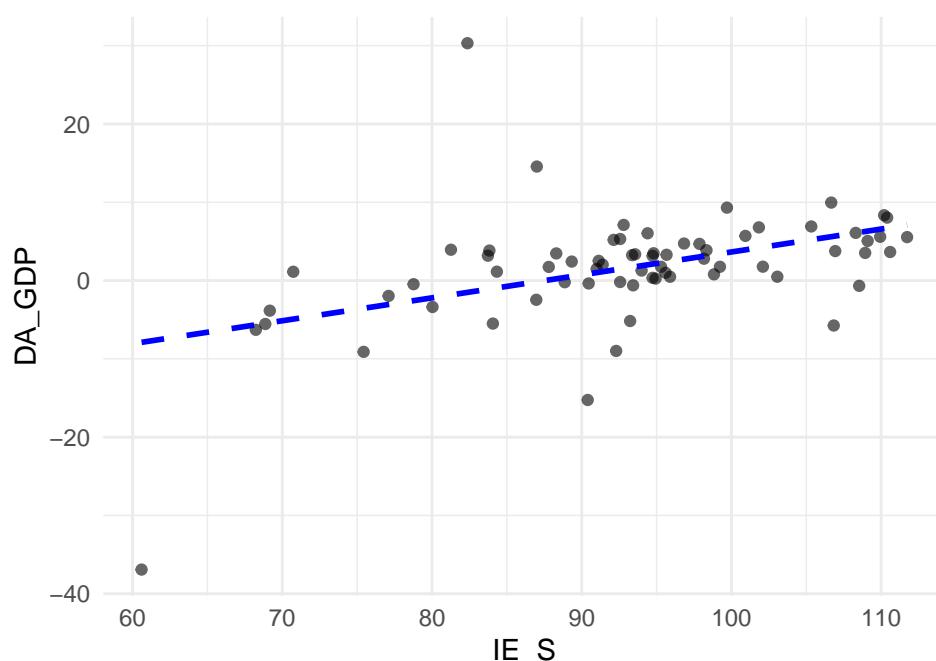
Scatter: IC_Br vs Target

Corr: 0

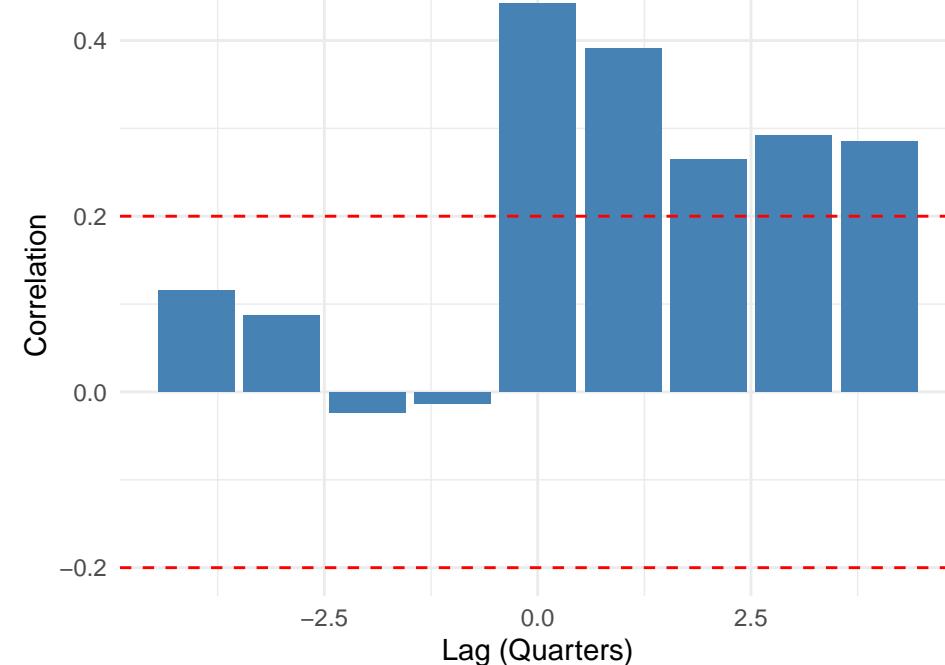


Scatter: IE_S vs Target

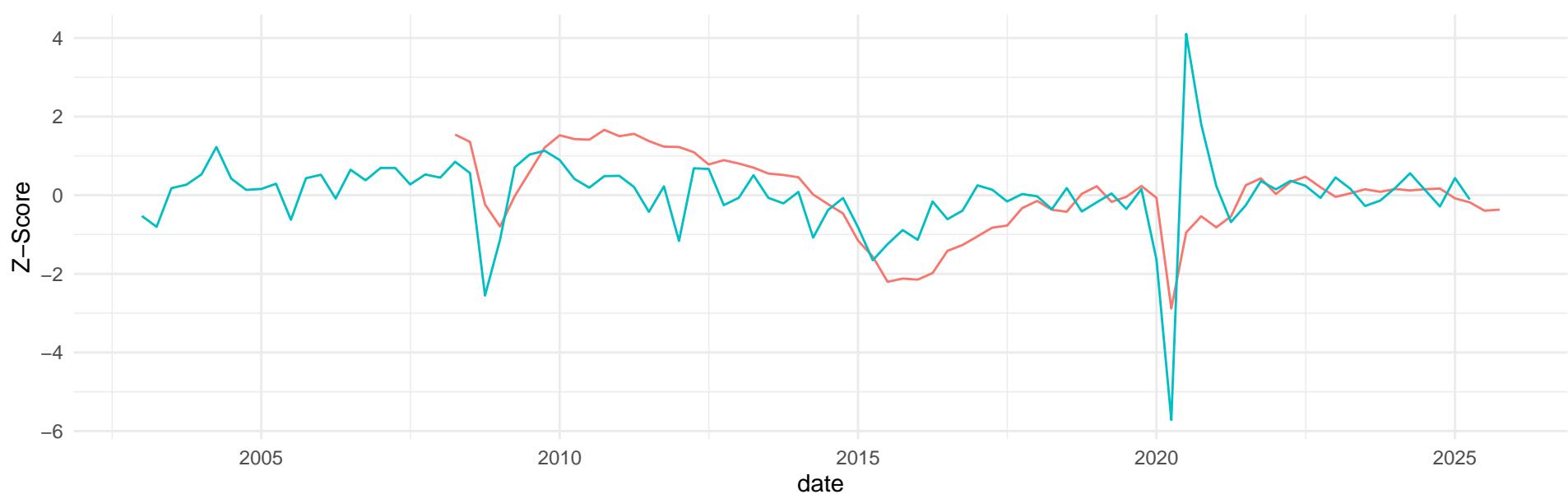
Corr: 0.44



Cross-Correlation (Quarterly Lags): IE_S



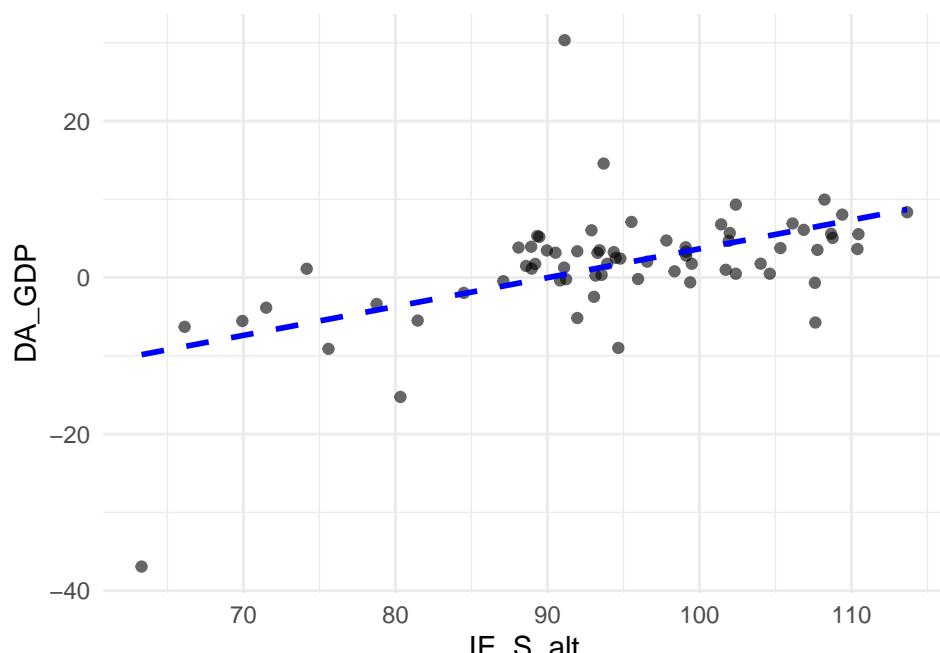
Standardized Time Series: IE_S



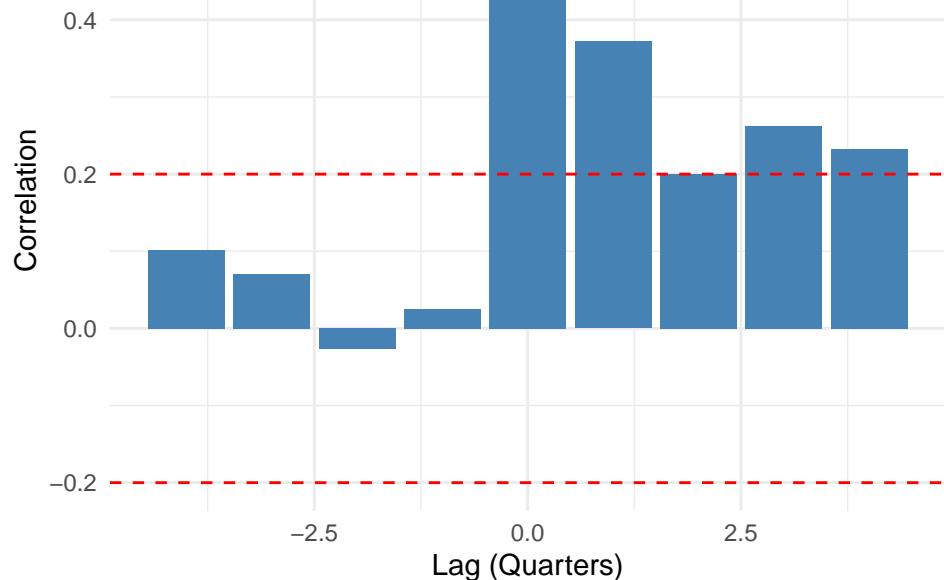
series — ind_scaled — target_scaled

Scatter: IE_S_alt vs Target

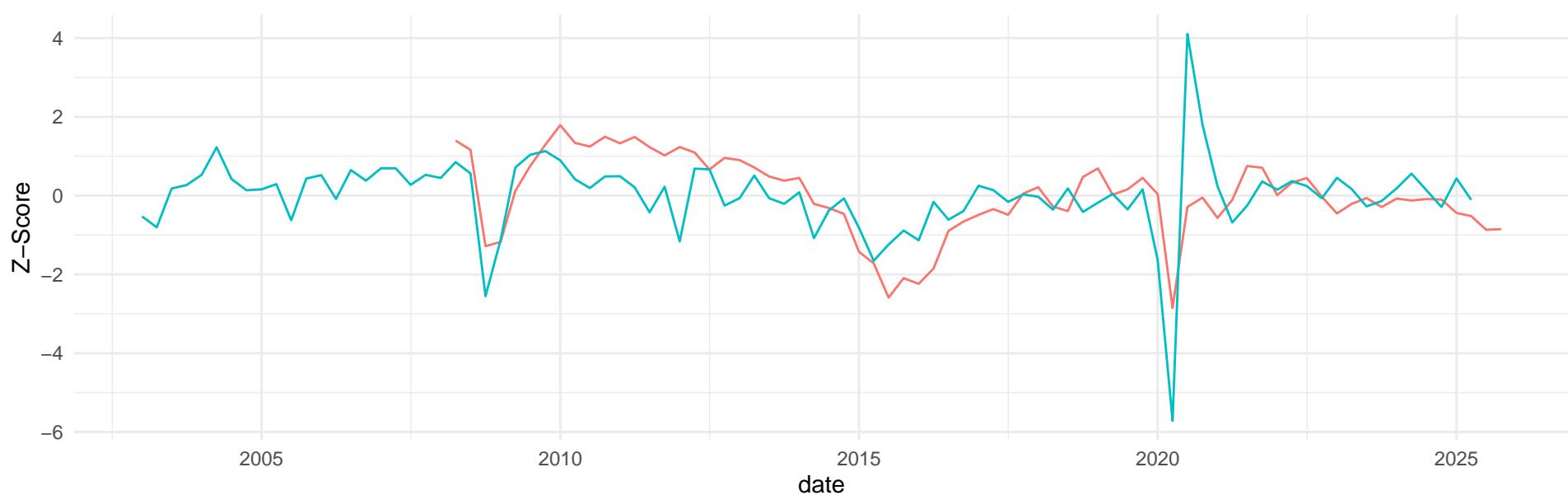
Corr: 0.53



Cross-Correlation (Quarterly Lags): IE_S_alt



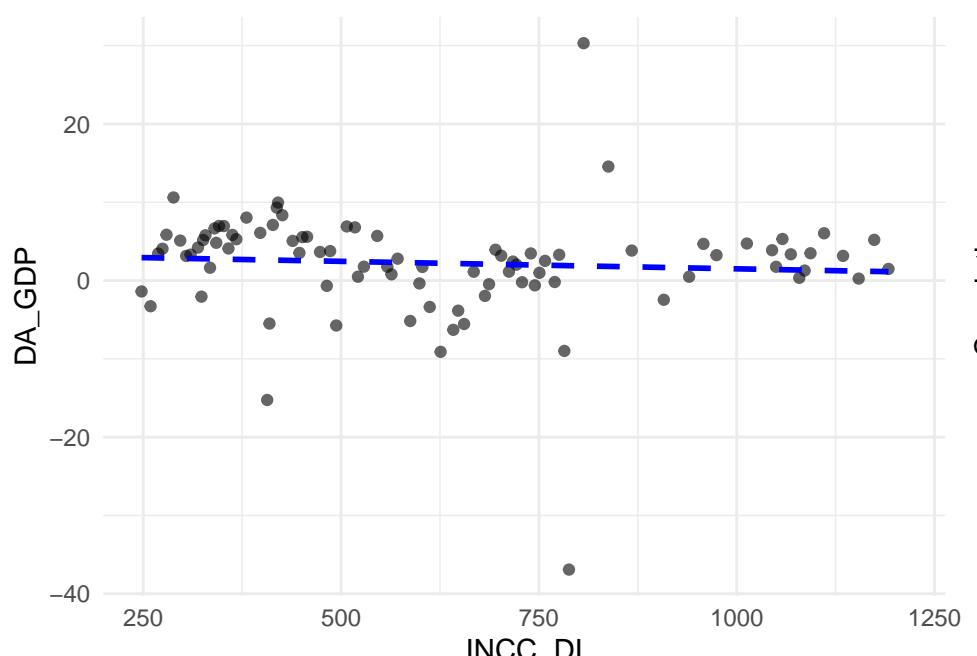
Standardized Time Series: IE_S_alt



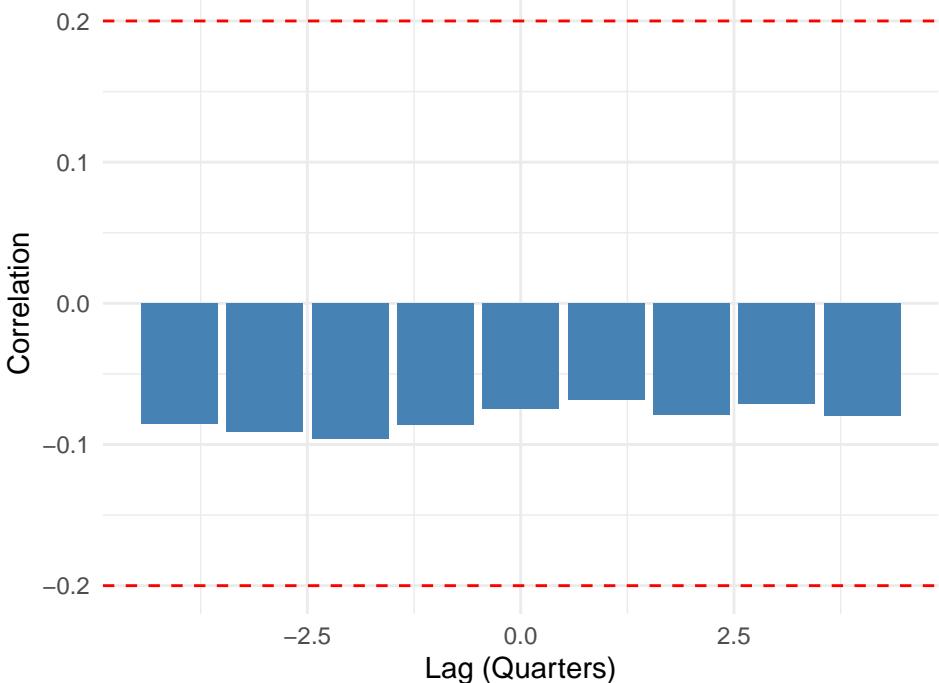
series — ind_scaled — target_scaled

Scatter: INCC_DI vs Target

Corr: -0.07



Cross-Correlation (Quarterly Lags): INCC_DI



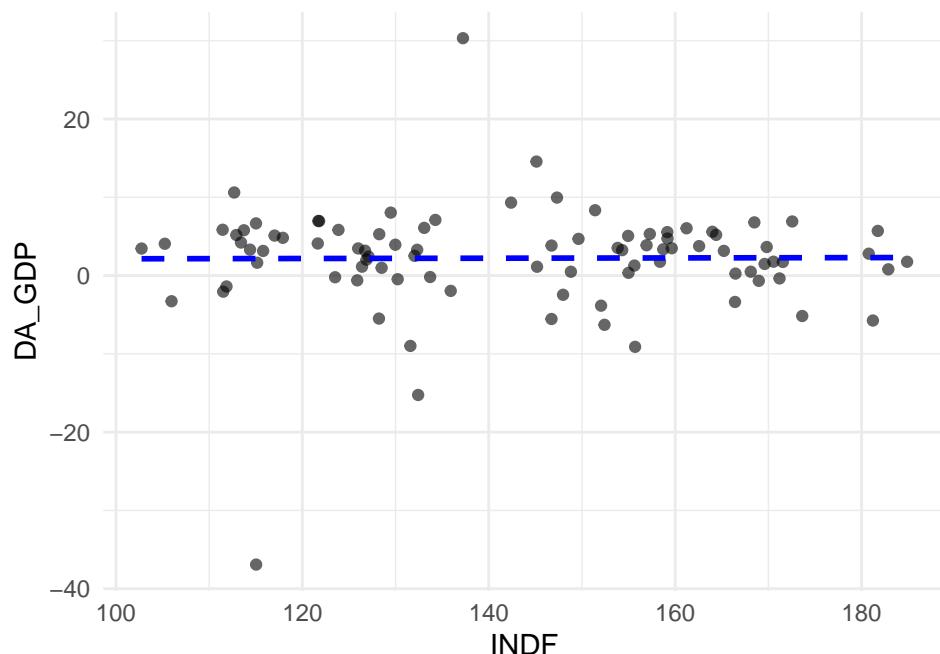
Standardized Time Series: INCC_DI



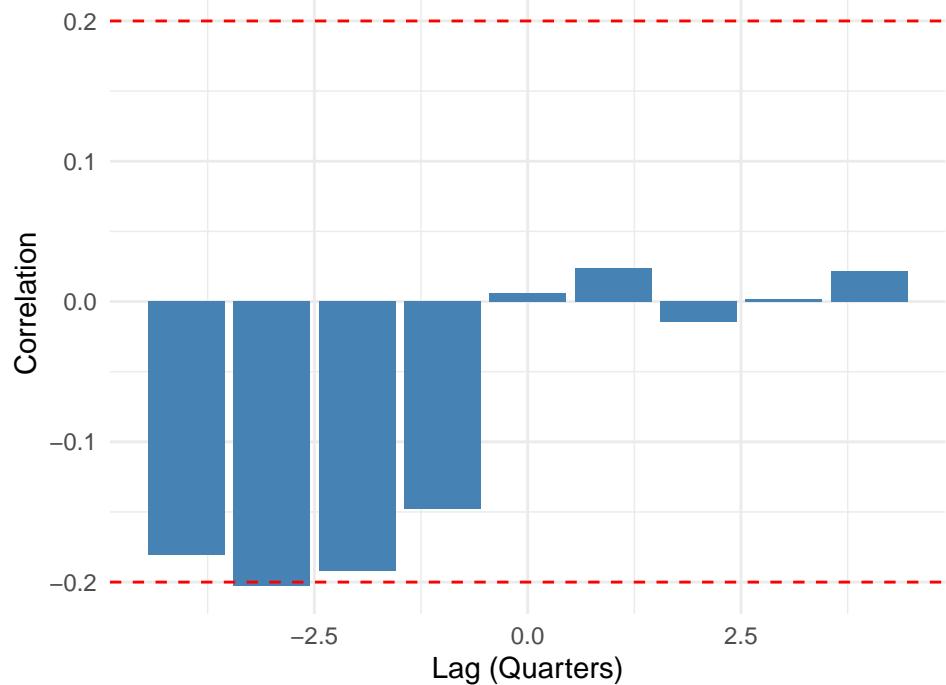
series — ind_scaled — target_scaled

Scatter: INDF vs Target

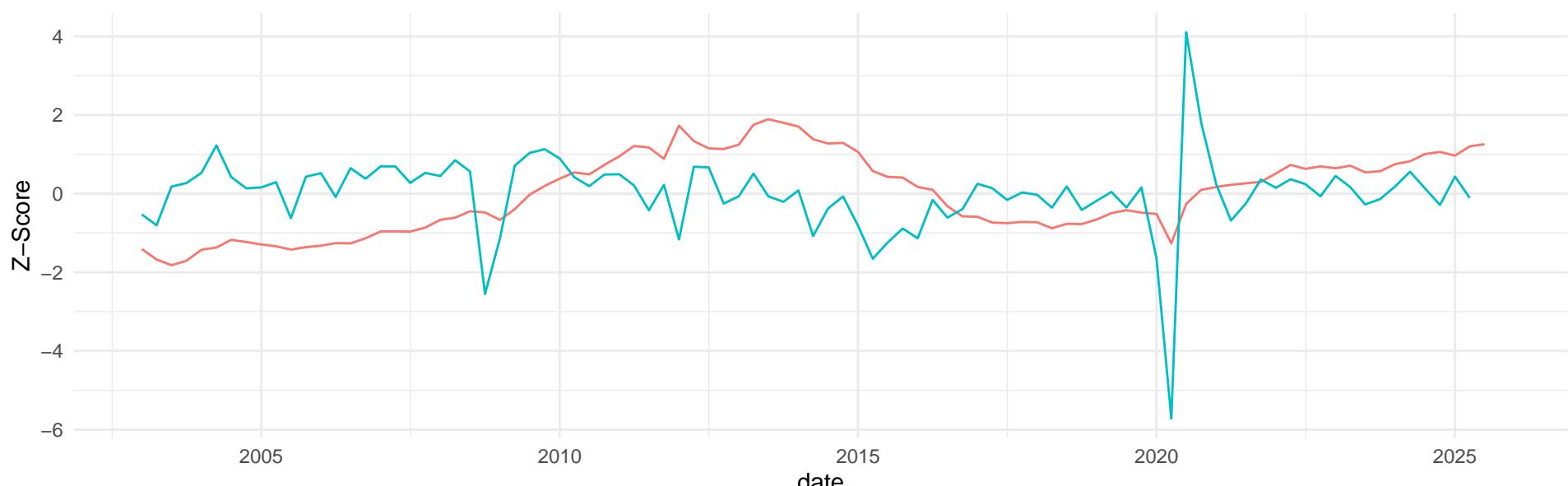
Corr: 0.01



Cross-Correlation (Quarterly Lags): INDF



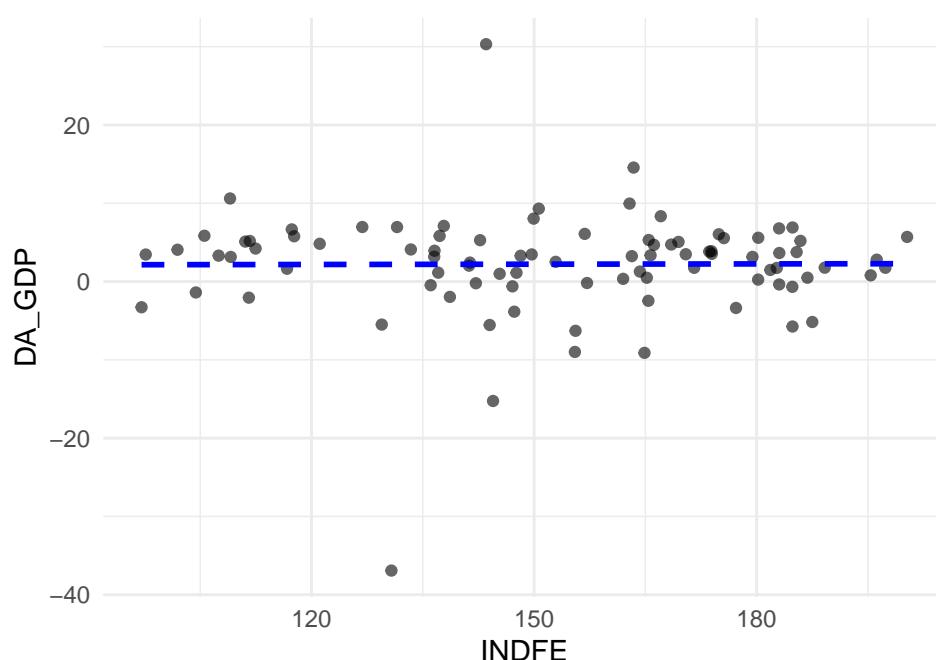
Standardized Time Series: INDF



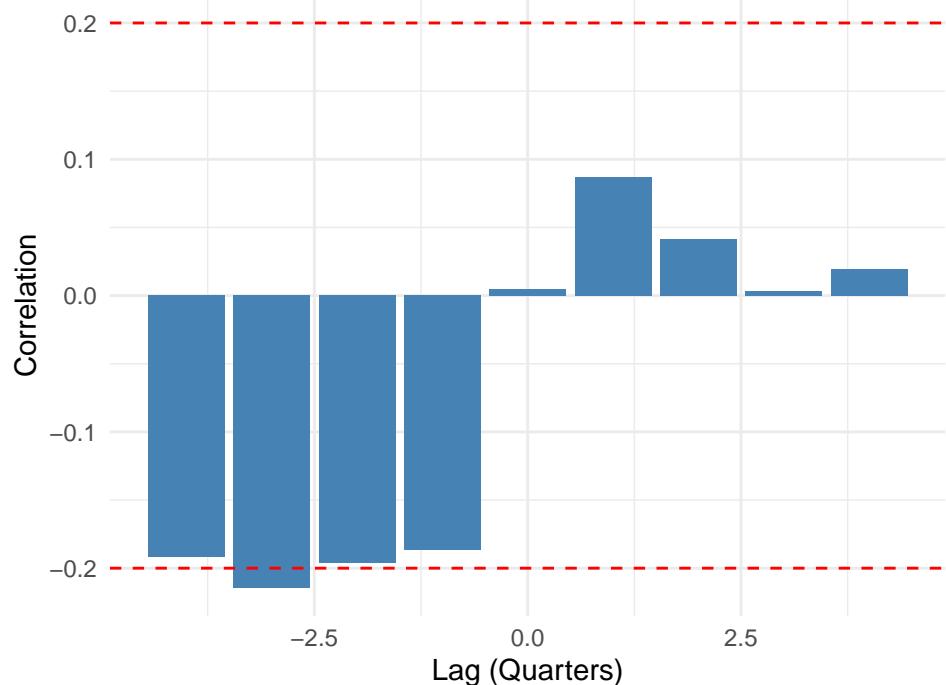
series — ind_scaled — target_scaled

Scatter: INDFE vs Target

Corr: 0



Cross-Correlation (Quarterly Lags): INDFE



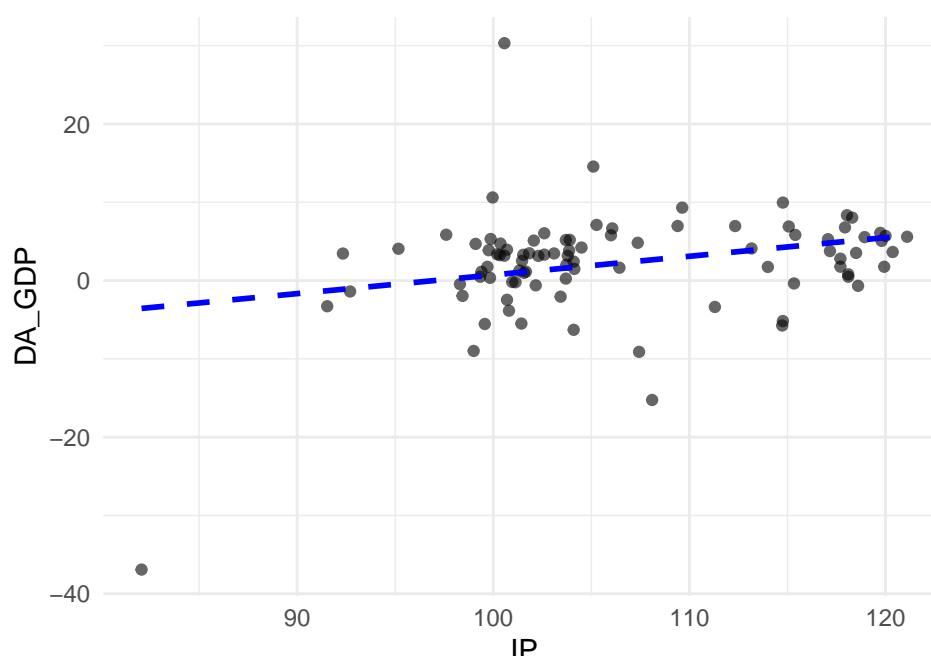
Standardized Time Series: INDFE



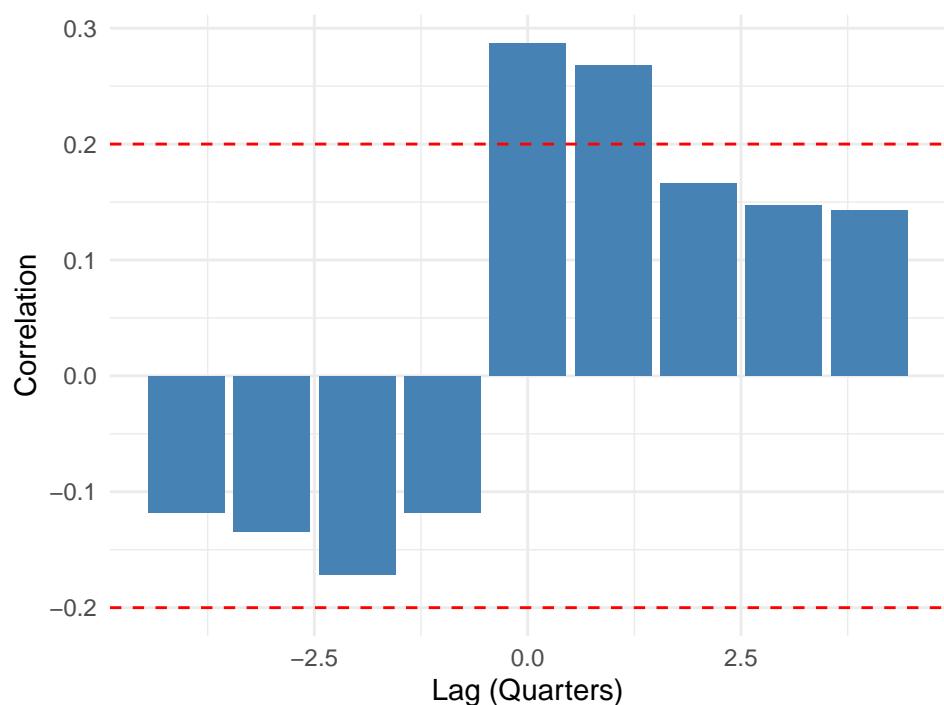
series — ind_scaled — target_scaled

Scatter: IP vs Target

Corr: 0.29



Cross-Correlation (Quarterly Lags): IP



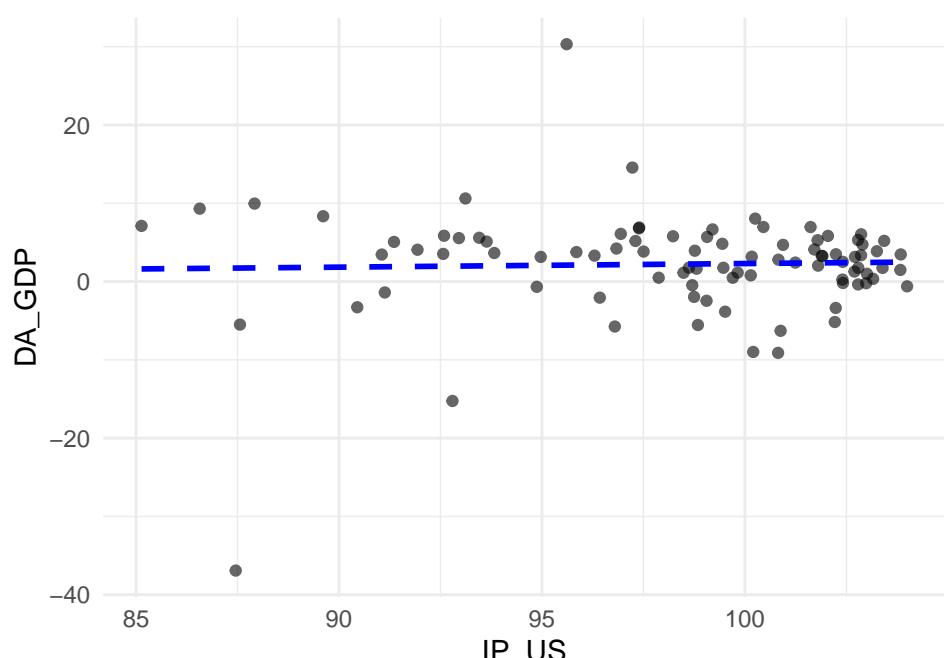
Standardized Time Series: IP



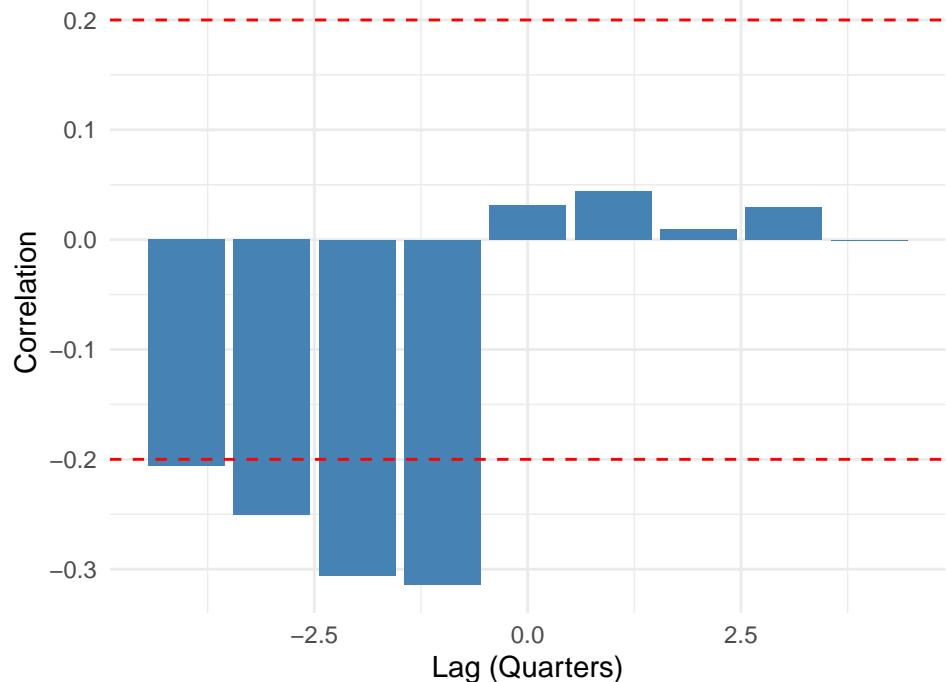
series — ind_scaled — target_scaled

Scatter: IP_US vs Target

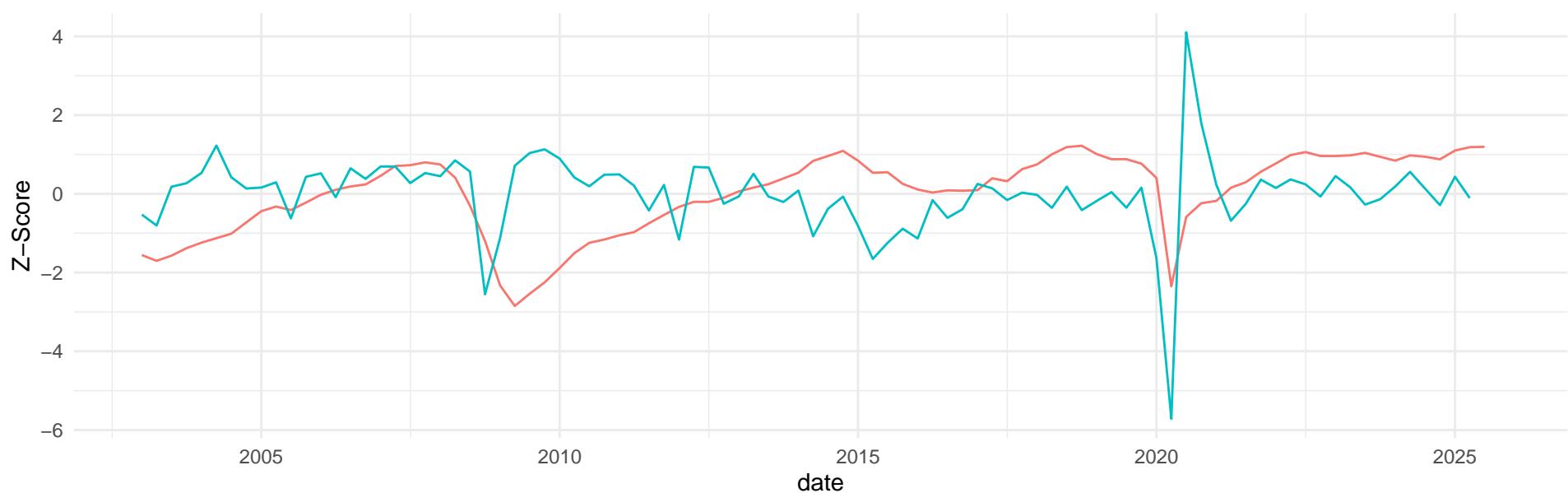
Corr: 0.03



Cross-Correlation (Quarterly Lags): IP_US



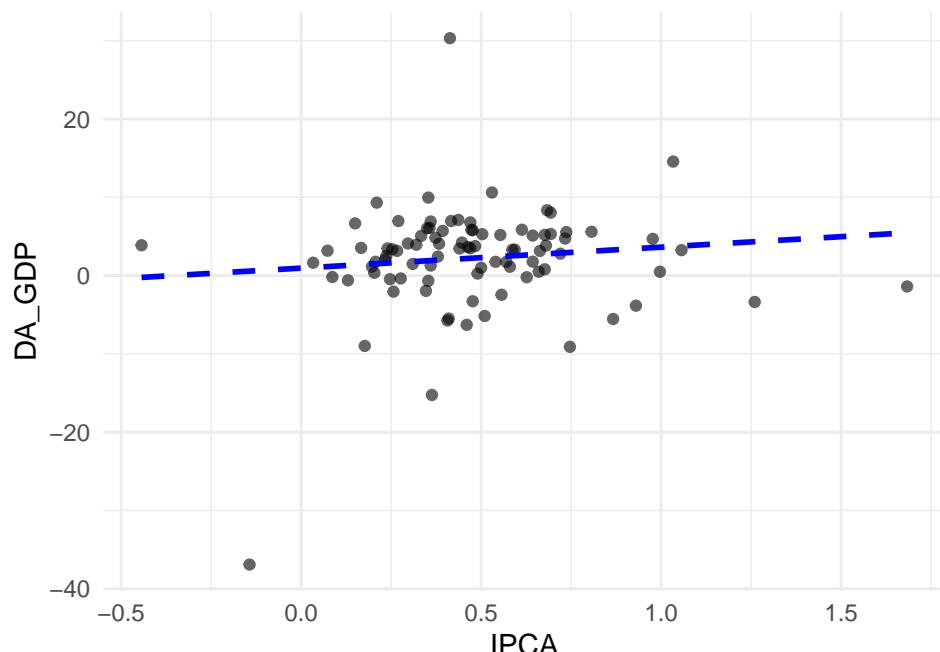
Standardized Time Series: IP_US



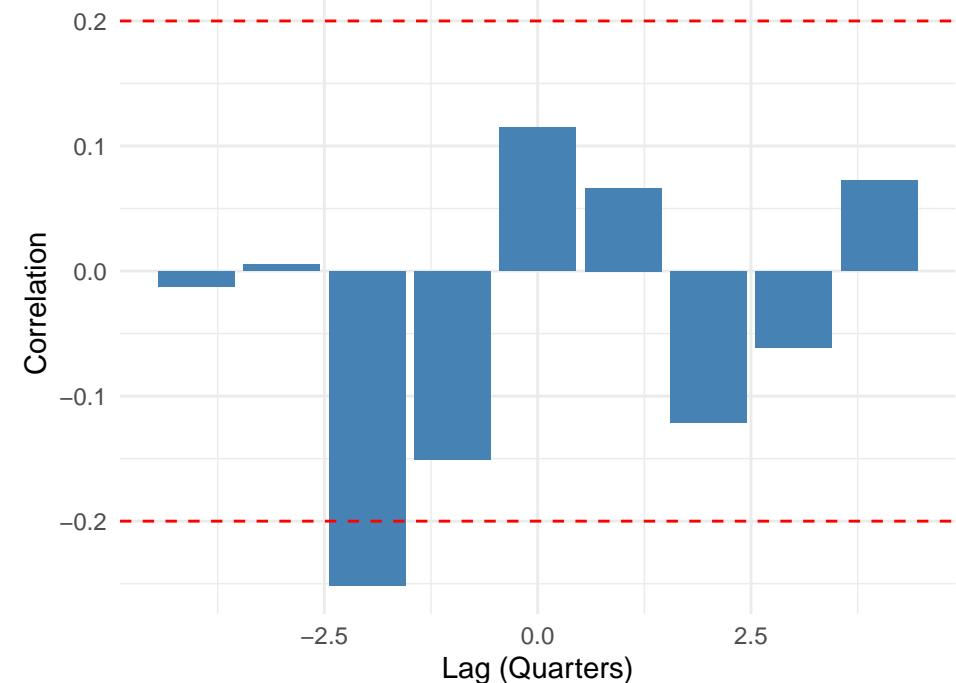
series — ind_scaled — target_scaled

Scatter: IPCA vs Target

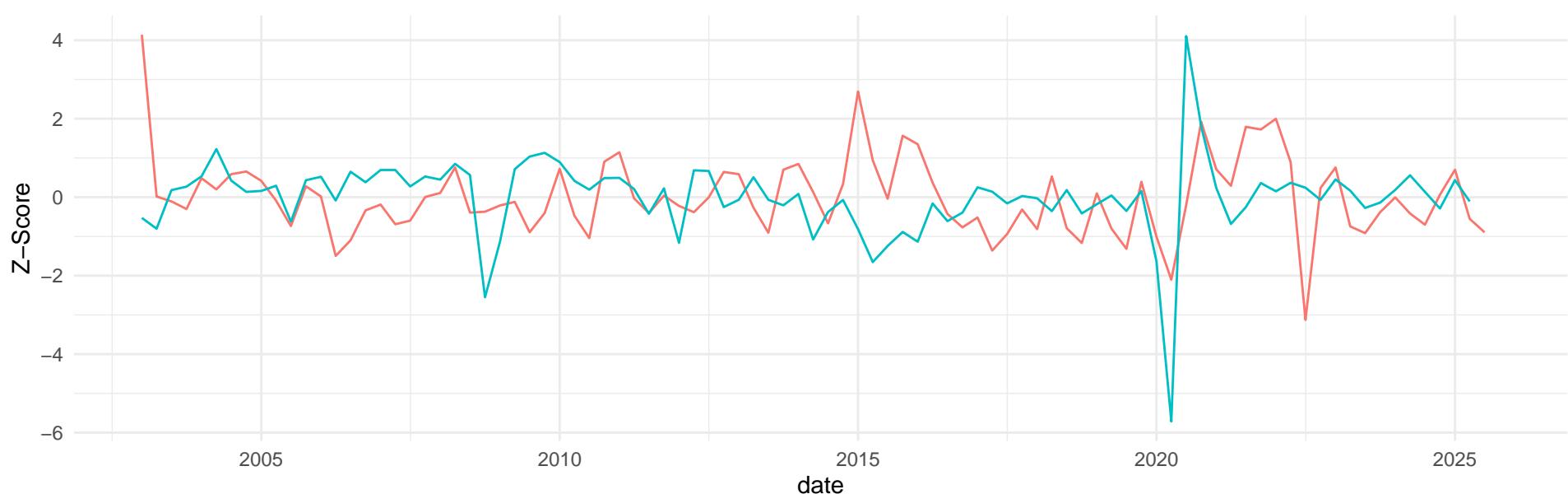
Corr: 0.11



Cross-Correlation (Quarterly Lags): IPCA



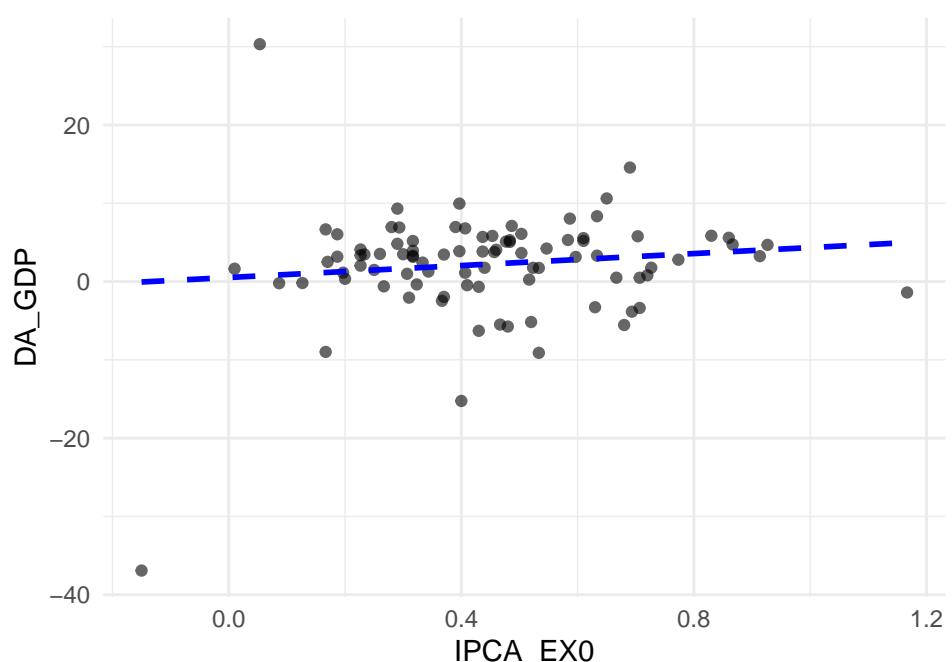
Standardized Time Series: IPCA



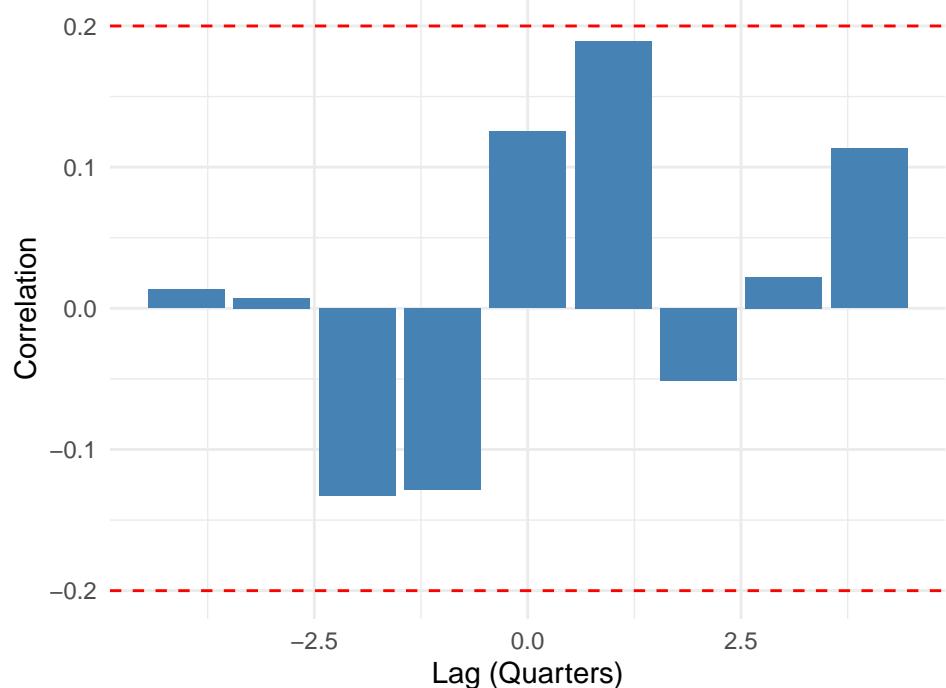
series — ind_scaled — target_scaled

Scatter: IPCA_EX0 vs Target

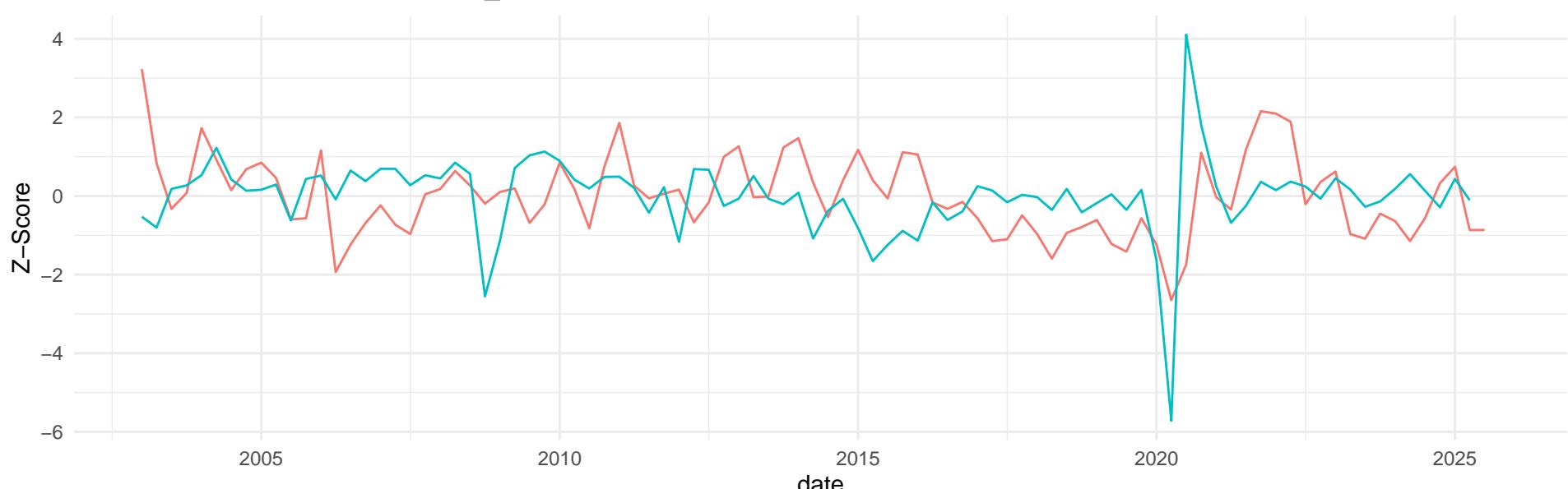
Corr: 0.13



Cross-Correlation (Quarterly Lags): IPCA_EX0



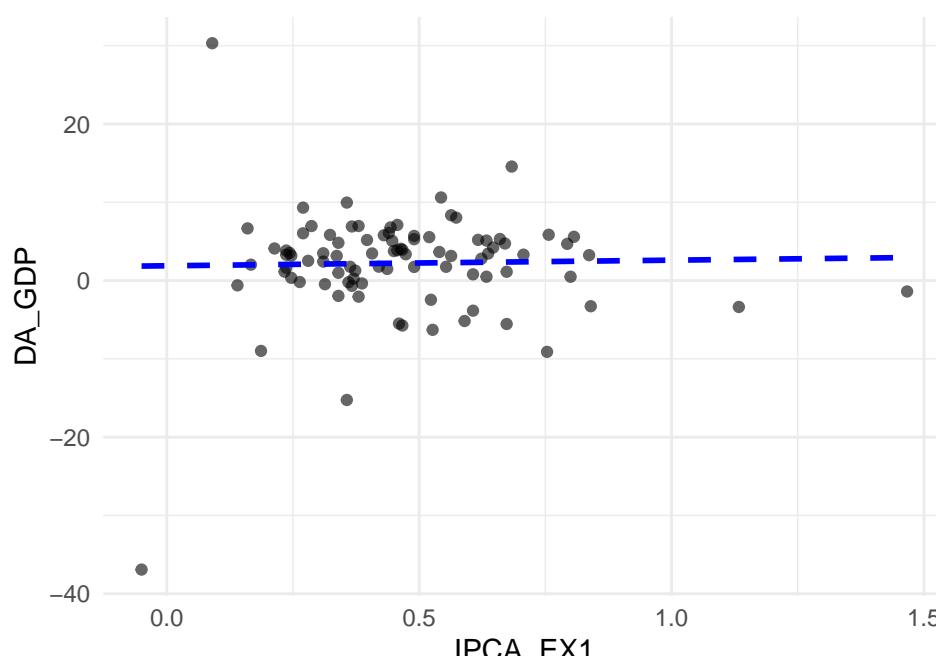
Standardized Time Series: IPCA_EX0



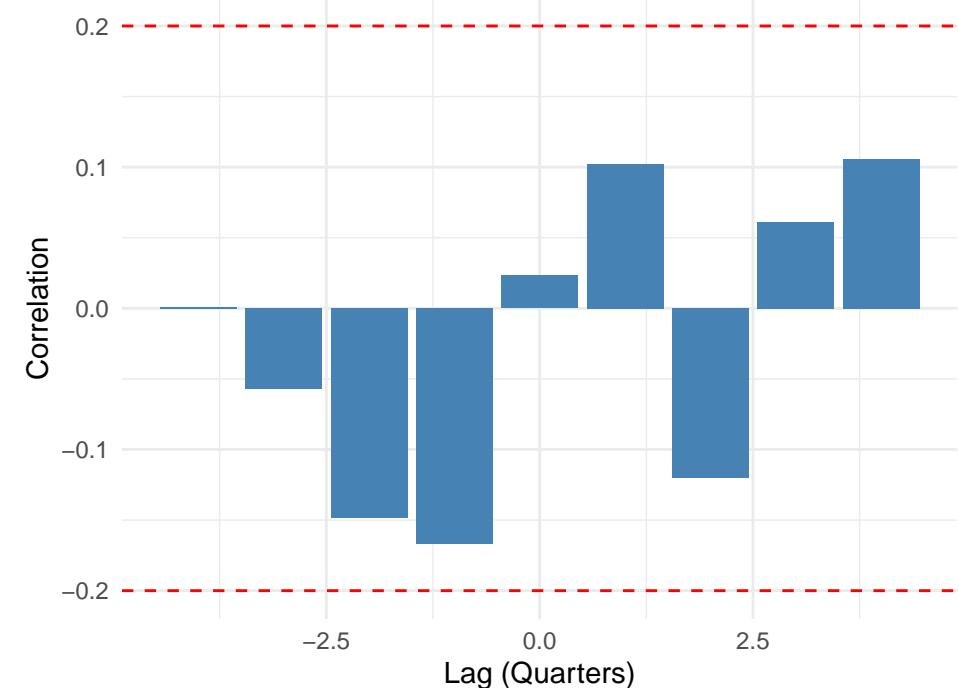
series — ind_scaled — target_scaled

Scatter: IPCA_EX1 vs Target

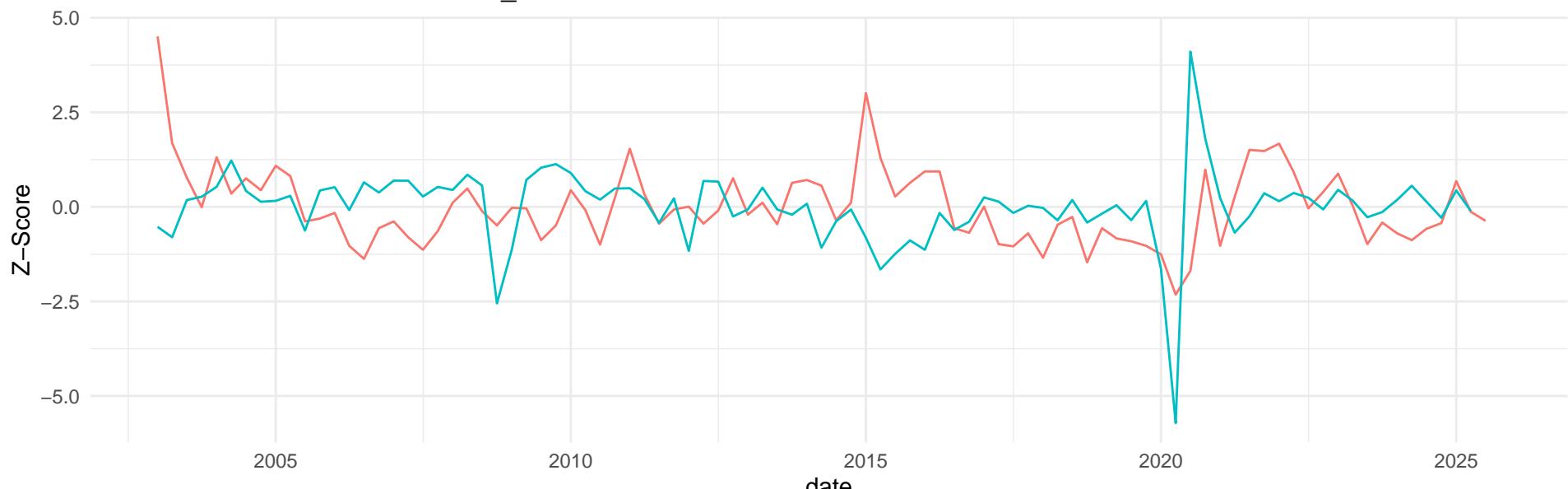
Corr: 0.02



Cross-Correlation (Quarterly Lags): IPCA_EX1



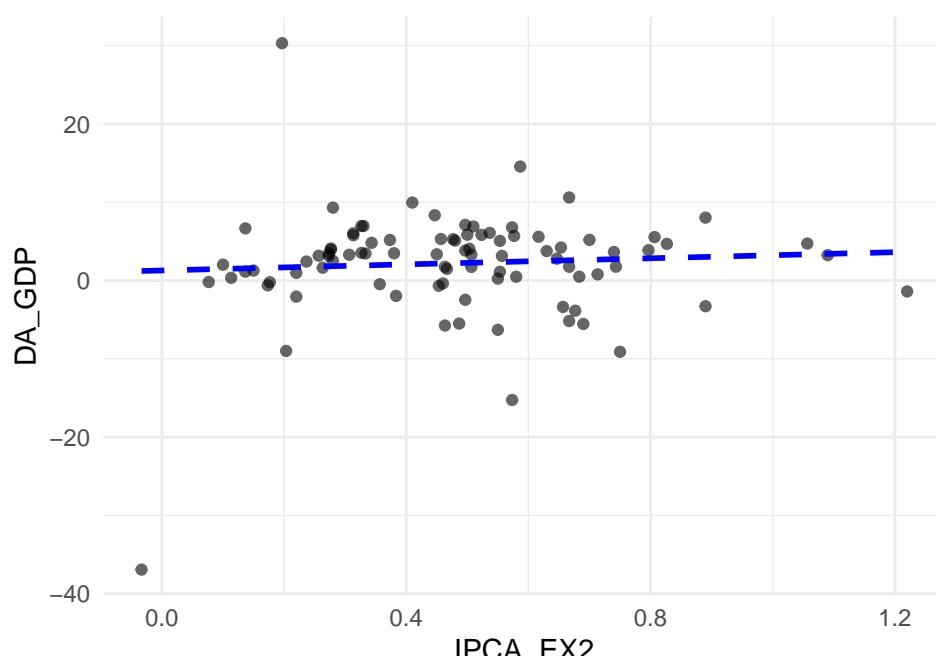
Standardized Time Series: IPCA_EX1



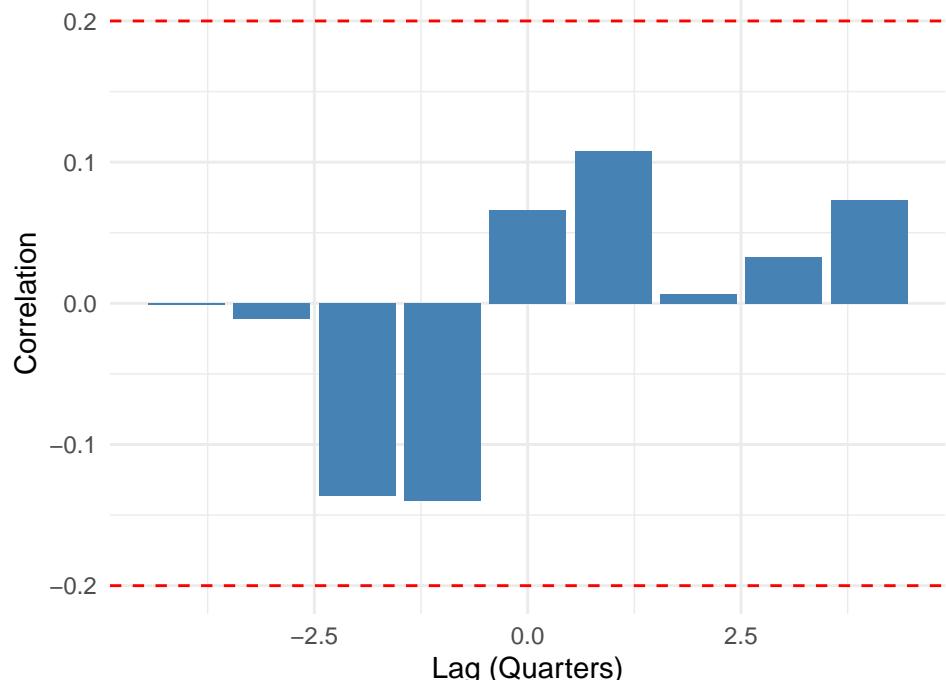
series — ind_scaled — target_scaled

Scatter: IPCA_EX2 vs Target

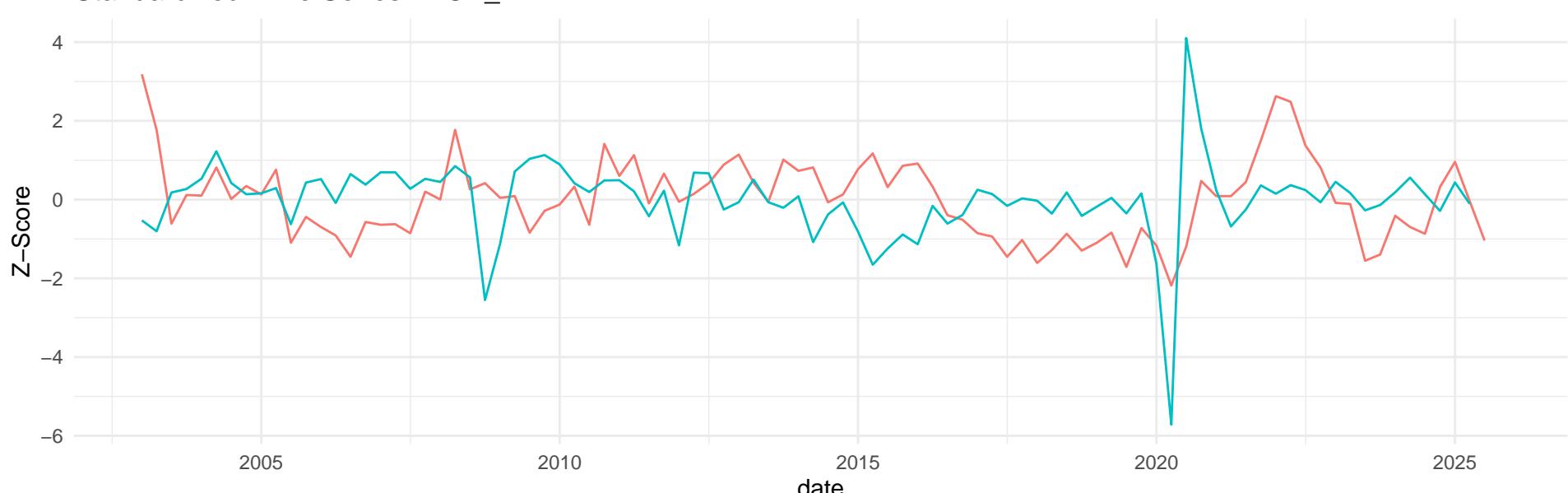
Corr: 0.07



Cross-Correlation (Quarterly Lags): IPCA_EX2



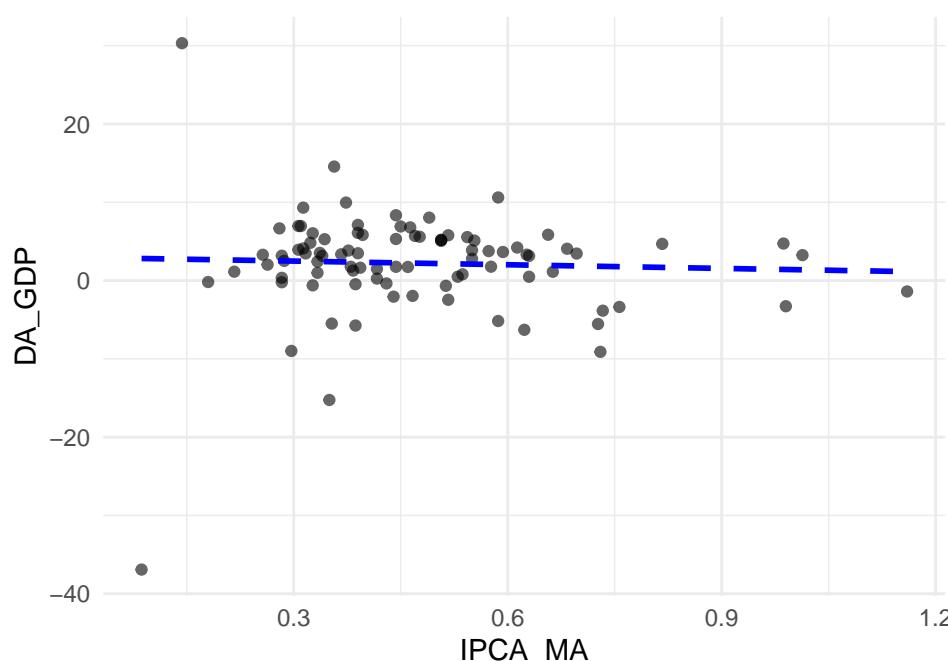
Standardized Time Series: IPCA_EX2



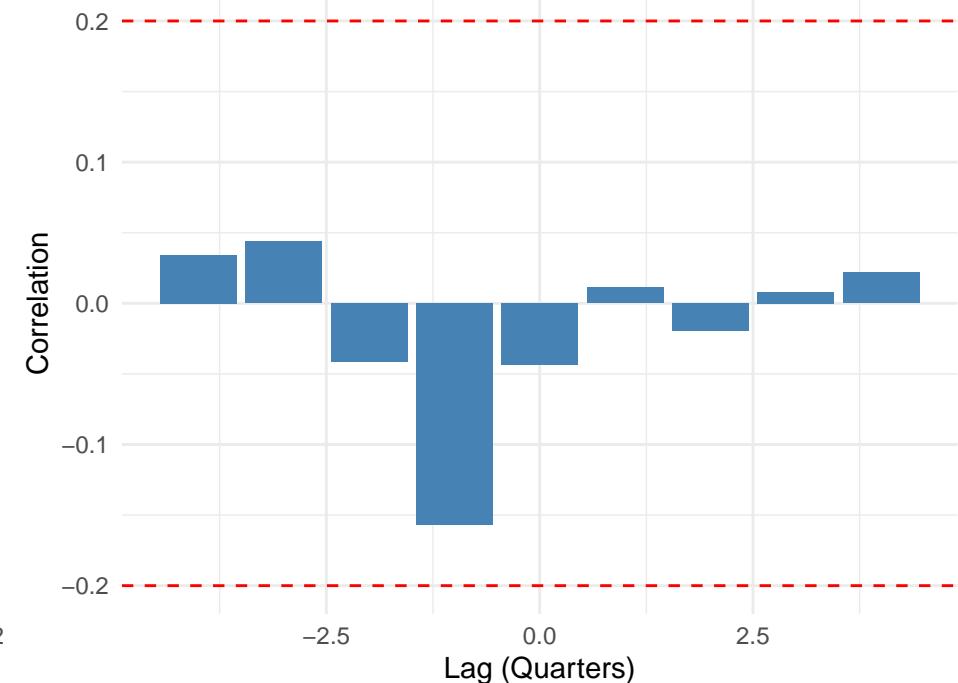
series — ind_scaled — target_scaled

Scatter: IPCA_MA vs Target

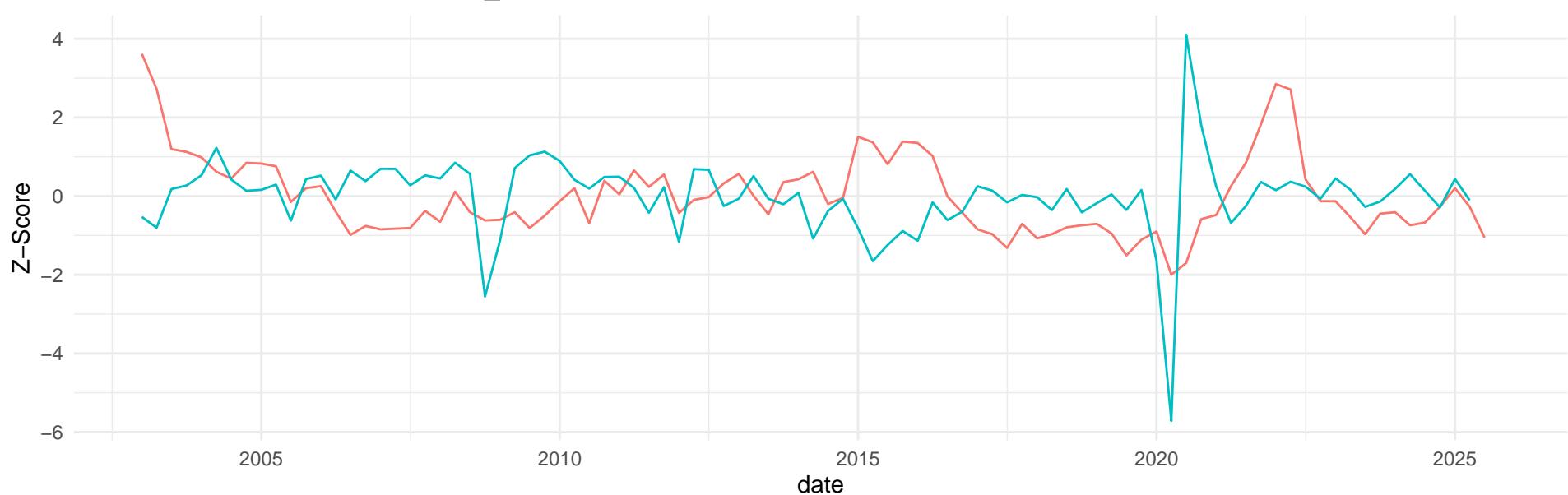
Corr: -0.04



Cross-Correlation (Quarterly Lags): IPCA_MA



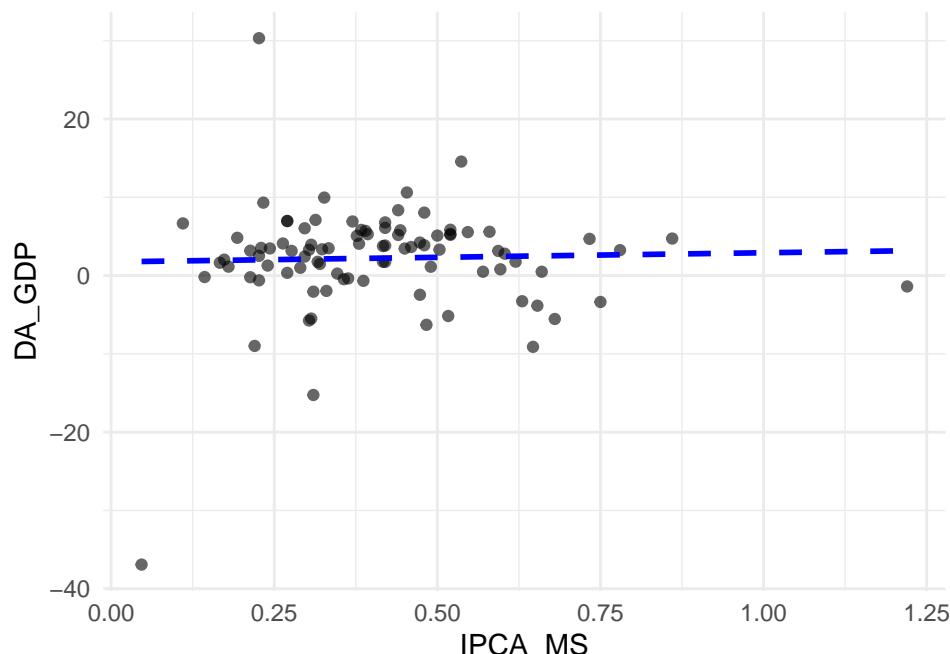
Standardized Time Series: IPCA_MA



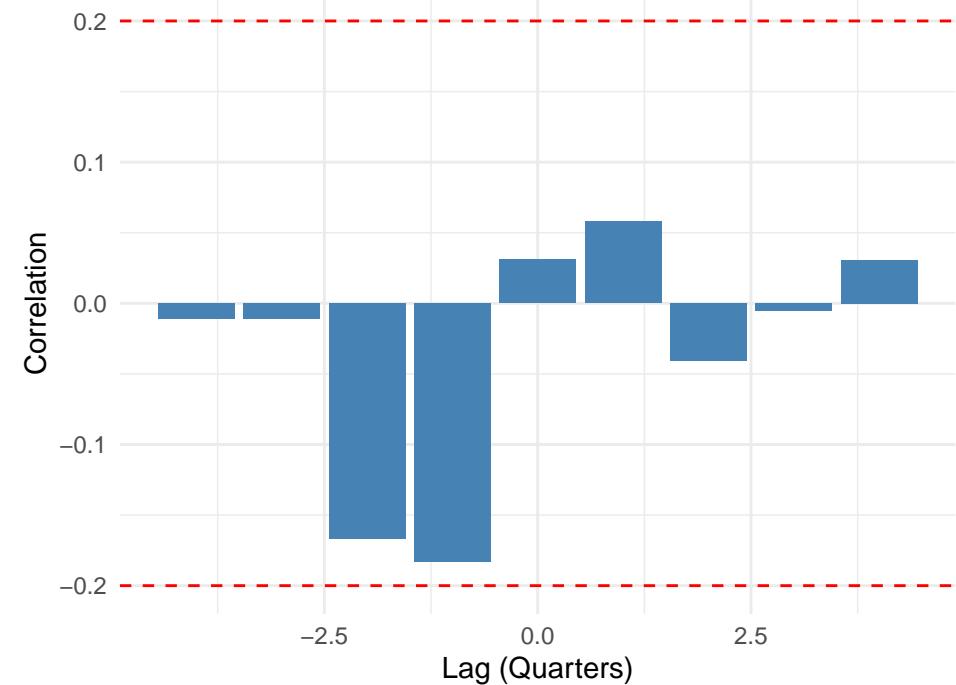
series — ind_scaled — target_scaled

Scatter: IPCA_MS vs Target

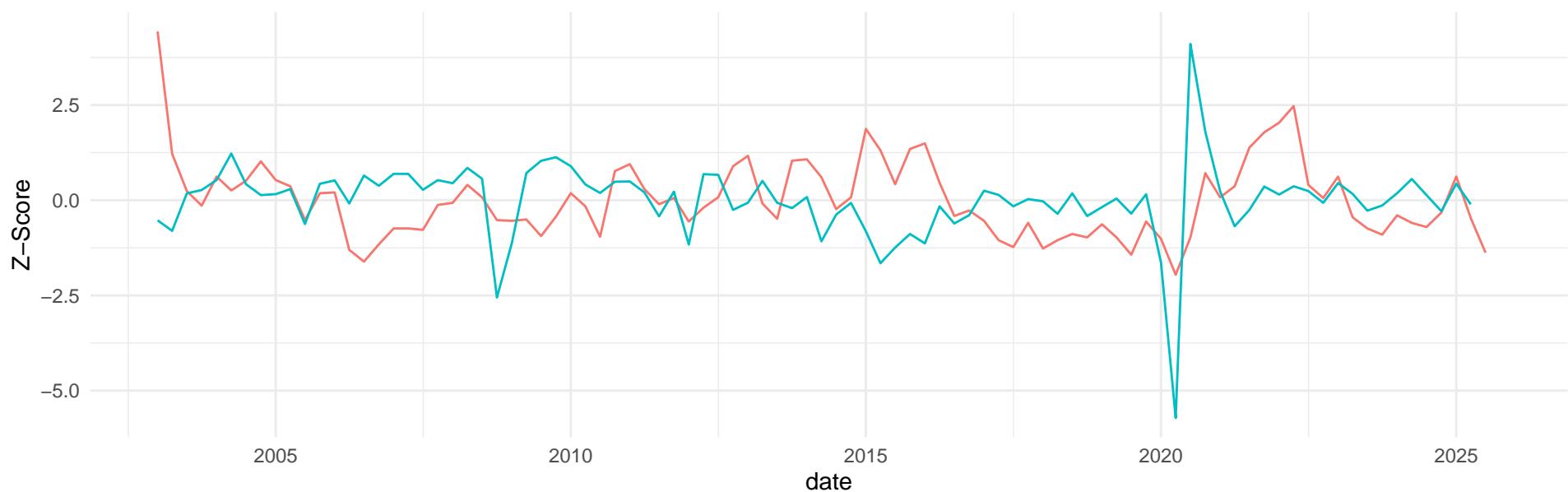
Corr: 0.03



Cross-Correlation (Quarterly Lags): IPCA_MS



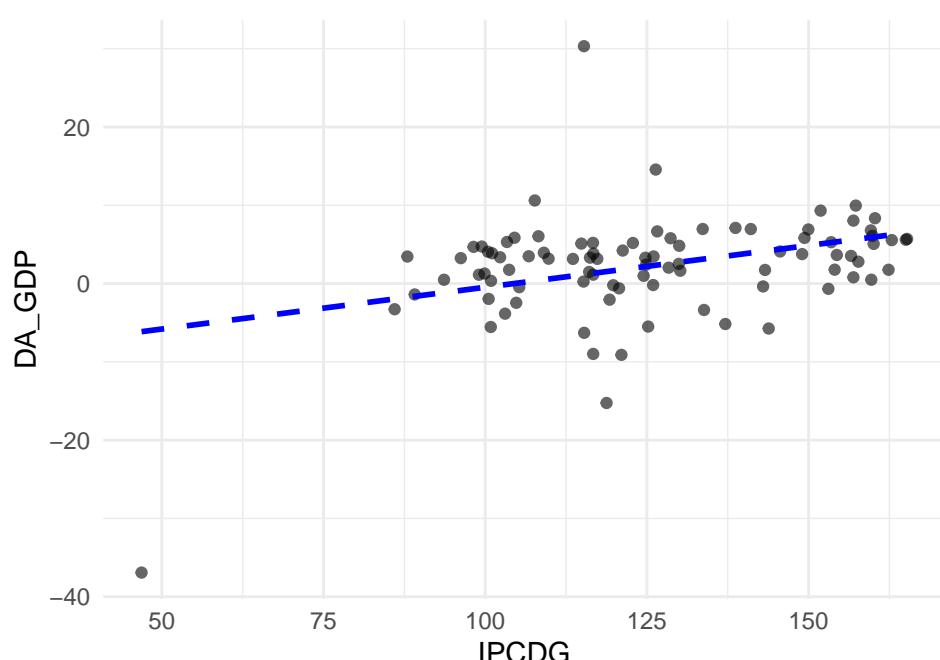
Standardized Time Series: IPCA_MS



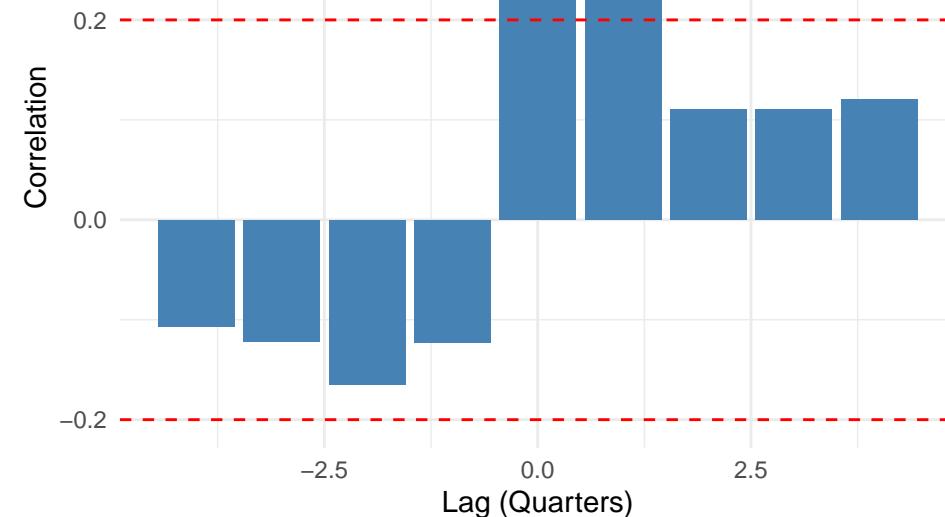
series — ind_scaled — target_scaled

Scatter: IPCDG vs Target

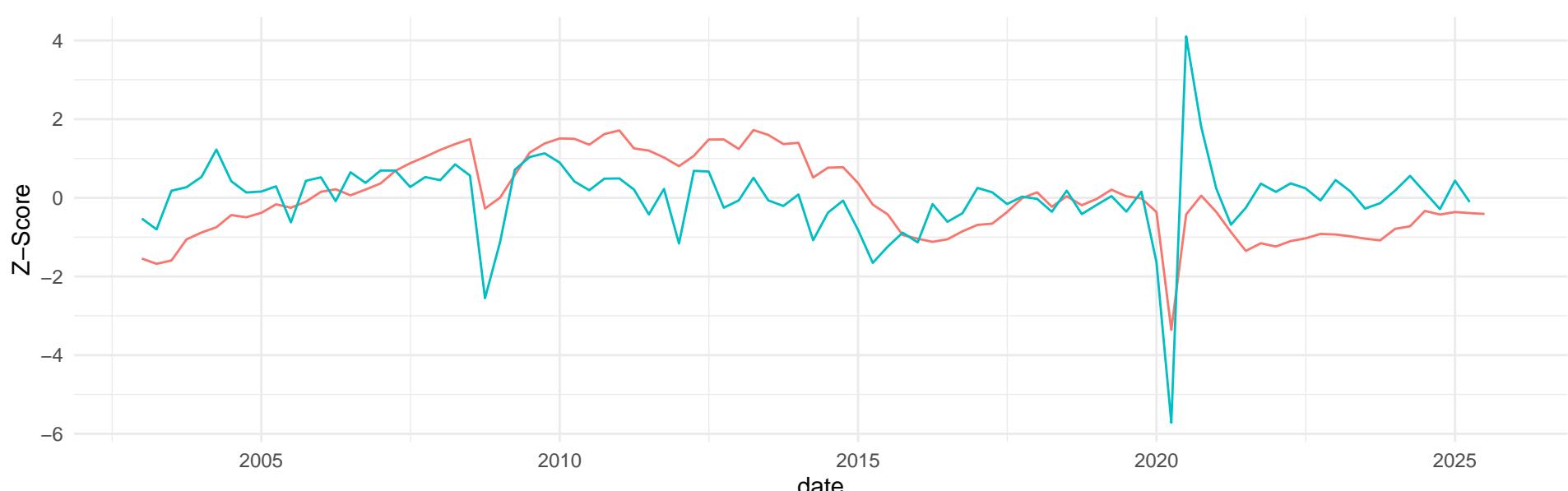
Corr: 0.37



Cross-Correlation (Quarterly Lags): IPCDG



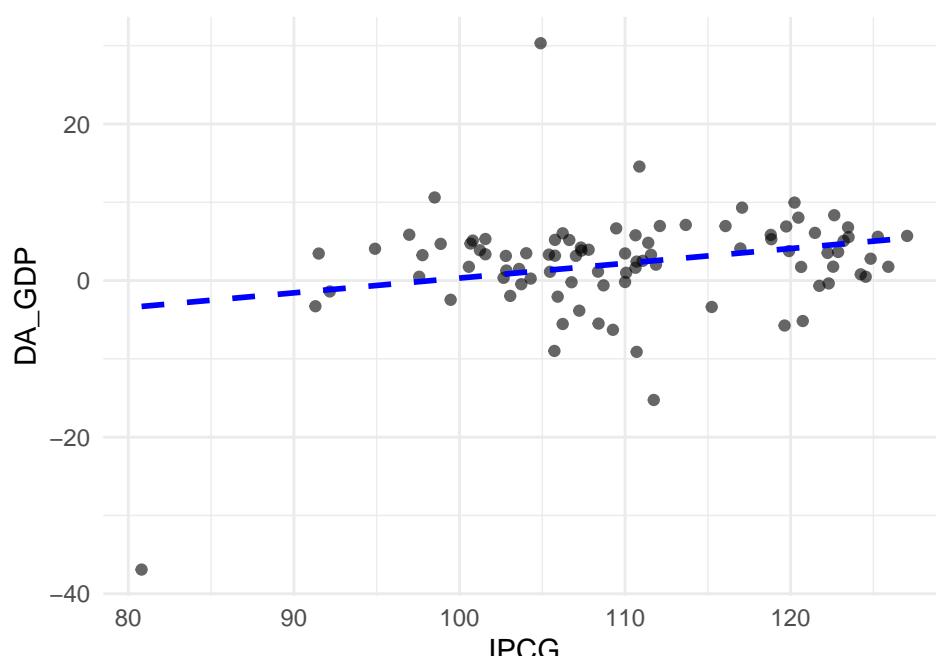
Standardized Time Series: IPCDG



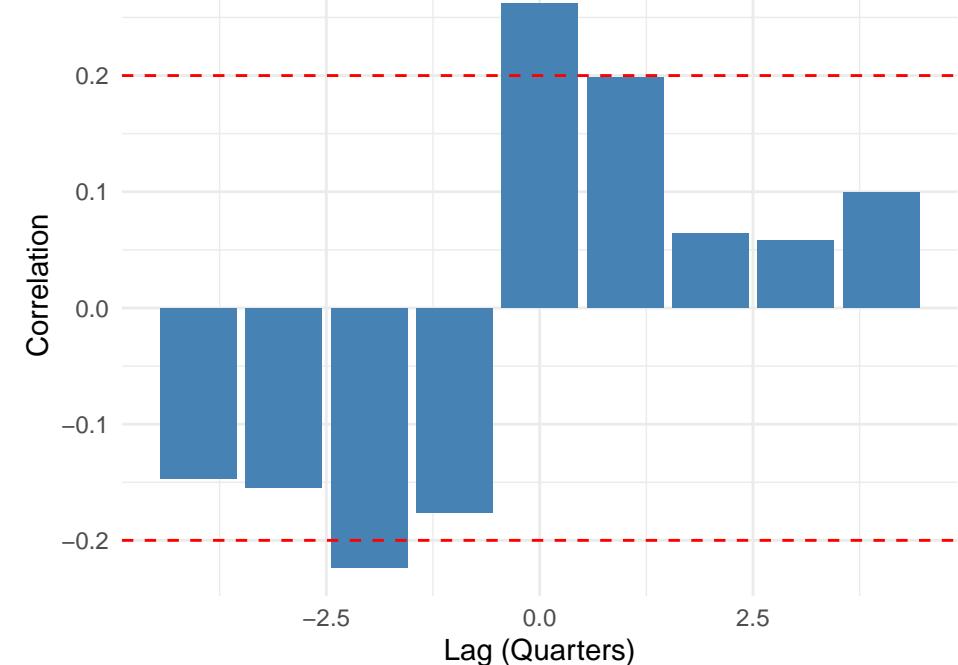
series — ind_scaled — target_scaled

Scatter: IPCG vs Target

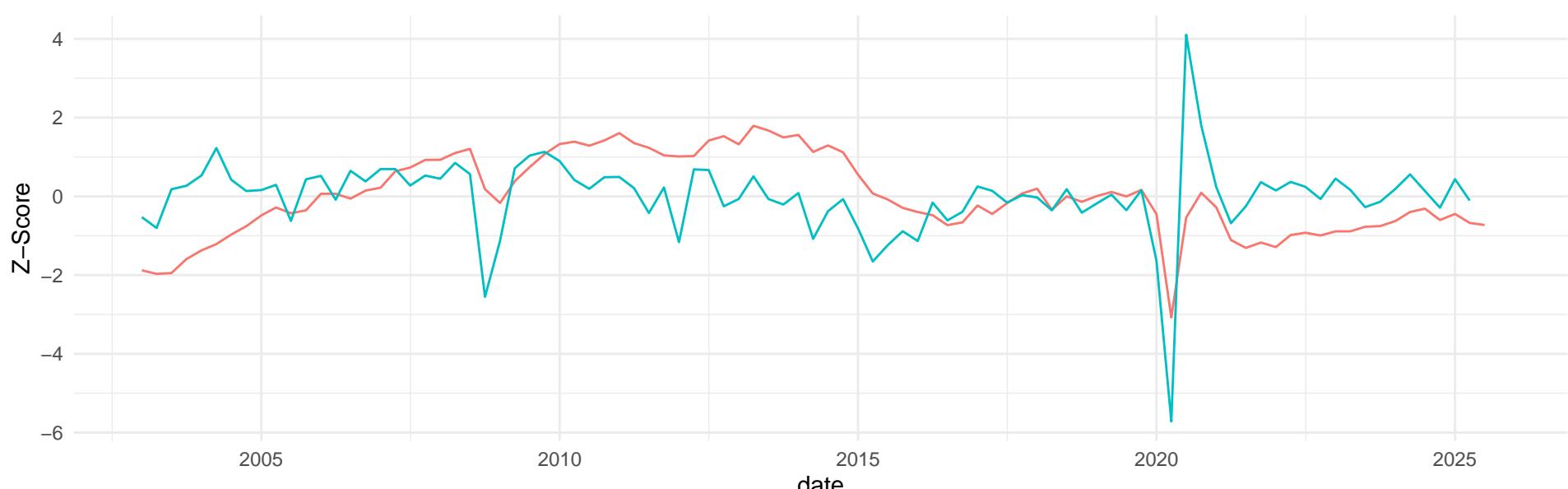
Corr: 0.26



Cross-Correlation (Quarterly Lags): IPCG



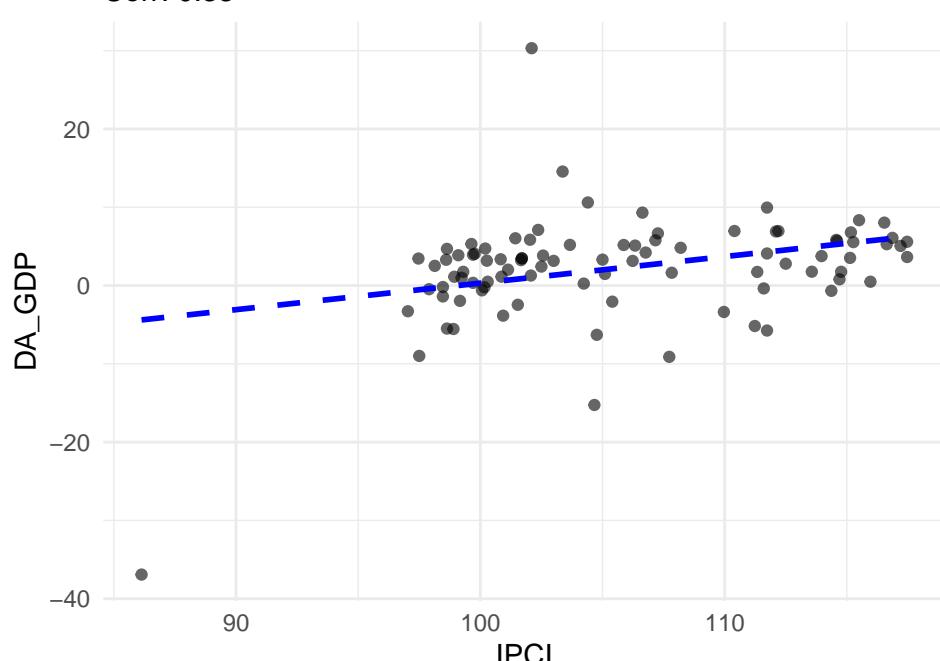
