May19

Model Equations

1: GROWTH_EA6 =
4*(LGDP_EA6-LGDP_EA6(-1))

2: GROWTH4_EA6 =
LGDP_EA6-LGDP_EA6(-4)

3: GROWTH_BAR_EA6 =
4*(LGDP_BAR_EA6-LGDP_BAR_EA6(-1))

4: GROWTH4_BAR_EA6 =
LGDP_BAR_EA6-LGDP_BAR_EA6(-4)

5: RS_EA6 =
gamma1_EA6*RS_EA6(-1)+(1-gamma1_EA6)*(RR_BAR_EA6+PIE4_EA6(+3)+gamma2_EA6*(PIE4_
PIETAR_EA6)+0 +gamma4_EA6*Y_EA6+0)+RESN_RS_EA6

6: RESN_RS_EA6 =
lambda1_RS_EA6*RESN_RS_EA6(-1)+RES_PIETAR_EA6+RES_RS_EA6

7: PIETAR_EA6 =
PIETAR_EA6(-1)-RES_PIETAR_EA6

8: PIE_EA6 =
lambda1_EA6*PIE4_EA6(+4) +(1-lambda1_EA6)*PIE4_EA6(-
1)+lambda2_EA6*Y_EA6(-1) +lambda3_EA6*(REER_M_EA6-
REER_M_EA6(-4)-(REER_M_BAR_EA6-REER_M_BAR_EA6(-4)))/4-
RESN_PIE_EA6

9: RESN_PIE_EA6 =
zeta_EA6*RESN_PIE_EA6(-1) + RES_PIE_EA6

10: DRS_EA6 =
RS_EA6-RS_EA6(-1)

11: RR_EA6 =
RS_EA6-PIE_EA6(+1)

12: RR_BAR_EA6 =
rho_EA6*rr_bar_EA6_ss+(1-rho_EA6)*RR_BAR_EA6(-
1)+RES_RR_BAR_EA6

13: PIE4_EA6 =
(PIE_EA6+PIE_EA6(-1)+PIE_EA6(-2)+PIE_EA6(-3))/4

14: LGDP_BAR_EA6 =
LGDP_BAR_EA6(-1)+G_EA6/4+RES_LGDP_BAR_EA6

15: G_EA6 =
tau_EA6*growth_EA6_ss+(1-tau_EA6)*G_EA6(-1)+RES_G_EA6

16: LCPI_EA6 =
LCPI_EA6(-1)+PIE_EA6/4

17: E4_PIE4_EA6 =
PIE4_EA6(+4)

18: E3_PIE4_EA6 =
PIE4_EA6(+3)

19: E1_PIE_EA6 =
PIE_EA6(+1)

20: E1_Y_EA6 =
Y_EA6(+1)

21: E4_Y_EA6 =
Y_EA6(+4)

22: E8_Y_EA6 =
Y_EA6(+8)

23: REER_T_GAP_EA6 =
REER_T_EA6 - REER_T_BAR_EA6

24: DOT_REER_M_EA6 =
4*(REER_M_EA6-REER_M_EA6(-1))

25: REER_M_EA6 =
+imp_EA6_EU *(LZ_EA6-LZ_EU)+imp_EA6_JA *(LZ_EA6-LZ_JA
)+imp_EA6_LA6*(LZ_EA6-LZ_LA6)+imp_EA6_RC6*(LZ_EA6-
LZ_RC6)+imp_EA6_US *LZ_EA6

26: REER_M_BAR_EA6 =
+imp_EA6_EU *(LZ_BAR_EA6-LZ_BAR_EU)+imp_EA6_JA
(LZ_BAR_EA6-LZ_BAR_JA)+imp_EA6_LA6(LZ_BAR_EA6-
LZ_BAR_LA6)+imp_EA6_RC6*(LZ_BAR_EA6-LZ_BAR_RC6)+imp_EA6_US
*LZ_BAR_EA6

27: DOT_REER_M_BAR_EA6 =
4*(REER_M_BAR_EA6-REER_M_BAR_EA6(-1))

28: REER_T_EA6 =
+trade_EA6_EU *(LZ_EA6-LZ_EU)+trade_EA6_JA *(LZ_EA6-LZ_JA
)+trade_EA6_LA6*(LZ_EA6-LZ_LA6)+trade_EA6_RC6*(LZ_EA6-
LZ_RC6)+trade_EA6_US *LZ_EA6

29: REER_T_BAR_EA6 =
+trade_EA6_EU *(LZ_BAR_EA6-LZ_BAR_EU)+trade_EA6_JA
(LZ_BAR_EA6-LZ_BAR_JA)+trade_EA6_LA6(LZ_BAR_EA6-
LZ_BAR_LA6)+trade_EA6_RC6*(LZ_BAR_EA6-LZ_BAR_RC6)+trade_EA6_US
*LZ_BAR_EA6

30: FACT_EA6 =
+ spill_US_EA6*Y_US (-1) + spill_EU_EA6*Y_EU (-1)
+ spill_JA_EA6*Y_JA (-1) + spill_LA6_EA6*Y_LA6(-1) +
spill_RC6_EA6*Y_RC6(-1)

31: FACT_RES_EA6 =
spill_EA6_EA6*RESN_YY_EA6 + spill_US_EA6*RESN_YY_US
+ spill_EU_EA6*RESN_YY_EU + spill_JA_EA6*RESN_YY_JA +
spill_LA6_EA6*RESN_YY_LA6 + spill_RC6_EA6*RESN_YY_RC6

32: RESN_YY_EA6 =
0.5*RESN_YY_EA6(-1) + RES_YY_EA6

33: Y_EA6 =
LGDP_EA6-LGDP_BAR_EA6

34: RR_EA6-RR_US =
4*(LZ_E_EA6-LZ_EA6)+RR_BAR_EA6-RR_BAR_US -
DOT_LZ_BAR_EA6+RESN_RR_DIFF_EA6

35: RESN_RR_DIFF_EA6 =
0.8*RESN_RR_DIFF_EA6(-1) + RES_RR_DIFF_EA6

36: LZ_BAR_EA6 =
LZ_BAR_EA6(-1)+DOT_LZ_BAR_EA6/4+RES_LZ_BAR_EA6

37: DOT_LZ_BAR_EA6 =
chi_EA6*dot_lz_bar_EA6_ss+(1-chi_EA6)*DOT_LZ_BAR_EA6(-
1)+RES_DOT_LZ_BAR_EA6

38: LZ_E_EA6 =
phi_EA6*LZ_EA6(+1)+(1-phi_EA6)*(LZ_EA6(-1)+2*DOT_LZ_BAR_EA6/4)

39: Y_EA6 =
beta1_EA6*Y_EA6(-1)+beta2_EA6*Y_EA6(+1)-beta3m_EA6*(LRR_EA6(-
1)-LRR_BAR_EA6(-1)) +beta_fact*FACT_EA6+beta_fact_res*FACT_RES_EA6+beta4_EA6*(REER_T_
1)-REER_T_BAR_EA6(-1)+REER_T_EA6(-2)-REER_T_BAR_EA6(-
2)+REER_T_EA6(-3)-REER_T_BAR_EA6(-3)+REER_T_EA6(-4)-
REER_T_BAR_EA6(-4))/4-E2_EA6+RESN_Y_EA6

40: RESN_Y_EA6 =
0.5*RESN_Y_EA6(-1) + RES_Y_EA6

41: E2_EA6 =
theta_EA6*(spill_US_EA6*E2_US+spill_EU_EA6*E2_EU+spill_JA_EA6*E2_JA)

42: LZ_GAP_EA6 =
LZ_EA6-LZ_BAR_EA6

43: LS_EA6 =
LZ_EA6+LCPI_EA6-LCPI_US

44: RR4_EA6 =
(RR_EA6+RR_EA6(+1)+RR_EA6(+2)+RR_EA6(+3))/4

45: RR4_BAR_EA6 =
(RR_BAR_EA6+RR_BAR_EA6(+1)+RR_BAR_EA6(+2)+RR_BAR_EA6(+3))/4

46: LRR_EA6 =
lrrw01_EA6*RR_EA6 + lrrw04_EA6*RR4_EA6 +
lrrw12_EA6*(RR4_EA6+RR4_EA6(+4)+RR4_EA6(+8))/3 +
lrrw20_EA6*(RR4_EA6+RR4_EA6(+4)+RR4_EA6(+8)+RR4_EA6(12)+RR4_EA6(16))/5

47: LRR_BAR_EA6 =
lrrw01_EA6*RR_BAR_EA6 + lrrw04_EA6*RR4_BAR_EA6 +
lrrw12_EA6*(RR4_BAR_EA6+RR4_BAR_EA6(+4)+RR4_BAR_EA6(+8))/3
+
lrrw20_EA6*(RR4_BAR_EA6+RR4_BAR_EA6(+4)+RR4_BAR_EA6(+8)+RR4_BAR_EA6(12)+RR4_BA

48: LRR_GAP_EA6 =
LRR_EA6 - LRR_BAR_EA6

49: GROWTH_EU =
4*(LGDP_EU -LGDP_EU(-1))

50: GROWTH4_EU =
LGDP_EU -LGDP_EU(-4)

51: GROWTH_BAR_EU =
4*(LGDP_BAR_EU -LGDP_BAR_EU(-1))

52: GROWTH4_BAR_EU =
LGDP_BAR_EU -LGDP_BAR_EU(-4)

53: RS_EU =
gamma1_EU *RS_EU(-1) +(1-gamma1_EU)*(RR_BAR_EU
+PIE4_EU(+3) +gamma2_EU *(PIE4_EU(+3) -PIETAR_EU)+0
+gamma4_EU *Y_EU +0)+RESN_RS_EU

54: RESN_RS_EU =
lambda1_RS_EU*RESN_RS_EU(-1)+RES_RS_EU

55: PIETAR_EU =
pietar_EU__ss

56: UNR_GAP_EU =
alpha1_EU *UNR_GAP_EU(-1) +alpha2_EU *Y_EU +RES_UNR_GAP_EU

57: UNR_GAP_EU =
UNR_BAR_EU -UNR_EU

58: UNR_BAR_EU =
UNR_BAR_EU(-1) +UNR_G_EU +RES_UNR_BAR_EU

59: UNR_G_EU =
(1-alpha3_EU)*UNR_G_EU(-1) +RES_UNR_G_EU

60: PIE_EU =
lambda1_EU *PIE4_EU(+4) +(1-lambda1_EU)*PIE4_EU(-1)
+lambda2_EU *Y_EU(-1) +lambda3_EU *(REER_M_EU
-REER_M_EU(-4) -(REER_M_BAR_EU -REER_M_BAR_EU(-4))
)/4-RESN_PIE_EU

61: RESN_PIE_EU =
zeta_EU*RESN_PIE_EU(-1) + RES_PIE_EU

62: DRS_EU =
RS_EU -RS_EU(-1)

63: RR_EU =
RS_EU -PIE_EU(+1)

64: RR_BAR_EU =
rho_EU *rr_bar_EU__ss+(1-rho_EU)*RR_BAR_EU(-1)
+RES_RR_BAR_EU

65: PIE4_EU =
(PIE_EU +PIE_EU(-1) +PIE_EU(-2) +PIE_EU(-3))/4

66: LGDP_BAR_EU =
LGDP_BAR_EU(-1) +G_EU /4+RES_LGDP_BAR_EU

67: G_EU =
tau_EU *growth_EU__ss+(1-tau_EU)*G_EU(-1) +RES_G_EU

68: LCPI_EU =
LCPI_EU(-1) +PIE_EU /4

69: E4_PIE4_EU =
PIE4_EU(+4)

70: E3_PIE4_EU =
PIE4_EU(+3)

71: E1_PIE_EU =
PIE_EU(+1)

72: E1_Y_EU =
Y_EU(+1)

73: E4_Y_EU =
Y_EU(+4)

74: E8_Y_EU =
Y_EU(+8)

75: REER_T_GAP_EU =
REER_T_EU - REER_T_BAR_EU

76: DOT_REER_M_EU =
4*(REER_M_EU-REER_M_EU(-1))

77: REER_M_EU =
+imp_EU__EA6*(LZ_EU -LZ_EA6)+imp_EU__JA *(LZ_EU -LZ_JA
)+imp_EU__LA6*(LZ_EU -LZ_LA6)+imp_EU__RC6*(LZ_EU
-LZ_RC6)+imp_EU__US *LZ_EU

78: REER_M_BAR_EU =
+imp_EU__EA6*(LZ_BAR_EU -LZ_BAR_EA6)+imp_EU__JA
(LZ_BAR_EU -LZ_BAR_JA)+imp_EU__LA6(LZ_BAR_EU -
LZ_BAR_LA6)+imp_EU__RC6*(LZ_BAR_EU -LZ_BAR_RC6)+imp_EU__US
*LZ_BAR_EU

79: DOT_REER_M_BAR_EU =
4*(REER_M_BAR_EU -REER_M_BAR_EU(-1))

80: REER_T_EU =
+trade_EU__EA6*(LZ_EU -LZ_EA6)+trade_EU__JA *(LZ_EU -LZ_JA
)+trade_EU__LA6*(LZ_EU -LZ_LA6)+trade_EU__RC6*(LZ_EU
-LZ_RC6)+trade_EU__US *LZ_EU

81: REER_T_BAR_EU =
+trade_EU__EA6*(LZ_BAR_EU -LZ_BAR_EA6)+trade_EU__JA
(LZ_BAR_EU -LZ_BAR_JA)+trade_EU__LA6(LZ_BAR_EU -
LZ_BAR_LA6)+trade_EU__RC6*(LZ_BAR_EU -LZ_BAR_RC6)+trade_EU__US
*LZ_BAR_EU

82: FACT_EU =
+ spill_US__EU *Y_US (-1) + spill_JA__EU *Y_JA (-1) + spill_EA6_EU
*Y_EA6(-1) + spill_LA6_EU *Y_LA6(-1) + spill_RC6_EU *Y_RC6(-1)