Standardized Time Series: IPCG



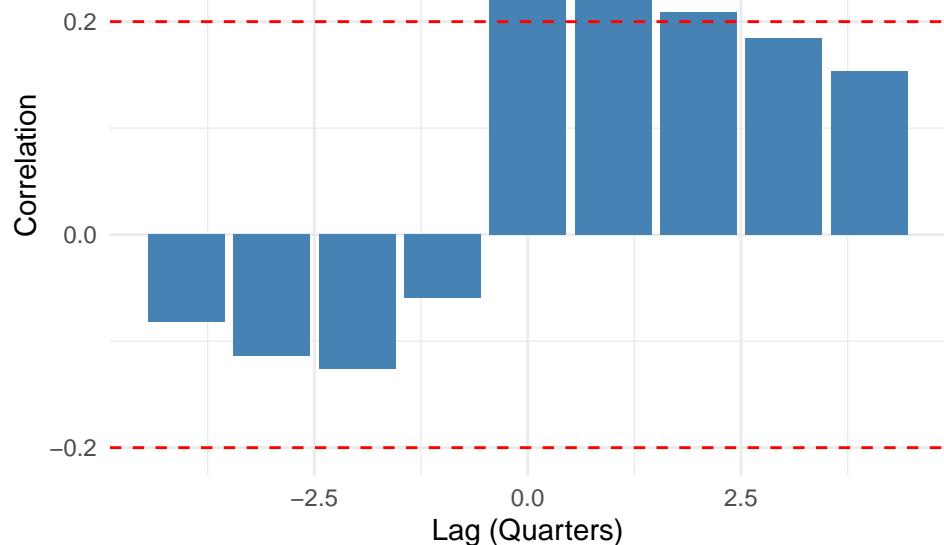
series — ind_scaled — target_scaled

Scatter: IPCI vs Target

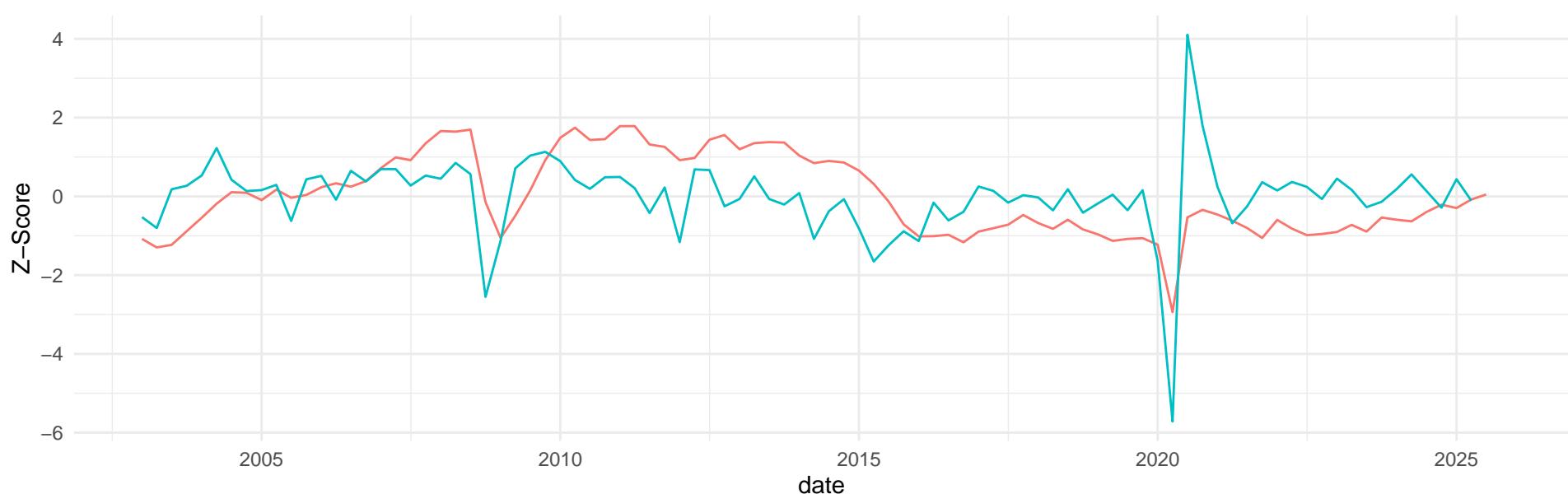
Corr: 0.33



Cross-Correlation (Quarterly Lags): IPCI



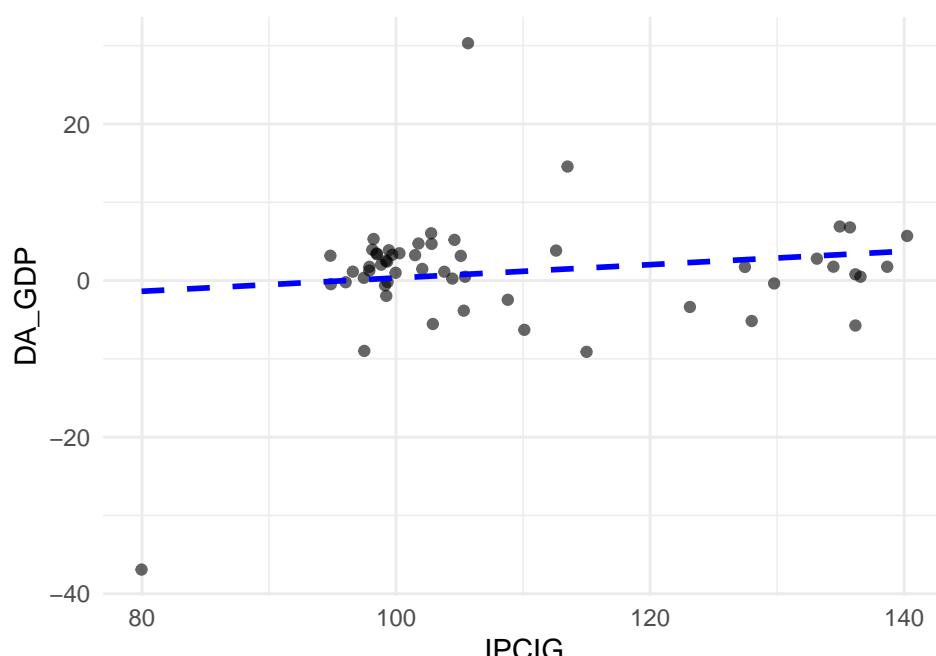
Standardized Time Series: IPCI



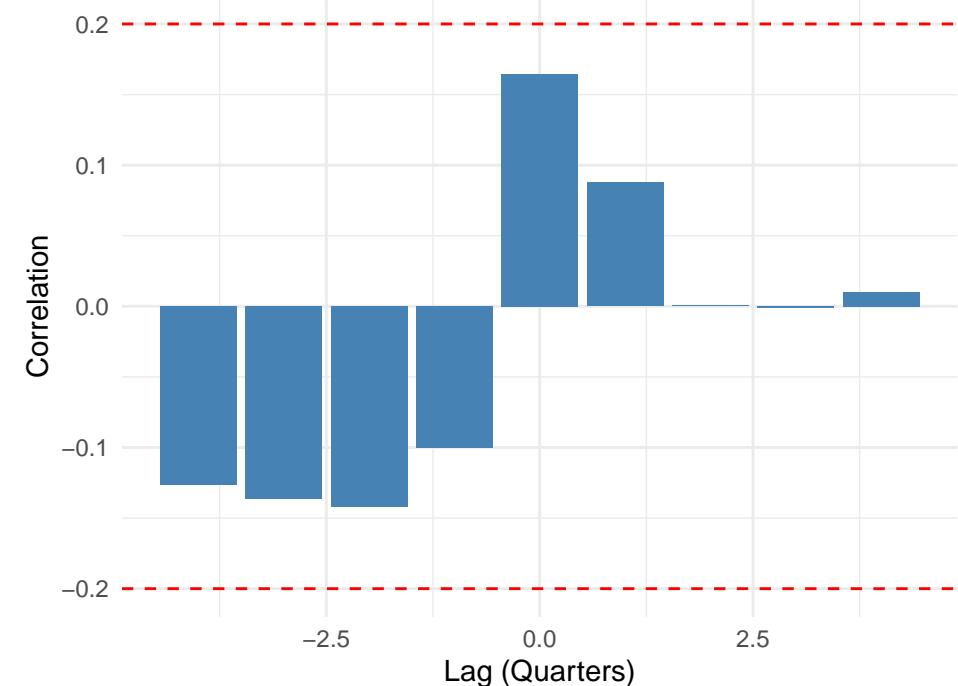
series — ind_scaled — target_scaled

Scatter: IPCIG vs Target

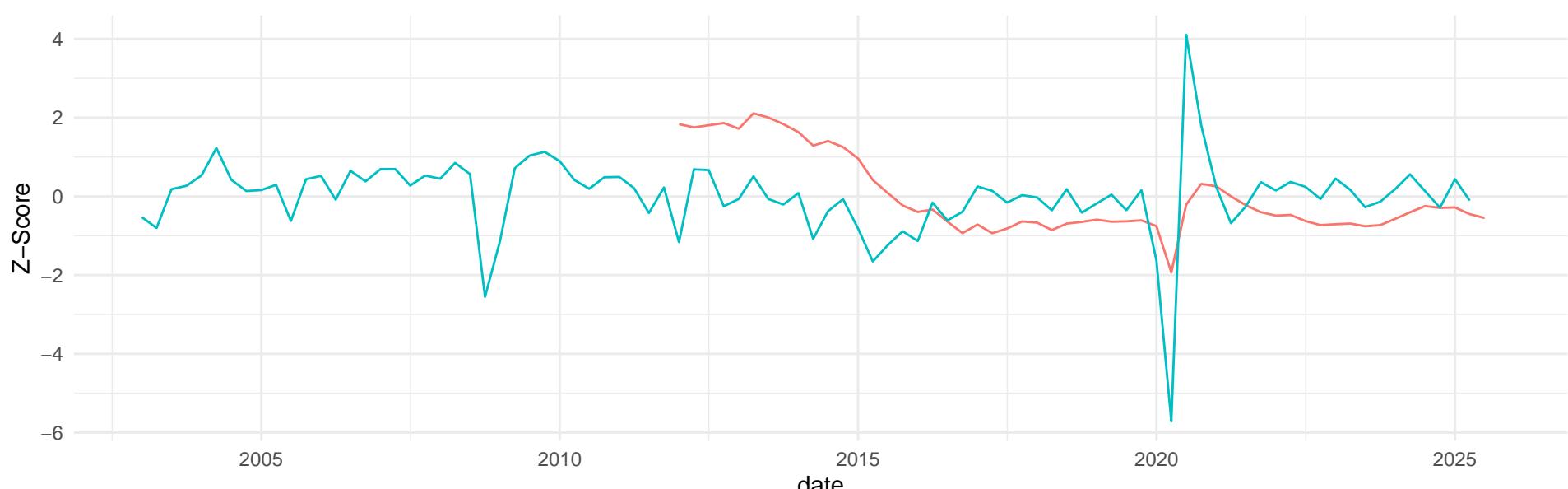
Corr: 0.16



Cross-Correlation (Quarterly Lags): IPCIG



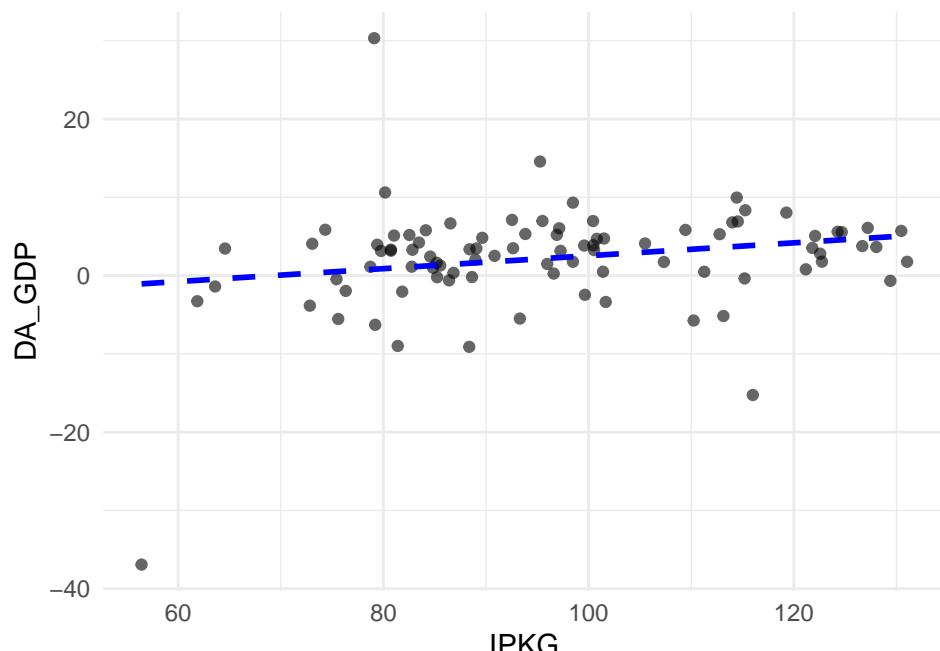
Standardized Time Series: IPCIG



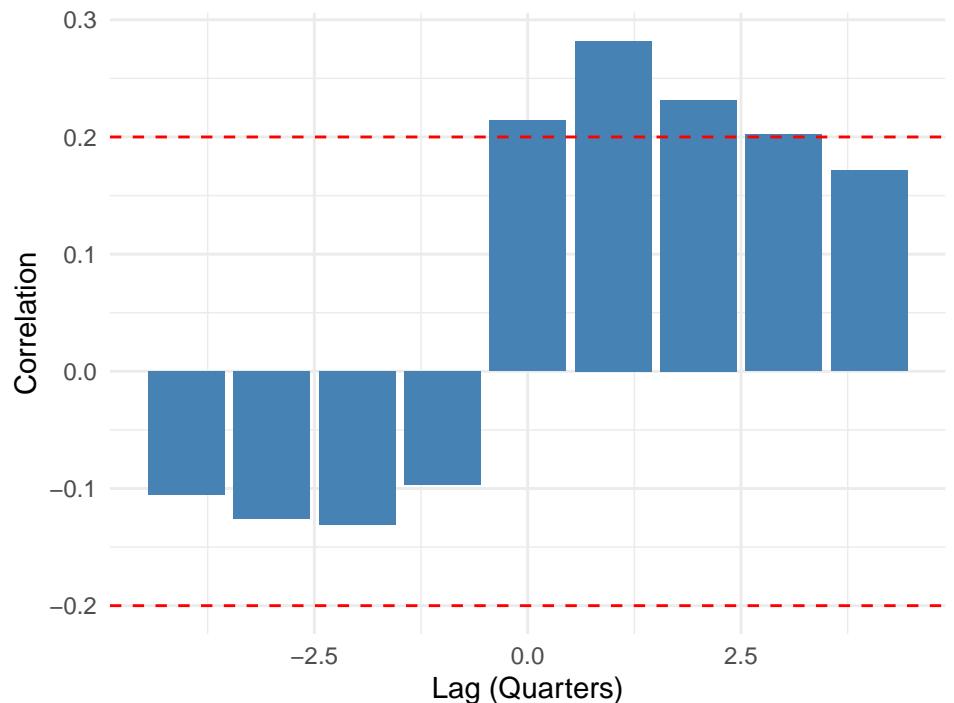
series — ind_scaled — target_scaled

Scatter: IPKG vs Target

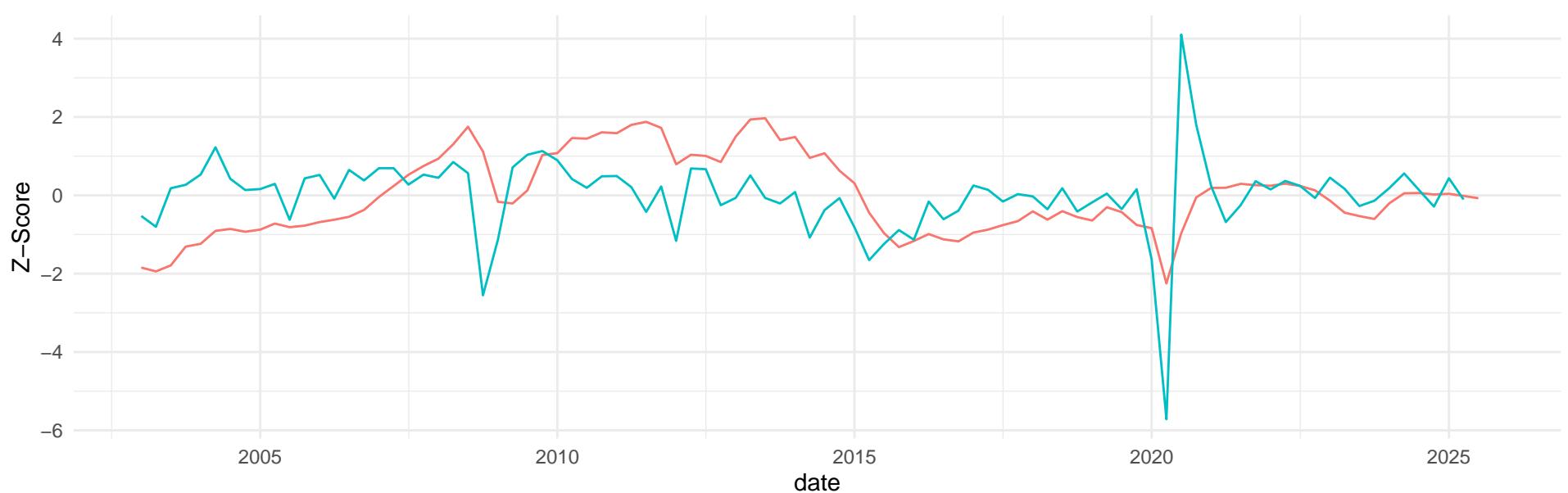
Corr: 0.21



Cross-Correlation (Quarterly Lags): IPKG



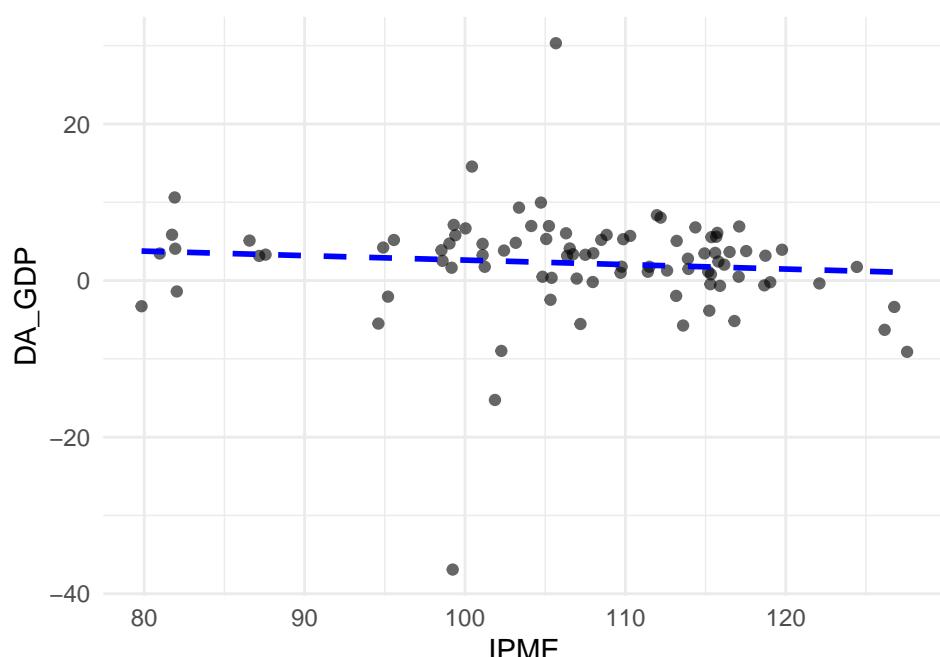
Standardized Time Series: IPKG



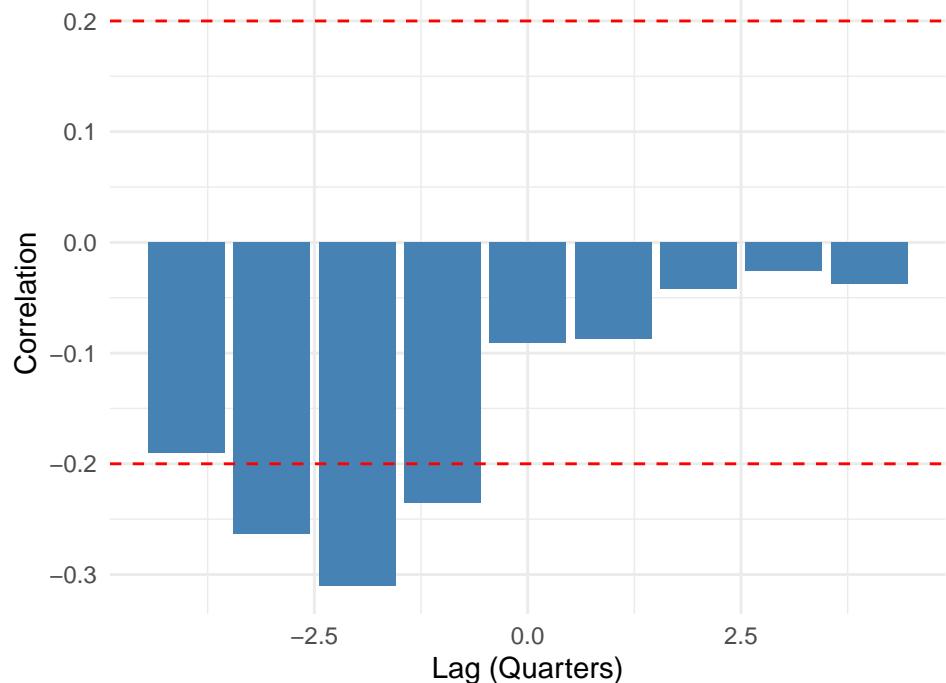
series — ind_scaled — target_scaled

Scatter: IPME vs Target

Corr: -0.09



Cross-Correlation (Quarterly Lags): IPME



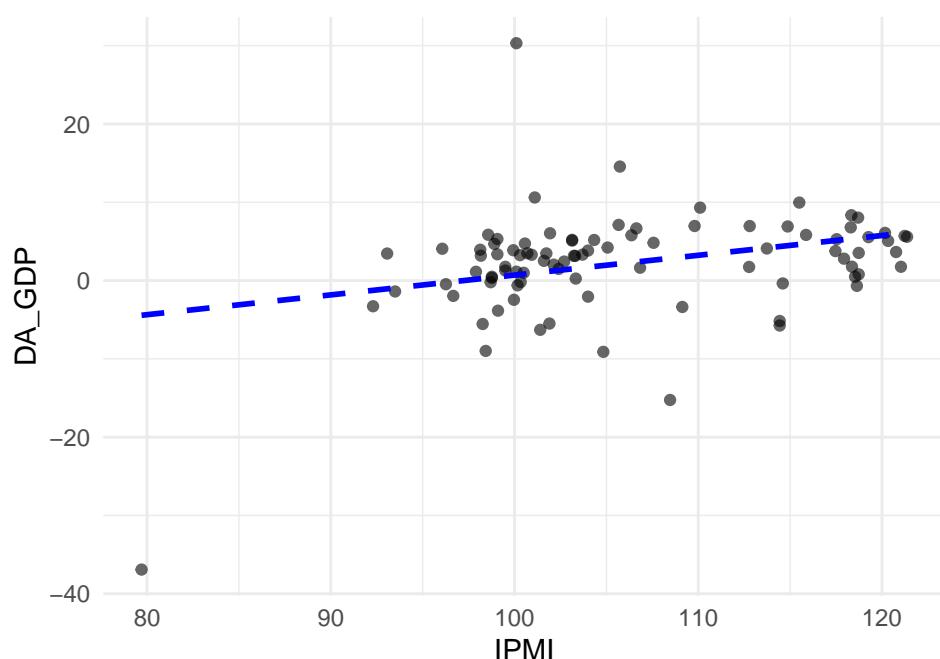
Standardized Time Series: IPME



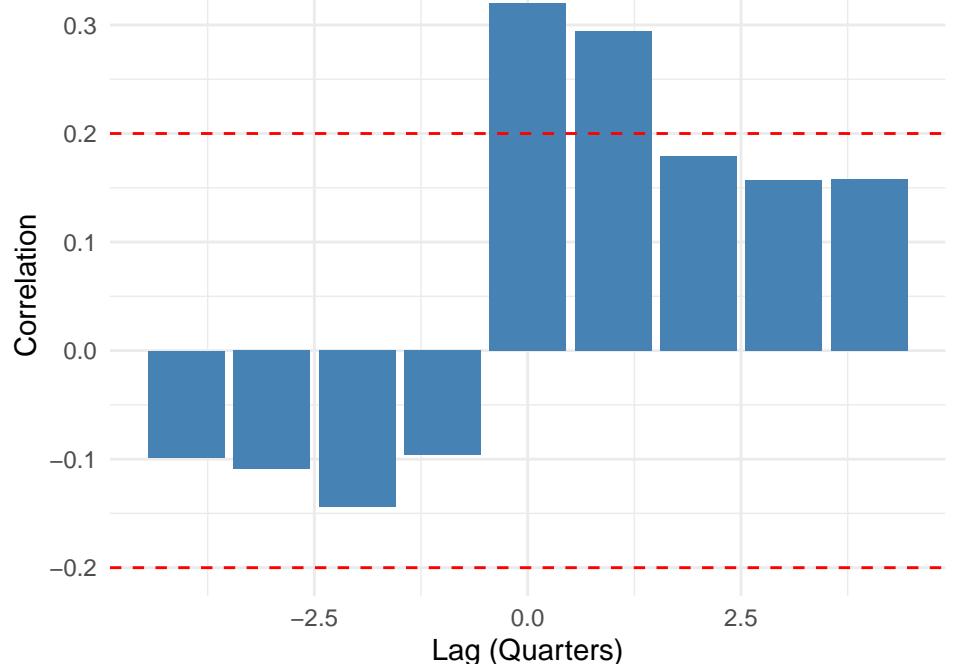
series — ind_scaled — target_scaled

Scatter: IPMI vs Target

Corr: 0.32



Cross-Correlation (Quarterly Lags): IPMI



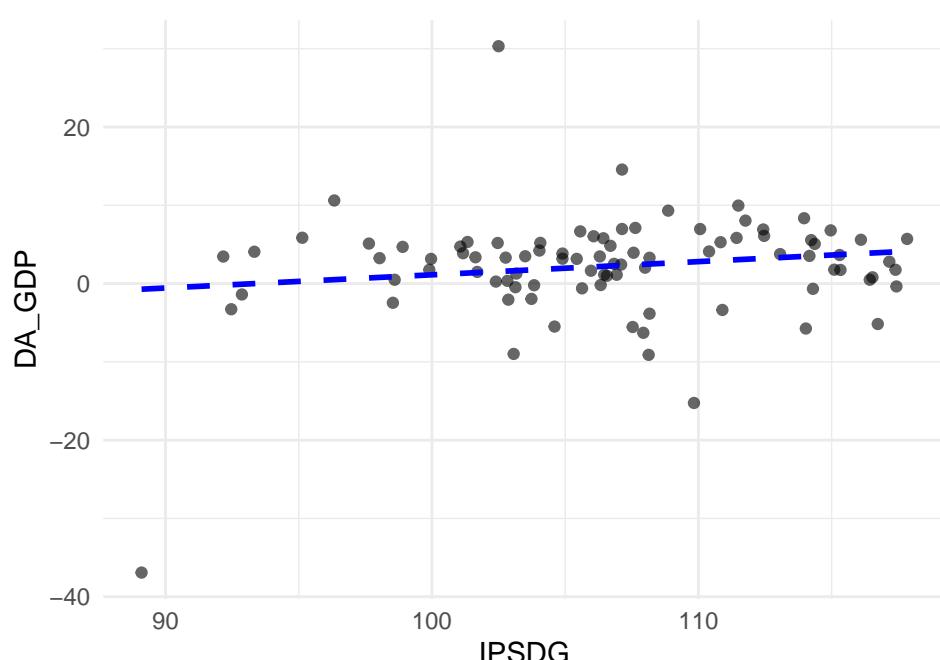
Standardized Time Series: IPMI



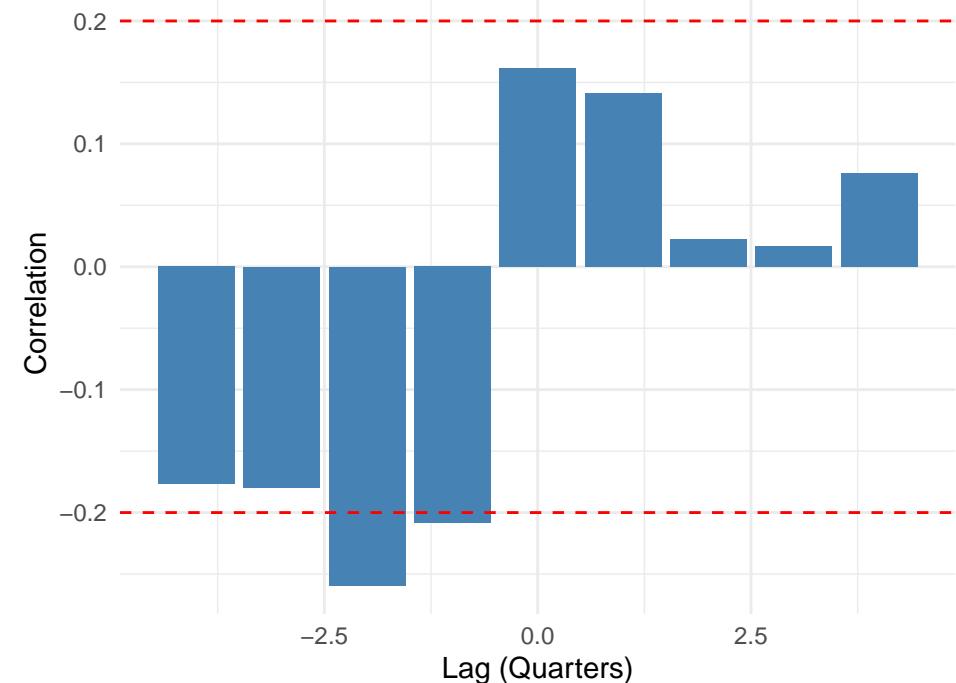
series — ind_scaled — target_scaled

Scatter: IPSDG vs Target

Corr: 0.16



Cross-Correlation (Quarterly Lags): IPSDG



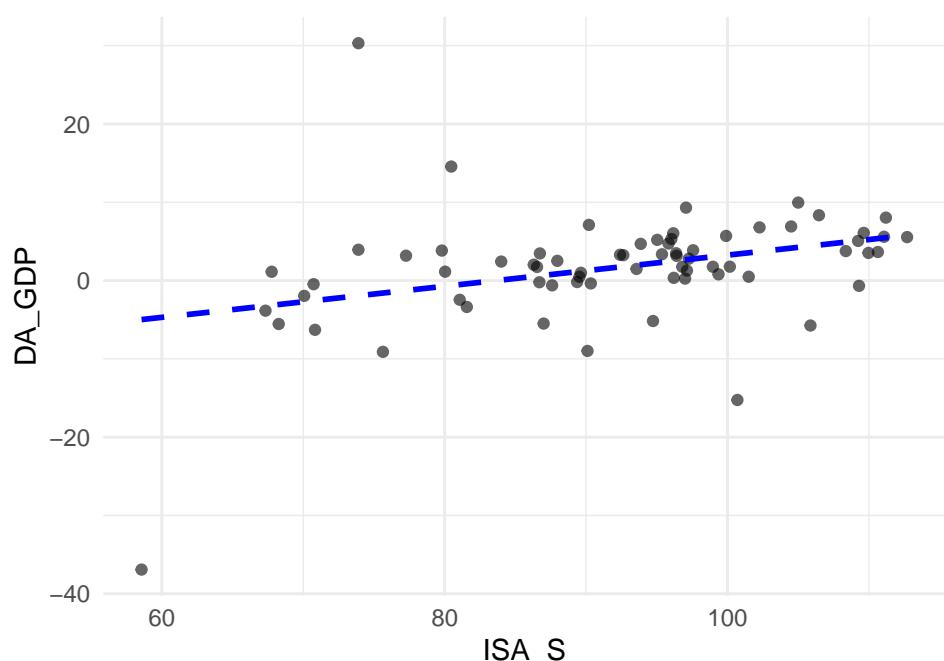
Standardized Time Series: IPSDG



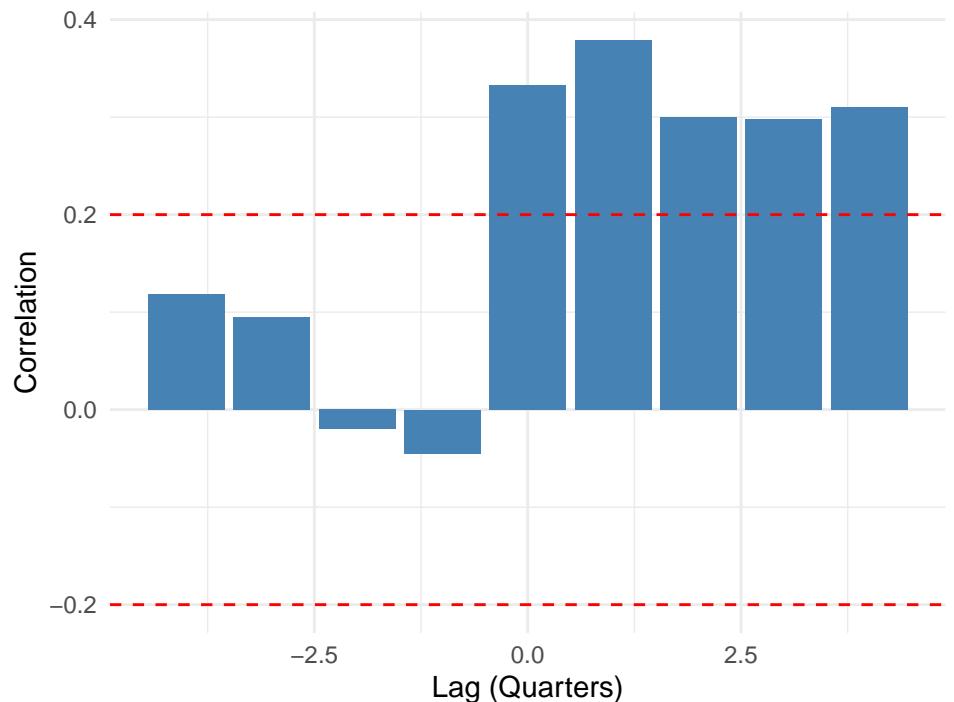
series — ind_scaled — target_scaled

Scatter: ISA_S vs Target

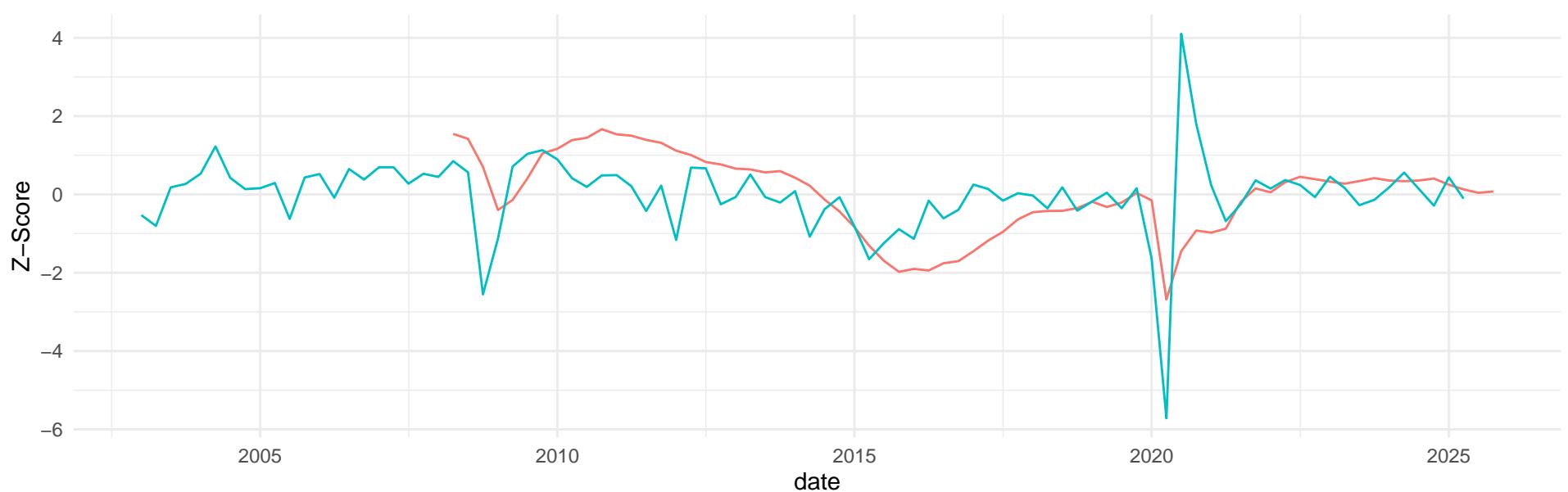
Corr: 0.33



Cross-Correlation (Quarterly Lags): ISA_S



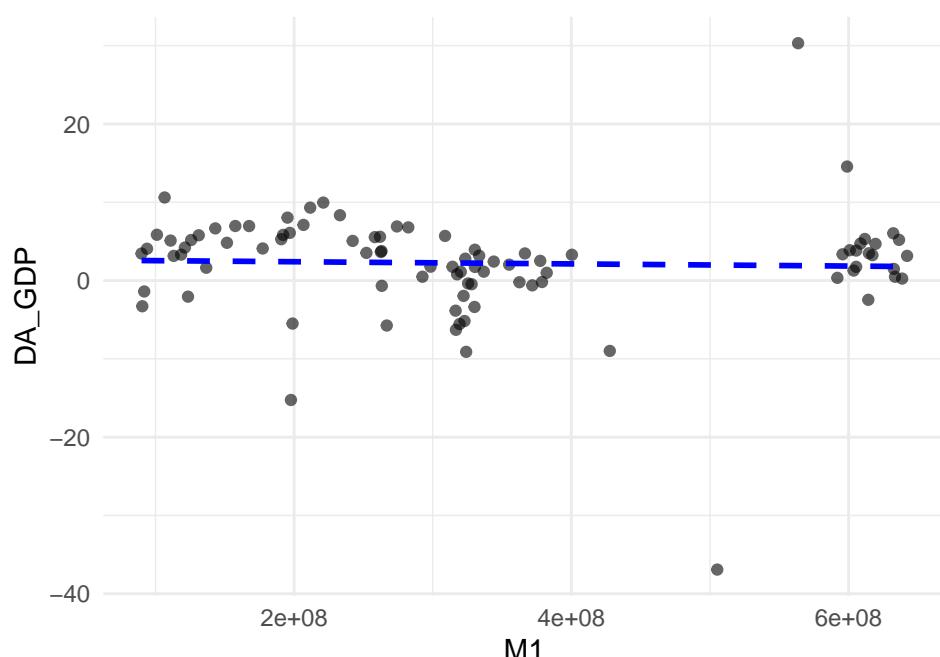
Standardized Time Series: ISA_S



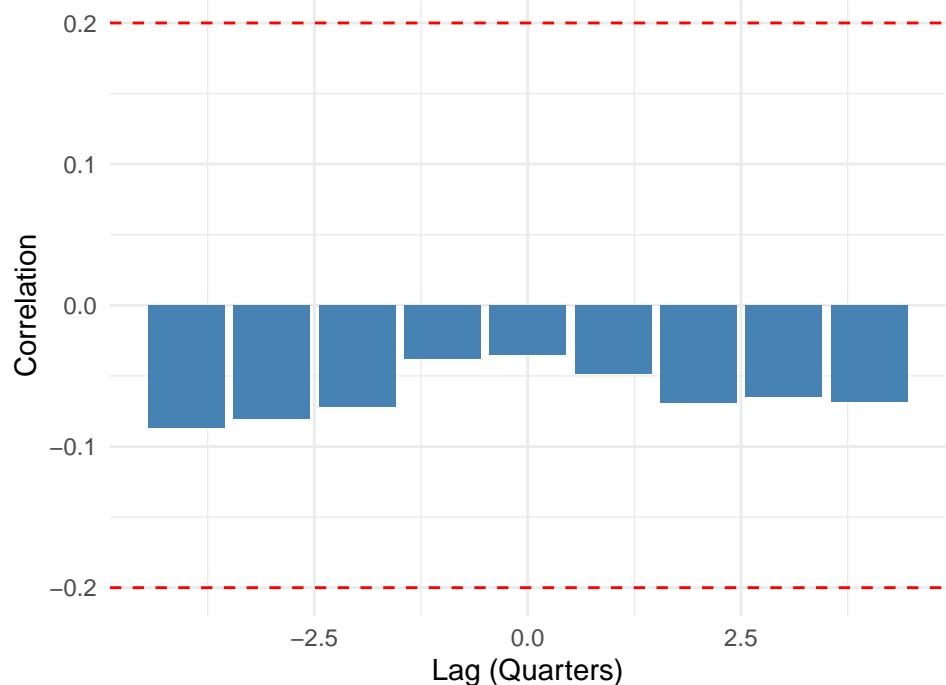
series — ind_scaled — target_scaled

Scatter: M1 vs Target

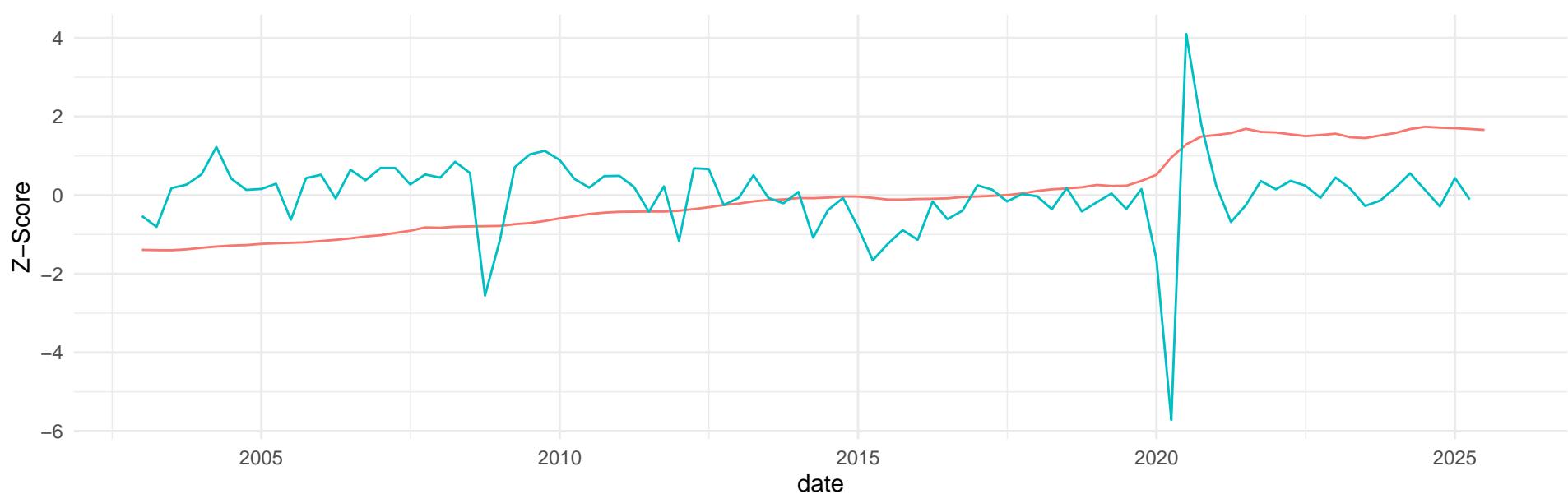
Corr: -0.04



Cross-Correlation (Quarterly Lags): M1



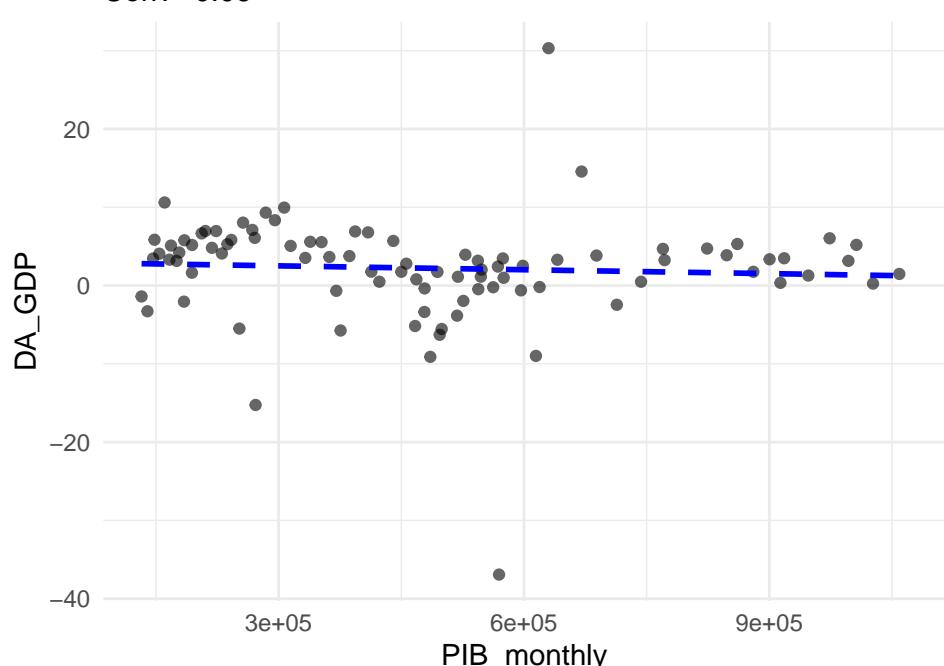
Standardized Time Series: M1



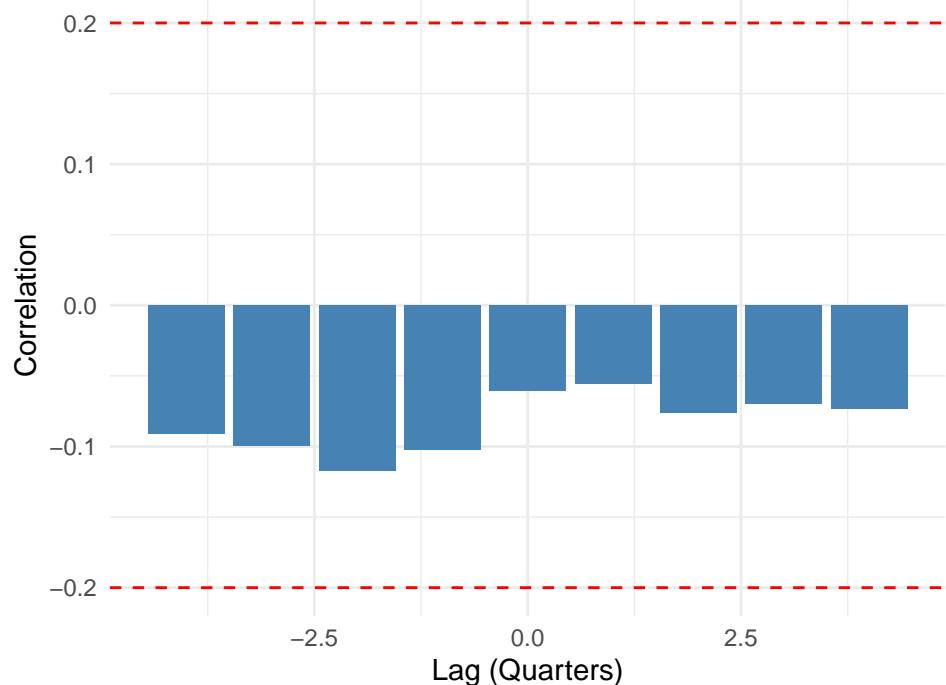
series — ind_scaled — target_scaled

Scatter: PIB_monthly vs Target

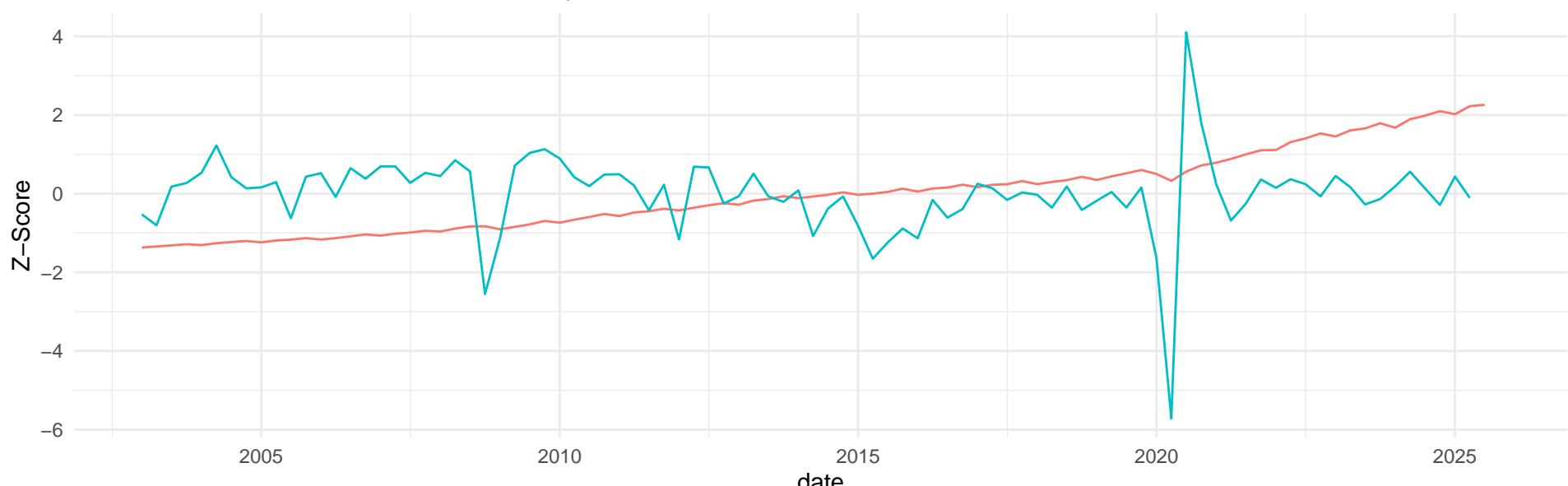
Corr: -0.06



Cross-Correlation (Quarterly Lags): PIB_monthly



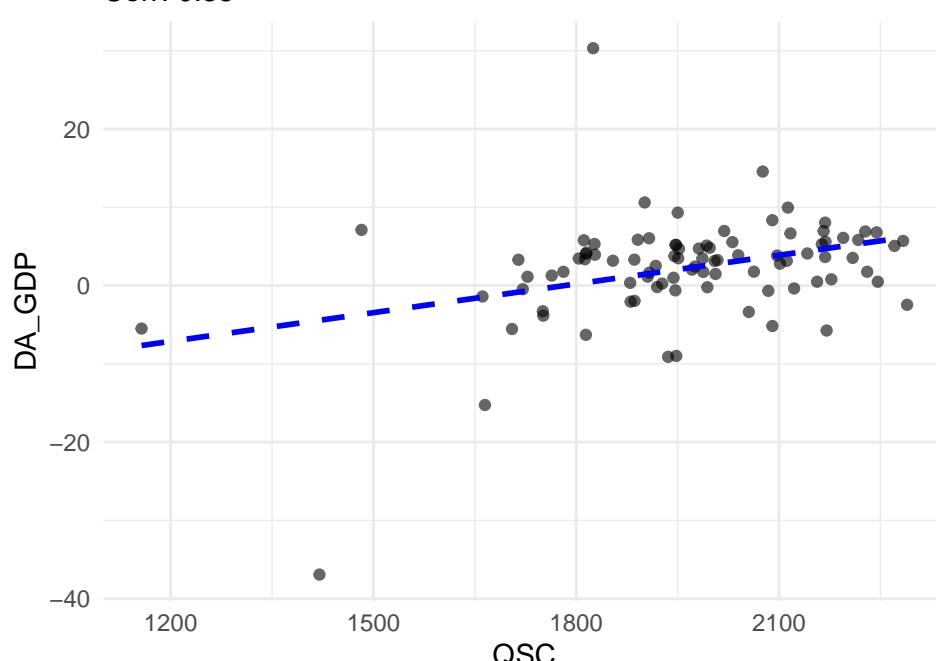
Standardized Time Series: PIB_monthly



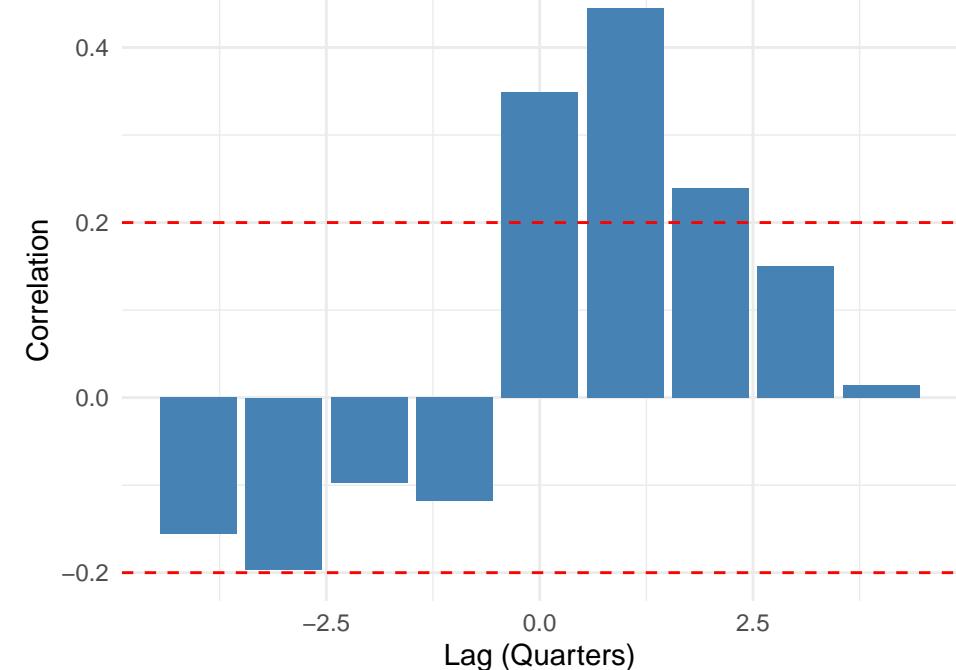
series — ind_scaled — target_scaled

Scatter: QSC vs Target

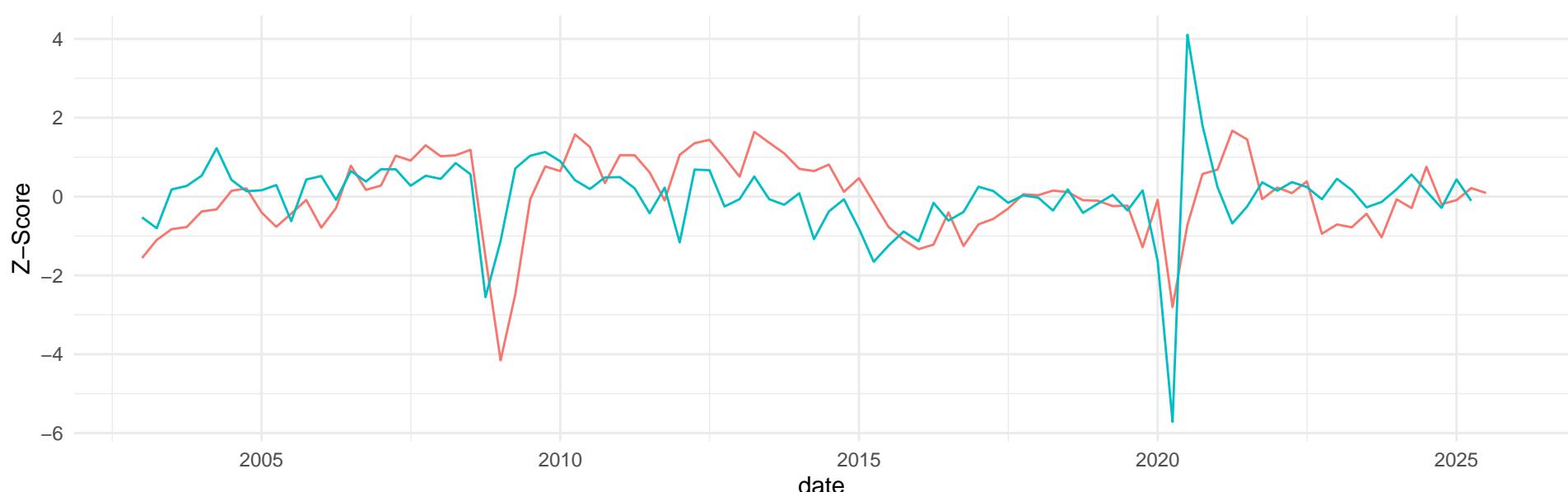
Corr: 0.35



Cross-Correlation (Quarterly Lags): QSC



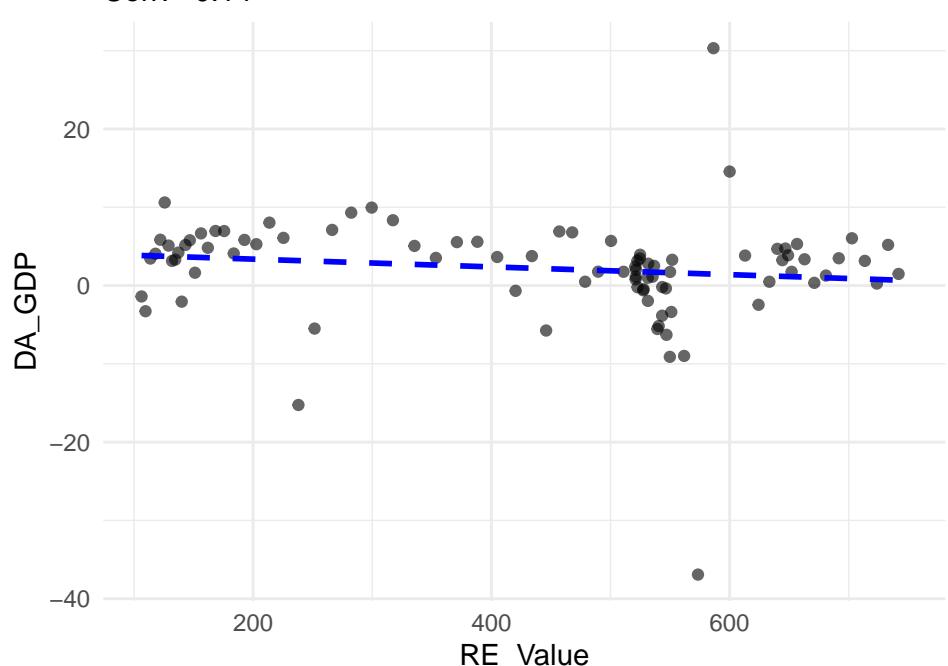
Standardized Time Series: QSC



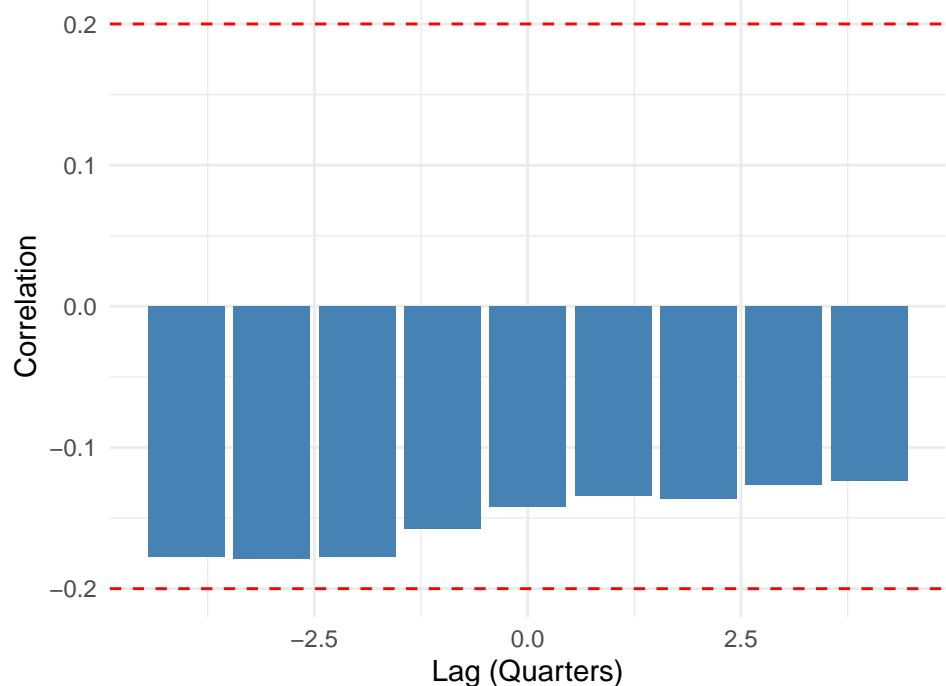
series — ind_scaled — target_scaled

Scatter: RE_Value vs Target

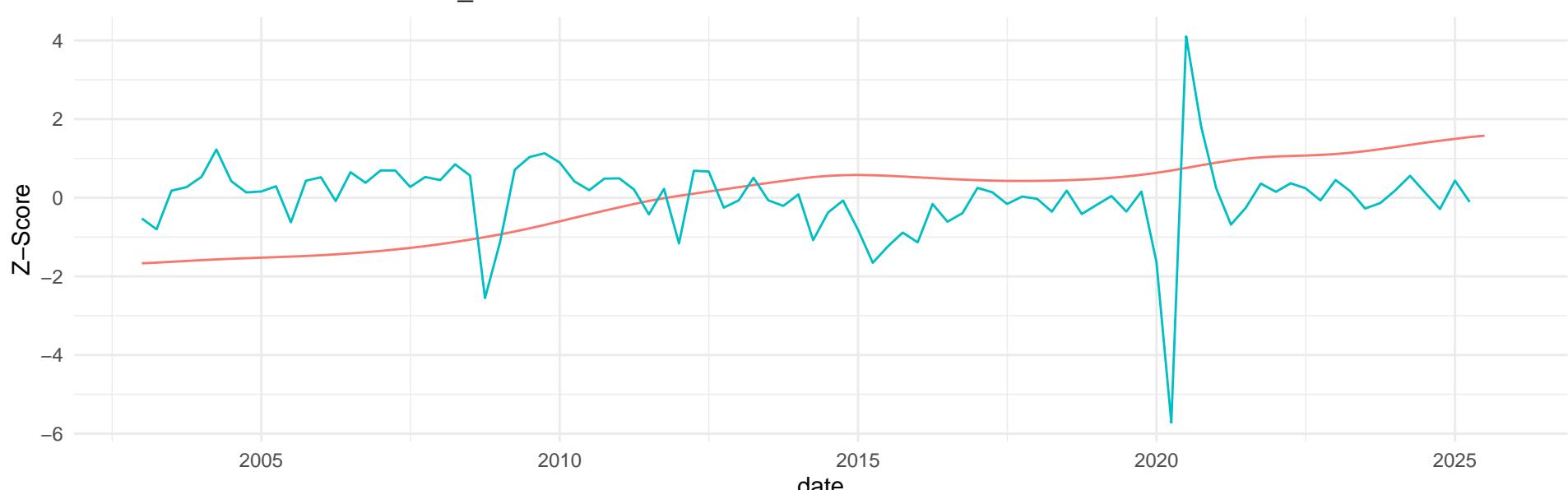
Corr: -0.14



Cross-Correlation (Quarterly Lags): RE_Value



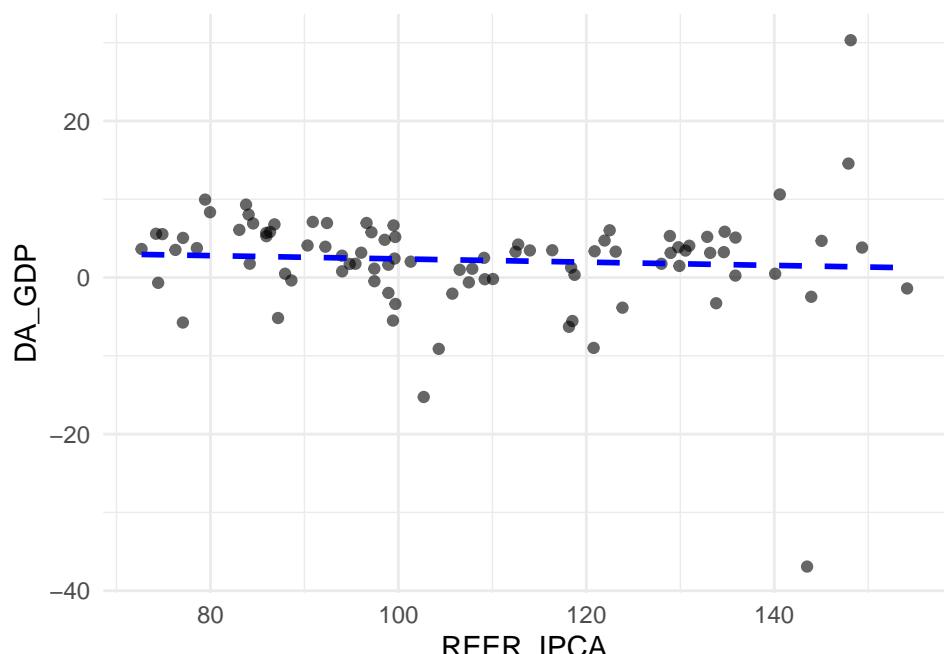
Standardized Time Series: RE_Value



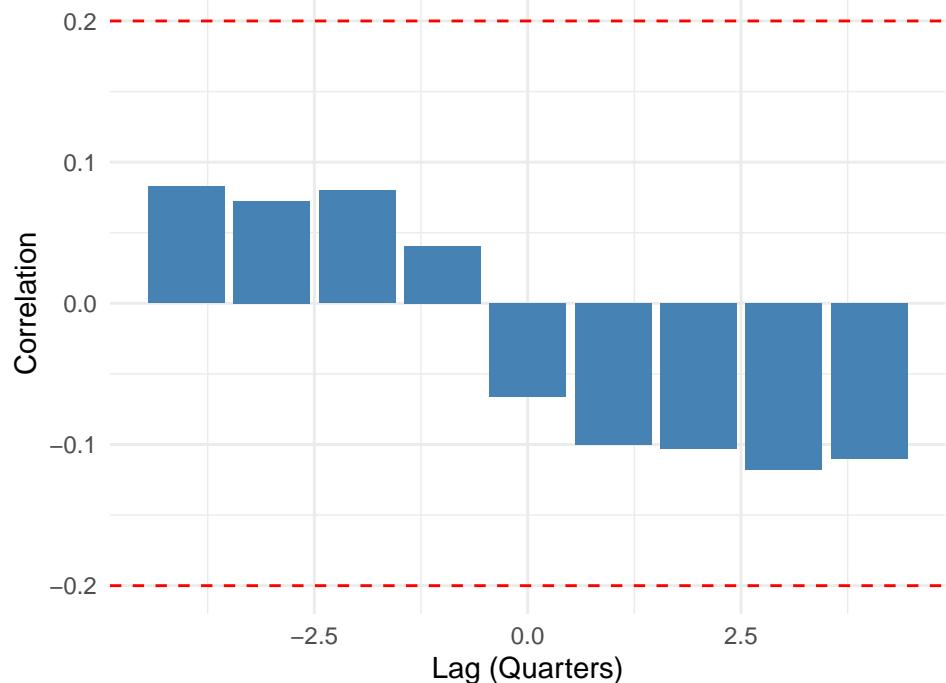
series — ind_scaled — target_scaled

Scatter: REER_IPCA vs Target

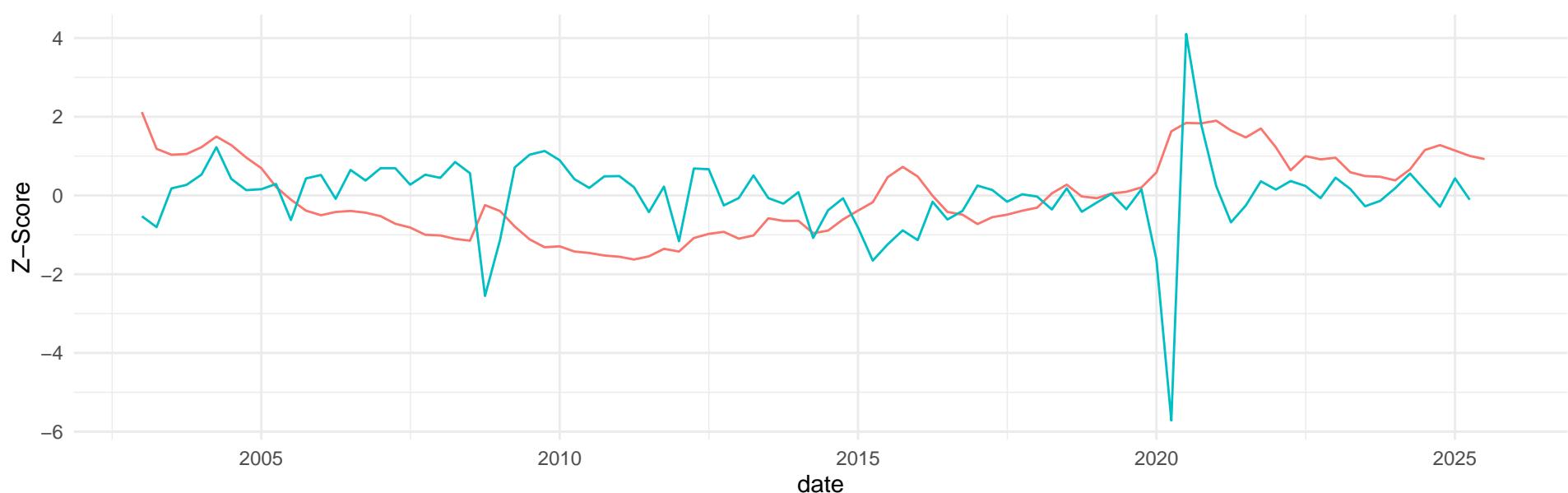
Corr: -0.07



Cross-Correlation (Quarterly Lags): REER_IPCA



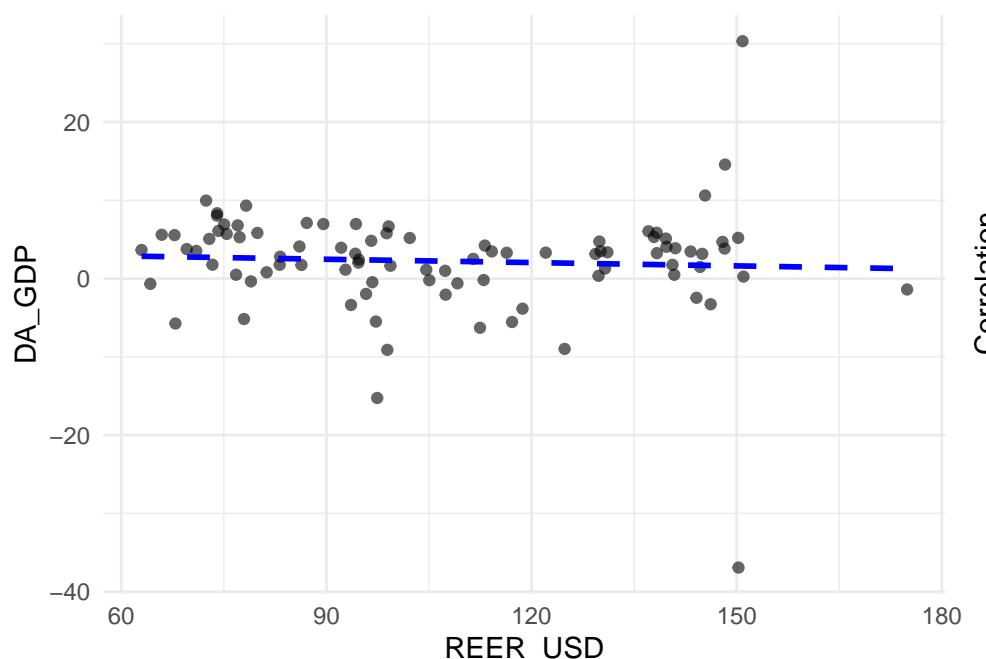
Standardized Time Series: REER_IPCA



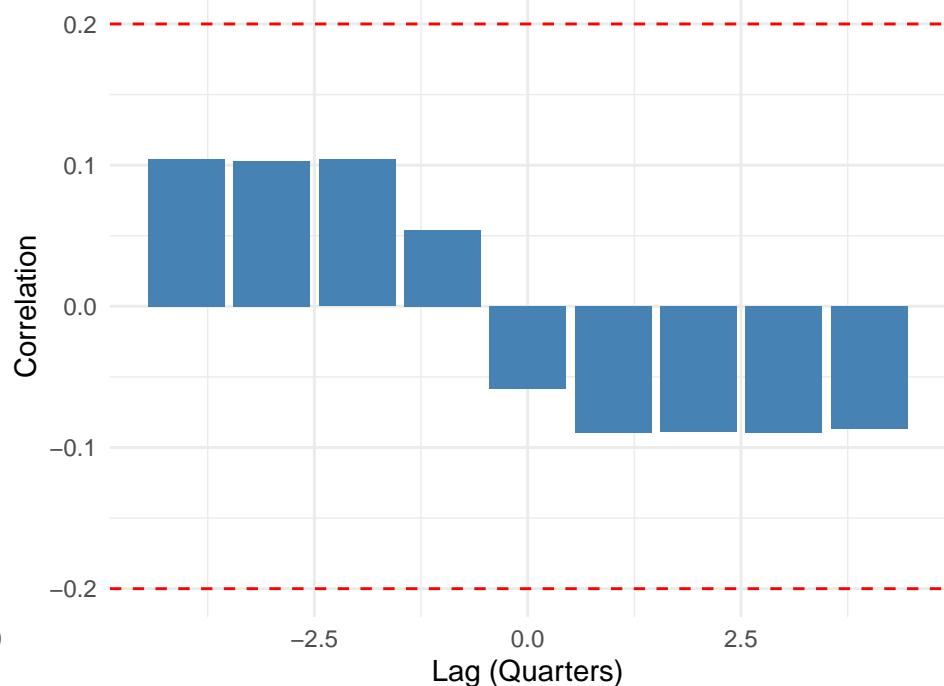
series — ind_scaled — target_scaled

Scatter: REER_USD vs Target

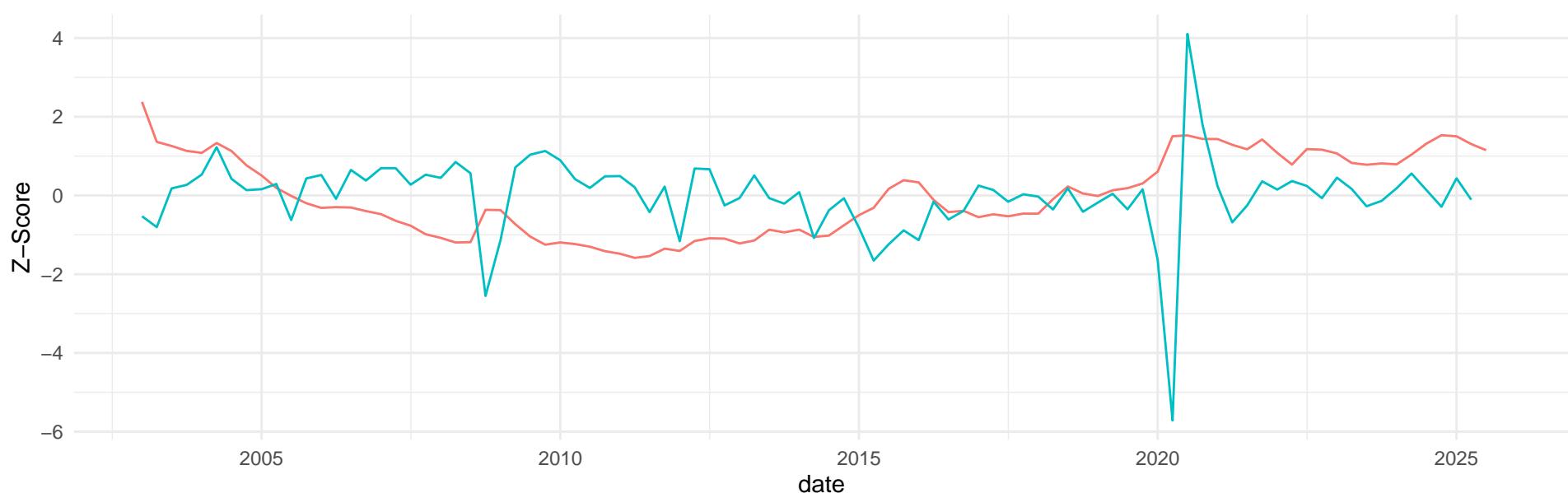
Corr: -0.06



Cross-Correlation (Quarterly Lags): REER_USD



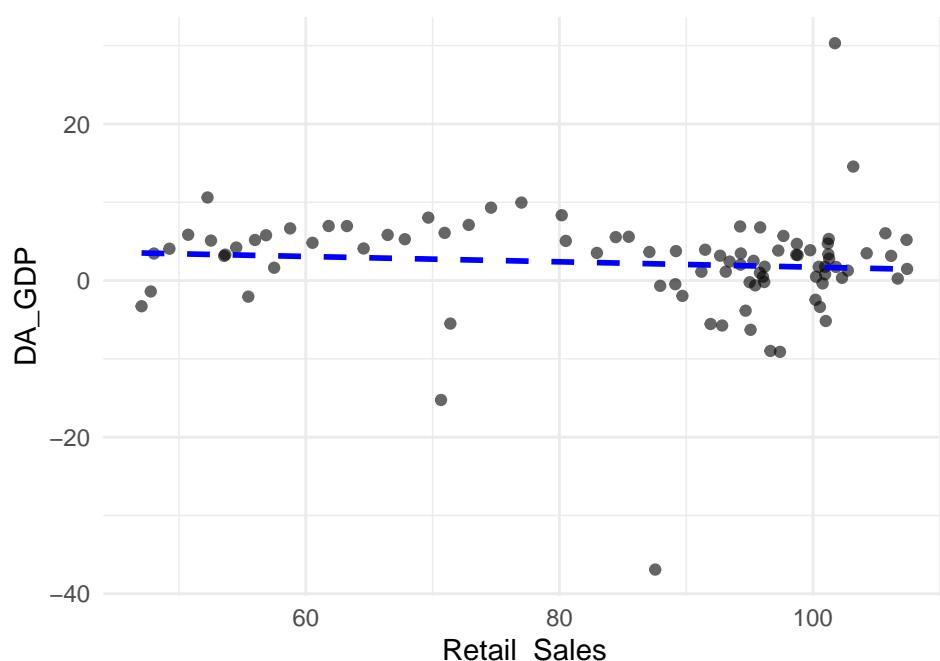
Standardized Time Series: REER_USD



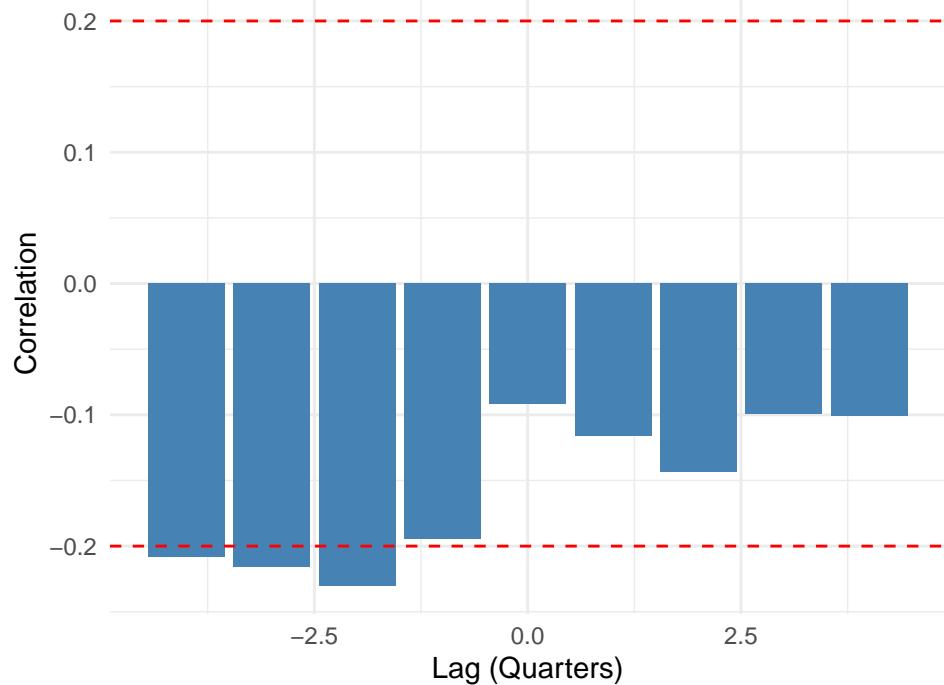
series — ind_scaled — target_scaled

Scatter: Retail_Sales vs Target

Corr: -0.09



Cross-Correlation (Quarterly Lags): Retail_Sales



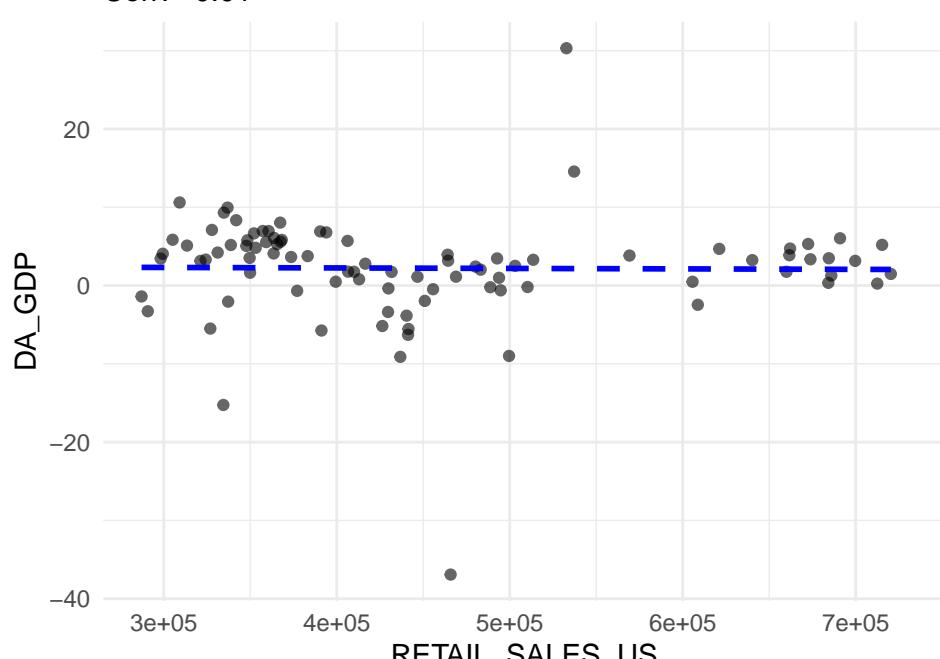
Standardized Time Series: Retail_Sales



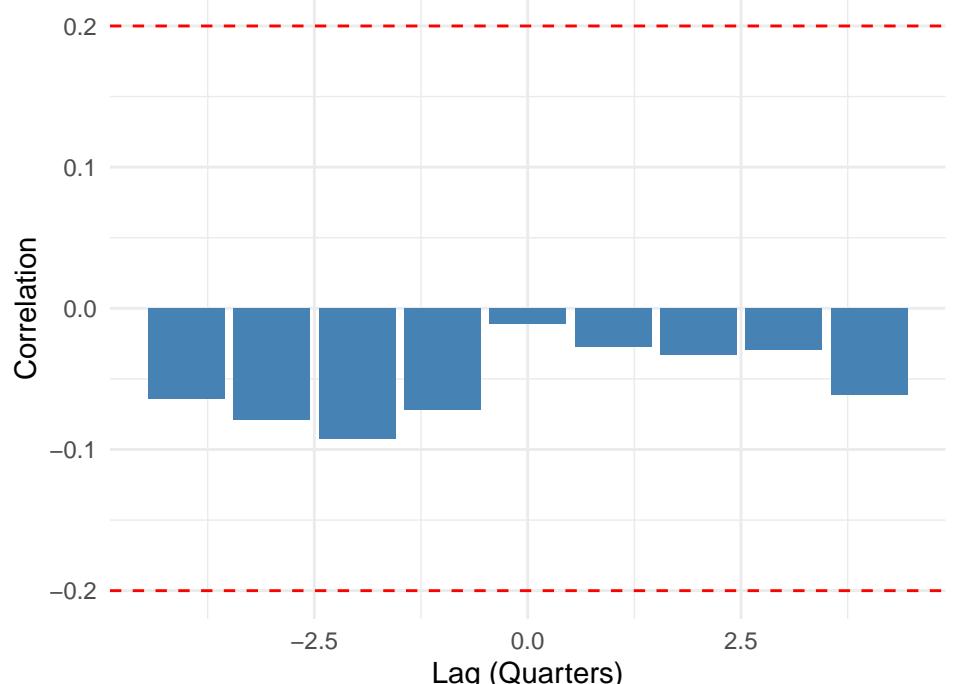
series — ind_scaled — target_scaled

Scatter: RETAIL_SALES_US vs Target

Corr: -0.01



Cross-Correlation (Quarterly Lags): RETAIL_SALES_U



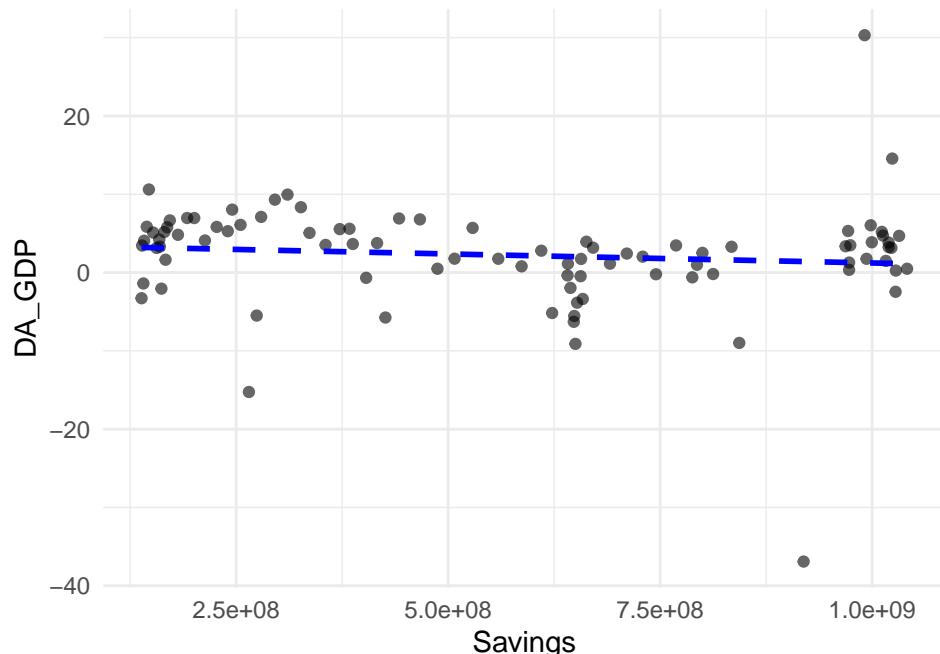
Standardized Time Series: RETAIL_SALES_US



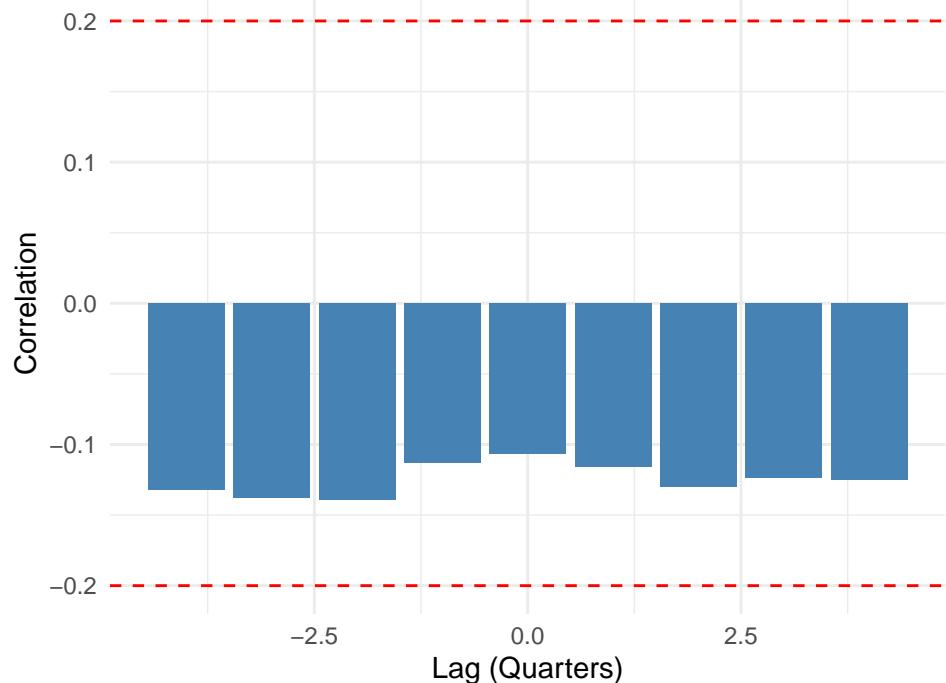
series — ind_scaled — target_scaled

Scatter: Savings vs Target

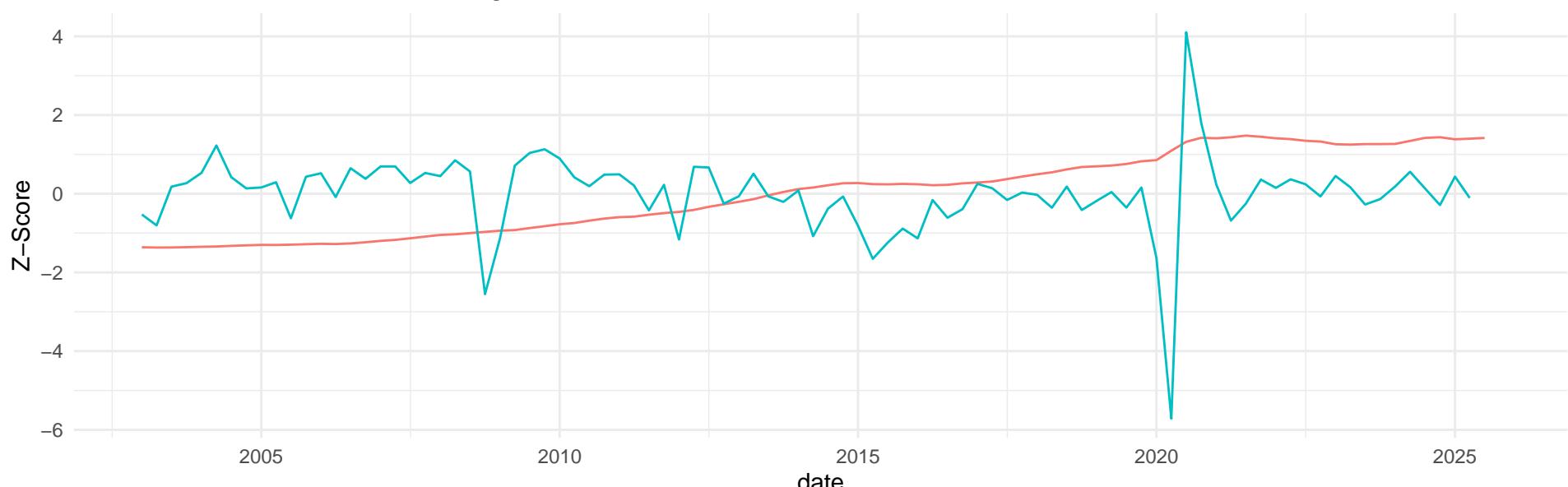
Corr: -0.11



Cross-Correlation (Quarterly Lags): Savings



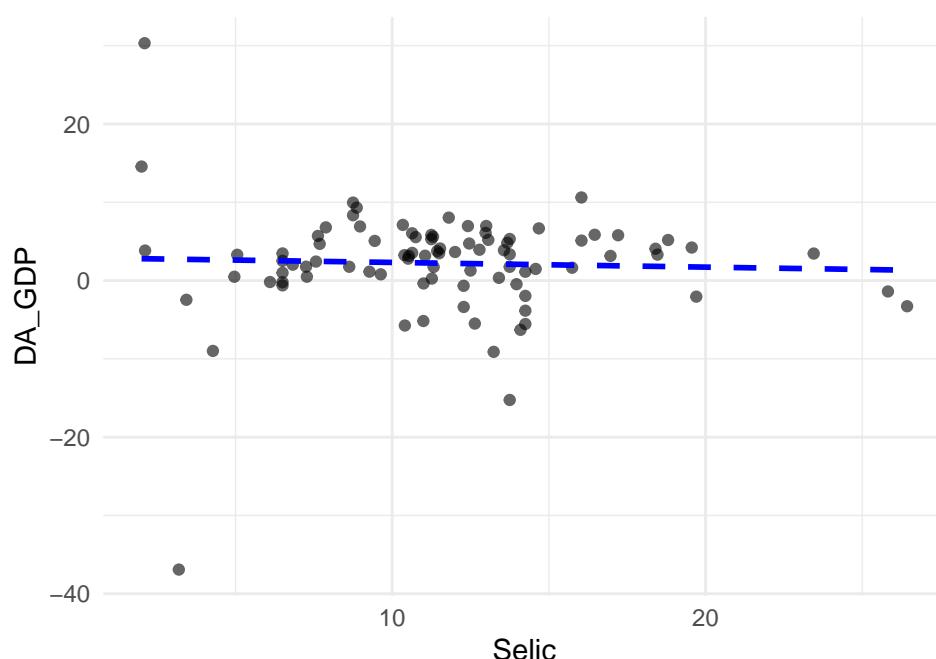
Standardized Time Series: Savings



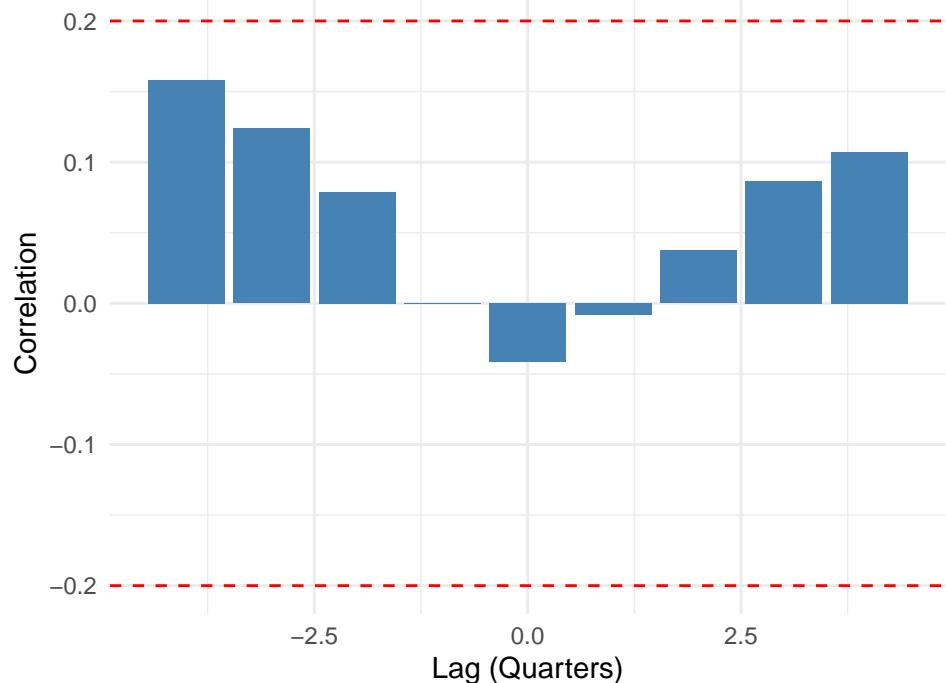
series — ind_scaled — target_scaled

Scatter: Selic vs Target

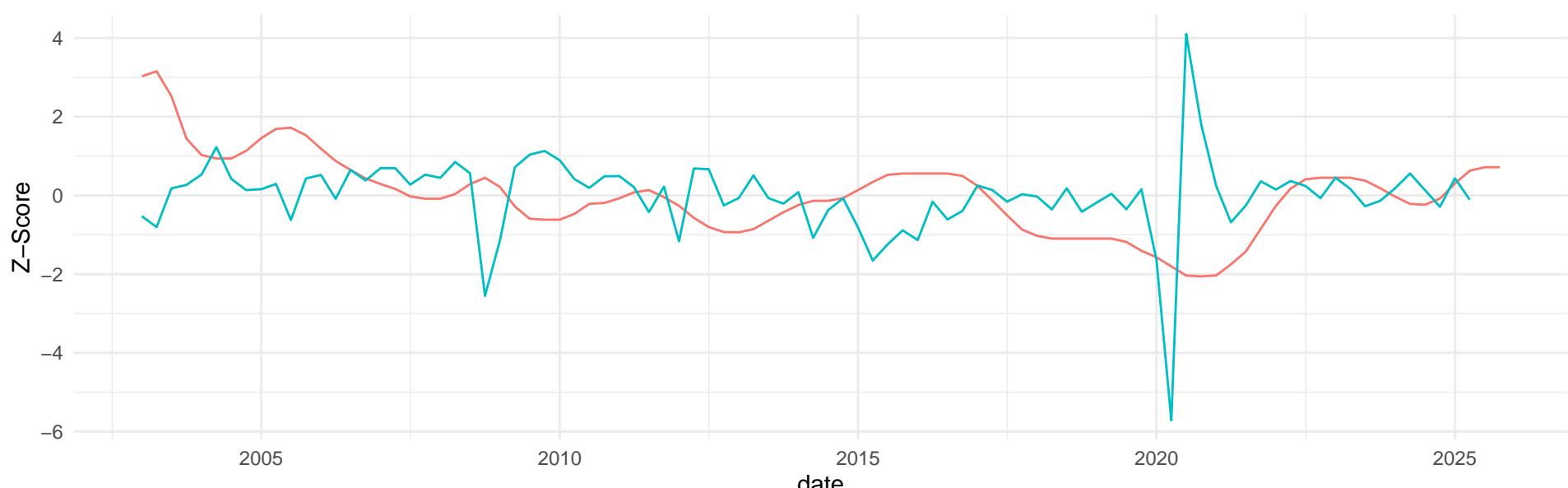
Corr: -0.04



Cross-Correlation (Quarterly Lags): Selic



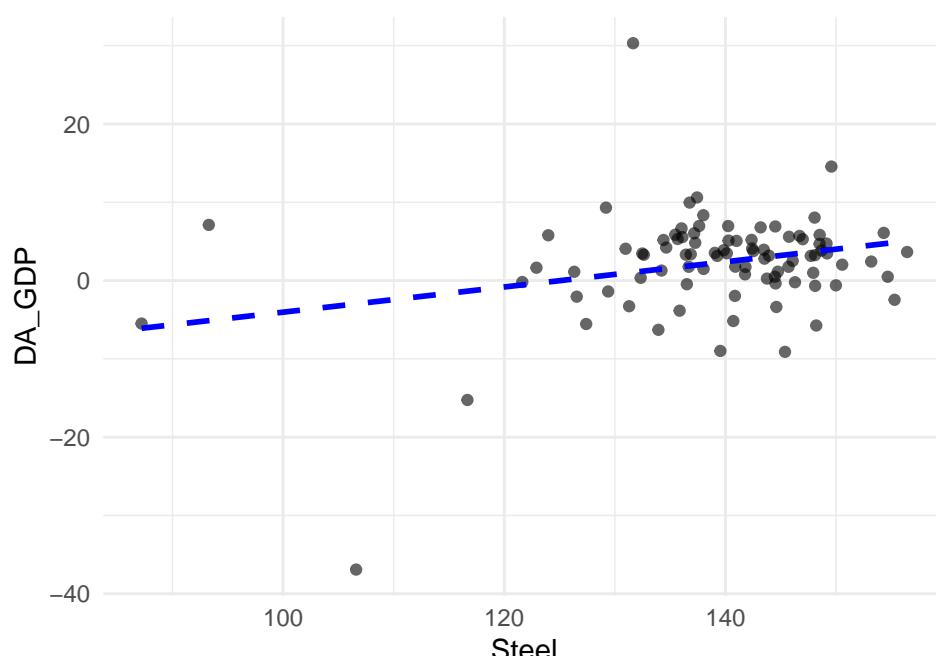
Standardized Time Series: Selic



series — ind_scaled — target_scaled

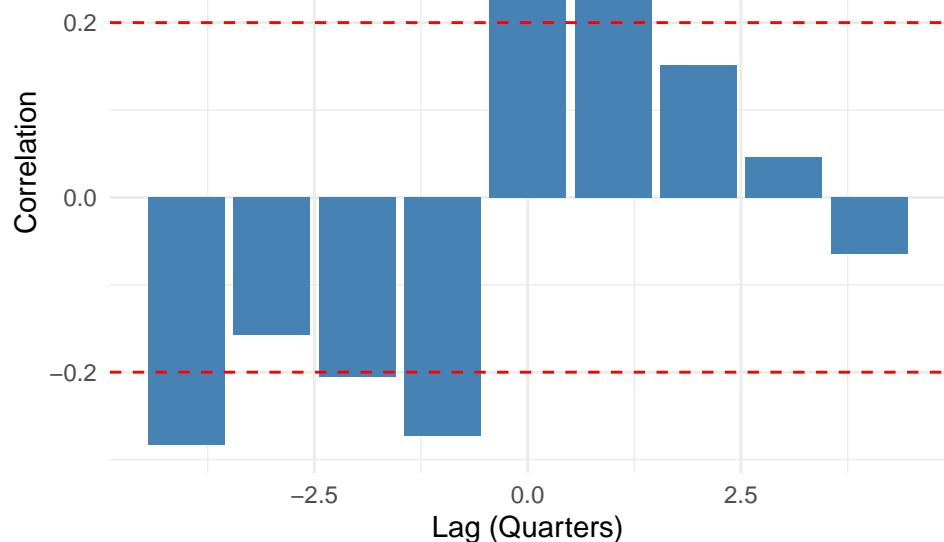
Scatter: Steel vs Target

Corr: 0.27

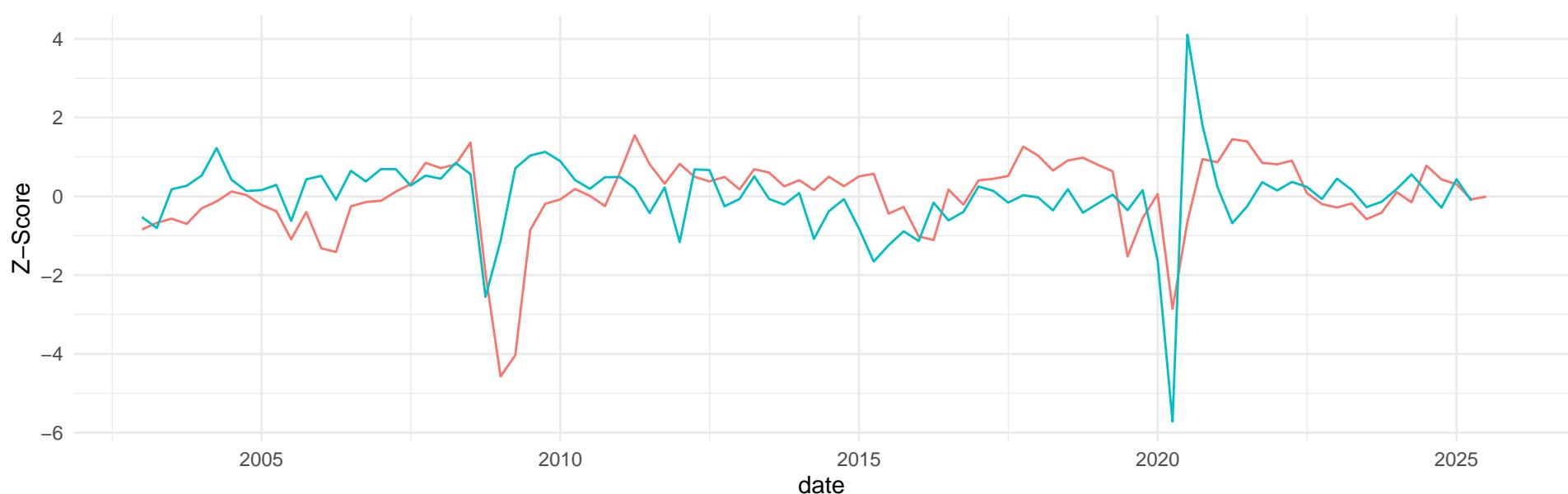


Cross-Correlation (Quarterly Lags): Steel

Correlation



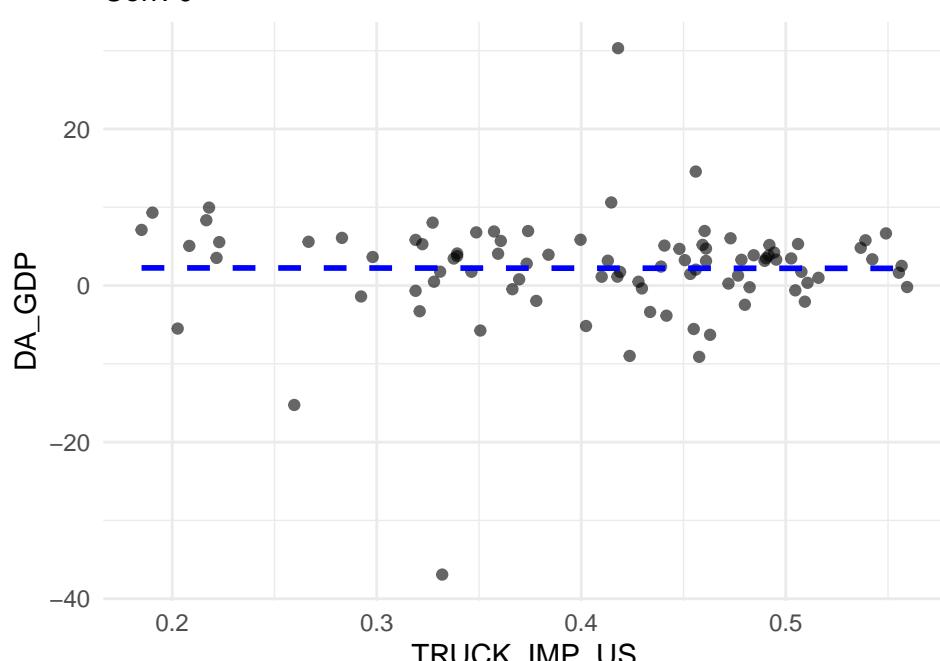
Standardized Time Series: Steel



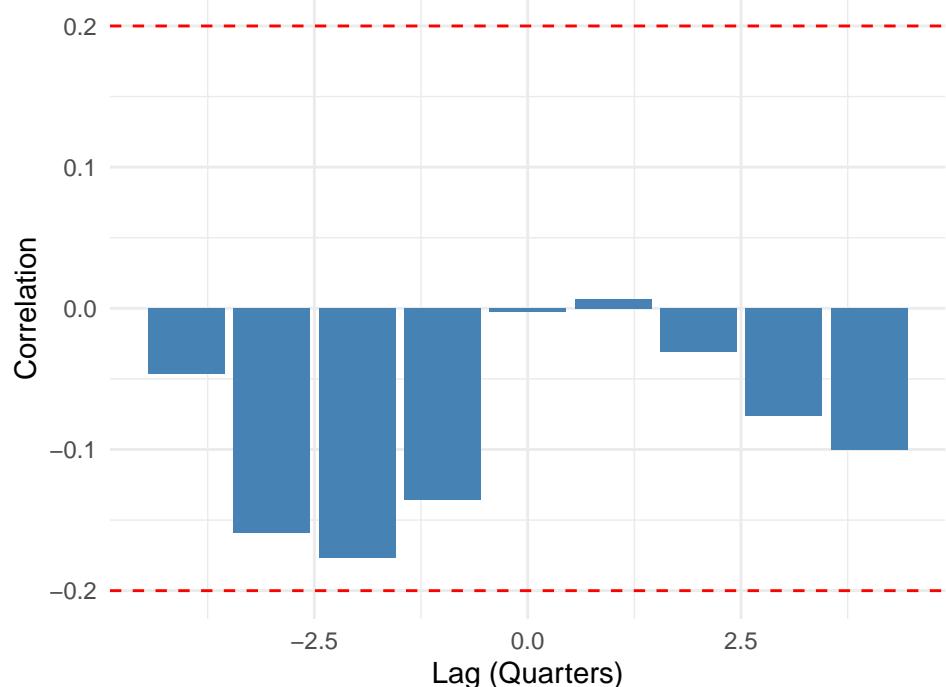
series — ind_scaled — target_scaled

Scatter: TRUCK_IMP_US vs Target

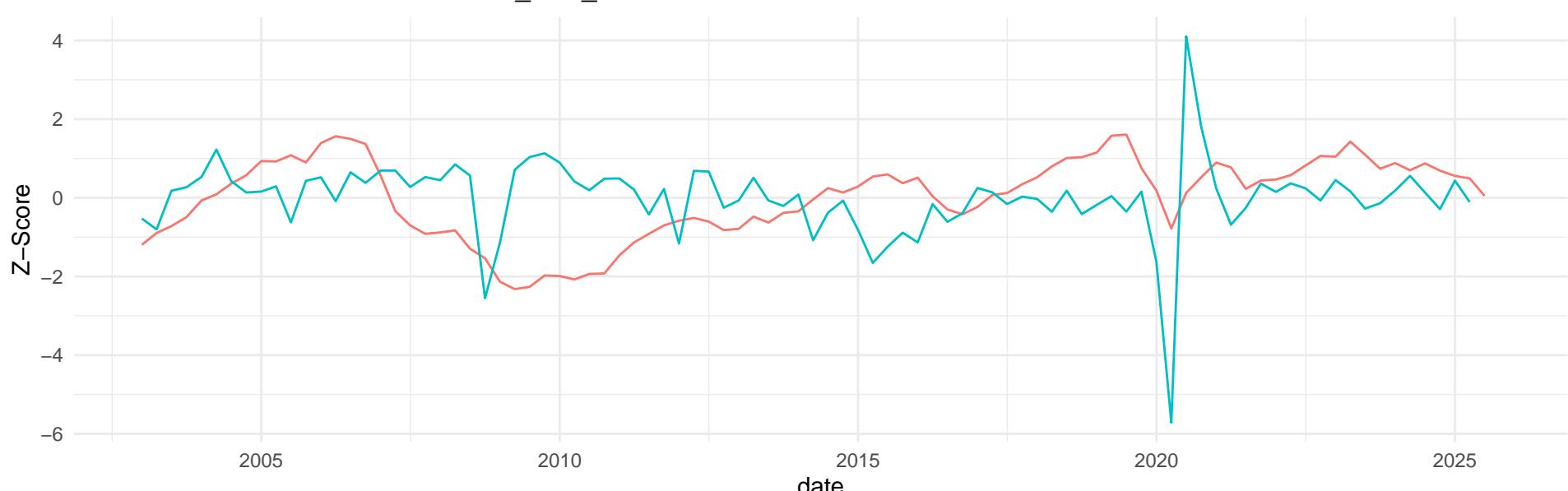
Corr: 0



Cross-Correlation (Quarterly Lags): TRUCK_IMP_US



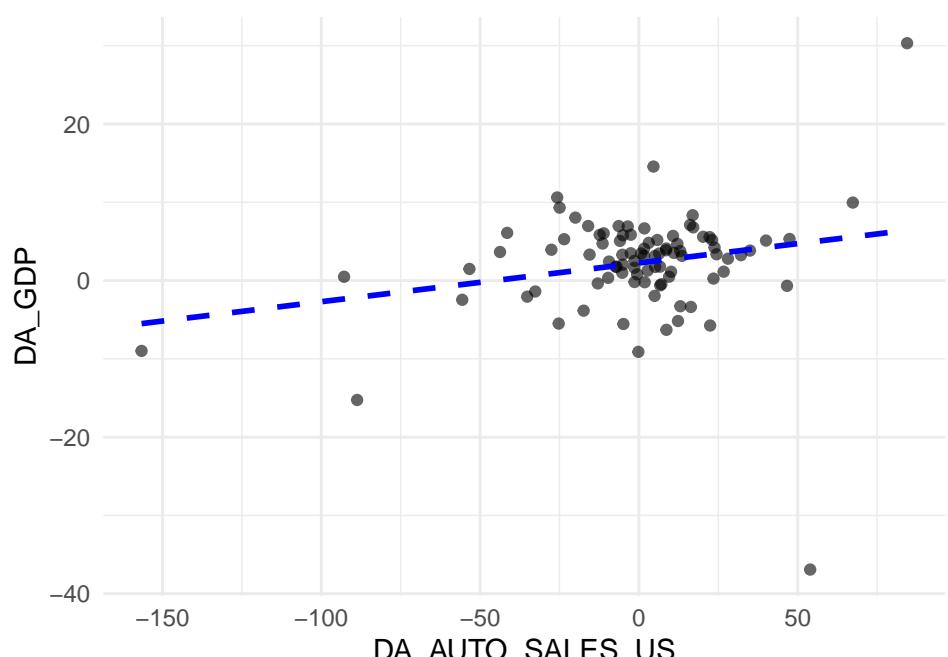
Standardized Time Series: TRUCK_IMP_US



series — ind_scaled — target_scaled

Scatter: DA_AUTO_SALES_US vs Target

Corr: 0.23



Cross-Correlation (Quarterly Lags): DA_AUTO_SALES

Correlation

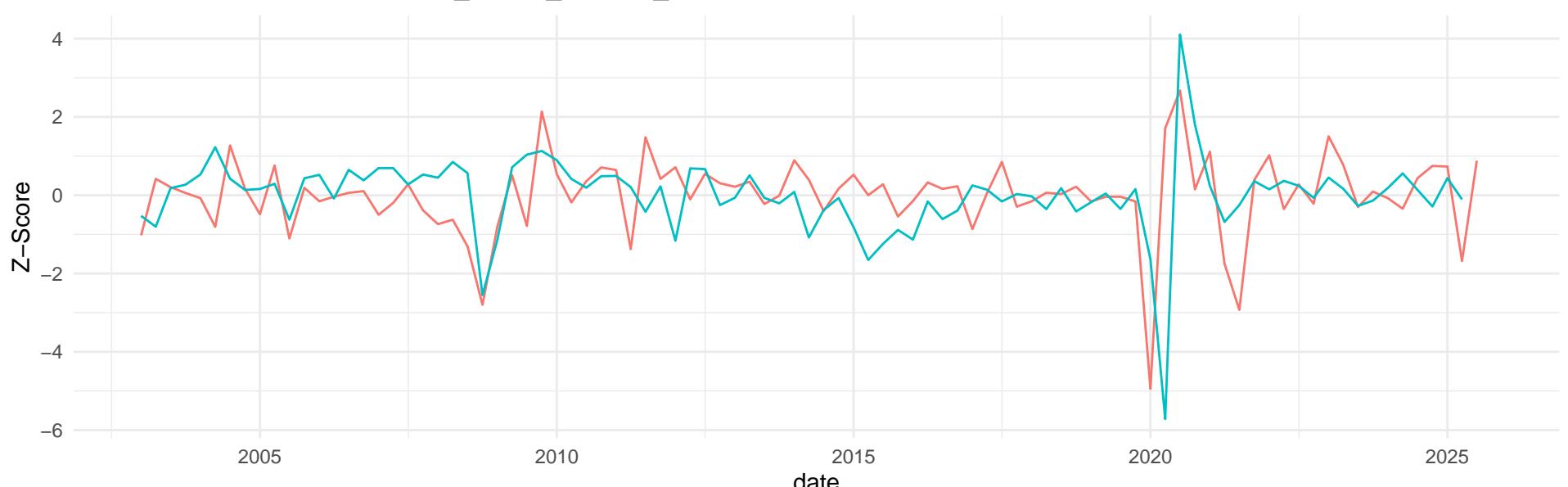
0.4
0.2
0.0
-0.2

-0.4

-3.0 -2.5 -2.0 -1.5 -1.0 -0.5 0.0 0.5 1.0 1.5 2.0 2.5 3.0

Lag (Quarters)

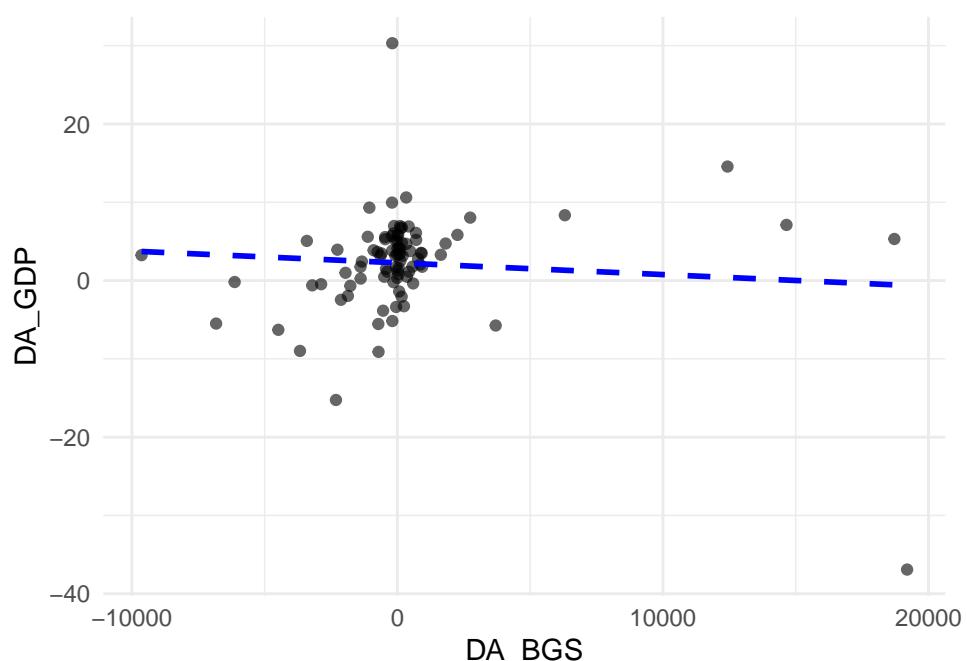
Standardized Time Series: DA_AUTO_SALES_US



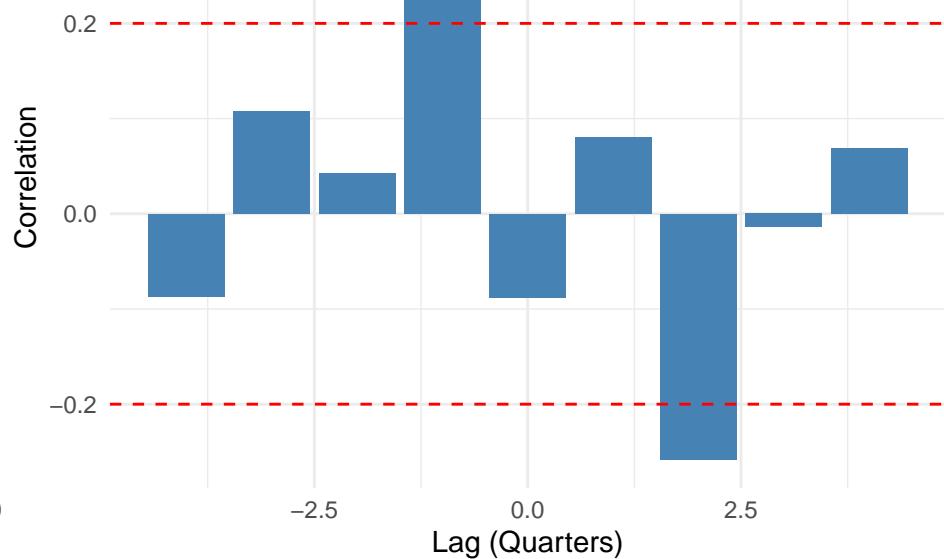
series — ind_scaled — target_scaled

Scatter: DA_BGS vs Target

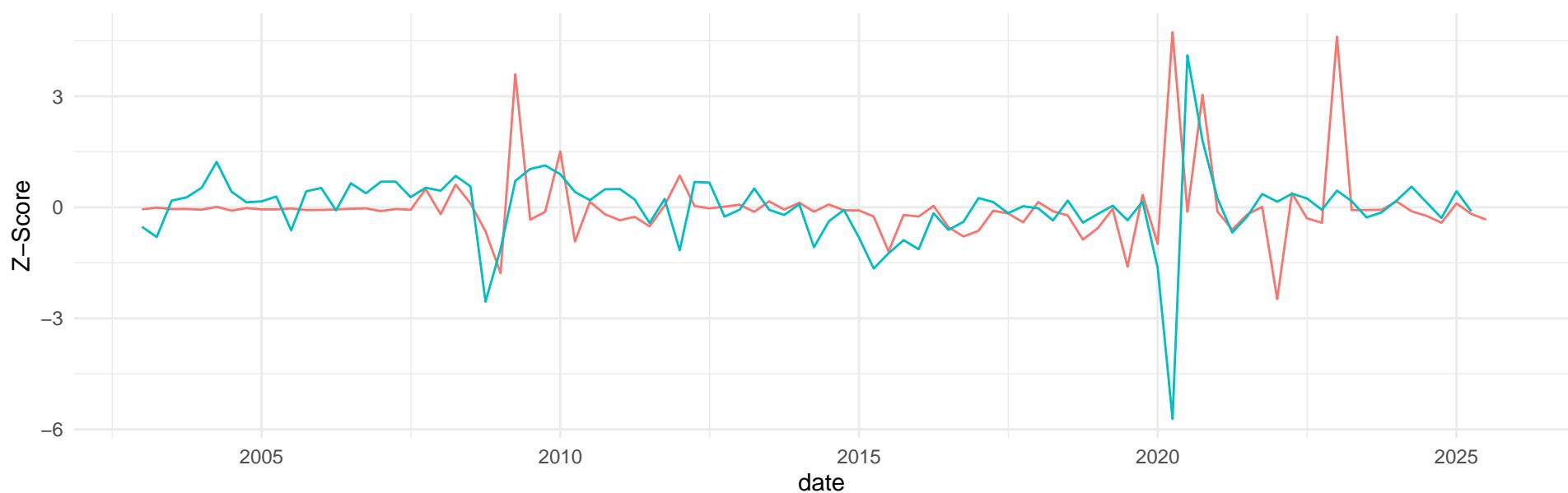
Corr: -0.09



Cross-Correlation (Quarterly Lags): DA_BGS



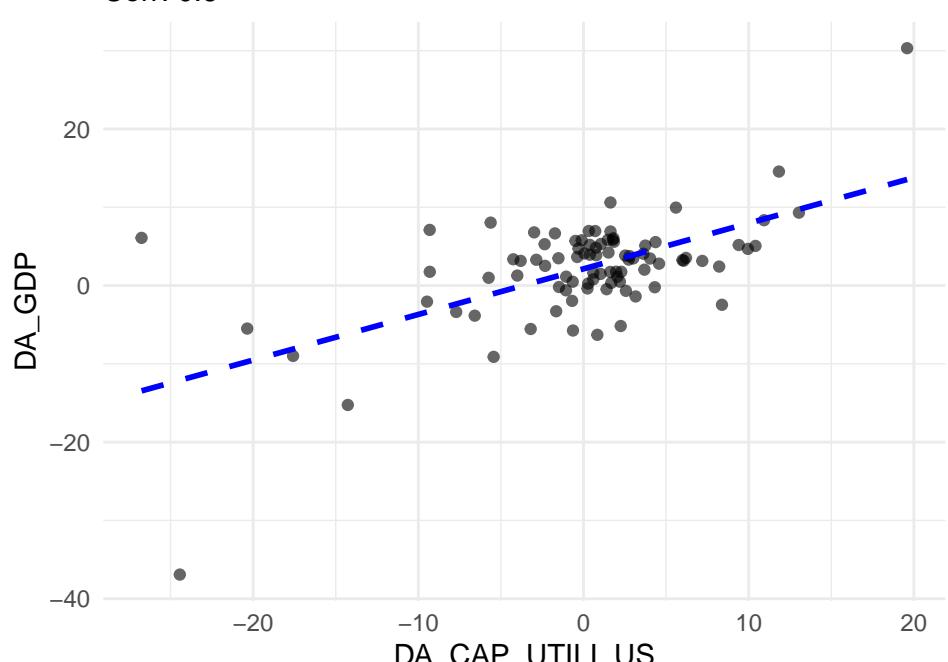
Standardized Time Series: DA_BGS



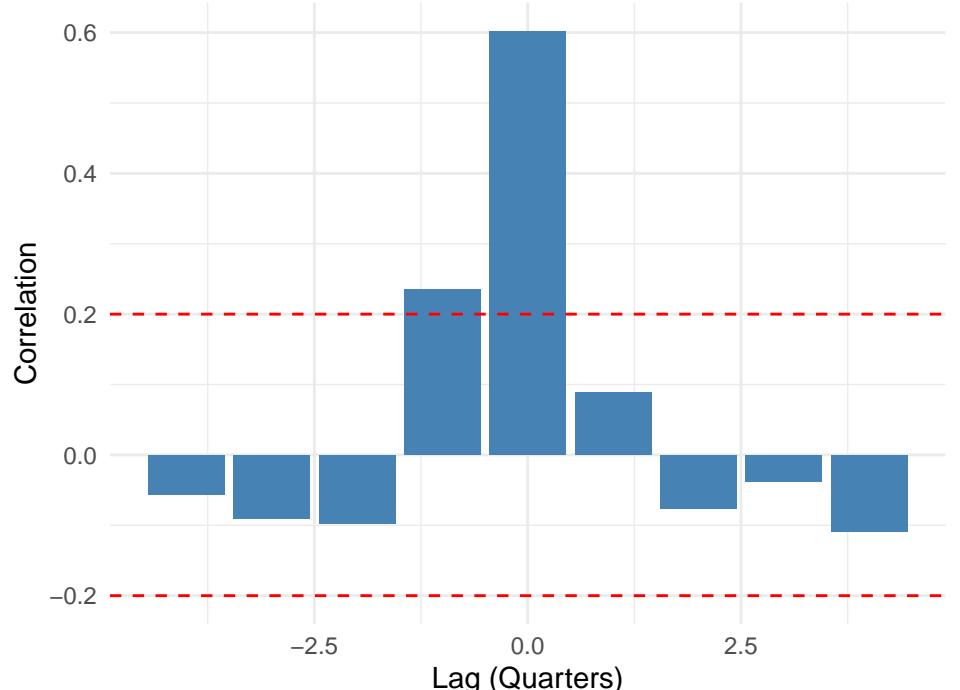
series — ind_scaled — target_scaled

Scatter: DA_CAP_UTILI_US vs Target

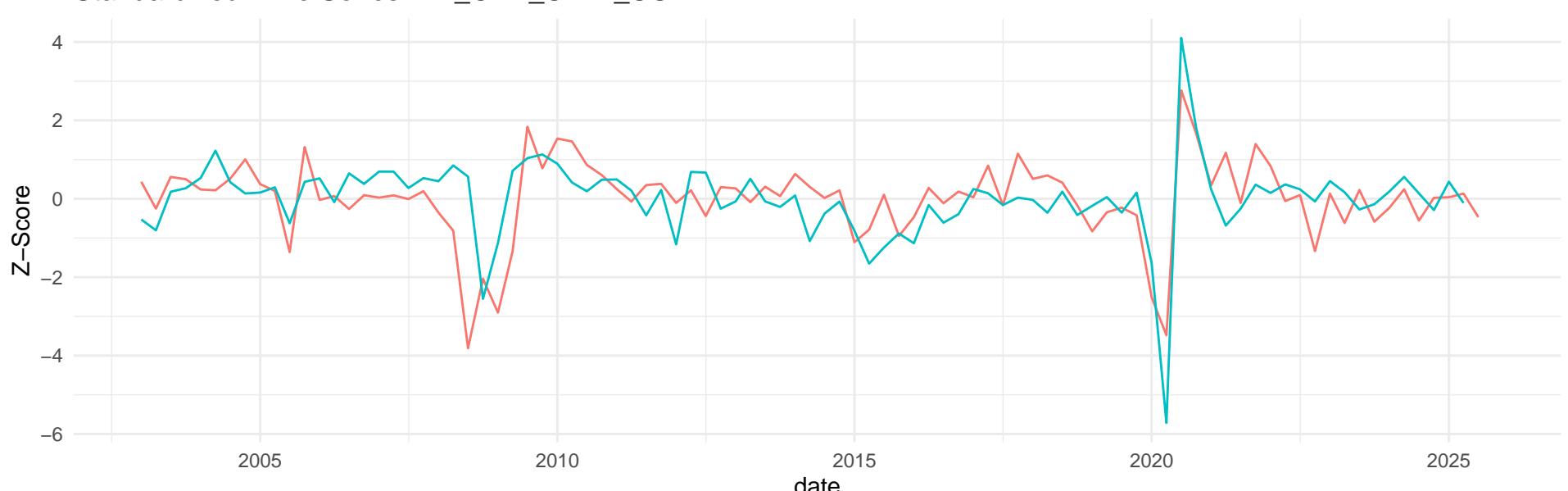
Corr: 0.6



Cross-Correlation (Quarterly Lags): DA_CAP_UTILI_U

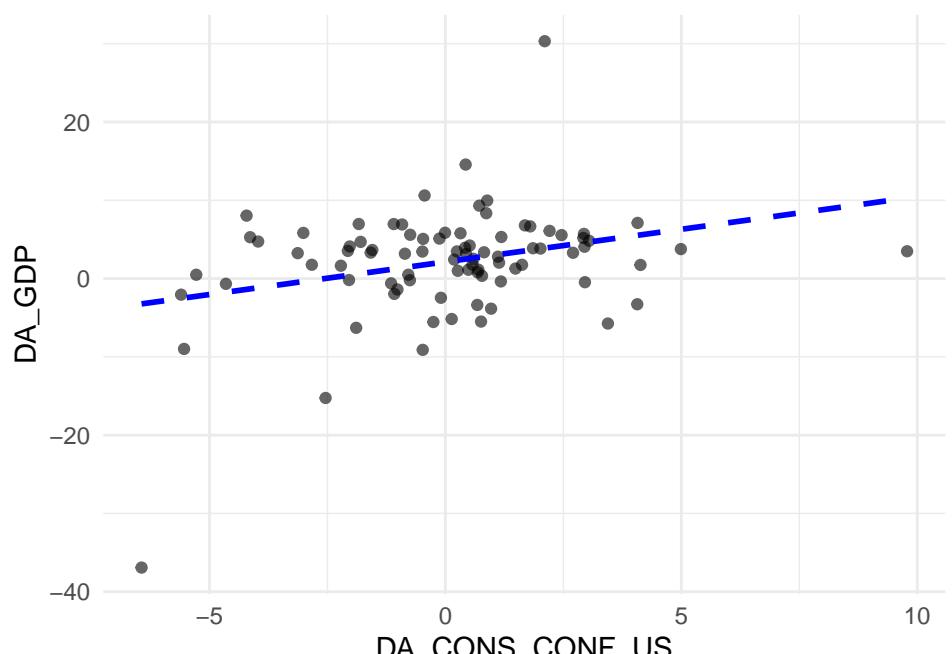


Standardized Time Series: DA_CAP_UTILI_US

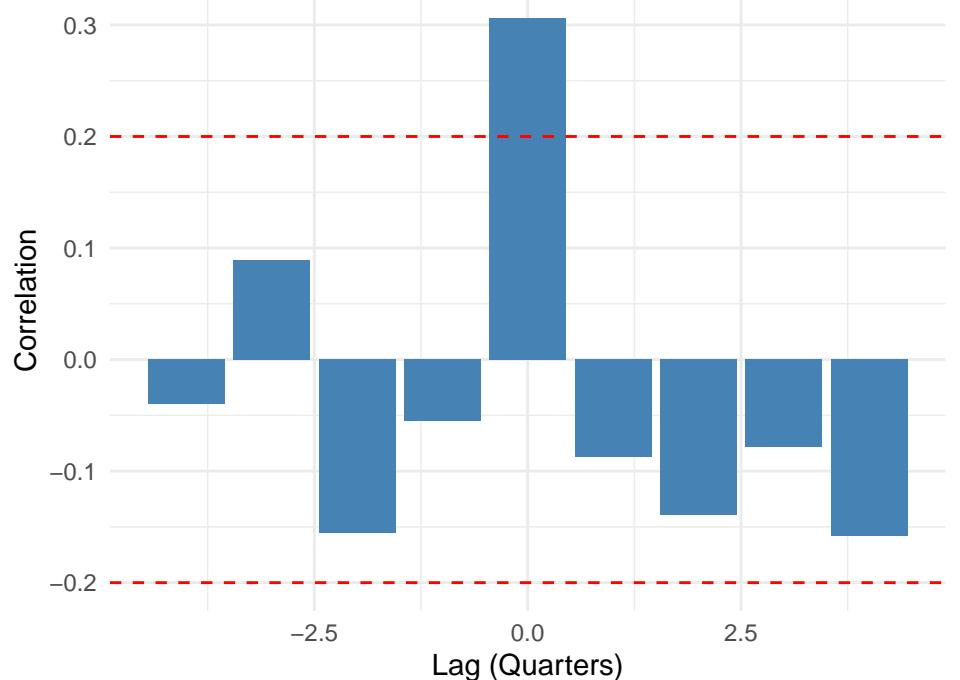


Scatter: DA_CONS_CONF_US vs Target

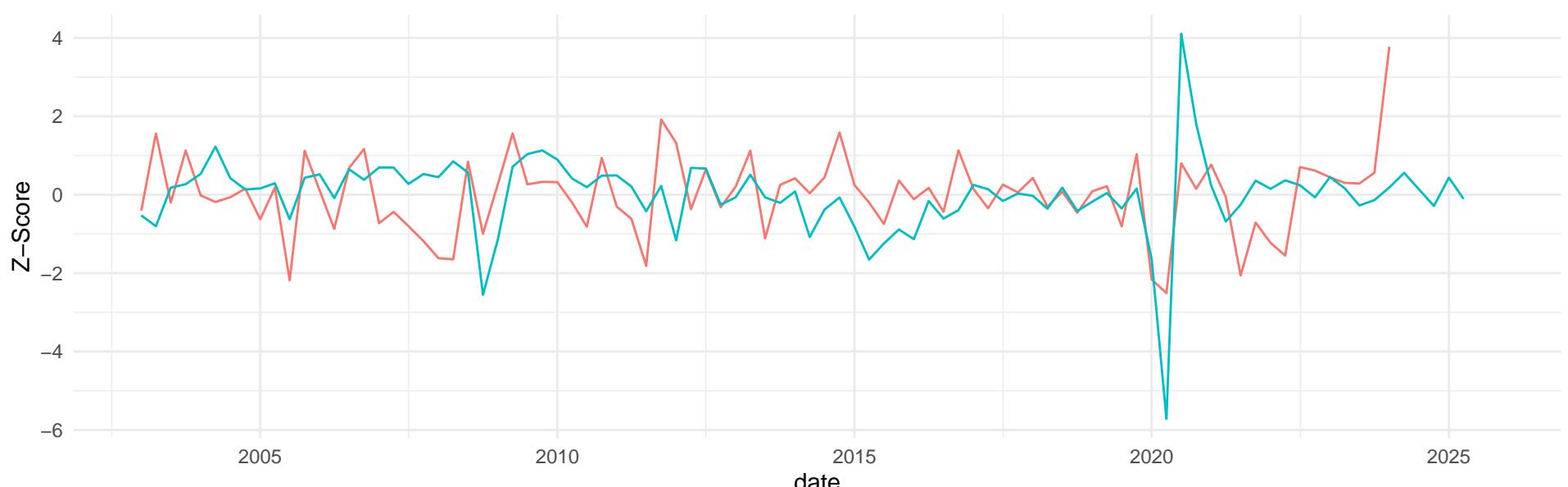
Corr: 0.31



Cross-Correlation (Quarterly Lags): DA_CONS_CONF_US



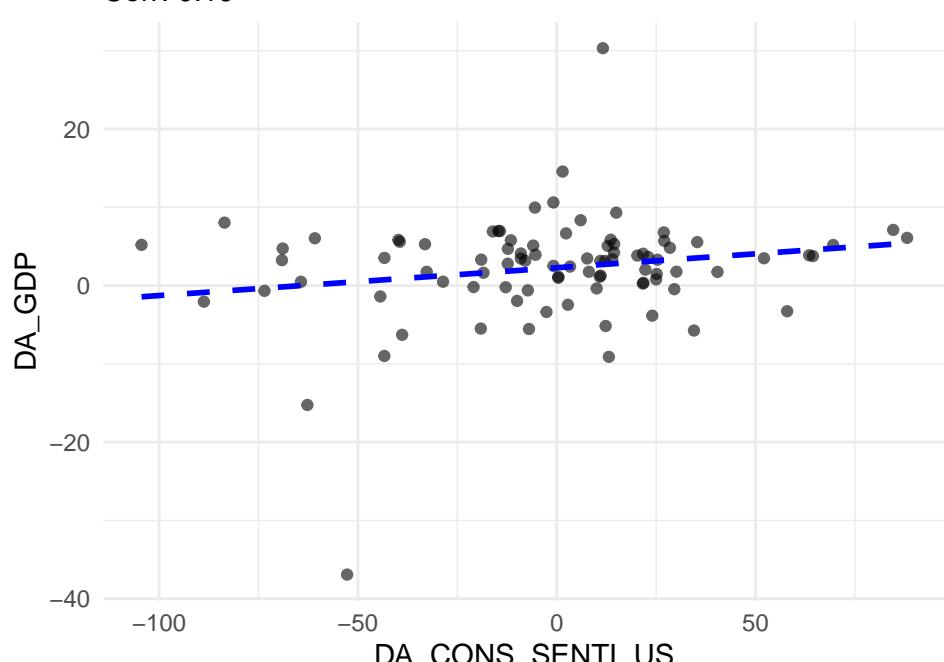
Standardized Time Series: DA_CONS_CONF_US



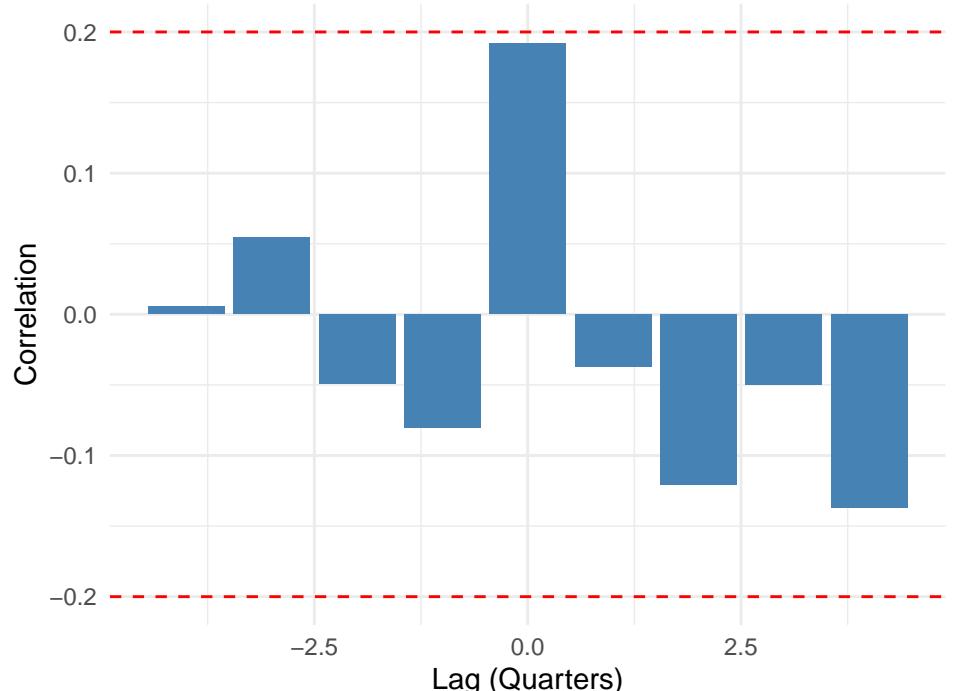
series — ind_scaled — target_scaled

Scatter: DA_CONS_SENTI_US vs Target

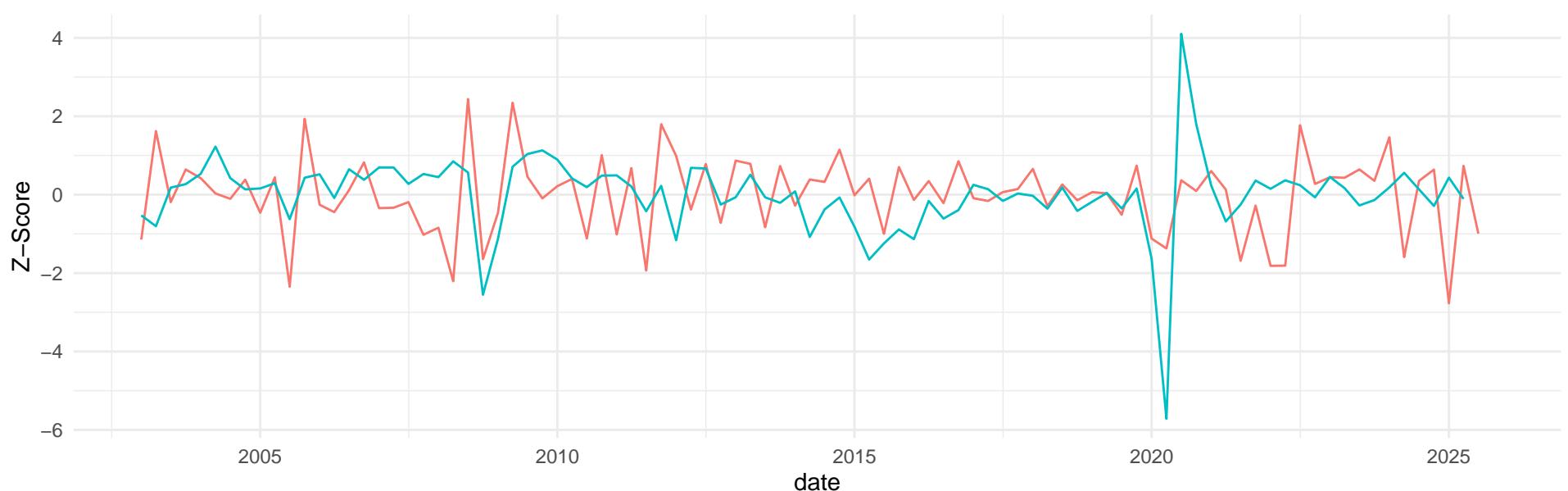
Corr: 0.19



Cross-Correlation (Quarterly Lags): DA_CONS_SENTI



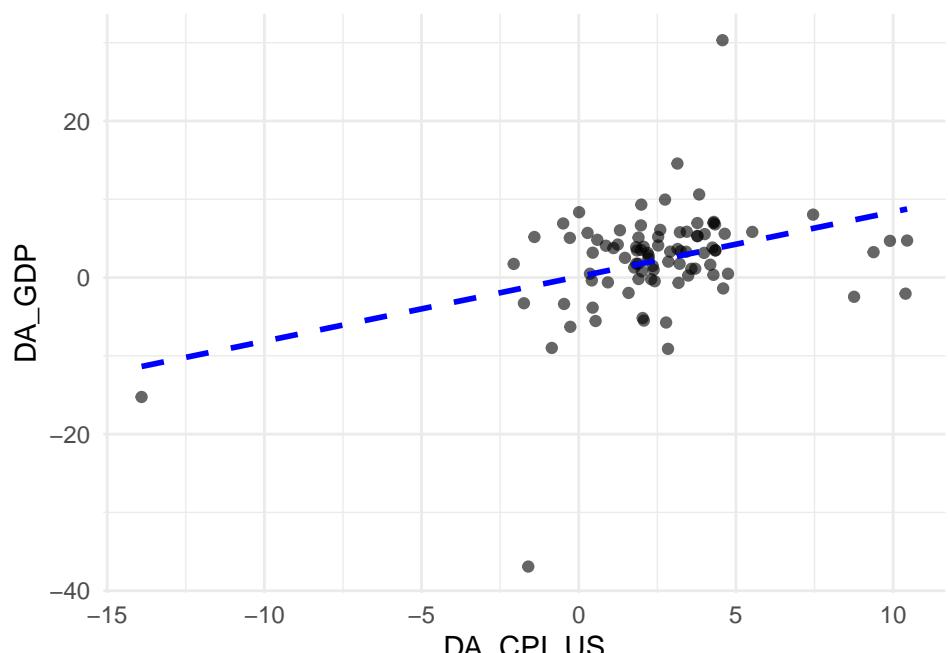
Standardized Time Series: DA_CONS_SENTI_US



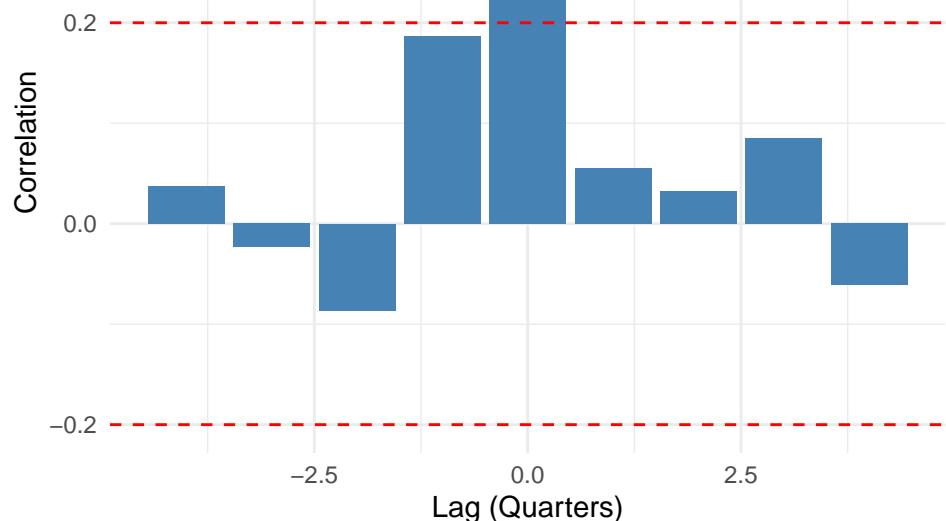
series — ind_scaled — target_scaled

Scatter: DA_CPI_US vs Target

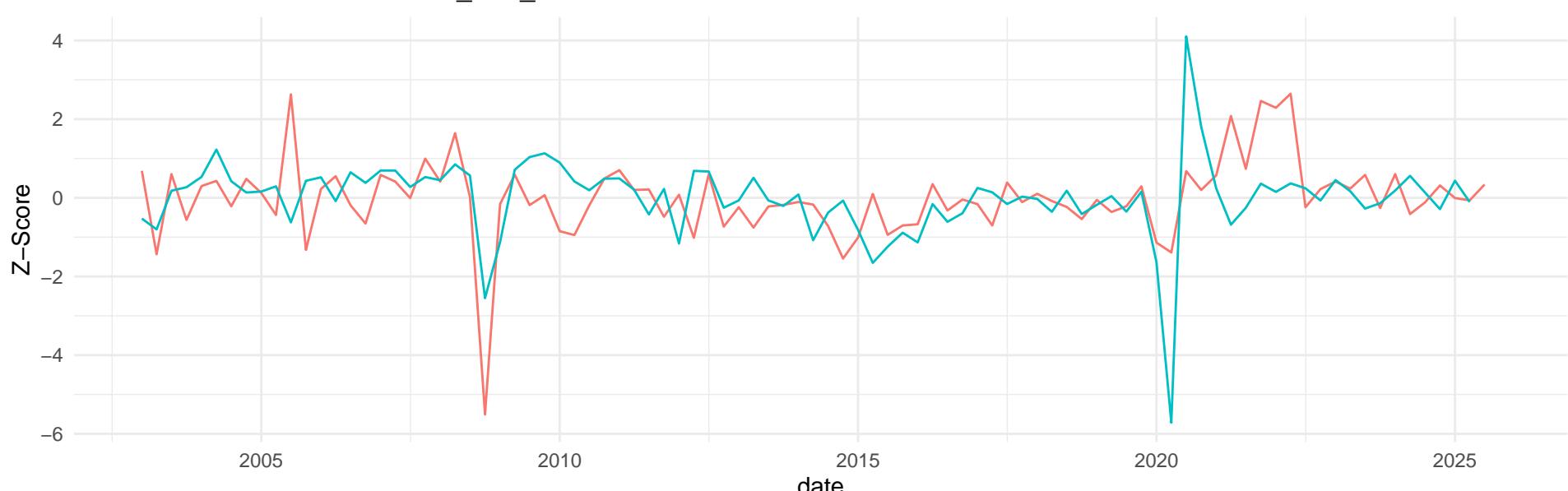
Corr: 0.36



Cross-Correlation (Quarterly Lags): DA_CPI_US



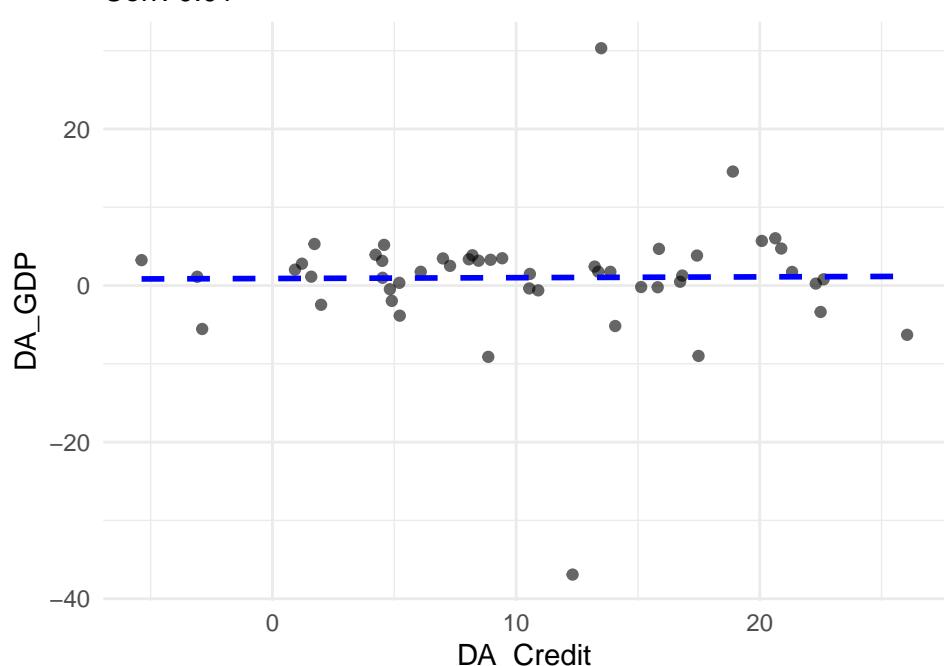
Standardized Time Series: DA_CPI_US



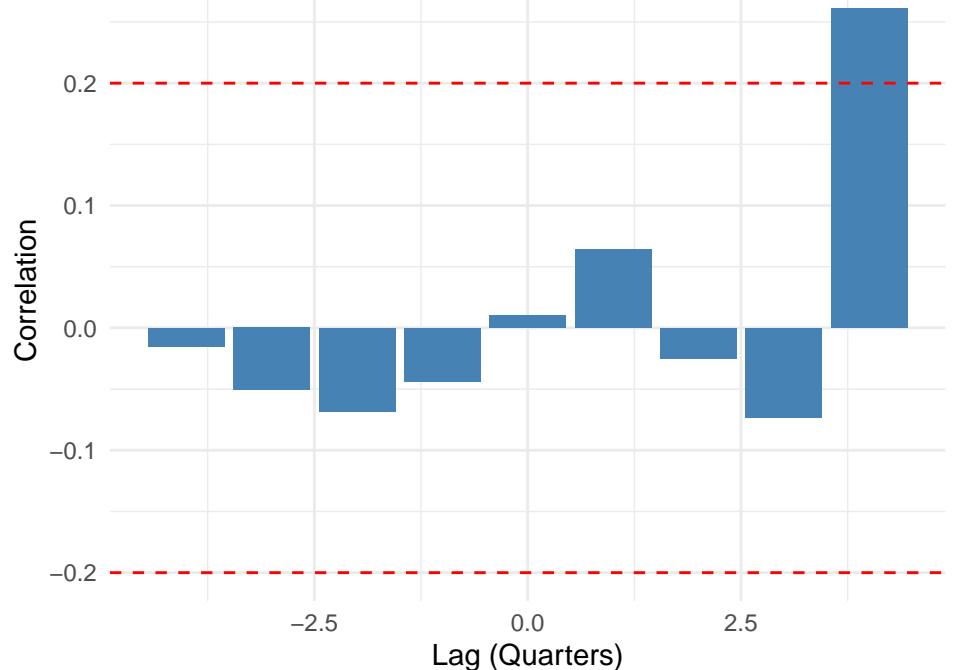
series — ind_scaled — target_scaled

Scatter: DA_Credit vs Target

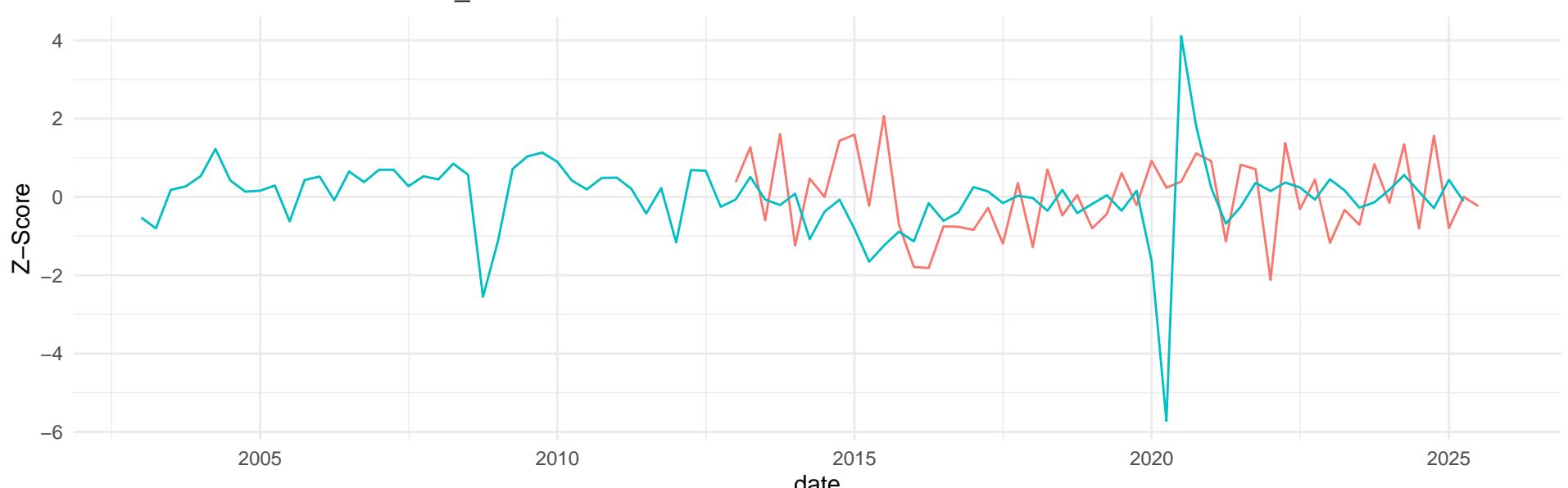
Corr: 0.01



Cross-Correlation (Quarterly Lags): DA_Credit



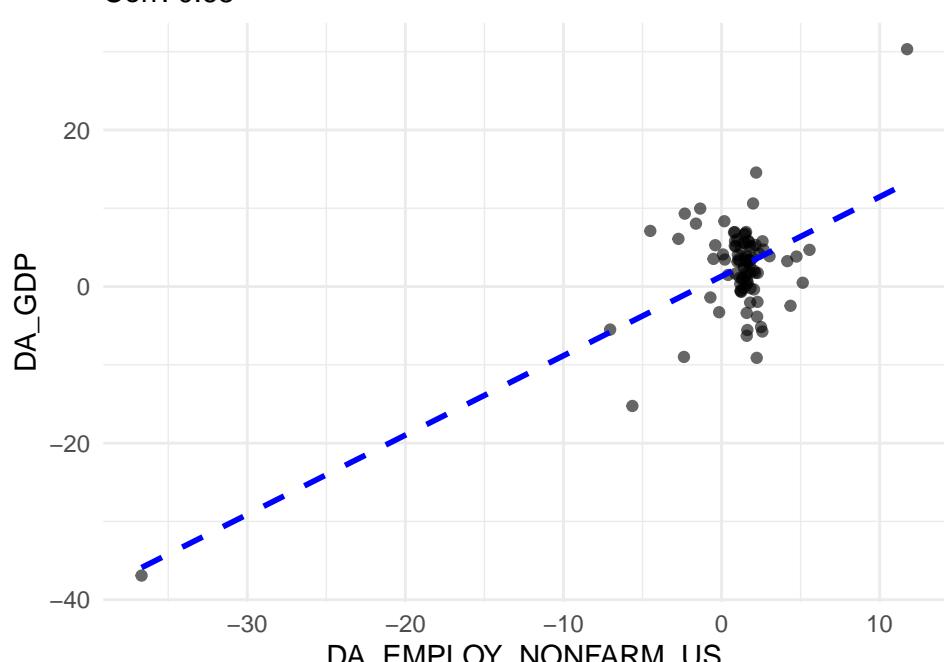
Standardized Time Series: DA_Credit



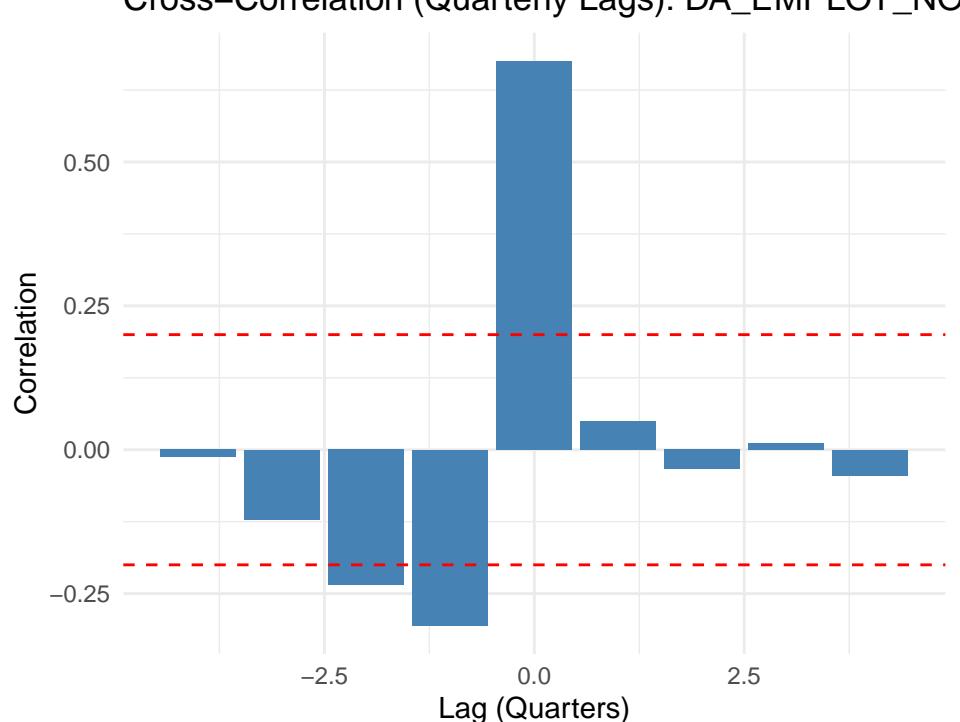
series — ind_scaled — target_scaled

Scatter: DA_EMPLOY_NONFARM_US vs Target

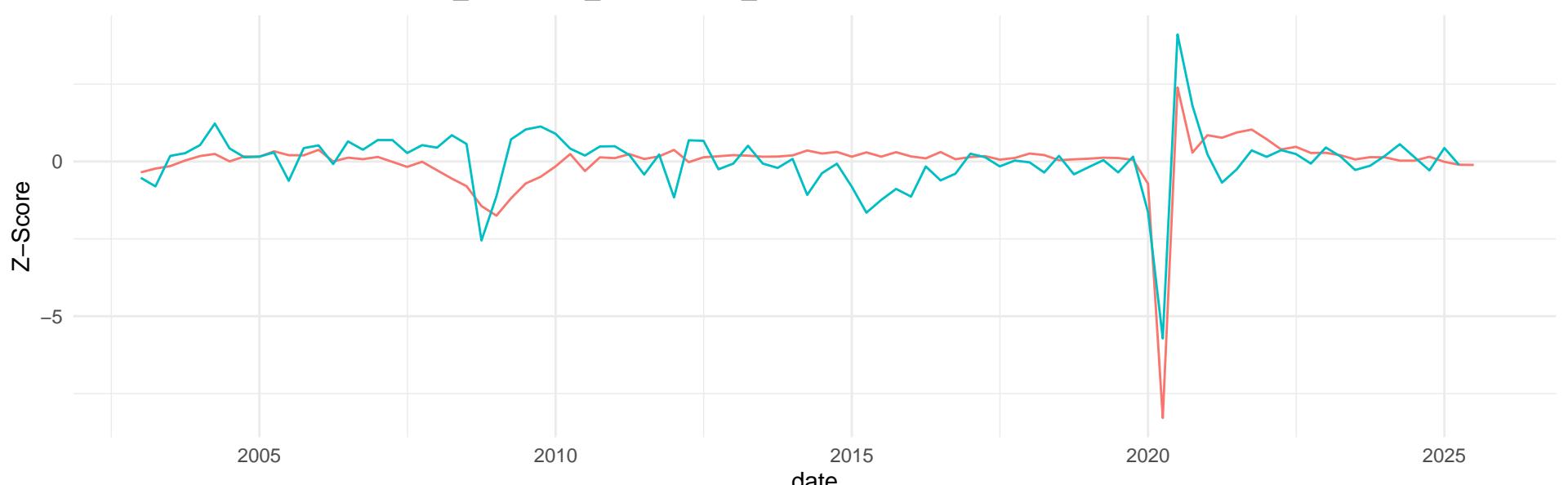
Corr: 0.68



Cross-Correlation (Quarterly Lags): DA_EMPLOY_NO



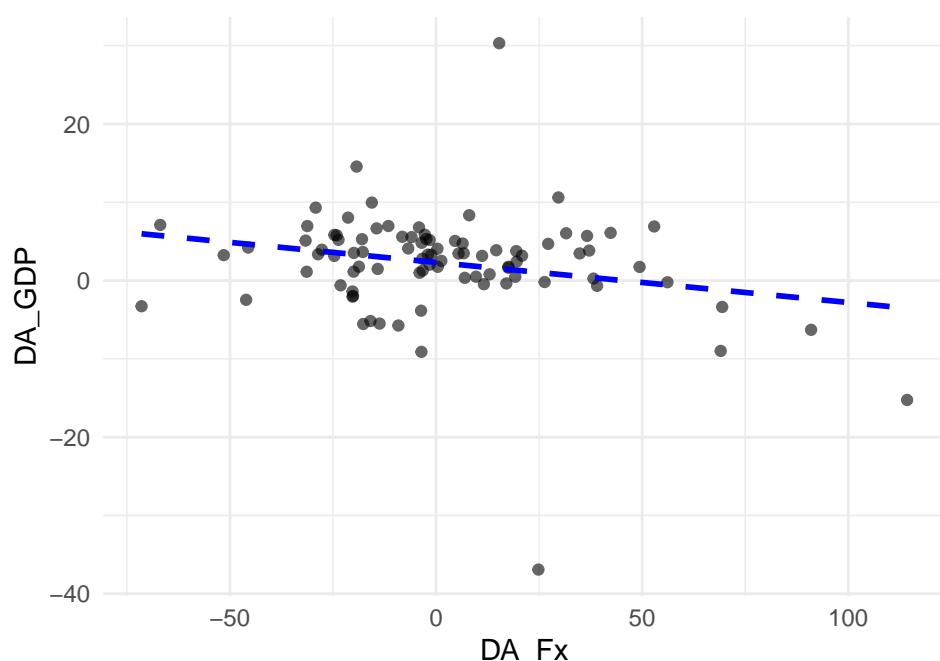
Standardized Time Series: DA_EMPLOY_NONFARM_US



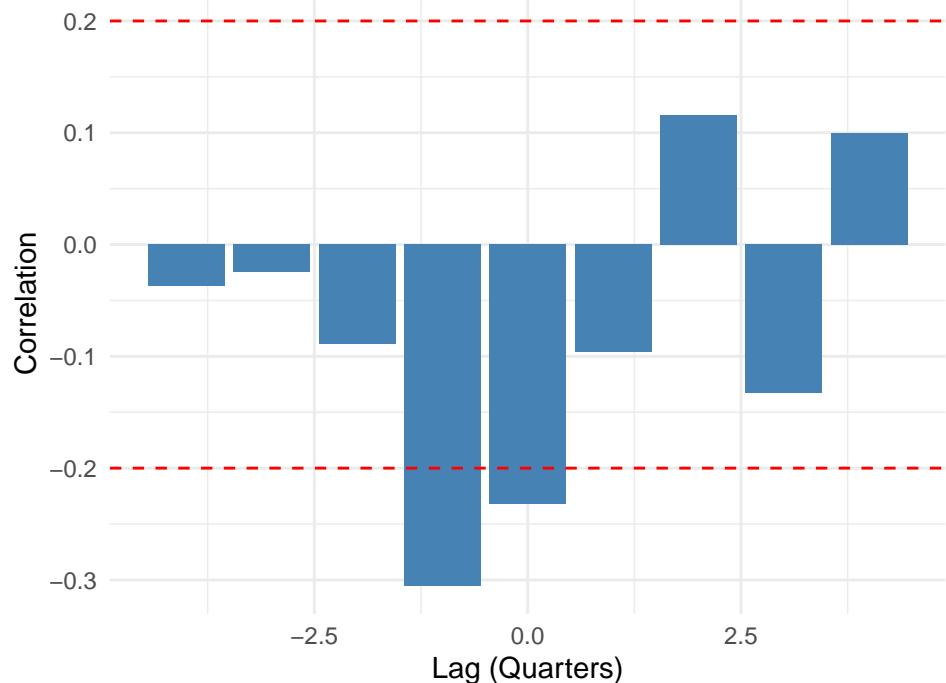
series — ind_scaled — target_scaled

Scatter: DA_Fx vs Target

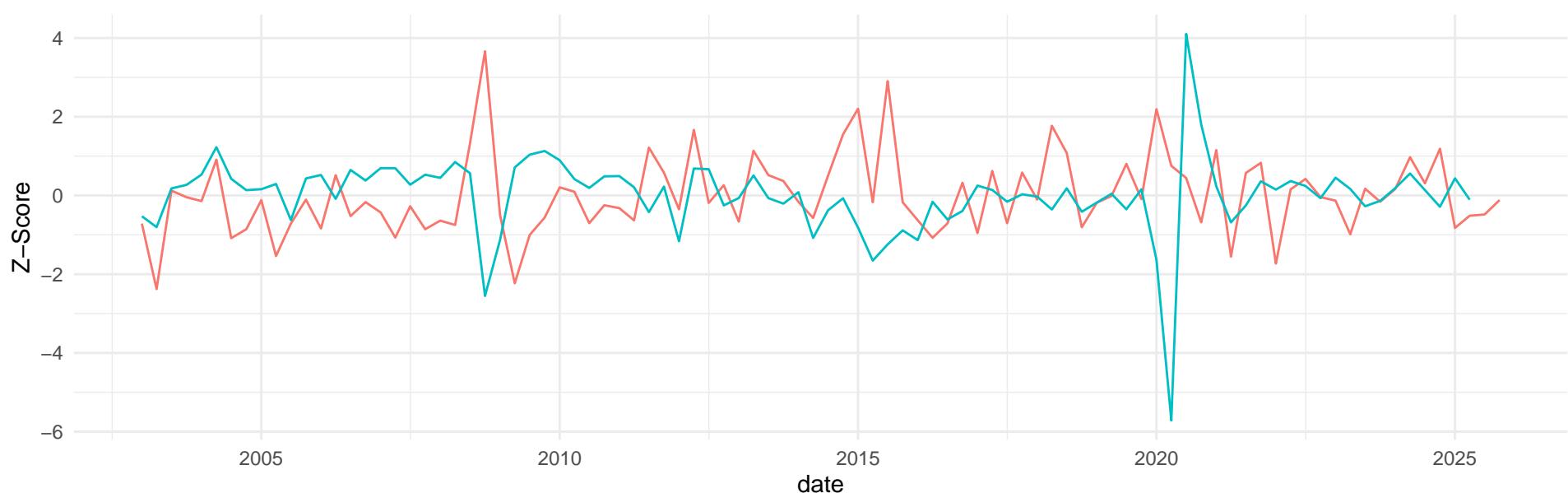
Corr: -0.23



Cross-Correlation (Quarterly Lags): DA_Fx



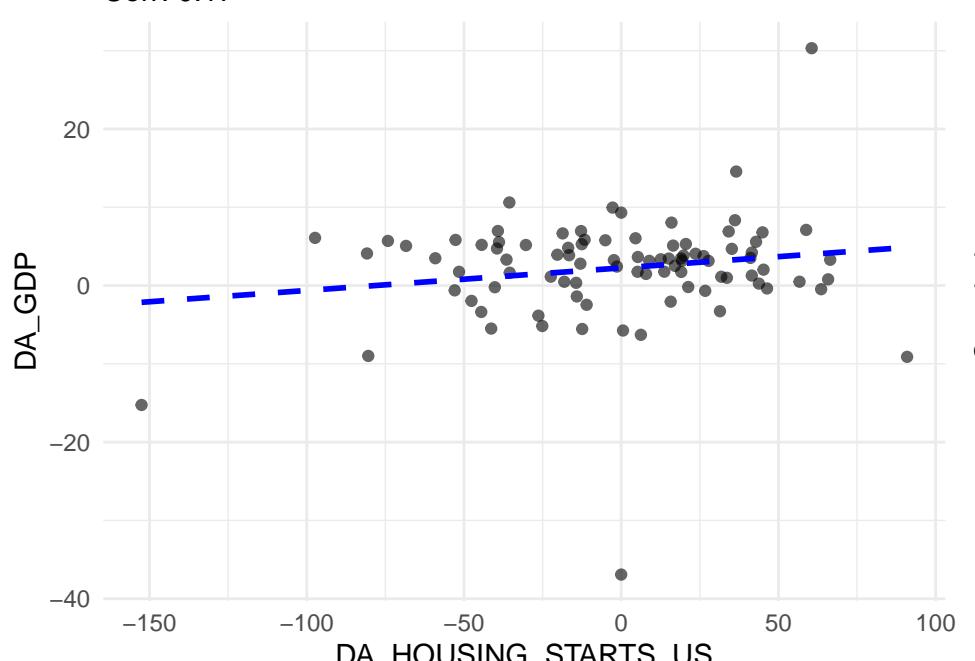
Standardized Time Series: DA_Fx



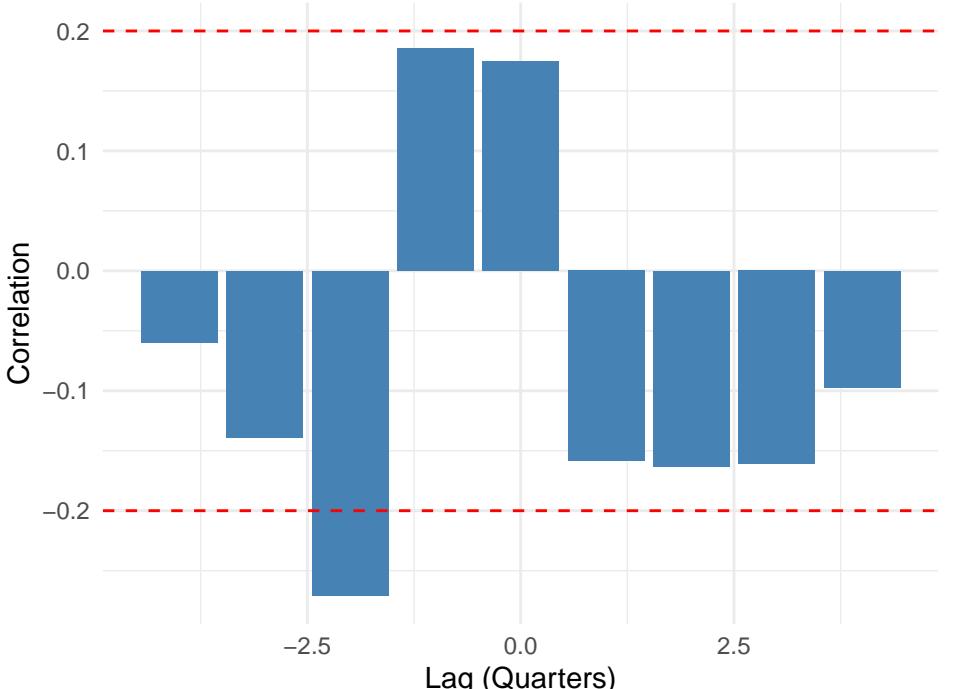
series — ind_scaled — target_scaled

Scatter: DA_HOUSING_STARTS_US vs Target

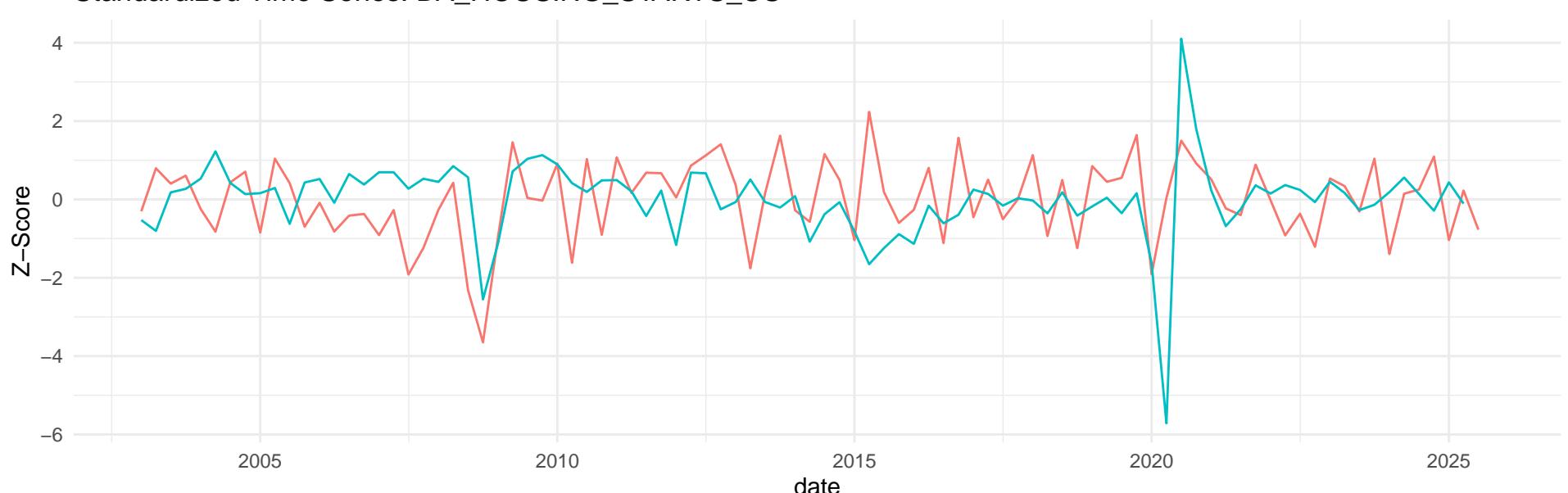
Corr: 0.17



Cross-Correlation (Quarterly Lags): DA_HOUSING_ST



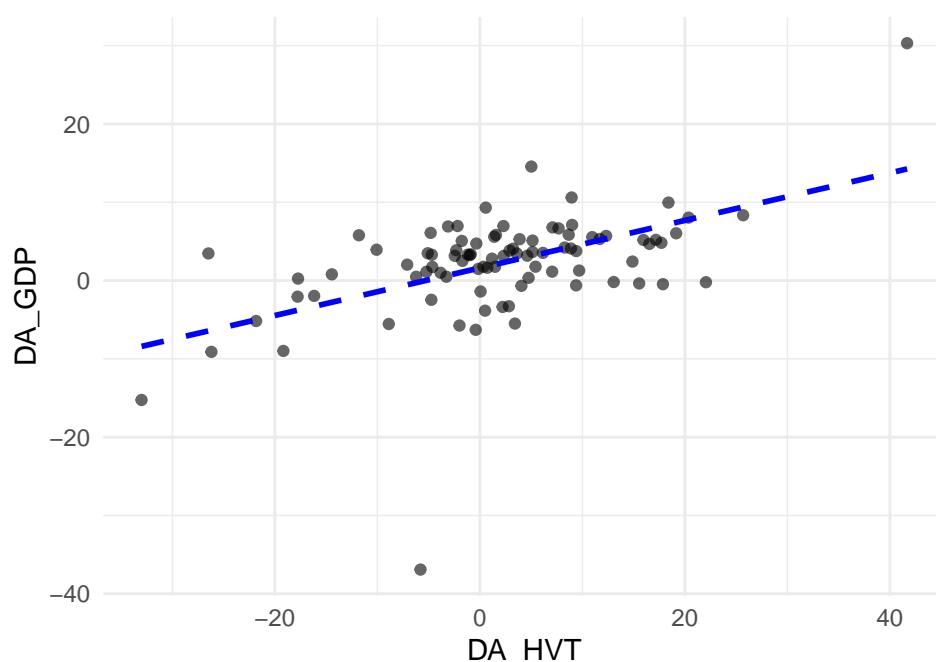
Standardized Time Series: DA_HOUSING_STARTS_US