83: FACT_RES_EU =
spill_EU__EU *RESN_YY_EU + spill_US__EU *RESN_YY_US +
spill_JA__EU *RESN_YY_JA + spill_EA6_EU *RESN_YY_EA6 +
spill_LA6_EU *RESN_YY_LA6 + spill_RC6_EU *RESN_YY_RC6

84: RESN_YY_EU =
0.5*RESN_YY_EU(-1) + RES_YY_EU

85: Y_EU =
LGDP_EU -LGDP_BAR_EU

86: RR_EU -RR_US =
4*(LZ_E_EU -LZ_EU)+RR_BAR_EU -RR_BAR_US +RESN_RR_DIFF_EU

87: RESN_RR_DIFF_EU =
0.8*RESN_RR_DIFF_EU(-1) + RES_RR_DIFF_EU

88: LZ_BAR_EU =
LZ_BAR_EU(-1) +RES_LZ_BAR_EU

89: LZ_E_EU =
phi_EU *LZ_EU(+1) +(1-phi_EU)*LZ_EU(-1)

90: Y_EU =
beta1_EU *Y_EU(-1) +beta2_EU*Y_EU(+1) -beta3m_EU *(LRR_EU(-1)
-LRR_BAR_EU(-1)) +beta_fact*FACT_EU +beta_fact_res*FACT_RES_EU
+beta4_EU*(REER_T_EU(-1) -REER_T_BAR_EU(-1)+REER_T_EU(-
2)-REER_T_BAR_EU(-2)+REER_T_EU(-3)-REER_T_BAR_EU(-
3)+REER_T_EU(-4)-REER_T_BAR_EU(-4))/4-E2_EU+RESN_Y_EU

91: RESN_Y_EU =
0.5*RESN_Y_EU(-1) + RES_Y_EU

92: E_EU =
-RES_BLT_EU

93: BLT_EU =
BLT_BAR_EU -kappa_EU *Y_EU(+4) -RES_BLT_EU

94: BLT_BAR_EU =
BLT_BAR_EU(-1) +RES_BLT_BAR_EU

95: E2_EU =
theta_EU *(0.04*(E_EU(-1) +E_EU(-9))+0.08*(E_EU(-2) +E_EU(-8)
)+0.12*(E_EU(-3) +E_EU(-7))+0.16*(E_EU(-4) +E_EU(-6)
)+0.2*E_EU(-5))

96: LZ_GAP_EU =
LZ_EU -LZ_BAR_EU

97: LS_EU =
LZ_EU +LCPI_EU -LCPI_US

98: RR4_EU =
(RR_EU +RR_EU(+1) +RR_EU(+2) +RR_EU(+3))/4

99: RR4_BAR_EU =
(RR_BAR_EU +RR_BAR_EU(+1) +RR_BAR_EU(+2) +RR_BAR_EU(+3)
)/4

100: LRR_GAP_EU =
LRR_EU - LRR_BAR_EU

101: LRR_EU =
lrrw01_EU *RR_EU
+ lrrw04_EU *RR4_EU
+ lrrw12_EU *(RR4_EU +RR4_EU(+4) +RR4_EU(+8))/3
+ lrrw20_EU *(RR4_EU +RR4_EU(+4) +RR4_EU(+8) +RR4_EU(12)
+RR4_EU(16))/5

102: LRR_BAR_EU =
lrrw01_EU *RR_BAR_EU
+ lrrw04_EU *RR4_BAR_EU
+ lrrw12_EU *(RR4_BAR_EU +RR4_BAR_EU(+4) +RR4_BAR_EU(+8)
)/3
+ lrrw20_EU *(RR4_BAR_EU +RR4_BAR_EU(+4) +RR4_BAR_EU(+8)
+RR4_BAR_EU(12) +RR4_BAR_EU(16))/5

103: GROWTH_JA =
4*(LGDP_JA -LGDP_JA(-1))

104: GROWTH4_JA =
LGDP_JA -LGDP_JA(-4)

105: GROWTH_BAR_JA =
4*(LGDP_BAR_JA -LGDP_BAR_JA(-1))

106: GROWTH4_BAR_JA =
LGDP_BAR_JA -LGDP_BAR_JA(-4)

107: RS_JA =
gamma1_JA *RS_JA(-1) +(1-gamma1_JA)*(RR_BAR_JA +PIE4_JA(+3)
+gamma2_JA *(PIE4_JA(+3) -PIETAR_JA)+0 +gamma4_JA *Y_JA +0
)+RESN_RS_JA

108: RESN_RS_JA =
lambda1_RS_JA*RESN_RS_JA(-1)+RES_RS_JA

109: PIETAR_JA =
pietar_JA__ss

110: UNR_GAP_JA =
alpha1_JA *UNR_GAP_JA(-1) +alpha2_JA *Y_JA +RES_UNR_GAP_JA

111: UNR_GAP_JA =
UNR_BAR_JA -UNR_JA

112: UNR_BAR_JA =
UNR_BAR_JA(-1) +UNR_G_JA +RES_UNR_BAR_JA

113: UNR_G_JA =
(1-alpha3_JA)*UNR_G_JA(-1) +RES_UNR_G_JA

114: PIE_JA =
lambda1_JA *PIE4_JA(+4) +(1-lambda1_JA)*PIE4_JA(-1)
+lambda2_JA *Y_JA(-1) +lambda3_JA *(REER_M_JA -REER_M_JA(-4)
-(REER_M_BAR_JA -REER_M_BAR_JA(-4)))/4-RESN_PIE_JA

115: RESN_PIE_JA =
zeta_JA*RESN_PIE_JA(-1) + RES_PIE_JA

116: DRS_JA =
RS_JA -RS_JA(-1)

117: RR_JA =
RS_JA -PIE_JA(+1)

118: RR_BAR_JA =
rho_JA *rr_bar_JA_ss+(1-rho_JA)*RR_BAR_JA(-1) +RES_RR_BAR_JA

119: PIE4_JA =
(PIE_JA +PIE_JA(-1) +PIE_JA(-2) +PIE_JA(-3))/4

120: LGDP_BAR_JA =
LGDP_BAR_JA(-1) +G_JA /4+RES_LGDP_BAR_JA

121: G_JA =
tau_JA *growth_JA_ss+(1-tau_JA)*G_JA(-1) +RES_G_JA

122: LCPI_JA =
LCPI_JA(-1) +PIE_JA /4

123: E4_PIE4_JA =
PIE4_JA(+4)

124: E3_PIE4_JA =
PIE4_JA(+3)

125: E1_PIE_JA =
PIE_JA(+1)

126: E1_Y_JA =
Y_JA(+1)

127: E4_Y_JA =
Y_JA(+4)

128: E8_Y_JA =
Y_JA(+8)

129: REER_T_GAP_JA =
REER_T_JA - REER_T_BAR_JA

130: DOT_REER_M_JA =
4*(REER_M_JA-REER_M_JA(-1))

131: REER_M_JA =
+imp_JA__EA6*(LZ_JA -LZ_EA6)+imp_JA__EU *(LZ_JA -LZ_EU
)+imp_JA__LA6*(LZ_JA -LZ_LA6)+imp_JA__RC6*(LZ_JA
-LZ_RC6)+imp_JA__US *LZ_JA

132: REER_M_BAR_JA =
+imp_JA__EA6*(LZ_BAR_JA -LZ_BAR_EA6)+imp_JA__EU
(LZ_BAR_JA -LZ_BAR_EU)+imp_JA__LA6(LZ_BAR_JA
-LZ_BAR_LA6)+imp_JA__RC6*(LZ_BAR_JA -LZ_BAR_RC6)+imp_JA__US
*LZ_BAR_JA

133: DOT_REER_M_BAR_JA =
4*(REER_M_BAR_JA -REER_M_BAR_JA(-1))

134: REER_T_JA =
+trade_JA__EA6*(LZ_JA -LZ_EA6)+trade_JA__EU *(LZ_JA -LZ_EU
)+trade_JA__LA6*(LZ_JA -LZ_LA6)+trade_JA__RC6*(LZ_JA
-LZ_RC6)+trade_JA__US *LZ_JA

135: REER_T_BAR_JA =
+trade_JA__EA6*(LZ_BAR_JA -LZ_BAR_EA6)+trade_JA__EU
(LZ_BAR_JA -LZ_BAR_EU)+trade_JA__LA6(LZ_BAR_JA -
LZ_BAR_LA6)+trade_JA__RC6*(LZ_BAR_JA -LZ_BAR_RC6)+trade_JA__US
*LZ_BAR_JA

136: FACT_JA =
+ spill_US__JA *Y_US (-1) + spill_EU__JA *Y_EU (-1) + spill_EA6_JA
*Y_EA6(-1) + spill_LA6_JA *Y_LA6(-1) + spill_RC6_JA *Y_RC6(-1)

137: FACT_RES_JA =
spill_JA__JA *RESN_YY_JA + spill_US__JA *RESN_YY_US + spill_EU__JA
*RESN_YY_EU + spill_EA6_JA *RESN_YY_EA6 + spill_LA6_JA
*RESN_YY_LA6 + spill_RC6_JA *RESN_YY_RC6

138: RESN_YY_JA =
0.5*RESN_YY_JA(-1) + RES_YY_JA

139: Y_JA =
LGDP_JA -LGDP_BAR_JA

140: RR_JA -RR_US =
4*(LZ_E_JA -LZ_JA)+RR_BAR_JA -RR_BAR_US +RESN_RR_DIFF_JA

141: RESN_RR_DIFF_JA =
0.8*RESN_RR_DIFF_JA(-1) + RES_RR_DIFF_JA

142: LZ_BAR_JA =
LZ_BAR_JA(-1) +RES_LZ_BAR_JA

143: LZ_E_JA =
phi_JA *LZ_JA(+1) +(1-phi_JA)*LZ_JA(-1)

144: Y_JA =
beta1_JA *Y_JA(-1) + beta2_JA *Y_JA(+1) -beta3m_JA *(LRR_JA(-1)
-LRR_BAR_JA(-1)) +beta_fact*FACT_JA +beta_fact_res*FACT_RES_JA
+ beta4_JA *(REER_T_JA(-1) -REER_T_BAR_JA(-1)+REER_T_JA(-2)
-REER_T_BAR_JA(-2)+REER_T_JA(-3)-REER_T_BAR_JA(-
3)+REER_T_JA(-4) -REER_T_BAR_JA(-4))/4-E2_JA+RESN_Y_JA

145: RESN_Y_JA =
0.5*RESN_Y_JA(-1) + RES_Y_JA

146: E_JA =
-RES_BLT_JA

147: BLT_JA =
BLT_BAR_JA -kappa_JA *Y_JA(+4) -RES_BLT_JA

148: BLT_BAR_JA =
BLT_BAR_JA(-1) +RES_BLT_BAR_JA

149: E2_JA =
theta_JA *(0.04*(E_JA(-1) +E_JA(-9))+0.08*(E_JA(-2) +E_JA(-8)
)+0.12*(E_JA(-3) +E_JA(-7))+0.16*(E_JA(-4) +E_JA(-6))+0.2*E_JA(-5))

150: LZ_GAP_JA =
LZ_JA -LZ_BAR_JA

151: LS_JA =
LZ_JA +LCPI_JA -LCPI_US

152: RR4_JA =
(RR_JA +RR_JA(+1) +RR_JA(+2) +RR_JA(+3))/4

153: RR4_BAR_JA =
(RR_BAR_JA +RR_BAR_JA(+1) +RR_BAR_JA(+2) +RR_BAR_JA(+3))/4

154: LRR_GAP_JA =
LRR_JA - LRR_BAR_JA

155: LRR_JA =
lrrw01_JA *RR_JA
+ lrrw04_JA *RR4_JA
+ lrrw12_JA *(RR4_JA +RR4_JA(+4) +RR4_JA(+8))/3
+ lrrw20_JA *(RR4_JA +RR4_JA(+4) +RR4_JA(+8) +RR4_JA(12)
+RR4_JA(16))/5

156: LRR_BAR_JA =
lrrw01_JA *RR_BAR_JA
+ lrrw04_JA *RR4_BAR_JA
+ lrrw12_JA *(RR4_BAR_JA +RR4_BAR_JA(+4) +RR4_BAR_JA(+8))/3
+ lrrw20_JA *(RR4_BAR_JA +RR4_BAR_JA(+4) +RR4_BAR_JA(+8)
+RR4_BAR_JA(12) +RR4_BAR_JA(16))/5

157: GROWTH_LA6 =
4*(LGDP_LA6-LGDP_LA6(-1))

158: GROWTH4_LA6 =
LGDP_LA6-LGDP_LA6(-4)

159: GROWTH_BAR_LA6 =
4*(LGDP_BAR_LA6-LGDP_BAR_LA6(-1))

160: GROWTH4_BAR_LA6 =
LGDP_BAR_LA6-LGDP_BAR_LA6(-4)

161: RS_LA6 =
gamma1_LA6*RS_LA6(-1)+(1-gamma1_LA6)*(RR_BAR_LA6+PIE4_LA6(+3)+gamma2_LA6*(PIE4_L
PIETAR_LA6)+0 +gamma4_LA6*Y_LA6+0)+RESN_RS_LA6

162: RESN_RS_LA6 =
lambda1_RS_LA6*RESN_RS_LA6(-1)+RES_PIETAR_LA6+RES_RS_LA6

163: PIETAR_LA6 =
PIETAR_LA6(-1)-RES_PIETAR_LA6

164: PIE_LA6 =
lambda1_LA6*PIE4_LA6(+4) +(1-lambda1_LA6)*PIE4_LA6(-
1)+lambda2_LA6*Y_LA6(-1) +lambda3_LA6*(REER_M_LA6-
REER_M_LA6(-4)-(REER_M_BAR_LA6-REER_M_BAR_LA6(-4)))/4-
RESN_PIE_LA6