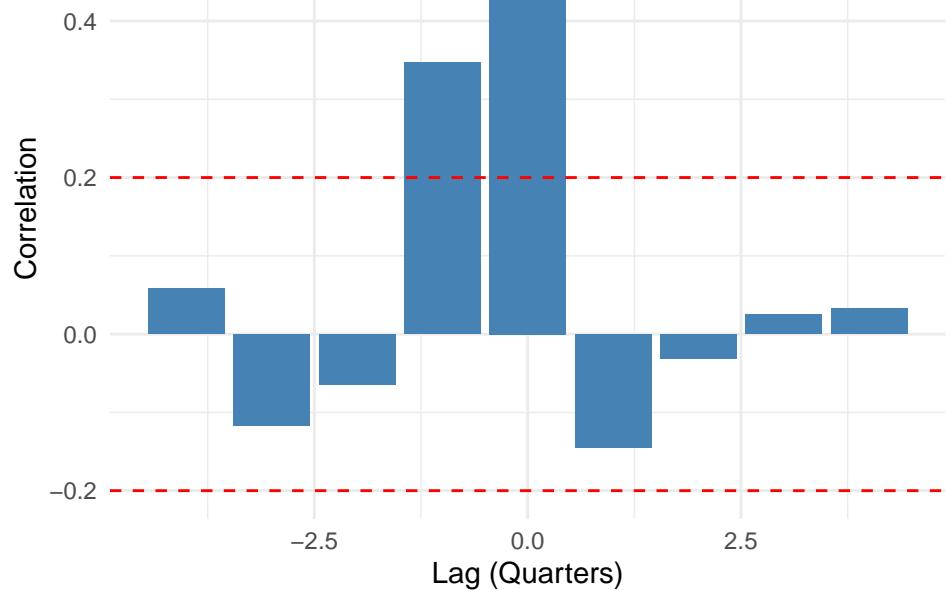
series — ind_scaled — target_scaled

Scatter: DA_HVT vs Target

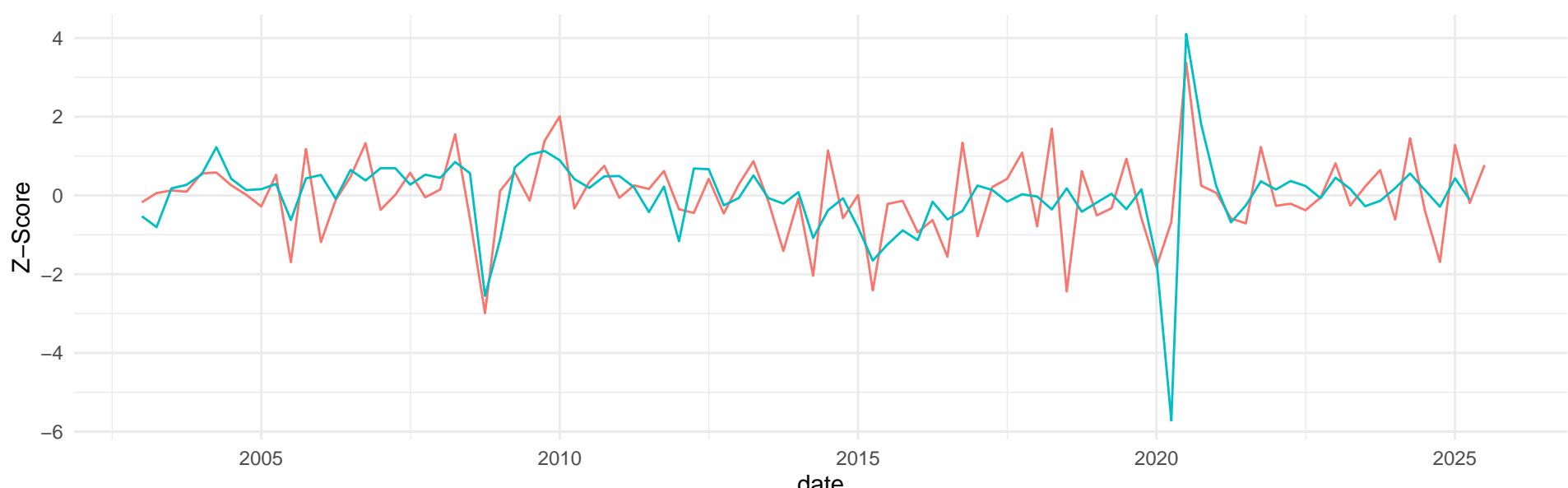
Corr: 0.52



Cross-Correlation (Quarterly Lags): DA_HVT



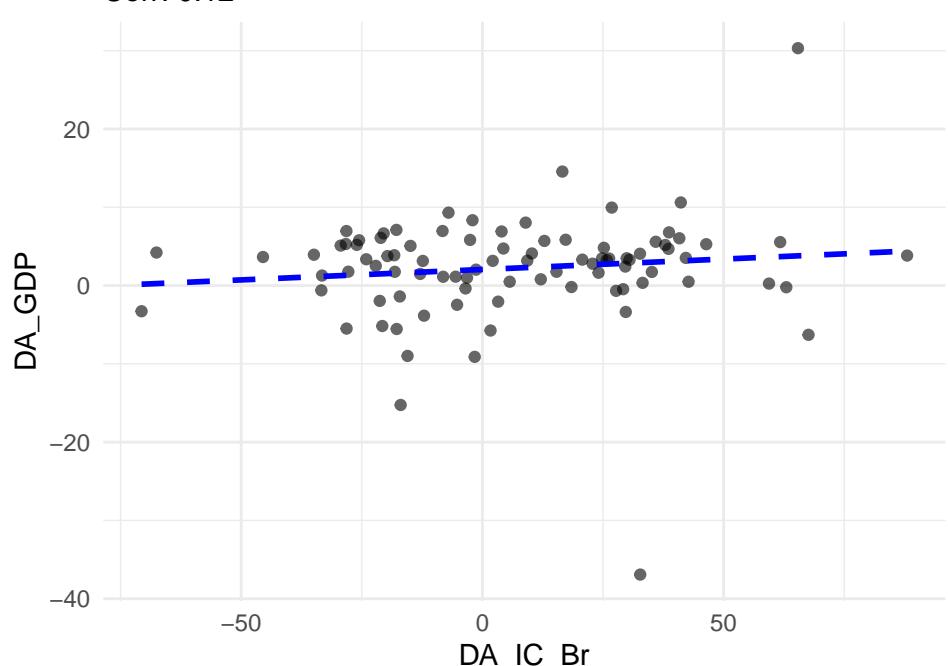
Standardized Time Series: DA_HVT



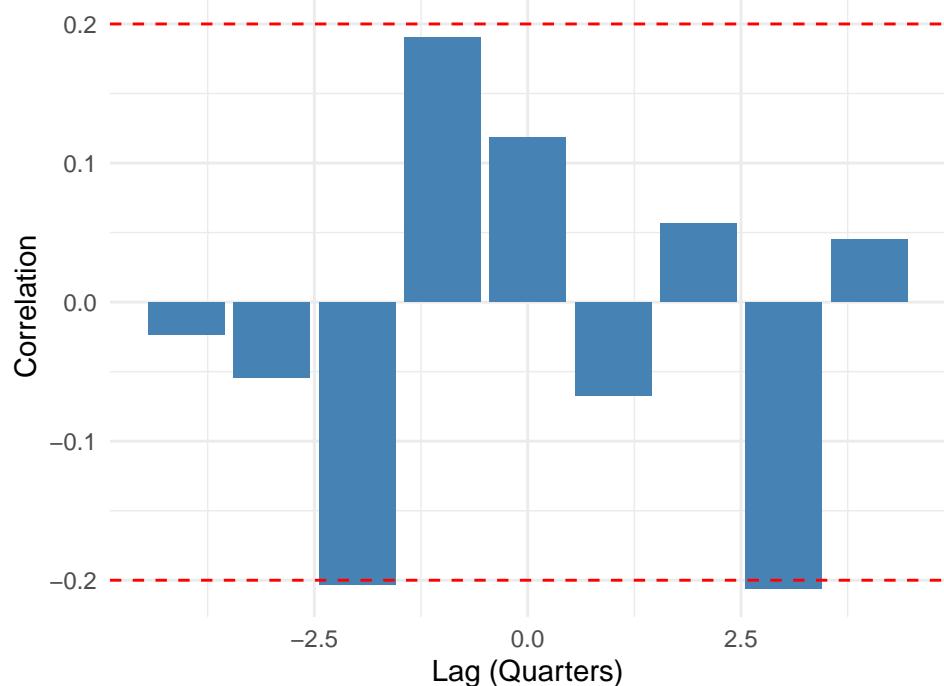
series — ind_scaled — target_scaled

Scatter: DA_IC_Br vs Target

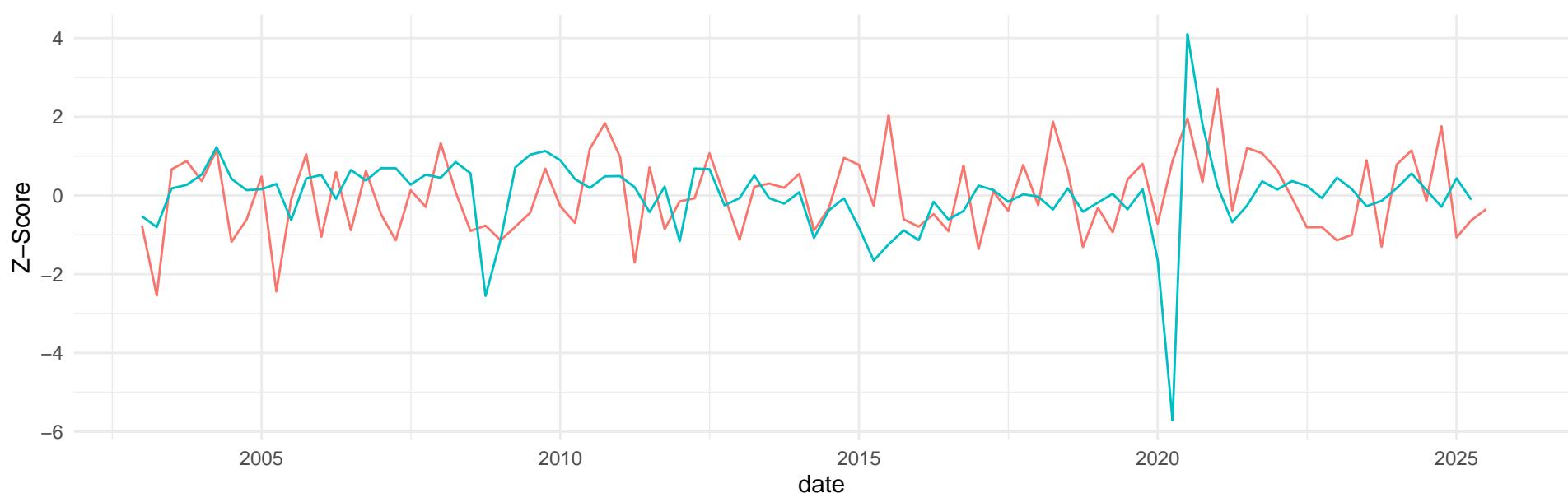
Corr: 0.12



Cross-Correlation (Quarterly Lags): DA_IC_Br



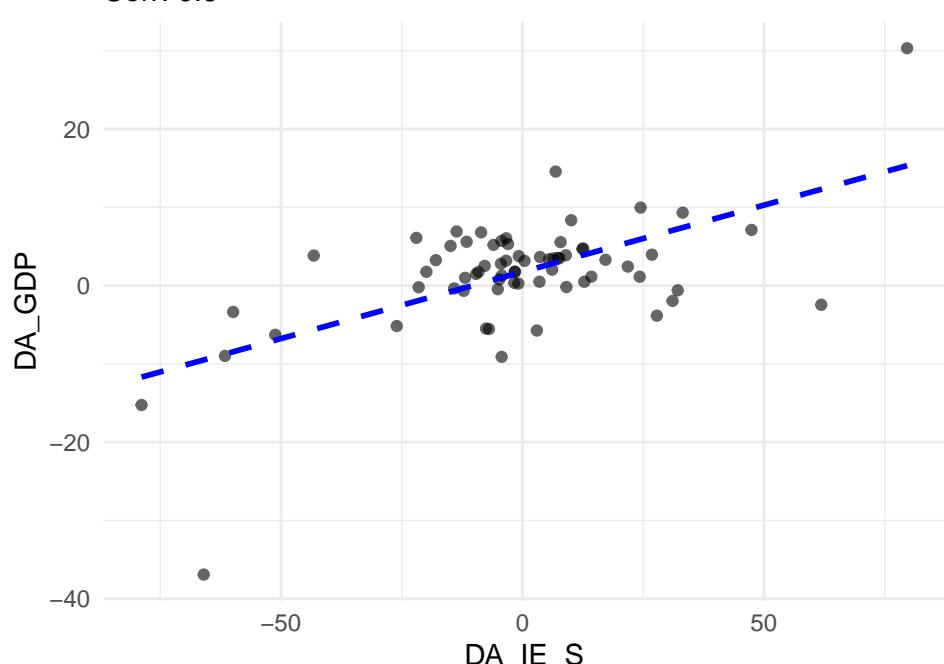
Standardized Time Series: DA_IC_Br



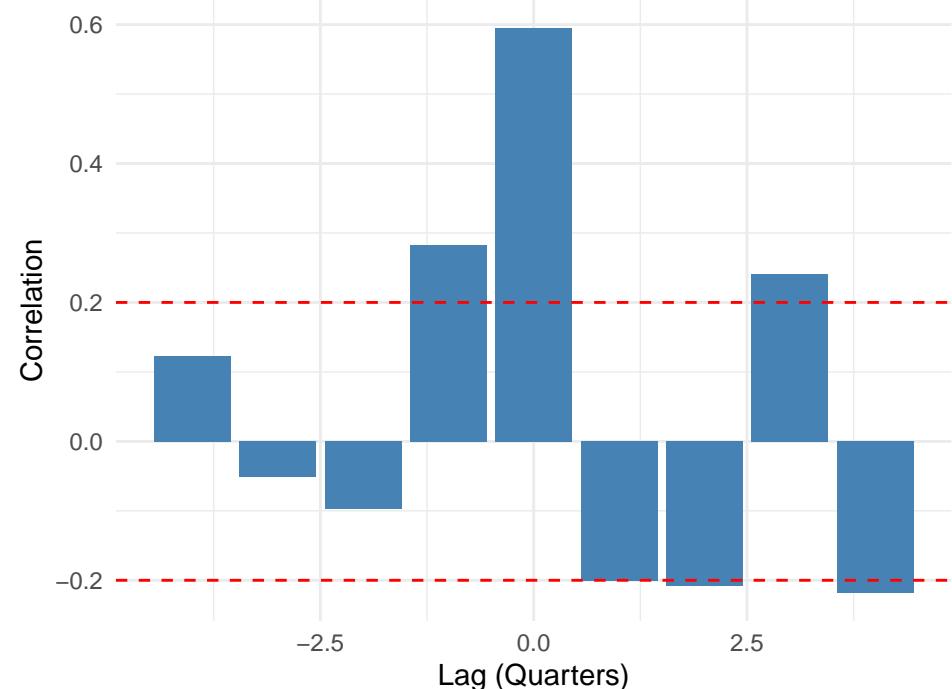
series — ind_scaled — target_scaled

Scatter: DA_IE_S vs Target

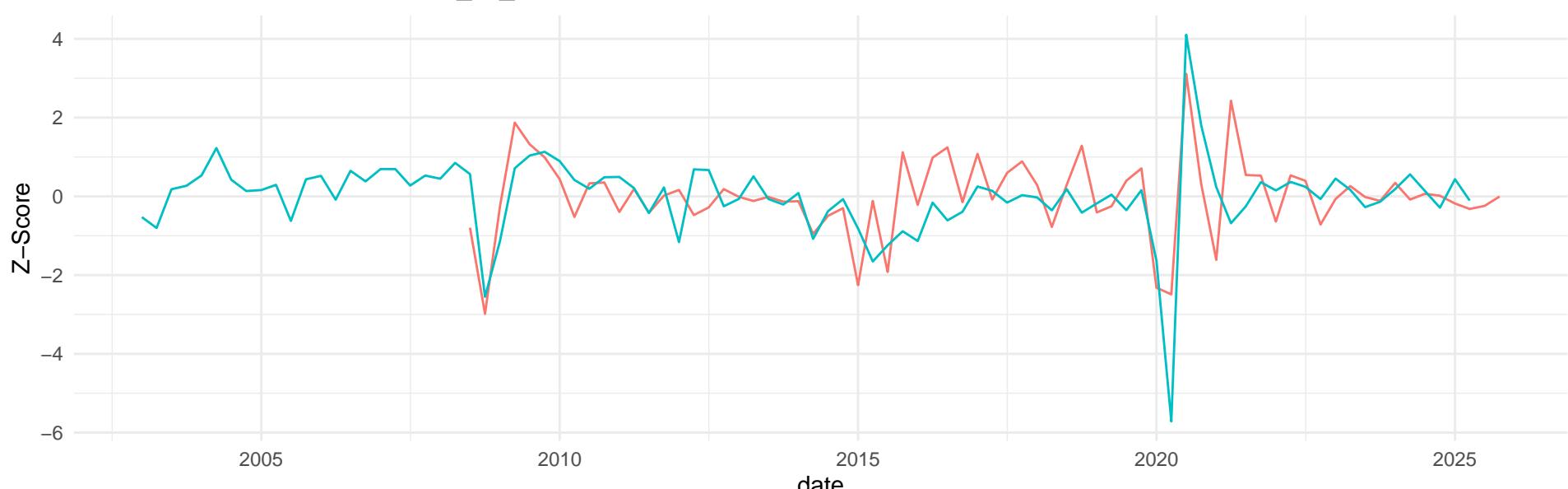
Corr: 0.6



Cross-Correlation (Quarterly Lags): DA_IE_S



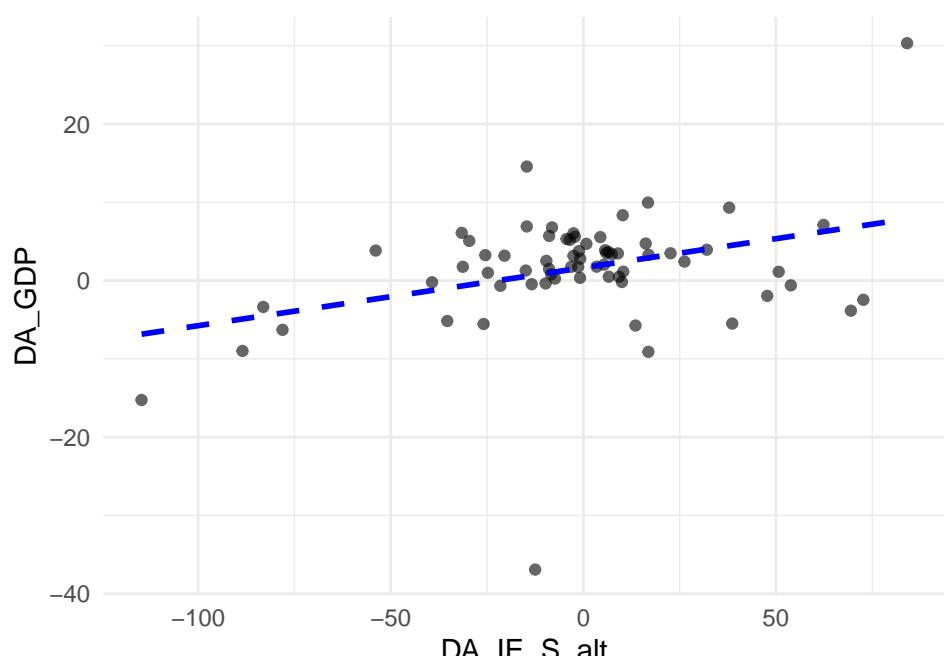
Standardized Time Series: DA_IE_S



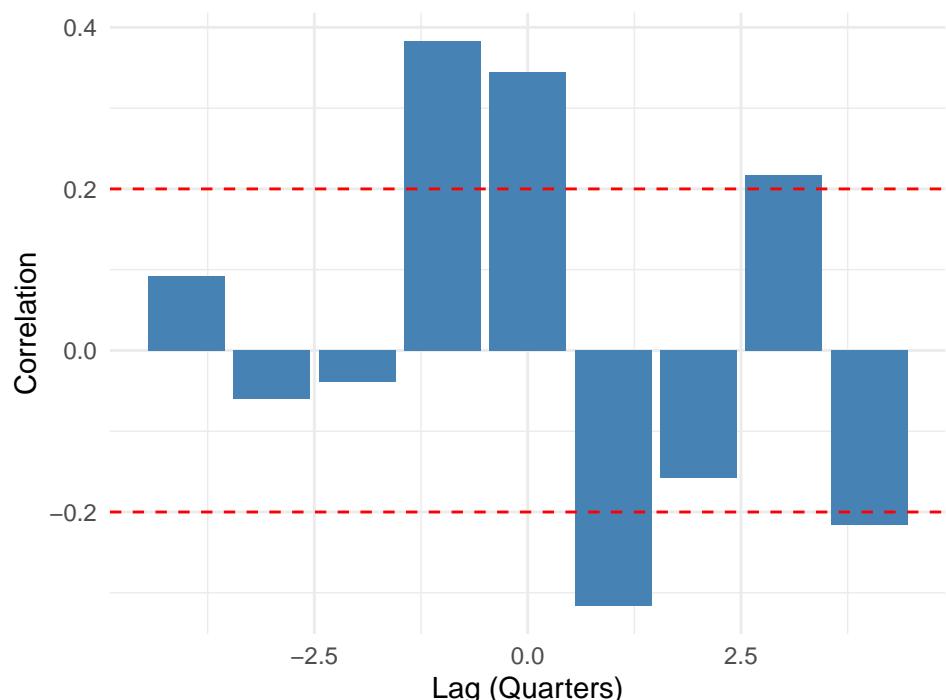
series — ind_scaled — target_scaled

Scatter: DA_IE_S_alt vs Target

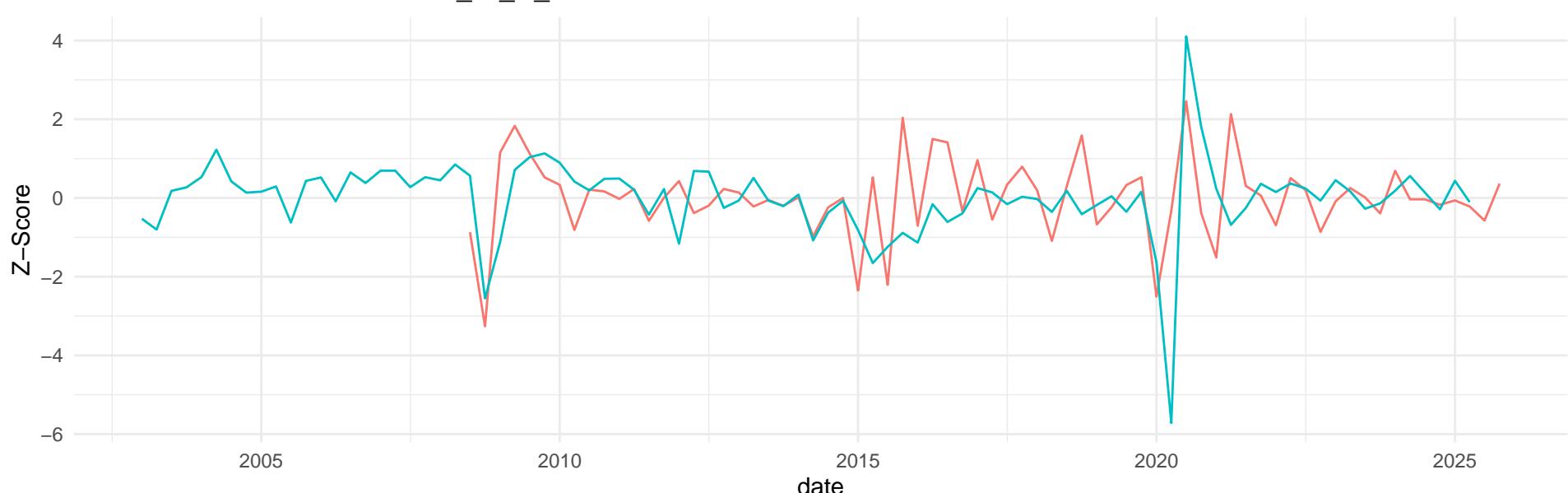
Corr: 0.34



Cross-Correlation (Quarterly Lags): DA_IE_S_alt



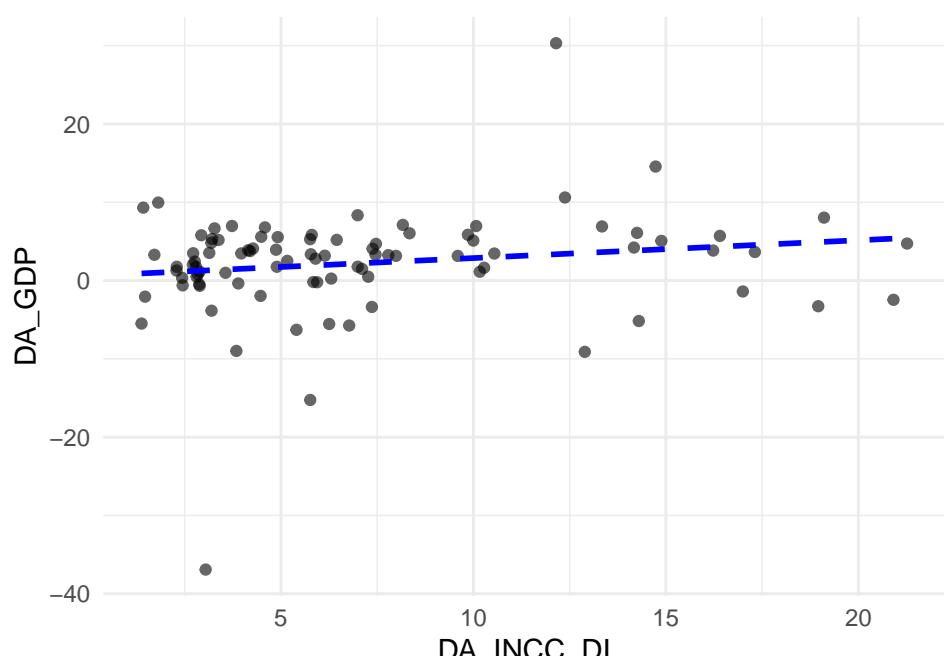
Standardized Time Series: DA_IE_S_alt



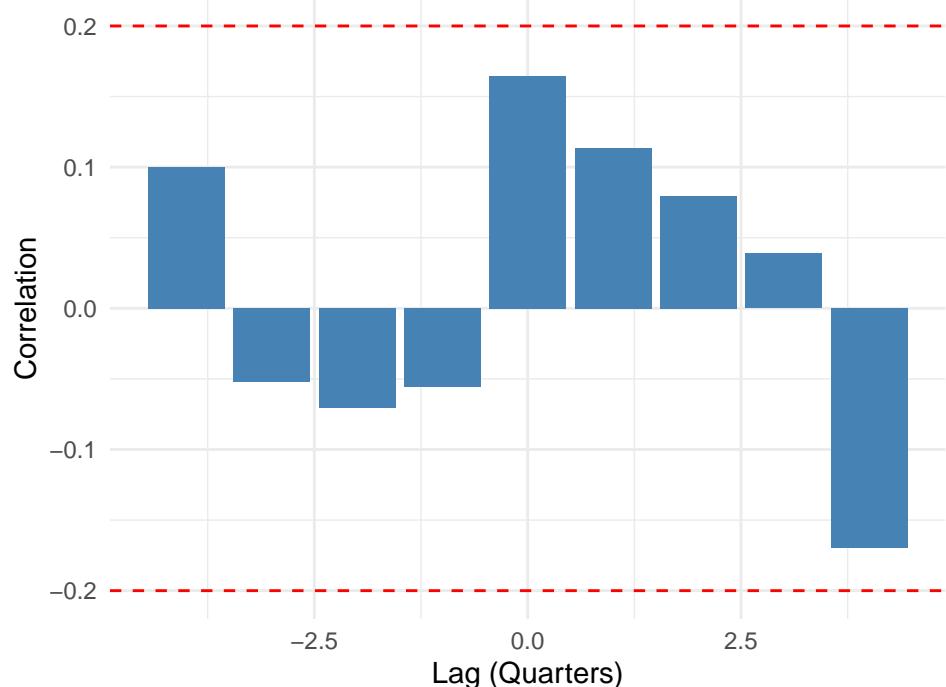
series — ind_scaled — target_scaled

Scatter: DA_INCC_DI vs Target

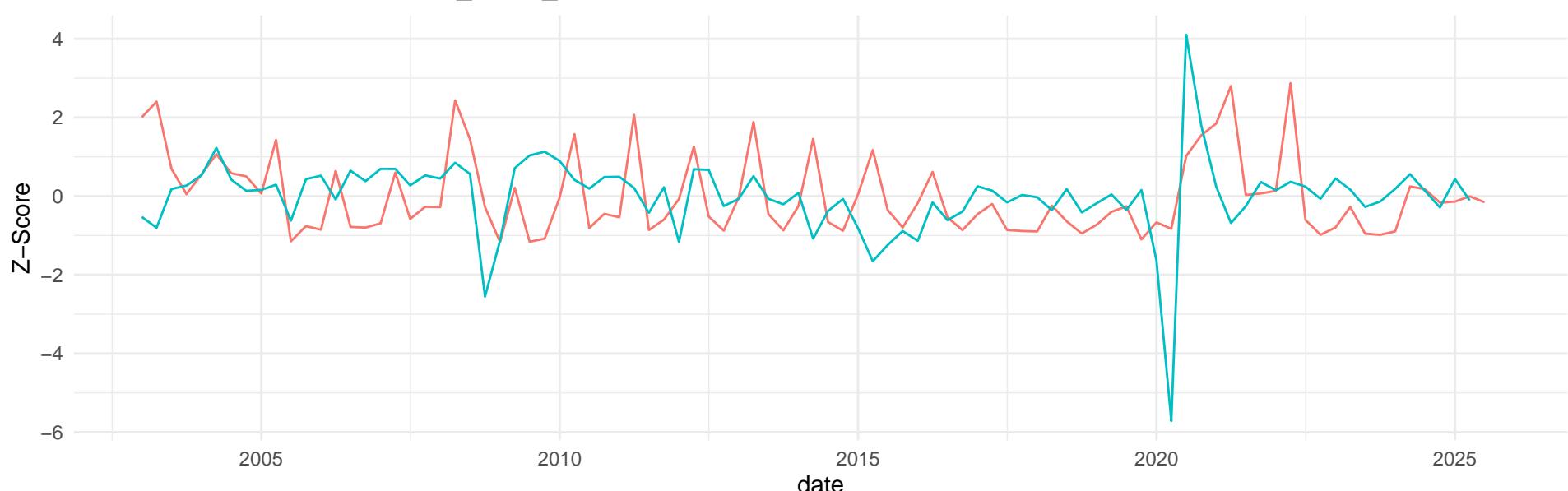
Corr: 0.16



Cross-Correlation (Quarterly Lags): DA_INCC_DI



Standardized Time Series: DA_INCC_DI



series — ind_scaled — target_scaled

Scatter: DA_INDF vs Target

Corr: 0.4

DA_GDP

20

0

-20

-40

-60

-30

DA_INDF



Cross-Correlation (Quarterly Lags): DA_INDF

Correlation

0.4

0.2

0.0

-0.2

Lag (Quarters)



Standardized Time Series: DA_INDF

Z-Score

4

2

0

-2

-4

-6

2005

2010

2015

2020

2025

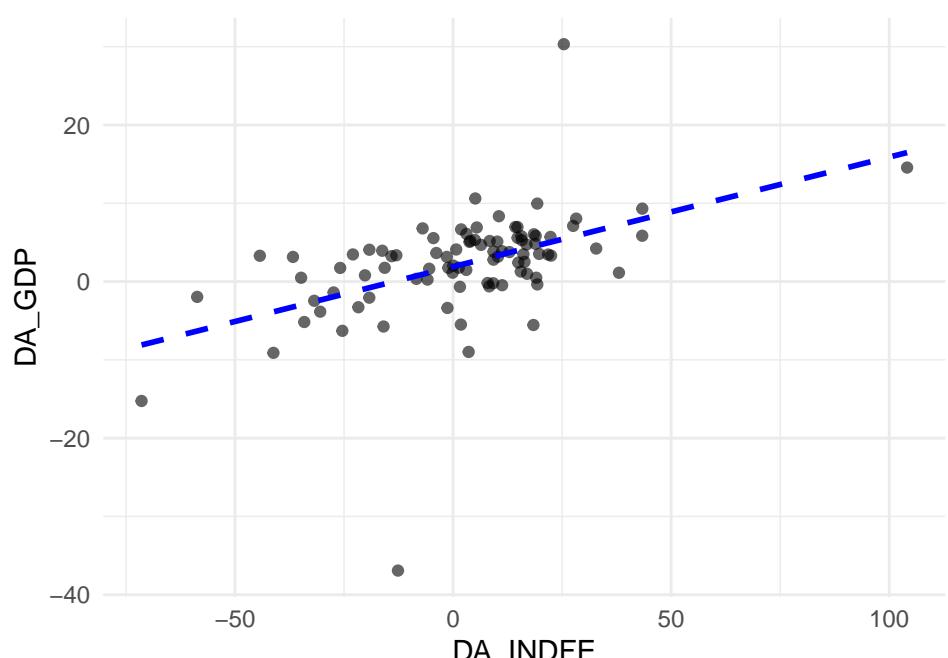
date

series — ind_scaled — target_scaled

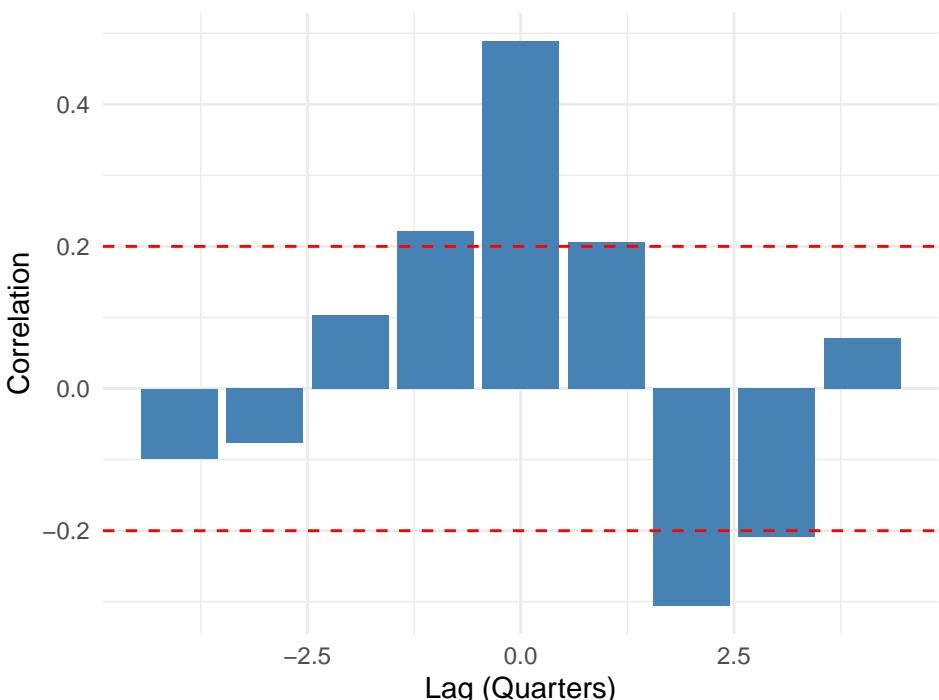


Scatter: DA_INDDE vs Target

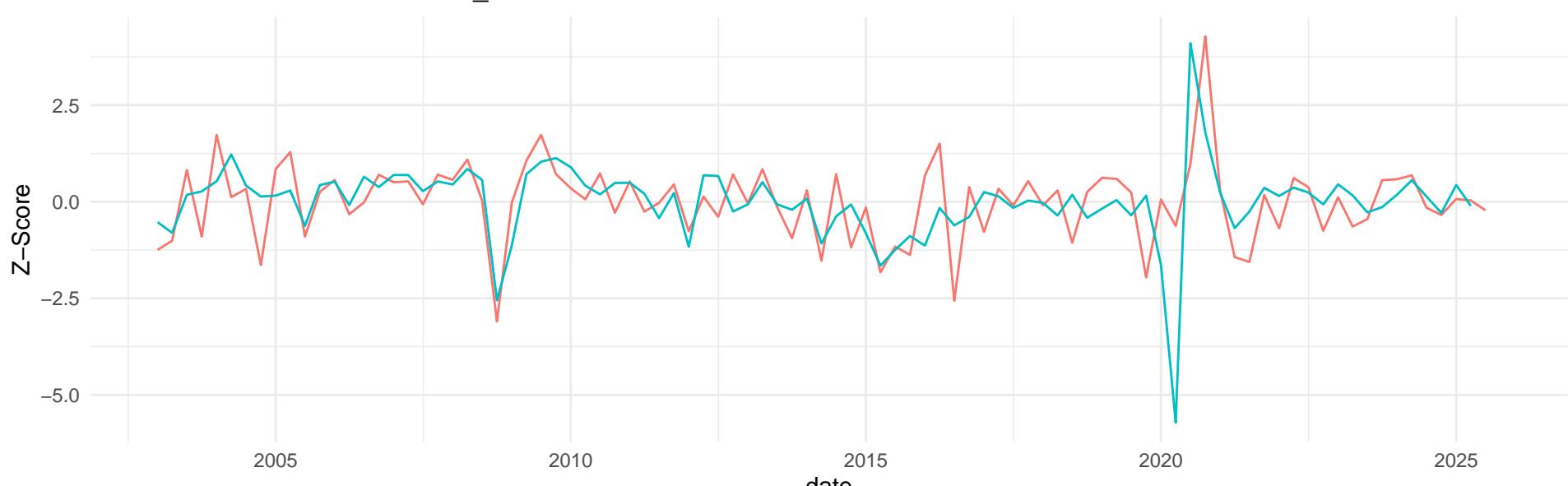
Corr: 0.49



Cross-Correlation (Quarterly Lags): DA_INDDE



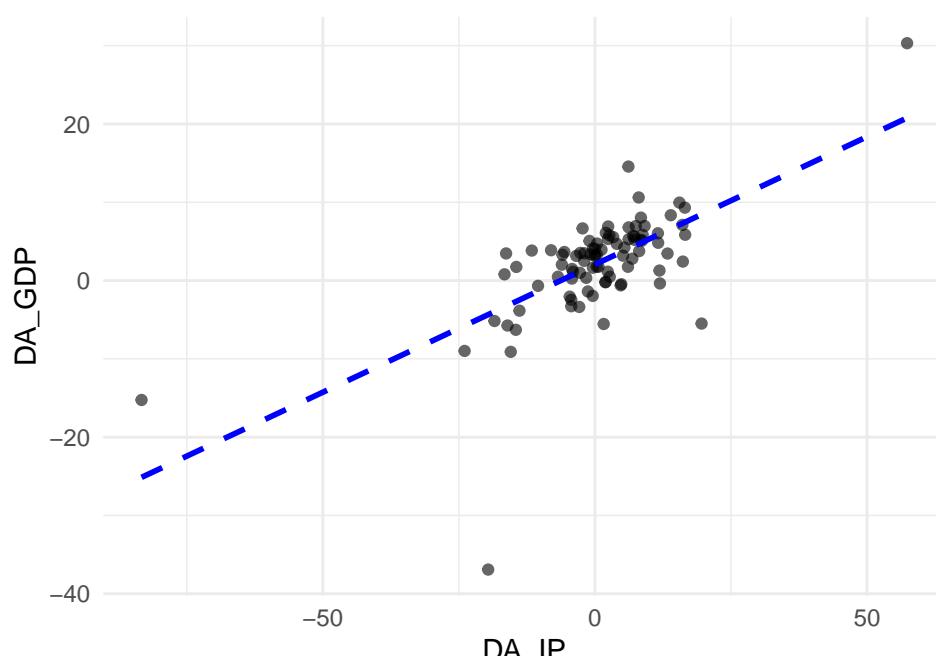
Standardized Time Series: DA_INDDE



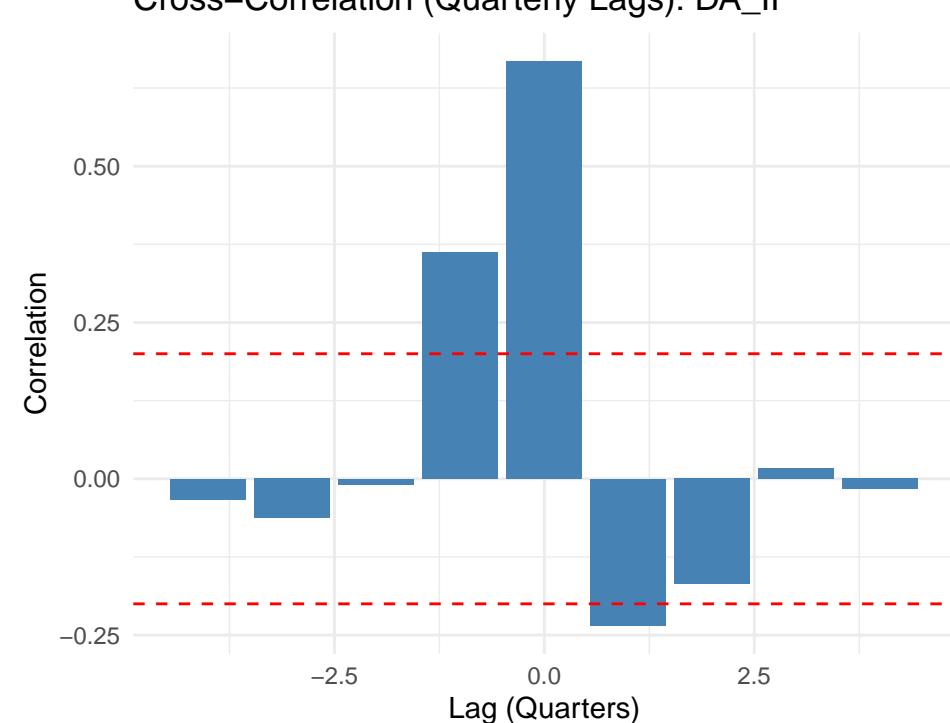
series — ind_scaled — target_scaled

Scatter: DA_IP vs Target

Corr: 0.67



Cross-Correlation (Quarterly Lags): DA_IP



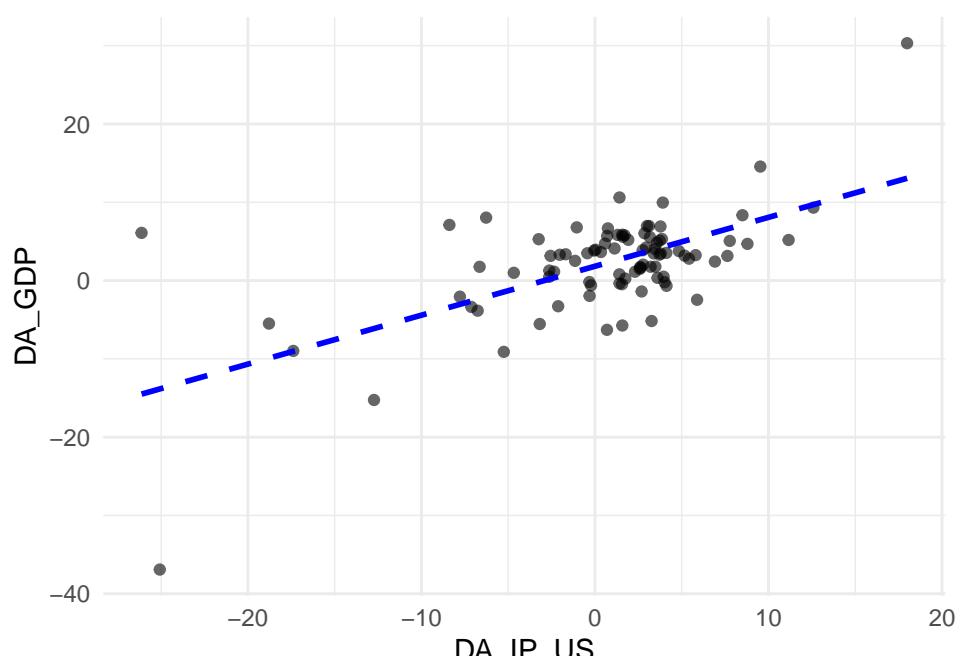
Standardized Time Series: DA_IP



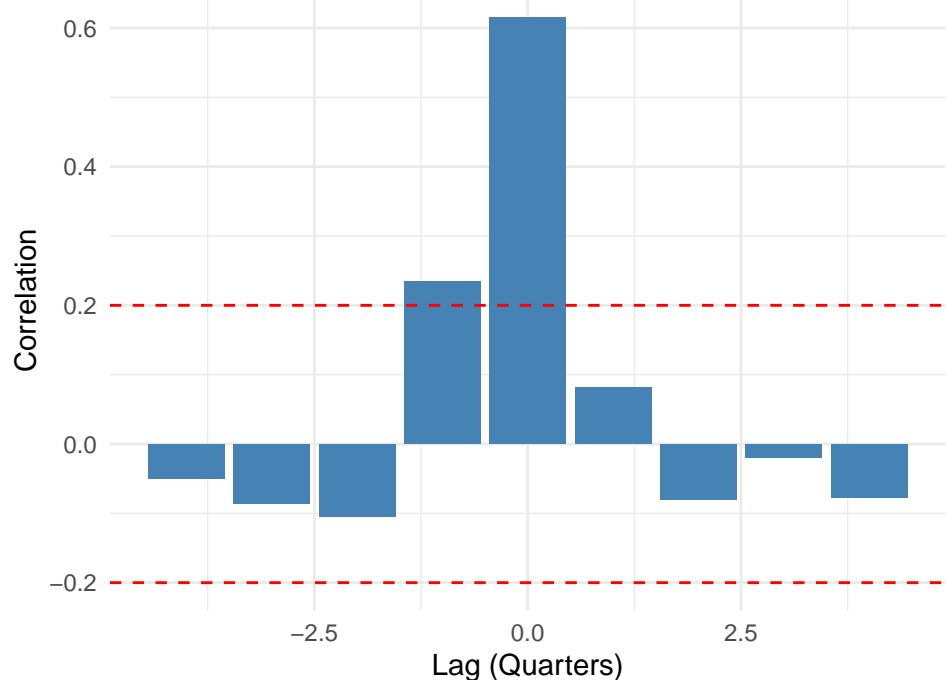
series — ind_scaled — target_scaled

Scatter: DA_IP_US vs Target

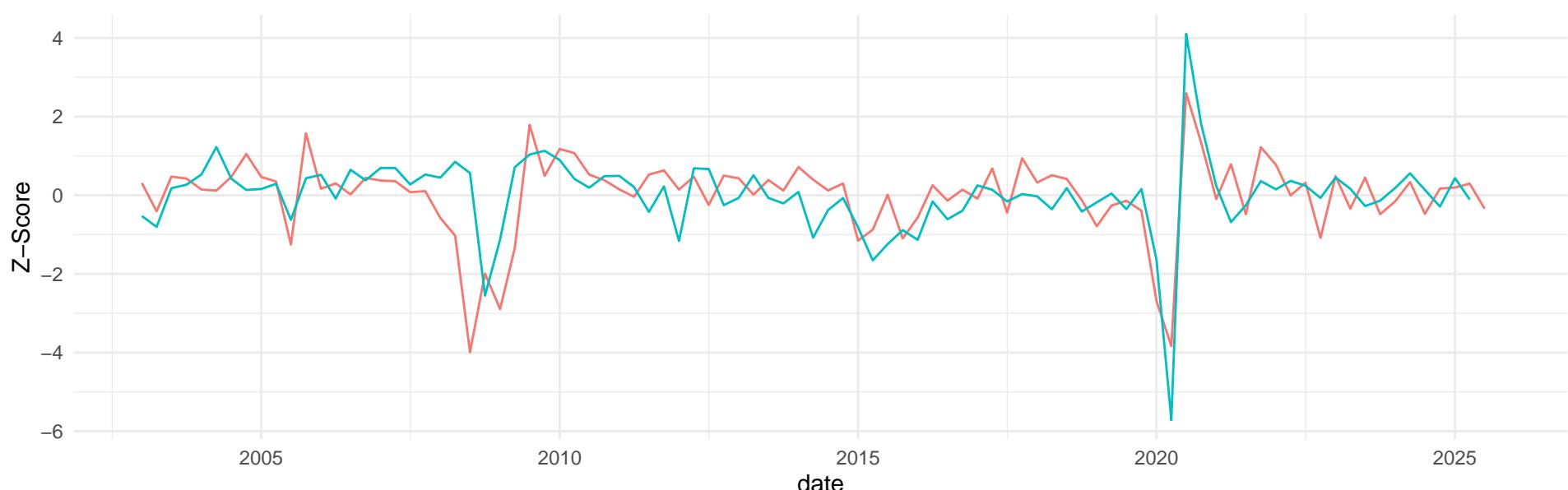
Corr: 0.61



Cross-Correlation (Quarterly Lags): DA_IP_US



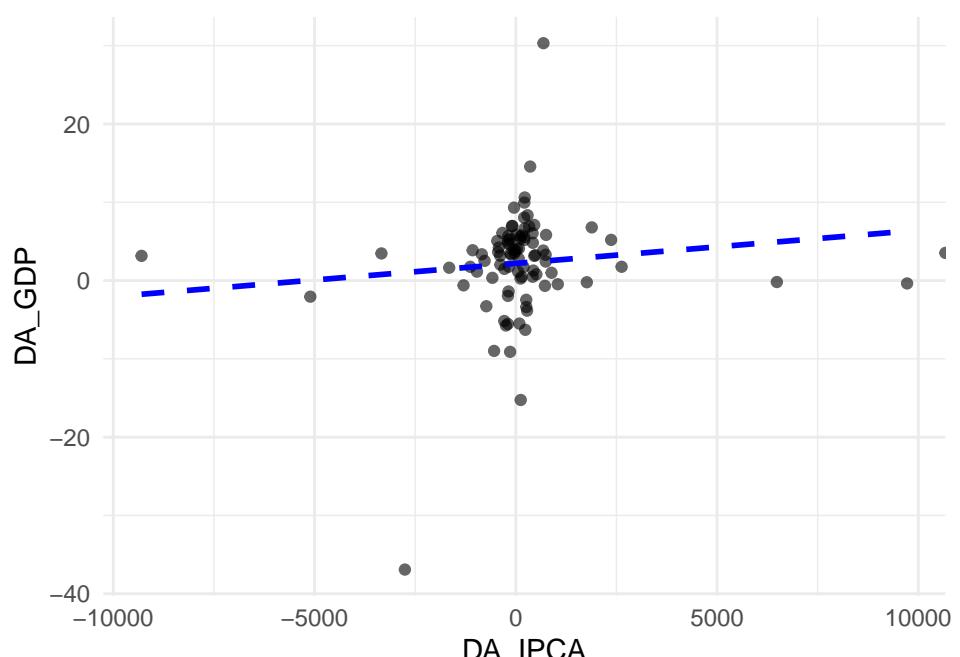
Standardized Time Series: DA_IP_US



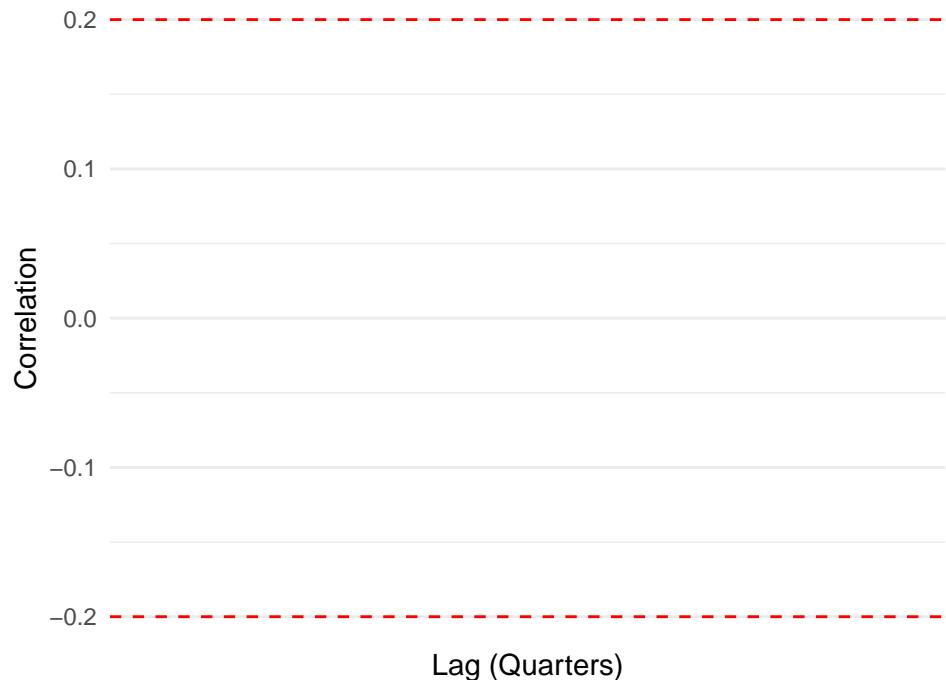
series — ind_scaled — target_scaled

Scatter: DA_IPCA vs Target

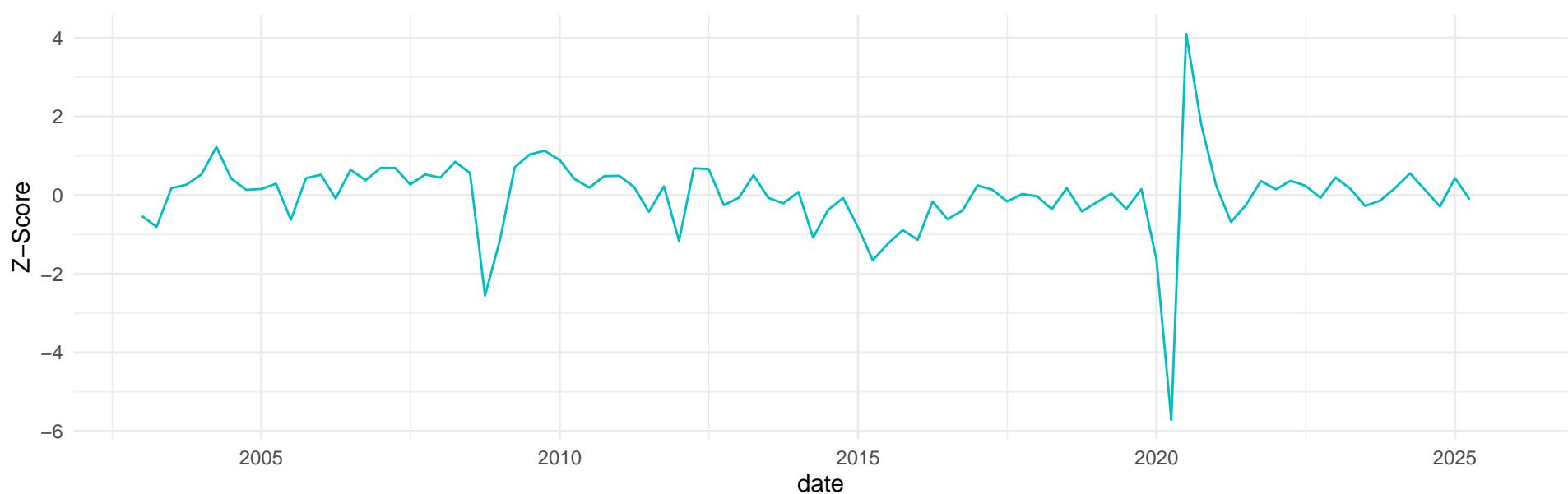
Corr: NaN



Cross-Correlation (Quarterly Lags): DA_IPCA



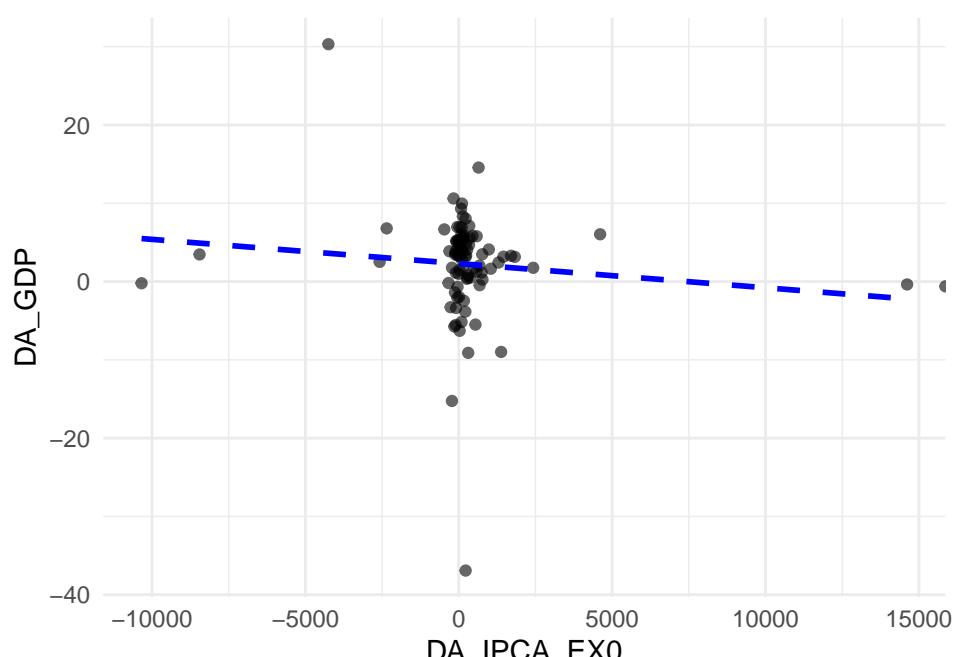
Standardized Time Series: DA_IPCA



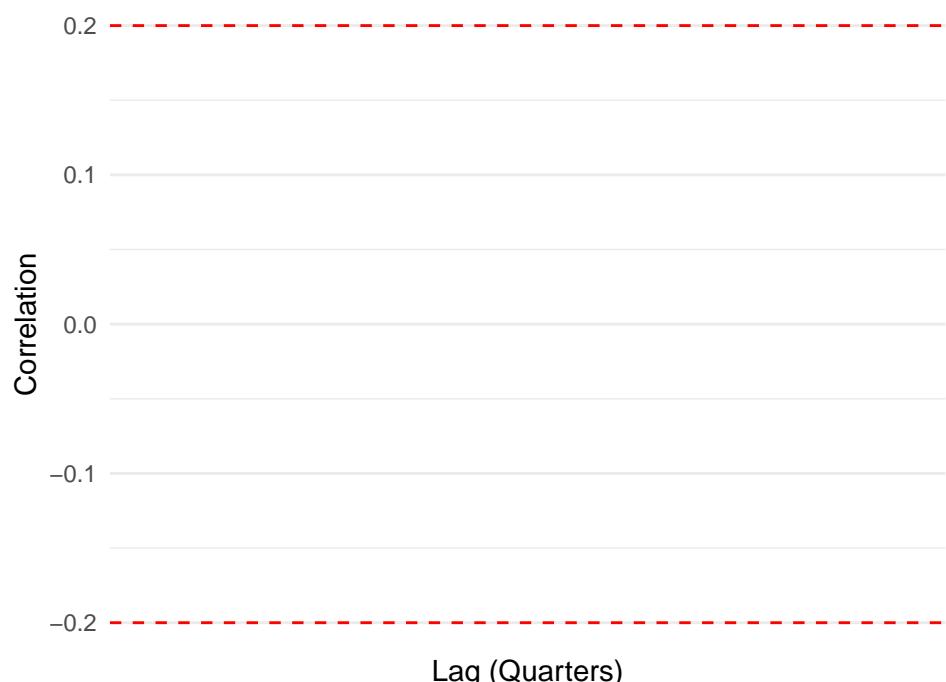
series — ind_scaled — target_scaled

Scatter: DA_IPCA_EX0 vs Target

Corr: NaN



Cross-Correlation (Quarterly Lags): DA_IPCA_EX0



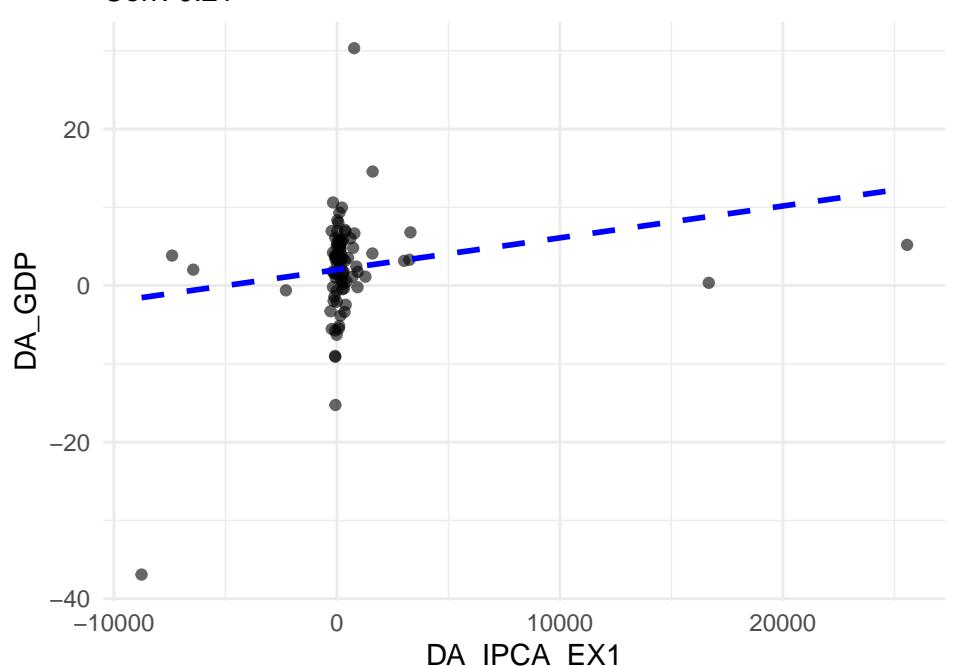
Standardized Time Series: DA_IPCA_EX0



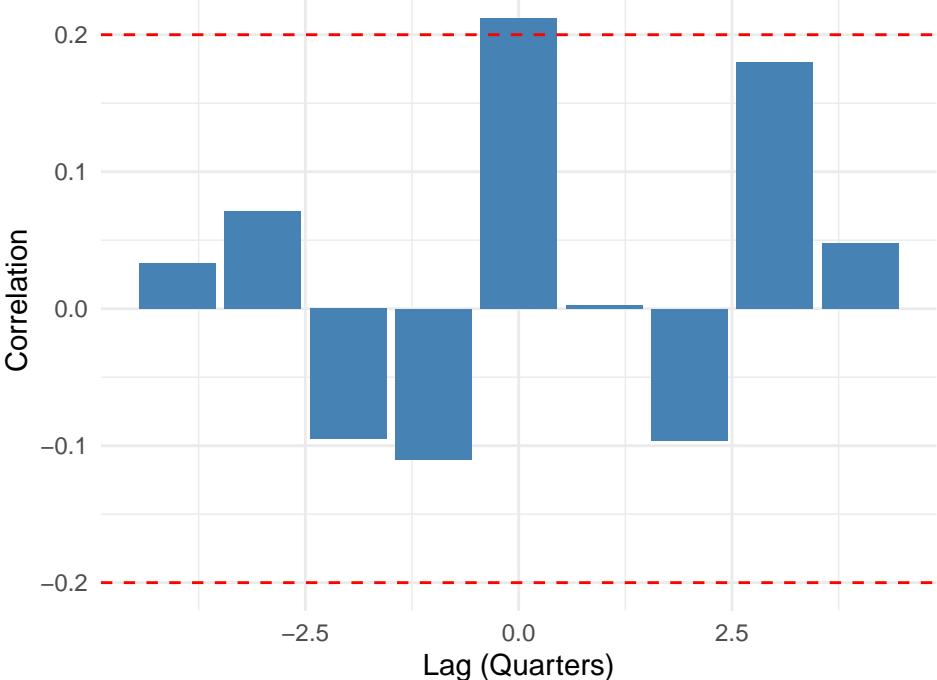
series — ind_scaled — target_scaled

Scatter: DA_IPCA_EX1 vs Target

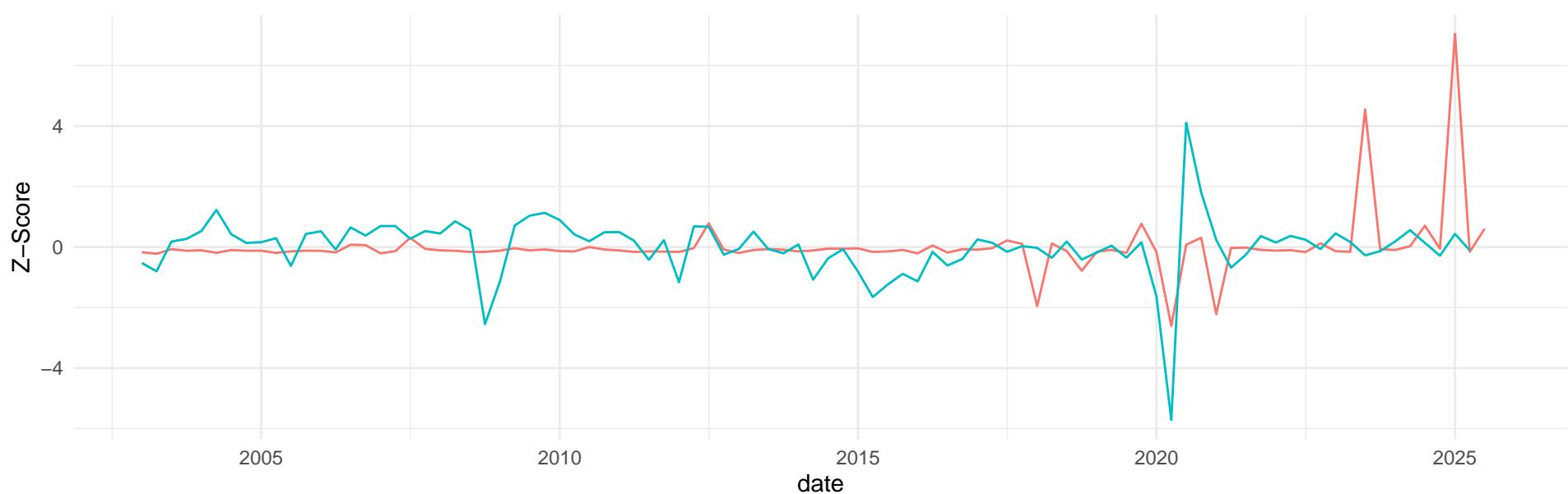
Corr: 0.21



Cross-Correlation (Quarterly Lags): DA_IPCA_EX1



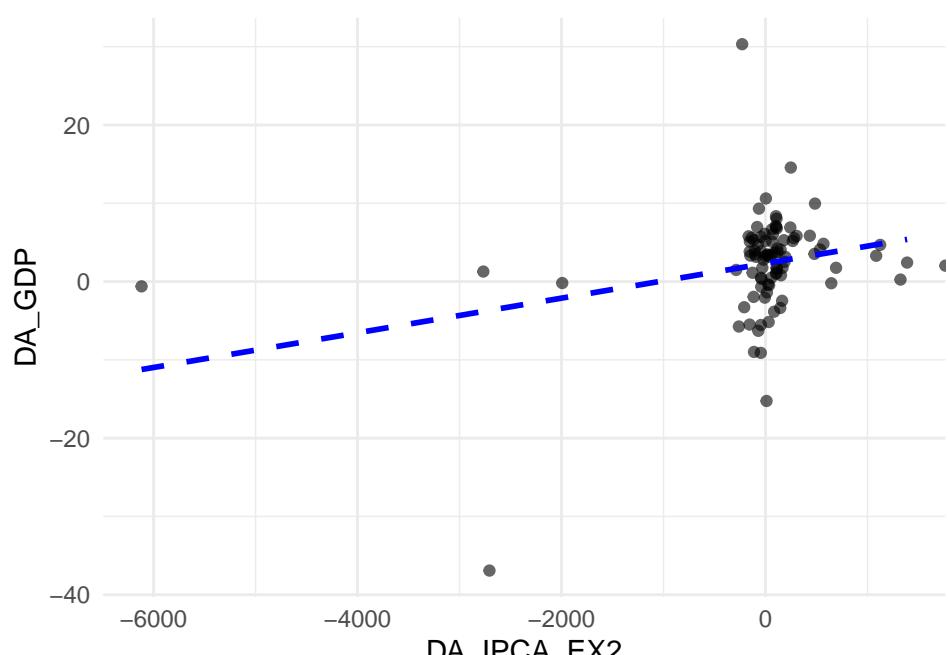
Standardized Time Series: DA_IPCA_EX1



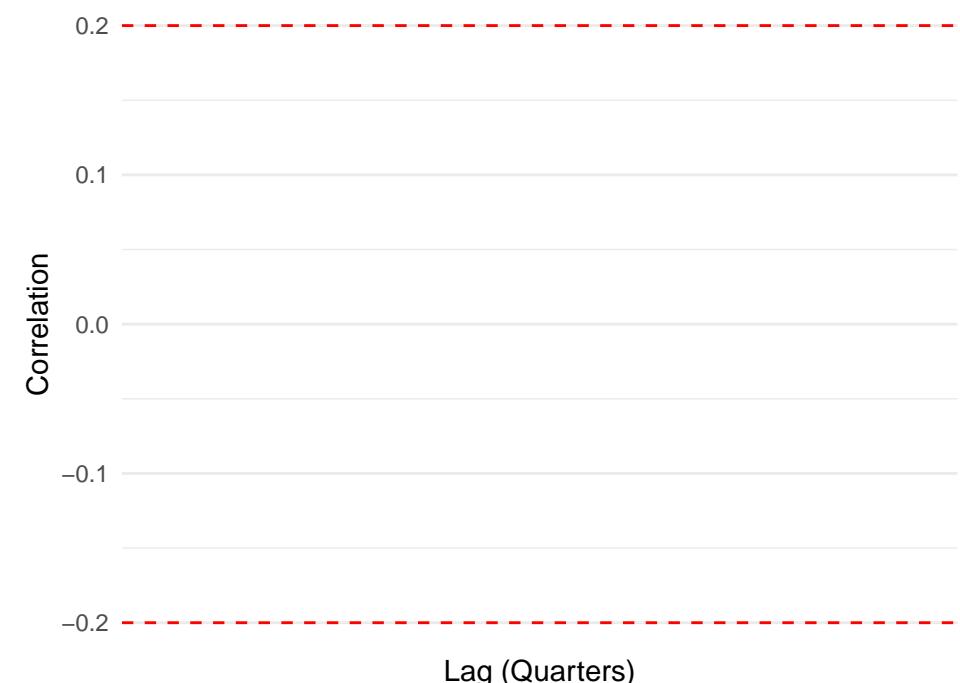
series — ind_scaled — target_scaled

Scatter: DA_IPCA_EX2 vs Target

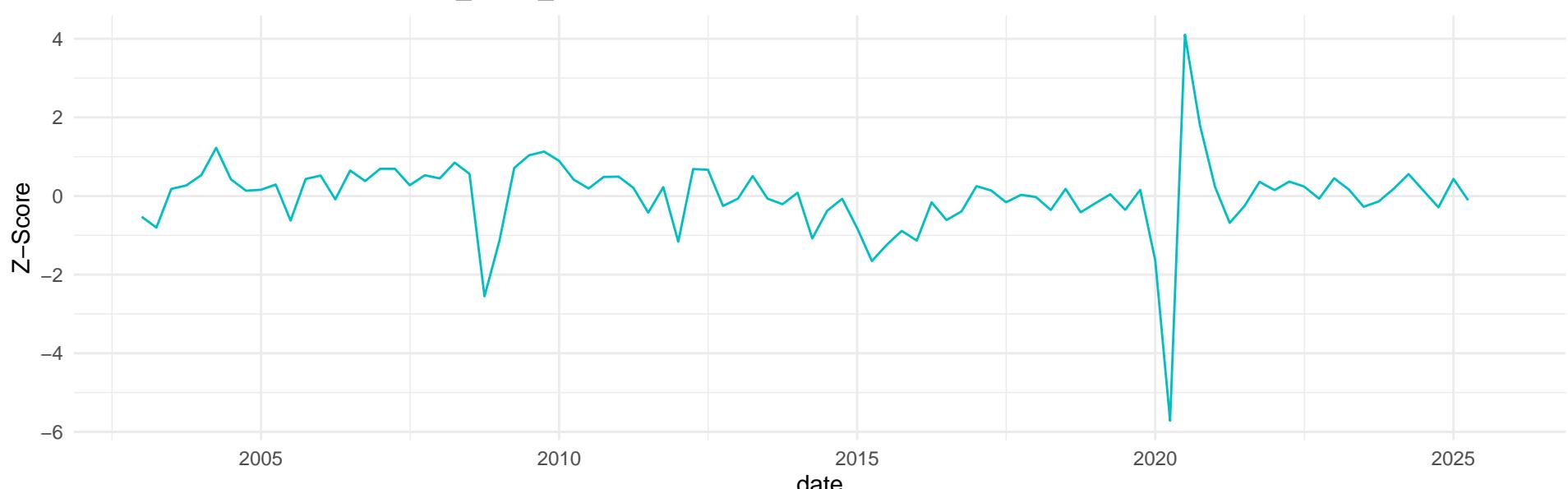
Corr: NaN



Cross-Correlation (Quarterly Lags): DA_IPCA_EX2



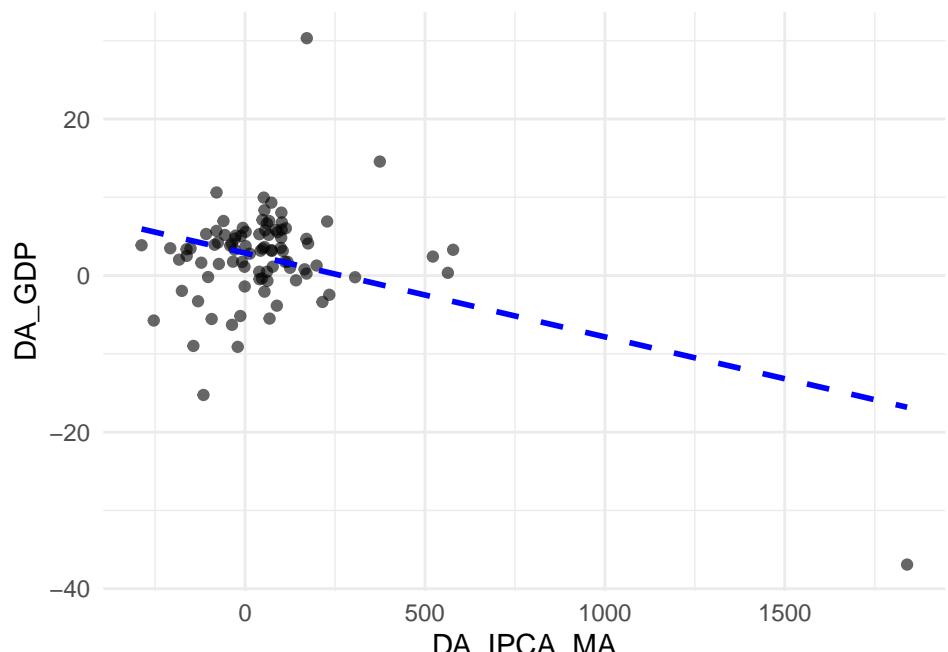
Standardized Time Series: DA_IPCA_EX2



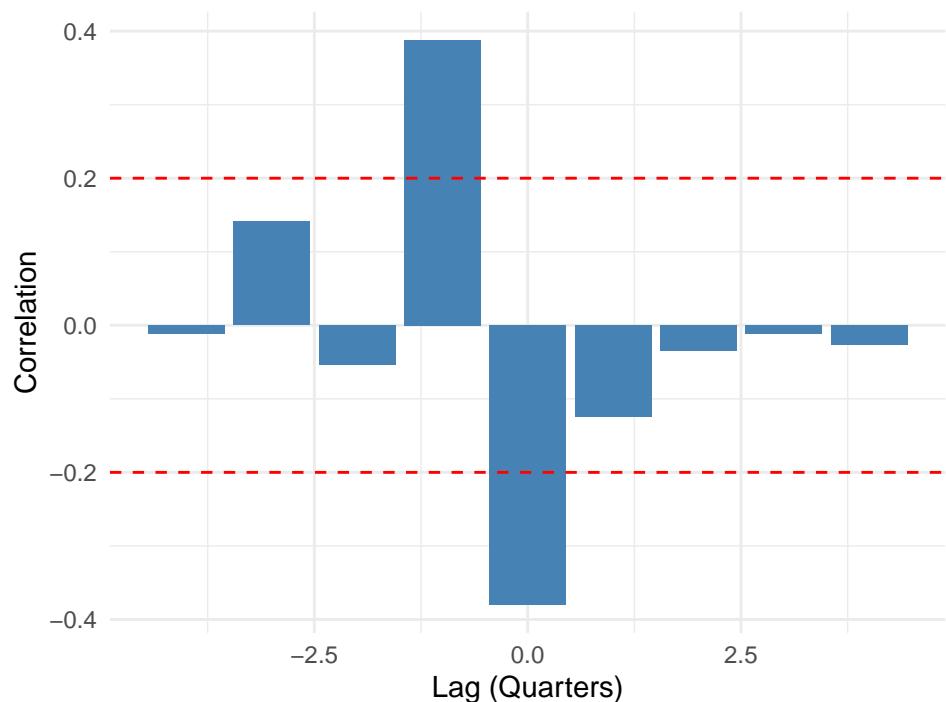
series — ind_scaled — target_scaled

Scatter: DA_IPCA_MA vs Target

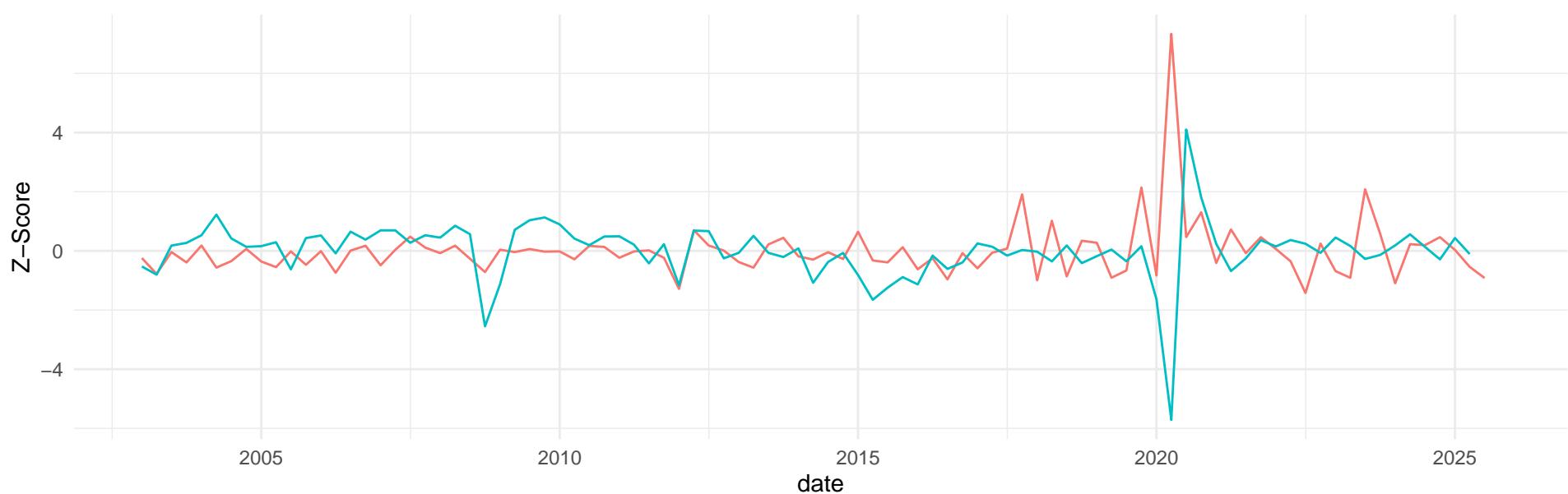
Corr: -0.38



Cross-Correlation (Quarterly Lags): DA_IPCA_MA



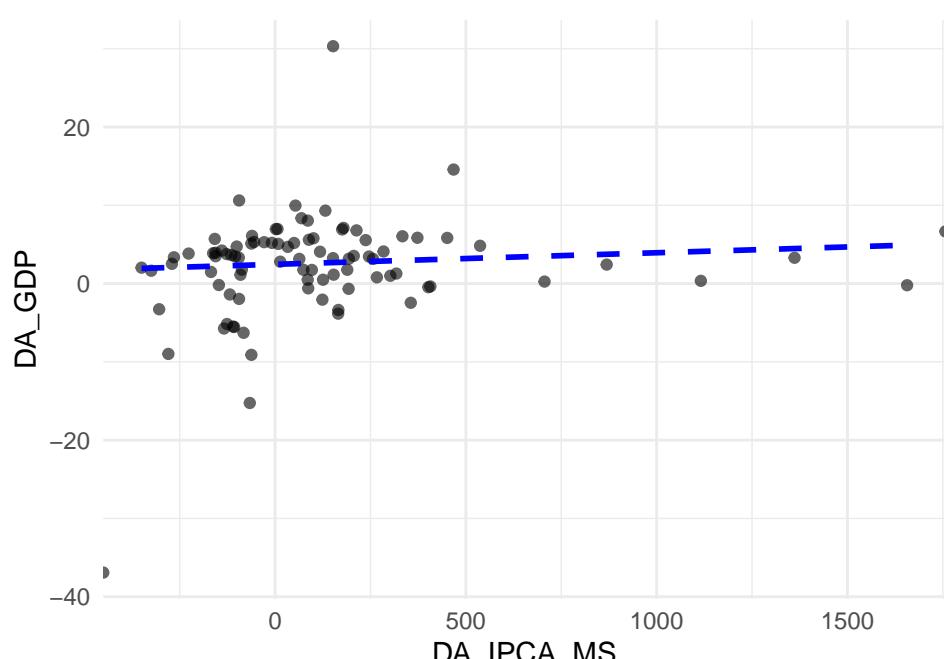
Standardized Time Series: DA_IPCA_MA



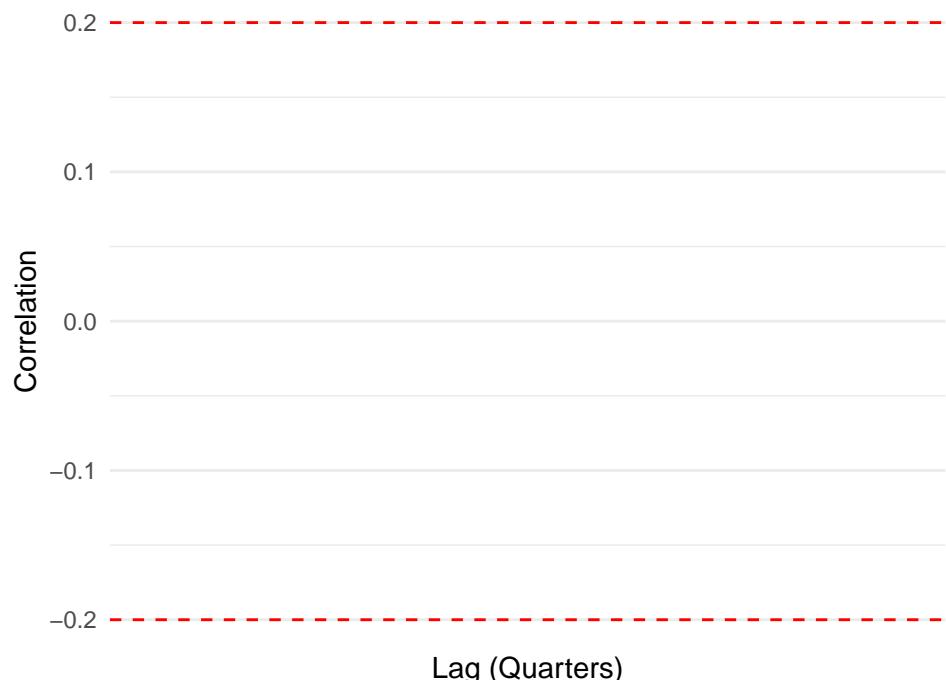
series — ind_scaled — target_scaled

Scatter: DA_IPCA_MS vs Target

Corr: NaN



Cross-Correlation (Quarterly Lags): DA_IPCA_MS



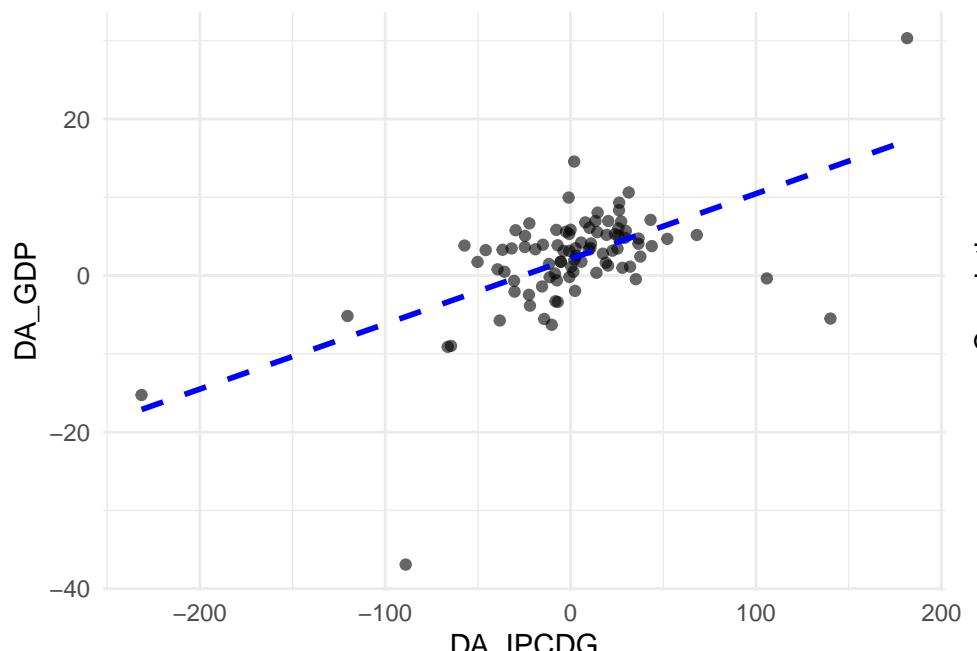
Standardized Time Series: DA_IPCA_MS



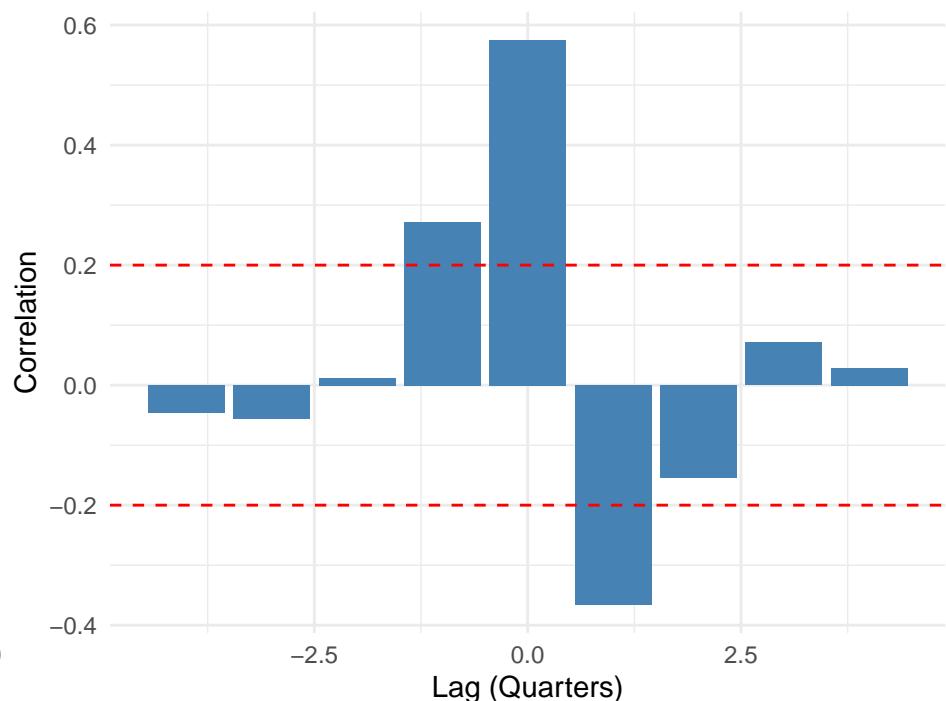
series — ind_scaled — target_scaled

Scatter: DA_IPCDG vs Target

Corr: 0.58



Cross-Correlation (Quarterly Lags): DA_IPCDG



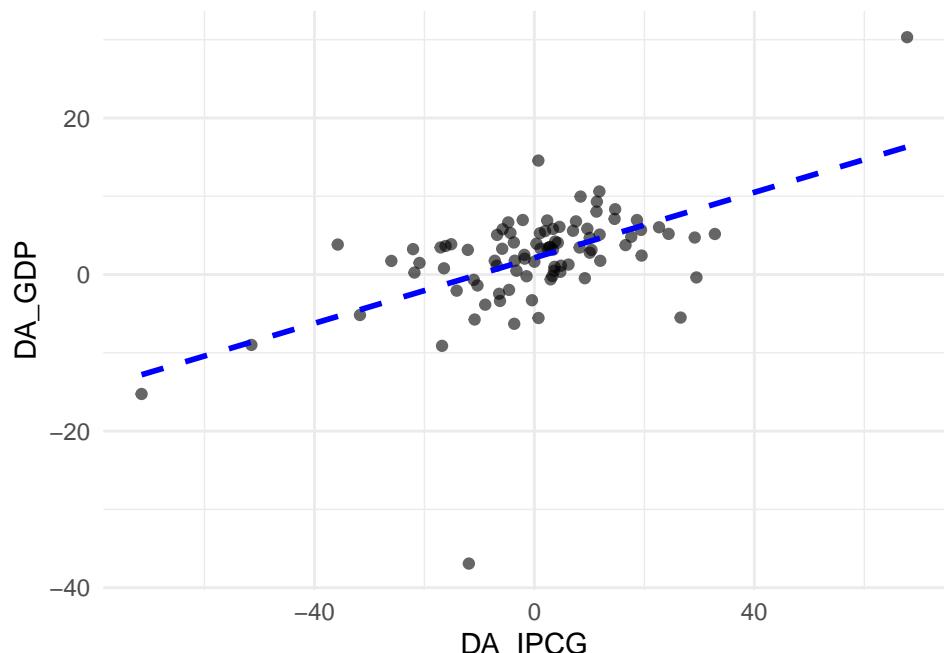
Standardized Time Series: DA_IPCDG



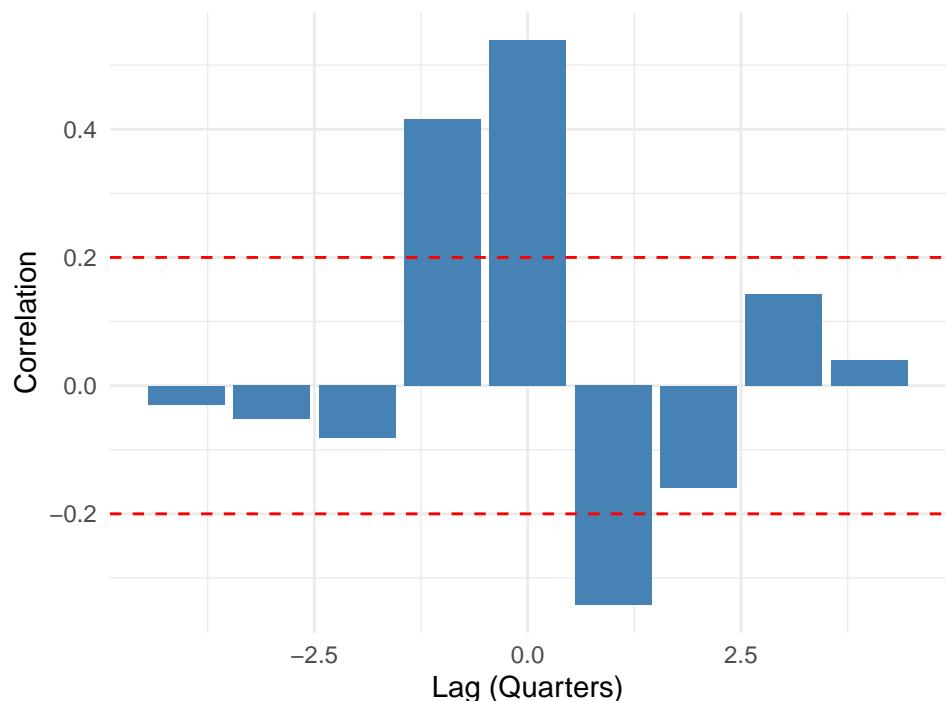
series — ind_scaled — target_scaled

Scatter: DA_IPCG vs Target

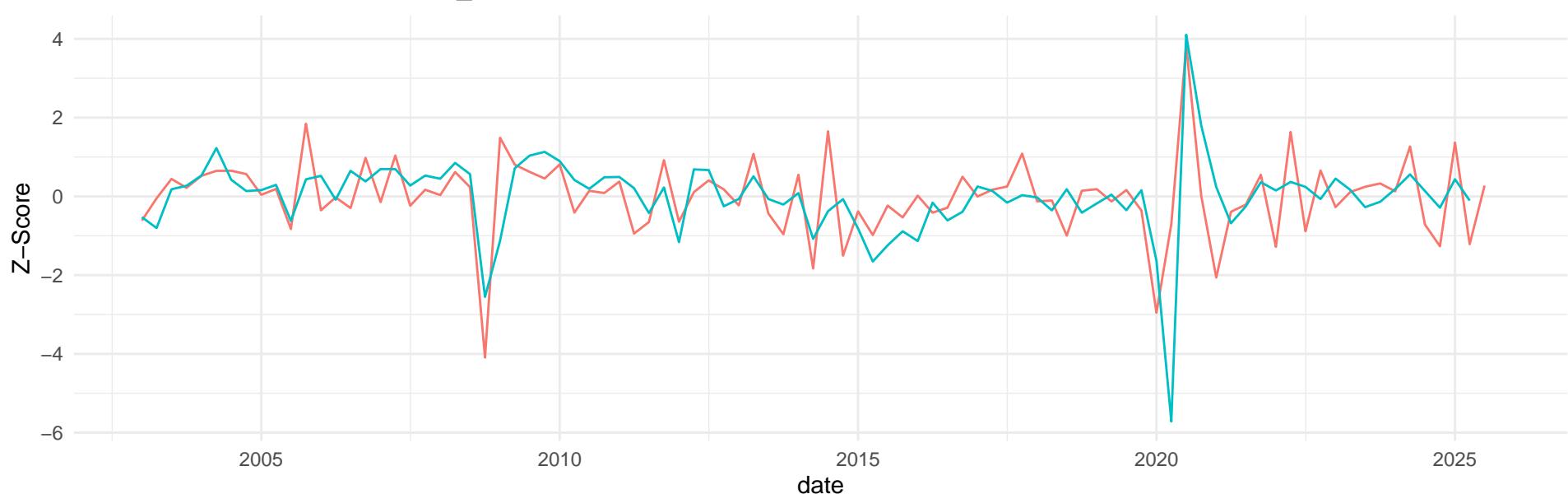
Corr: 0.54



Cross-Correlation (Quarterly Lags): DA_IPCG



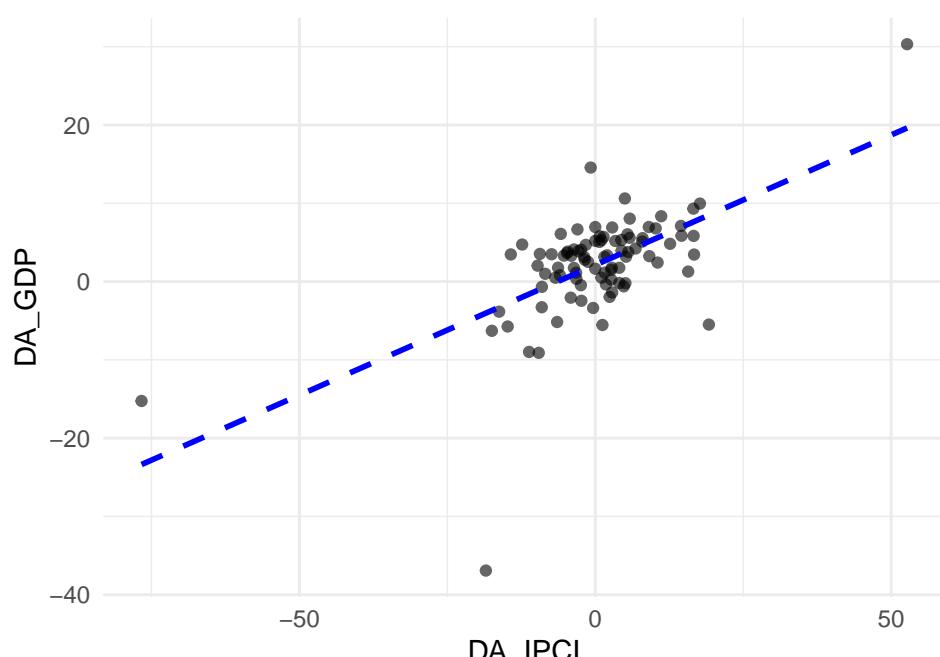
Standardized Time Series: DA_IPCG



series — ind_scaled — target_scaled

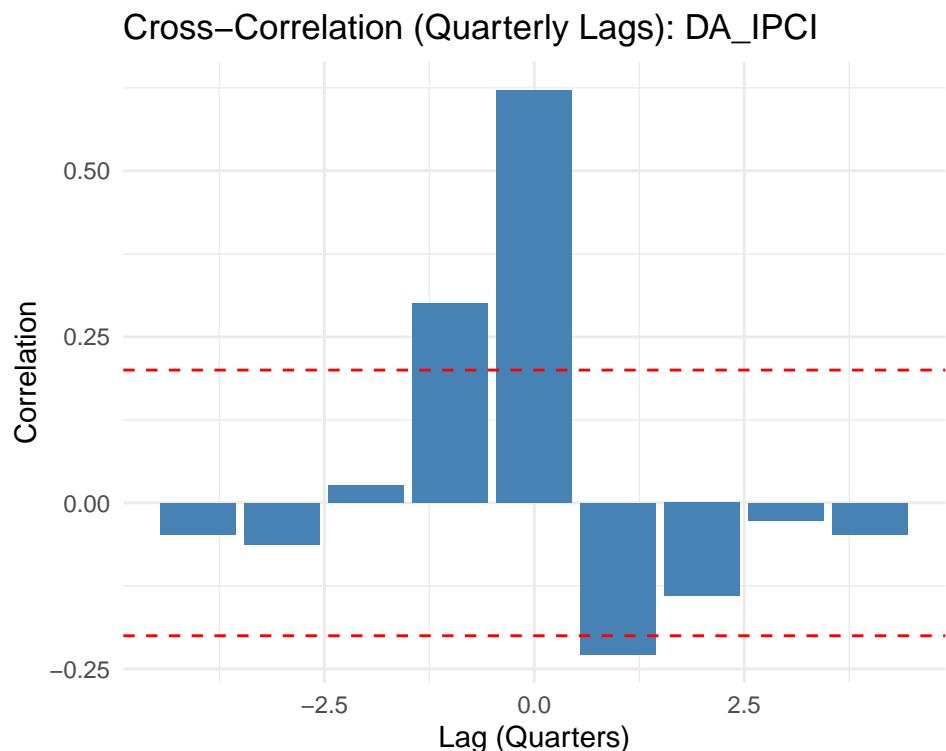
Scatter: DA_IPCI vs Target

Corr: 0.62



Cross-Correlation (Quarterly Lags): DA_IPCI

Correlation



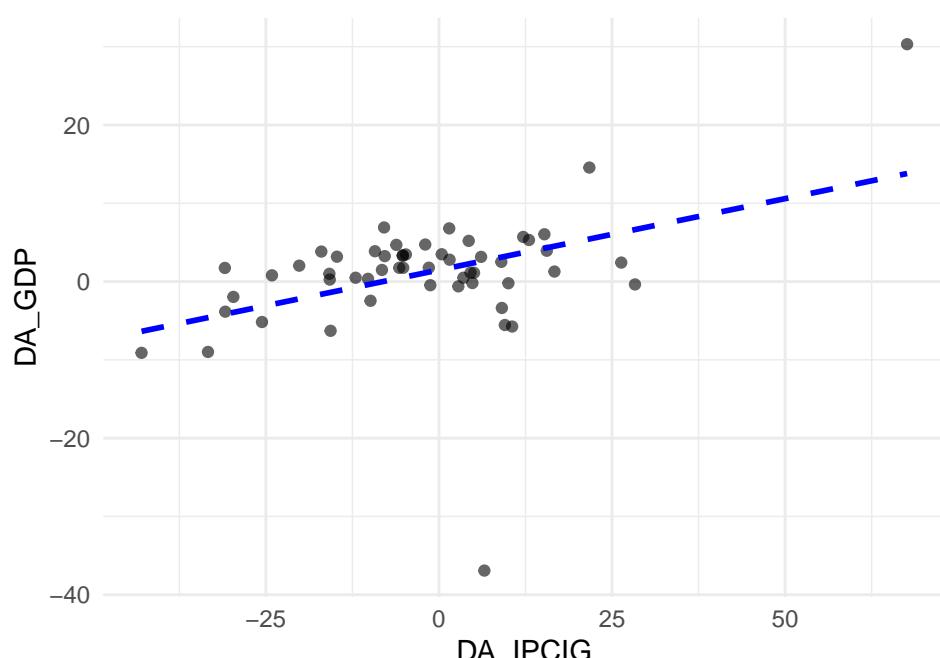
Standardized Time Series: DA_IPCI



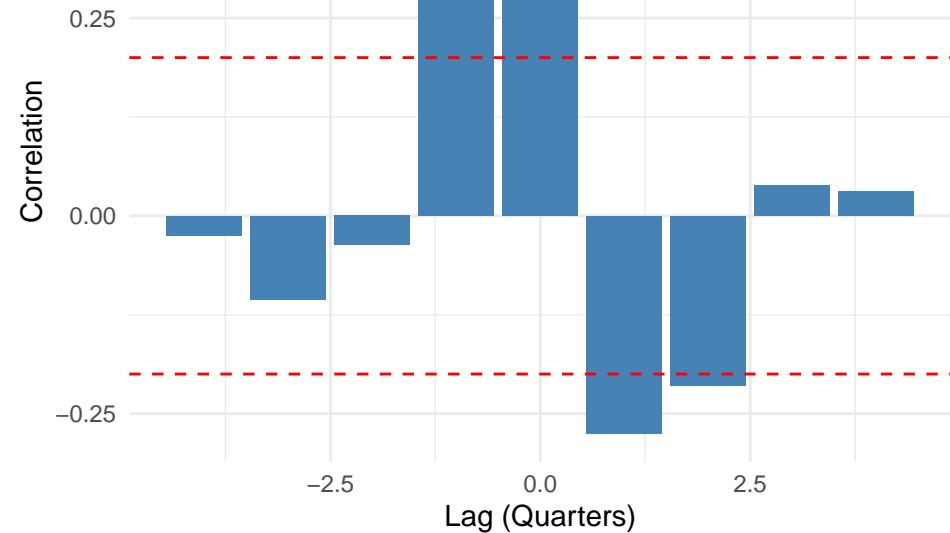
series — ind_scaled — target_scaled

Scatter: DA_IPCIG vs Target

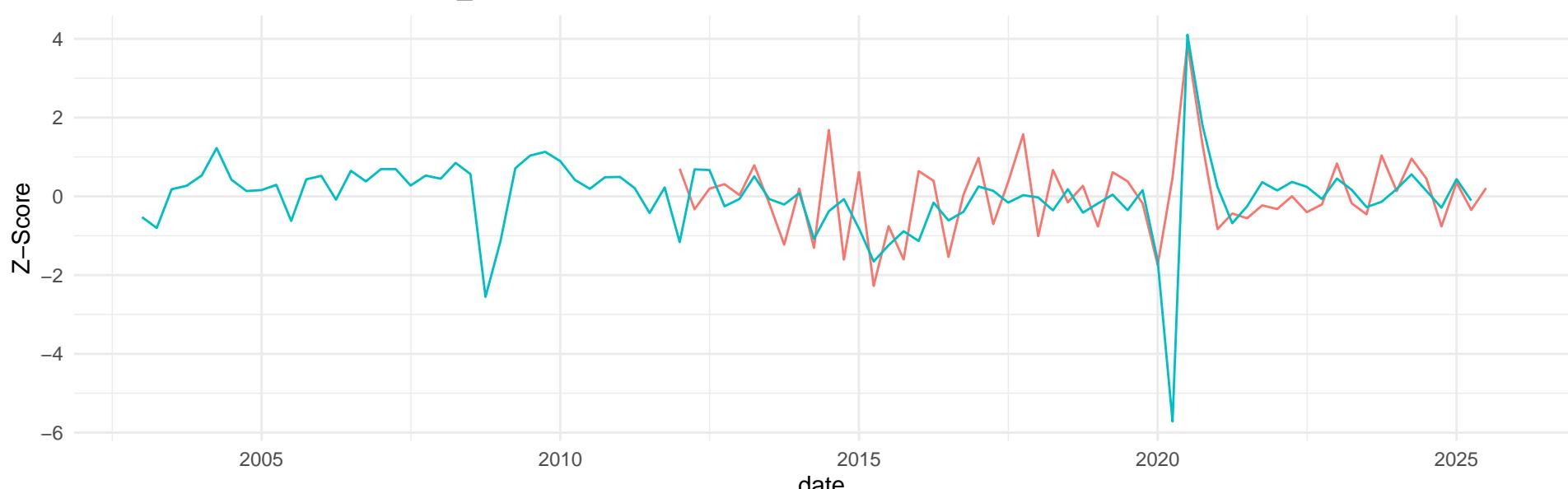
Corr: 0.43



Cross-Correlation (Quarterly Lags): DA_IPCIG



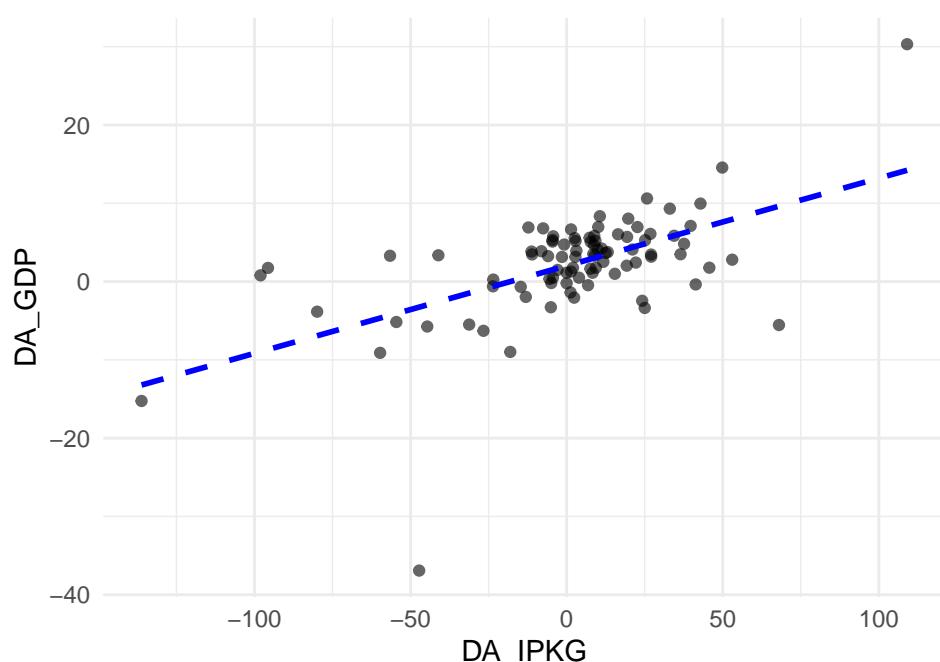
Standardized Time Series: DA_IPCIG



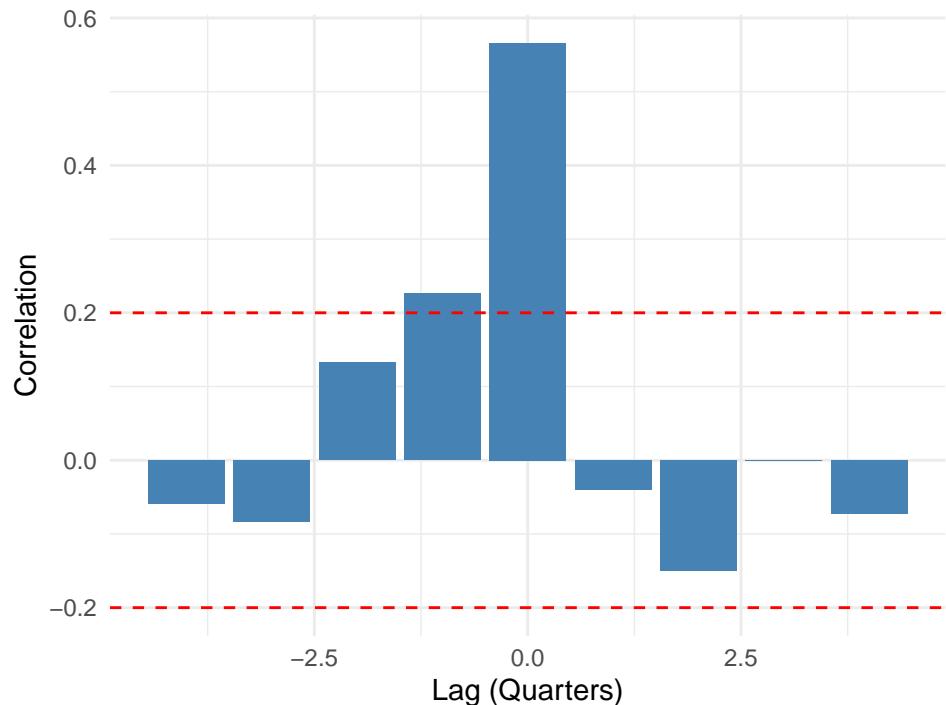
series — ind_scaled — target_scaled

Scatter: DA_IPKG vs Target

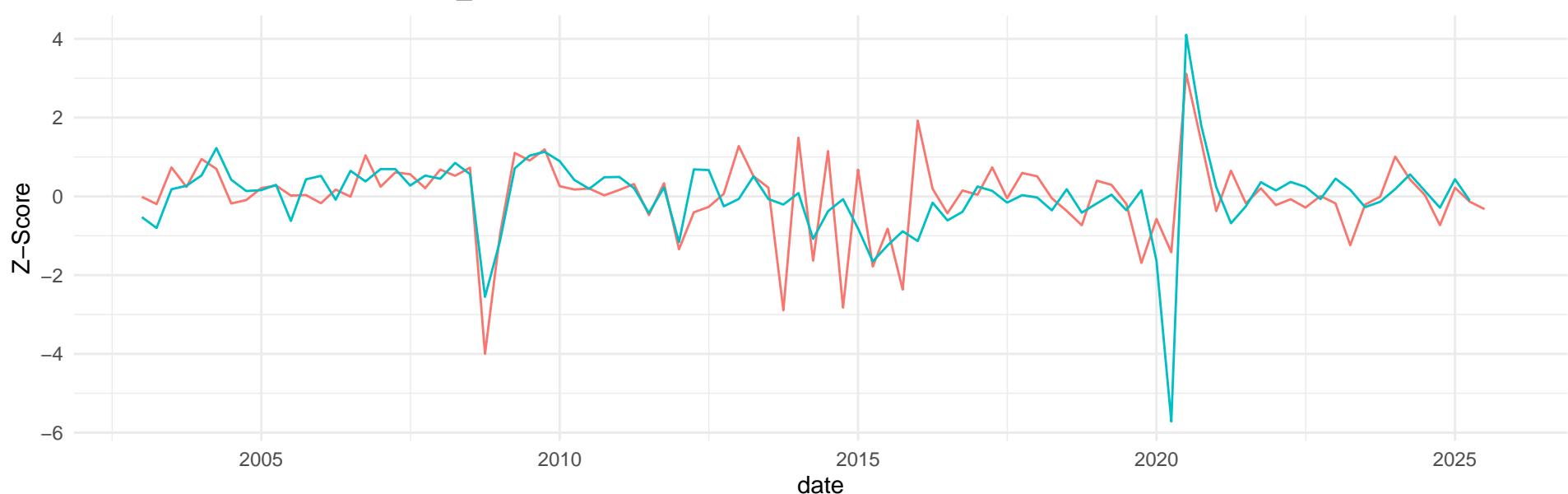
Corr: 0.57



Cross-Correlation (Quarterly Lags): DA_IPKG



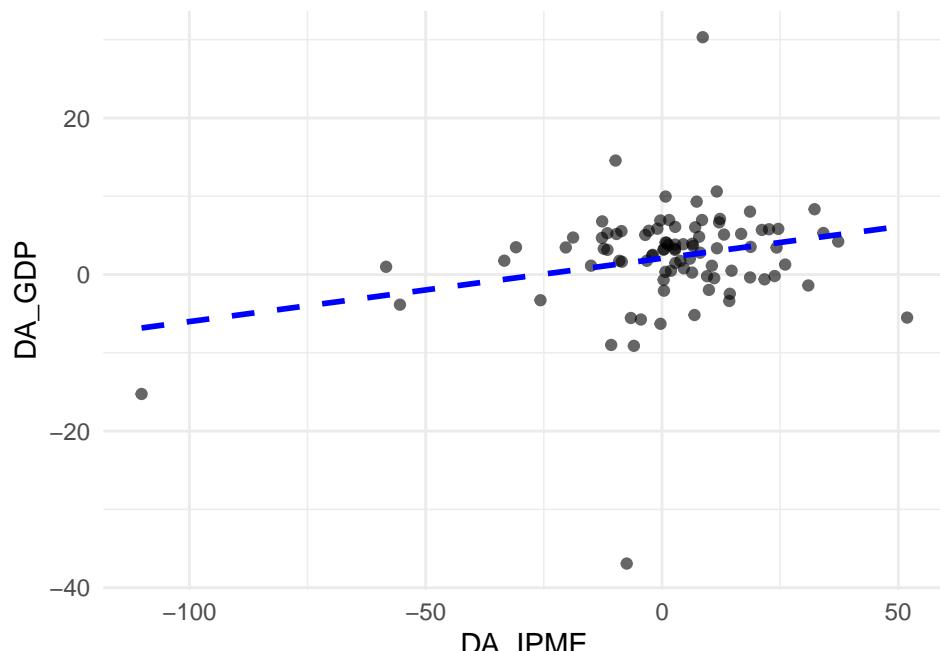
Standardized Time Series: DA_IPKG



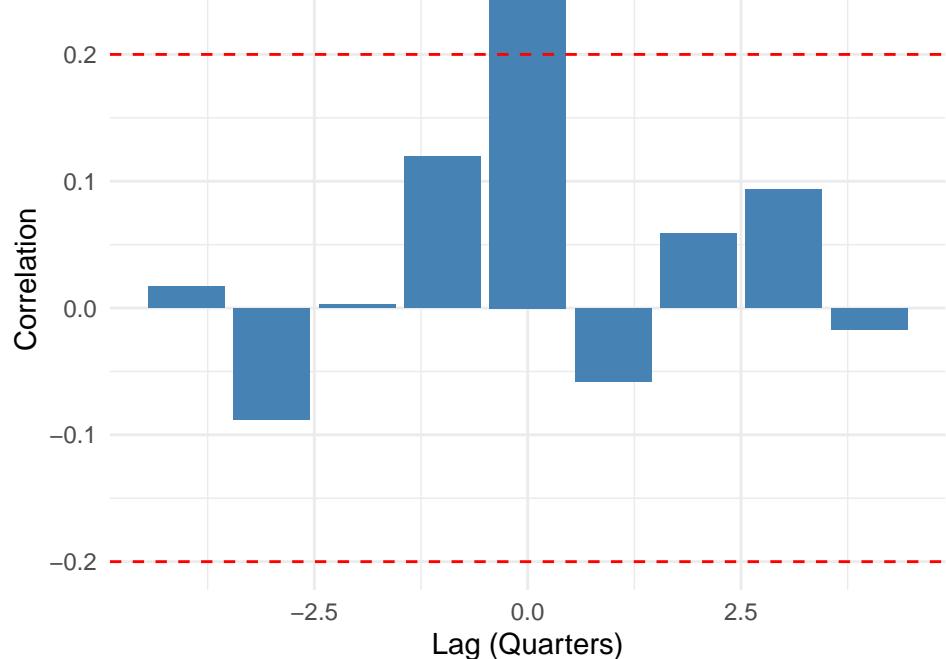
series — ind_scaled — target_scaled

Scatter: DA_IPME vs Target

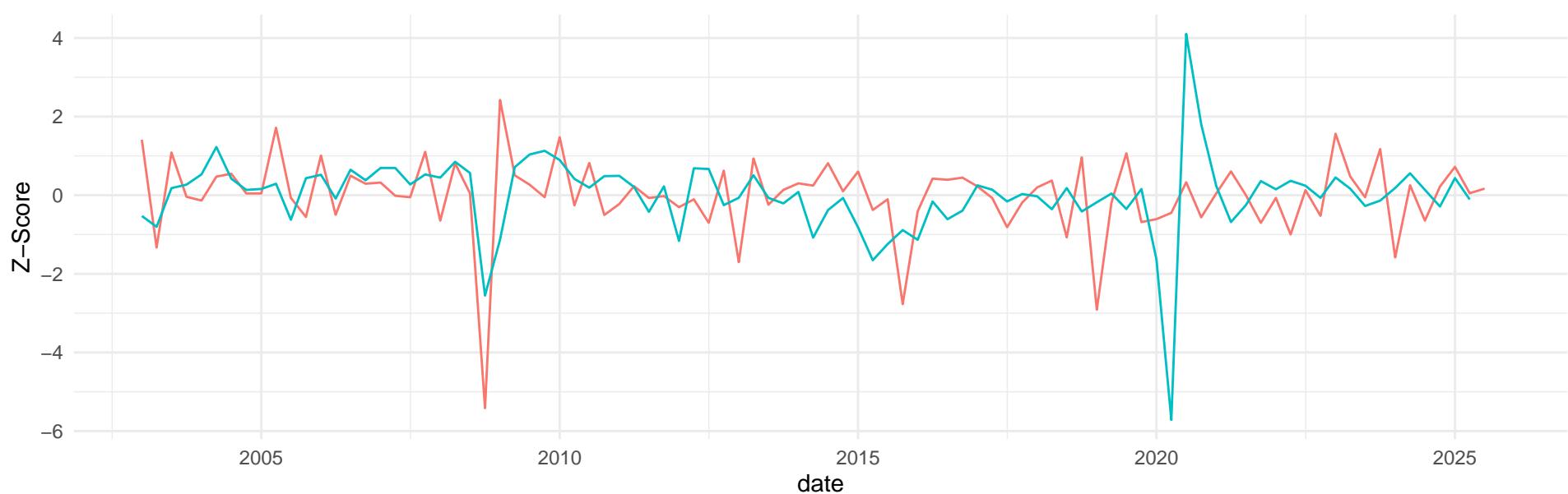
Corr: 0.25



Cross-Correlation (Quarterly Lags): DA_IPME



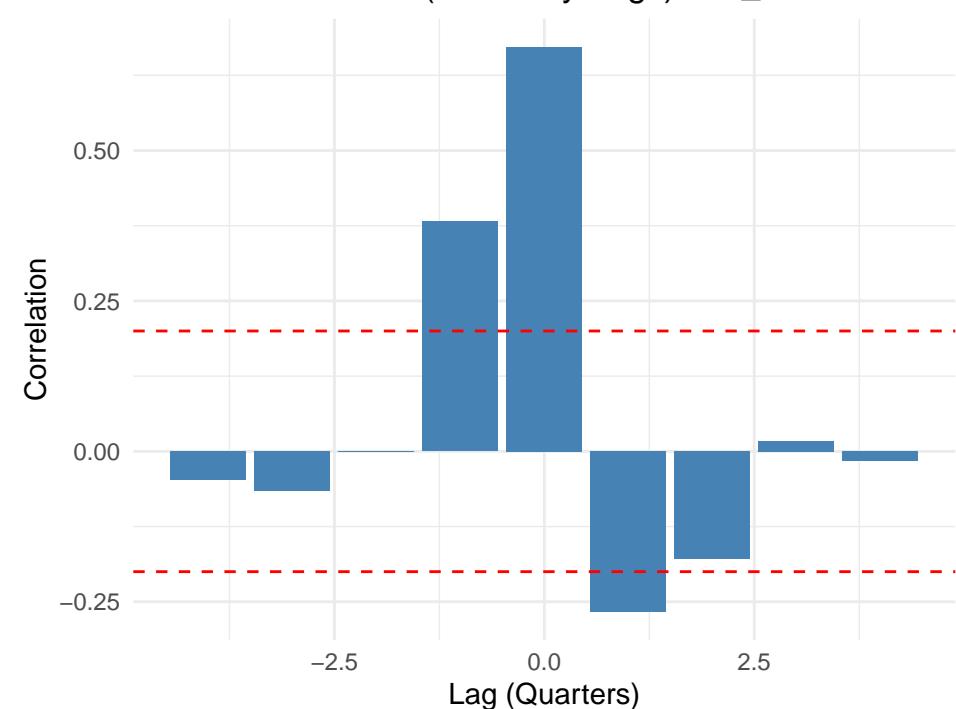
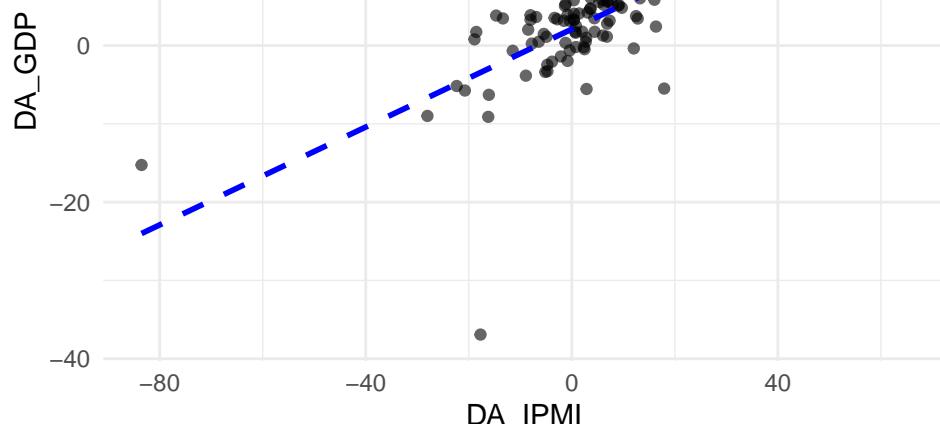
Standardized Time Series: DA_IPME



series — ind_scaled — target_scaled



Corr: 0.67



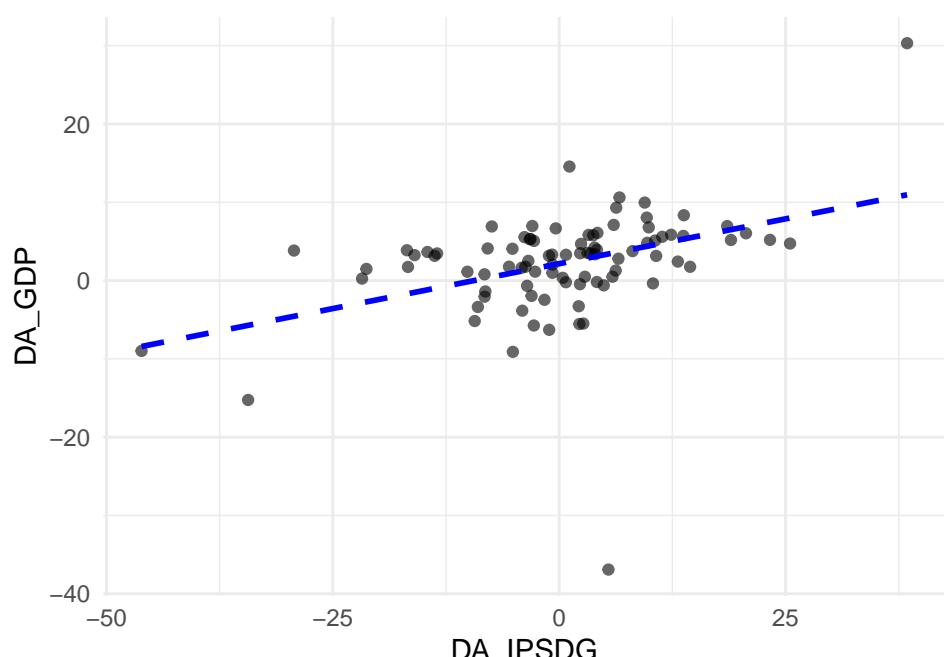
Standardized Time Series: DA IPMI



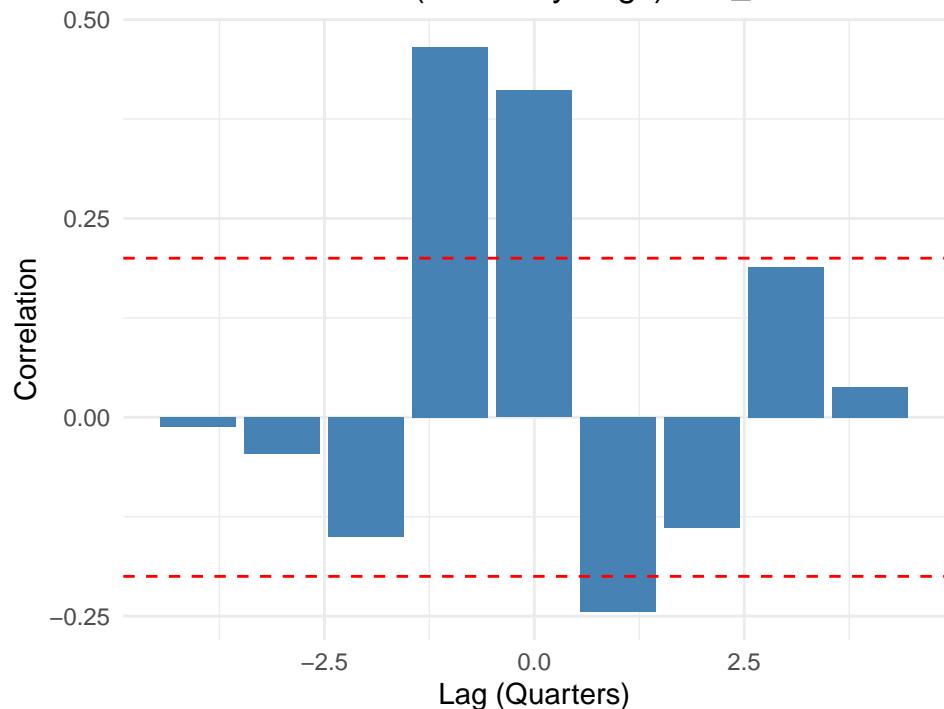
series — ind_scaled — target_scaled

Scatter: DA_IPSDG vs Target

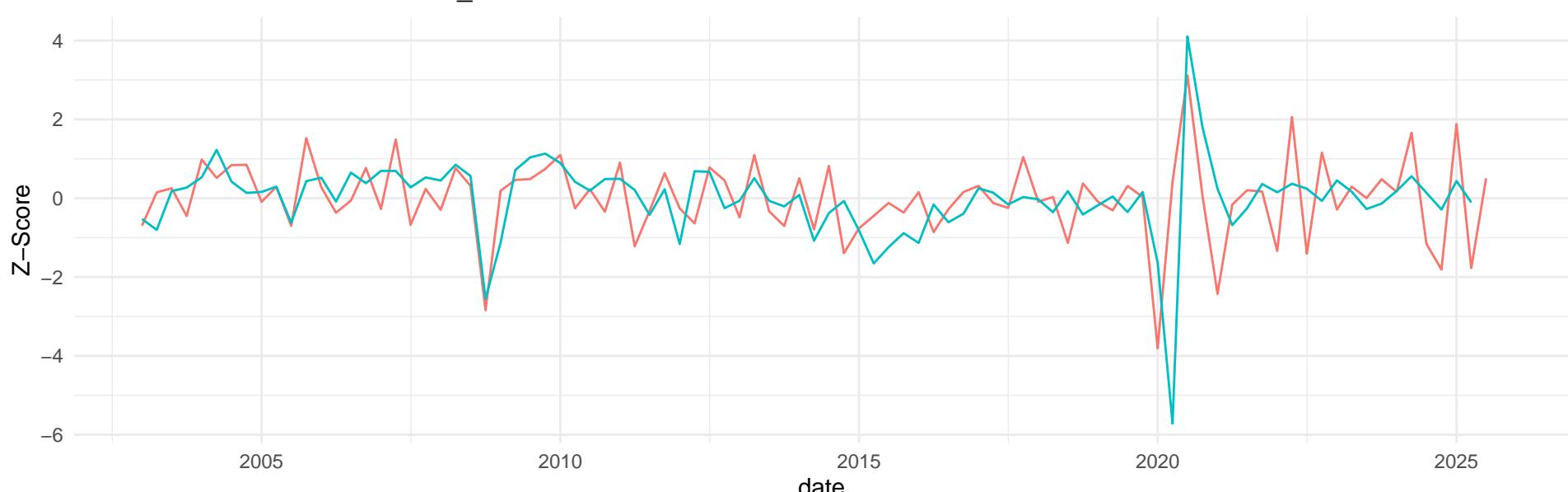
Corr: 0.41



Cross-Correlation (Quarterly Lags): DA_IPSDG



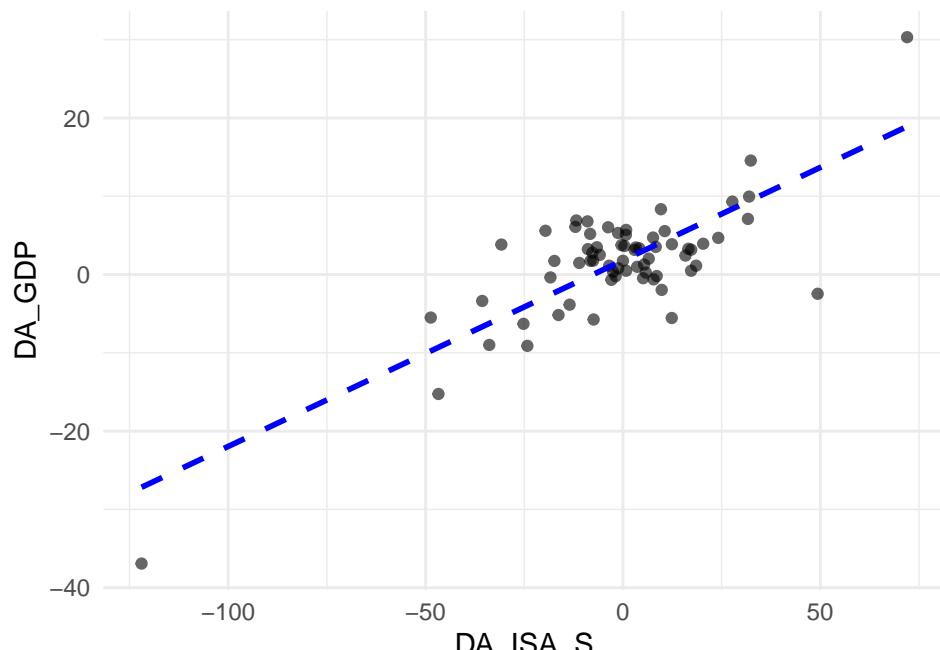
Standardized Time Series: DA_IPSDG



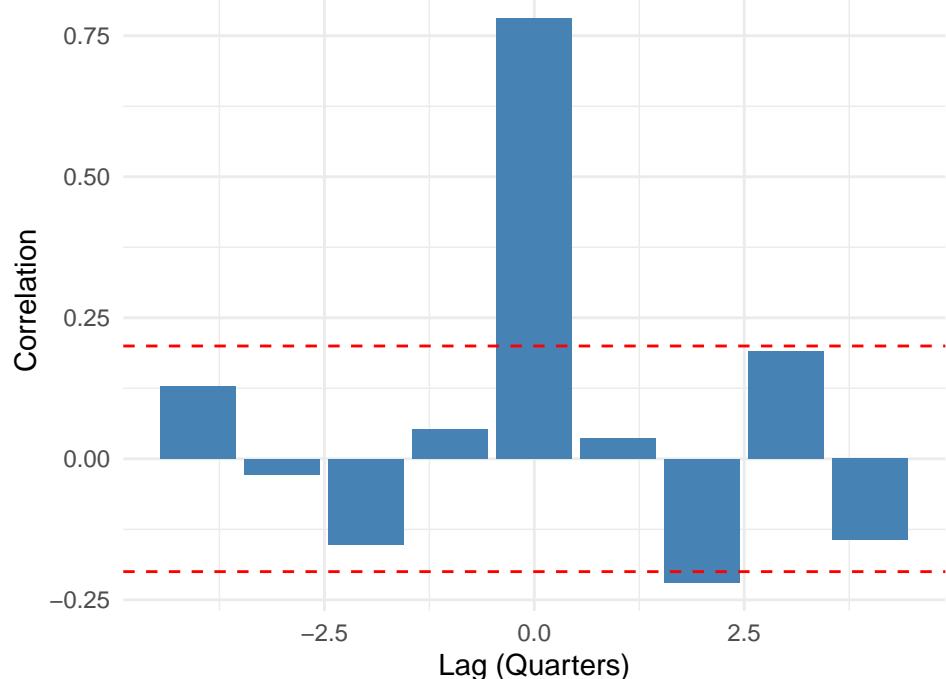
series — ind_scaled — target_scaled

Scatter: DA_ISA_S vs Target

Corr: 0.78



Cross-Correlation (Quarterly Lags): DA_ISA_S



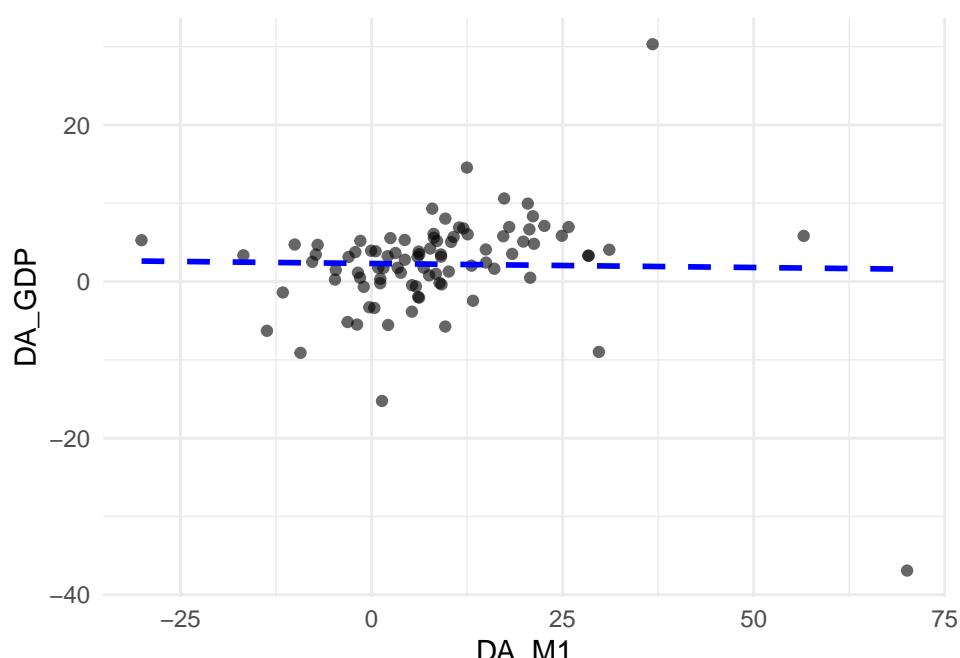
Standardized Time Series: DA_ISA_S



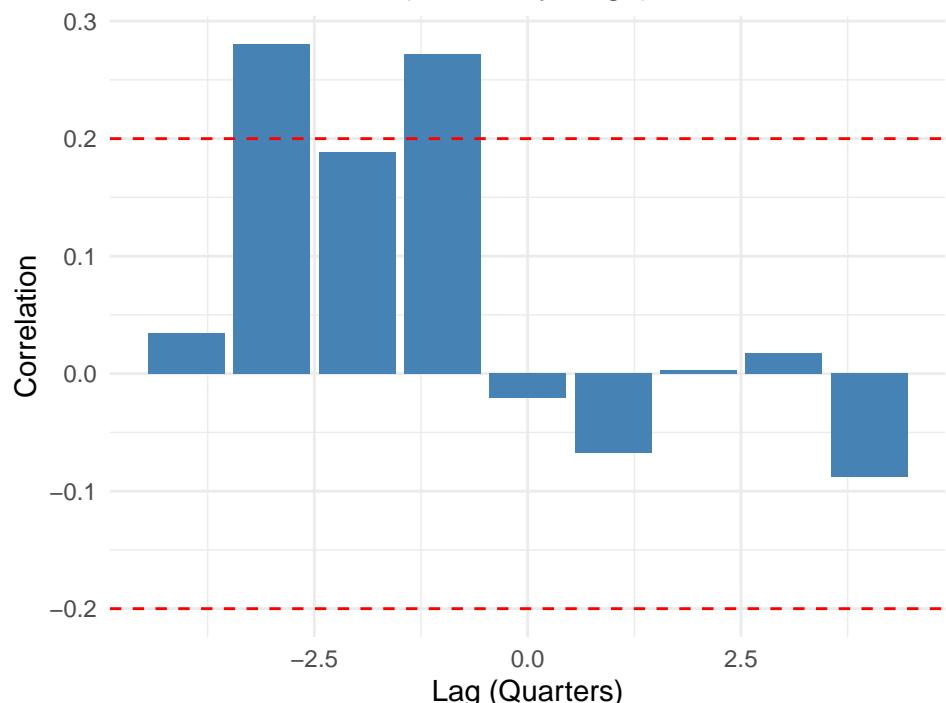
series — ind_scaled — target_scaled

Scatter: DA_M1 vs Target

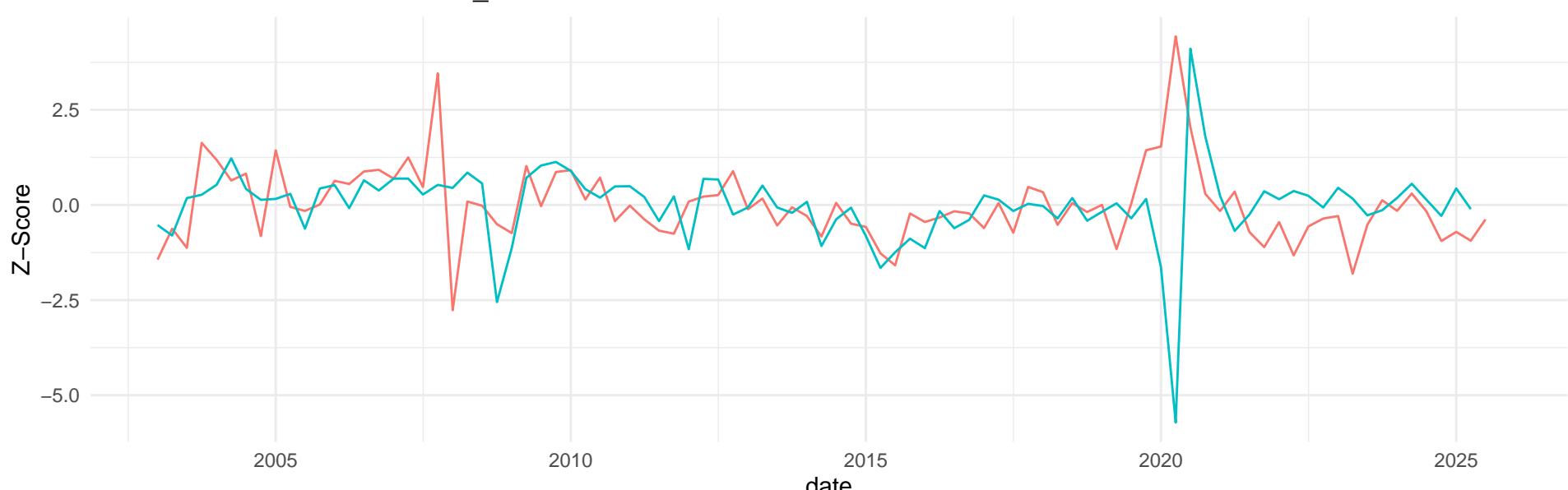
Corr: -0.02



Cross-Correlation (Quarterly Lags): DA_M1



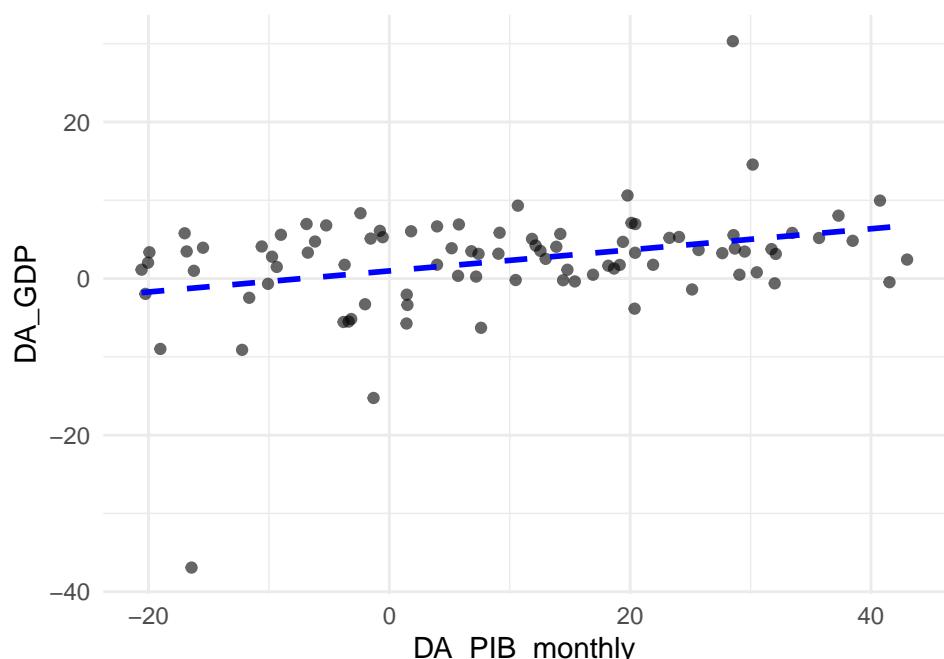
Standardized Time Series: DA_M1



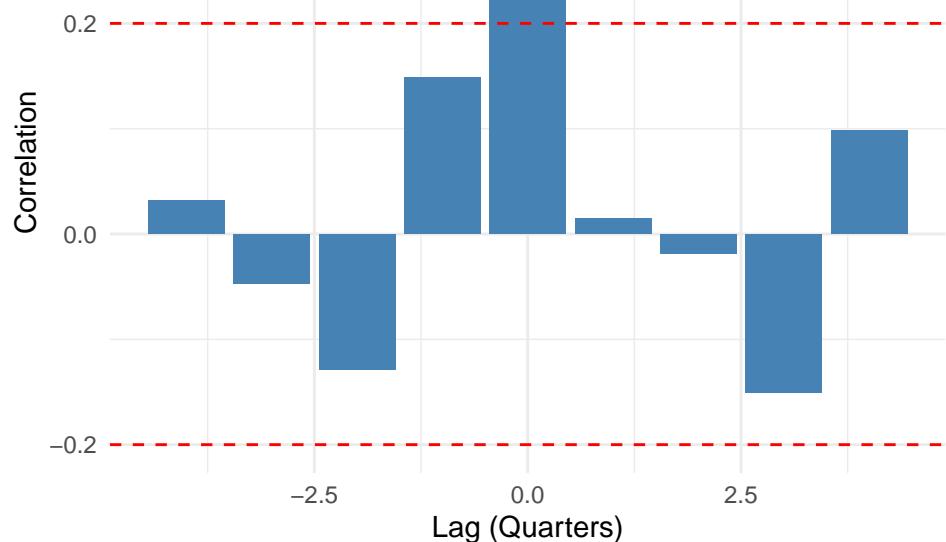
series — ind_scaled — target_scaled

Scatter: DA_PIB_monthly vs Target

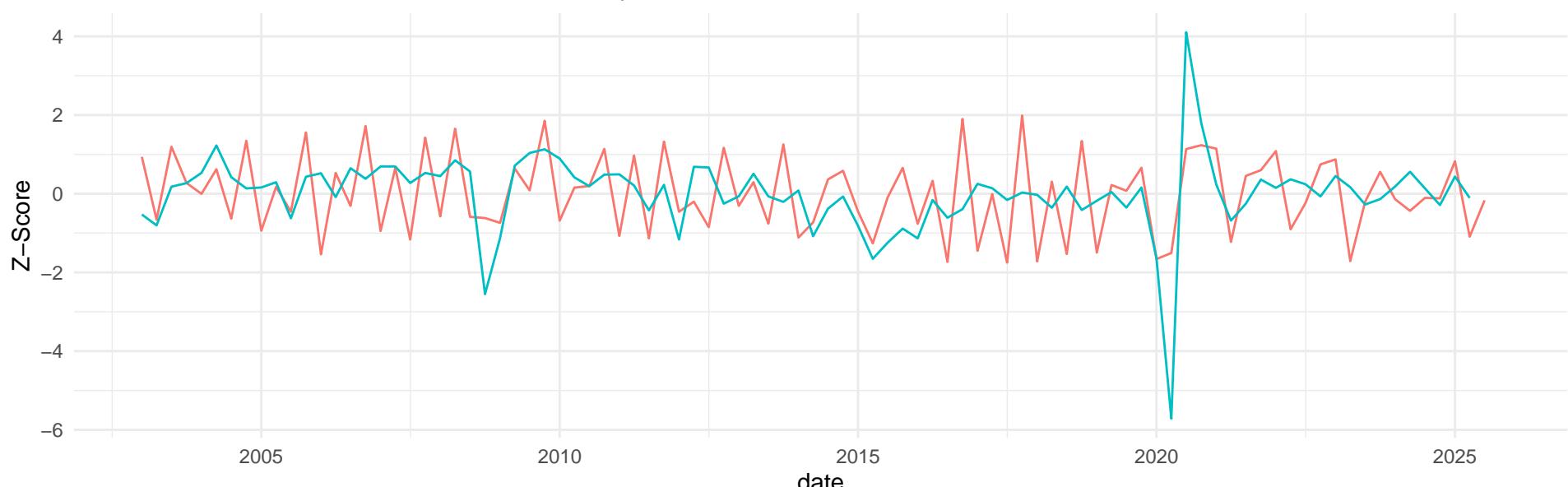
Corr: 0.34



Cross-Correlation (Quarterly Lags): DA_PIB_monthly



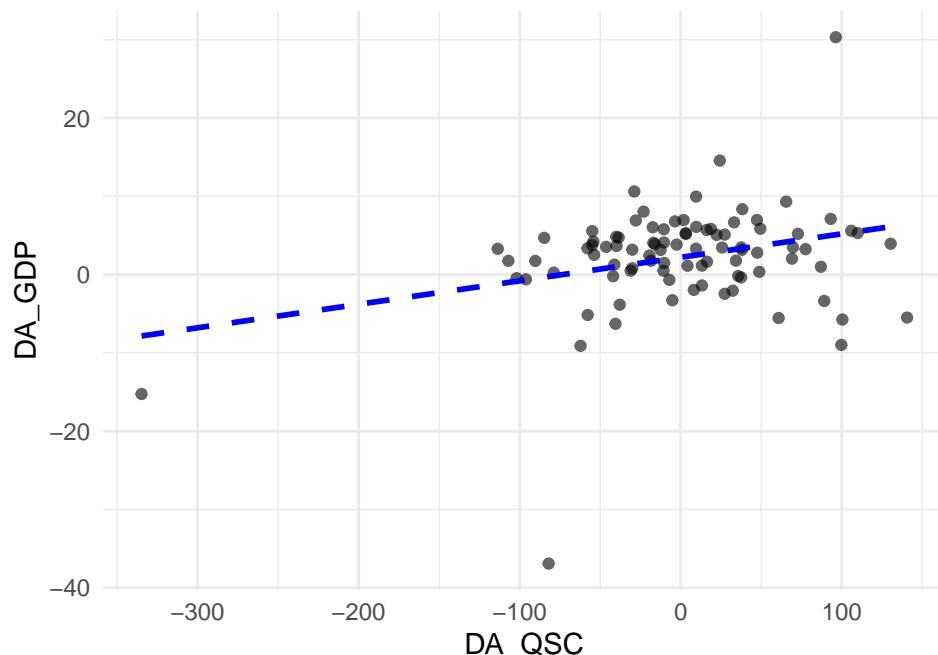
Standardized Time Series: DA_PIB_monthly



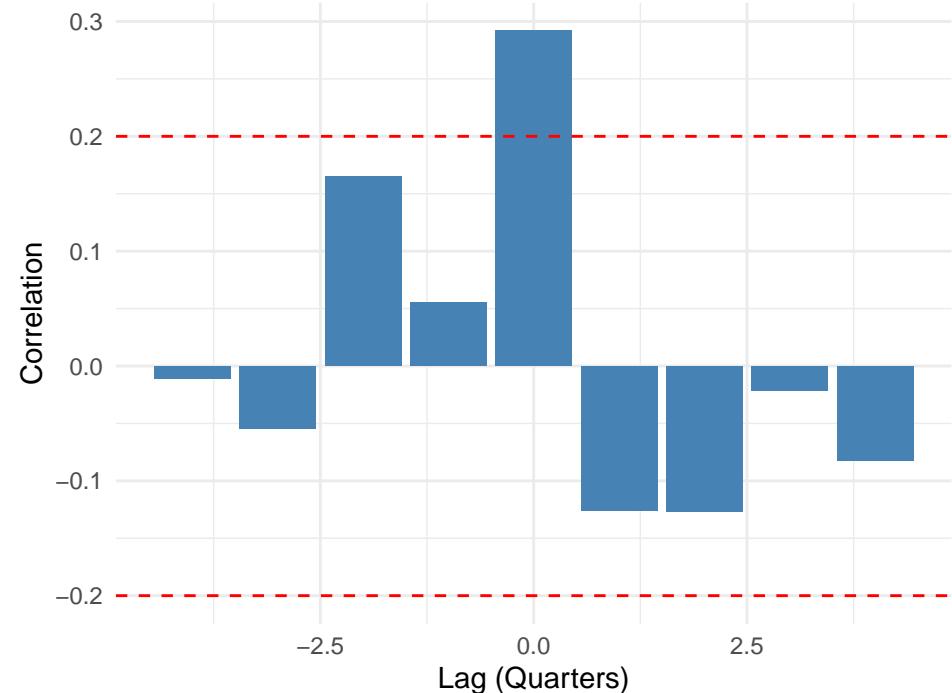
series — ind_scaled — target_scaled

Scatter: DA_QSC vs Target

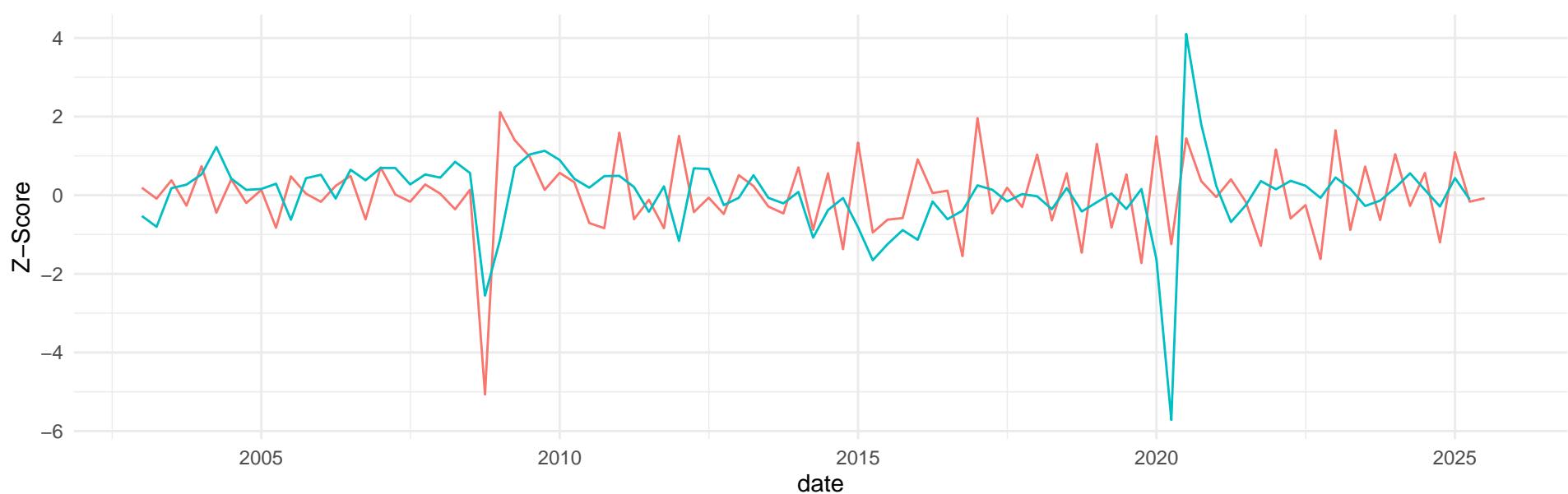
Corr: 0.29



Cross-Correlation (Quarterly Lags): DA_QSC



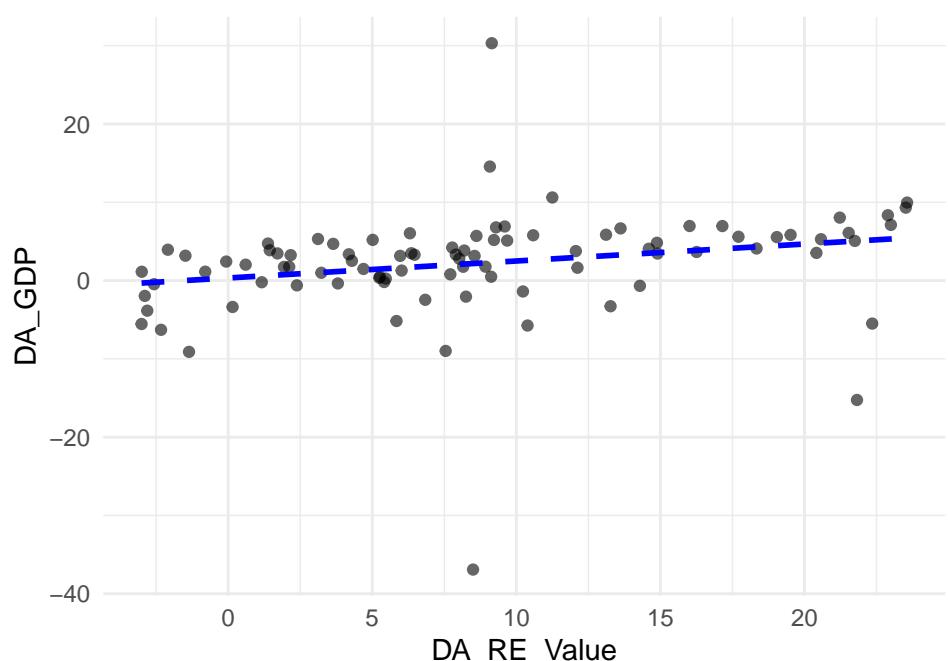
Standardized Time Series: DA_QSC



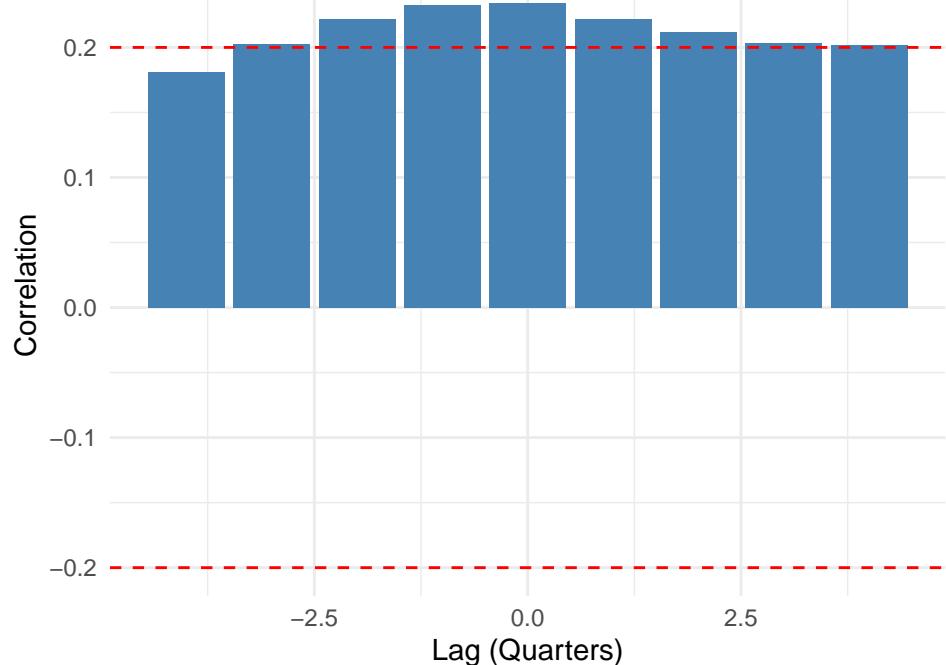
series — ind_scaled — target_scaled

Scatter: DA_RE_Value vs Target

Corr: 0.23



Cross-Correlation (Quarterly Lags): DA_RE_Value



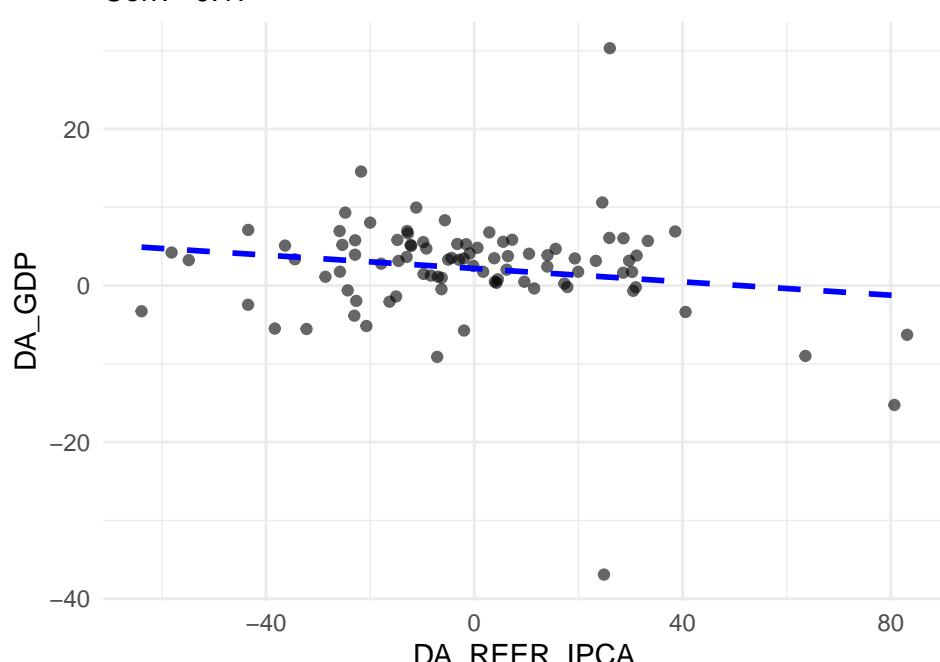
Standardized Time Series: DA_RE_Value



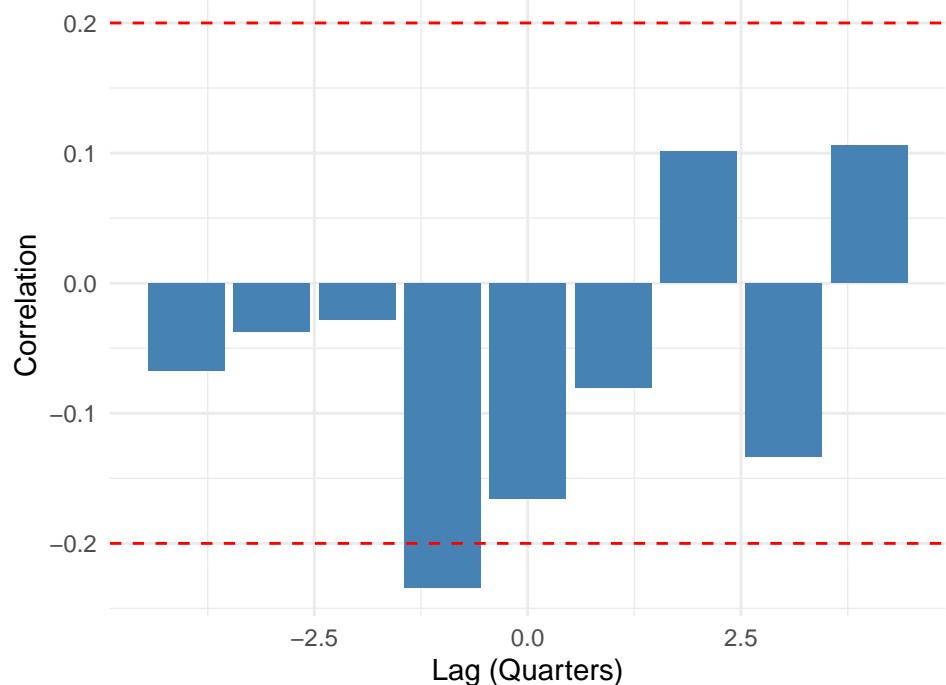
series — ind_scaled — target_scaled

Scatter: DA_REER_IPCA vs Target

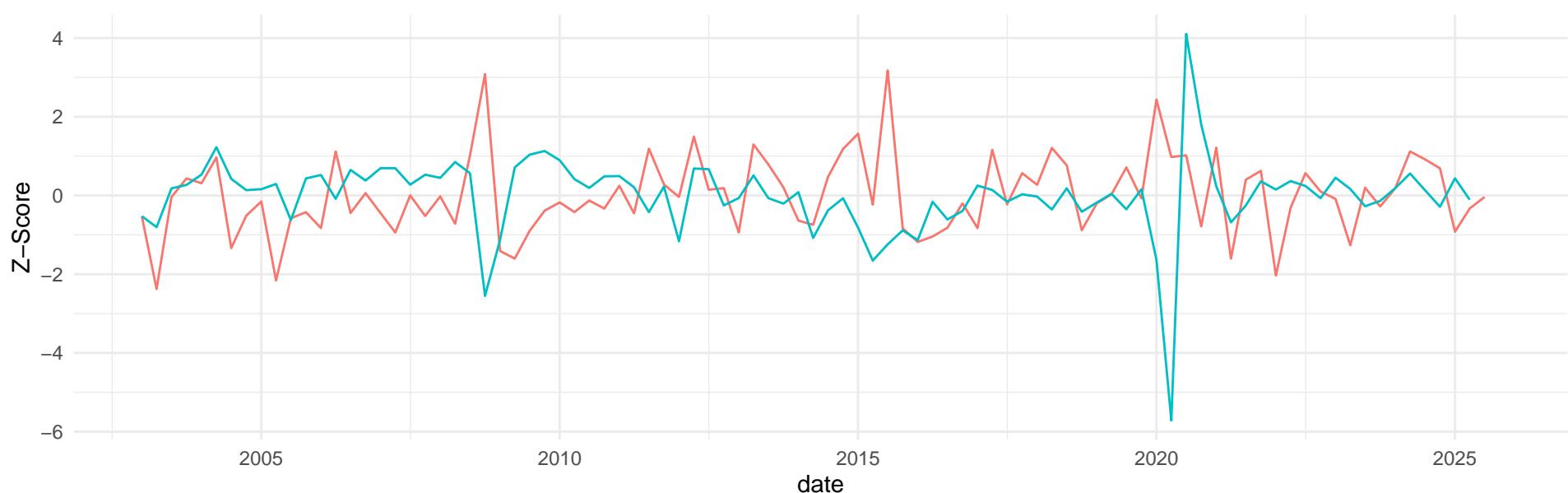
Corr: -0.17



Cross-Correlation (Quarterly Lags): DA_REER_IPCA



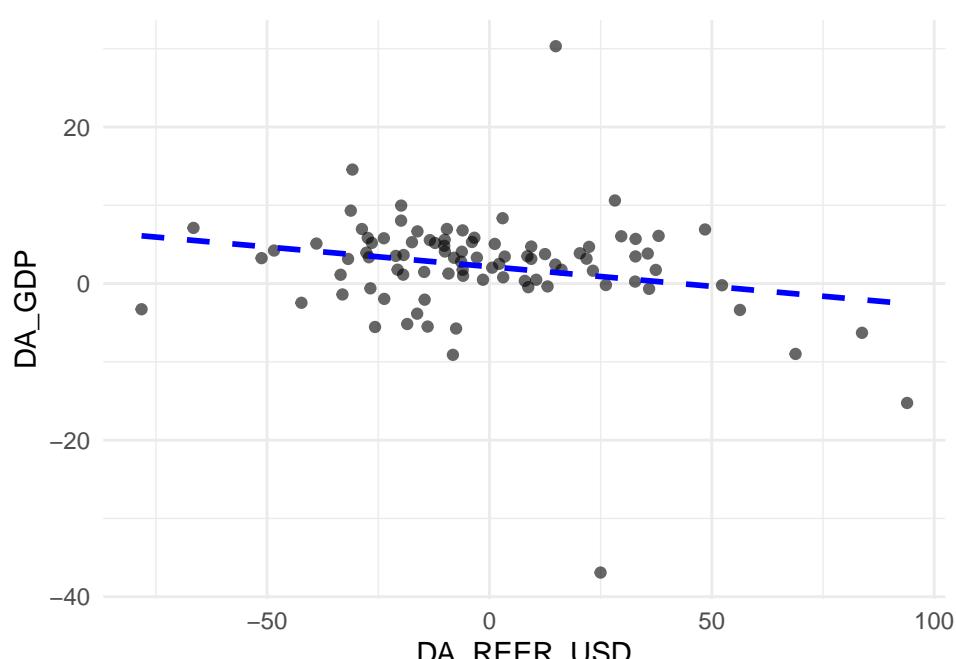
Standardized Time Series: DA_REER_IPCA



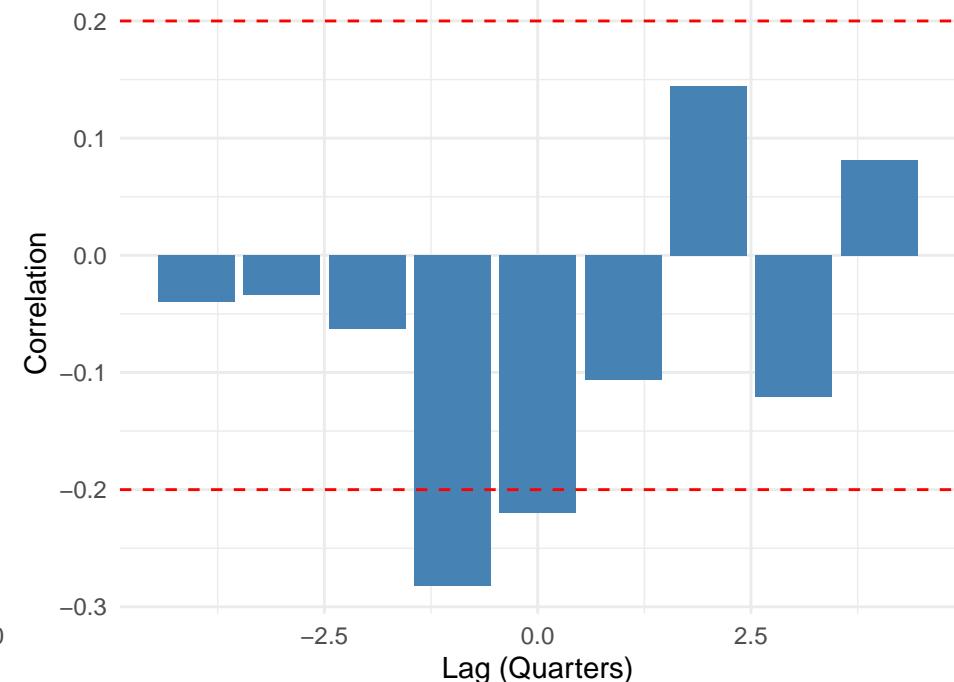
series — ind_scaled — target_scaled

Scatter: DA_REER_USD vs Target

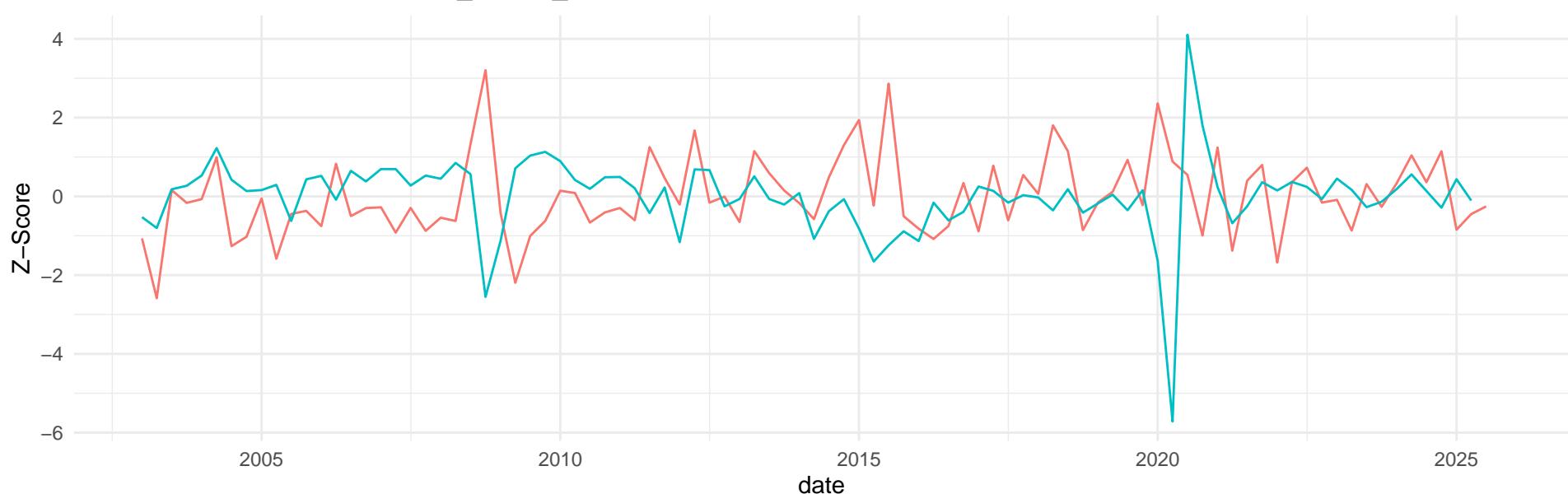
Corr: -0.22



Cross-Correlation (Quarterly Lags): DA_REER_USD



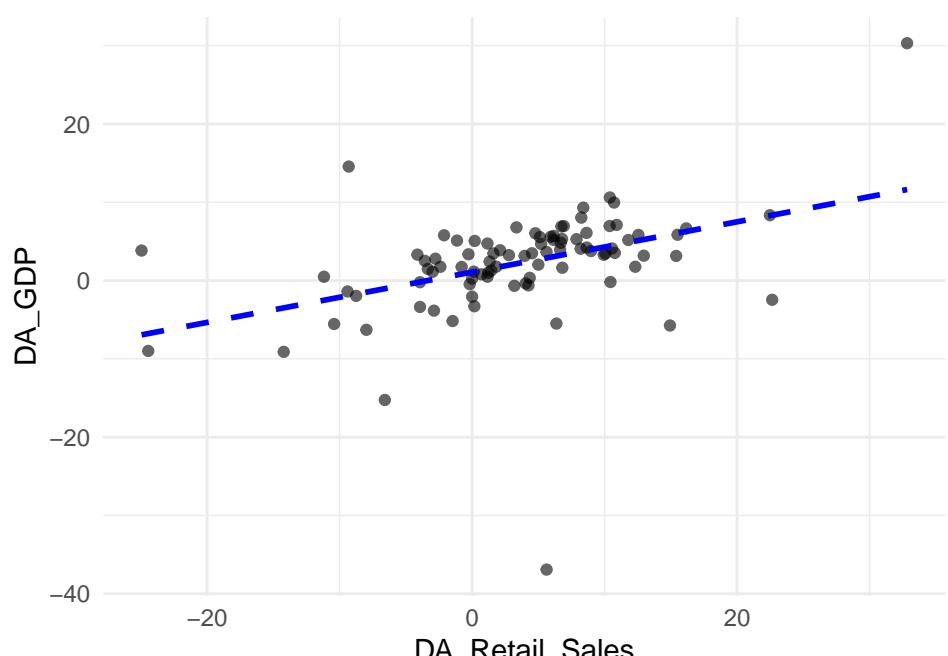
Standardized Time Series: DA_REER_USD



series — ind_scaled — target_scaled

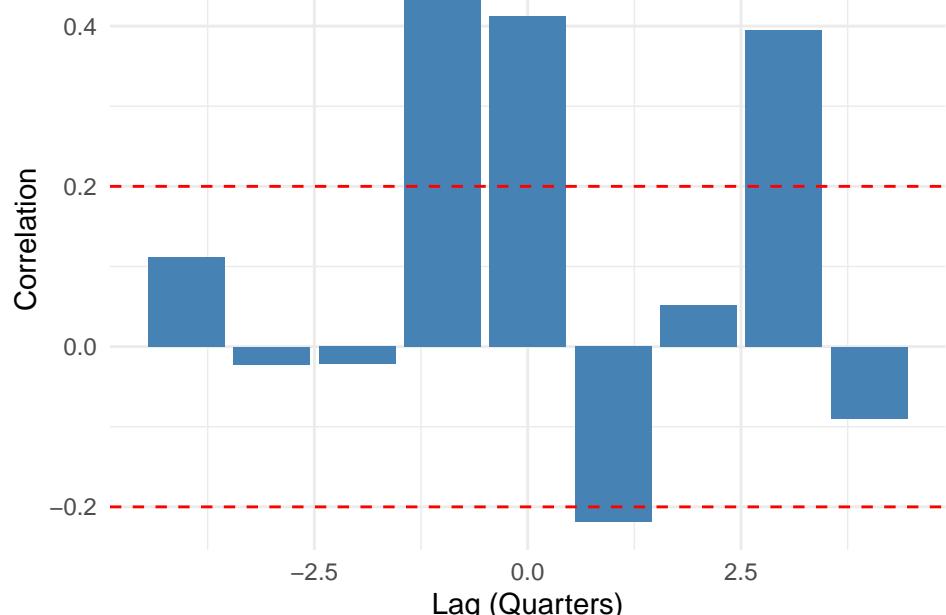
Scatter: DA_Retail_Sales vs Target

Corr: 0.41

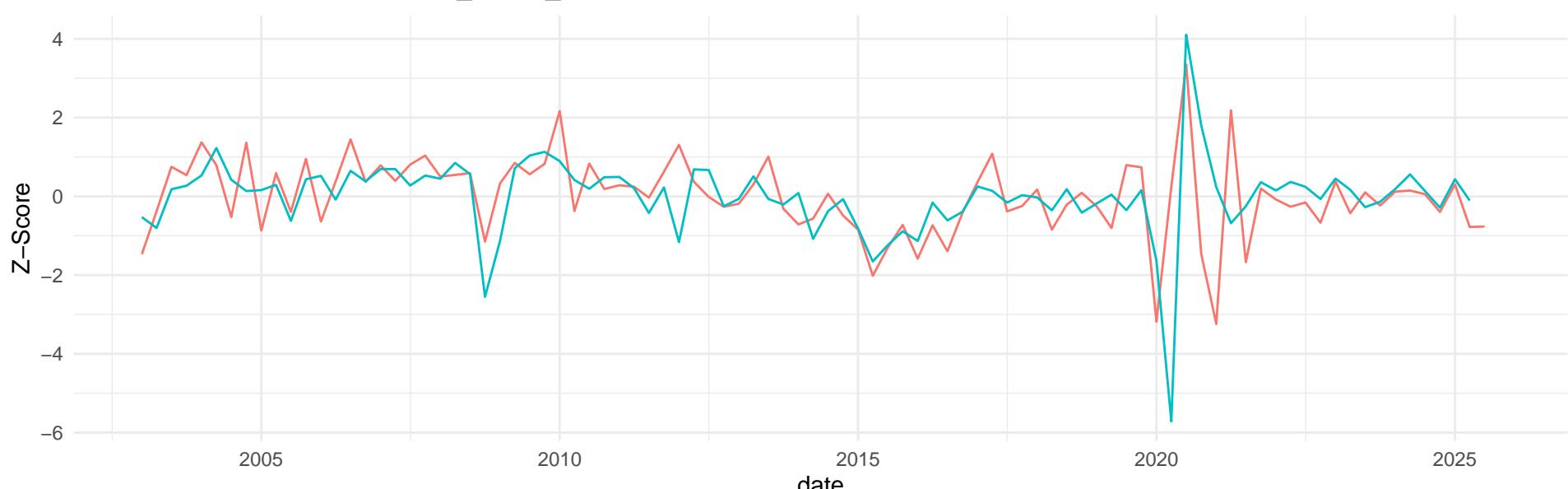


Cross-Correlation (Quarterly Lags): DA_Retail_Sales

Correlation



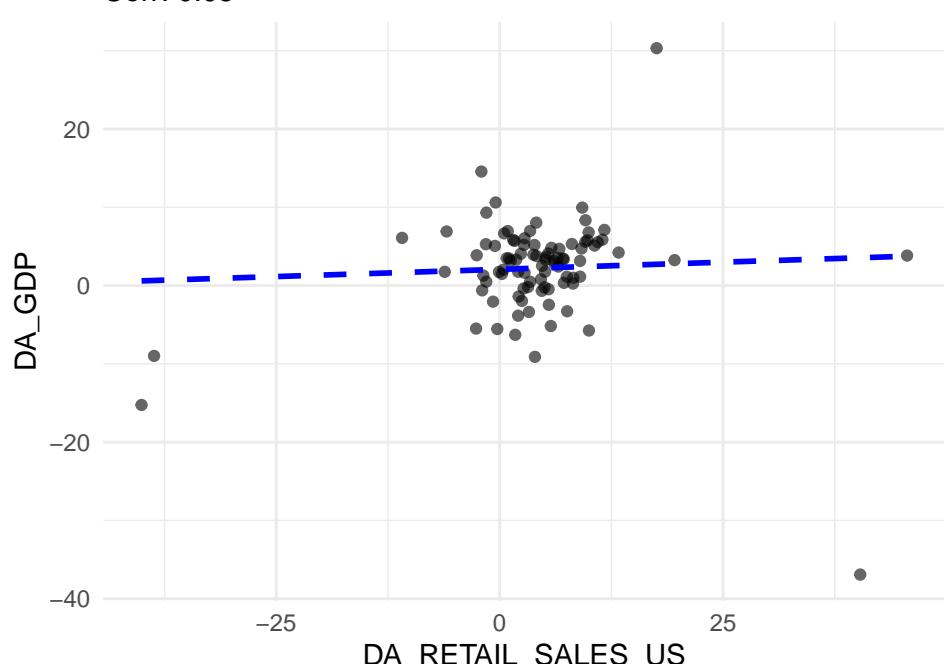
Standardized Time Series: DA_Retail_Sales



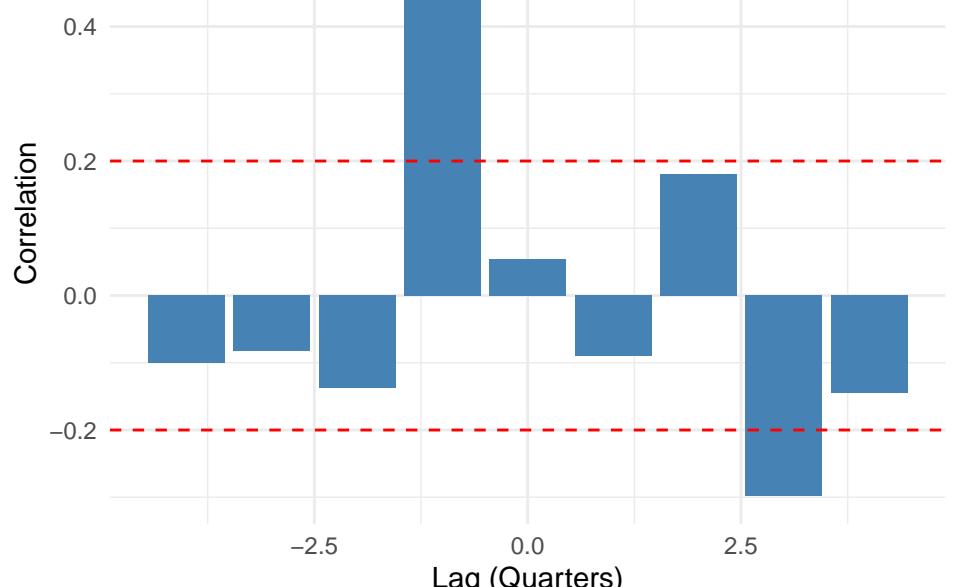
series — ind_scaled — target_scaled

Scatter: DA_RETAIL_SALES_US vs Target

Corr: 0.05



Cross-Correlation (Quarterly Lags): DA_RETAIL_SALE



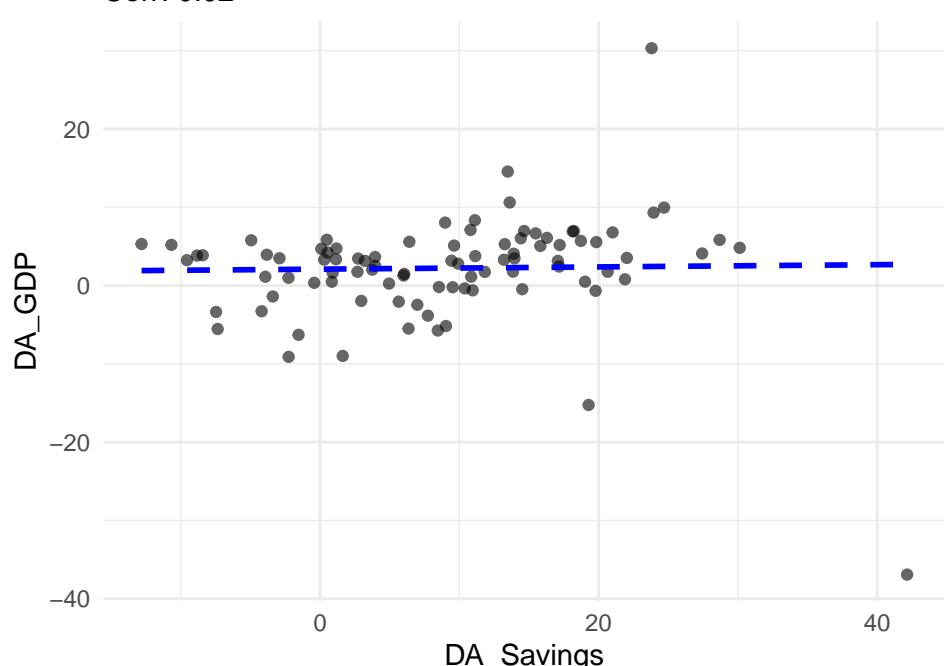
Standardized Time Series: DA_RETAIL_SALES_US



series — ind_scaled — target_scaled

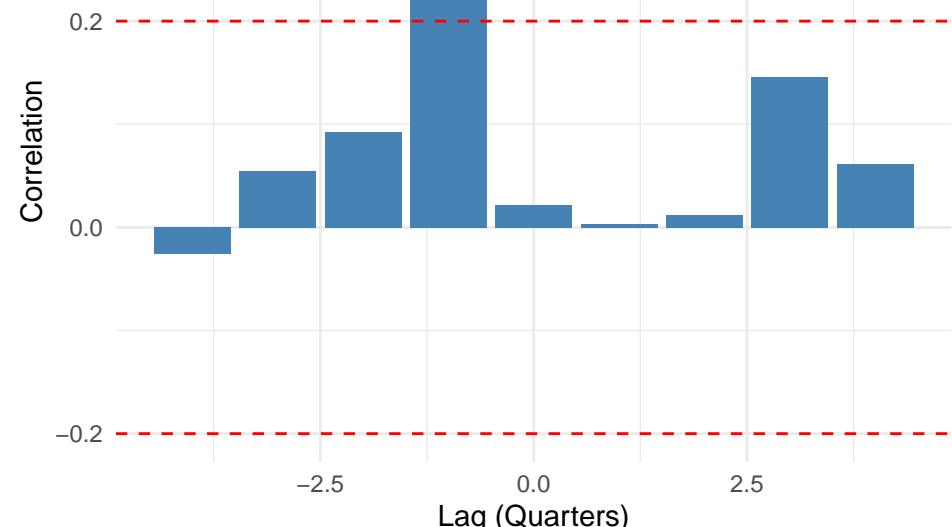
Scatter: DA_Savings vs Target

Corr: 0.02

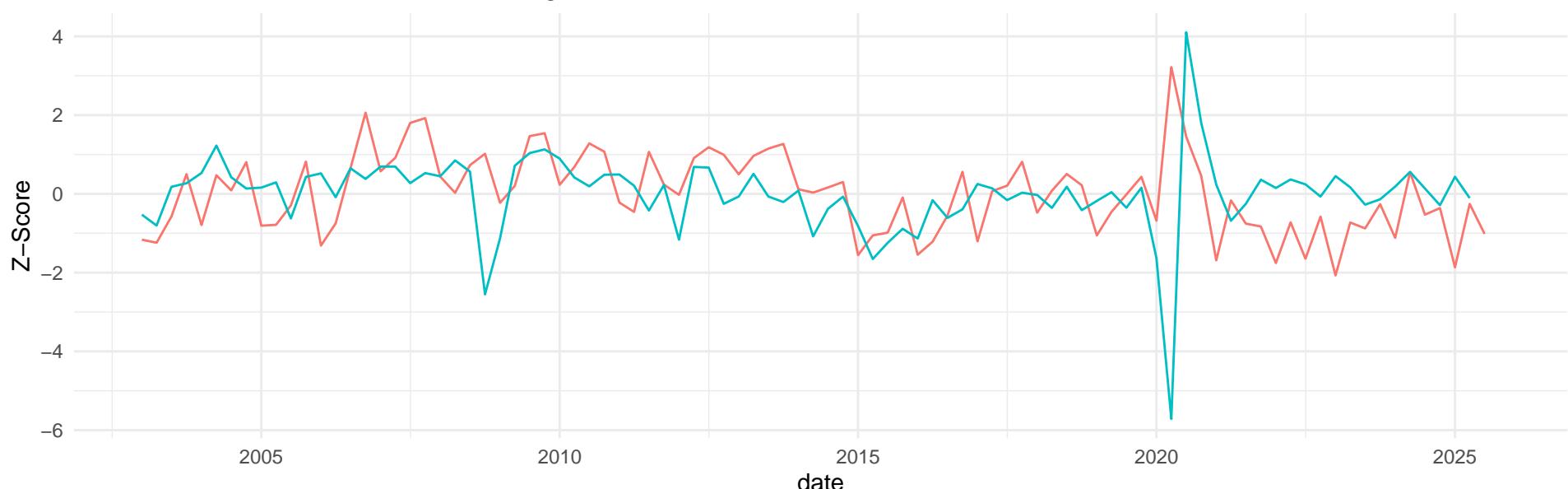


Cross-Correlation (Quarterly Lags): DA_Savings

Correlation



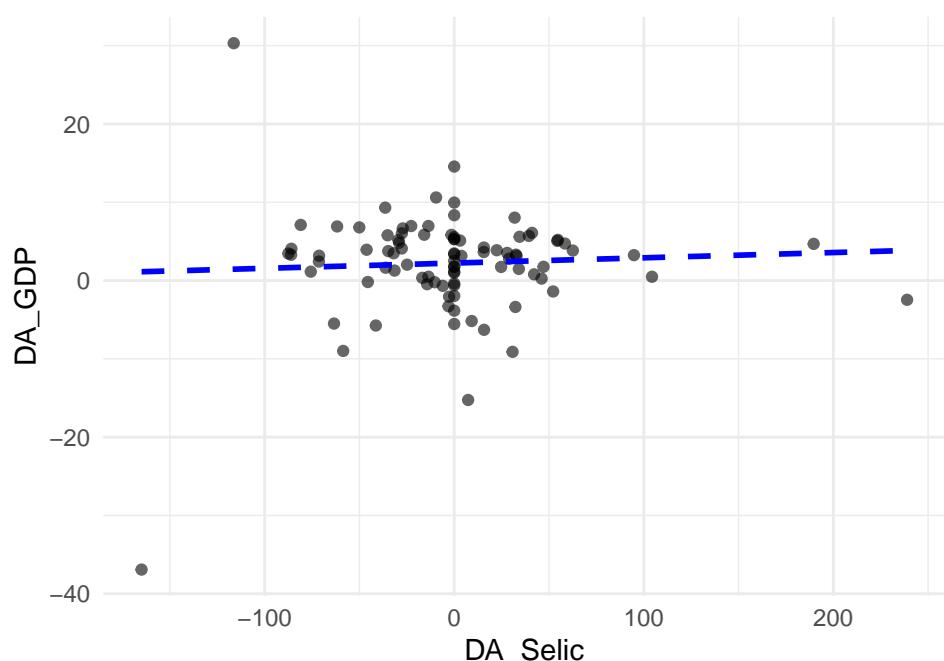
Standardized Time Series: DA_Savings



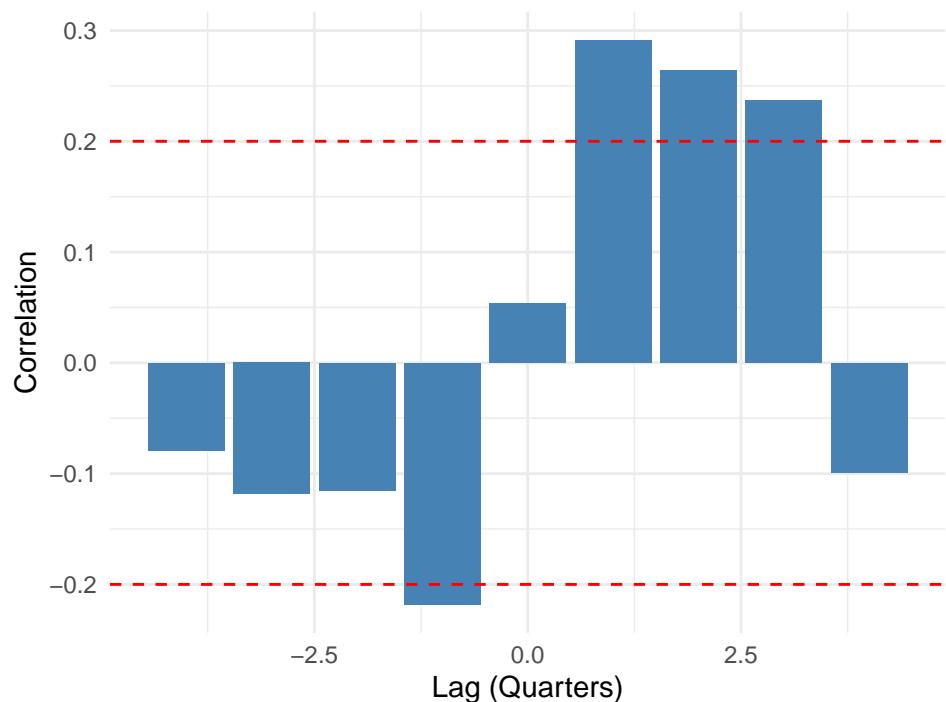
series — ind_scaled — target_scaled

Scatter: DA_Selic vs Target

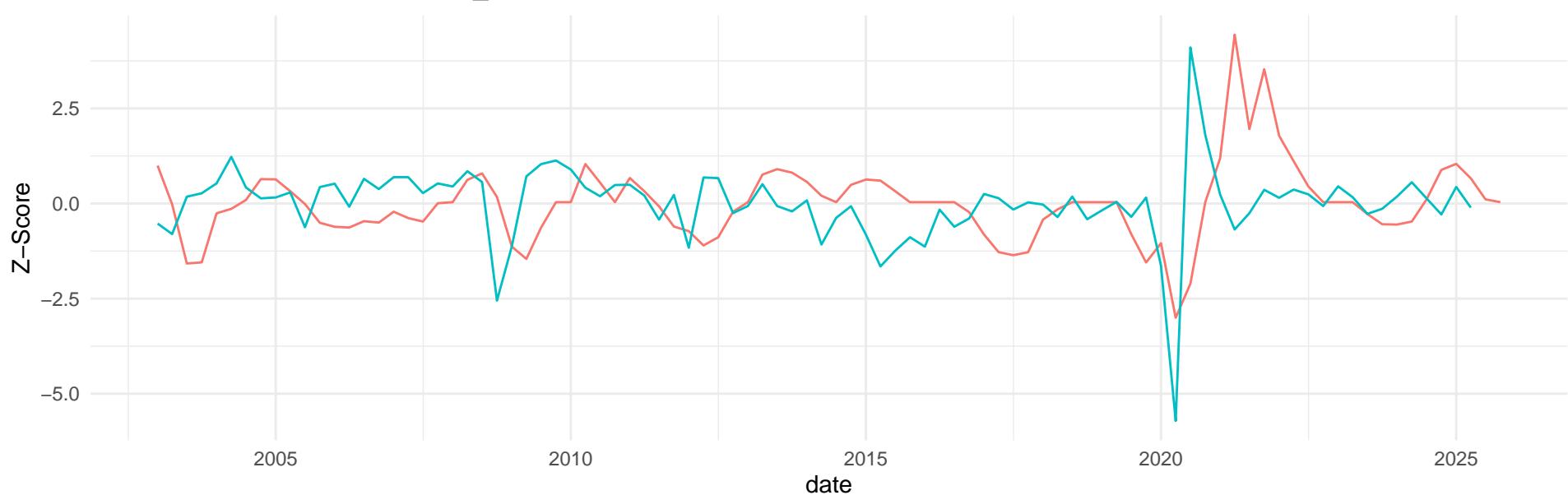
Corr: 0.05



Cross-Correlation (Quarterly Lags): DA_Selic



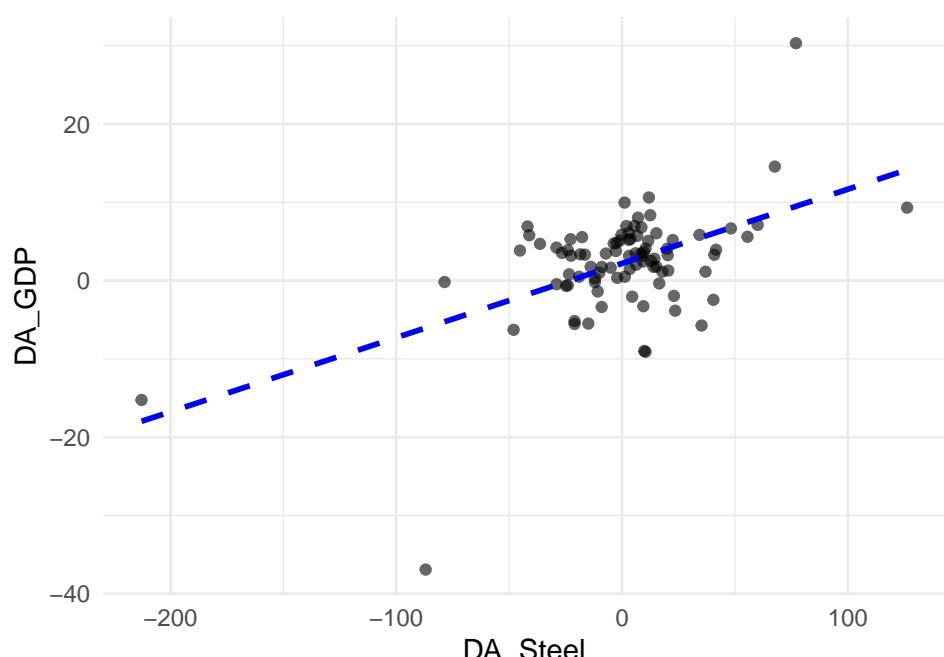
Standardized Time Series: DA_Selic



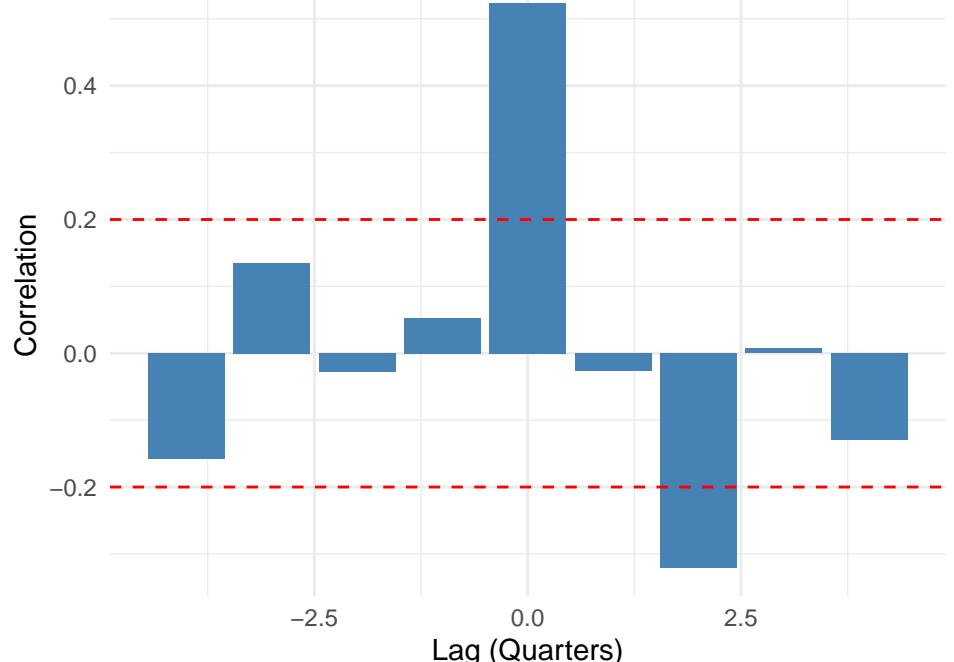
series — ind_scaled — target_scaled

Scatter: DA_Steel vs Target

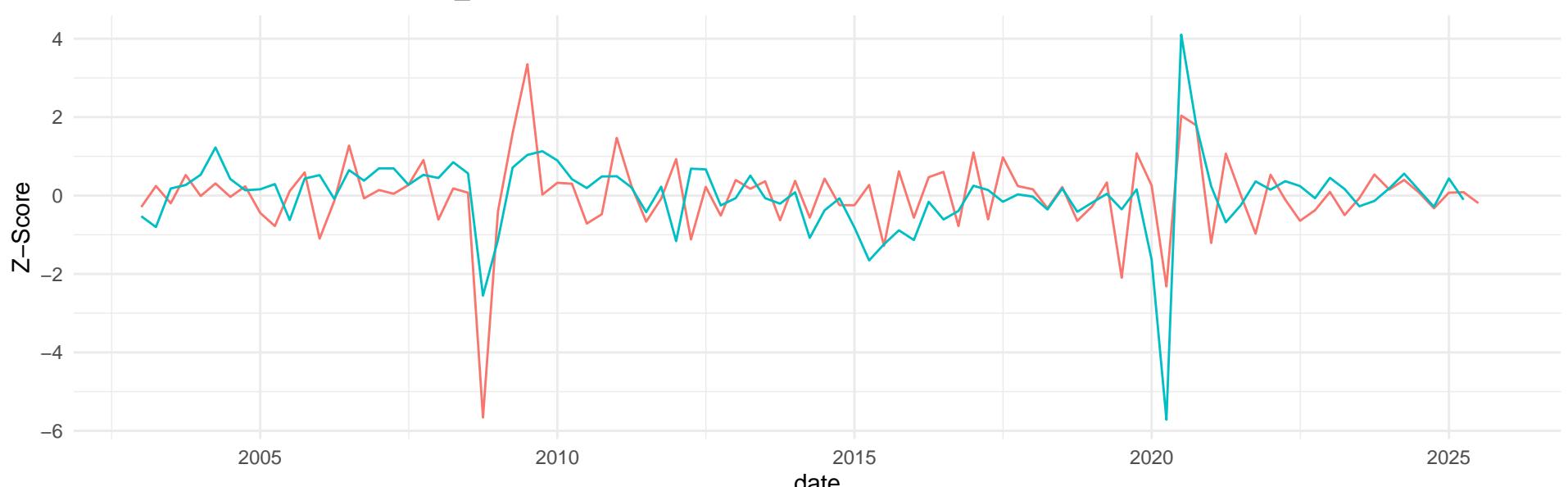
Corr: 0.52



Cross-Correlation (Quarterly Lags): DA_Steel



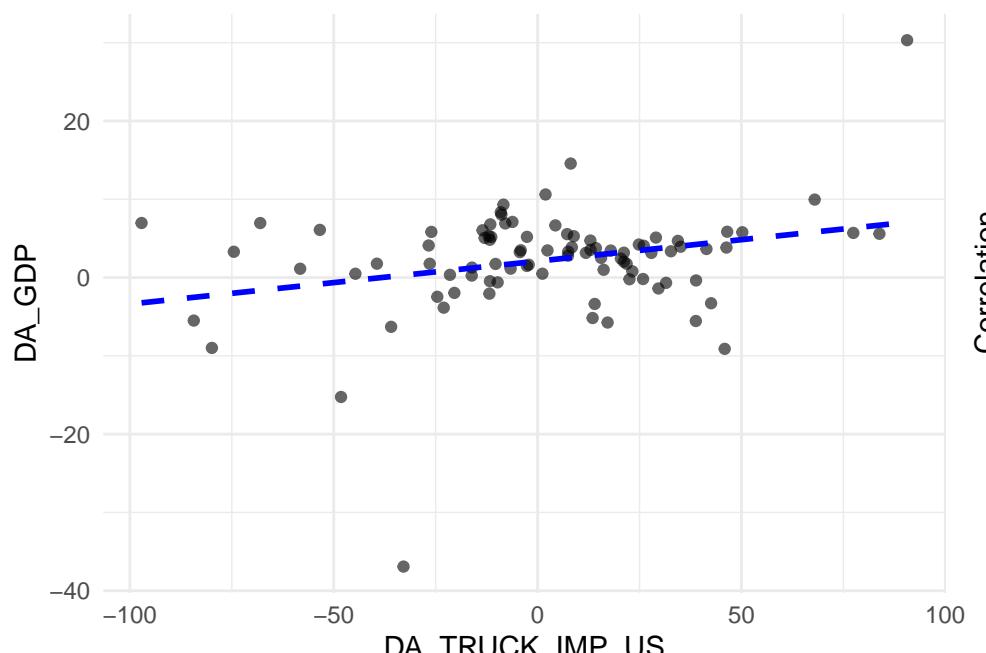
Standardized Time Series: DA_Steel



series — ind_scaled — target_scaled

Scatter: DA_TRUCK_IMP_US vs Target

Corr: 0.28

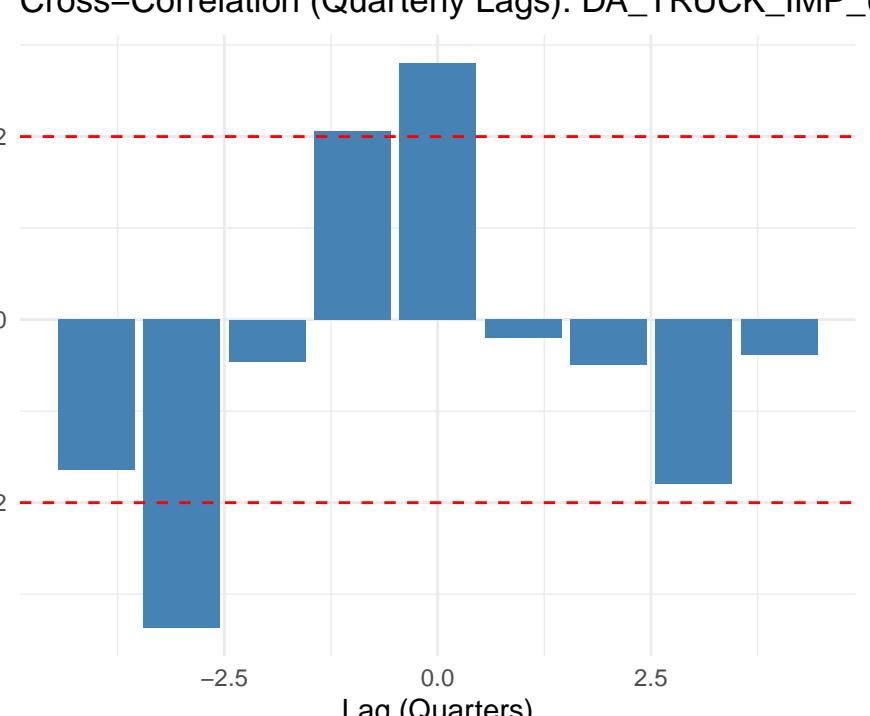


Cross-Correlation (Quarterly Lags): DA_TRUCK_IMP_US

Correlation

0.2
0.0
-0.2

Lag (Quarters)