165: DRS_LA6 =
RS_LA6-RS_LA6(-1)

166: RESN_PIE_LA6 =
zeta_LA6*RESN_PIE_LA6(-1) + RES_PIE_LA6

167: RR_LA6 =
RS_LA6-PIE_LA6(+1)

168: RR_BAR_LA6 =
rho_LA6*rr_bar_LA6_ss+(1-rho_LA6)*RR_BAR_LA6(-
1)+RES_RR_BAR_LA6

169: PIE4_LA6 =
(PIE_LA6+PIE_LA6(-1)+PIE_LA6(-2)+PIE_LA6(-3))/4

170: LGDP_BAR_LA6 =
LGDP_BAR_LA6(-1)+G_LA6/4+RES_LGDP_BAR_LA6

171: G_LA6 =
tau_LA6*growth_LA6_ss+(1-tau_LA6)*G_LA6(-1)+RES_G_LA6

172: LCPI_LA6 =
LCPI_LA6(-1)+PIE_LA6/4

173: E4_PIE4_LA6 =
PIE4_LA6(+4)

174: E3_PIE4_LA6 =
PIE4_LA6(+3)

175: E1_PIE_LA6 =
PIE_LA6(+1)

176: E1_Y_LA6 =
Y_LA6(+1)

177: E4_Y_LA6 =
Y_LA6(+4)

178: E8_Y_LA6 =
Y_LA6(+8)

179: REER_T_GAP_LA6 =
REER_T_LA6 - REER_T_BAR_LA6

180: DOT_REER_M_LA6 =
4*(REER_M_LA6-REER_M_LA6(-1))

181: REER_M_LA6 =
+imp_LA6_EA6*(LZ_LA6-LZ_EA6)+imp_LA6_EU *(LZ_LA6-LZ_EU
)+imp_LA6_JA *(LZ_LA6-LZ_JA)+imp_LA6_RC6*(LZ_LA6-
LZ_RC6)+imp_LA6_US *LZ_LA6

182: REER_M_BAR_LA6 =
+imp_LA6_EA6*(LZ_BAR_LA6-LZ_BAR_EA6)+imp_LA6_EU
*(LZ_BAR_LA6-LZ_BAR_EU)+imp_LA6_JA *(LZ_BAR_LA6-LZ_BAR_JA
)+imp_LA6_RC6*(LZ_BAR_LA6-LZ_BAR_RC6)+imp_LA6_US
*LZ_BAR_LA6

183: DOT_REER_M_BAR_LA6 =
4*(REER_M_BAR_LA6-REER_M_BAR_LA6(-1))

184: REER_T_LA6 =
+trade_LA6_EA6*(LZ_LA6-LZ_EA6)+trade_LA6_EU *(LZ_LA6-LZ_EU
)+trade_LA6_JA *(LZ_LA6-LZ_JA)+trade_LA6_RC6*(LZ_LA6-
LZ_RC6)+trade_LA6_US *LZ_LA6

185: REER_T_BAR_LA6 =
+trade_LA6_EA6*(LZ_BAR_LA6-LZ_BAR_EA6)+trade_LA6_EU
*(LZ_BAR_LA6-LZ_BAR_EU)+trade_LA6_JA *(LZ_BAR_LA6-LZ_BAR_JA
)+trade_LA6_RC6*(LZ_BAR_LA6-LZ_BAR_RC6)+trade_LA6_US
*LZ_BAR_LA6

186: FACT_LA6 =
+ spill_US_LA6*Y_US (-1) + spill_EU_LA6*Y_EU (-1)
+ spill_JA_LA6*Y_JA (-1) + spill_EA6_LA6*Y_EA6(-1) +
spill_RC6_LA6*Y_RC6(-1)

187: FACT_RES_LA6 =
spill_LA6_LA6*RESN_YY_LA6 + spill_US_LA6*RESN_YY_US
+ spill_EU_LA6*RESN_YY_EU + spill_JA_LA6*RESN_YY_JA +
spill_EA6_LA6*RESN_YY_EA6 + spill_RC6_LA6*RESN_YY_RC6

188: RESN_YY_LA6 =
0.5*RESN_YY_LA6(-1) + RES_YY_LA6

189: Y_LA6 =
LGDP_LA6-LGDP_BAR_LA6

190: RR_LA6-RR_US =
4*(LZ_E_LA6-LZ_LA6)+RR_BAR_LA6-RR_BAR_US -
DOT_LZ_BAR_LA6+RESN_RR_DIFF_LA6

191: RESN_RR_DIFF_LA6 =
0.8*RESN_RR_DIFF_LA6(-1) + RES_RR_DIFF_LA6

192: LZ_BAR_LA6 =
LZ_BAR_LA6(-1)+DOT_LZ_BAR_LA6/4+RES_LZ_BAR_LA6

193: DOT_LZ_BAR_LA6 =
chi_LA6*dot_lz_bar_LA6_ss+(1-chi_LA6)*DOT_LZ_BAR_LA6(-
1)+RES_DOT_LZ_BAR_LA6

194: LZ_E_LA6 =
phi_LA6*LZ_LA6(+1)+(1-phi_LA6)*(LZ_LA6(-1)+2*DOT_LZ_BAR_LA6/4)

195: Y_LA6 =
beta1_LA6*Y_LA6(-1)+beta2_LA6*Y_LA6(+1)-beta3m_LA6*(LRR_LA6(-
1)-LRR_BAR_LA6(-1)) +beta_fact*FACT_LA6+beta_fact_res*FACT_RES_LA6+beta4_LA6*(REER_T_L
1)-REER_T_BAR_LA6(-1)+REER_T_LA6(-2)-REER_T_BAR_LA6(-
2)+REER_T_LA6(-3)-REER_T_BAR_LA6(-3)+REER_T_LA6(-4)-
REER_T_BAR_LA6(-4))/4-E2_LA6+RESN_Y_LA6

196: RESN_Y_LA6 =
0.5*RESN_Y_LA6(-1) + RES_Y_LA6

197: E2_LA6 =
theta_LA6*(spill_US_LA6*E2_US+spill_EU_LA6*E2_EU+spill_JA_LA6*E2_JA)

198: LZ_GAP_LA6 =
LZ_LA6-LZ_BAR_LA6

199: LS_LA6 =
LZ_LA6+LCPI_LA6-LCPI_US

200: RR4_LA6 =
(RR_LA6+RR_LA6(+1)+RR_LA6(+2)+RR_LA6(+3))/4

201: RR4_BAR_LA6 =
(RR_BAR_LA6+RR_BAR_LA6(+1)+RR_BAR_LA6(+2)+RR_BAR_LA6(+3))/4

202: LRR_LA6 =
lrrw01_LA6*RR_LA6 + lrrw04_LA6*RR4_LA6 +
lrrw12_LA6*(RR4_LA6+RR4_LA6(+4)+RR4_LA6(+8))/3 +
lrrw20_LA6*(RR4_LA6+RR4_LA6(+4)+RR4_LA6(+8)+RR4_LA6(12)+RR4_LA6(16))/5

203: LRR_BAR_LA6 =
lrrw01_LA6*RR_BAR_LA6 + lrrw04_LA6*RR4_BAR_LA6 +
lrrw12_LA6*(RR4_BAR_LA6+RR4_BAR_LA6(+4)+RR4_BAR_LA6(+8))/3
+
lrrw20_LA6*(RR4_BAR_LA6+RR4_BAR_LA6(+4)+RR4_BAR_LA6(+8)+RR4_BAR_LA6(12)+RR4_BAR

204: LRR_GAP_LA6 =
LRR_LA6 - LRR_BAR_LA6

205: GROWTH_RC6 =
4*(LGDP_RC6-LGDP_RC6(-1))

206: GROWTH4_RC6 =
LGDP_RC6-LGDP_RC6(-4)

207: GROWTH_BAR_RC6 =
4*(LGDP_BAR_RC6-LGDP_BAR_RC6(-1))

208: GROWTH4_BAR_RC6 =
LGDP_BAR_RC6-LGDP_BAR_RC6(-4)

209: RS_RC6 =
gamma1_RC6*RS_RC6(-1)+(1-gamma1_RC6)*(RR_BAR_RC6+PIE4_RC6(+3)+gamma2_RC6*(PIE4
PIETAR_RC6)+0 +gamma4_RC6*Y_RC6+0)+RESN_RS_RC6

210: RESN_RS_RC6 =
lambda1_RS_RC6*RESN_RS_RC6(-1)+RES_PIETAR_RC6+RES_RS_RC6

211: PIETAR_RC6 =
PIETAR_RC6(-1)-RES_PIETAR_RC6

212: PIE_RC6 =
lambda1_RC6*PIE4_RC6(+4) +(1-lambda1_RC6)*PIE4_RC6(-
1)+lambda2_RC6*Y_RC6(-1) +lambda3_RC6*(REER_M_RC6-
REER_M_RC6(-4)-(REER_M_BAR_RC6-REER_M_BAR_RC6(-4)))/4-
RESN_PIE_RC6

213: RESN_PIE_RC6 =
zeta_RC6*RESN_PIE_RC6(-1) + RES_PIE_RC6

214: DRS_RC6 =
RS_RC6-RS_RC6(-1)

215: RR_RC6 =
RS_RC6-PIE_RC6(+1)

216: RR_BAR_RC6 =
rho_RC6*rr_bar_RC6_ss+(1-rho_RC6)*RR_BAR_RC6(-
1)+RES_RR_BAR_RC6

217: PIE4_RC6 =
(PIE_RC6+PIE_RC6(-1)+PIE_RC6(-2)+PIE_RC6(-3))/4

218: LGDP_BAR_RC6 =
LGDP_BAR_RC6(-1)+G_RC6/4+RES_LGDP_BAR_RC6

219: G_RC6 =
tau_RC6*growth_RC6_ss+(1-tau_RC6)*G_RC6(-1)+RES_G_RC6

220: LCPI_RC6 =
LCPI_RC6(-1)+PIE_RC6/4

221: E4_PIE4_RC6 =
PIE4_RC6(+4)

222: E3_PIE4_RC6 =
PIE4_RC6(+3)

223: E1_PIE_RC6 =
PIE_RC6(+1)

224: E1_Y_RC6 =
Y_RC6(+1)

225: E4_Y_RC6 =
Y_RC6(+4)

226: E8_Y_RC6 =
Y_RC6(+8)

227: REER_T_GAP_RC6 =
REER_T_RC6 - REER_T_BAR_RC6

228: DOT_REER_M_RC6 =
4*(REER_M_RC6-REER_M_RC6(-1))

229: REER_M_RC6 =
+imp_RC6_EA6*(LZ_RC6-LZ_EA6)+imp_RC6_EU *(LZ_RC6-LZ_EU
)+imp_RC6_JA *(LZ_RC6-LZ_JA)+imp_RC6_LA6*(LZ_RC6-
LZ_LA6)+imp_RC6_US *LZ_RC6

230: REER_M_BAR_RC6 =
+imp_RC6_EA6*(LZ_BAR_RC6-LZ_BAR_EA6)+imp_RC6_EU
*(LZ_BAR_RC6-LZ_BAR_EU)+imp_RC6_JA *(LZ_BAR_RC6-LZ_BAR_JA
)+imp_RC6_LA6*(LZ_BAR_RC6-LZ_BAR_LA6)+imp_RC6_US
*LZ_BAR_RC6

231: DOT_REER_M_BAR_RC6 =
4*(REER_M_BAR_RC6-REER_M_BAR_RC6(-1))

232: REER_T_RC6 =
+trade_RC6_EA6*(LZ_RC6-LZ_EA6)+trade_RC6_EU *(LZ_RC6-LZ_EU
)+trade_RC6_JA *(LZ_RC6-LZ_JA)+trade_RC6_LA6*(LZ_RC6-
LZ_LA6)+trade_RC6_US *LZ_RC6

233: REER_T_BAR_RC6 =
+trade_RC6_EA6*(LZ_BAR_RC6-LZ_BAR_EA6)+trade_RC6_EU
*(LZ_BAR_RC6-LZ_BAR_EU)+trade_RC6_JA *(LZ_BAR_RC6-
LZ_BAR_JA)+trade_RC6_LA6*(LZ_BAR_RC6-LZ_BAR_LA6)+trade_RC6_US
*LZ_BAR_RC6

234: FACT_RC6 =
+ spill_US_RC6*Y_US (-1) + spill_EU_RC6*Y_EU (-1)
+ spill_JA_RC6*Y_JA (-1) + spill_EA6_RC6*Y_EA6(-1) +
spill_LA6_RC6*Y_LA6(-1)

235: FACT_RES_RC6 =
spill_RC6_RC6*RESN_YY_RC6 + spill_US_RC6*RESN_YY_US
+ spill_EU_RC6*RESN_YY_EU + spill_JA_RC6*RESN_YY_JA +
spill_EA6_RC6*RESN_YY_EA6 + spill_LA6_RC6*RESN_YY_LA6

236: RESN_YY_RC6 =
0.5*RESN_YY_RC6(-1) + RES_YY_RC6

237: Y_RC6 =
LGDP_RC6-LGDP_BAR_RC6

238: RR_RC6-RR_US =
4*(LZ_E_RC6-LZ_RC6)+RR_BAR_RC6-RR_BAR_US -
DOT_LZ_BAR_RC6+RESN_RR_DIFF_RC6

239: RESN_RR_DIFF_RC6 =
0.8*RESN_RR_DIFF_RC6(-1) + RES_RR_DIFF_RC6

240: LZ_BAR_RC6 =
LZ_BAR_RC6(-1)+DOT_LZ_BAR_RC6/4+RES_LZ_BAR_RC6

241: DOT_LZ_BAR_RC6 =
chi_RC6*dot_lz_bar_RC6_ss+(1-chi_RC6)*DOT_LZ_BAR_RC6(-
1)+RES_DOT_LZ_BAR_RC6