Standardized Time Series: DA_TRUCK_IMP_US

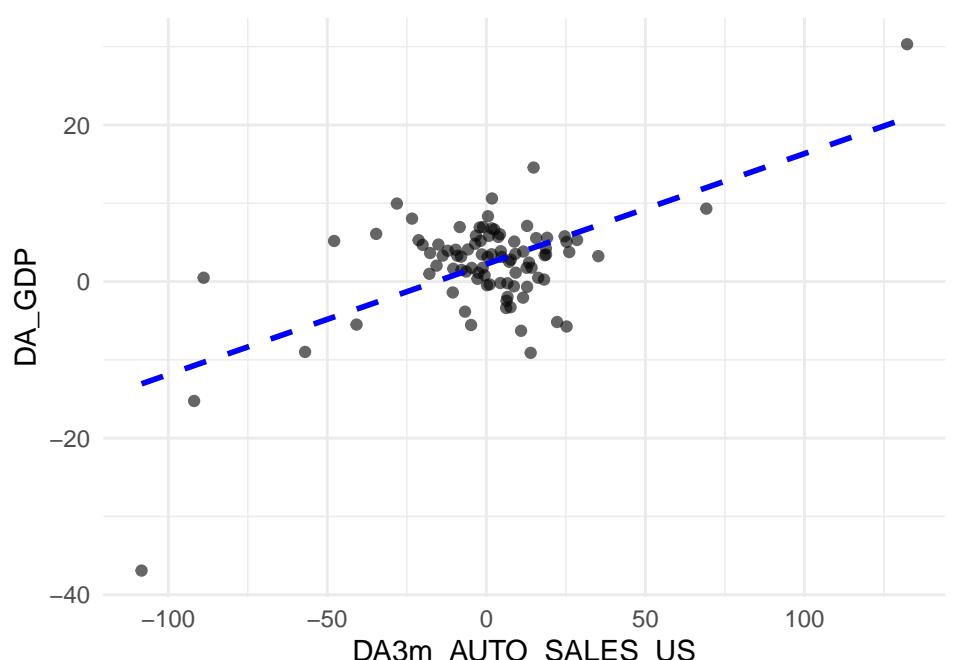


date

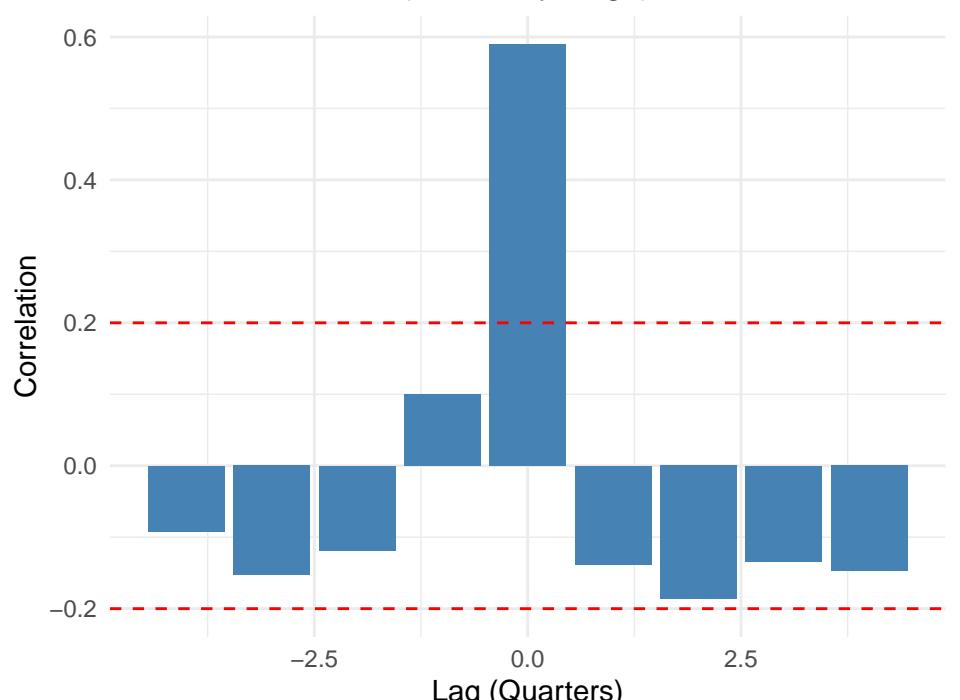
series — ind_scaled — target_scaled

Scatter: DA3m_AUTO_SALES_US vs Target

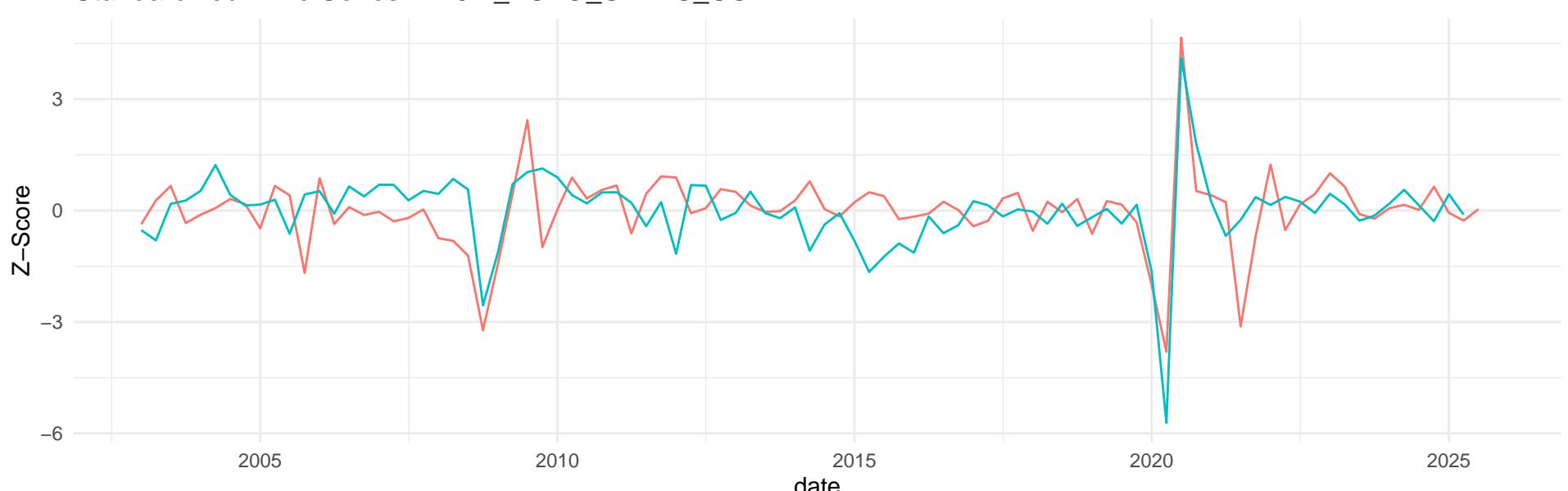
Corr: 0.59



Cross-Correlation (Quarterly Lags): DA3m_AUTO_SALES_US



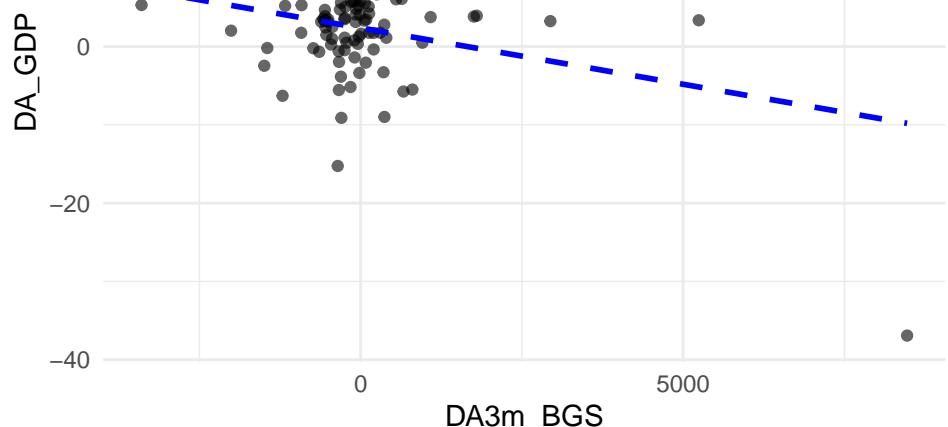
Standardized Time Series: DA3m_AUTO_SALES_US



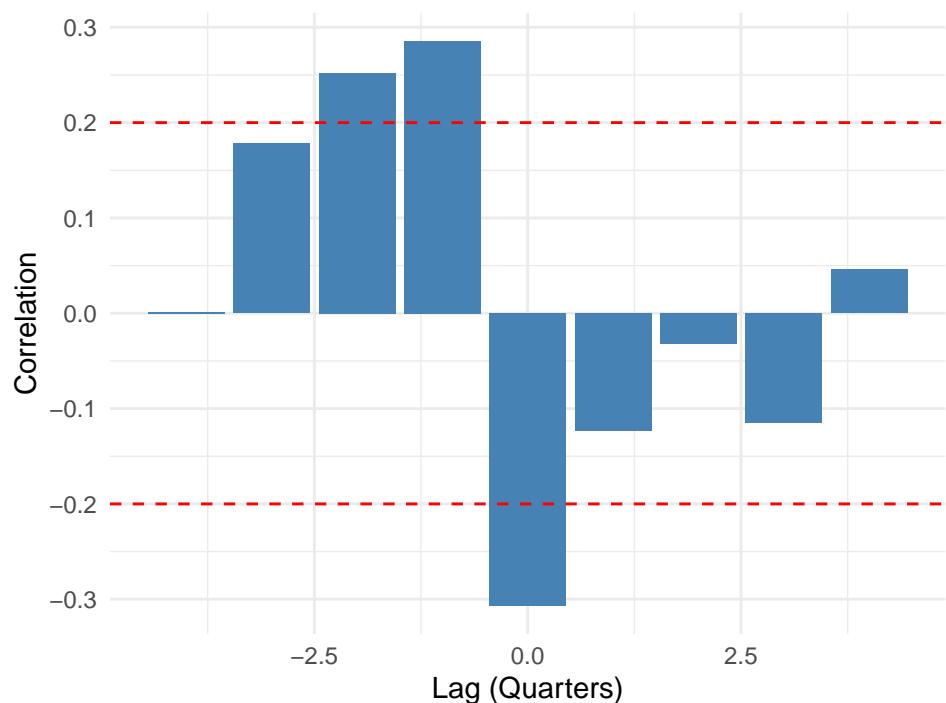
series — ind_scaled — target_scaled

Scatter: DA3m_BGS vs Target

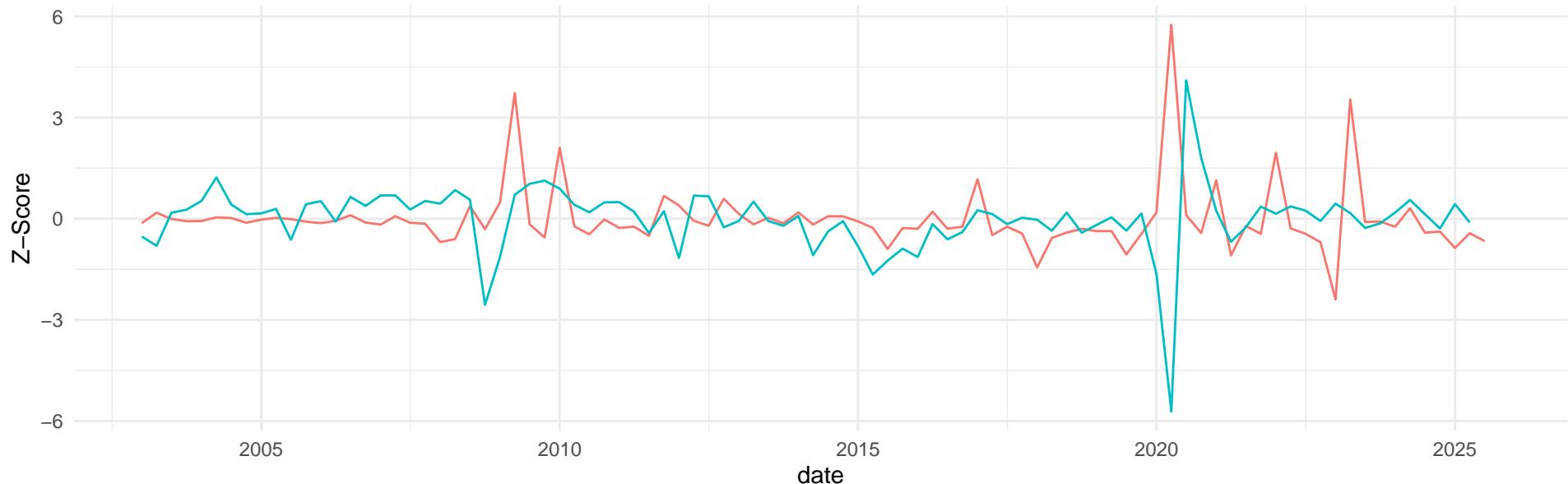
Corr: -0.31



Cross-Correlation (Quarterly Lags): DA3m_BGS



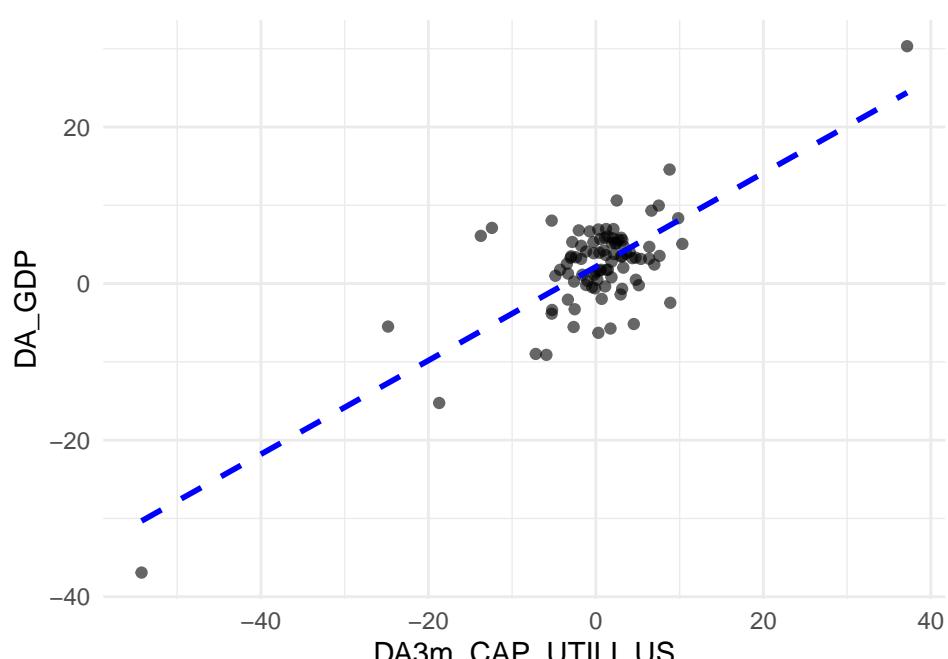
Standardized Time Series: DA3m_BGS



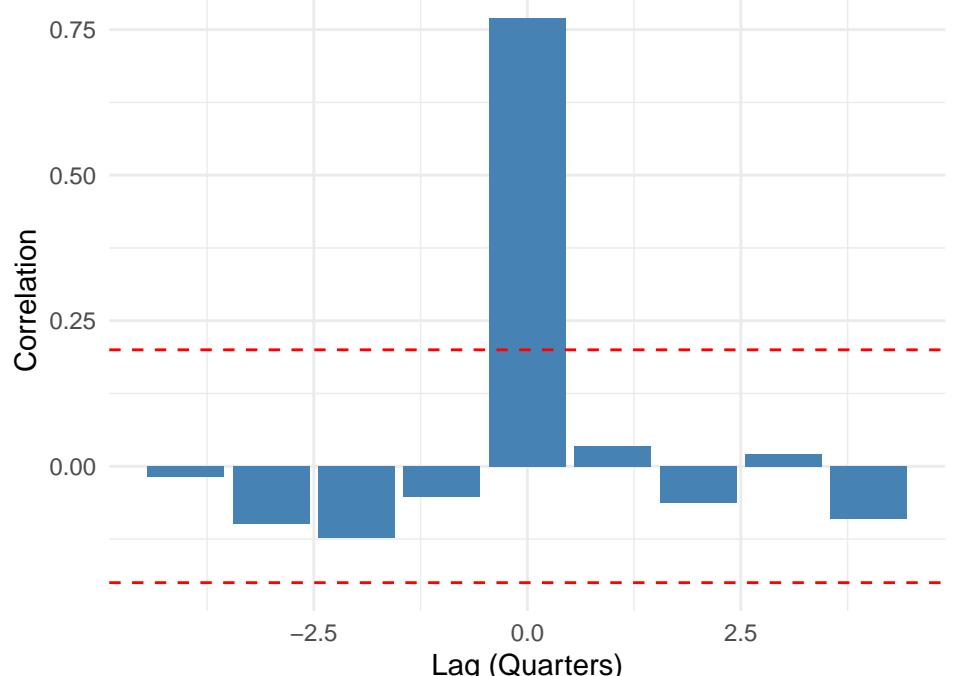
series — ind_scaled — target_scaled

Scatter: DA3m_CAP UTILI_US vs Target

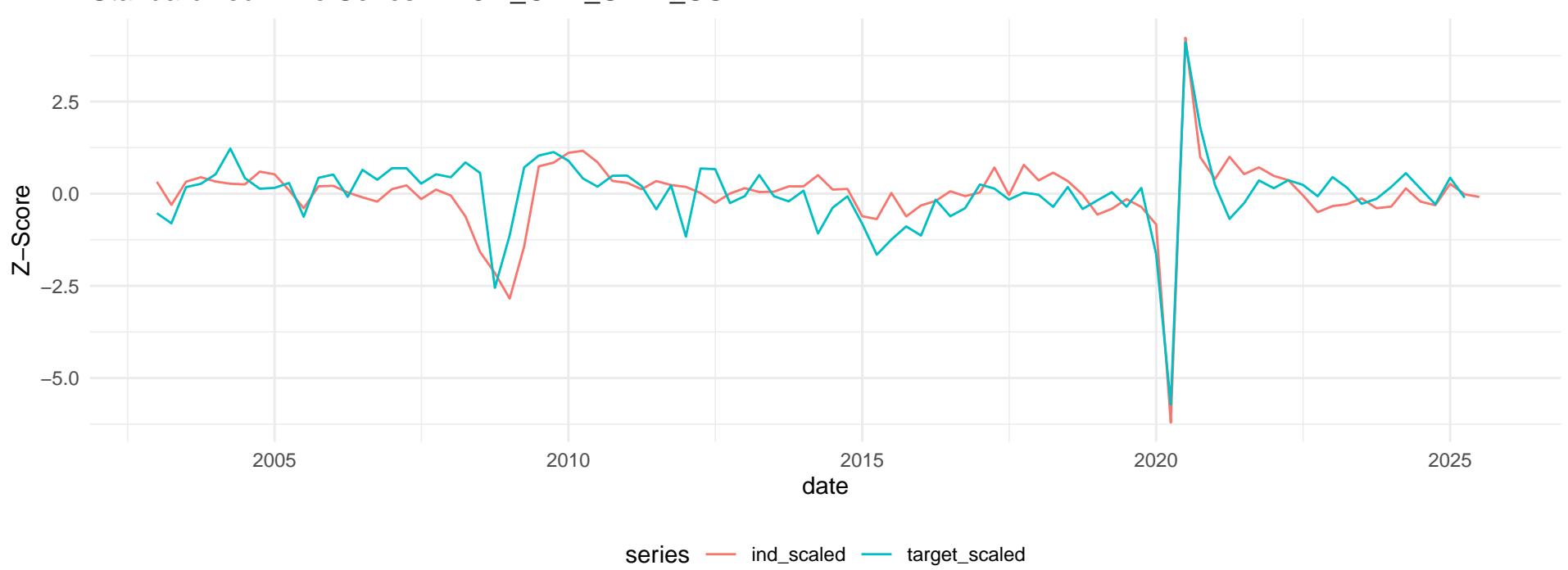
Corr: 0.77



Cross-Correlation (Quarterly Lags): DA3m_CAP UTILI

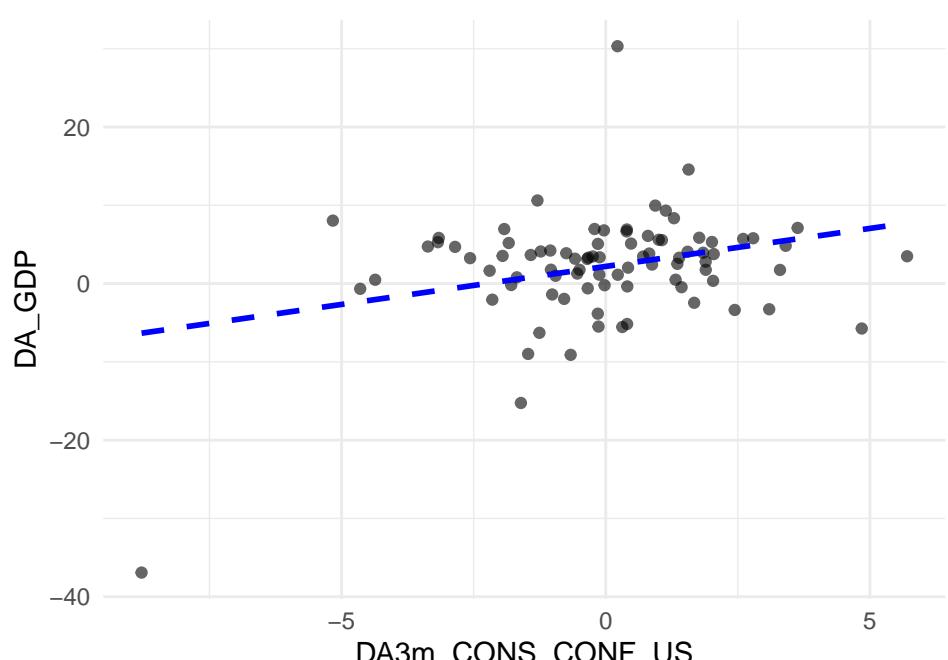


Standardized Time Series: DA3m_CAP UTILI_US

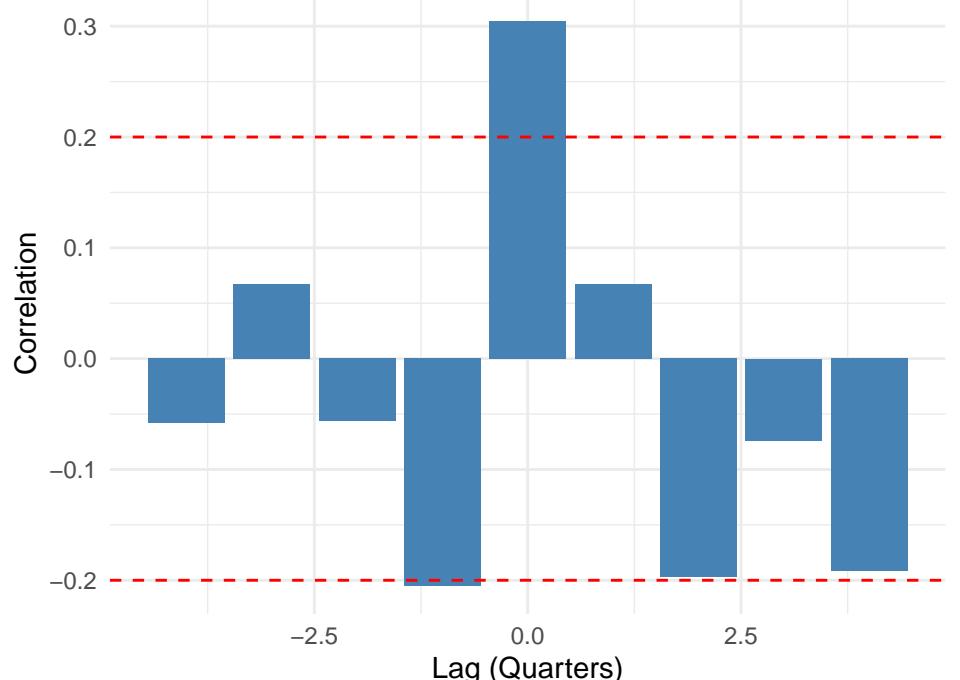


Scatter: DA3m_CONS_CONF_US vs Target

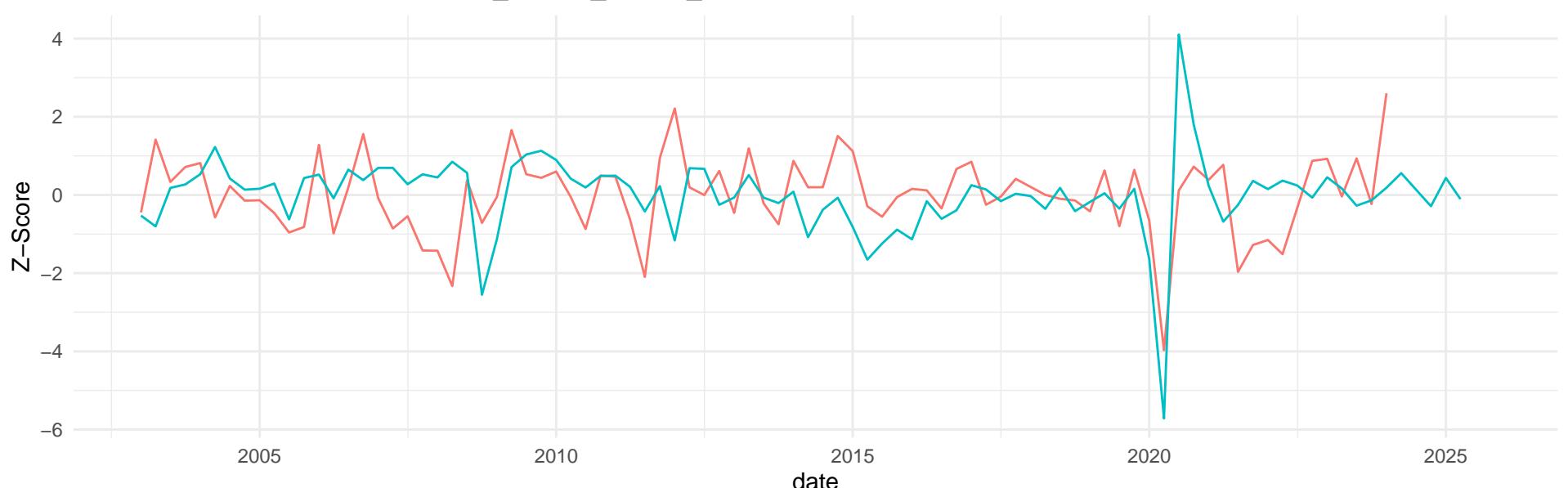
Corr: 0.3



Cross-Correlation (Quarterly Lags): DA3m_CONS_CO

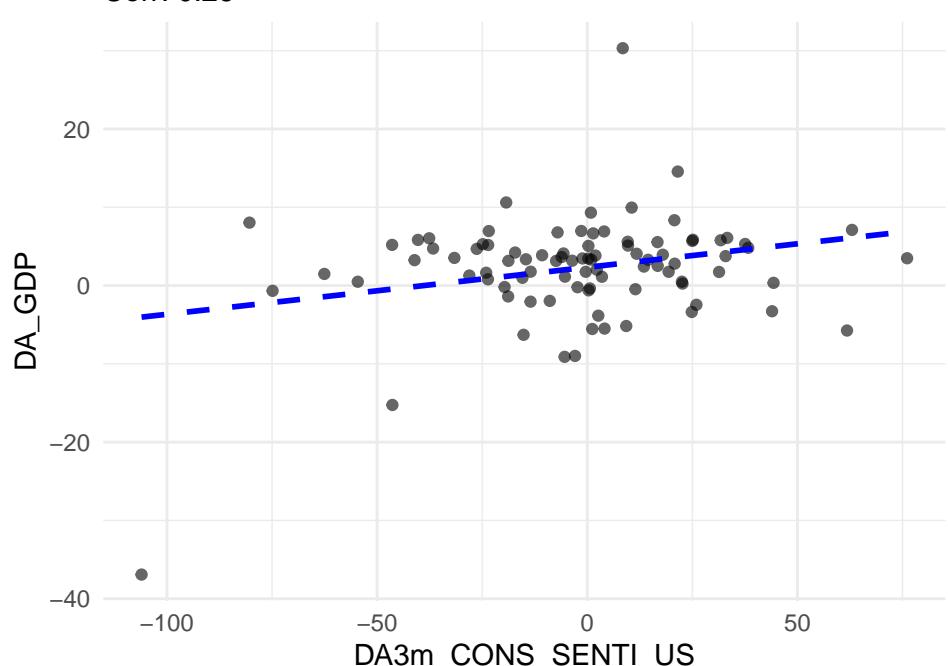


Standardized Time Series: DA3m_CONS_CONF_US

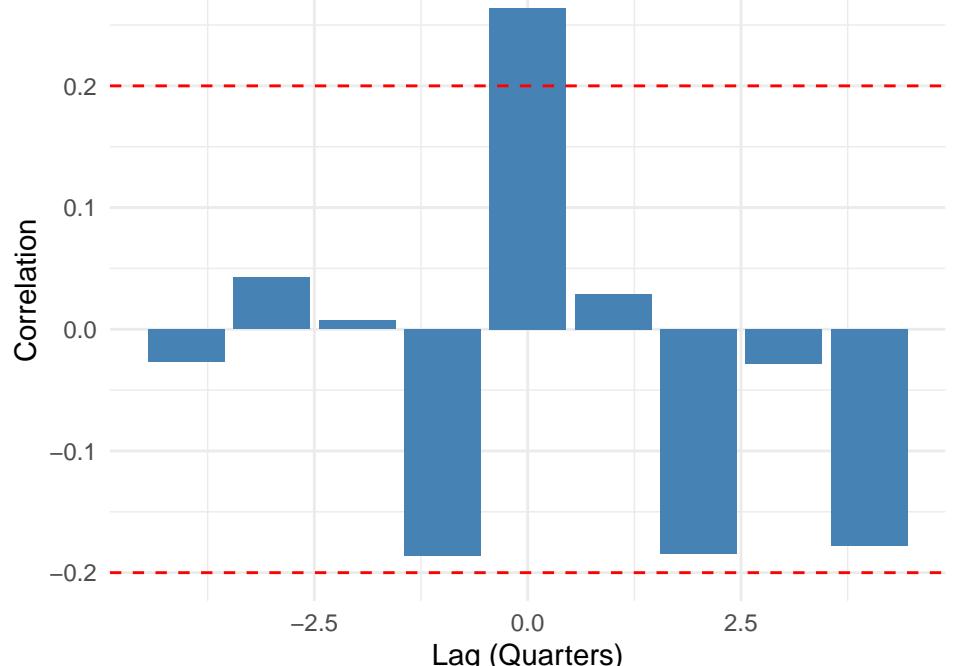


Scatter: DA3m_CONS_SENTI_US vs Target

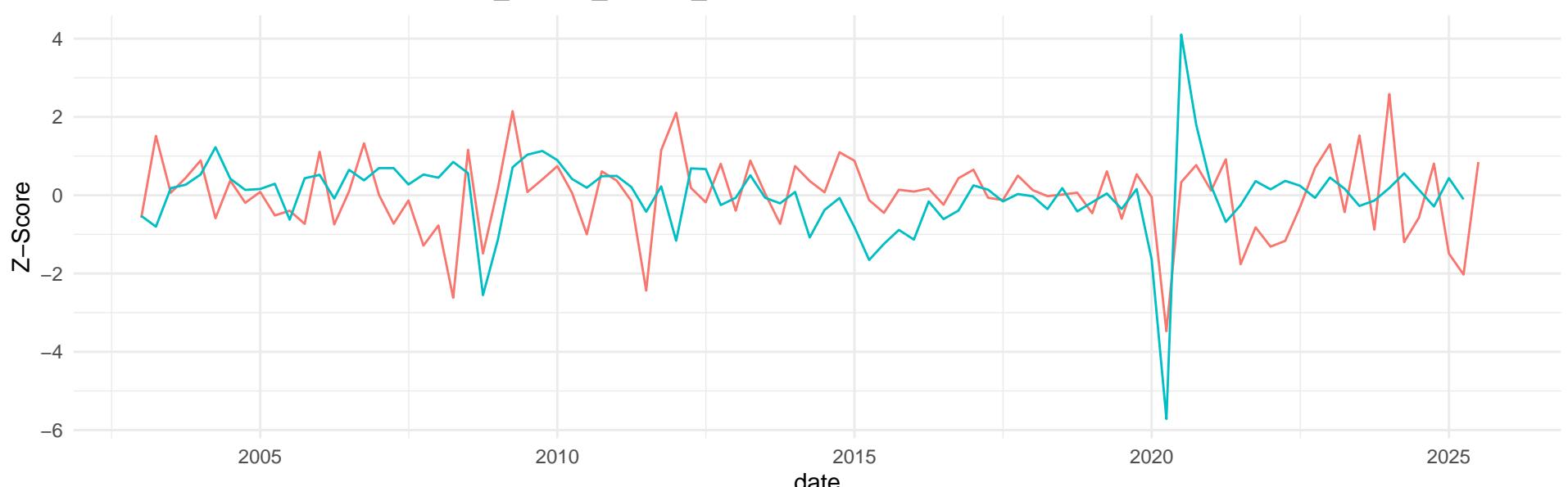
Corr: 0.26



Cross-Correlation (Quarterly Lags): DA3m_CONS_SE



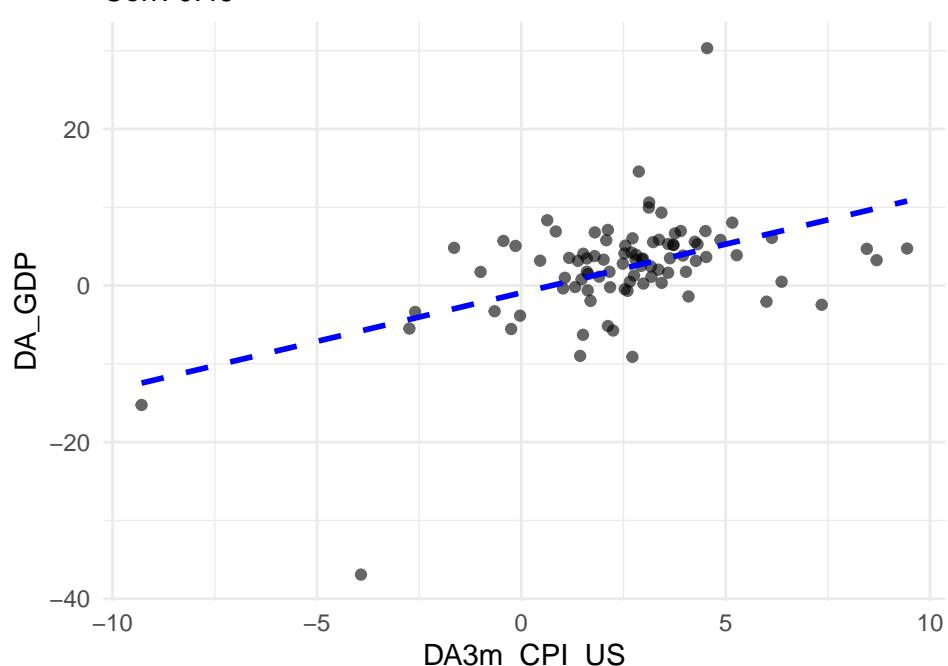
Standardized Time Series: DA3m_CONS_SENTI_US



series — ind_scaled — target_scaled

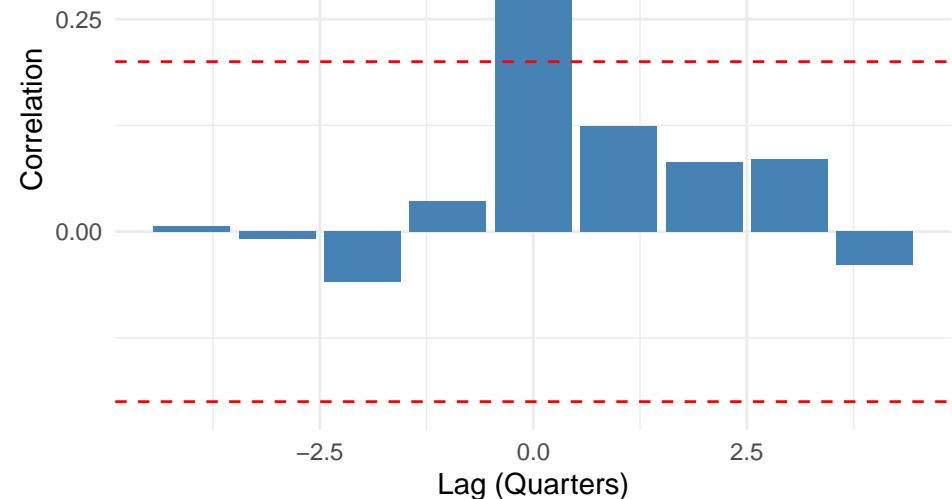
Scatter: DA3m_CPI_US vs Target

Corr: 0.46

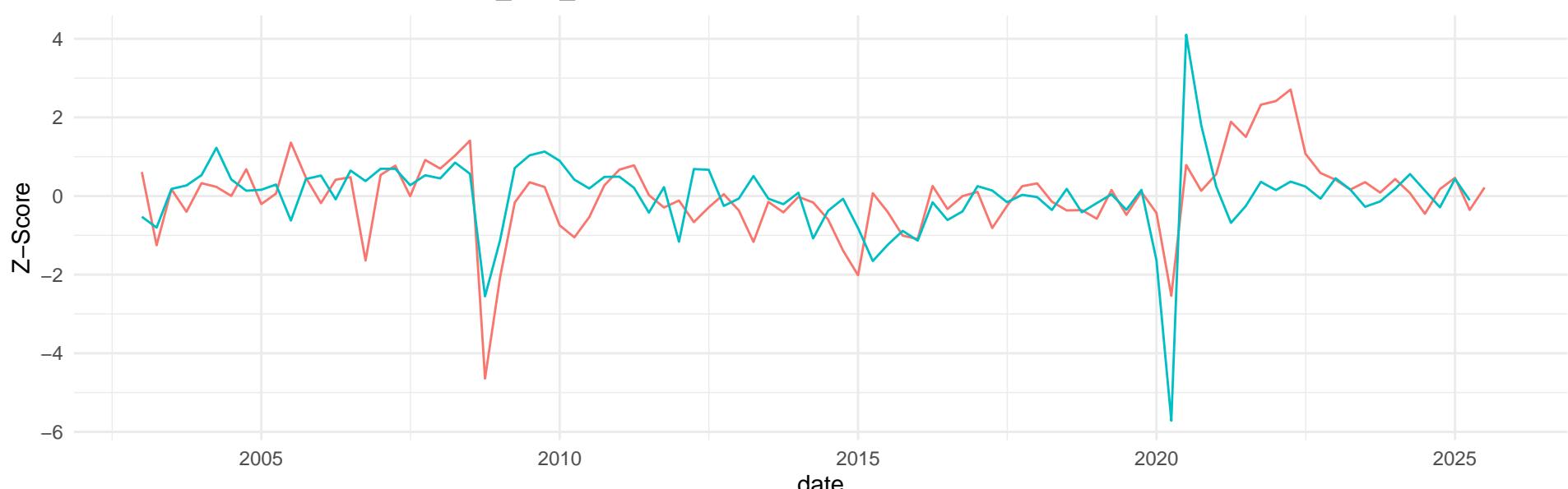


Cross-Correlation (Quarterly Lags): DA3m_CPI_US

Correlation



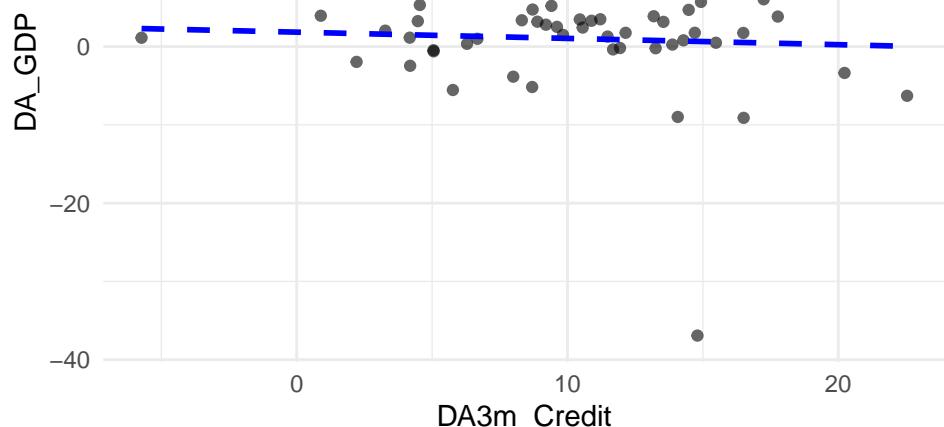
Standardized Time Series: DA3m_CPI_US



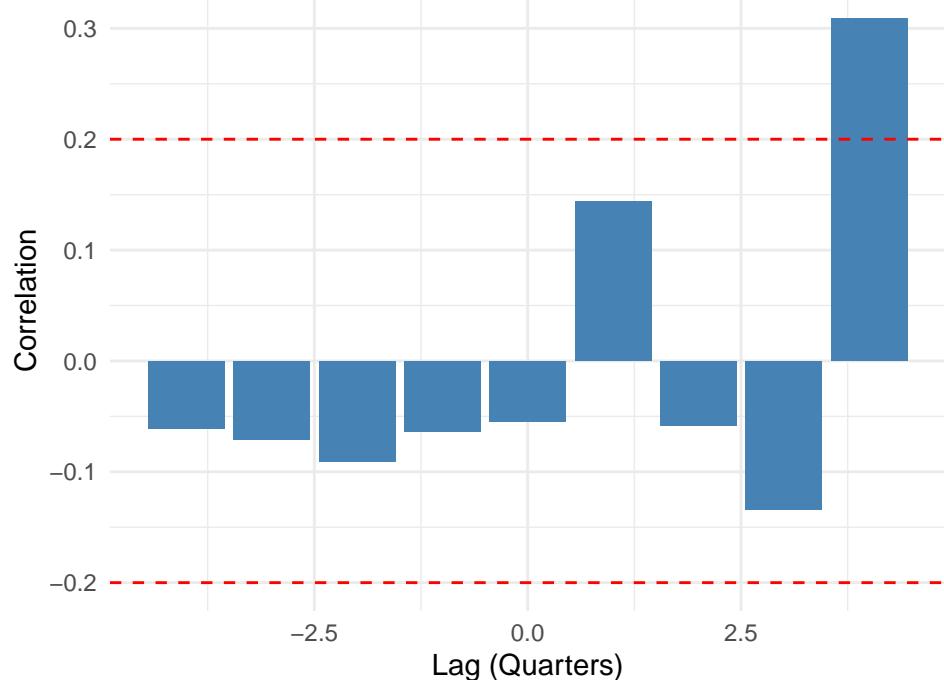
series — ind_scaled — target_scaled

Scatter: DA3m_Credit vs Target

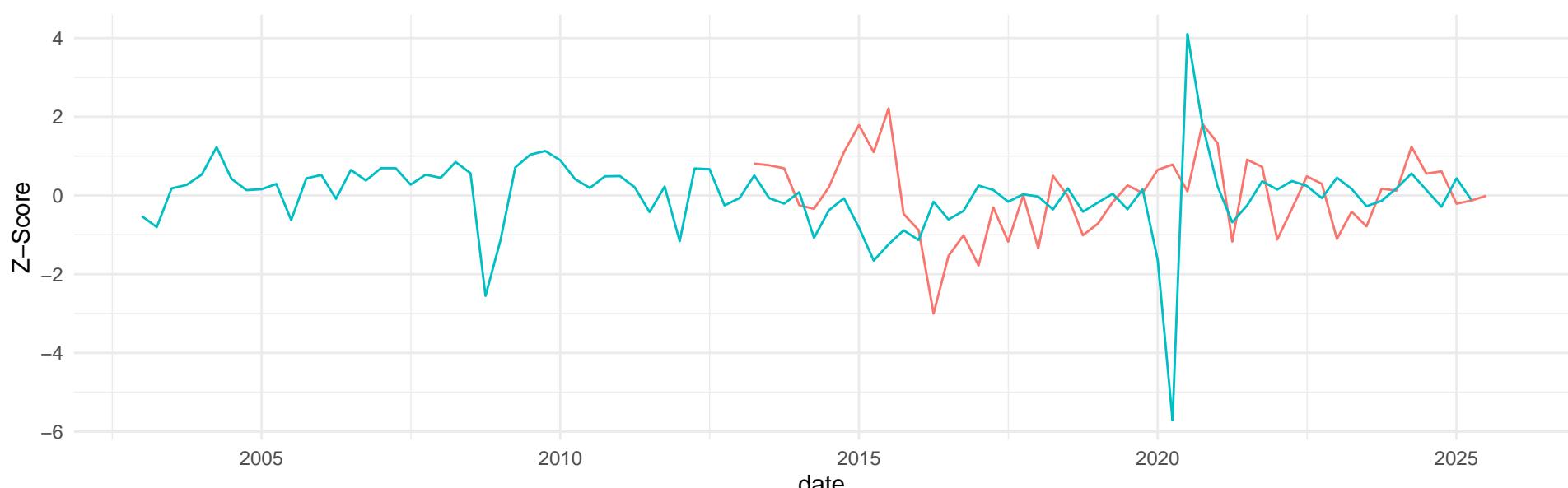
Corr: -0.05



Cross-Correlation (Quarterly Lags): DA3m_Credit



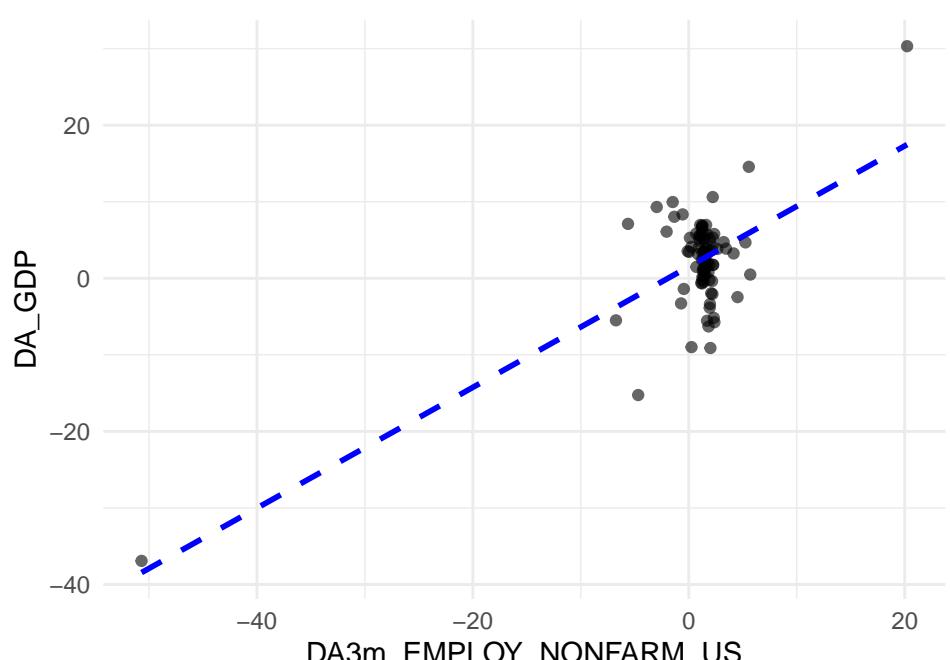
Standardized Time Series: DA3m_Credit



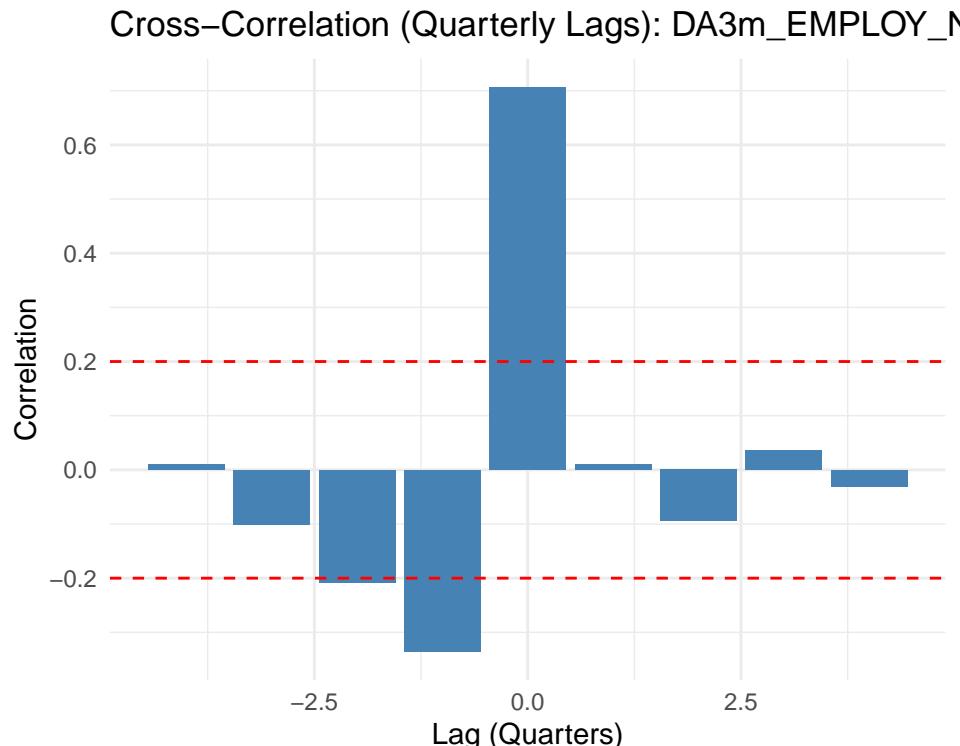
series — ind_scaled — target_scaled

Scatter: DA3m_EMPLOY_NONFARM_US vs Target

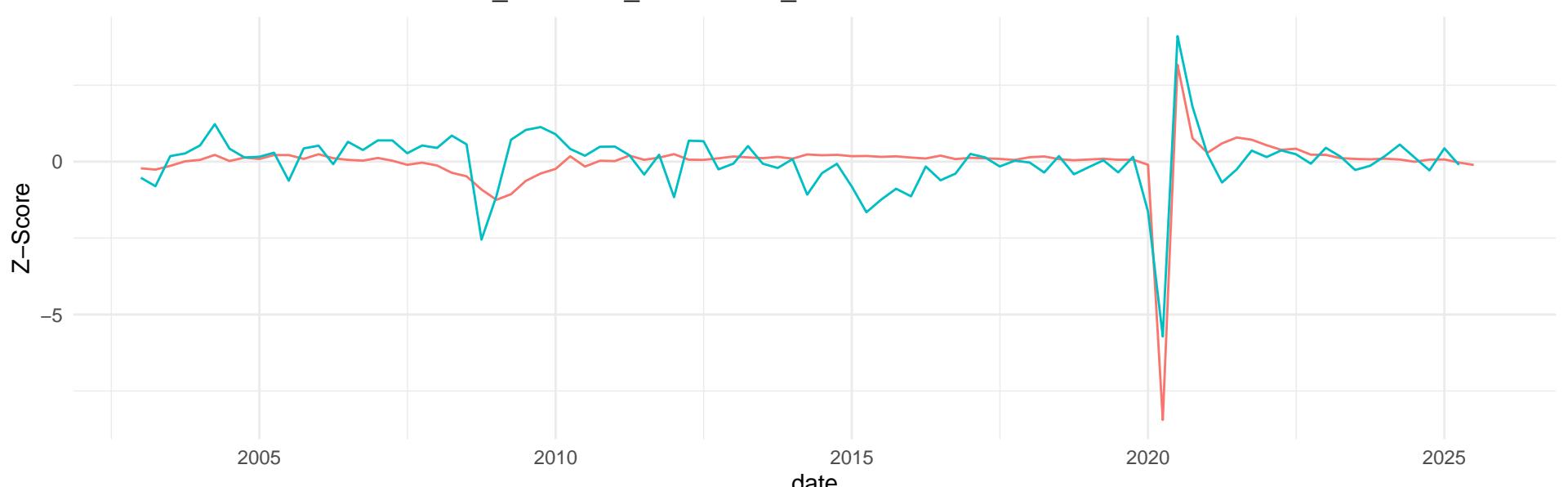
Corr: 0.71



Cross-Correlation (Quarterly Lags): DA3m_EMPLOY_N



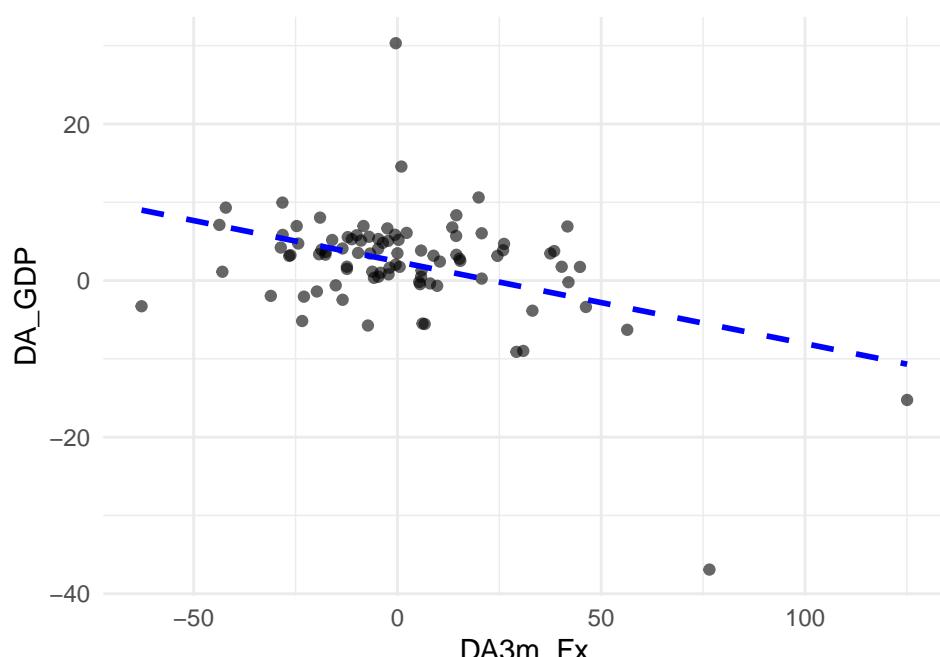
Standardized Time Series: DA3m_EMPLOY_NONFARM_US



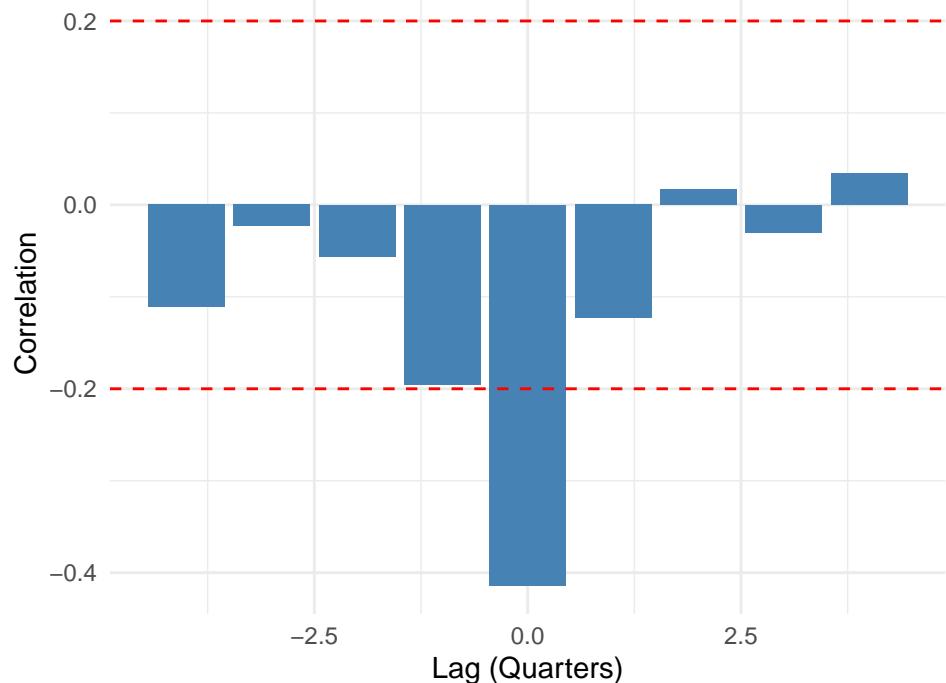
series — ind_scaled — target_scaled

Scatter: DA3m_Fx vs Target

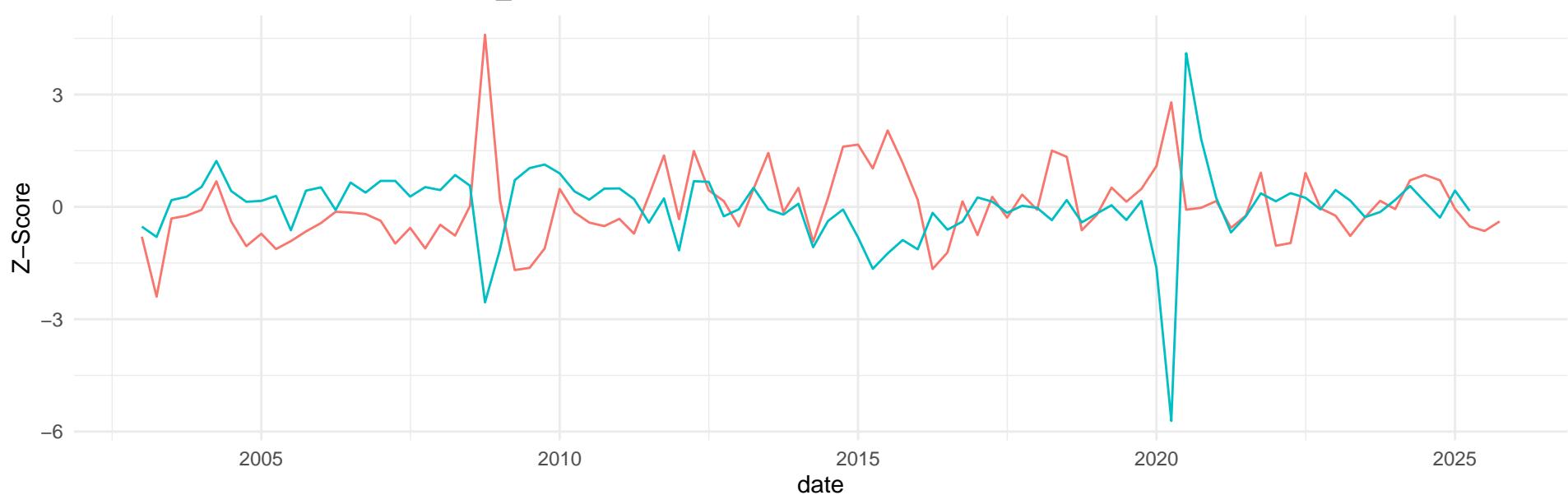
Corr: -0.41



Cross-Correlation (Quarterly Lags): DA3m_Fx



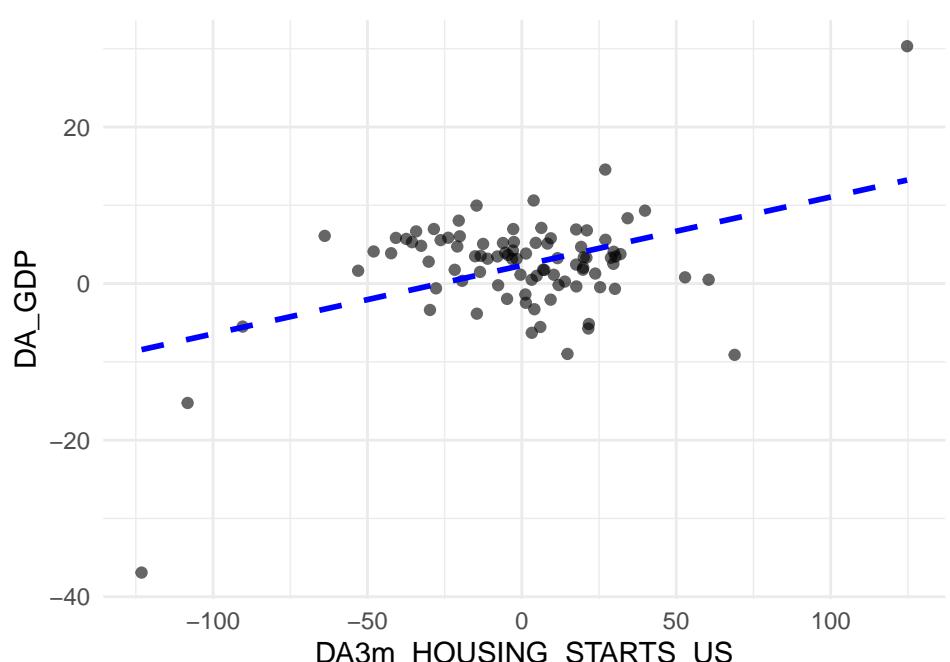
Standardized Time Series: DA3m_Fx



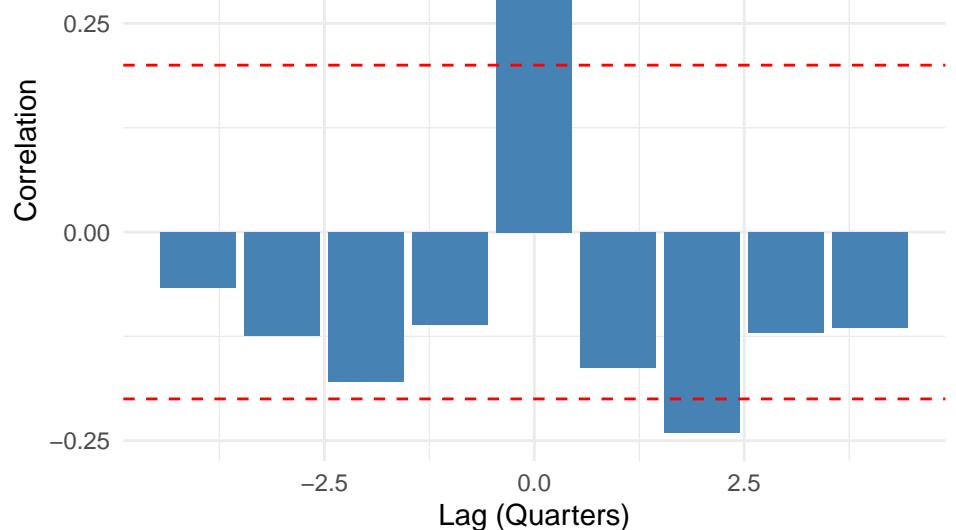
series — ind_scaled — target_scaled

Scatter: DA3m_HOUSING_STARTS_US vs Target

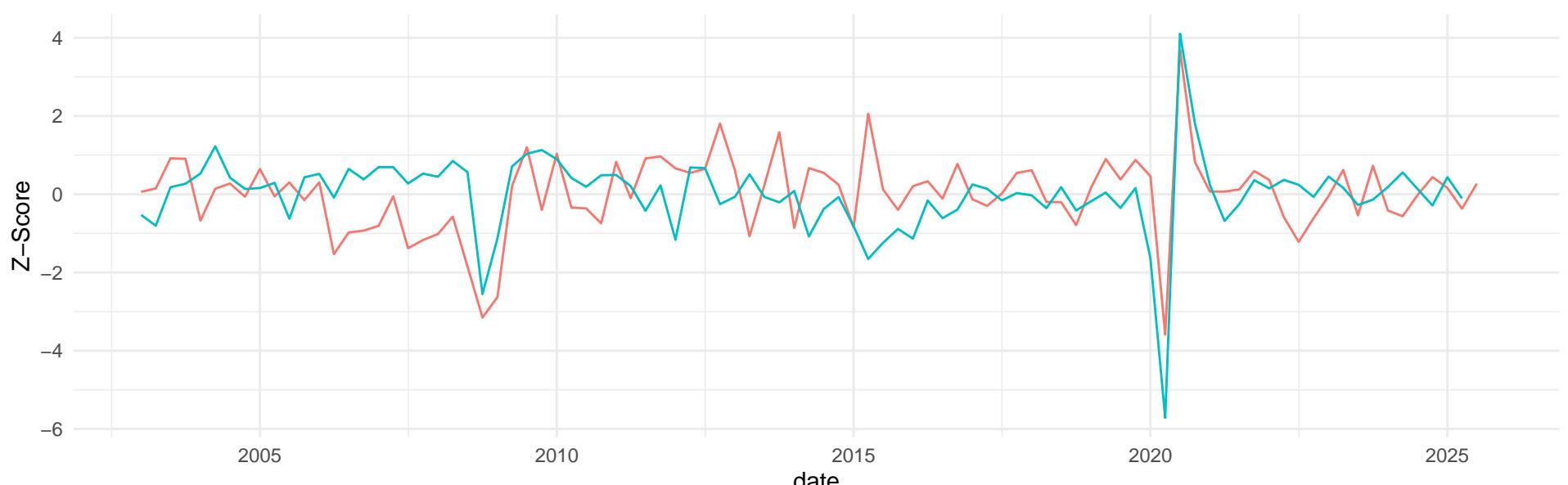
Corr: 0.44



Cross-Correlation (Quarterly Lags): DA3m_HOUSING



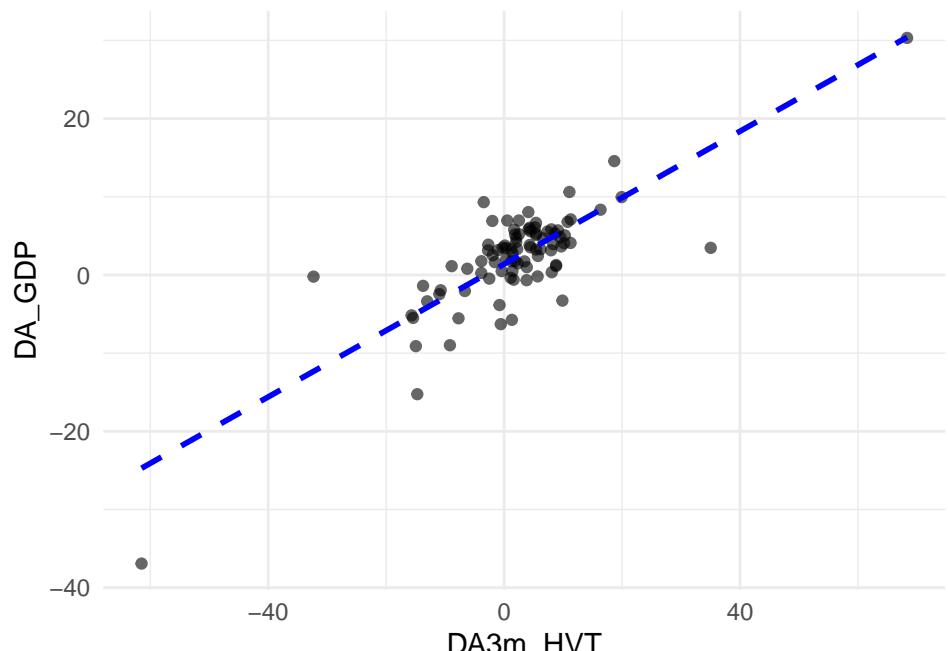
Standardized Time Series: DA3m_HOUSING_STARTS_US