242: LZ_E_RC6 =
phi_RC6*LZ_RC6(+1)+(1-phi_RC6)*(LZ_RC6(-1)+2*DOT_LZ_BAR_RC6/4)

243: Y_RC6 =
beta1_RC6*Y_RC6(-1)+ beta2_RC6*Y_RC6(+1)-
beta3m_RC6*(LRR_RC6(-1)-LRR_BAR_RC6(-1))
+beta_fact*FACT_RC6+beta_fact_res*FACT_RES_RC6+beta4_RC6*(REER_T_RC6(-
1)-REER_T_BAR_RC6(-1)+REER_T_RC6(-2)-REER_T_BAR_RC6(-
2)+REER_T_RC6(-3)-REER_T_BAR_RC6(-3)+REER_T_RC6(-4)-
REER_T_BAR_RC6(-4))/4-E2_RC6+RESN_Y_RC6

244: RESN_Y_RC6 =
0.5*RESN_Y_RC6(-1) + RES_Y_RC6

245: E2_RC6 =
theta_RC6*(spill_US__RC6*E2_US+spill_EU__RC6*E2_EU+spill_JA__RC6*E2_JA)

246: LZ_GAP_RC6 =
LZ_RC6-LZ_BAR_RC6

247: LS_RC6 =
LZ_RC6+LCPI_RC6-LCPI_US

248: RR4_RC6 =
(RR_RC6+RR_RC6(+1)+RR_RC6(+2)+RR_RC6(+3))/4

249: RR4_BAR_RC6 =
(RR_BAR_RC6+RR_BAR_RC6(+1)+RR_BAR_RC6(+2)+RR_BAR_RC6(+3))/4

250: LRR_RC6 =
lrrw01_RC6*RR_RC6 + lrrw04_RC6*RR4_RC6 +
lrrw12_RC6*(RR4_RC6+RR4_RC6(+4)+RR4_RC6(+8))/3 +
lrrw20_RC6*(RR4_RC6+RR4_RC6(+4)+RR4_RC6(+8)+RR4_RC6(12)+RR4_RC6(16))/5

251: LRR_BAR_RC6 =
lrrw01_RC6*RR_BAR_RC6 + lrrw04_RC6*RR4_BAR_RC6 +
lrrw12_RC6*(RR4_BAR_RC6+RR4_BAR_RC6(+4)+RR4_BAR_RC6(+8))/3
+
lrrw20_RC6*(RR4_BAR_RC6+RR4_BAR_RC6(+4)+RR4_BAR_RC6(+8)+RR4_BAR_RC6(12)+RR4_B

252: LRR_GAP_RC6 =
LRR_RC6 - LRR_BAR_RC6

253: GROWTH_US =
4*(LGDP_US -LGDP_US(-1))

254: GROWTH4_US =
LGDP_US -LGDP_US(-4)

255: GROWTH_BAR_US =
4*(LGDP_BAR_US -LGDP_BAR_US(-1))

256: GROWTH4_BAR_US =
LGDP_BAR_US -LGDP_BAR_US(-4)

257: RS_US =
gamma1_US *RS_US(-1) +(1-gamma1_US)*(RR_BAR_US
+PIE4_US(+3) +gamma2_US *(PIE4_US(+3) -PIETAR_US)+0
+gamma4_US *Y_US)+RESN_RS_US

258: RESN_RS_US =
lambda1_RS_US*RESN_RS_US(-1)+RES_RS_US

259: PIETAR_US =
pietar_US__ss

260: UNR_GAP_US =
alpha1_US *UNR_GAP_US(-1) +alpha2_US *Y_US +RES_UNR_GAP_US

261: UNR_GAP_US =
UNR_BAR_US -UNR_US

262: UNR_BAR_US =
UNR_BAR_US(-1) +UNR_G_US +RES_UNR_BAR_US

263: UNR_G_US =
(1-alpha3_US)*UNR_G_US(-1) +RES_UNR_G_US

264: PIE_US =
lambda1_US *PIE4_US(+4) +(1-lambda1_US)*PIE4_US(-1)
+lambda2_US *Y_US(-1) +lambda3_US *(REER_M_US -REER_M_US(-
4)-(REER_M_BAR_US -REER_M_BAR_US(-4)))/4-RES_PIE_US

265: DRS_US =
RS_US -RS_US(-1)

266: RR_US =
RS_US -PIE_US(+1)

267: RR_BAR_US =
rho_US *rr_bar_US__ss+(1-rho_US)*RR_BAR_US(-1)
+RES_RR_BAR_US

268: PIE4_US =
(PIE_US +PIE_US(-1) +PIE_US(-2) +PIE_US(-3))/4

269: LGDP_BAR_US =
LGDP_BAR_US(-1) +G_US /4+RES_LGDP_BAR_US

270: G_US =
tau_US *growth_US__ss+(1-tau_US)*G_US(-1) +RES_G_US

271: LCPI_US =
LCPI_US(-1) +PIE_US /4

272: E4_PIE4_US =
PIE4_US(+4)

273: E3_PIE4_US =
PIE4_US(+3)

274: E1_PIE_US =
PIE_US(+1)

275: E1_Y_US =
Y_US(+1)

276: E4_Y_US =
Y_US(+4)

277: E8_Y_US =
Y_US(+8)

278: REER_T_GAP_US =
REER_T_US - REER_T_BAR_US

279: DOT_REER_M_US =
4*(REER_M_US-REER_M_US(-1))

280: REER_M_US =
+imp_US__EA6*(-LZ_EA6)+imp_US__EU *(-LZ_EU)+imp_US__JA
(-LZ_JA)+imp_US__LA6(-LZ_LA6)+imp_US__RC6*(-LZ_RC6)

281: REER_M_BAR_US =
+imp_US__EA6*(-LZ_BAR_EA6)+imp_US__EU *(-LZ_BAR_EU
)+imp_US__JA *(-LZ_BAR_JA)+imp_US__LA6*(-
LZ_BAR_LA6)+imp_US__RC6*(-LZ_BAR_RC6)

282: DOT_REER_M_BAR_US =
4*(REER_M_BAR_US -REER_M_BAR_US(-1))

283: REER_T_US =
+trade_US__EA6*(-LZ_EA6)+trade_US__EU *(-LZ_EU)+trade_US__JA
(-LZ_JA)+trade_US__LA6(-LZ_LA6)+trade_US__RC6*(-LZ_RC6)

284: REER_T_BAR_US =
+trade_US__EA6*(-LZ_BAR_EA6)+trade_US__EU *(-LZ_BAR_EU
)+trade_US__JA *(-LZ_BAR_JA)+trade_US__LA6*(-
LZ_BAR_LA6)+trade_US__RC6*(-LZ_BAR_RC6)

285: FACT_US =
+ spill_EU__US *Y_EU (-1) + spill_JA__US *Y_JA (-1) + spill_EA6_US
*Y_EA6(-1) + spill_LA6_US *Y_LA6(-1) + spill_RC6_US *Y_RC6(-1)

286: FACT_RES_US =
spill_US__US *RESN_YY_US + spill_EU__US *RESN_YY_EU +
spill_JA__US *RESN_YY_JA + spill_EA6_US *RESN_YY_EA6 +
spill_LA6_US *RESN_YY_LA6 + spill_RC6_US *RESN_YY_RC6

287: RESN_YY_US =
0.5*RESN_YY_US(-1) + RES_YY_US

288: Y_US =
LGDP_US -LGDP_BAR_US

289: Y_US =
beta1_US *Y_US(-1) + beta2_US *Y_US(+1) -beta3m_US *(LRR_US(-1)
-LRR_BAR_US(-1)) +beta_fact*FACT_US +beta_fact_res*FACT_RES_US
+beta4_US *(REER_T_US(-1) -REER_T_BAR_US(-1) + REER_T_US(-2)
-REER_T_BAR_US(-2) + REER_T_US(-3) -REER_T_BAR_US(-3) +
REER_T_US(-4) -REER_T_BAR_US(-4))/4-E2_US+RESN_Y_US

290: RESN_Y_US =
0.5*RESN_Y_US(-1) + RES_Y_US

291: E_US =
-RES_BLT_US

292: BLT_US =
BLT_BAR_US -kappa_US *Y_US(+4) -RES_BLT_US

293: BLT_BAR_US =
BLT_BAR_US(-1) +RES_BLT_BAR_US

294: E2_US =
theta_US *(0.04*(E_US(-1) +E_US(-9))+0.08*(E_US(-2) +E_US(-8)
)+0.12*(E_US(-3) +E_US(-7))+0.16*(E_US(-4) +E_US(-6)
)+0.2*E_US(-5))

295: RR4_US =
(RR_US +RR_US(+1) +RR_US(+2) +RR_US(+3))/4

296: RR4_BAR_US =
(RR_BAR_US +RR_BAR_US(+1) +RR_BAR_US(+2) +RR_BAR_US(+3)
)/4

297: LRR_GAP_US =
LRR_US - LRR_BAR_US

298: LRR_US =
lrrw01_US *RR_US
+ lrrw04_US *RR4_US
+ lrrw12_US *(RR4_US +RR4_US(+4) +RR4_US(+8))/3
+ lrrw20_US *(RR4_US +RR4_US(+4) +RR4_US(+8) +RR4_US(12)
+RR4_US(16))/5

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299:  LRR_BAR_US  =
            lrrw01_US *RR_BAR_US
            + lrrw04_US *RR4_BAR_US
            + lrrw12_US *(RR4_BAR_US +RR4_BAR_US(+4) +RR4_BAR_US(+8)
            )/3
            + lrrw20_US *(RR4_BAR_US +RR4_BAR_US(+4) +RR4_BAR_US(+8)
            +RR4_BAR_US(12) +RR4_BAR_US(16) )/5
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Parameter Values (First Part)

	EU	JA	US	EA6	LA6	RC6
alpha1	0.717	0.7589	0.8235			
alpha2	0.1401	0.0599	0.1823			
alpha3	0.101	0.2214	0.3649			
beta1	0.7563	0.7792	0.5688	0.4707	0.544	0.441
beta1_prime	0.9454	0.974	0.711	0.8199	0.8989	0.8126
beta2	0.04365	0.02082	0.2312	0.2146	0.1782	0.4085
beta2_prime	0.8	0.8	0.8	0.8	0.8	0.8
beta3	0.2009	0.1478	0.1866	0.2	0.2	0.2
beta3m	0.2009	0.1478	0.1866	0.2	0.2	0.2
beta4	0.06652	0.03627	0.05084	0.1715	0.1477	0.06968
beta_reergap	0.273	0.1643	0.1179	0.324	0.324	0.1246
chi				0.05	0.05	0.05
dVA_dX	0.89	0.89	0.88	0.79	0.69	0.8
dY_dVA	1.4	1.4	1.5	1.3	1.2	1.3
exp_EA6	0.2275	0.1963	0.3663		0.0309	0.179
exp_EU		0.0381	0.2021	0.133	0.0385	0.5884
exp_JA	0.1312		0.2844	0.457	0.021	0.1064
exp_LA6	0.1109	0.0287	0.6868	0.0619		0.1117
exp_RC6	0.4524	0.0439	0.3687	0.108	0.027	
exp_US	0.1682	0.077		0.1902	0.1776	0.3862
gamma1	0.6859	0.7497	0.7107	0.6666	0.6448	0.725
gamma2	1.306	1.058	0.9104	1.114	0.911	0.8983
gamma4	0.2012	0.1693	0.2052	0.1691	0.2023	0.1621
imp_EA6	0.2122	0.3074	0.2055		0.0534	0.2221
imp_EU		0.0508	0.1132	0.2589	0.0479	0.5292
imp_JA	0.1059		0.1489	0.532	0.0406	0.1727
imp_LA6	0.1451	0.0576	0.4221	0.2432		0.1317
imp_RC6	0.489	0.0486	0.2075	0.208	0.0469	
imp_US	0.1542	0.0835		0.3147	0.1484	0.2992
kappa	20.08	20.08	20.08			
lambda1	0.7	0.75	0.75	0.7199	0.5935	0.5452
lambda1_RS	0.69	0.63	0.39	0.58	0.28	0.3
lambda2	0.2223	0.1836	0.1801	0.1967	0.228	0.1491
lambda3	0.2462	0.1516	0.09965	0.08121	0.1613	0.09808
lrrw01	0.1	0.1	0.1	0.1	0.1	0.1
lrrw04	0.35	0.35	0.35	0.35	0.35	0.35
lrrw12	0.35	0.35	0.35	0.35	0.35	0.35
lrrw20	0.2	0.2	0.2	0.2	0.2	0.2
mrat	0.1291	0.1108	0.1271	0.1608	0.1608	0.1822
phi	0.8342	0.8562		0.8	0.8	0.8

	EU	JA	US	EA6	LA6	RC6
rho	0.4673	0.03	0.2901	0.2	0.2	0.2
rsize_EA6	0.52	1.21	0.43		2.57	0.7
rsize_EU		2.31	0.81	1.91	4.92	1.33
rsize_JA	0.43		0.35	0.83	2.13	0.58
rsize_LA6	0.2	0.47	0.17	0.39		0.27
rsize_RC6	0.75	1.73	0.61	1.44	3.7	
rsize_US	1.23	2.83		2.35	6.05	1.64
spill_EA6	0.02211	0.07452	0.01876	1	0.01827	0.026
spill_EU	1	0.01888	0.01563	0.06556	0.02519	0.0945
spill_JA	0.006287	1	0.007622	0.05025	0.007934	0.01154
spill_LA6	0.005814	0.005424	0.01523	0.01566	1	0.005947
spill_RC6	0.08326	0.01909	0.03044	0.05605	0.02618	1
spill_US	0.03004	0.03742	1	0.09653	0.09449	0.06486
tau	0.0289	0.0375	0.0274	0.03	0.03	0.03
theta	0.3	0.3	1.071	0.9964	0.9921	0.9961
trade_EA6	0.2198	0.2519	0.2859		0.04215	0.2006
trade_EU		0.04445	0.1577	0.196	0.0432	0.5588
trade_JA	0.1186		0.2167	0.4945	0.0308	0.1396
trade_LA6	0.128	0.04315	0.5544	0.1525		0.1217
trade_RC6	0.4707	0.04625	0.2881	0.158	0.03695	
trade_US	0.1612	0.08025		0.2525	0.163	0.3427
xrat	0.1244	0.1491	0.0744	0.2014	0.1648	0.1709
zeta	0.22	0.18	0	0.36	0.24	0.4