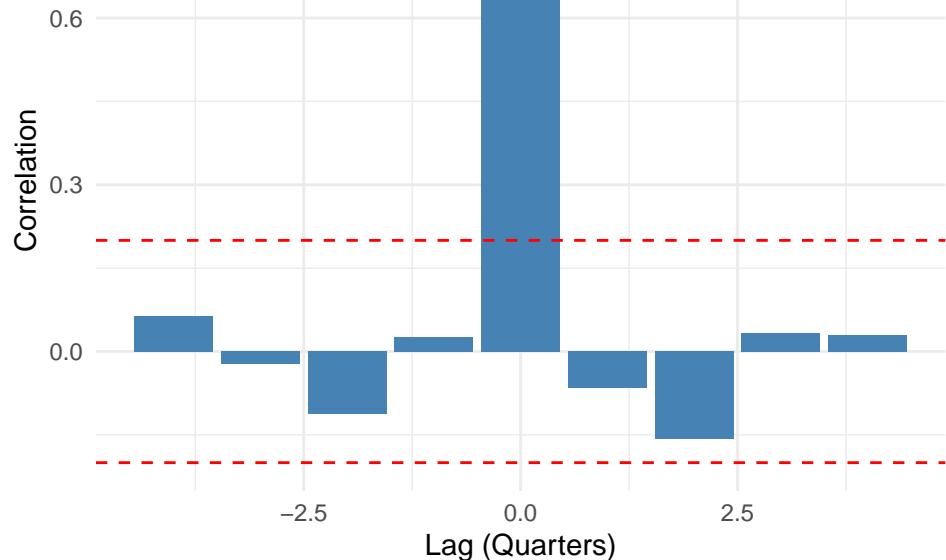
series — ind_scaled — target_scaled

Scatter: DA3m_HVT vs Target

Corr: 0.82



Cross-Correlation (Quarterly Lags): DA3m_HVT



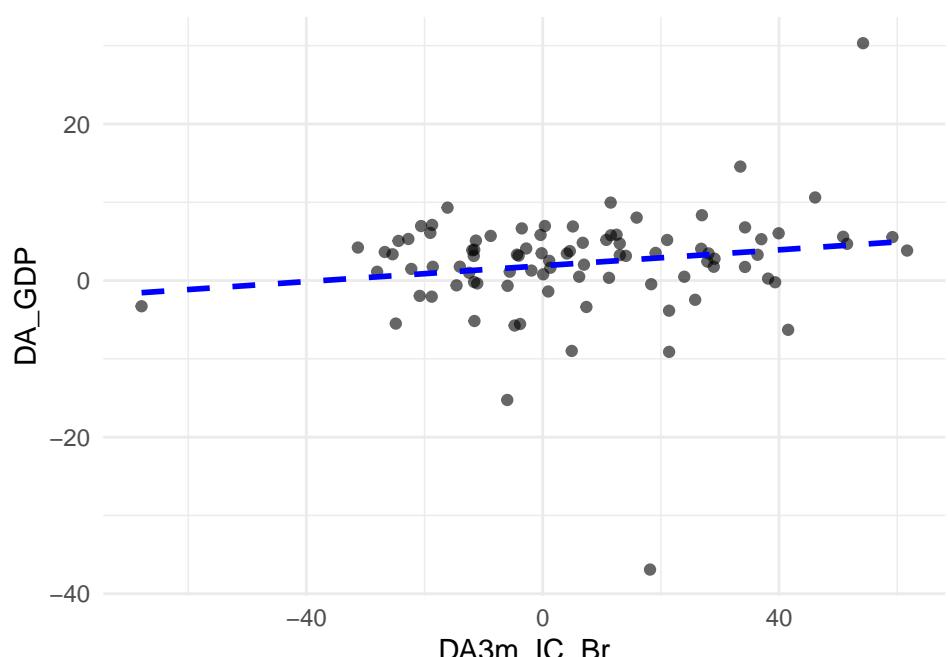
Standardized Time Series: DA3m_HVT



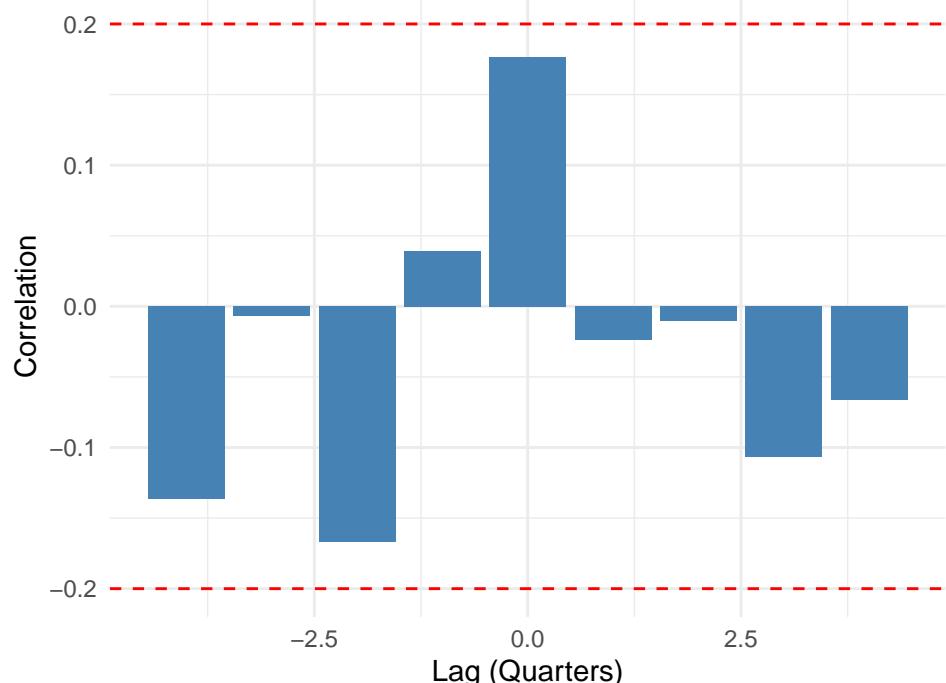
series — ind_scaled — target_scaled

Scatter: DA3m_IC_Br vs Target

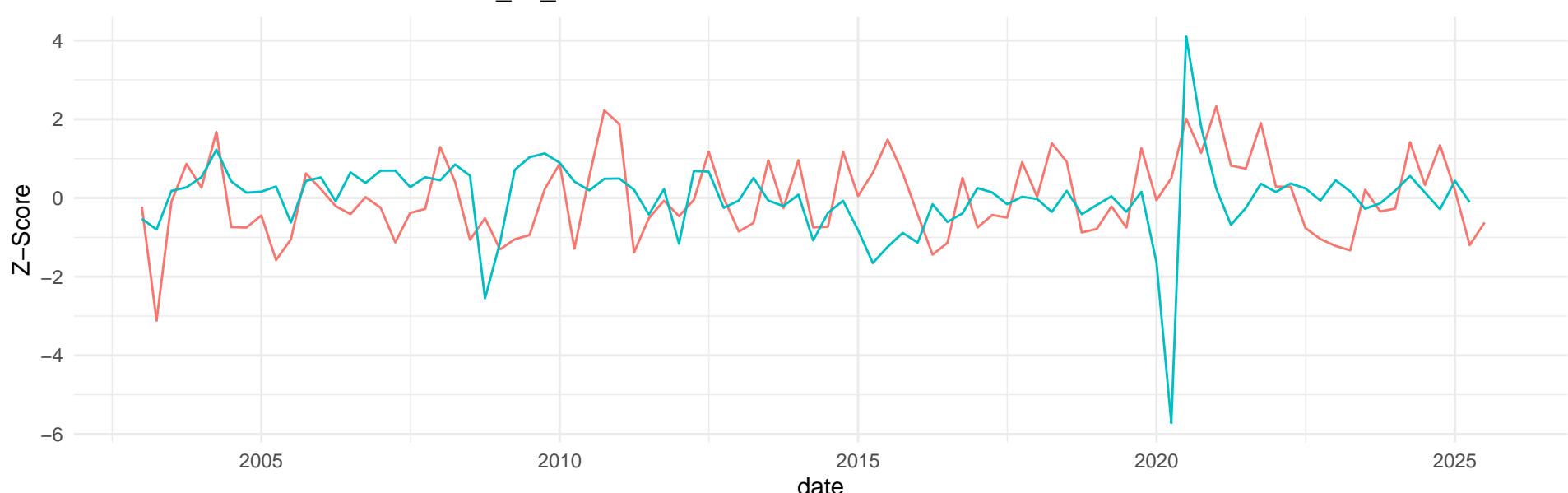
Corr: 0.18



Cross-Correlation (Quarterly Lags): DA3m_IC_Br



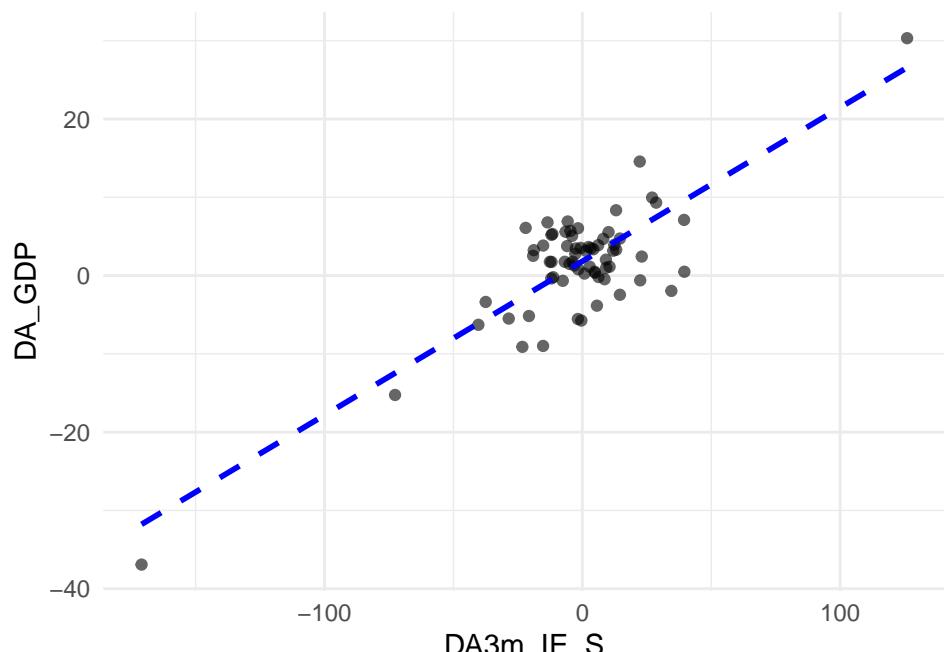
Standardized Time Series: DA3m_IC_Br



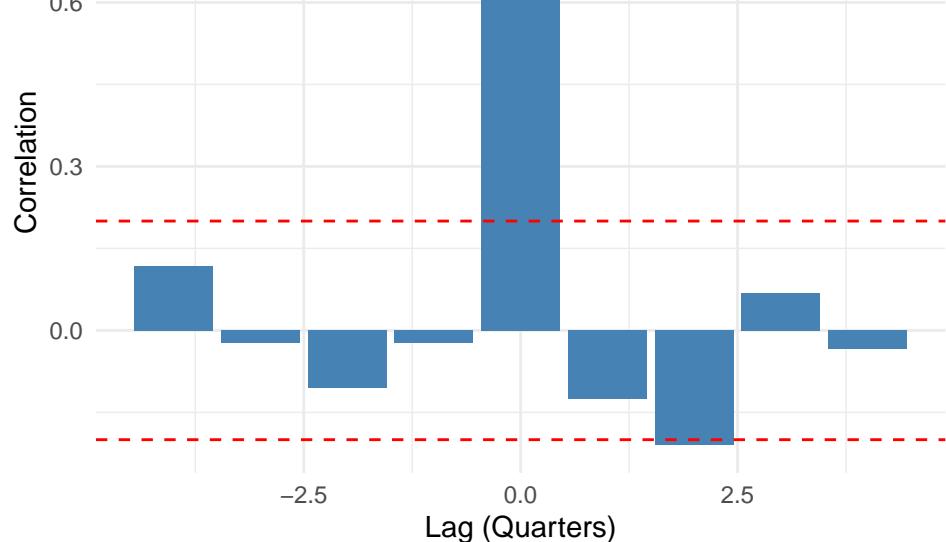
series — ind_scaled — target_scaled

Scatter: DA3m_IE_S vs Target

Corr: 0.82



Cross-Correlation (Quarterly Lags): DA3m_IE_S



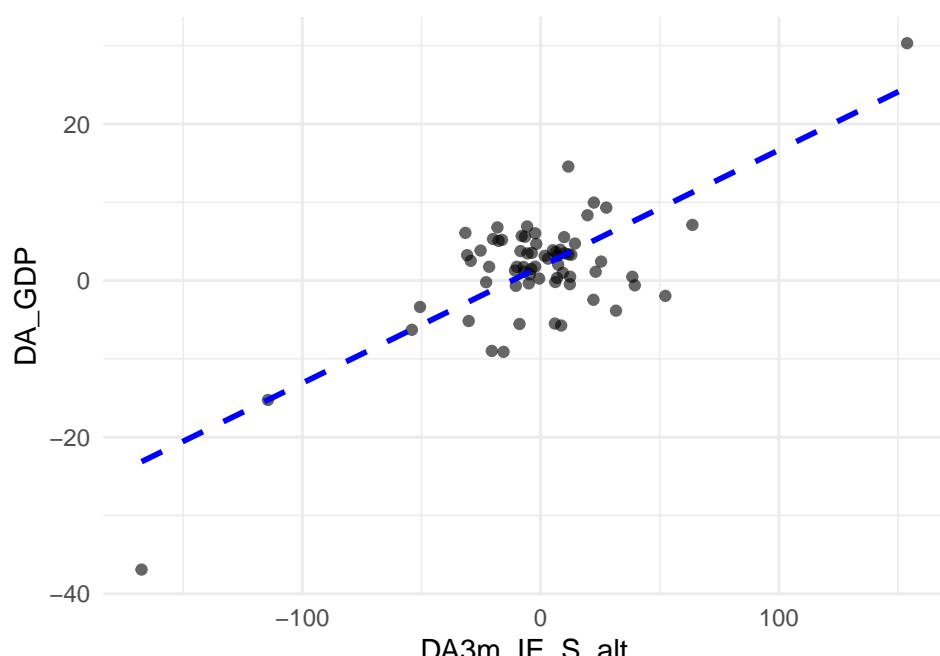
Standardized Time Series: DA3m_IE_S



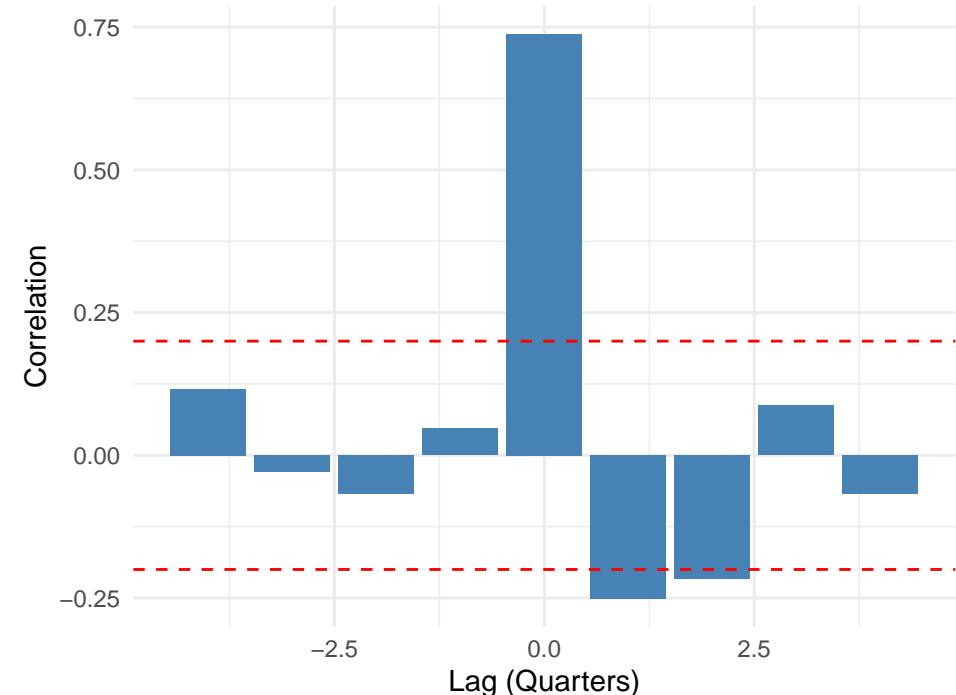
series — ind_scaled — target_scaled

Scatter: DA3m_IE_S_alt vs Target

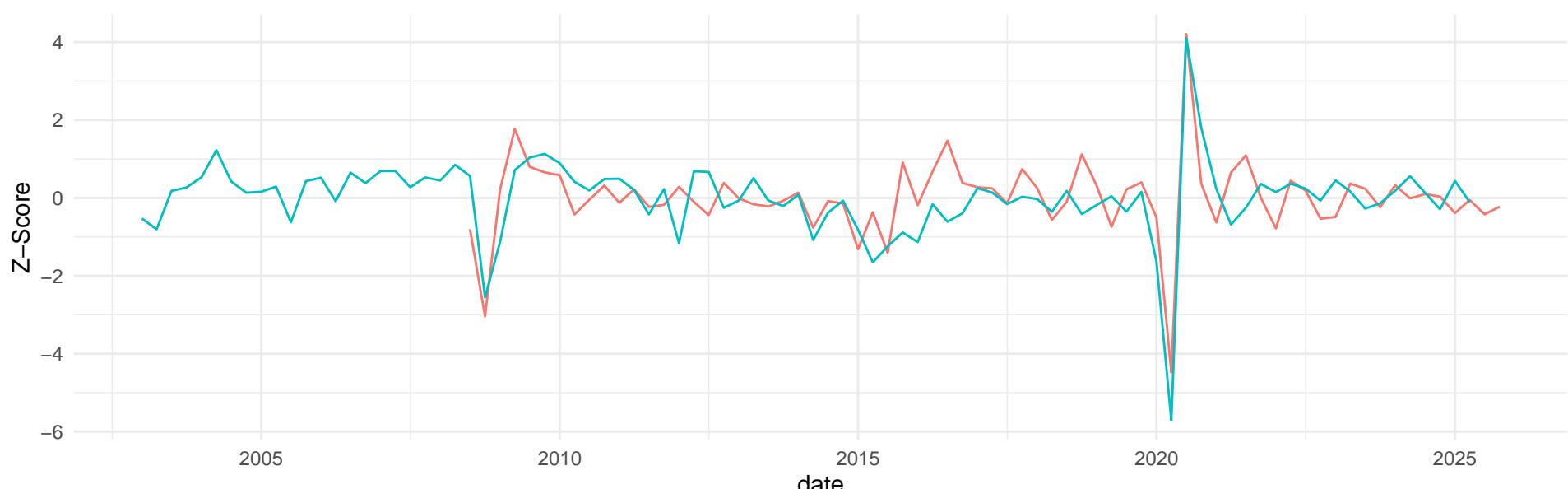
Corr: 0.74



Cross-Correlation (Quarterly Lags): DA3m_IE_S_alt



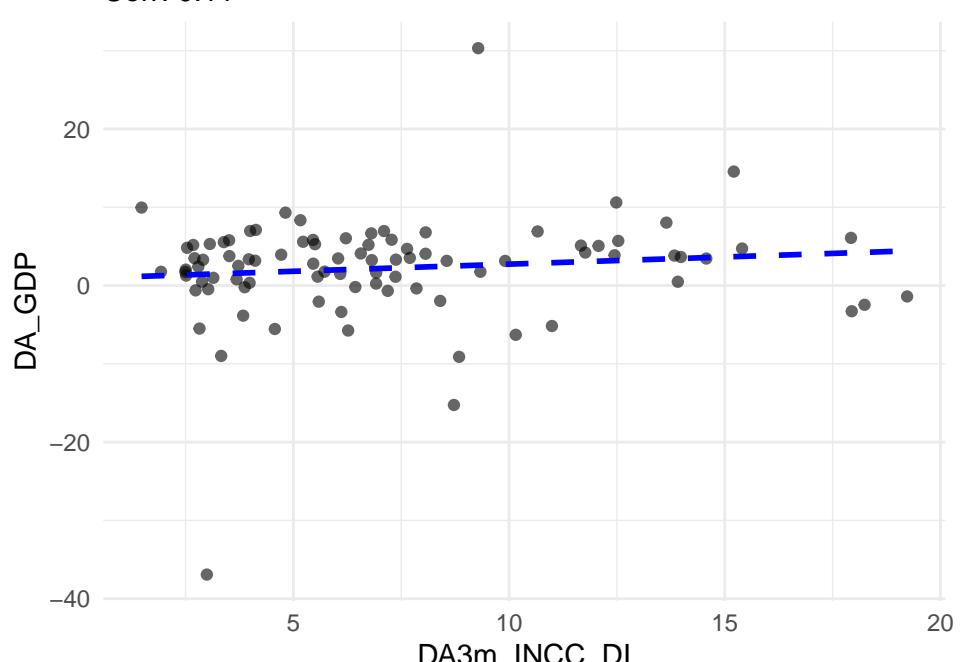
Standardized Time Series: DA3m_IE_S_alt



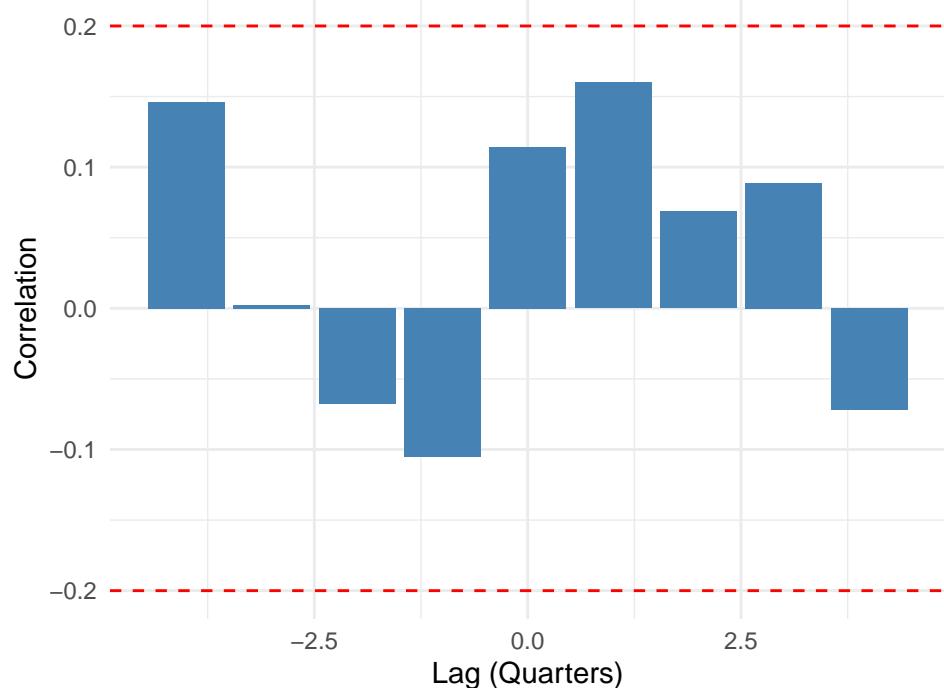
series — ind_scaled — target_scaled

Scatter: DA3m_INCC_DI vs Target

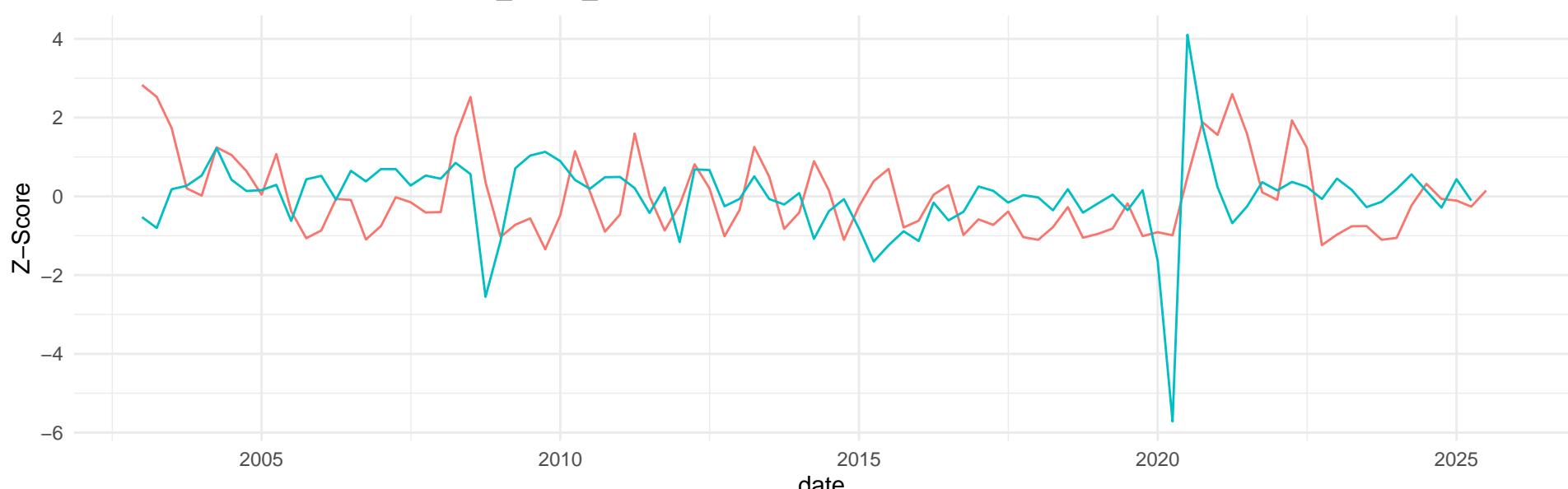
Corr: 0.11



Cross-Correlation (Quarterly Lags): DA3m_INCC_DI



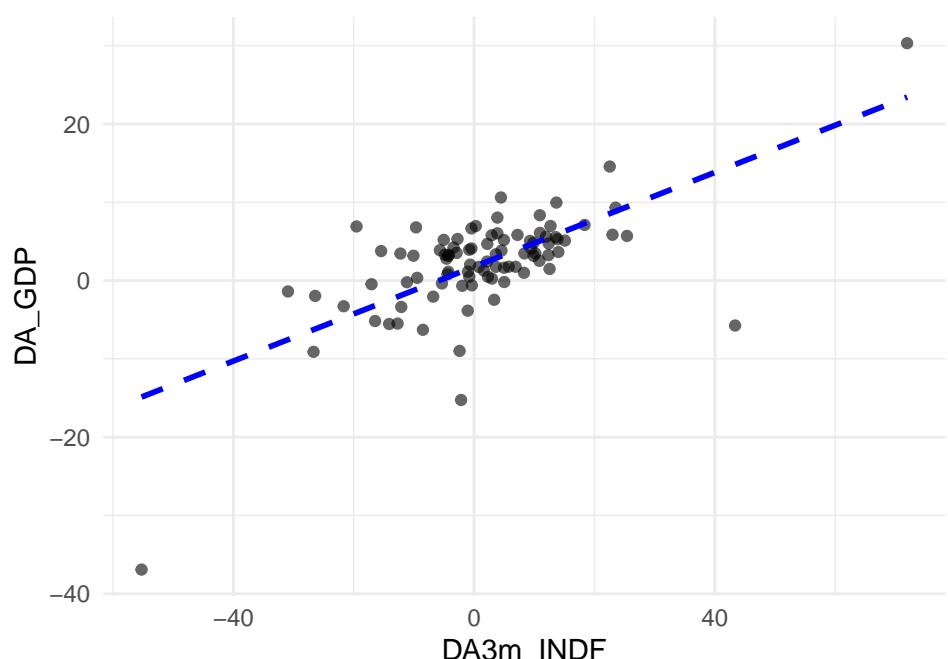
Standardized Time Series: DA3m_INCC_DI



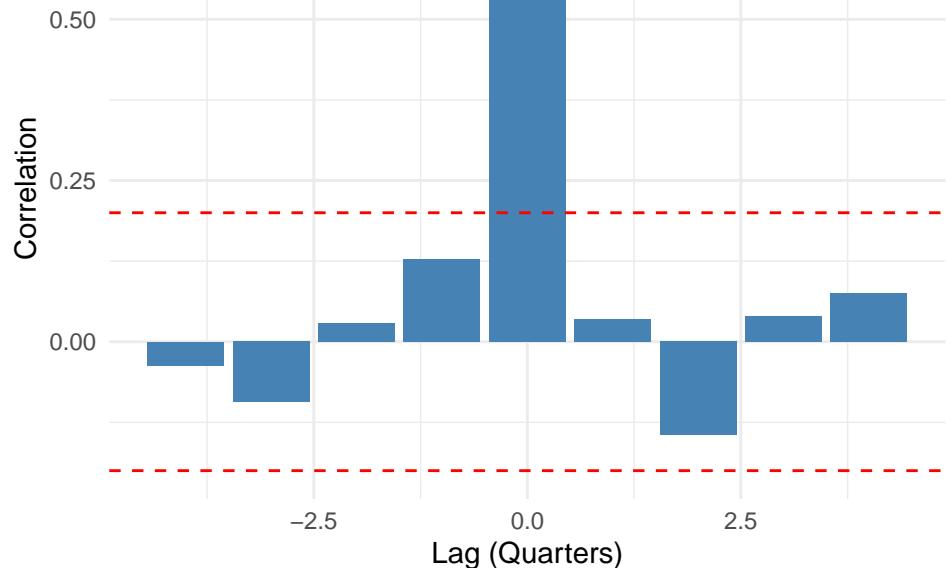
series — ind_scaled — target_scaled

Scatter: DA3m_INDf vs Target

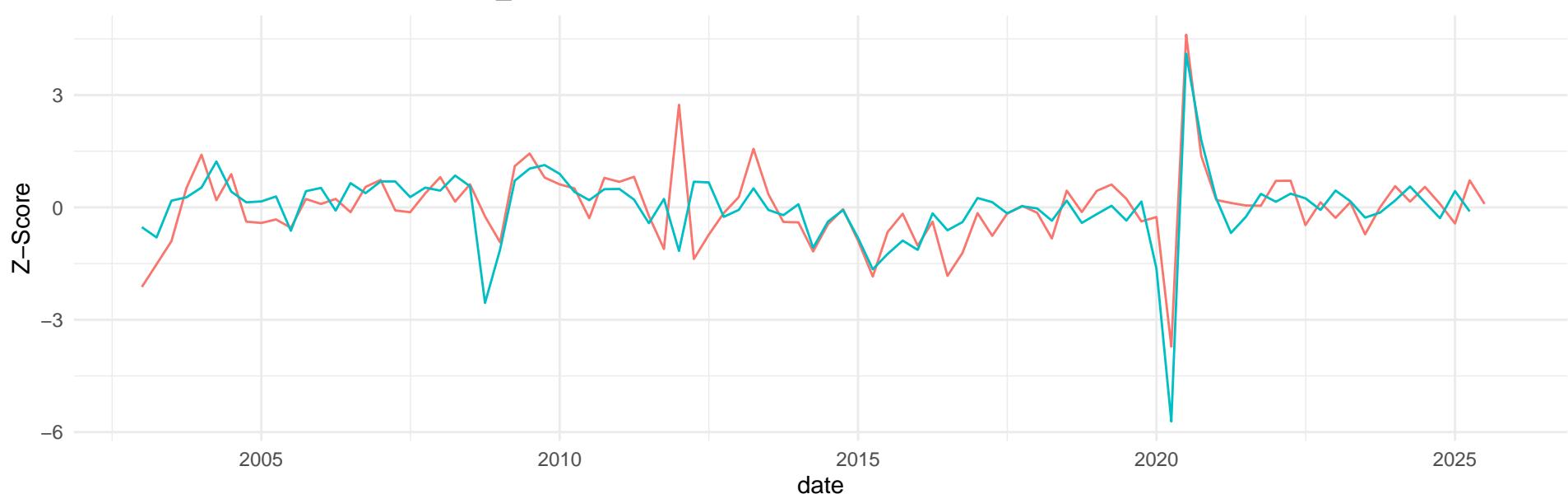
Corr: 0.68



Cross-Correlation (Quarterly Lags): DA3m_INDf



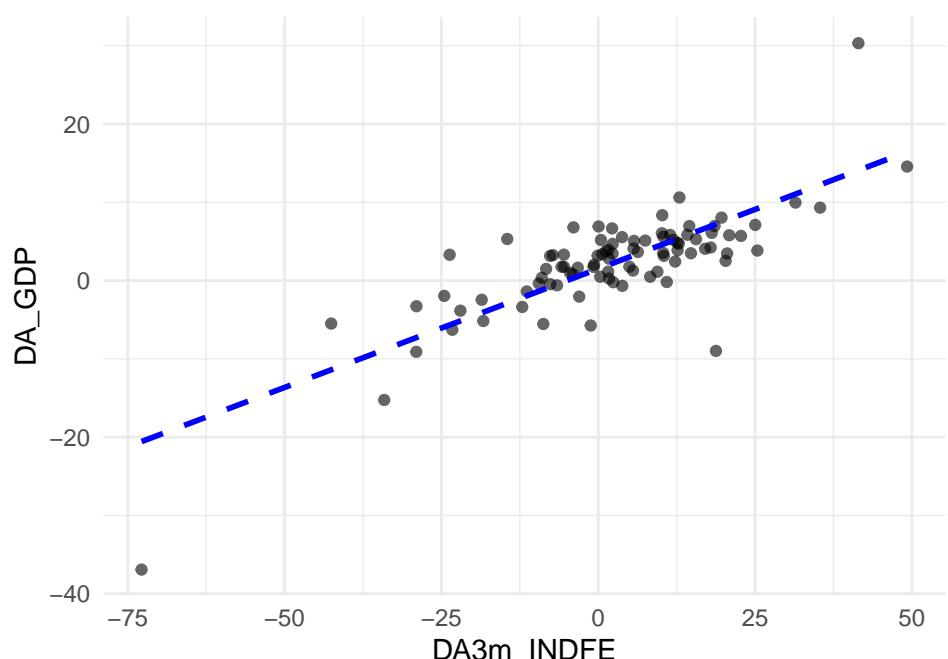
Standardized Time Series: DA3m_INDf



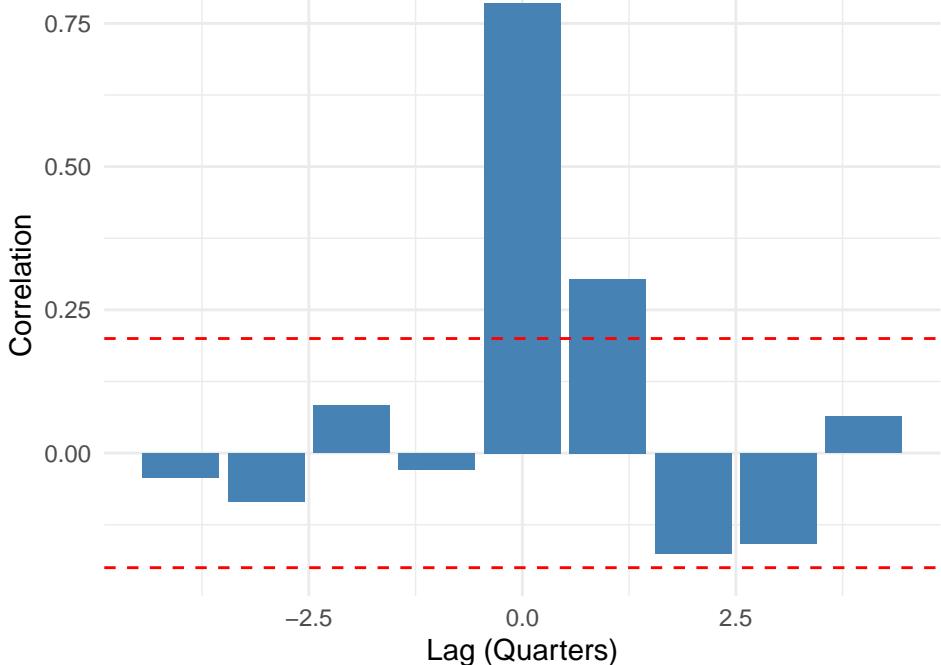
series — ind_scaled — target_scaled

Scatter: DA3m_INDDE vs Target

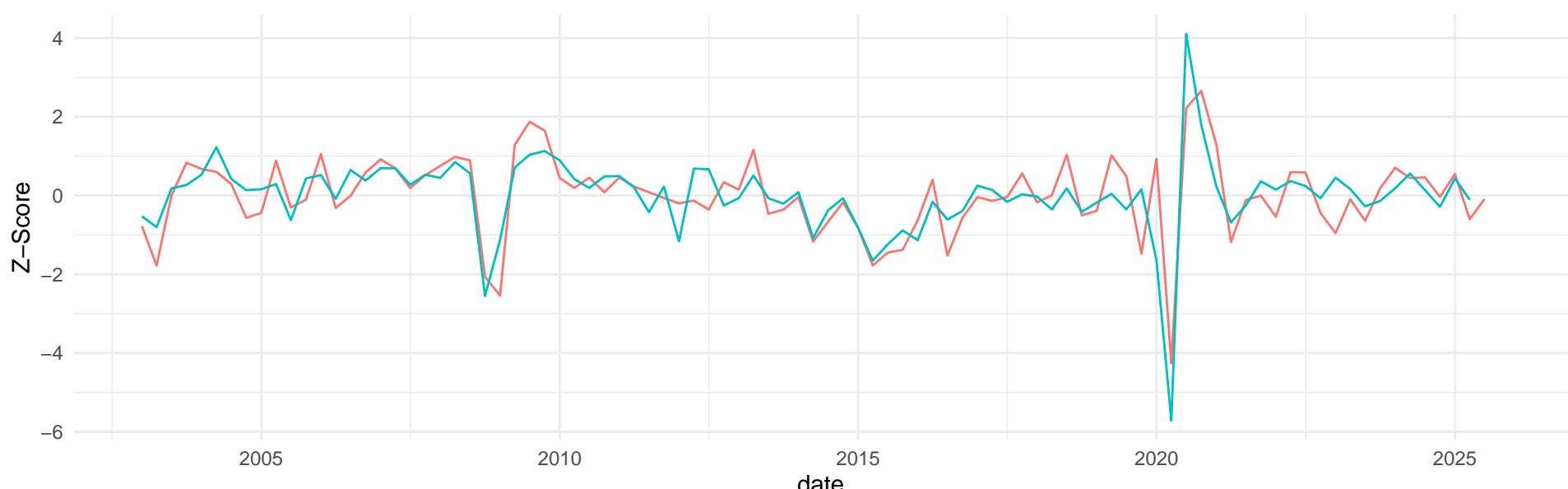
Corr: 0.79



Cross-Correlation (Quarterly Lags): DA3m_INDDE



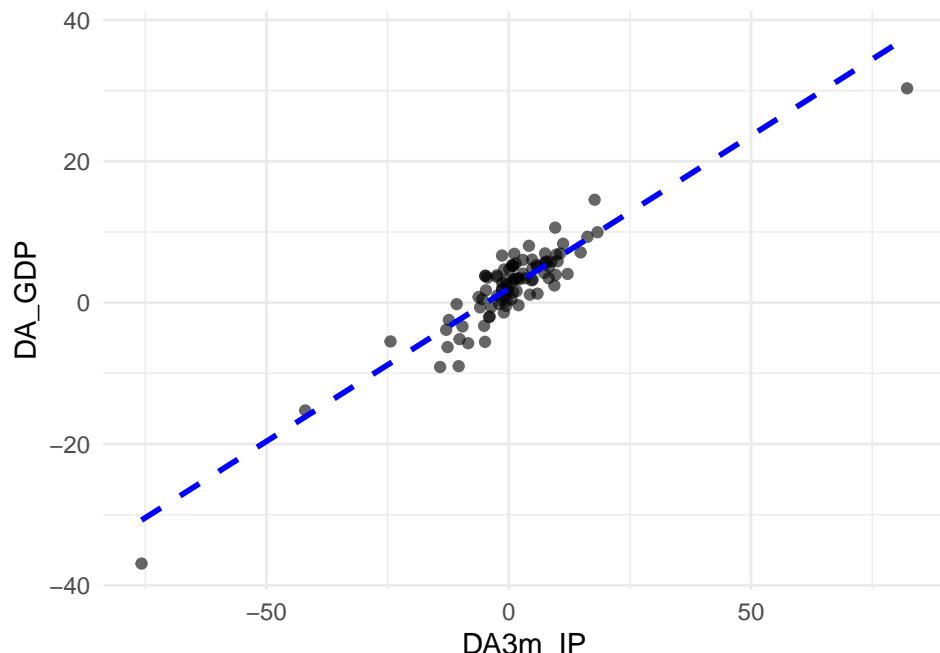
Standardized Time Series: DA3m_INDDE



series — ind_scaled — target_scaled

Scatter: DA3m_IP vs Target

Corr: 0.93



Cross-Correlation (Quarterly Lags): DA3m_IP

Correlation

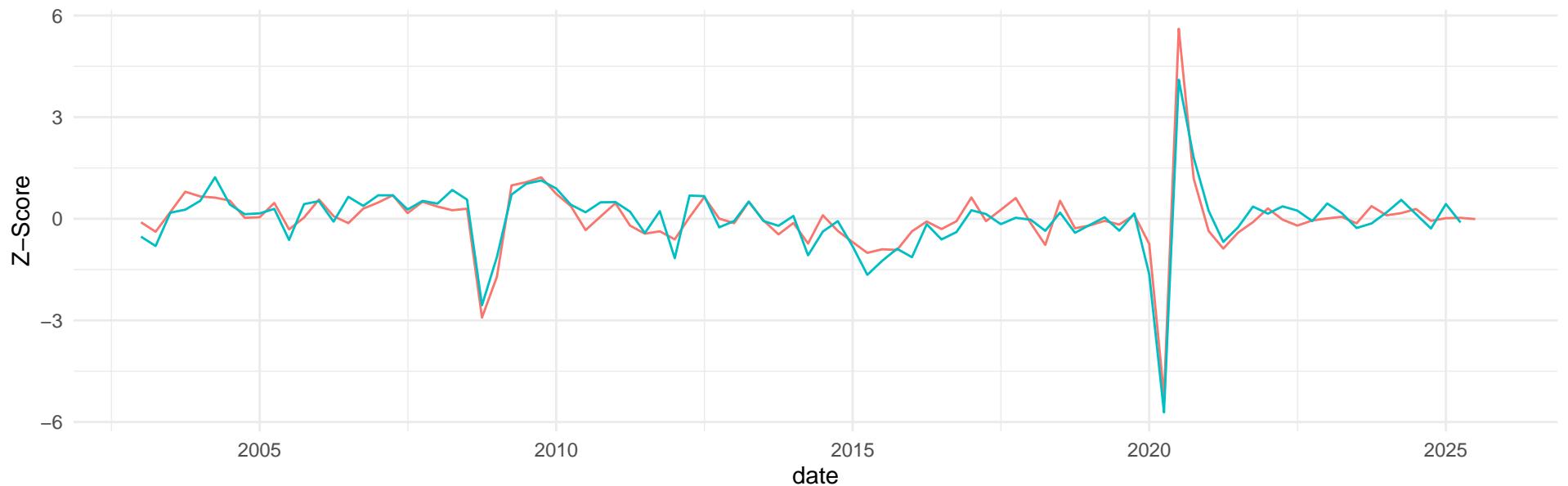
0.75
0.50
0.25
0.00
-0.25

-

Lag (Quarters)

-2.5 0.0 2.5

Standardized Time Series: DA3m_IP

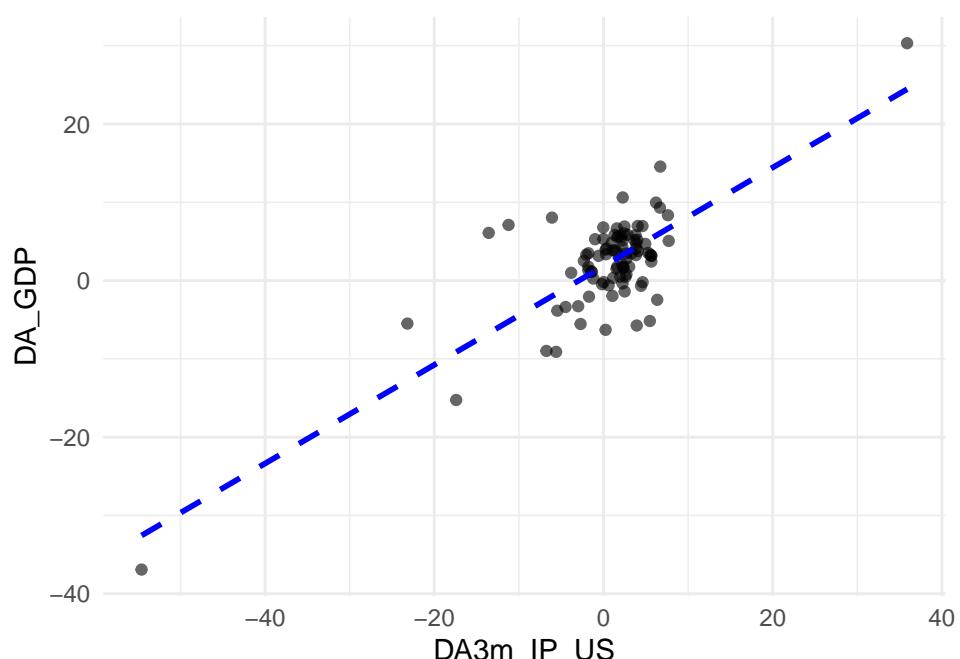


date

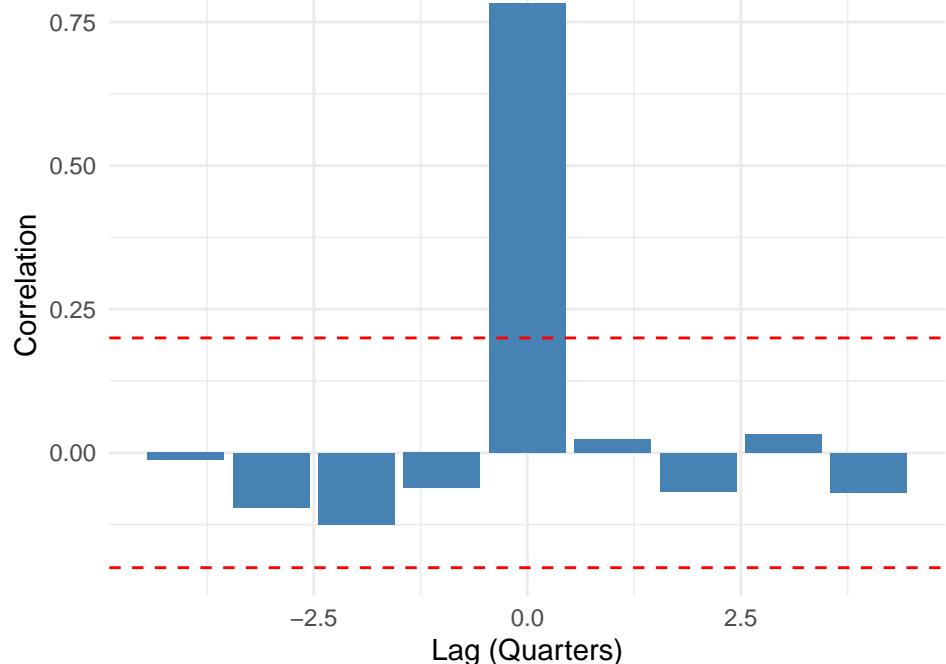
series — ind_scaled — target_scaled

Scatter: DA3m_IP_US vs Target

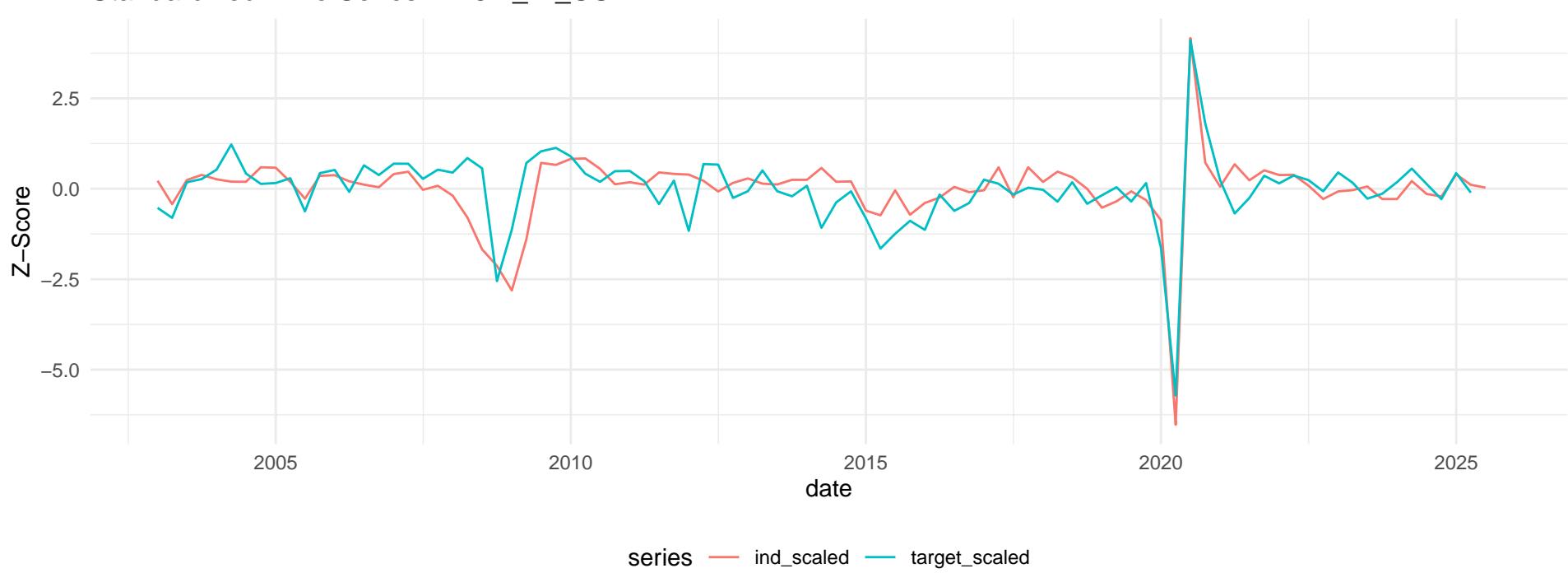
Corr: 0.78



Cross-Correlation (Quarterly Lags): DA3m_IP_US

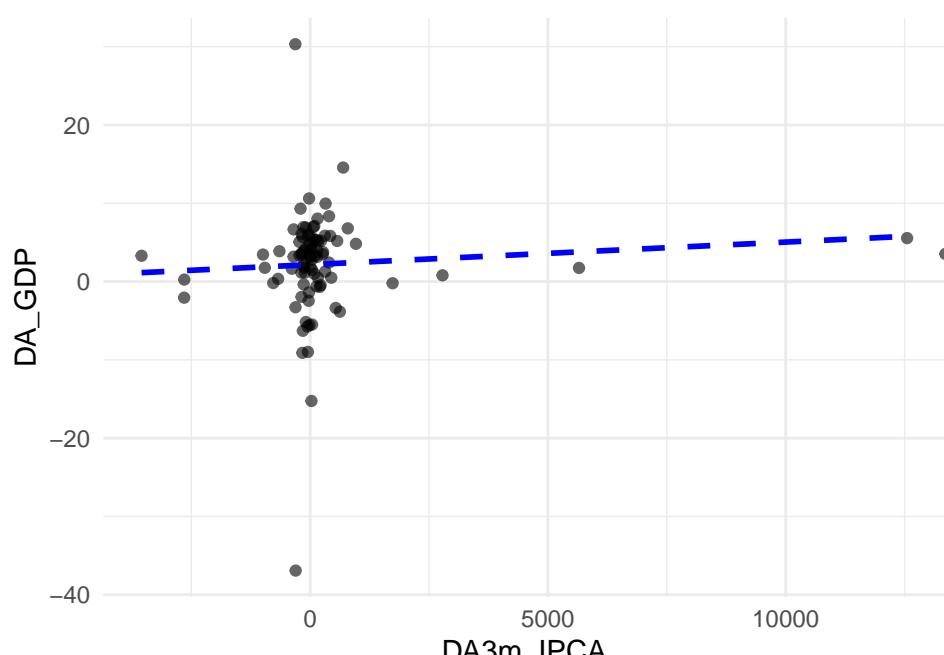


Standardized Time Series: DA3m_IP_US



Scatter: DA3m_IPCA vs Target

Corr: NaN



Cross-Correlation (Quarterly Lags): DA3m_IPCA



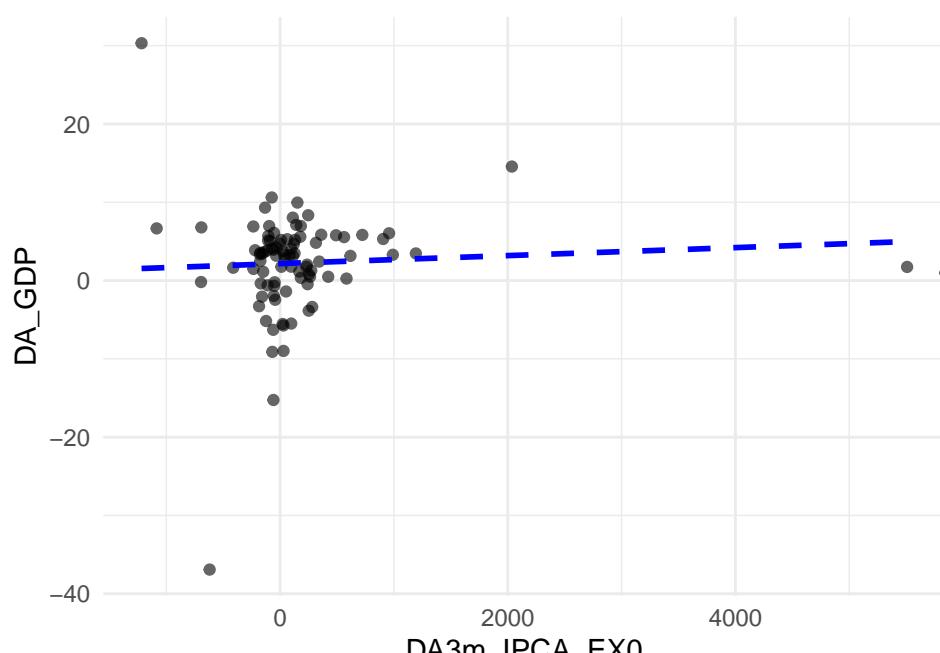
Standardized Time Series: DA3m_IPCA



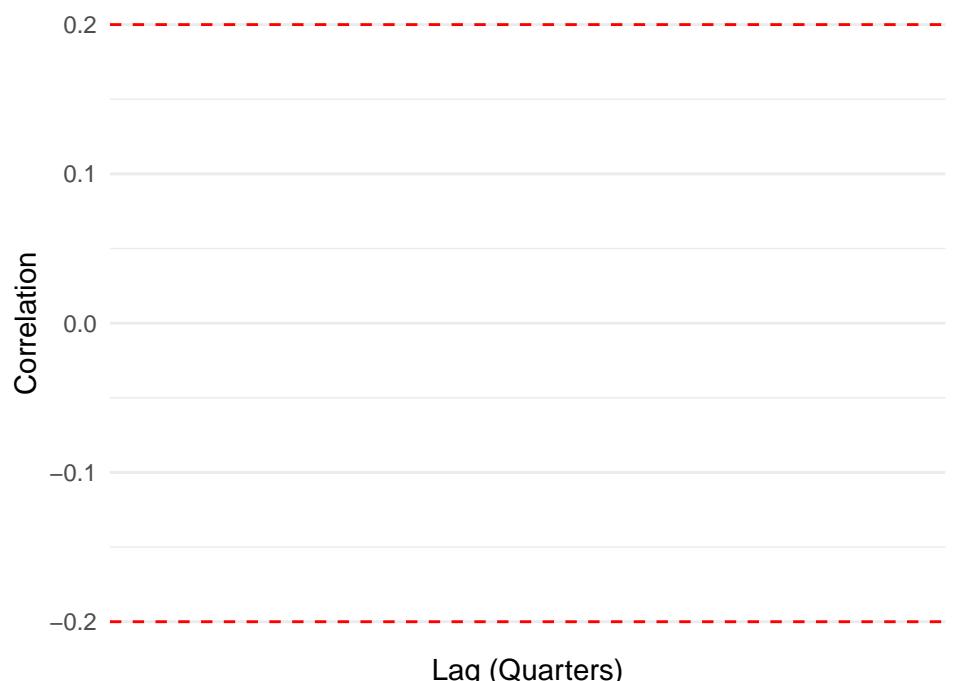
series — ind_scaled — target_scaled

Scatter: DA3m_IPCA_EX0 vs Target

Corr: NaN



Cross-Correlation (Quarterly Lags): DA3m_IPCA_EX0



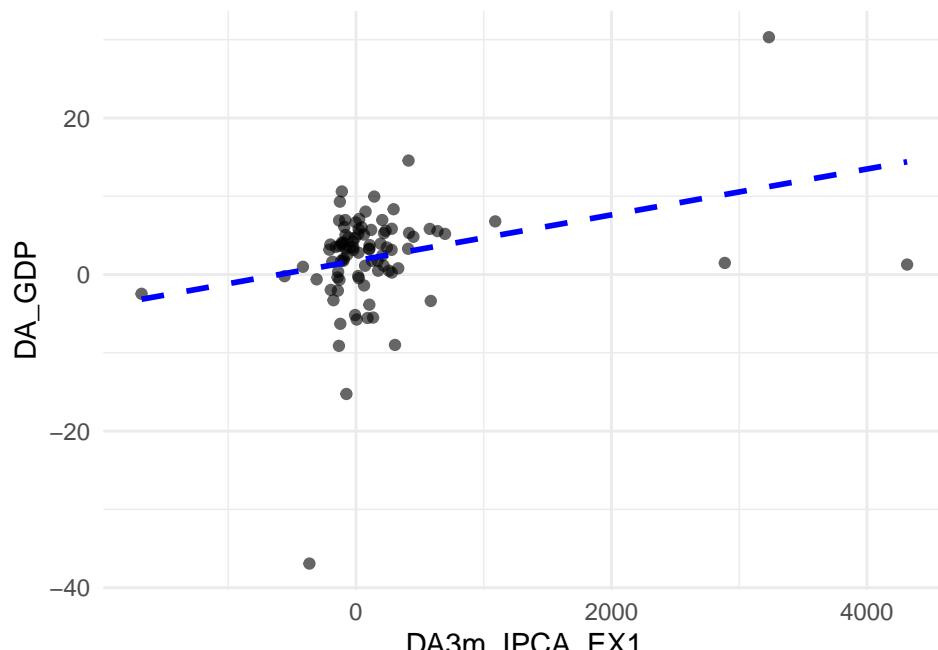
Standardized Time Series: DA3m_IPCA_EX0



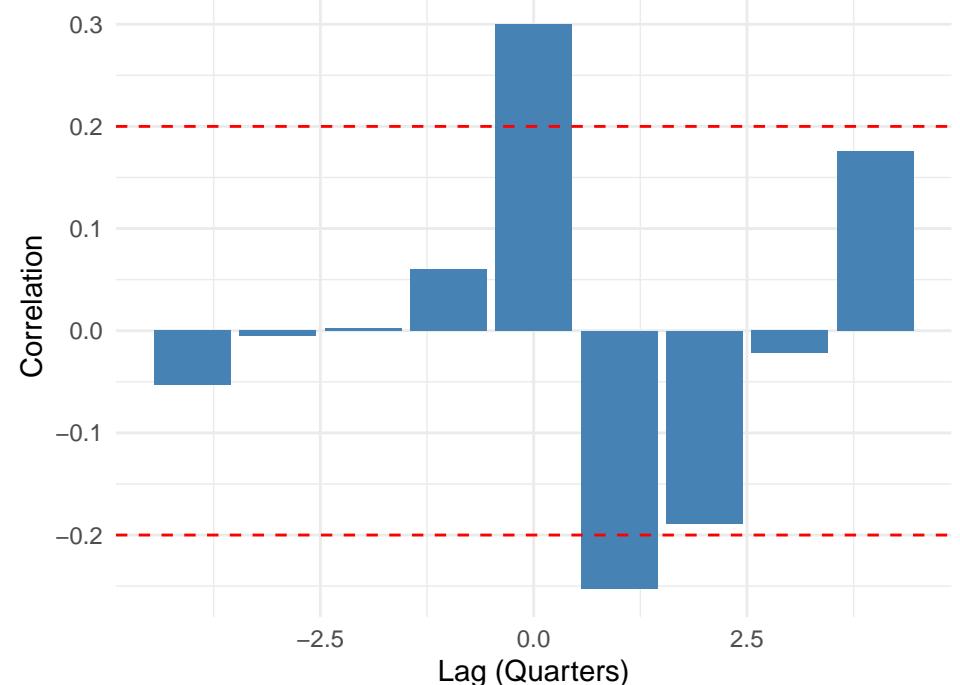
series — ind_scaled — target_scaled

Scatter: DA3m_IPCA_EX1 vs Target

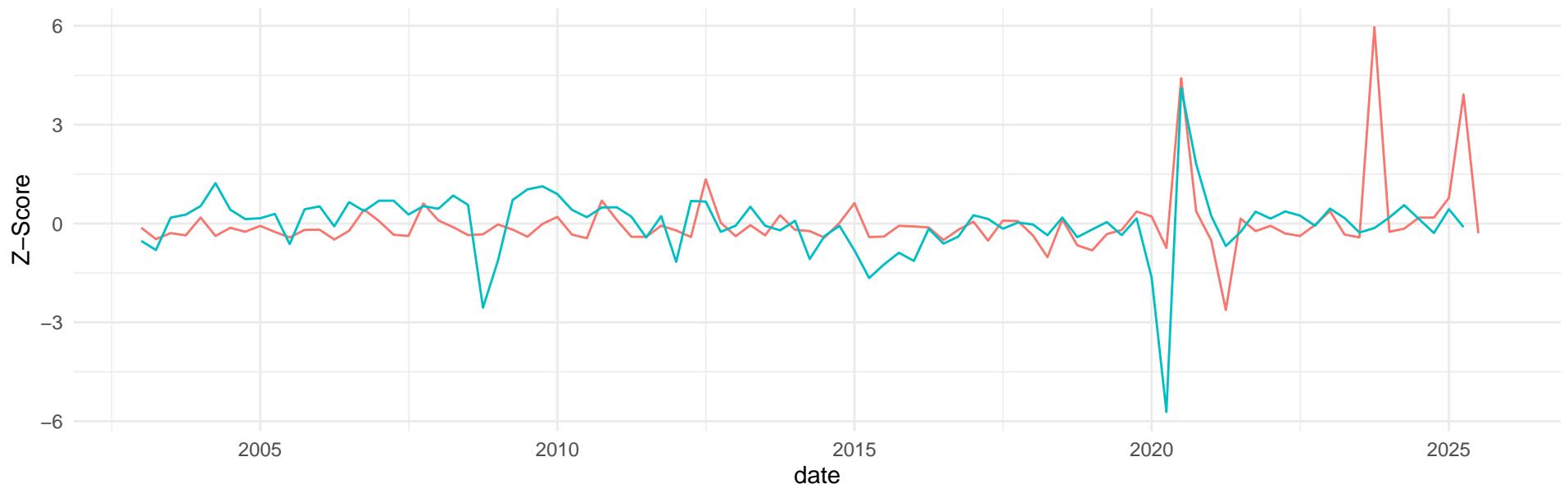
Corr: 0.3



Cross-Correlation (Quarterly Lags): DA3m_IPCA_EX1



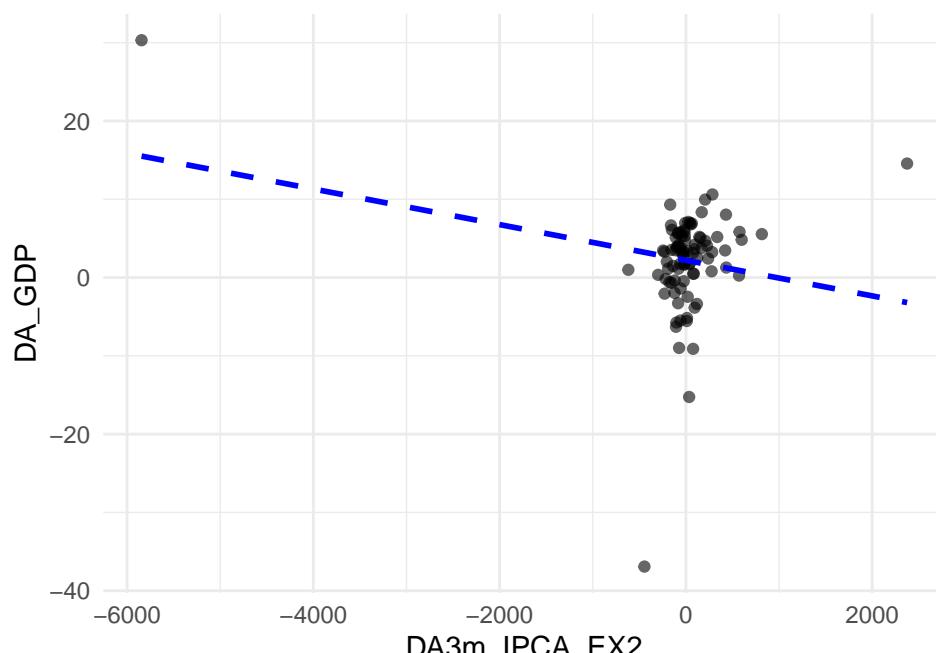
Standardized Time Series: DA3m_IPCA_EX1



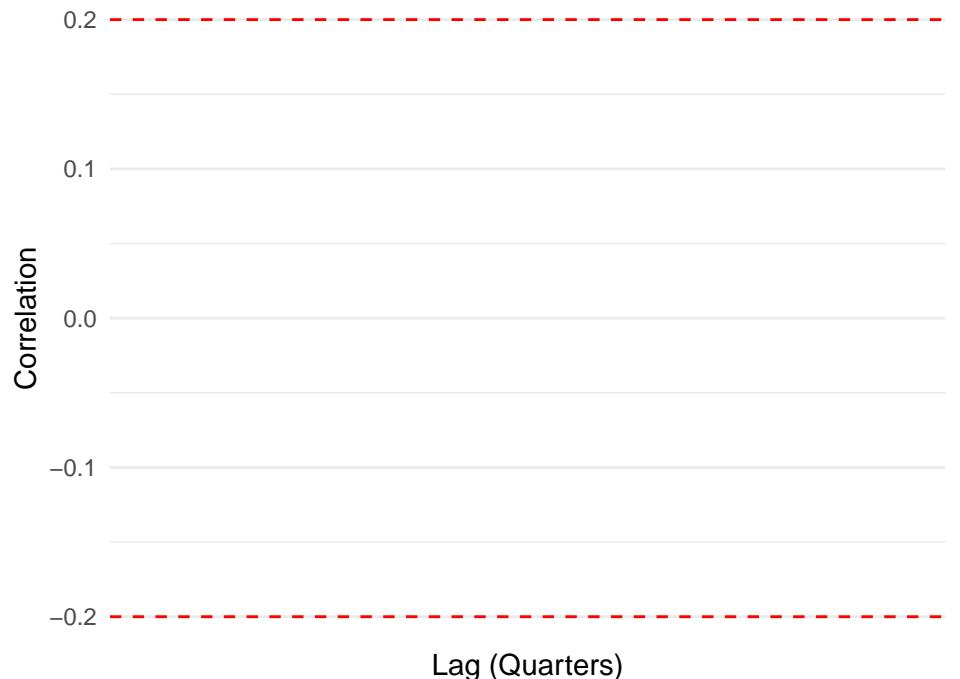
series — ind_scaled — target_scaled

Scatter: DA3m_IPCA_EX2 vs Target

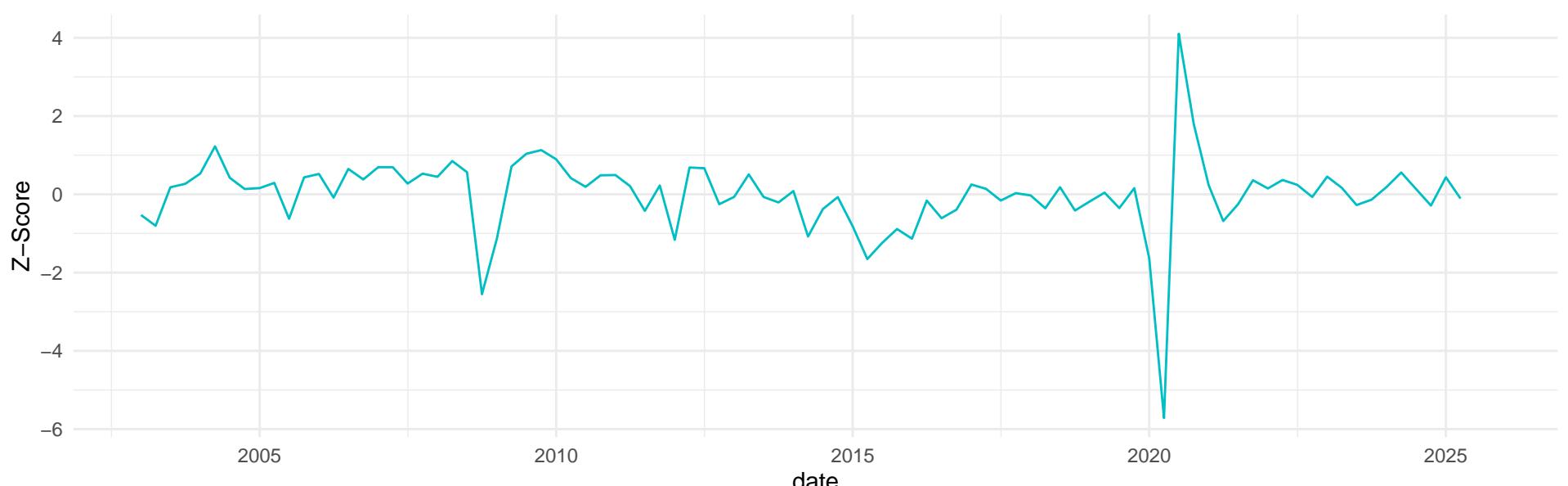
Corr: NaN



Cross-Correlation (Quarterly Lags): DA3m_IPCA_EX2



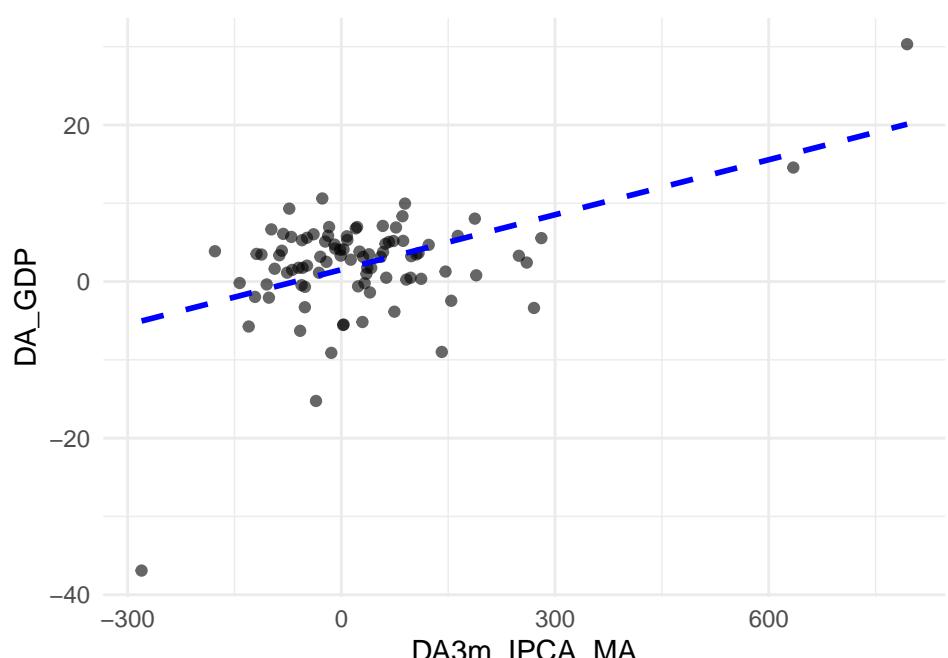
Standardized Time Series: DA3m_IPCA_EX2



series — ind_scaled — target_scaled

Scatter: DA3m_IPCA_MA vs Target

Corr: 0.49



Cross-Correlation (Quarterly Lags): DA3m_IPCA_MA

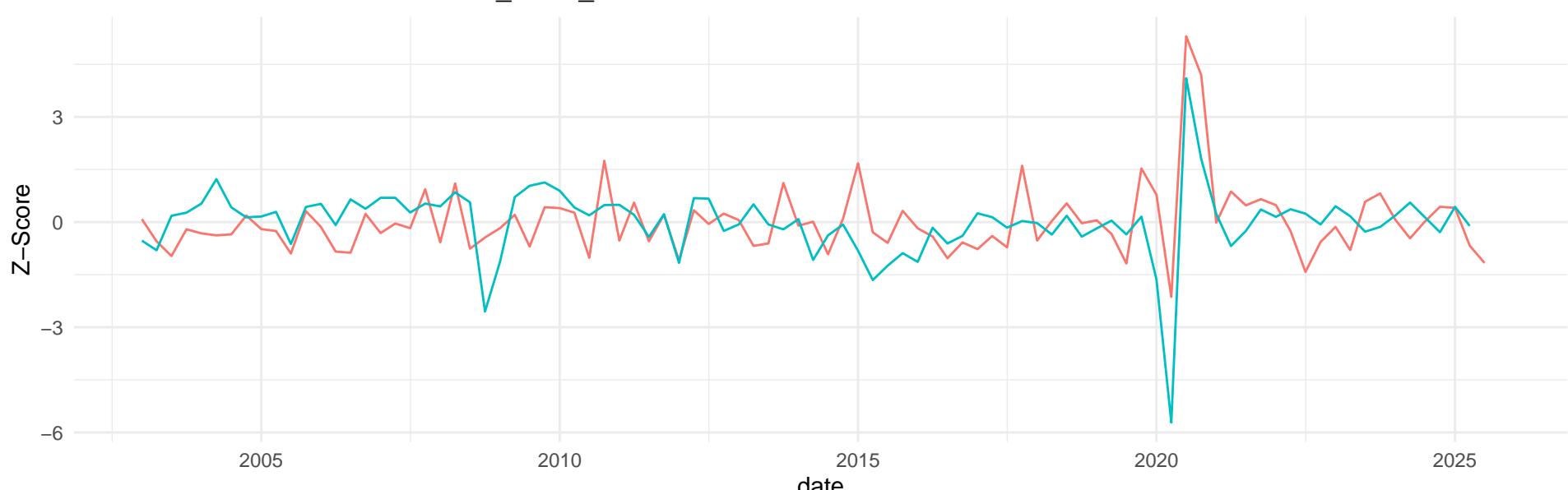
Correlation

-0.2 0.0 0.2 0.4

-2.5 -2.0 -1.5 -1.0 -0.5 0.0 0.5 1.0 1.5 2.0 2.5

Lag (Quarters)