Parameter Values (Second Part)

beta_fact	0.8911
beta_fact_res	1
dot_lz_bar_EA6_ss	0
dot_lz_bar_LA6_ss	0
dot_lz_bar_RC6_ss	0
growth_EA6_ss	6
growth_EU__ss	2.261
growth_JA__ss	1.444
growth_LA6_ss	6
growth_RC6_ss	6
growth_US__ss	2.273
pietar_EA6_ss	4
pietar_EU__ss	1.9
pietar_JA__ss	1
pietar_LA6_ss	3.5
pietar_RC6_ss	4.5
pietar_US__ss	2.5
rr_bar_EA6_ss	2
rr_bar_EU__ss	1.984
rr_bar_JA__ss	1.379
rr_bar_LA6_ss	2
rr_bar_RC6_ss	2
rr_bar_US__ss	1.728

Table 3: Root Mean Square Errors

	1 Ahead			4 Ahead			8 Ahead			12 Ahead		
	Act.	Th.	N	Act.	Th.	N	Act.	Th.	N	Act.	Th.	N
GROWTH_US	2.2	1.9	67	2.6	2.1	64	3	2.2	60	3.1	2.1	56
GROWTH4_US	0.54	0.47	67	1.6	1	64	2.3	1.4	60	2.4	1.3	56
UNR_US	0.2	0.12	67	0.71	0.41	64	1.5	0.64	60	2	0.72	56
PIE_US	2.2	1	67	2.2	1.1	64	2.2	1.2	60	2.3	1.1	56
PIE4_US	0.56	0.26	67	1.2	0.66	64	1.1	0.82	60	1.2	0.83	56
RS_US	0.39	0.29	67	1.2	0.78	64	1.9	1.1	60	2.3	1.2	56
BLT_US	8.1	7.5	67	19	13	64	23	14	60	24	13	56
GROWTH_EU	2.1	1.6	67	2.4	1.6	64	2.6	1.7	60	2.6	1.6	56
GROWTH4_EU	0.55	0.39	67	1.7	0.87	64	2.1	1	60	2.1	1	56
UNR_EU	0.2	0.071	67	0.6	0.26	64	0.84	0.41	60	0.9	0.49	56
PIE_EU	1.3	1	67	1.5	1.2	64	1.2	1.2	60	1.1	1.2	56
PIE4_EU	0.33	0.26	67	1.1	0.79	64	0.93	0.93	60	0.75	0.92	56
RS_EU	0.36	0.39	67	1.1	1.1	64	1.3	1.4	60	1.6	1.4	56
BLT_EU	17	6.8	67	27	11	64	33	13	60	33	12	56
GROWTH_JA	4.6	2	67	4.6	2	64	4.7	2	60	4.7	1.9	56
GROWTH4_JA	1.1	0.5	67	3.3	1	64	3.1	1.1	60	3	1.1	56
UNR_JA	0.14	0.08	67	0.44	0.2	64	0.84	0.31	60	1	0.38	56
PIE_JA	1.5	0.69	67	1.6	0.81	64	1.9	0.86	60	2	0.82	56
PIE4_JA	0.38	0.17	67	0.9	0.52	64	1.3	0.65	60	1.6	0.65	56
RS_JA	0.17	0.21	67	0.93	0.63	64	2.3	0.92	60	2.8	0.97	56
BLT_JA	10	5.8	67	24	8.8	64	24	9.4	60	22	9	56
GROWTH_EA6	3.9	2	67	3.1	2.1	64	3.2	2.2	60	3.1	2.1	56
GROWTH4_EA6	1	0.49	67	2.3	1	64	2.1	1.2	60	2.1	1.3	56
PIE_EA6	2.3	0.93	67	3.7	1.2	64	4.1	1.3	60	4.5	1.3	56
PIE4_EA6	0.57	0.23	67	2.6	0.84	64	3.5	1.1	60	4	1.1	56
RS_EA6	1.1	0.51	67	1.6	1	64	2.8	1.3	60	3.7	1.3	56
GROWTH_LA6	9.4	2.1	67	11	2.2	64	5.3	2.3	60	4.6	2.2	56
GROWTH4_LA6	2.4	0.52	67	11	1.2	64	5.4	1.4	60	3.8	1.5	56
PIE_LA6	19	1.8	67	28	2.2	64	35	2.6	60	39	2.7	56
PIE4_LA6	9.8	0.44	67	25	1.5	64	34	2.1	60	38	2.3	56
RS_LA6	9.7	0.87	67	19	1.7	64	30	2.4	60	36	2.5	56
GROWTH_RC6	6.9	2.9	67	6.9	3.1	64	5.6	3.2	60	3.8	3	56
GROWTH4_RC6	3.2	0.73	67	6.6	1.5	64	5.2	1.8	60	3.7	1.8	56
PIE_RC6	3.6	1.2	67	6.9	1.7	64	9.4	1.9	60	11	1.9	56
PIE4_RC6	1	0.3	67	4.9	1.2	64	8.5	1.6	60	10	1.7	56
RS_RC6	1.7	0.59	67	3.8	1.3	64	7	1.7	60	8.9	1.9	56

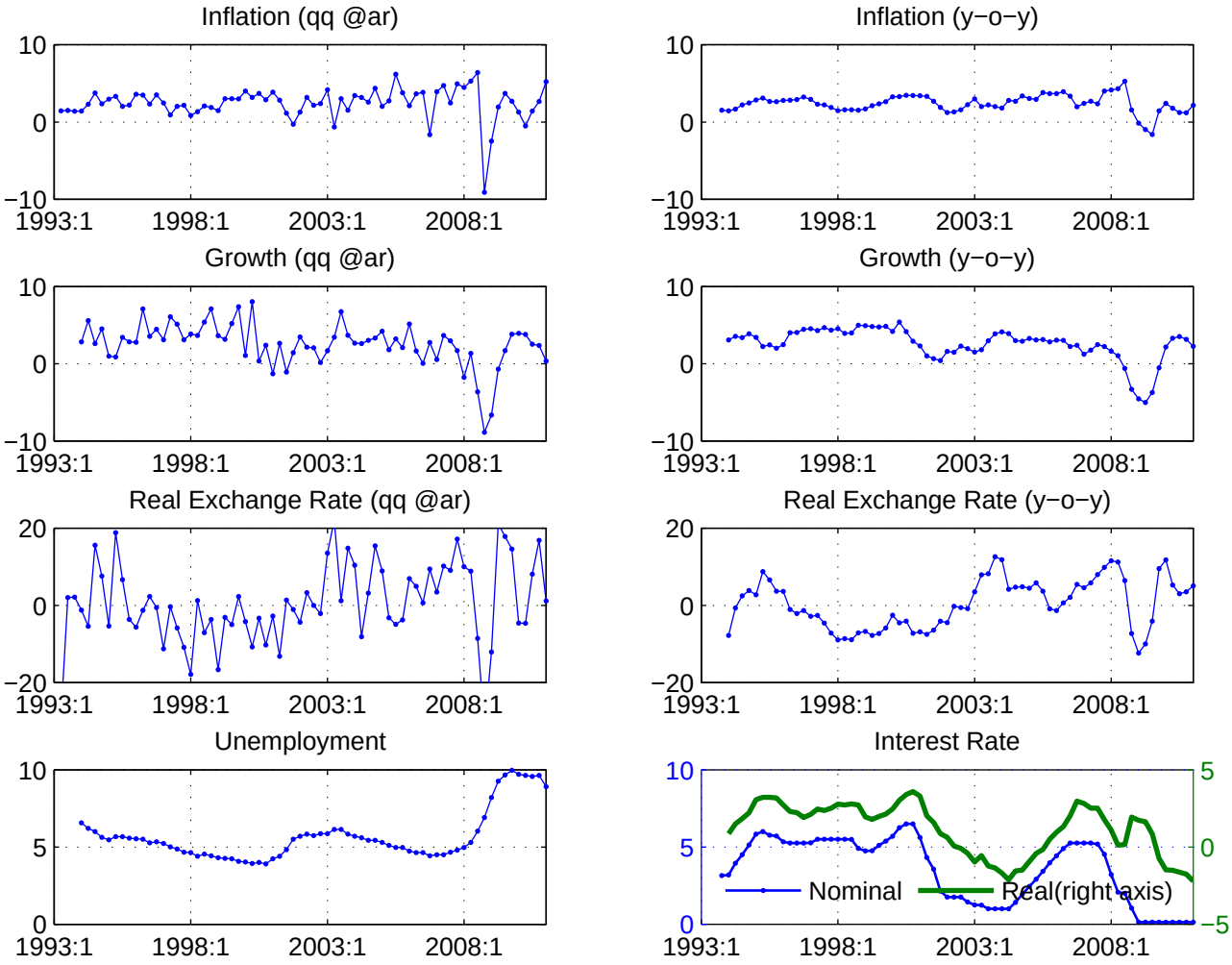


Figure 1: Historical Variables US

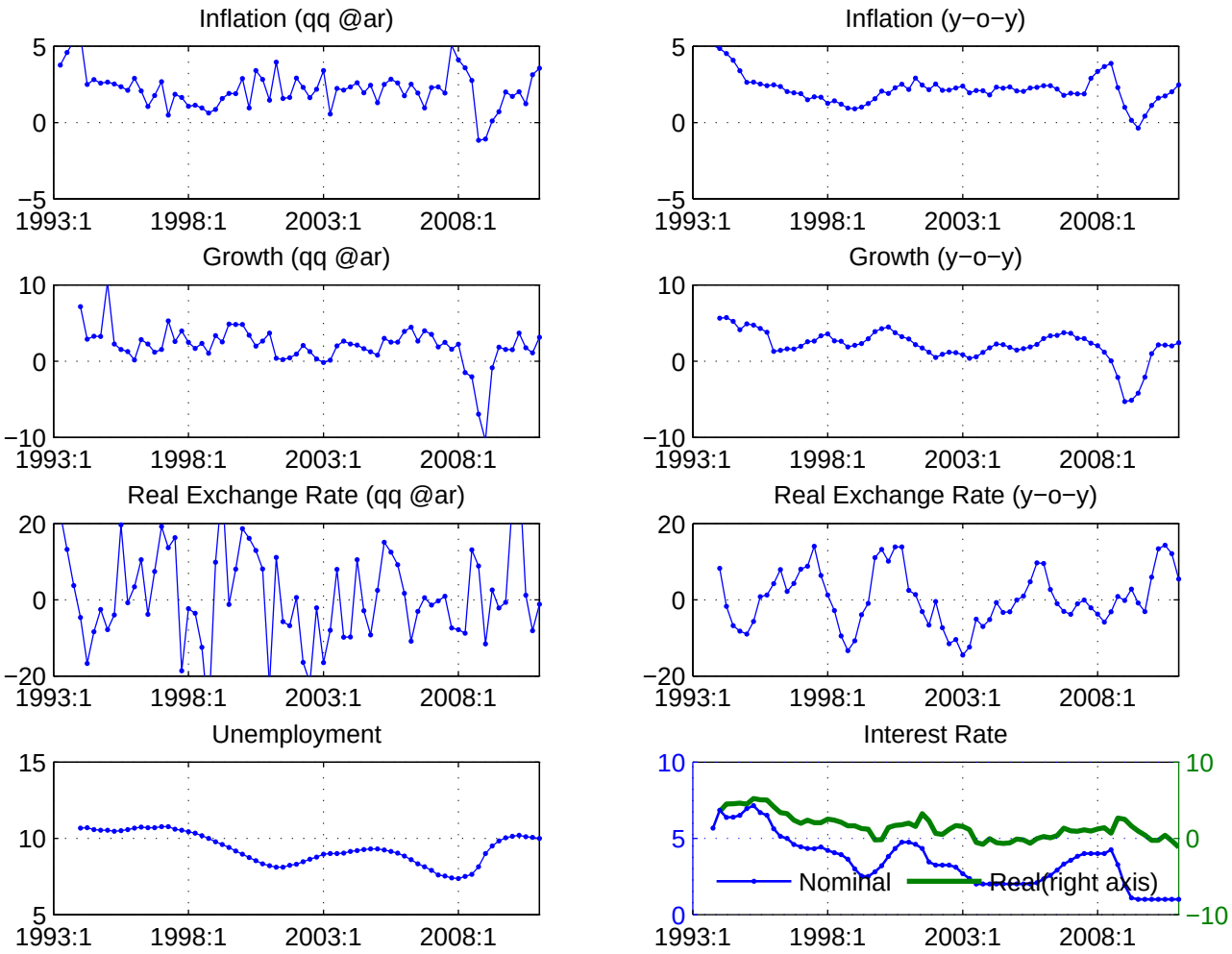


Figure 2: Historical Variables EU

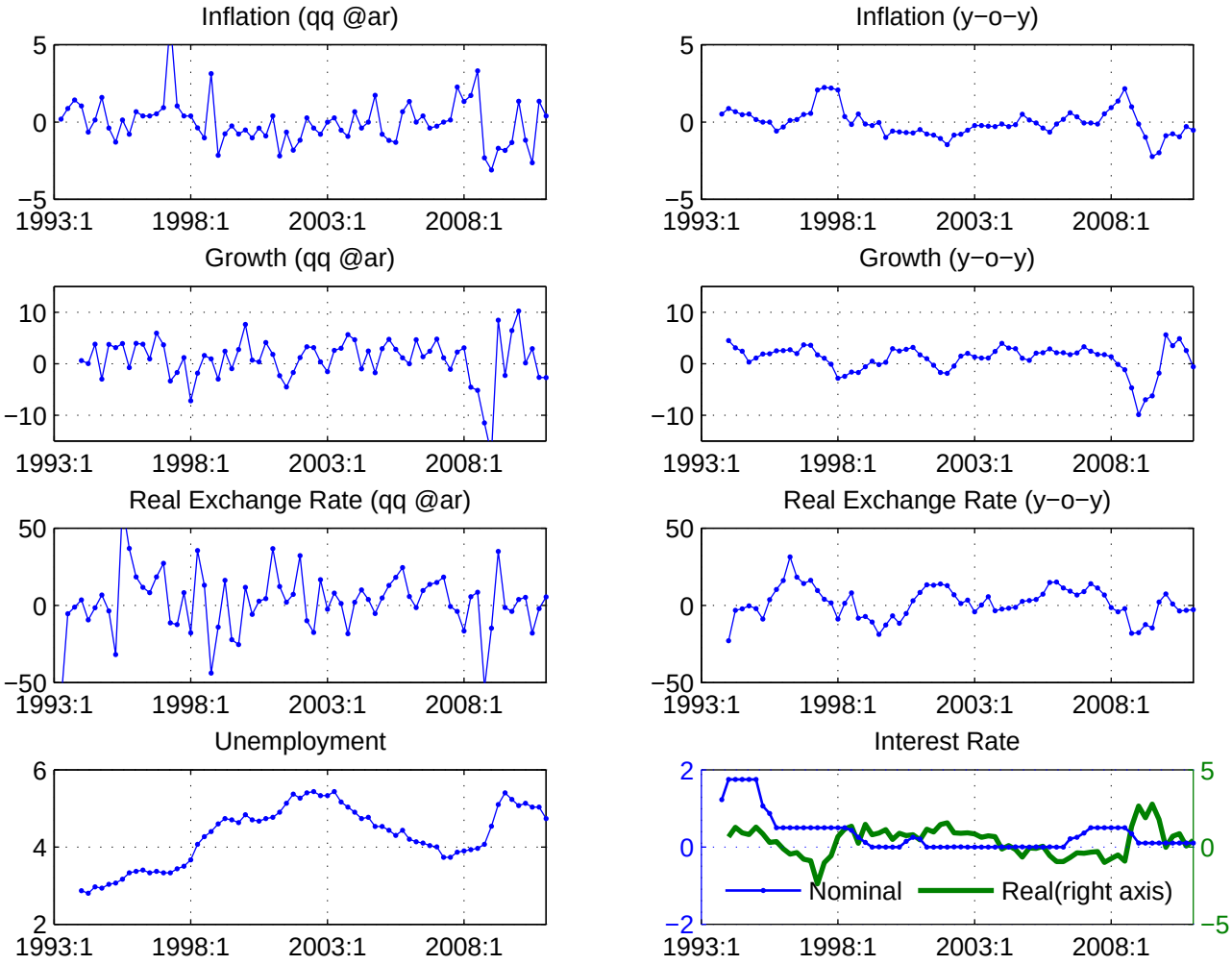


Figure 3: Historical Variables JA

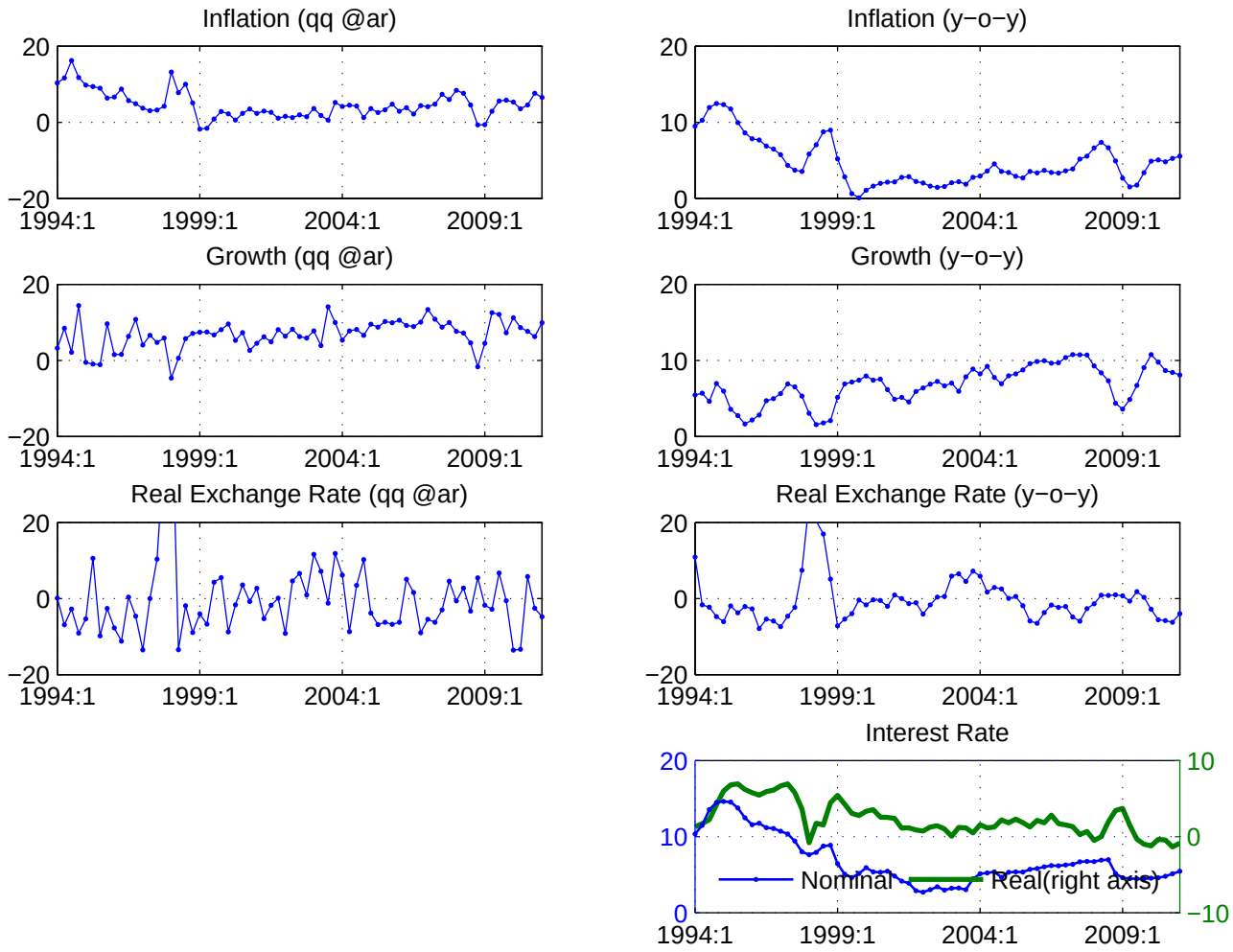


Figure 4: Historical Variables EA6