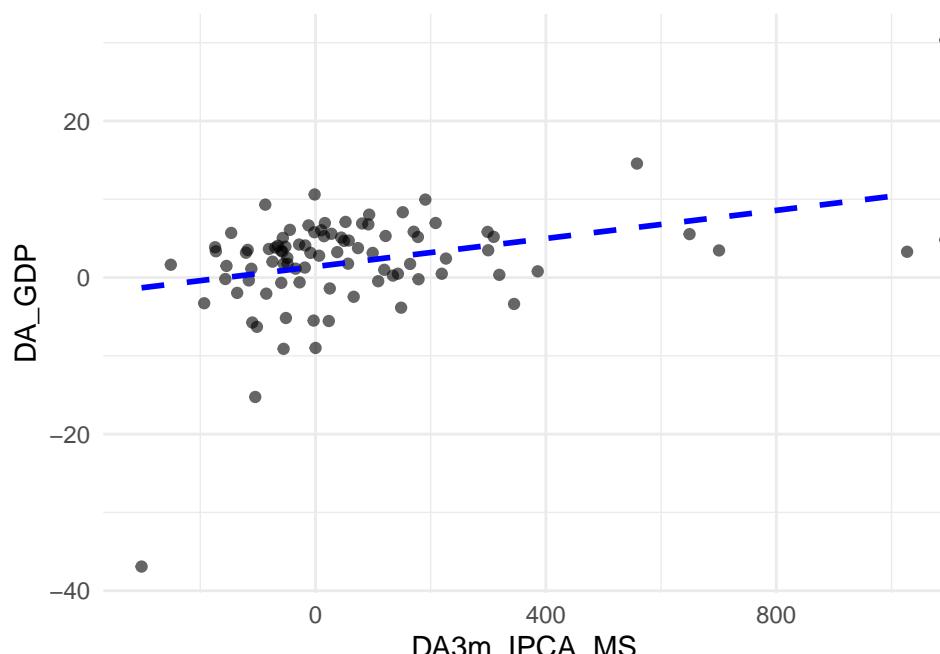
Standardized Time Series: DA3m_IPCA_MA



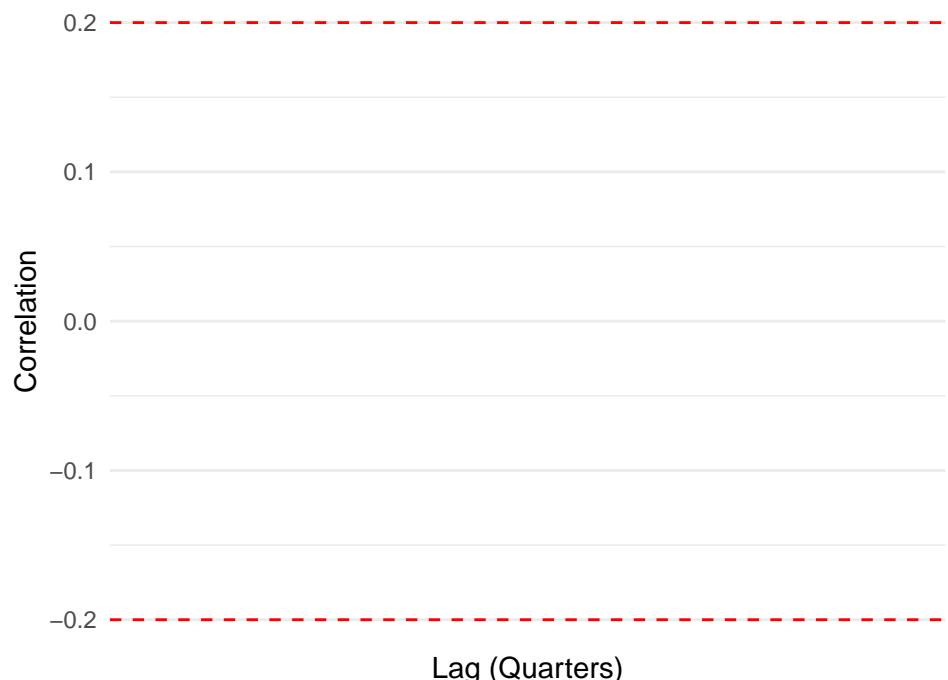
series — ind_scaled — target_scaled

Scatter: DA3m_IPCA_MS vs Target

Corr: NaN



Cross-Correlation (Quarterly Lags): DA3m_IPCA_MS



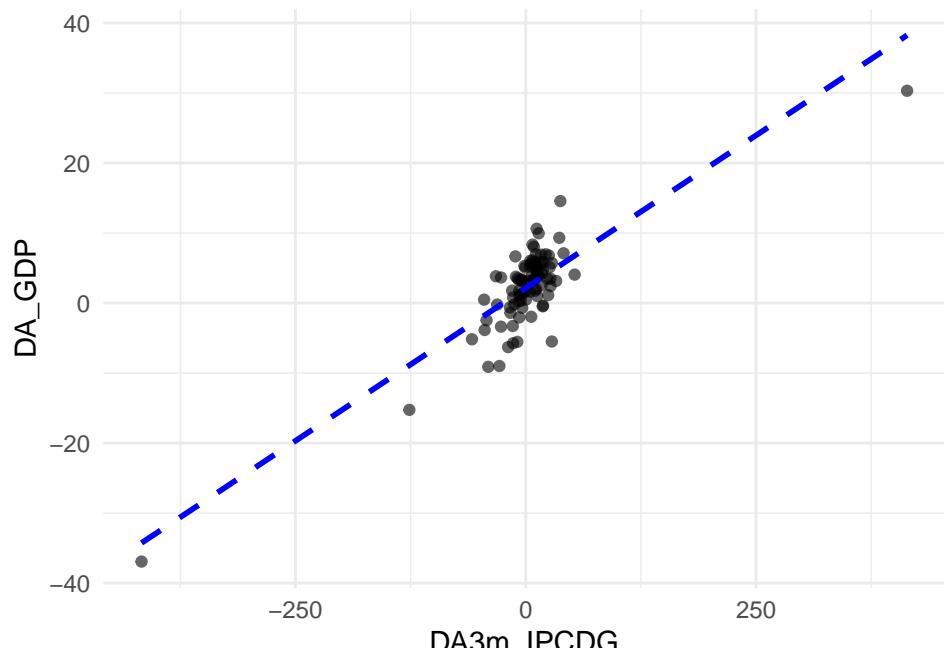
Standardized Time Series: DA3m_IPCA_MS



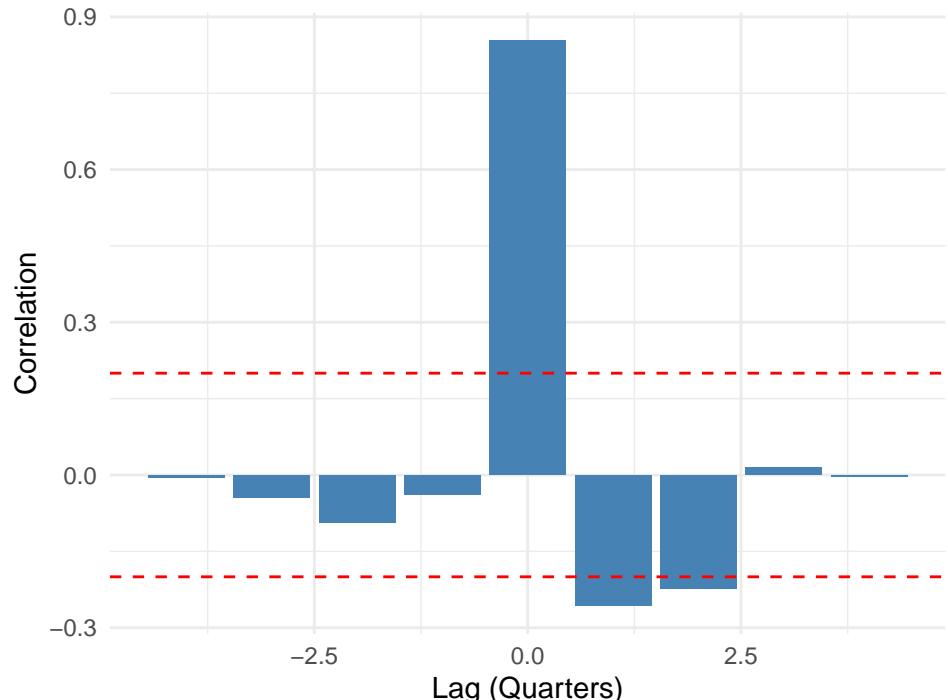
series — ind_scaled — target_scaled

Scatter: DA3m_IPCDG vs Target

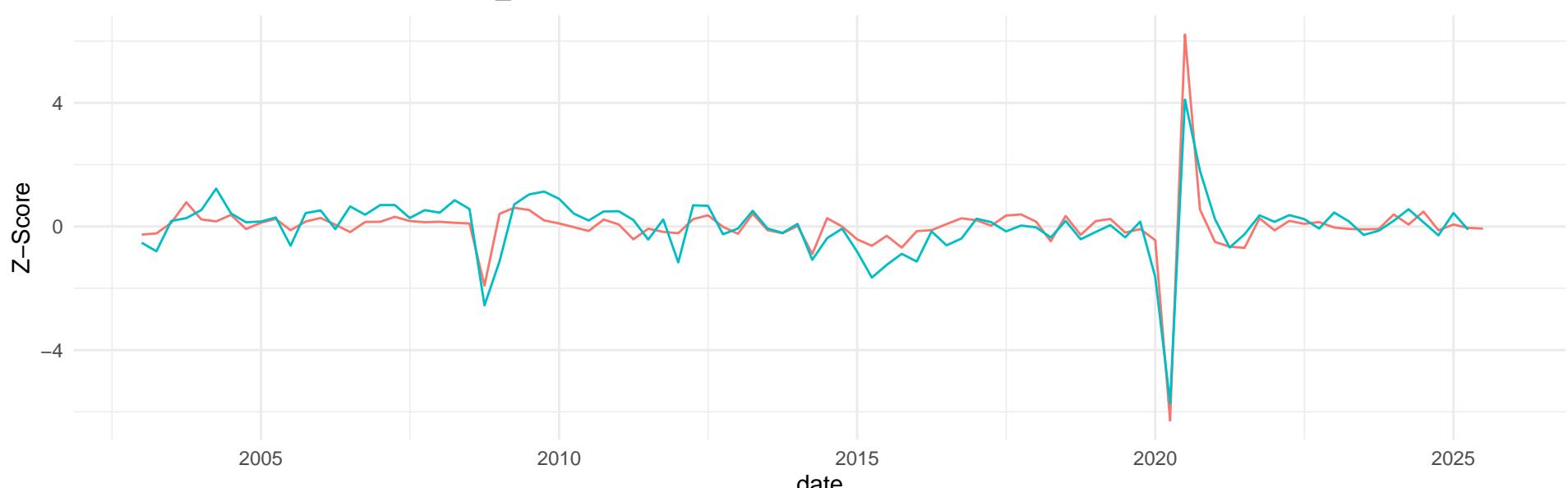
Corr: 0.85



Cross-Correlation (Quarterly Lags): DA3m_IPCDG



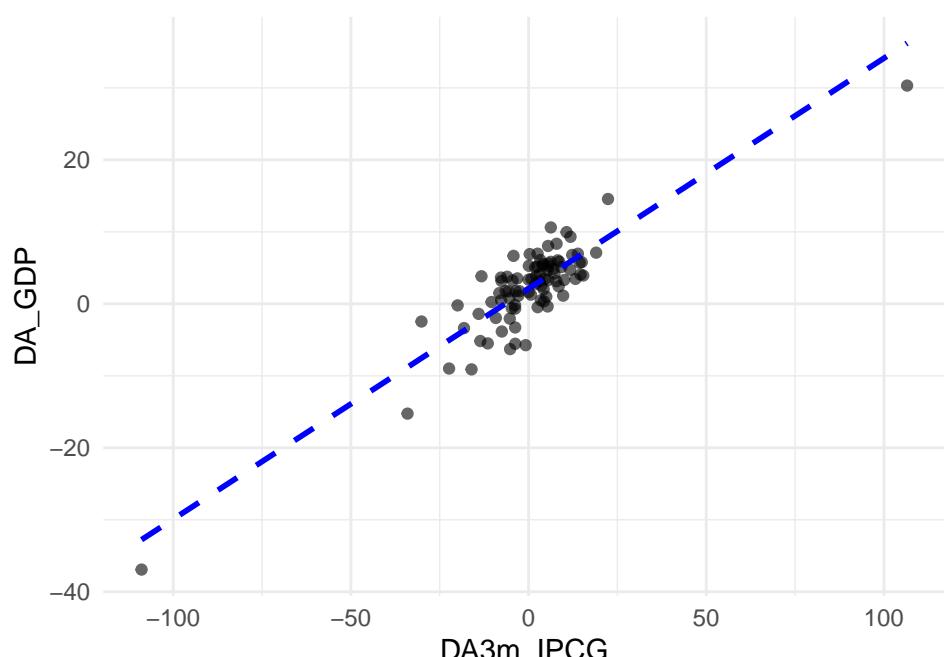
Standardized Time Series: DA3m_IPCDG



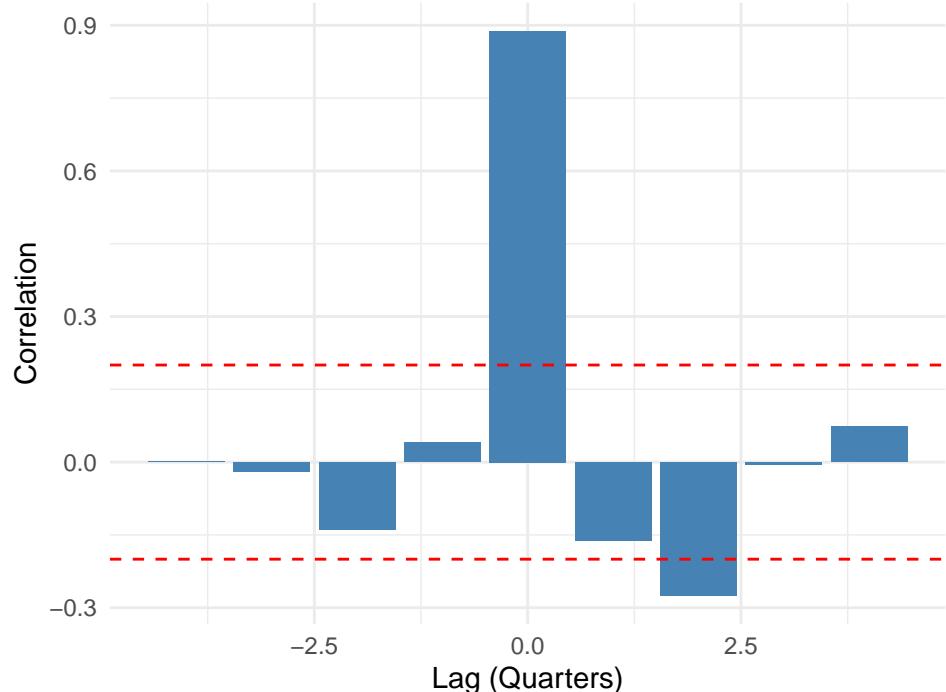
series — ind_scaled — target_scaled

Scatter: DA3m_IPCG vs Target

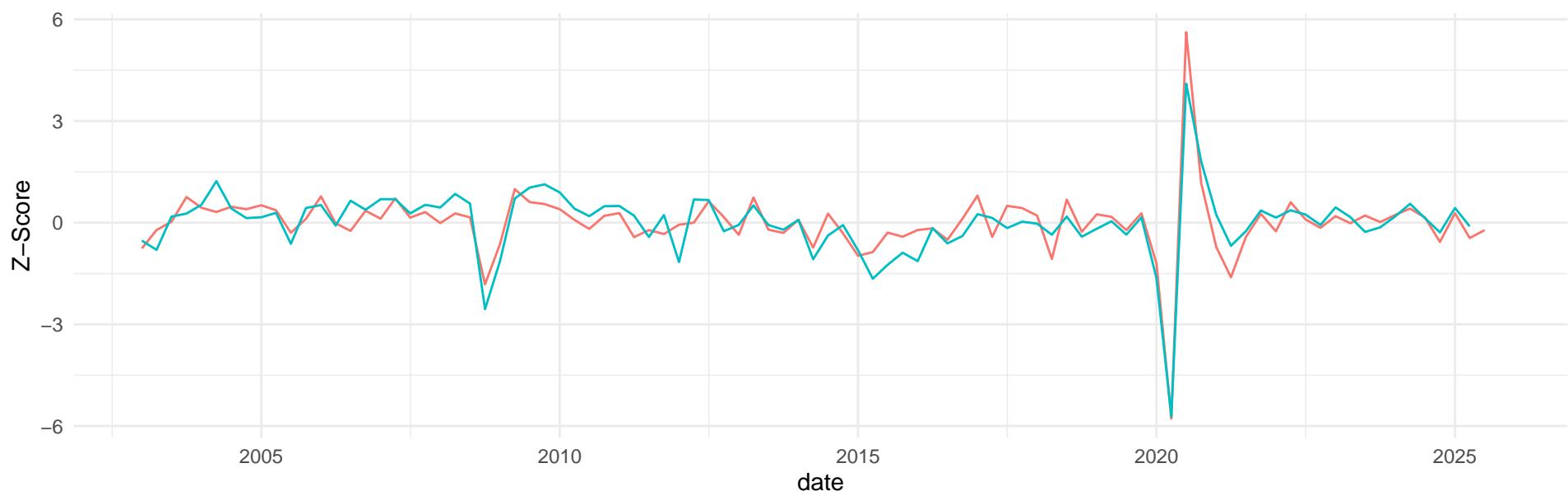
Corr: 0.89



Cross-Correlation (Quarterly Lags): DA3m_IPCG



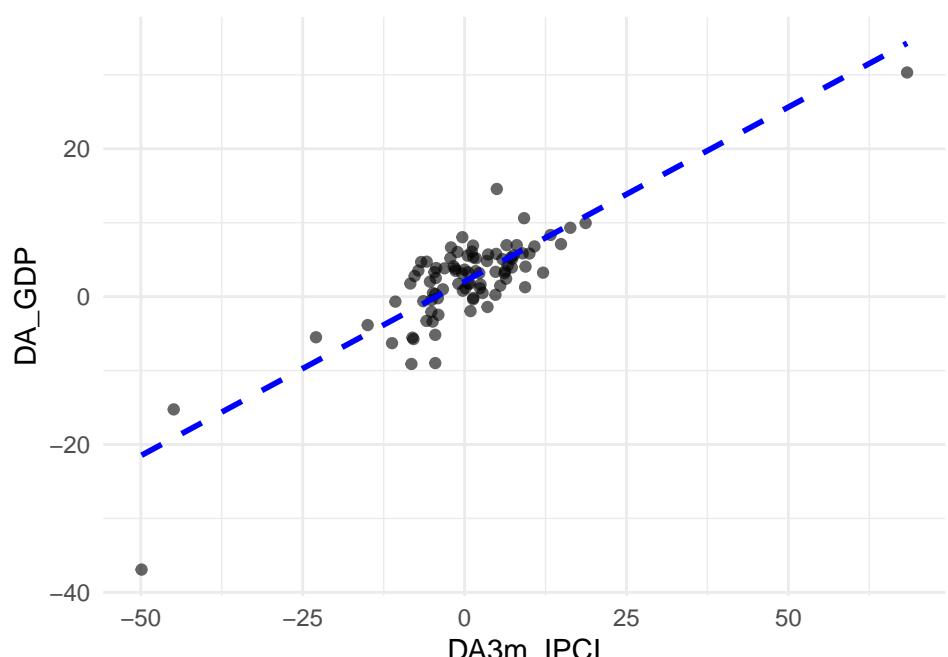
Standardized Time Series: DA3m_IPCG



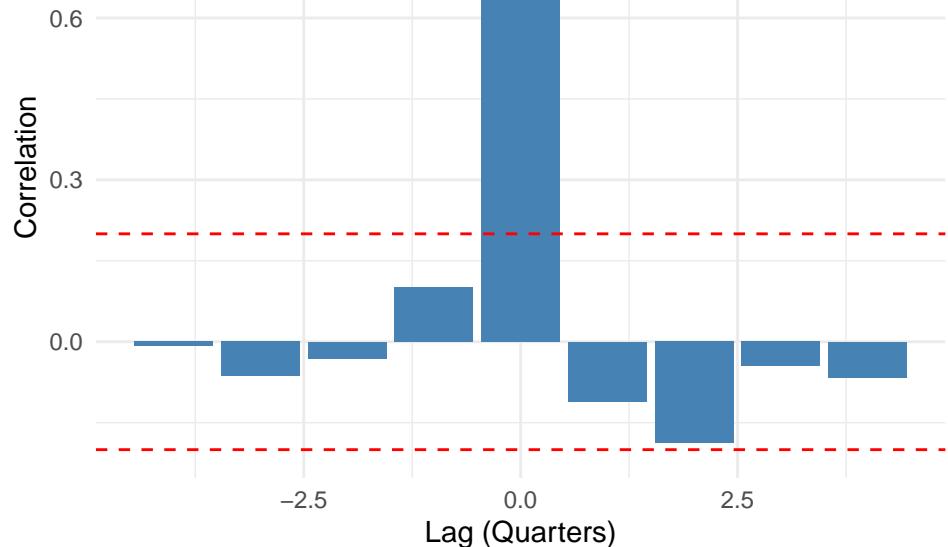
series — ind_scaled — target_scaled

Scatter: DA3m_IPCI vs Target

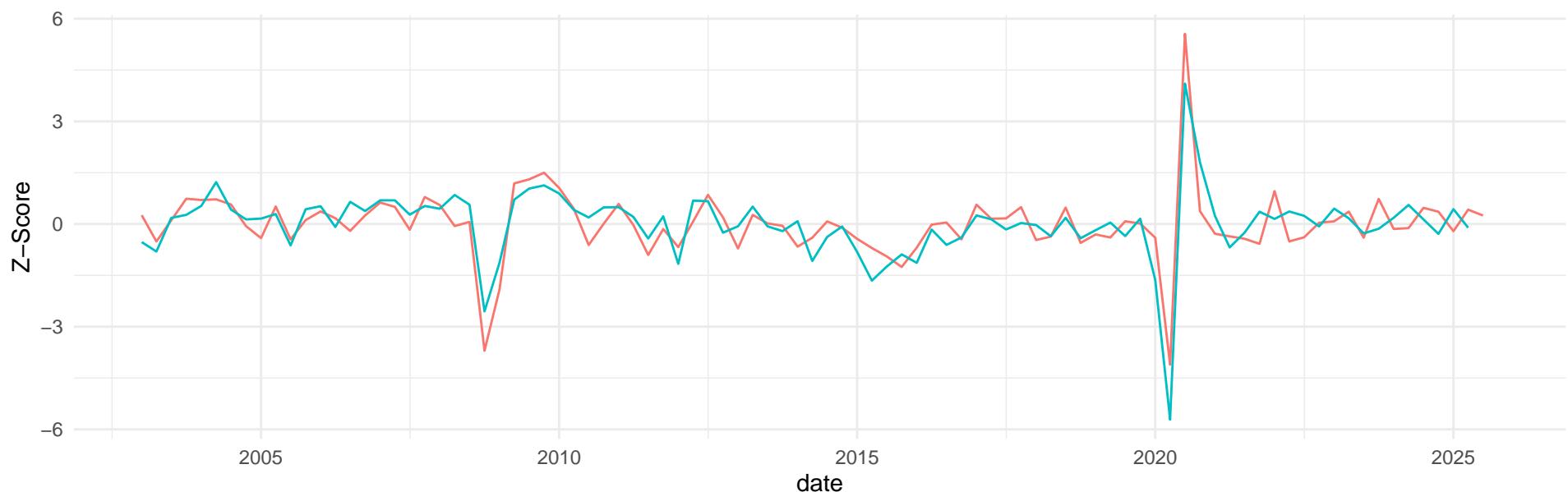
Corr: 0.85



Cross-Correlation (Quarterly Lags): DA3m_IPCI



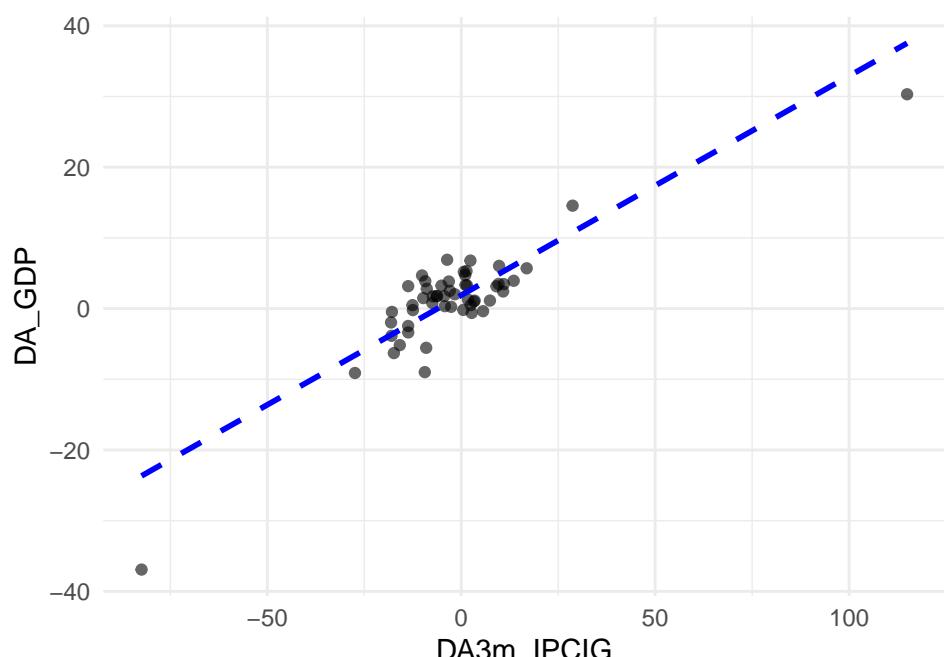
Standardized Time Series: DA3m_IPCI



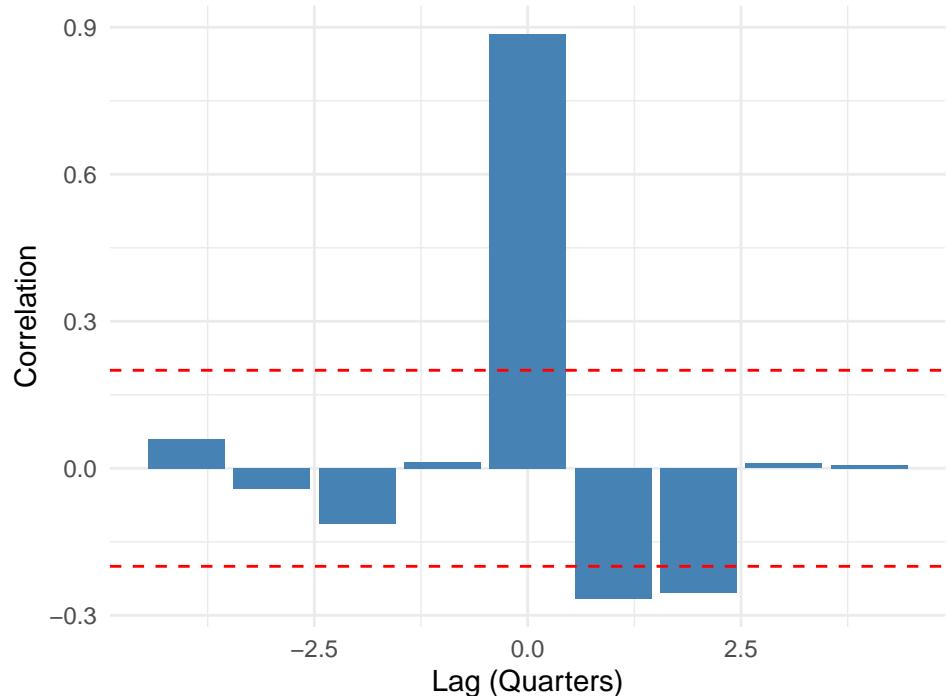
series — ind_scaled — target_scaled

Scatter: DA3m_IPCIG vs Target

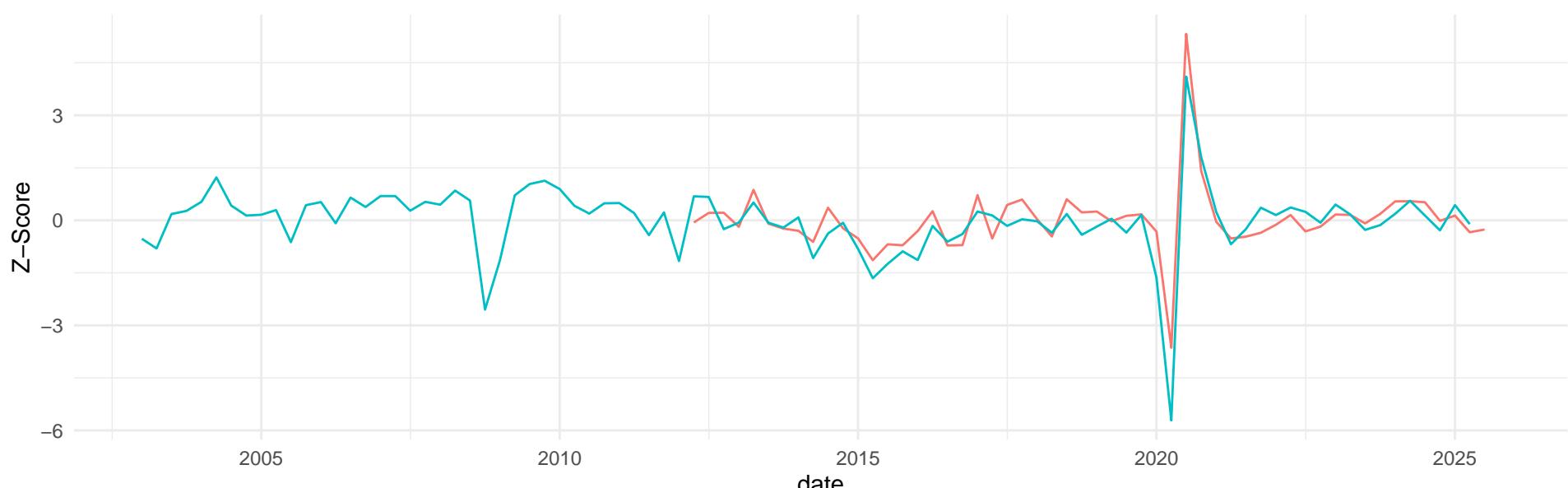
Corr: 0.89



Cross-Correlation (Quarterly Lags): DA3m_IPCIG



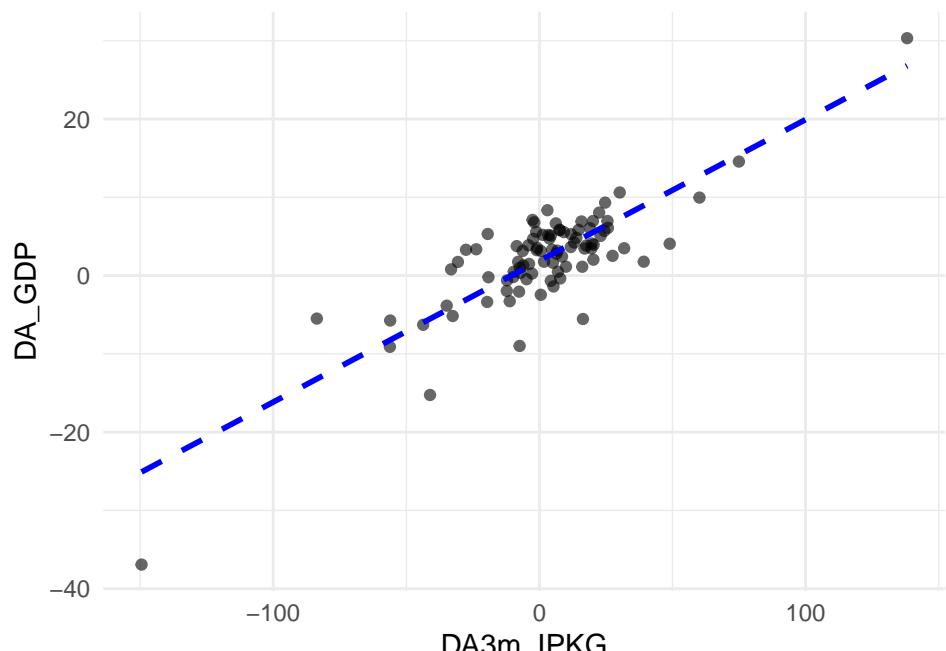
Standardized Time Series: DA3m_IPCIG



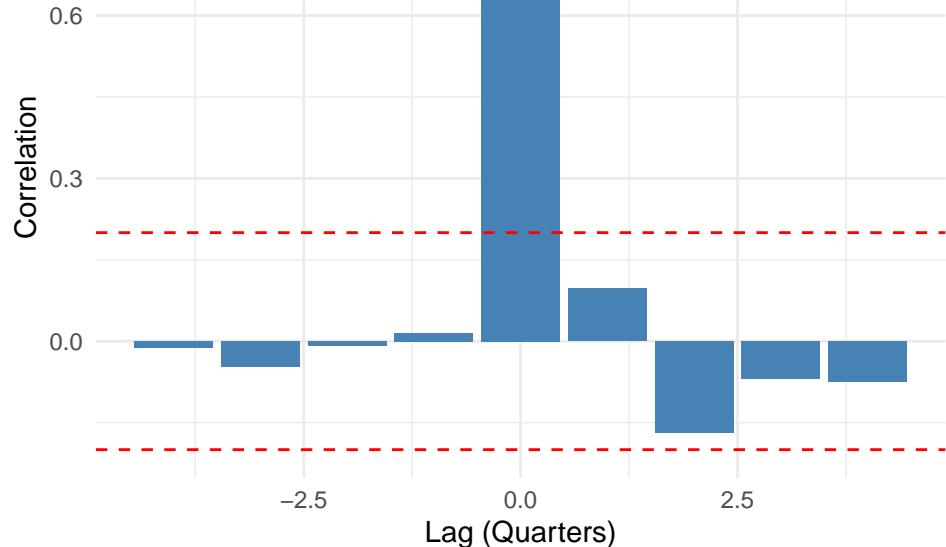
series — ind_scaled — target_scaled

Scatter: DA3m_IPKG vs Target

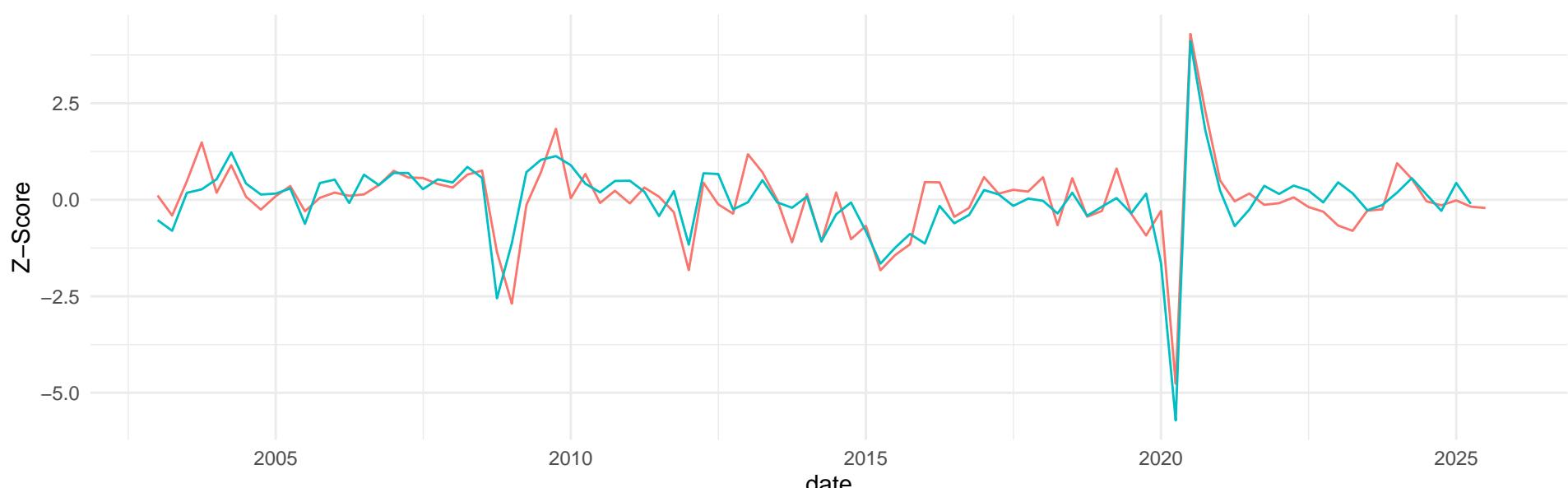
Corr: 0.84



Cross-Correlation (Quarterly Lags): DA3m_IPKG



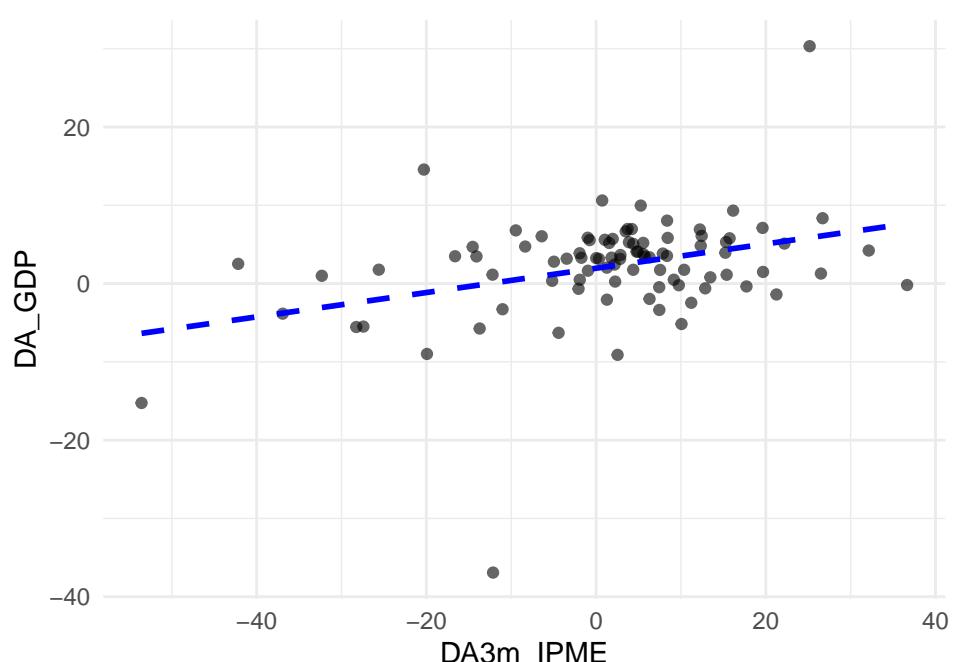
Standardized Time Series: DA3m_IPKG



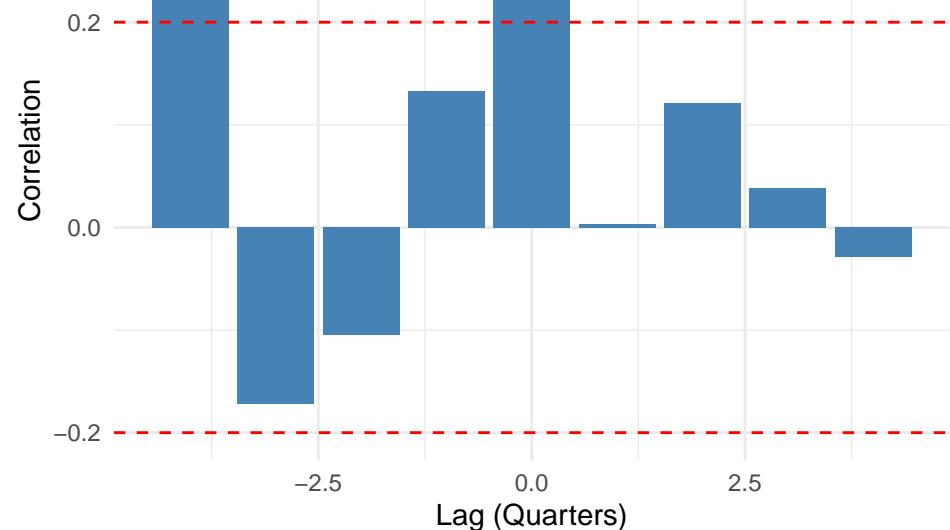
series — ind_scaled — target_scaled

Scatter: DA3m_IPME vs Target

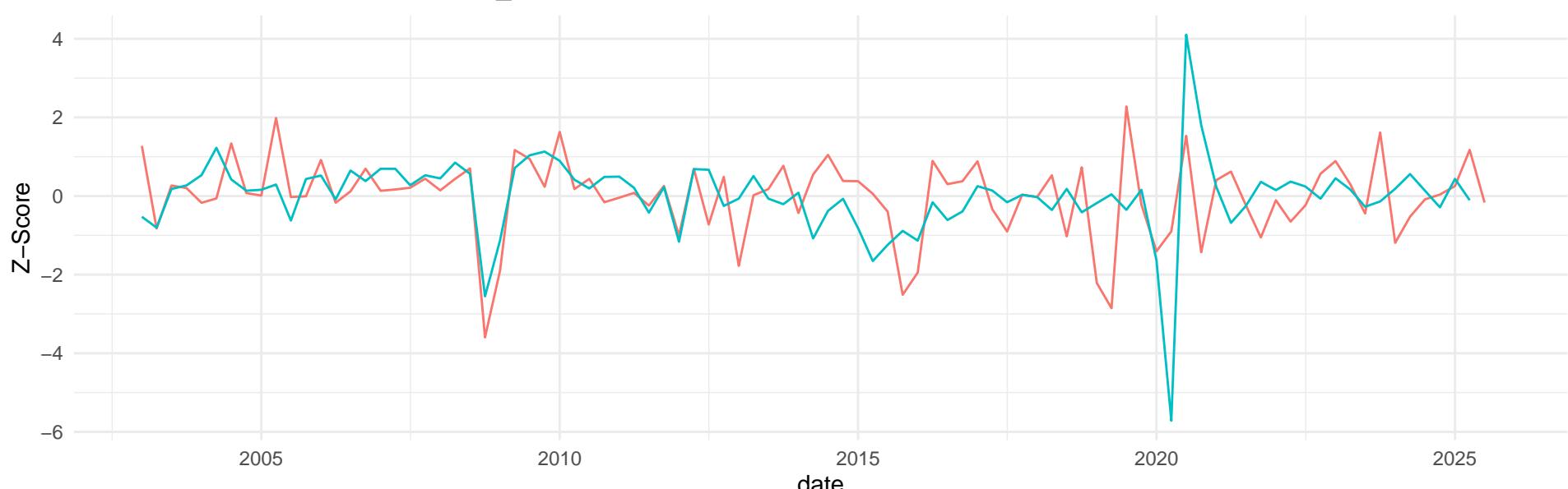
Corr: 0.35



Cross-Correlation (Quarterly Lags): DA3m_IPME



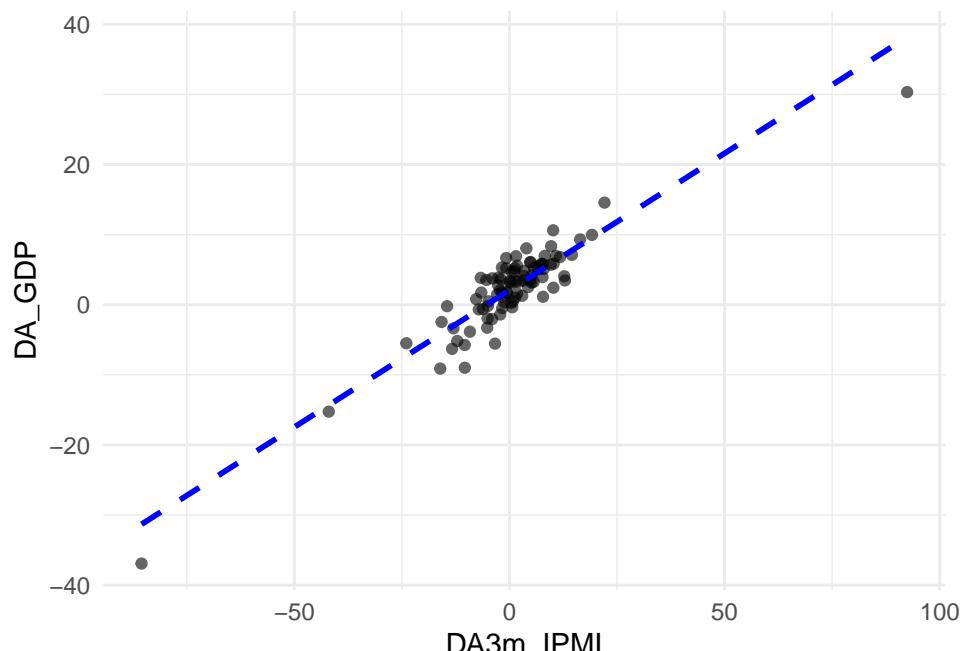
Standardized Time Series: DA3m_IPME



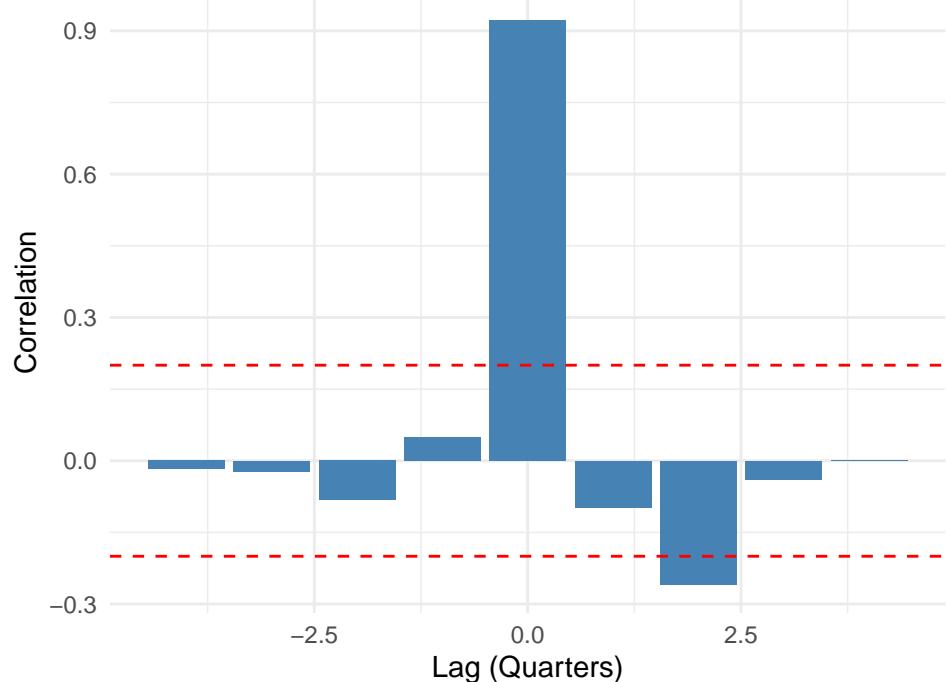
series — ind_scaled — target_scaled

Scatter: DA3m_IPMI vs Target

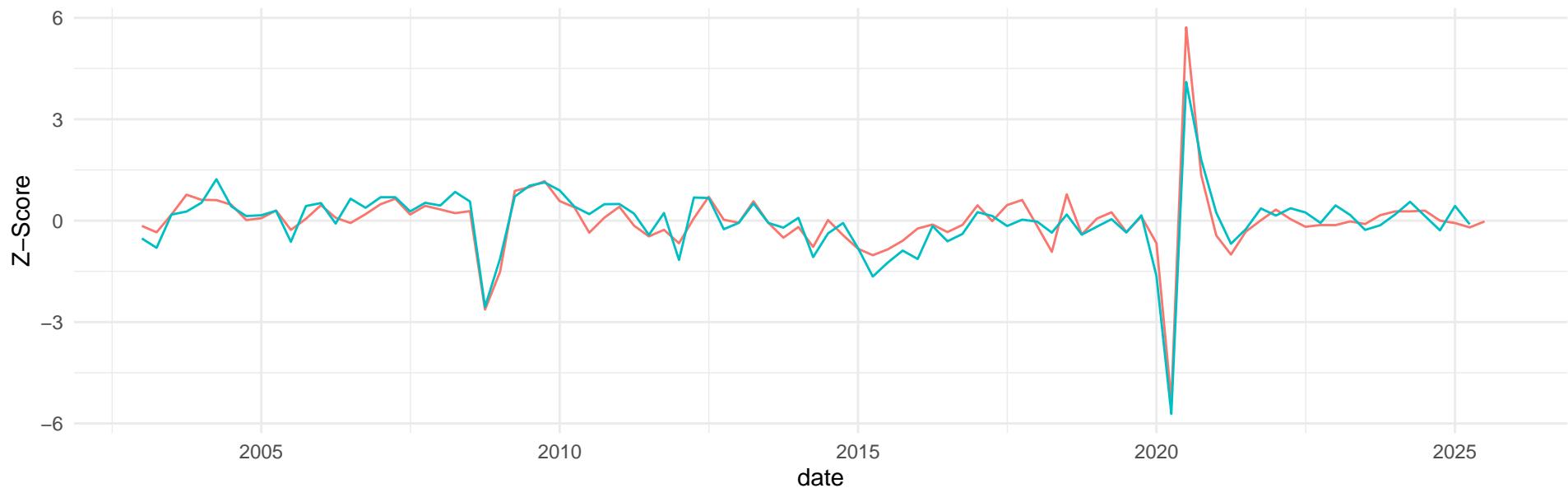
Corr: 0.92



Cross-Correlation (Quarterly Lags): DA3m_IPMI



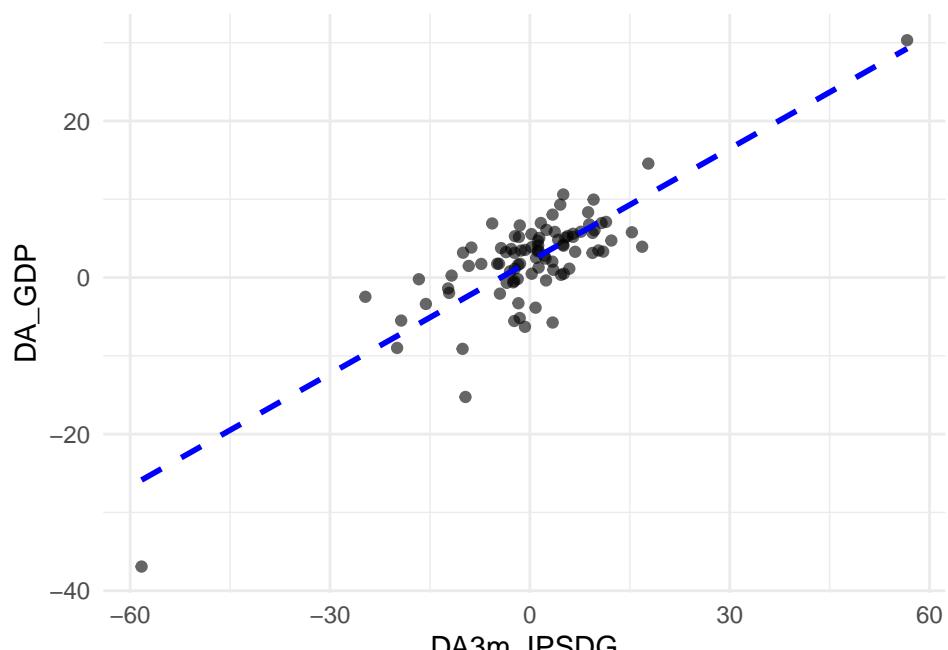
Standardized Time Series: DA3m_IPMI



series — ind_scaled — target_scaled

Scatter: DA3m_IPSDG vs Target

Corr: 0.82

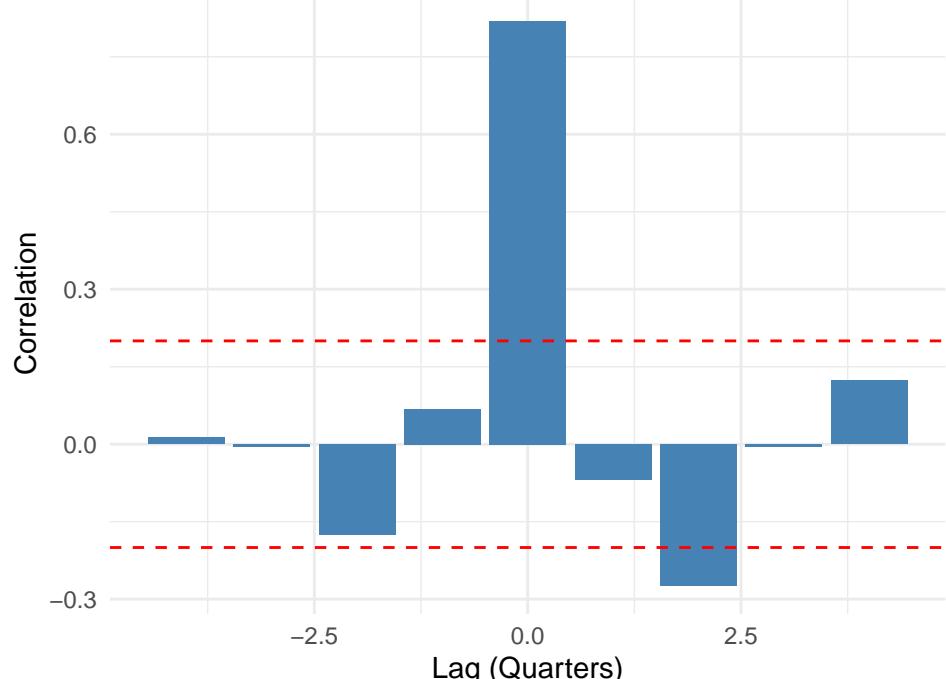


Cross-Correlation (Quarterly Lags): DA3m_IPSDG

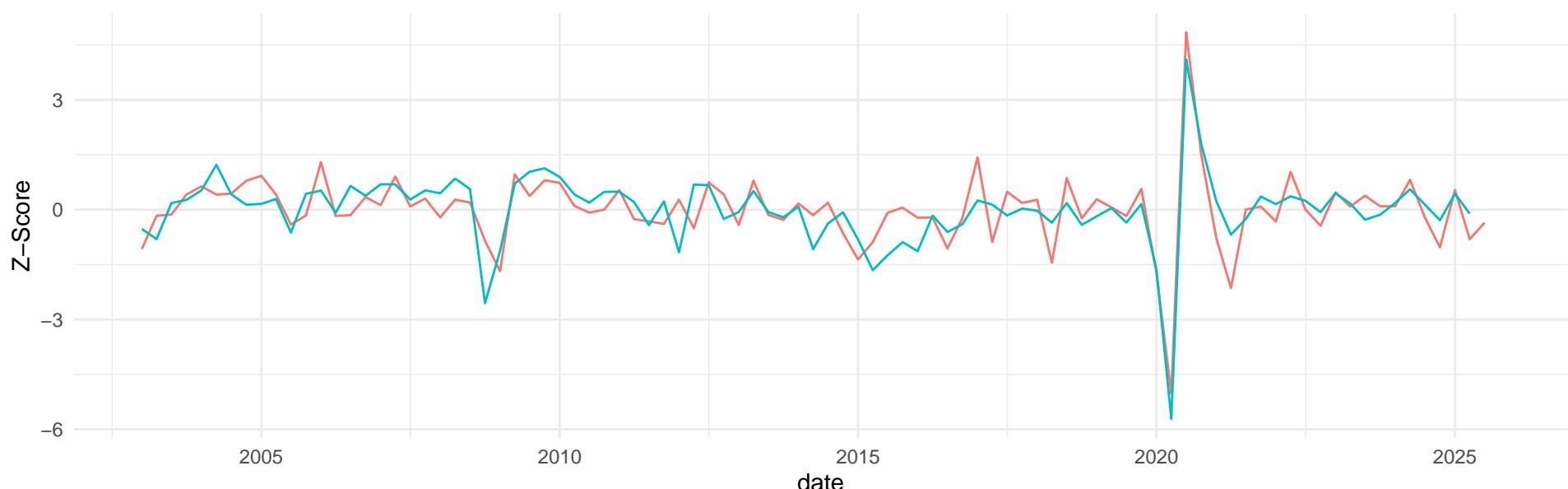
Correlation

0.6
0.3
0.0
-0.3

Lag (Quarters)



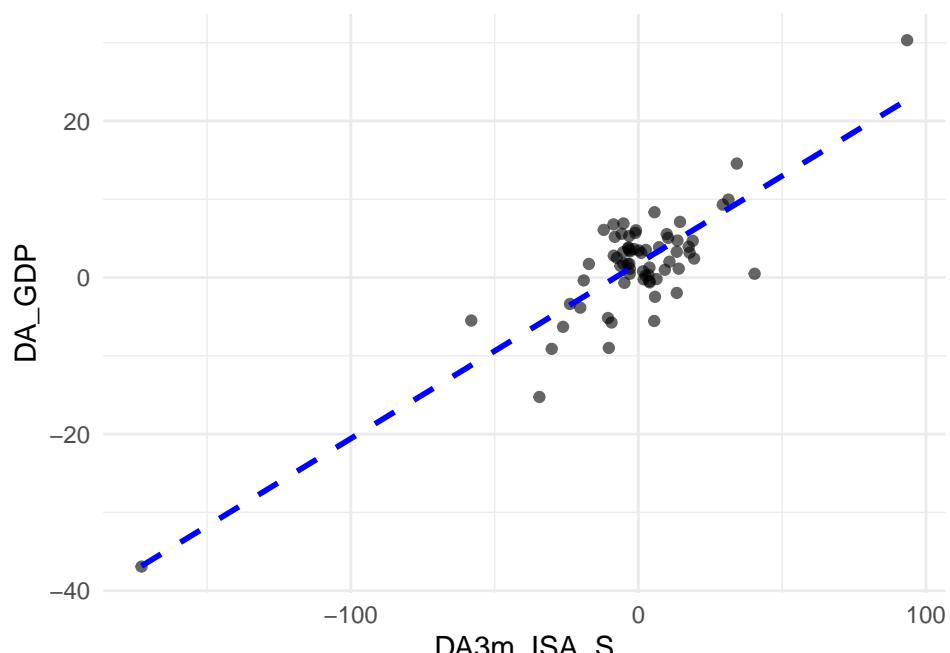
Standardized Time Series: DA3m_IPSDG



series — ind_scaled — target_scaled

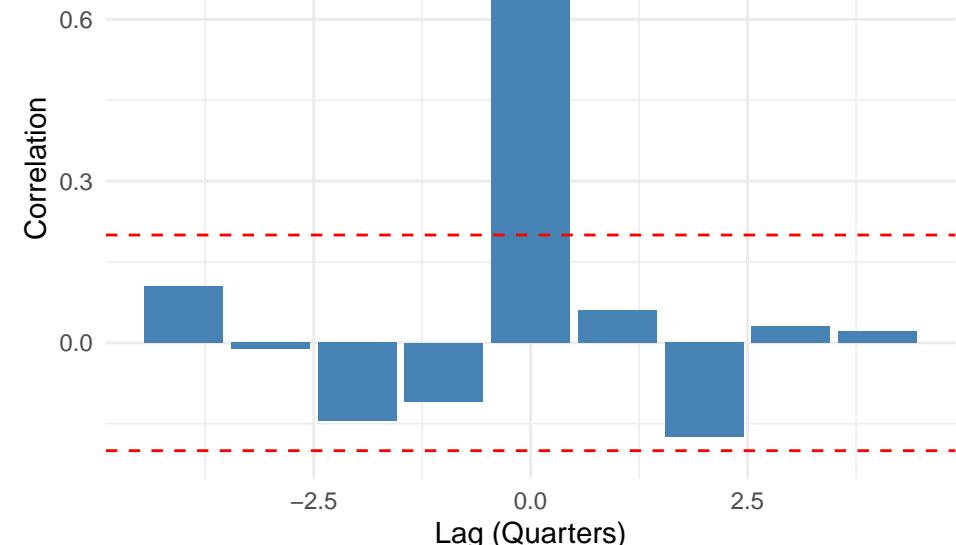
Scatter: DA3m_ISA_S vs Target

Corr: 0.85

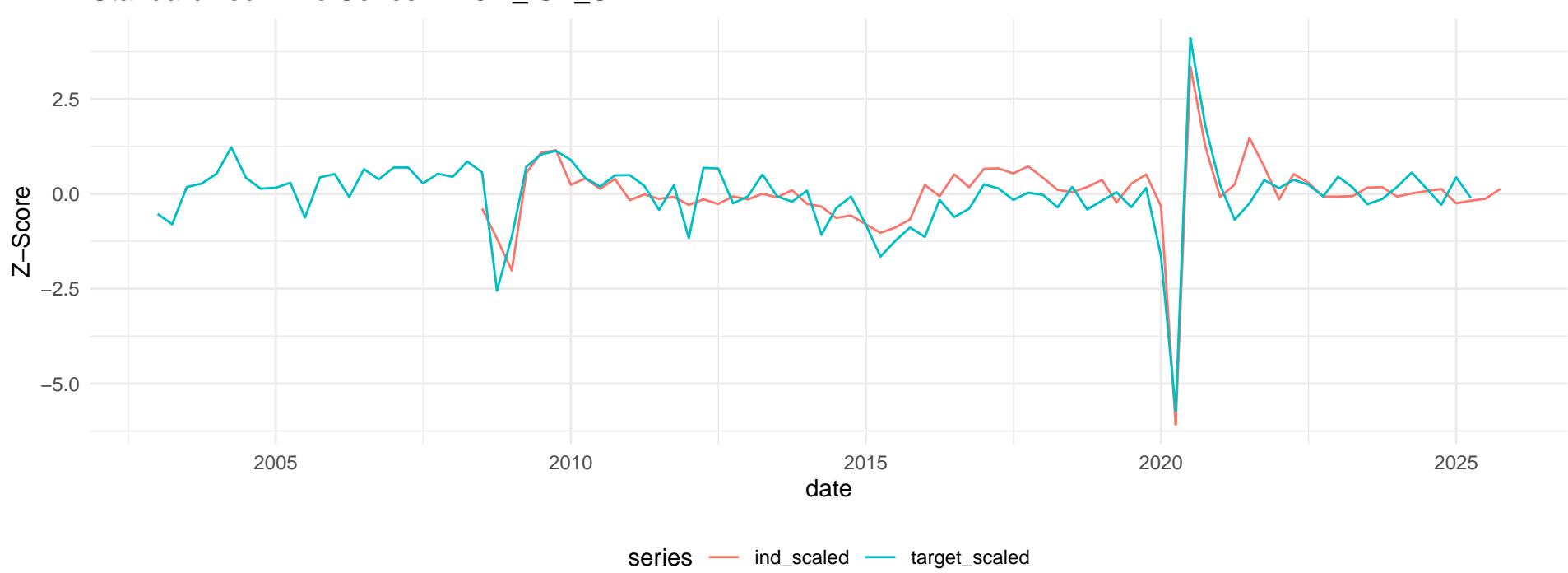


Cross-Correlation (Quarterly Lags): DA3m_ISA_S

Correlation

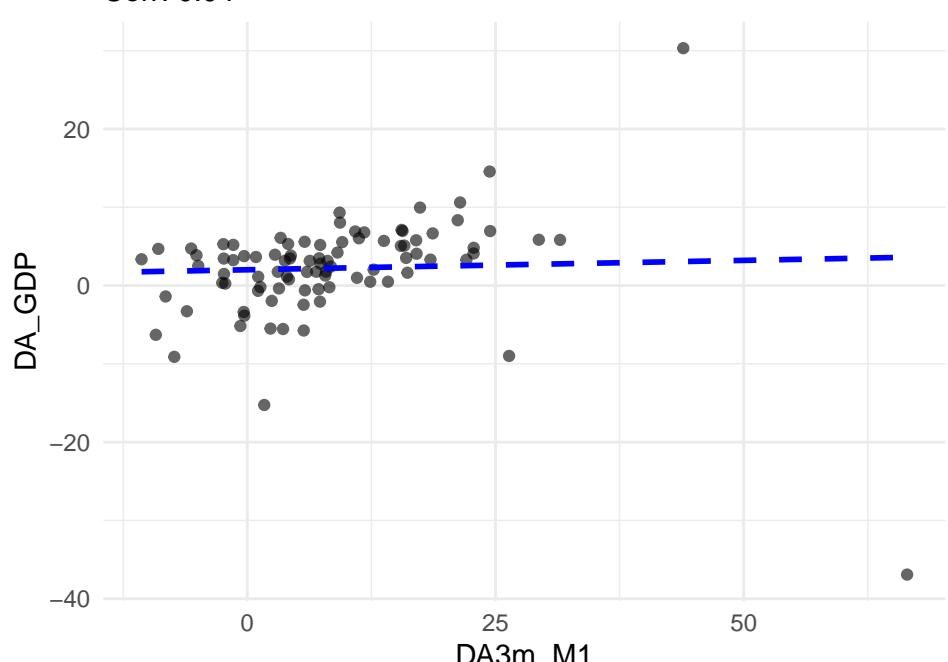


Standardized Time Series: DA3m_ISA_S

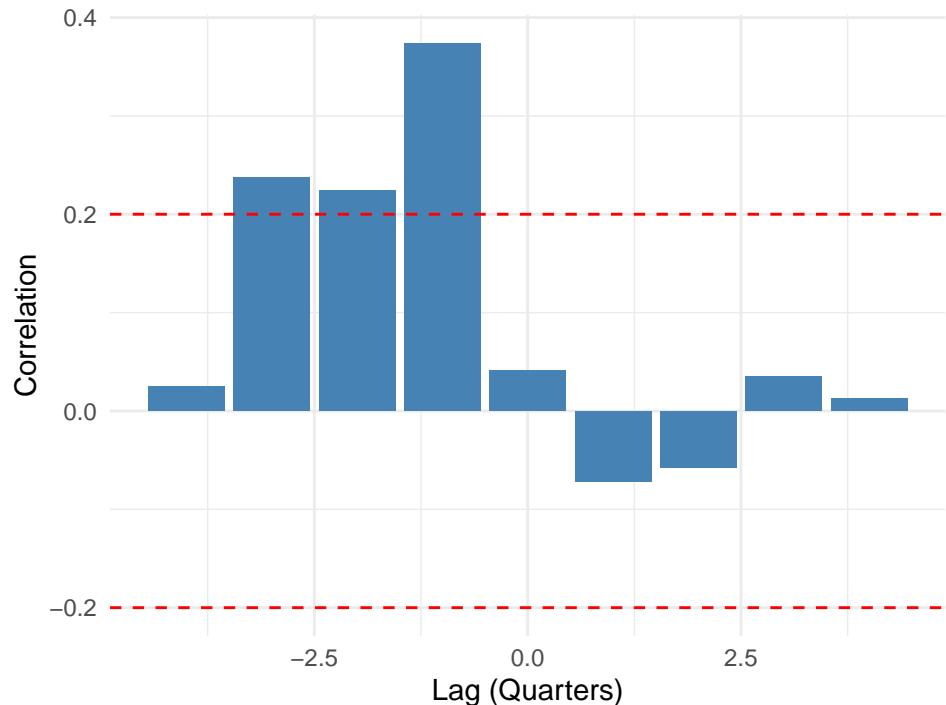


Scatter: DA3m_M1 vs Target

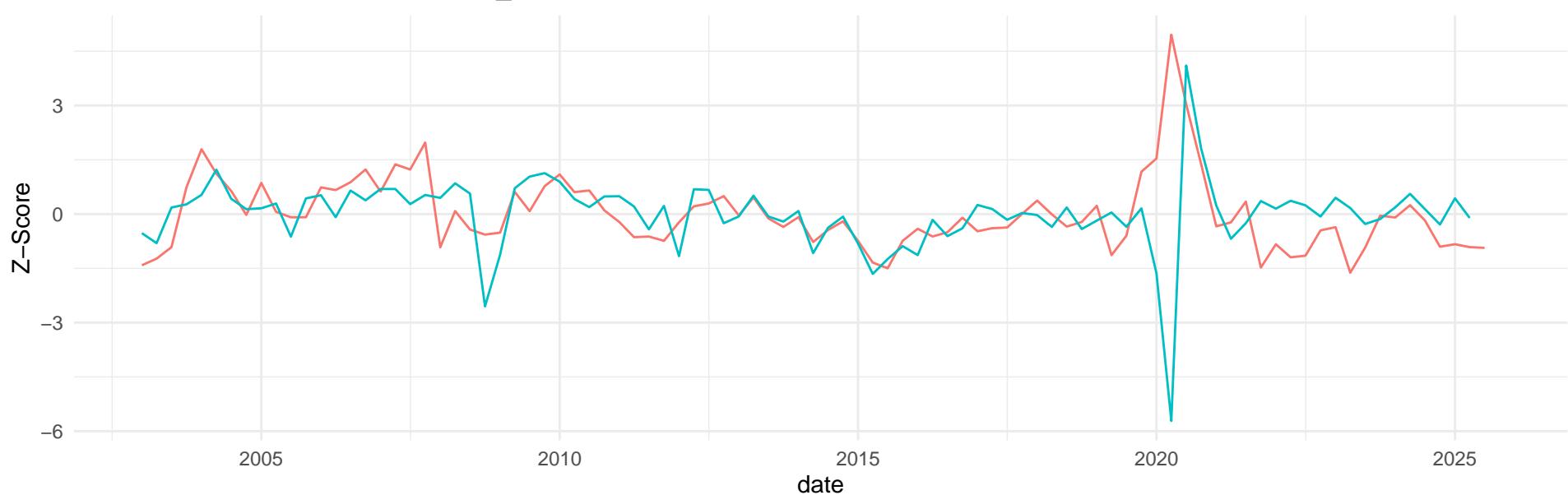
Corr: 0.04



Cross-Correlation (Quarterly Lags): DA3m_M1



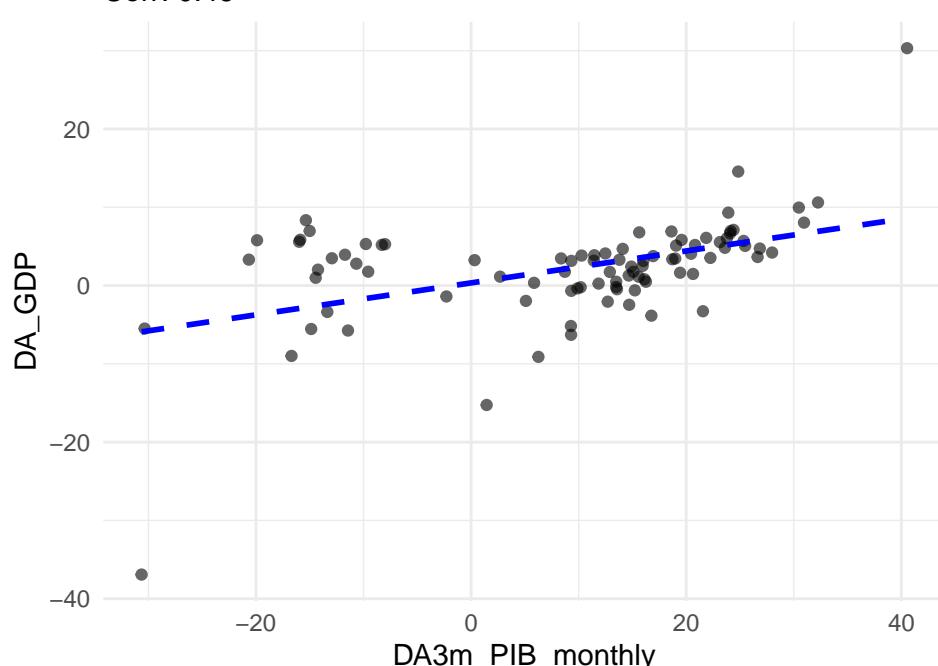
Standardized Time Series: DA3m_M1



series — ind_scaled — target_scaled

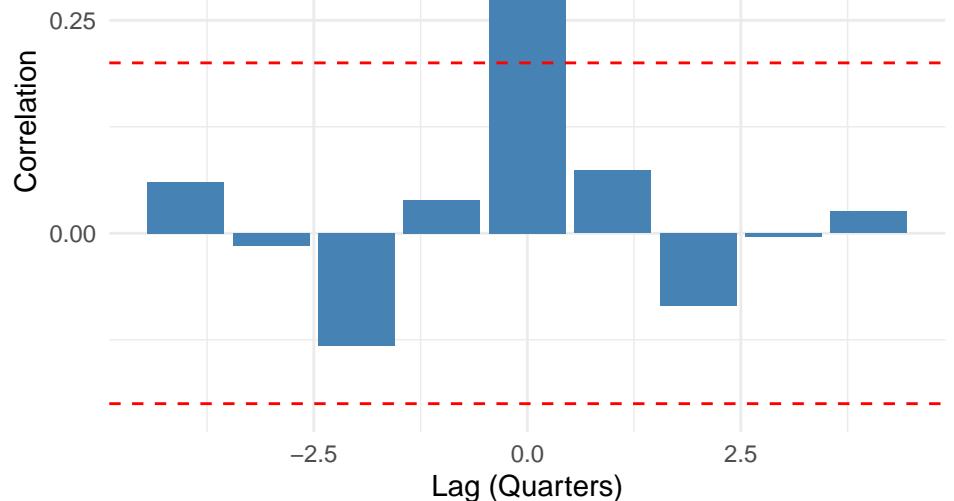
Scatter: DA3m_PIB_monthly vs Target

Corr: 0.46

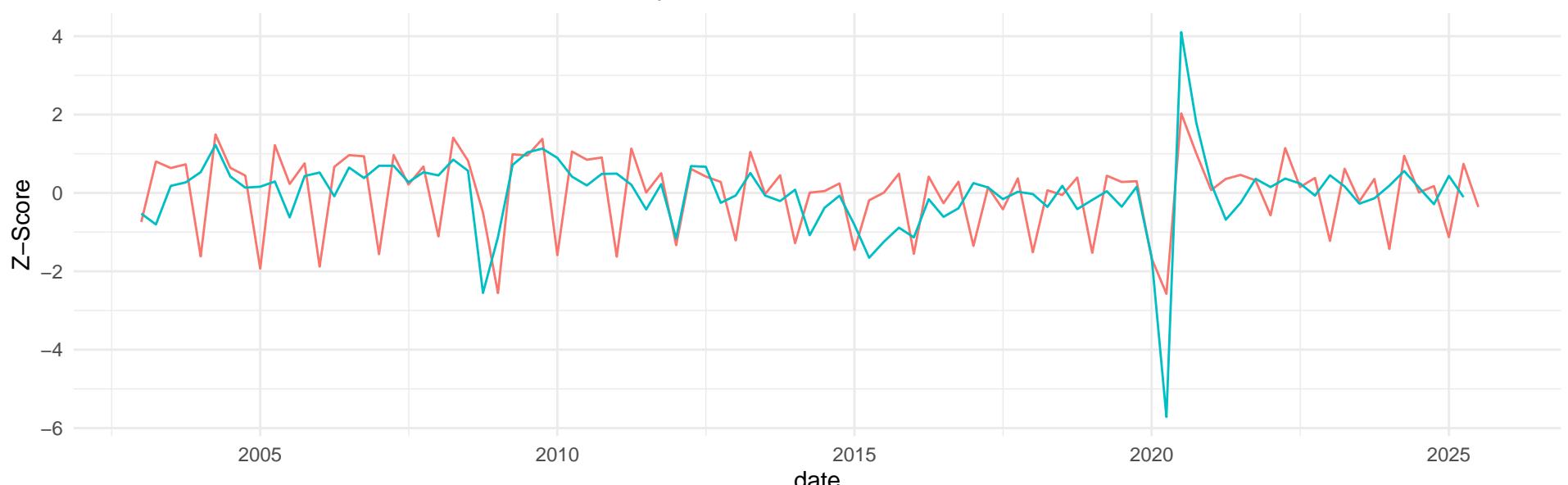


Cross-Correlation (Quarterly Lags): DA3m_PIB_monthly

Correlation



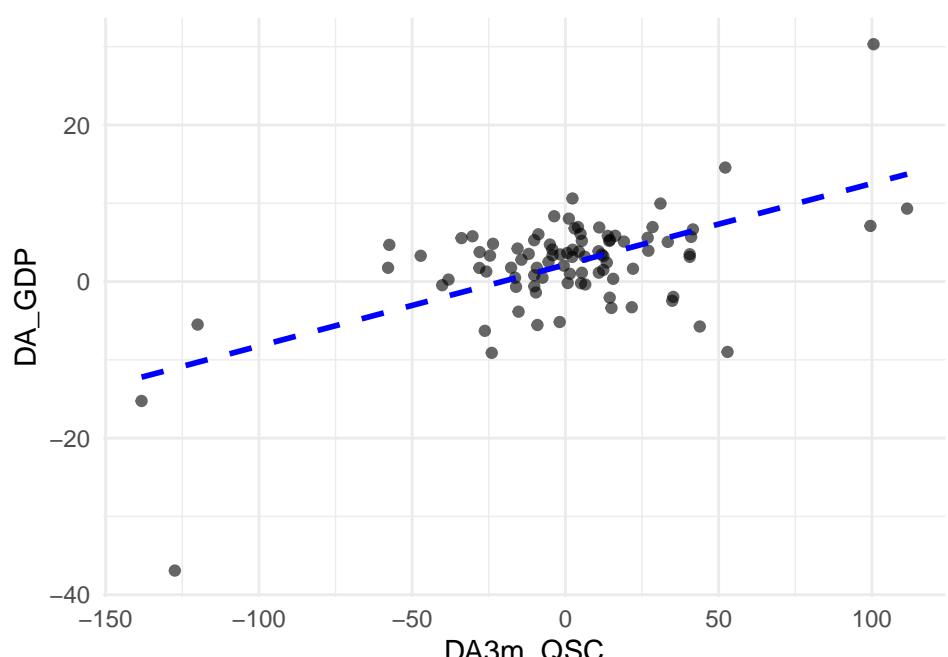
Standardized Time Series: DA3m_PIB_monthly



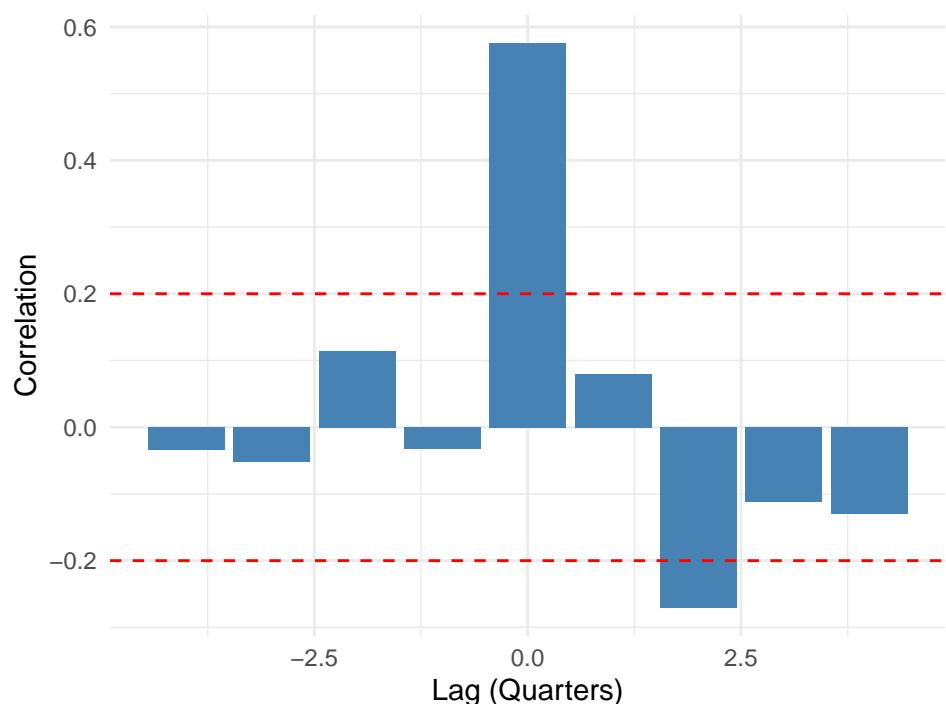
series — ind_scaled — target_scaled

Scatter: DA3m_QSC vs Target

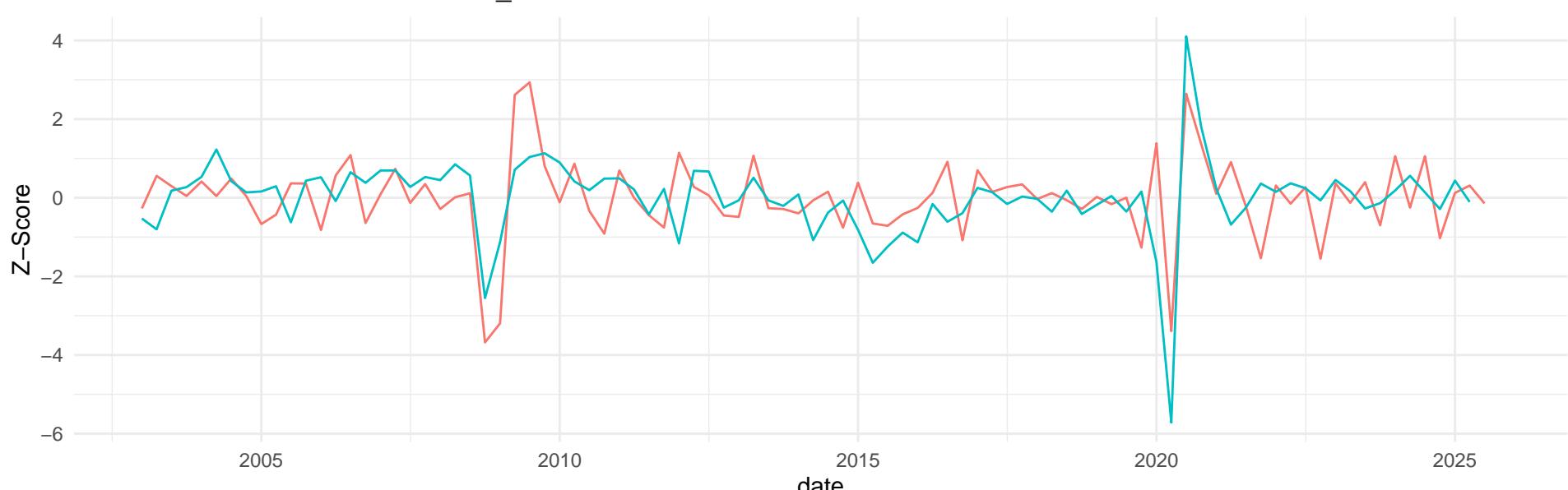
Corr: 0.58



Cross-Correlation (Quarterly Lags): DA3m_QSC



Standardized Time Series: DA3m_QSC



series — ind_scaled — target_scaled

Scatter: DA3m_RE_Value vs Target

Corr: 0.24

DA_GDP

20

-20

-40

DA3m_RE_Value

Standardized Time Series: DA3m_RE_Value

Z-Score

4

2

0

-2

-4

-6

2005

2010

date

series — ind_scaled — target_scaled

Cross-Correlation (Quarterly Lags): DA3m_RE_Value

Correlation

0.2

0.1

0.0

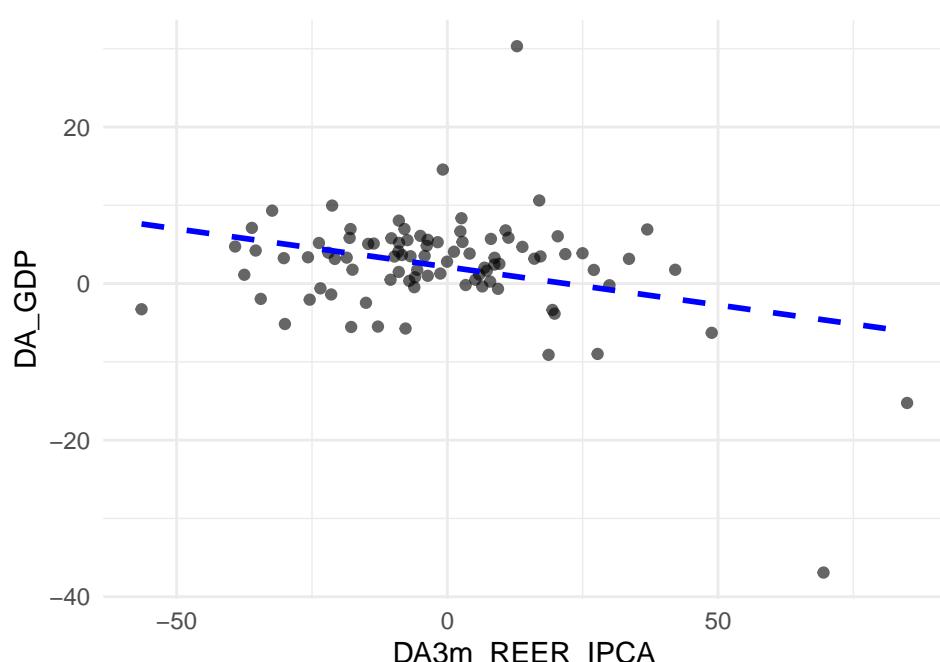
-0.1

-0.2

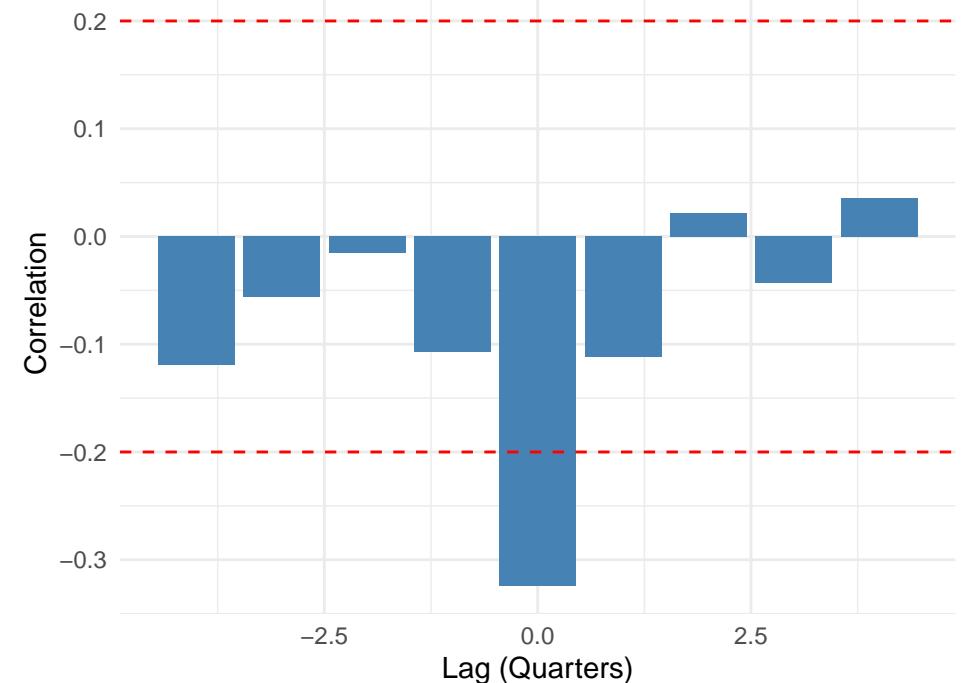
Lag (Quarters)

Scatter: DA3m_REER_IPCA vs Target

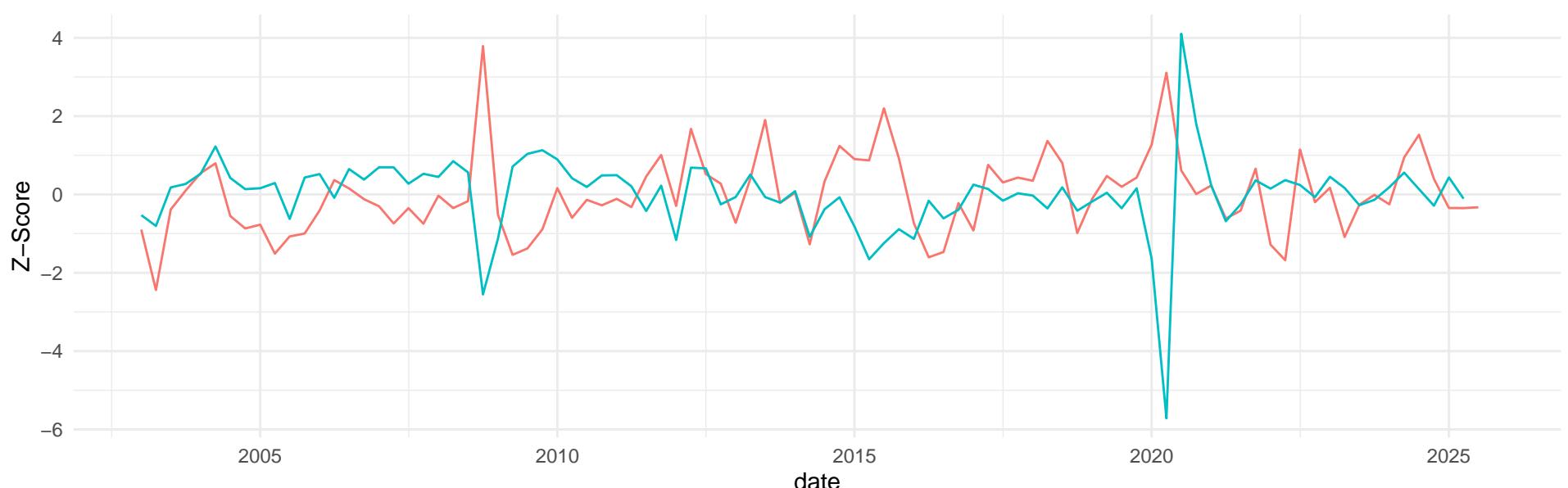
Corr: -0.32



Cross-Correlation (Quarterly Lags): DA3m_REER_IPCA



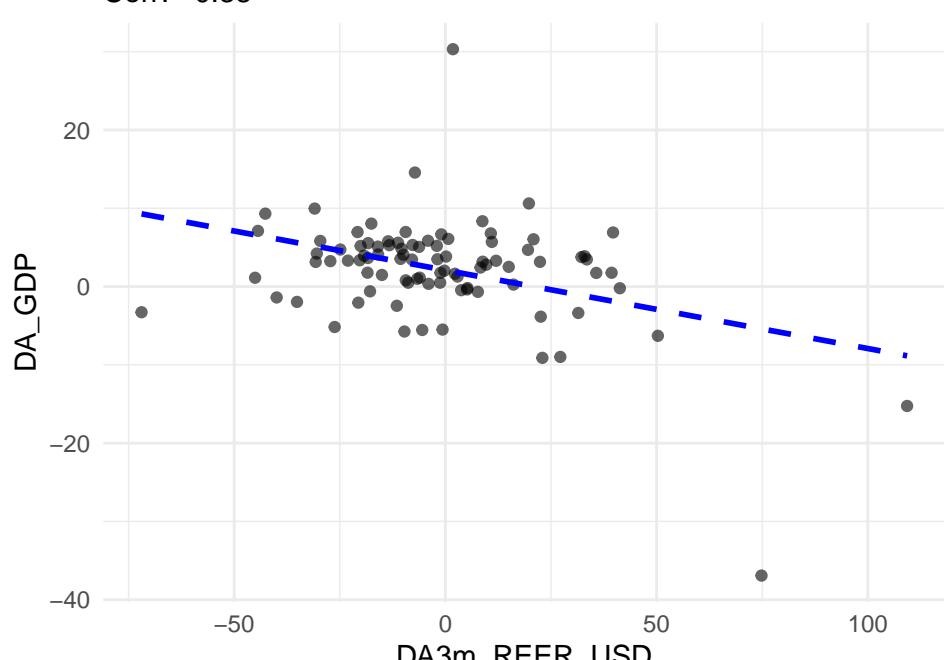
Standardized Time Series: DA3m_REER_IPCA



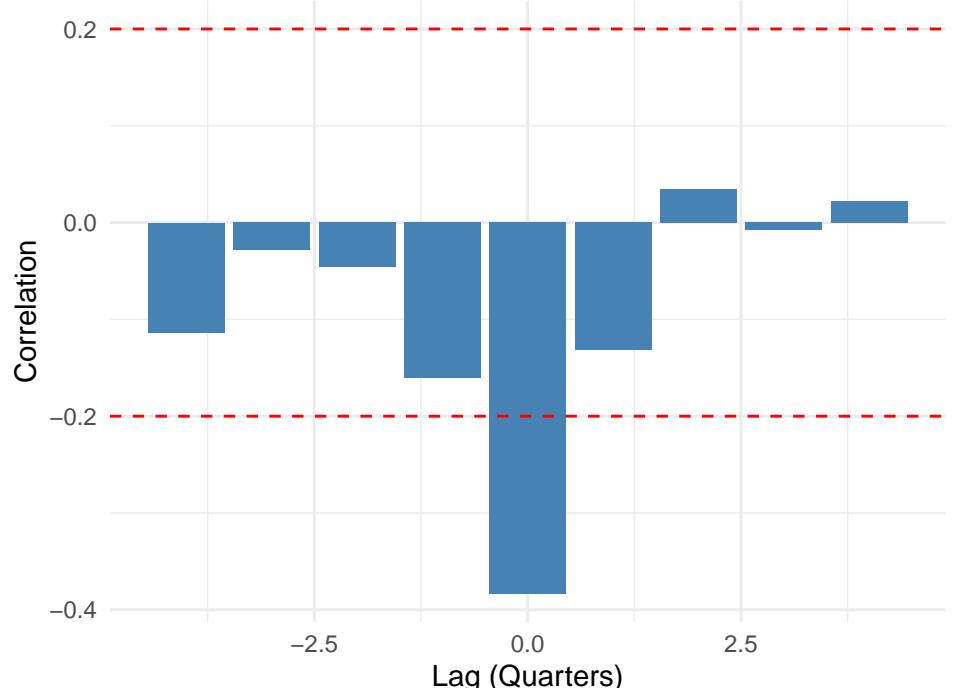
series — ind_scaled — target_scaled

Scatter: DA3m_REER_USD vs Target

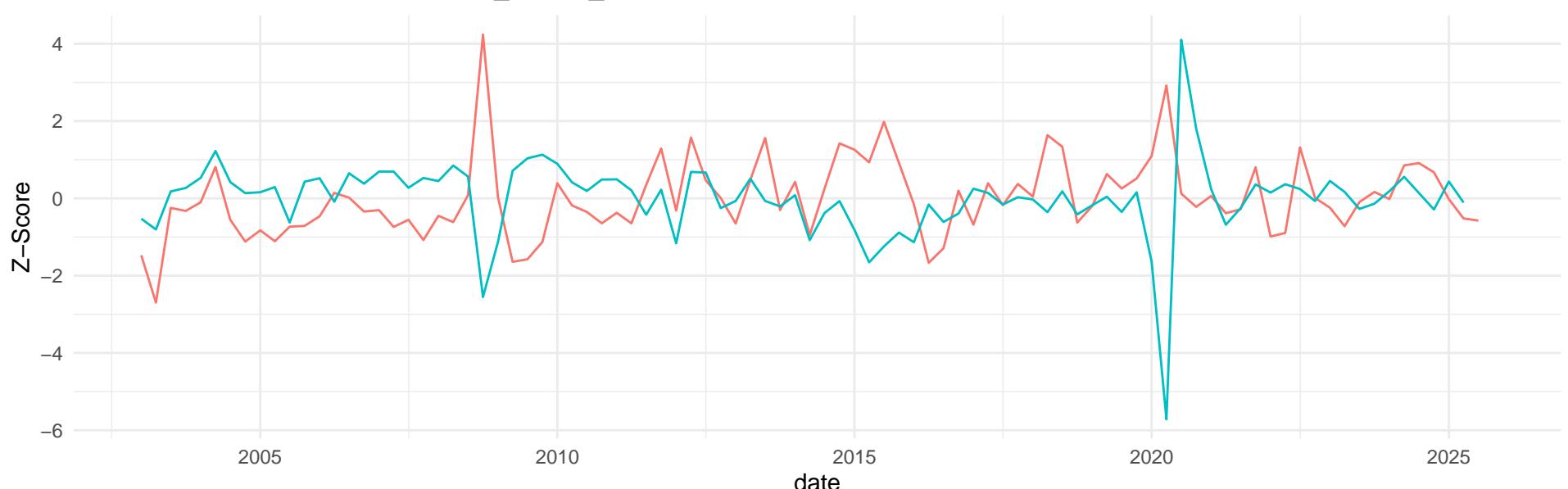
Corr: -0.38



Cross-Correlation (Quarterly Lags): DA3m_REER_USD



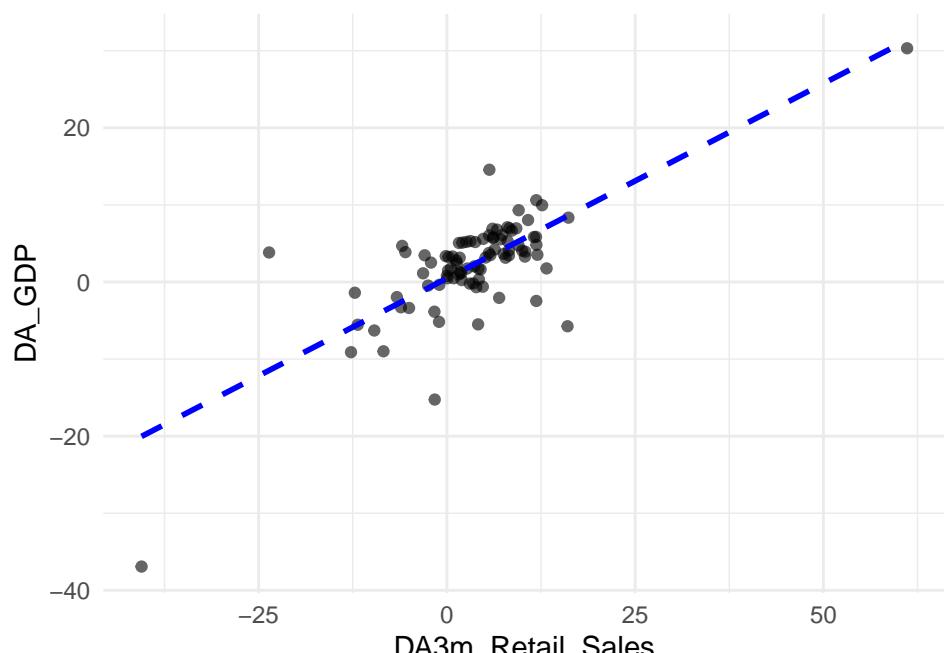
Standardized Time Series: DA3m_REER_USD



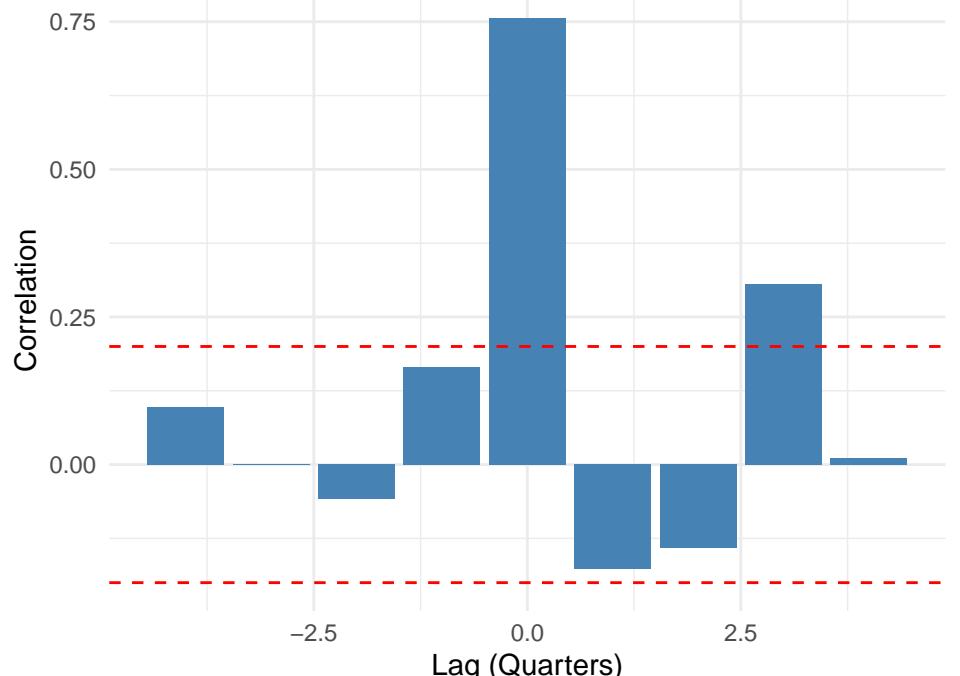
series — ind_scaled — target_scaled

Scatter: DA3m_Retail_Sales vs Target

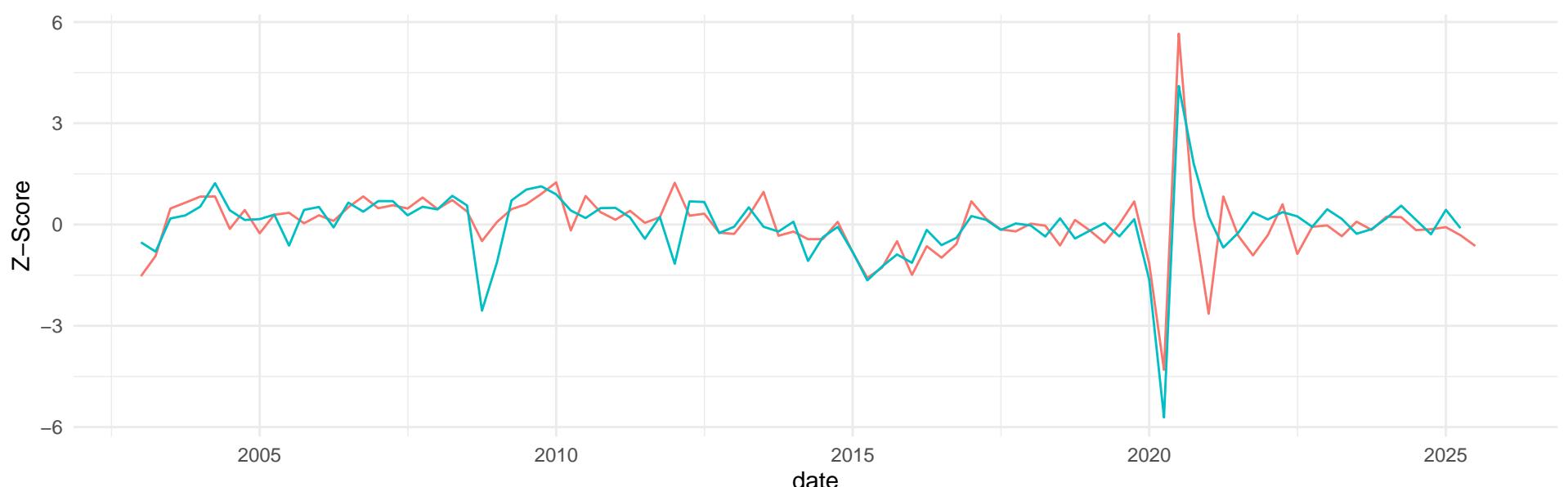
Corr: 0.76



Cross-Correlation (Quarterly Lags): DA3m_Retail_Sale

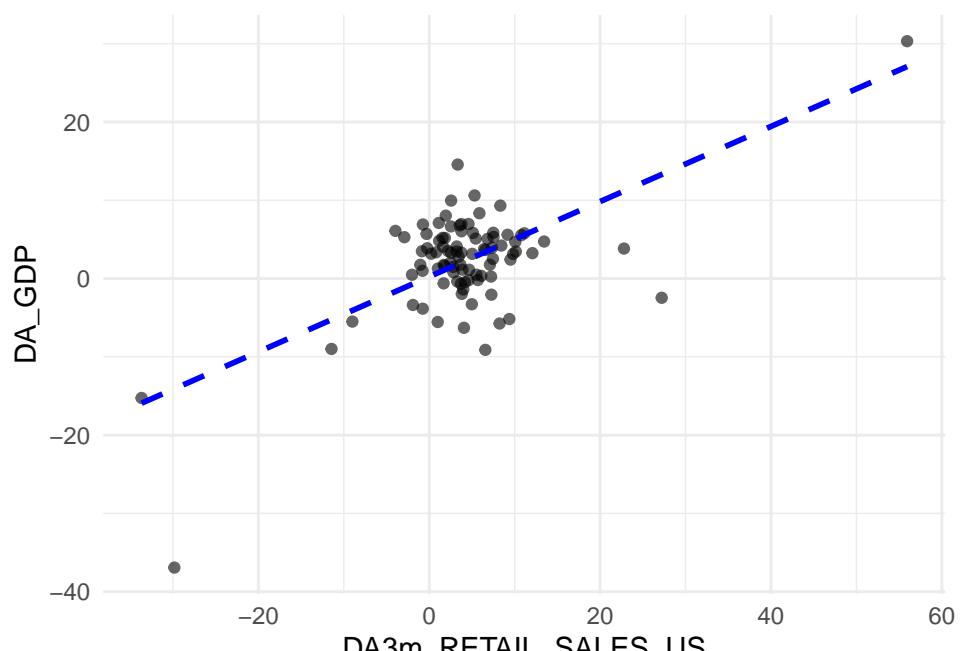


Standardized Time Series: DA3m_Retail_Sales



Scatter: DA3m RETAIL_SALES_US vs Target

Corr: 0.65



Cross-Correlation (Quarterly Lags): DA3m RETAIL_S

Correlation

0.50
0.25
0.00
-0.25

-0.50

-0.75

-1.00

-1.25

-1.50

-1.75

-2.00

-2.25

-2.50

-2.75

-3.00

-3.25

-3.50

-3.75

-4.00

-4.25

-4.50

-4.75

-5.00

-5.25

-5.50

-5.75

-6.00

-6.25

-6.50

-6.75

-7.00

-7.25

-7.50

-7.75

-8.00

-8.25

-8.50

-8.75

-9.00

-9.25

-9.50

-9.75

-10.00

-10.25

-10.50

-10.75

-11.00

-11.25

-11.50

-11.75

-12.00

-12.25

-12.50

-12.75

-13.00

-13.25

-13.50

-13.75

-14.00

-14.25

-14.50

-14.75

-15.00

-15.25

-15.50

-15.75

-16.00

-16.25

-16.50

-16.75

-17.00

-17.25

-17.50

-17.75

-18.00

-18.25

-18.50

-18.75

-19.00

-19.25

-19.50

-19.75

-20.00

-20.25

-20.50

-20.75

-21.00

-21.25

-21.50

-21.75

-22.00

-22.25

-22.50

-22.75

-23.00

-23.25

-23.50

-23.75

-24.00

-24.25

-24.50

-24.75

-25.00

-25.25

-25.50

-25.75

-26.00

-26.25

-26.50

-26.75

-27.00

-27.25

-27.50

-27.75

-28.00

-28.25

-28.50

-28.75

-29.00

-29.25

-29.50

-29.75

-30.00

-30.25

-30.50

-30.75

-31.00

-31.25

-31.50

-31.75

-32.00

-32.25

-32.50

-32.75

-33.00

-33.25

-33.50

-33.75

-34.00

-34.25

-34.50

-34.75

-35.00

-35.25

-35.50

-35.75

-36.00

-36.25

-36.50

-36.75

-37.00

-37.25

-37.50

-37.75

-38.00

-38.25

-38.50

-38.75

-39.00

-39.25

-39.50

-39.75

-40.00

-40.25

-40.50

-40.75

-41.00

-41.25

-41.50

-41.75

-42.00

-42.25

-42.50

-42.75

-43.00

-43.25

-43.50

-43.75

-44.00

-44.25

-44.50

-44.75

-45.00

-45.25

-45.50

-45.75

-46.00

-46.25

-46.50

-46.75

-47.00

-47.25

-47.50

-47.75

-48.00

-48.25

-48.50

-48.75

-49.00

-49.25

-49.50

-49.75

-50.00

-50.25

-50.50

-50.75

-51.00

-51.25

-51.50

-51.75

-52.00

-52.25

-52.50

-52.75

-53.00

-53.25

-53.50

-53.75

-54.00

-54.25

-54.50

-54.75

-55.00

-55.25

-55.50

-55.75

-56.00

-56.25

-56.50

-56.75

-57.00

-57.25

-57.50

-57.75

-58.00

-58.25

-58.50

-58.75

-59.00

-59.25

-59.50

-59.75

-60.00

-60.25

-60.50

-60.75

-61.00

-61.25

-61.50

-61.75

-62.00

-62.25

-62.50

-62.75

-63.00

-63.25

-63.50

-63.75

-64.00

-64.25

-64.50

-64.75

-65.00

-65.25

-65.50

-65.75

-66.00

-66.25

-66.50

-66.75

-67.00

-67.25

-67.50

-67.75

-68.00

-68.25

-68.50

-68.75

-69.00

-69.25

-69.50

-69.75

-70.00

-70.25

-70.50

-70.75

-71.00

-71.25

-71.50

-71.75

-72.00

-72.25

-72.50

-72.75

-73.00

-73.25

-73.50

-73.75

-74.00

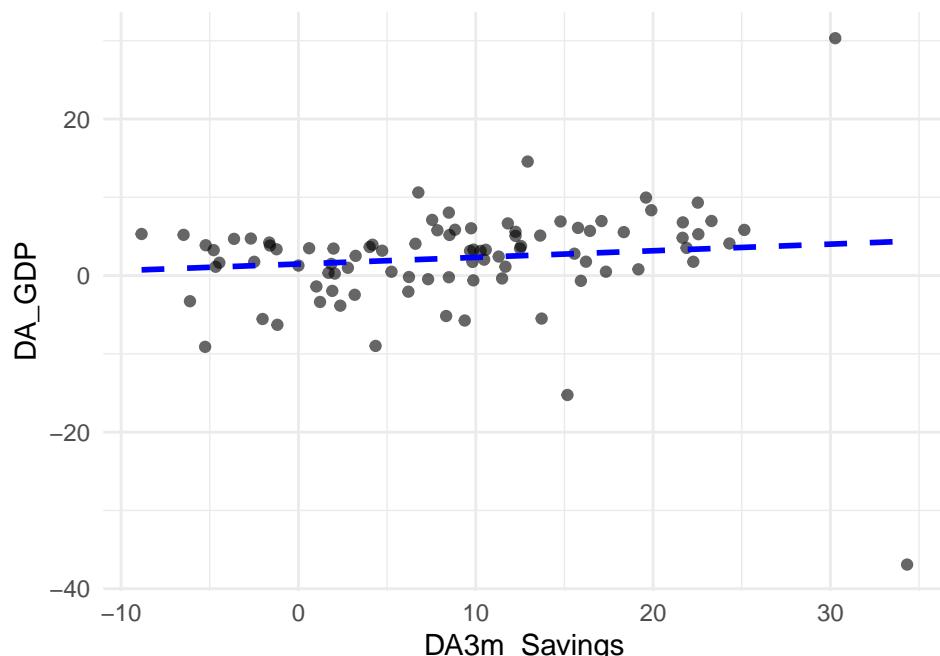
-74.25

-74.50

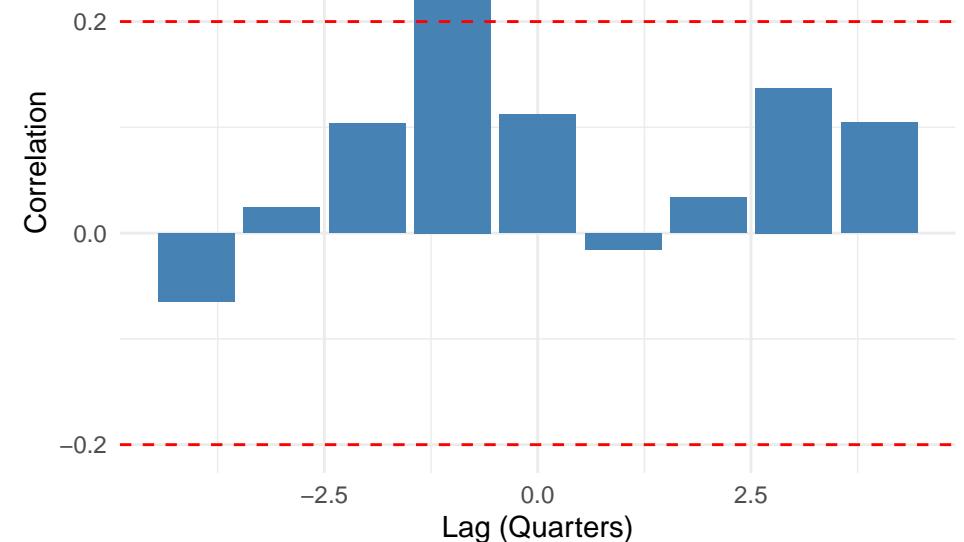
-74.75

Scatter: DA3m_Savings vs Target

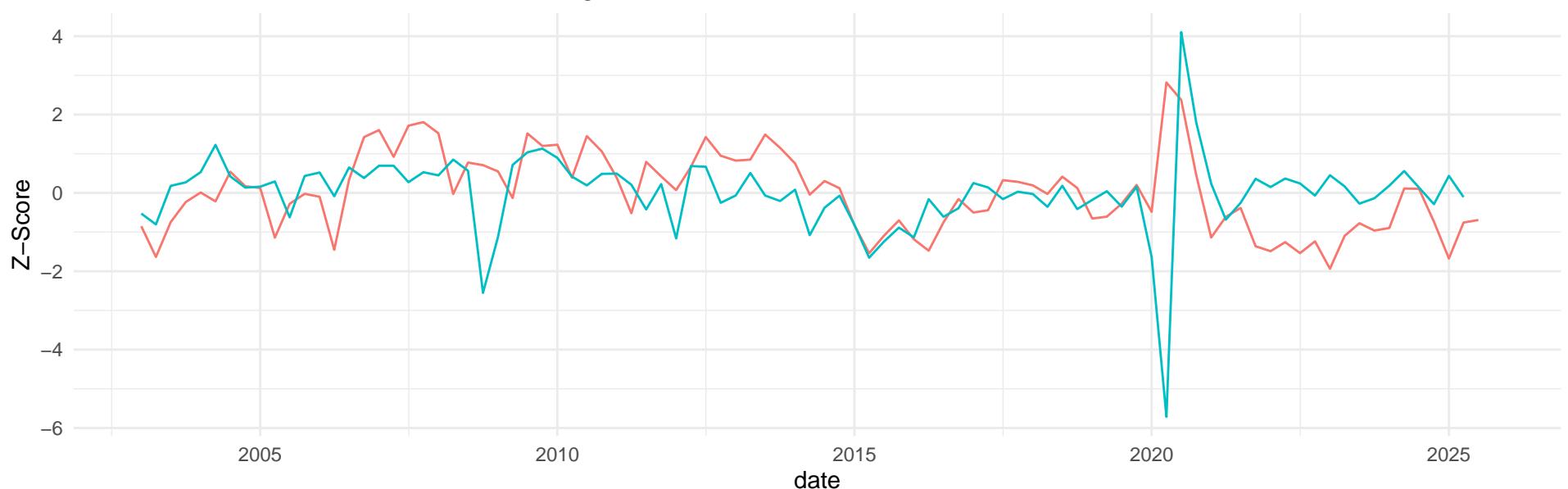
Corr: 0.11



Cross-Correlation (Quarterly Lags): DA3m_Savings



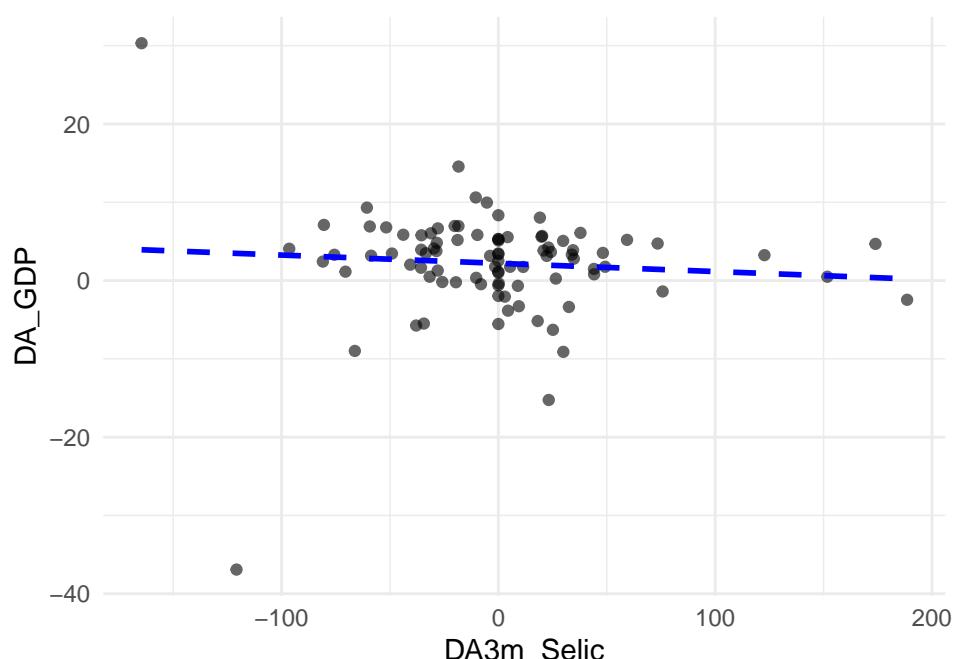
Standardized Time Series: DA3m_Savings



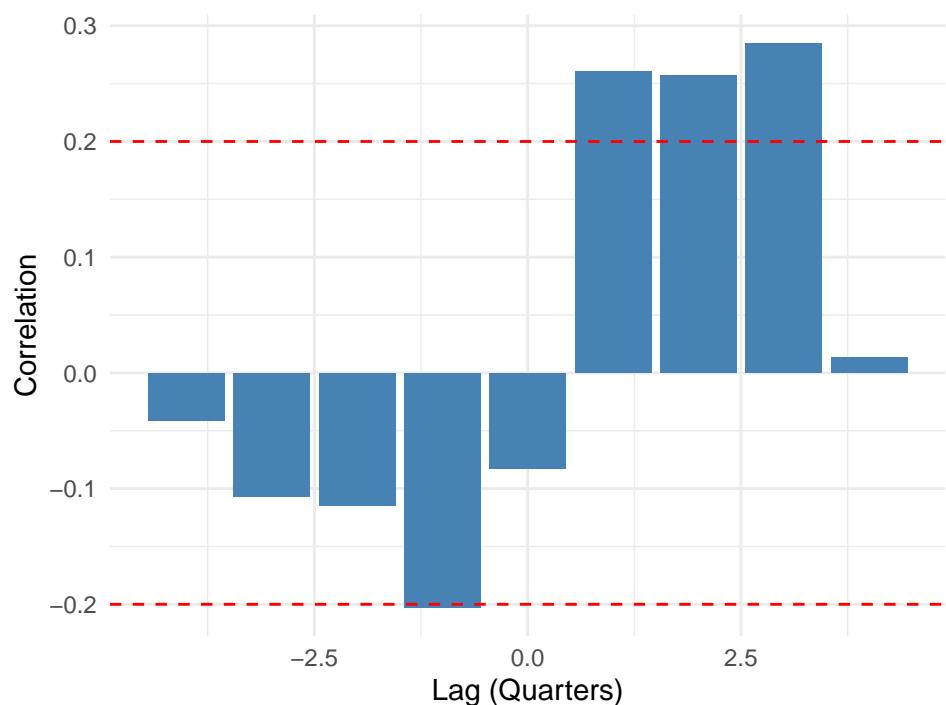
series — ind_scaled — target_scaled

Scatter: DA3m_Selic vs Target

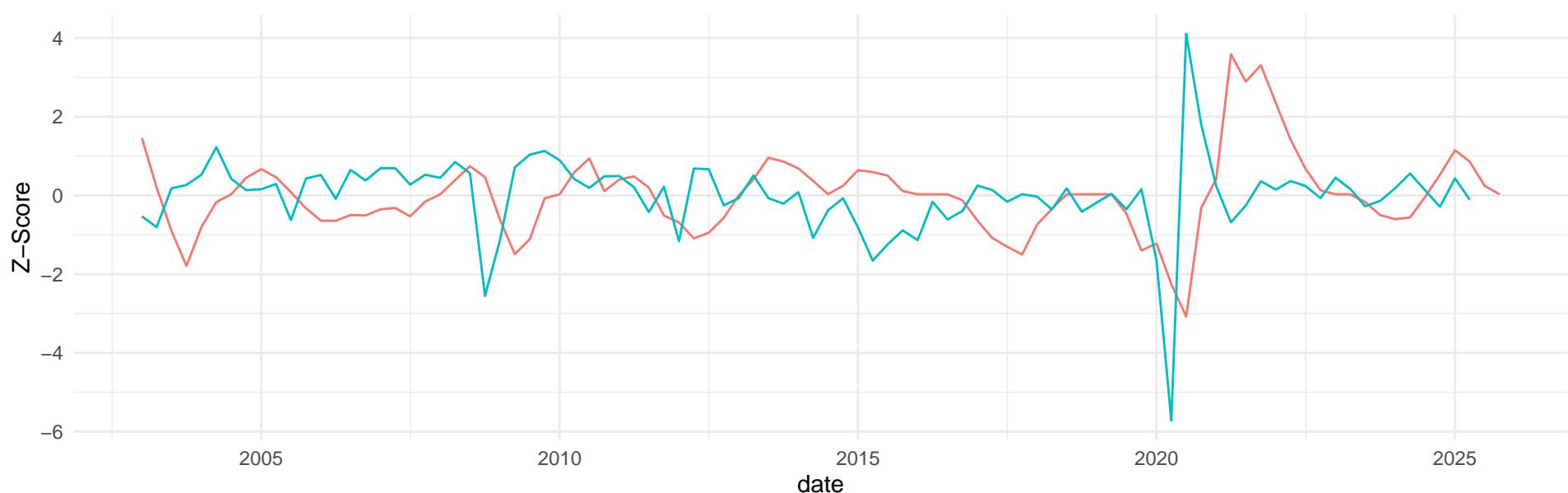
Corr: -0.08



Cross-Correlation (Quarterly Lags): DA3m_Selic



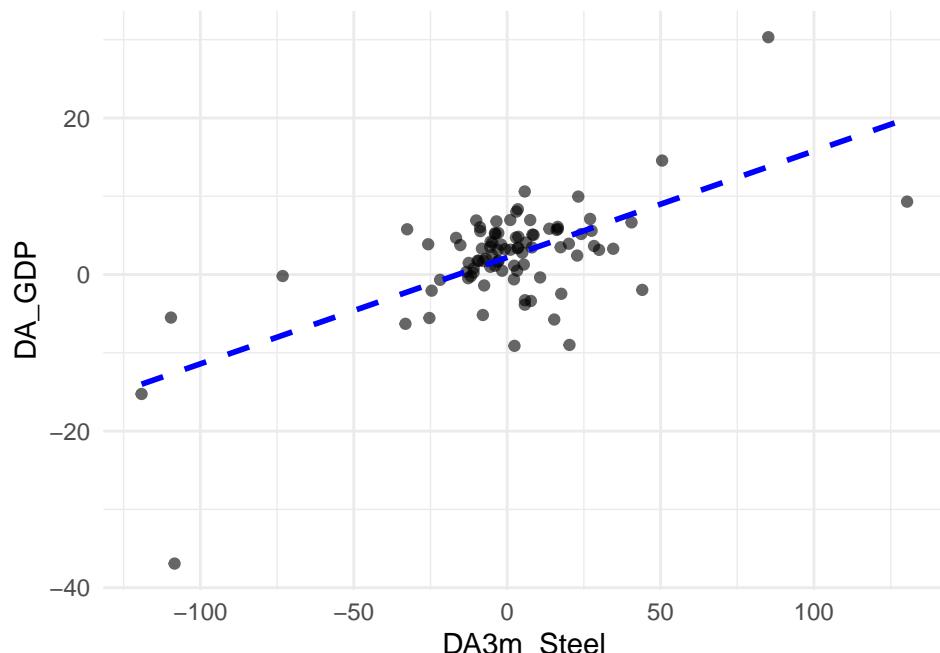
Standardized Time Series: DA3m_Selic



series — ind_scaled — target_scaled

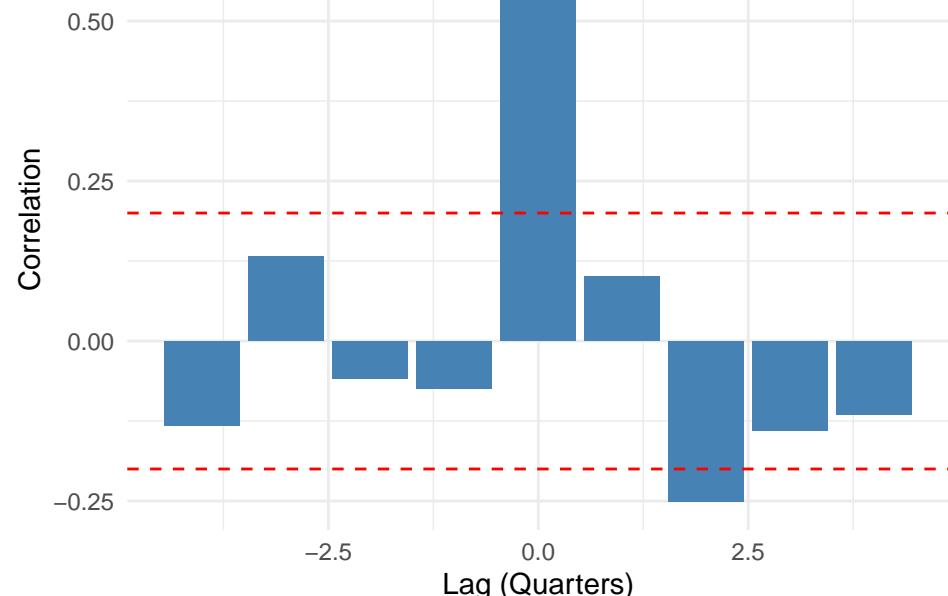
Scatter: DA3m_Steel vs Target

Corr: 0.63

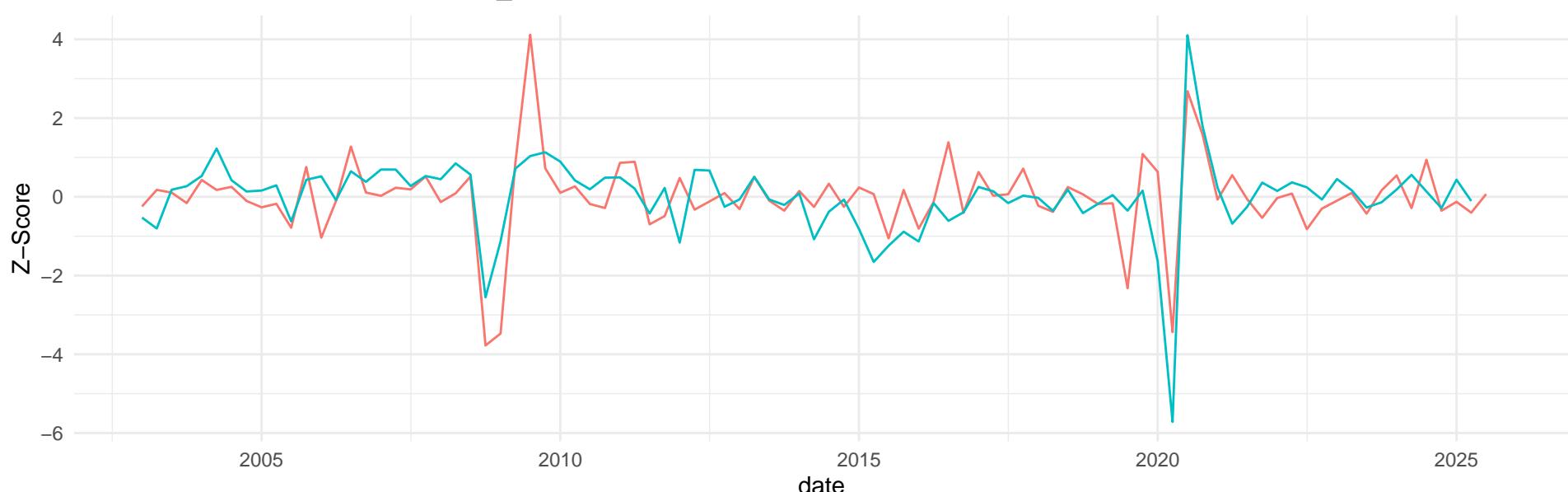


Cross-Correlation (Quarterly Lags): DA3m_Steel

Correlation



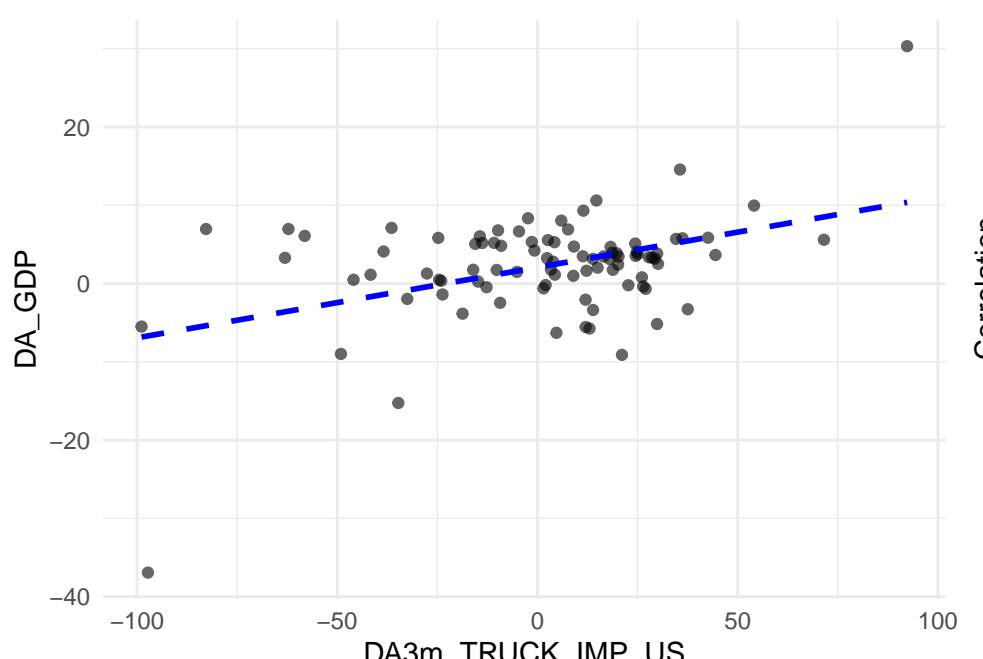
Standardized Time Series: DA3m_Steel



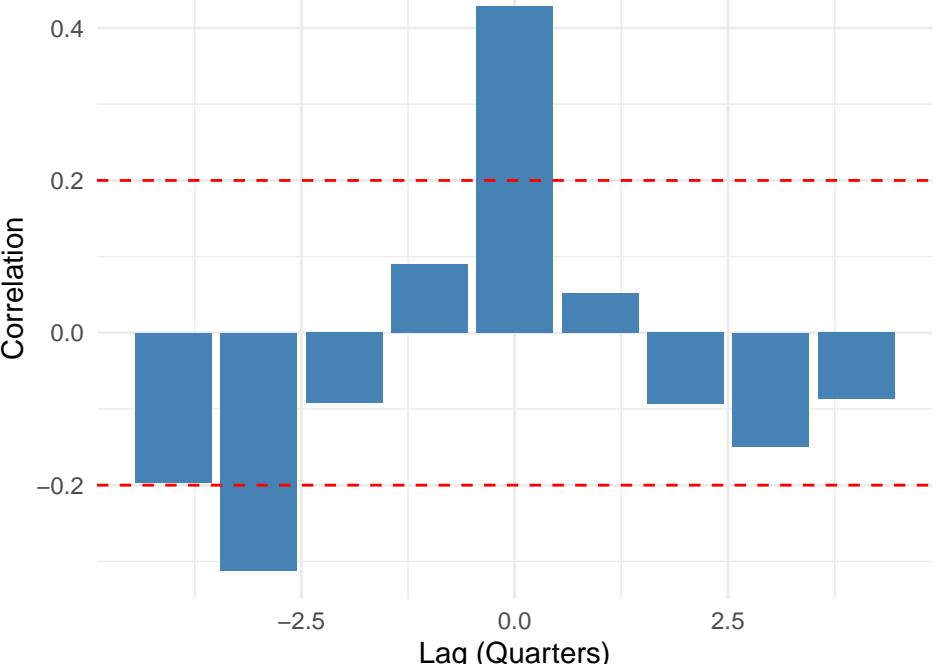
series — ind_scaled — target_scaled

Scatter: DA3m_TRUCK_IMP_US vs Target

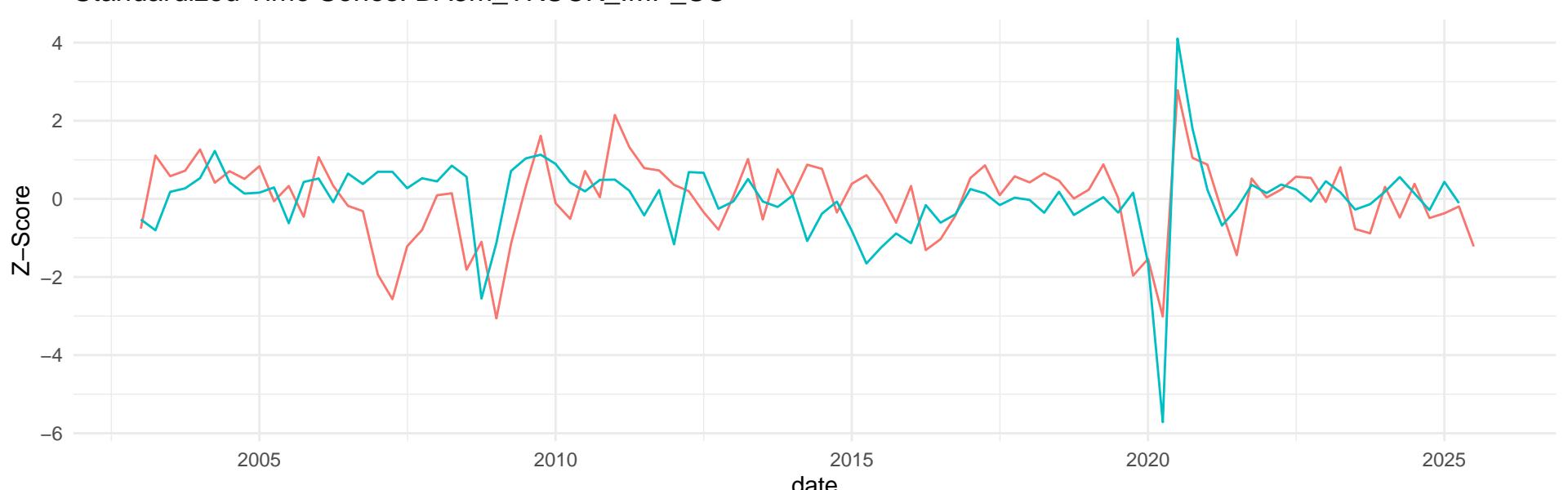
Corr: 0.43



Cross-Correlation (Quarterly Lags): DA3m_TRUCK_IM



Standardized Time Series: DA3m_TRUCK_IMP_US



series — ind_scaled — target_scaled