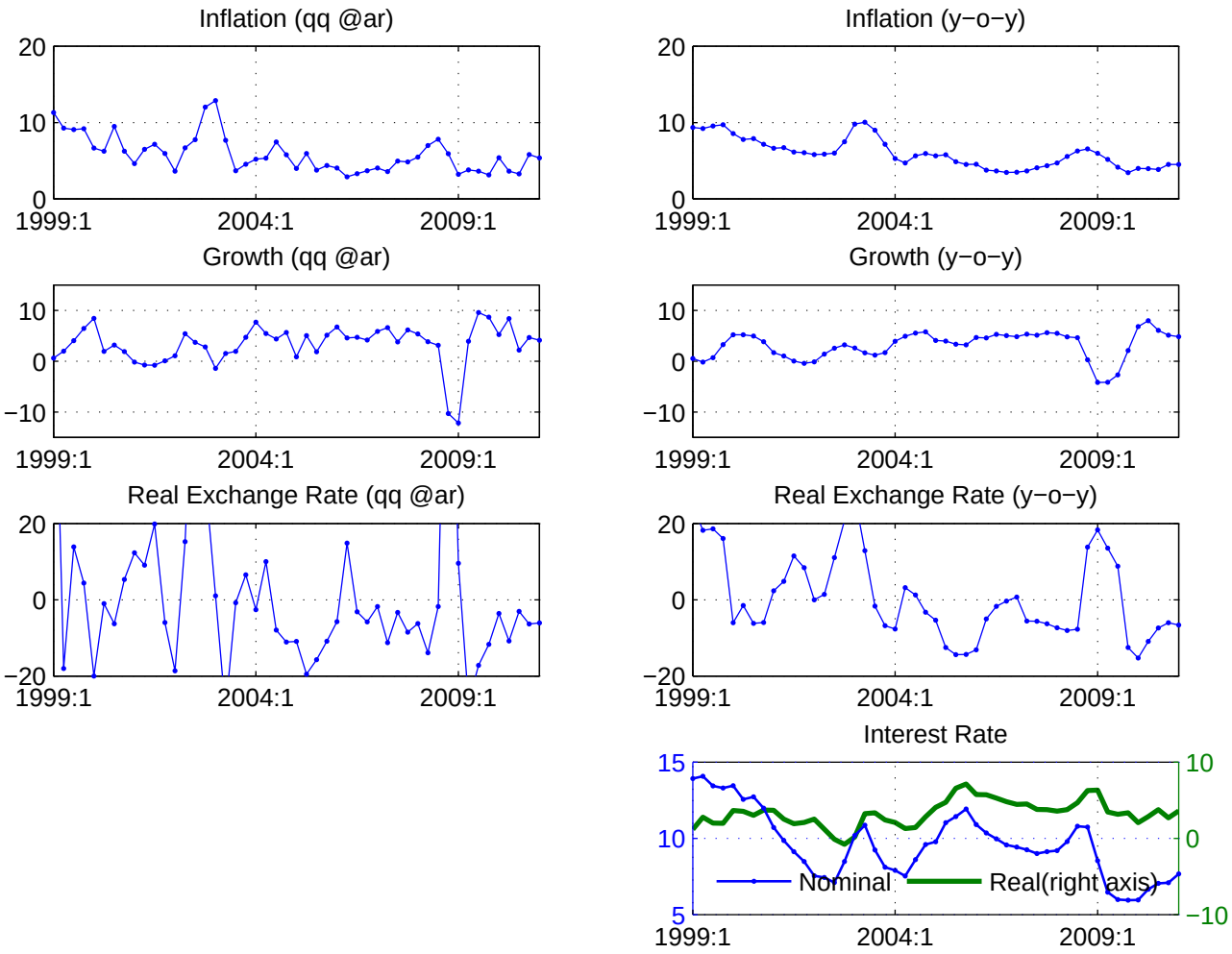


Figure 5: Historical Variables LA6

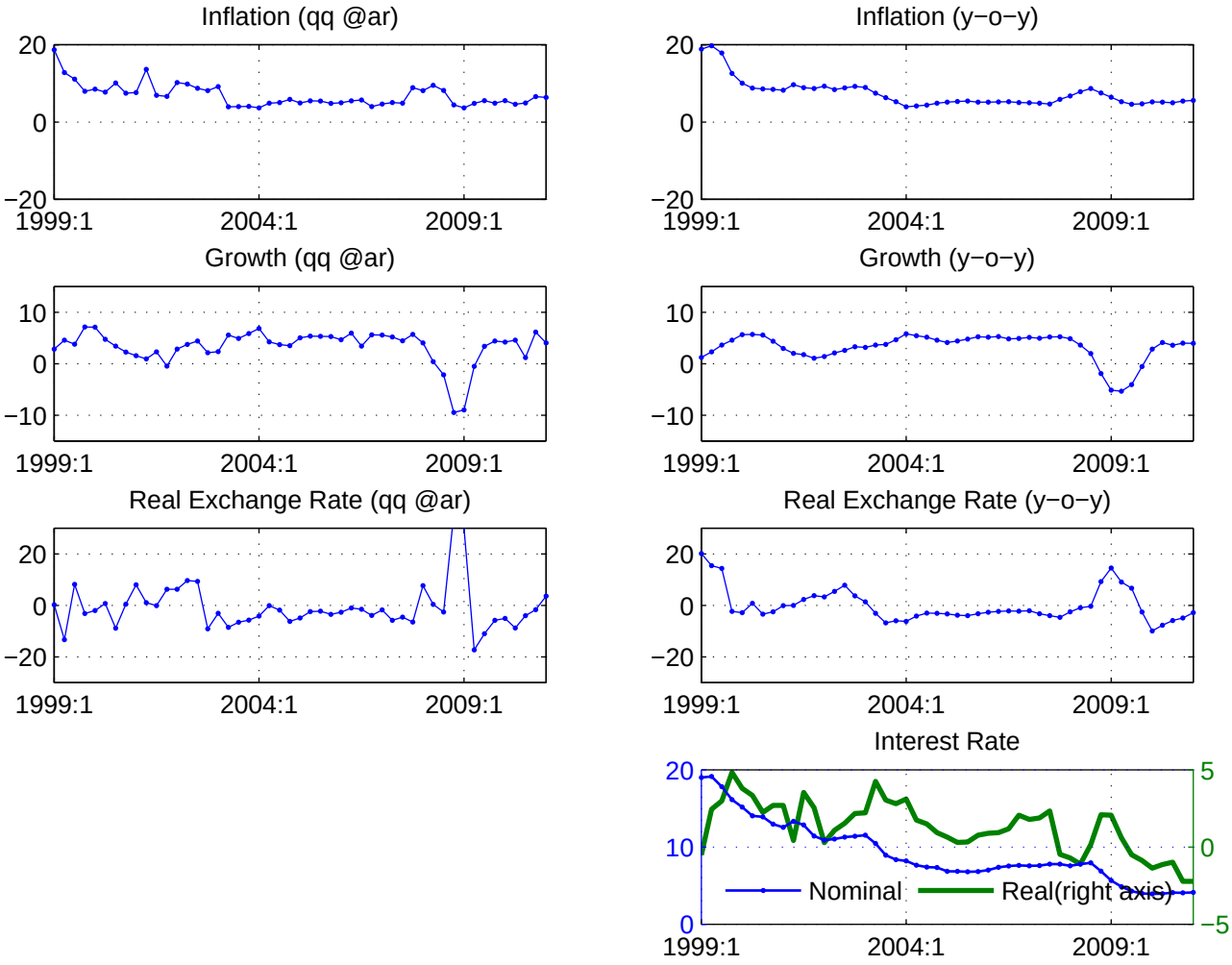


Figure 6: Historical Variables RC6

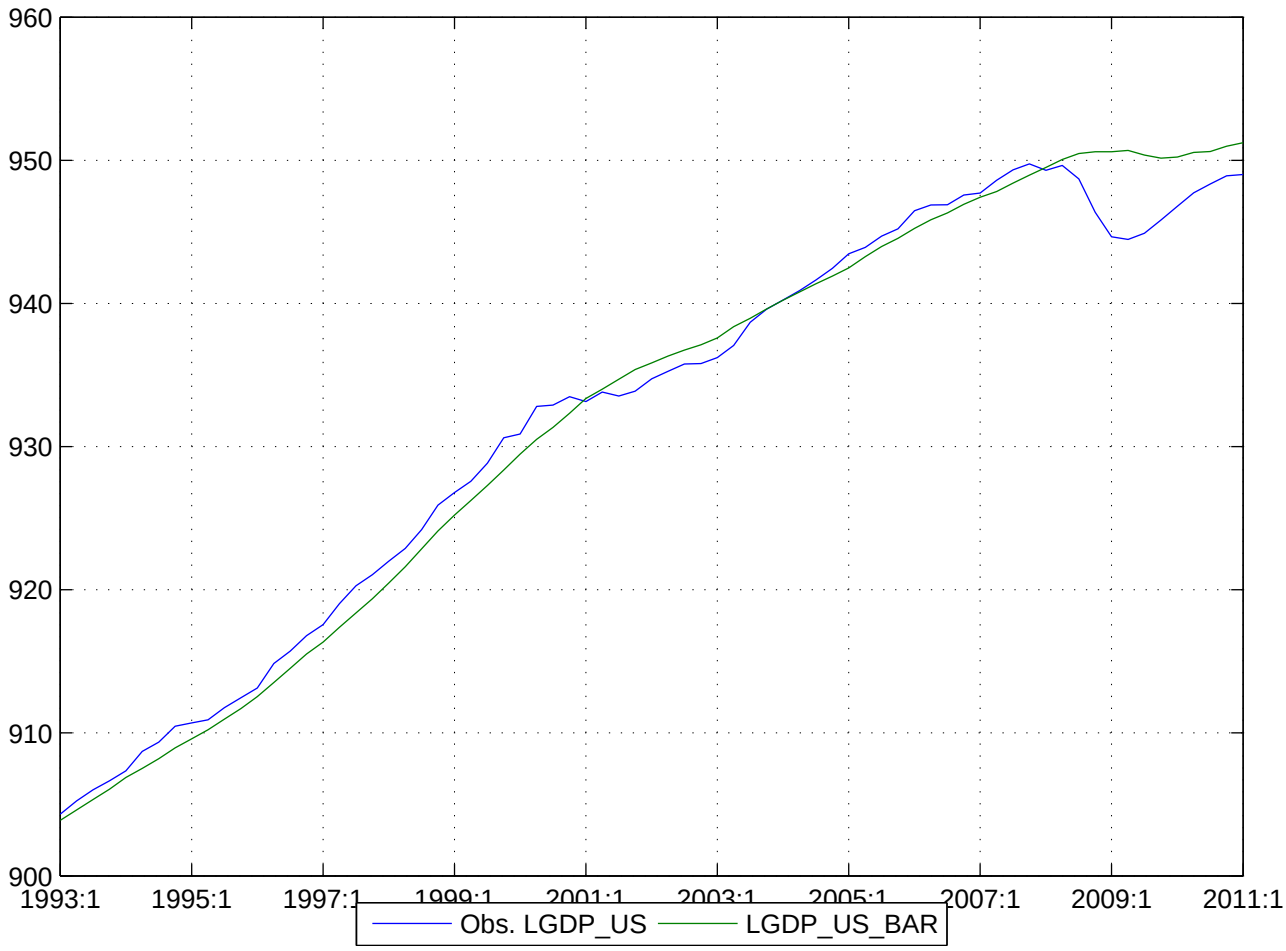


Figure 7: US GDP level

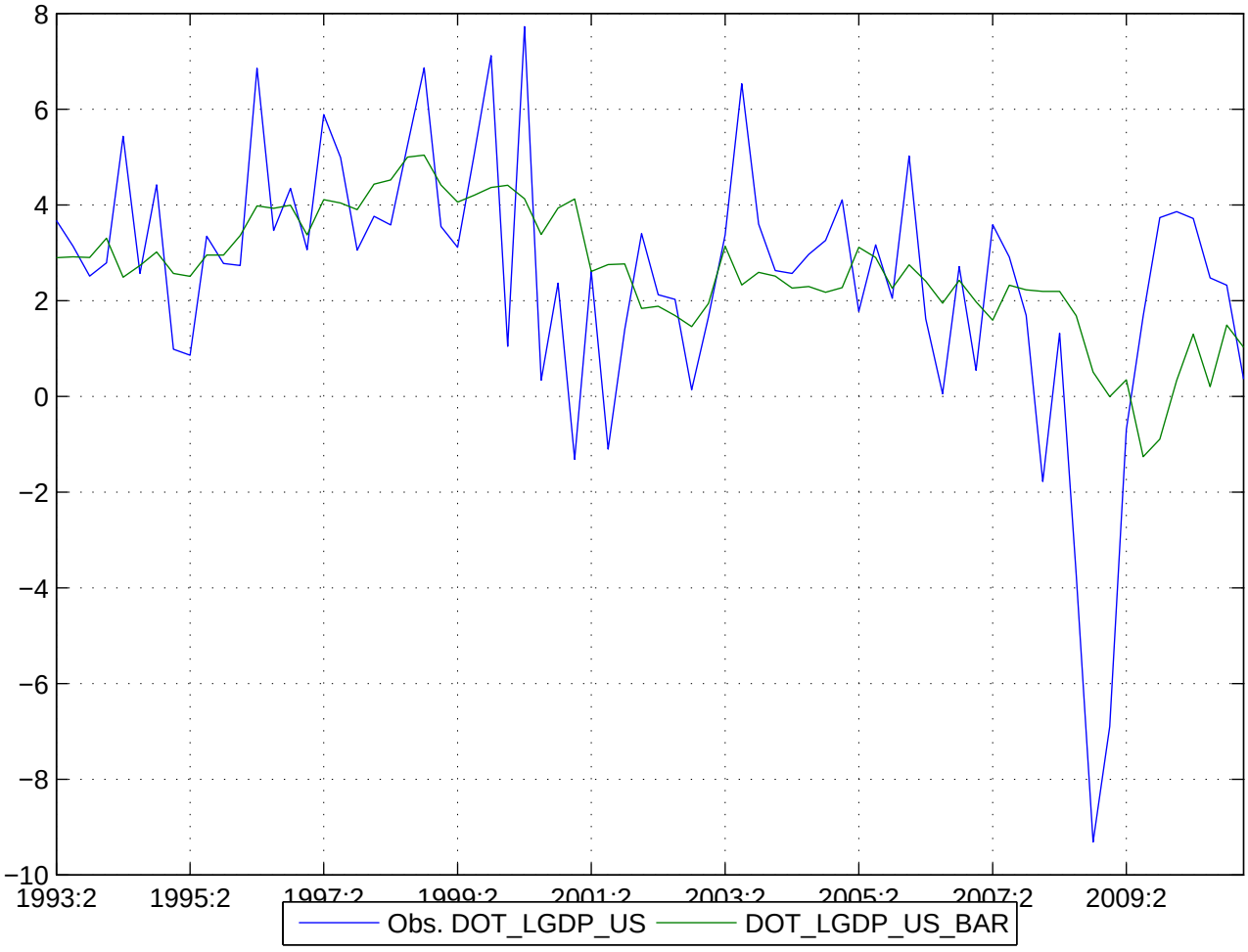


Figure 8: US GDP growth

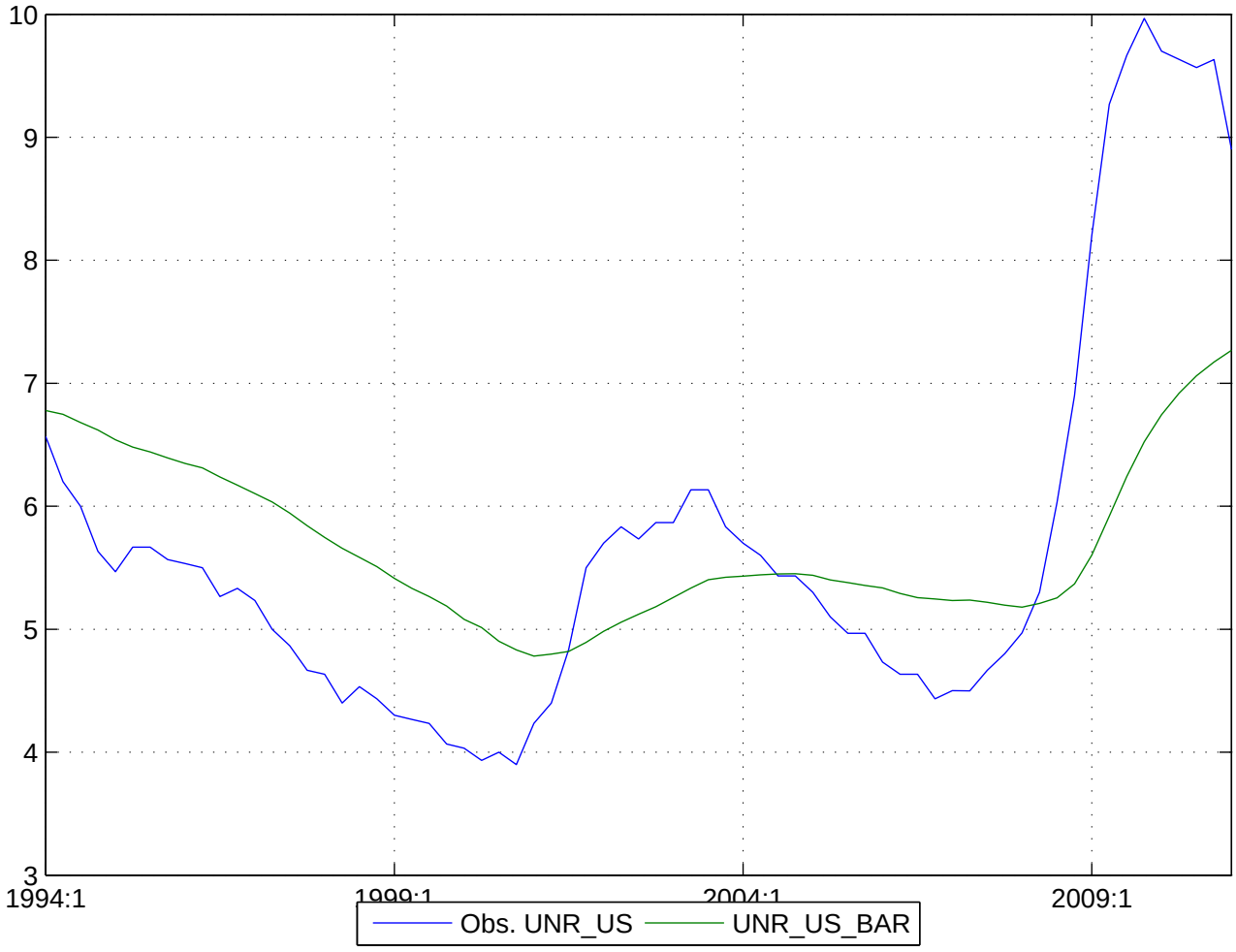


Figure 9: US Unemployment

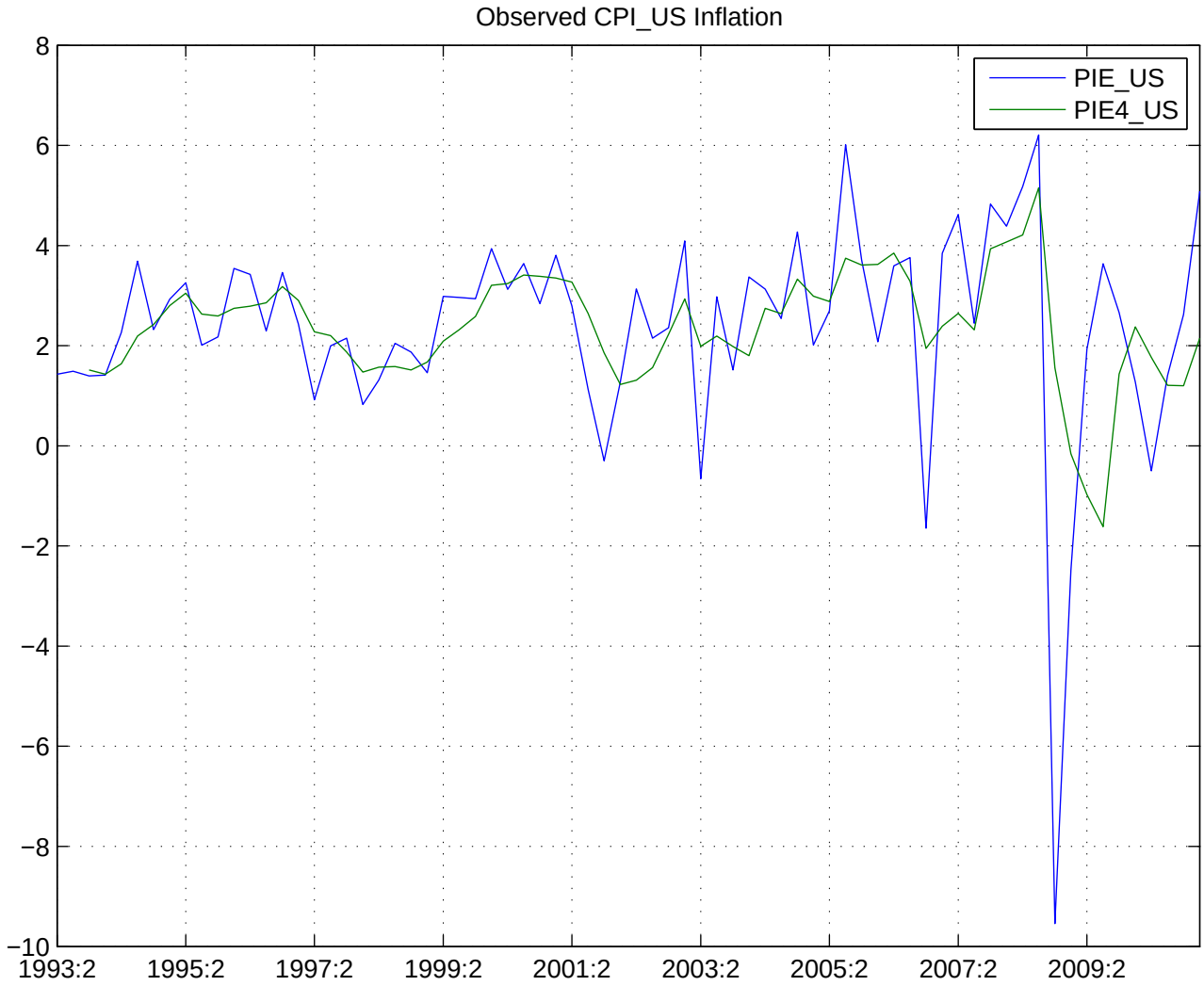


Figure 10: PIE_US

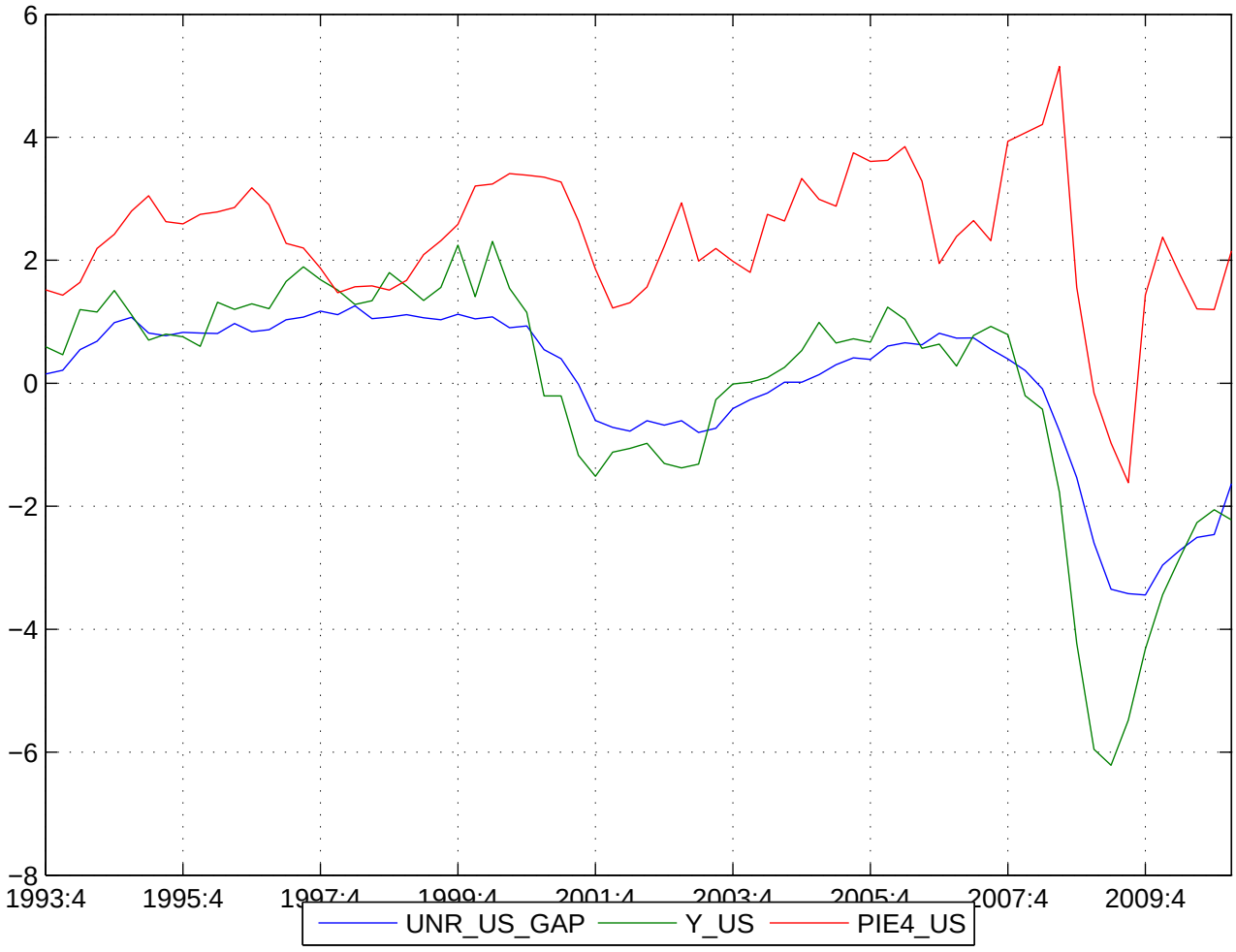


Figure 11: US_GAP

Figure 12: REER_T_US

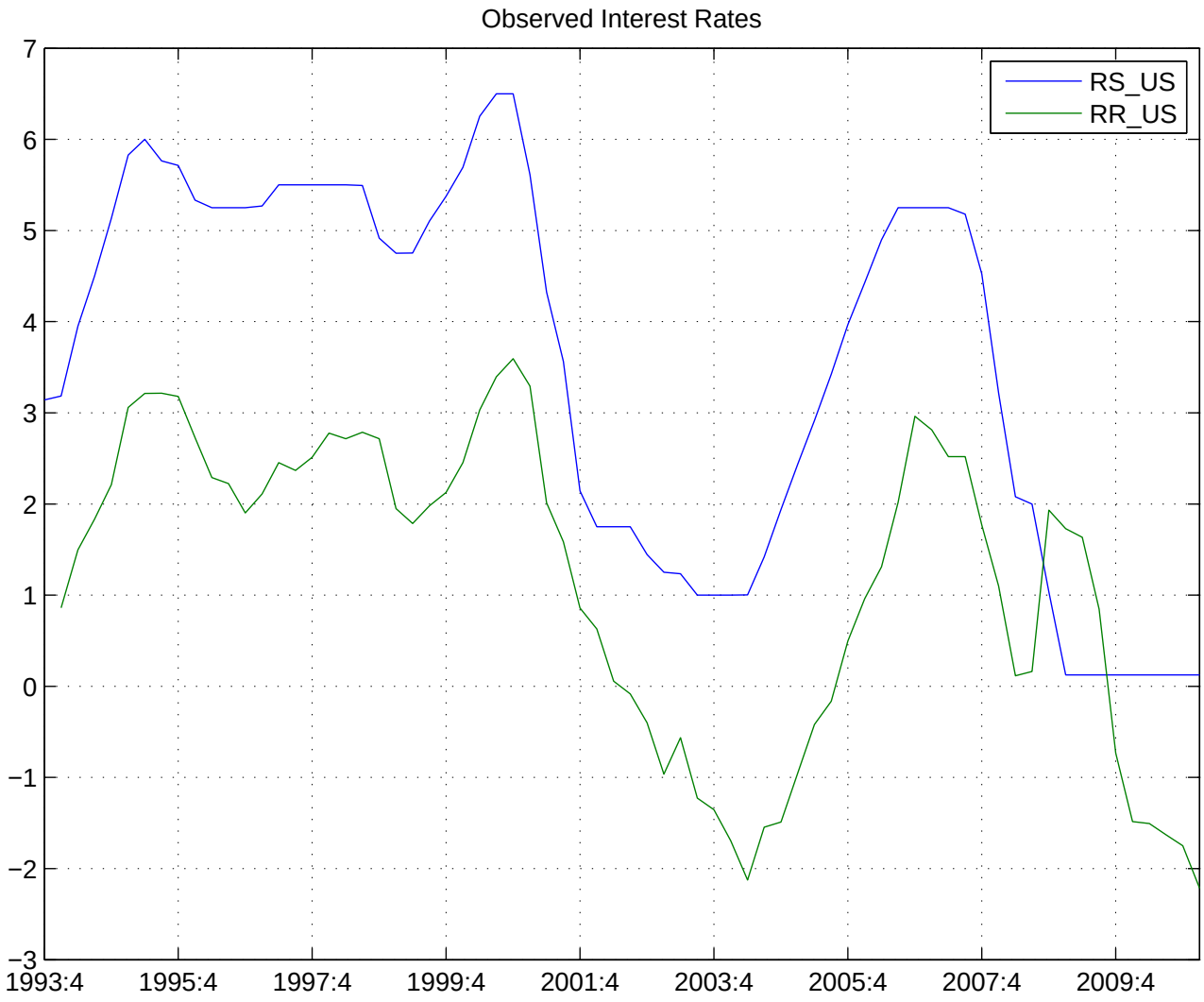


Figure 13: RR_US

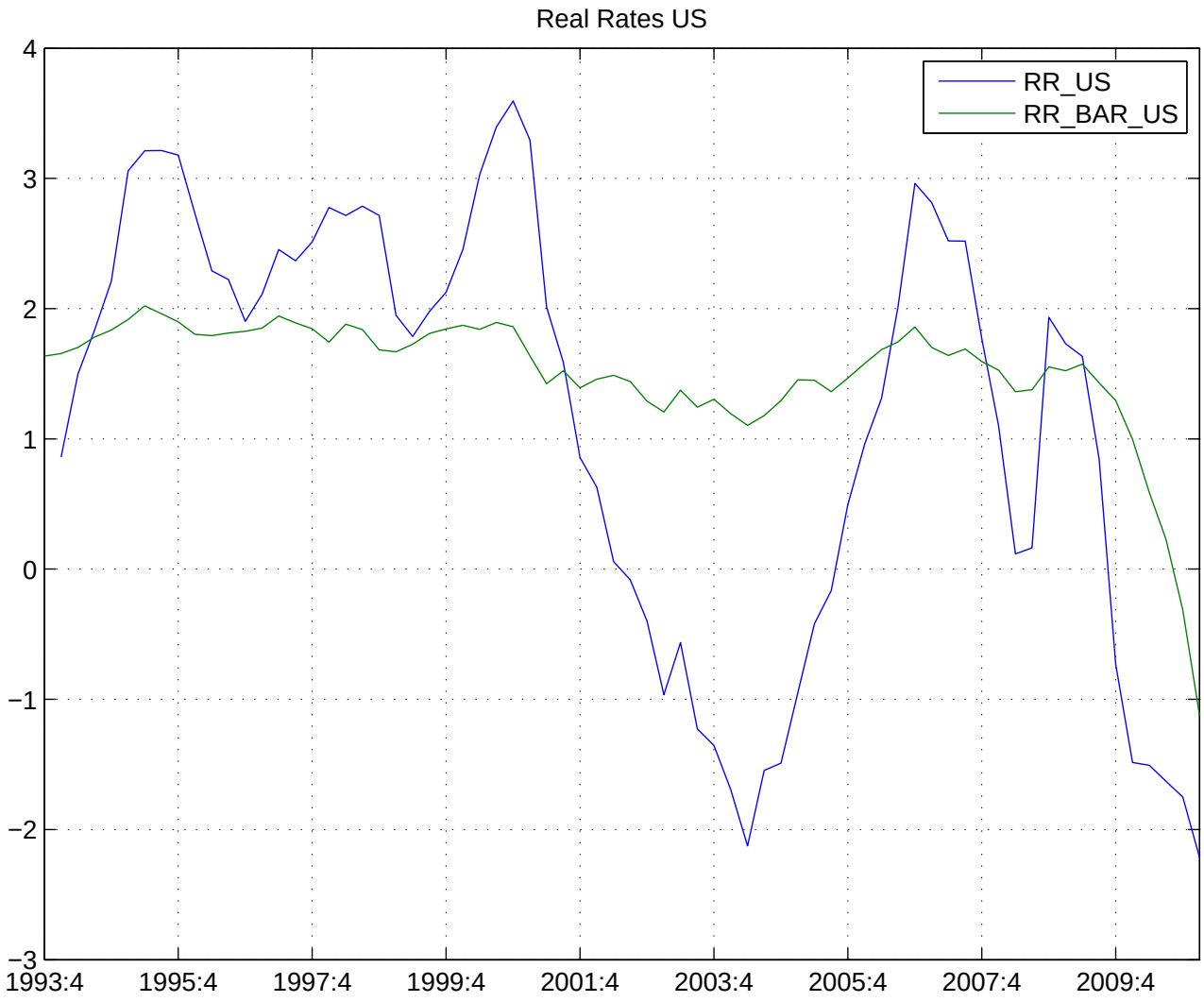
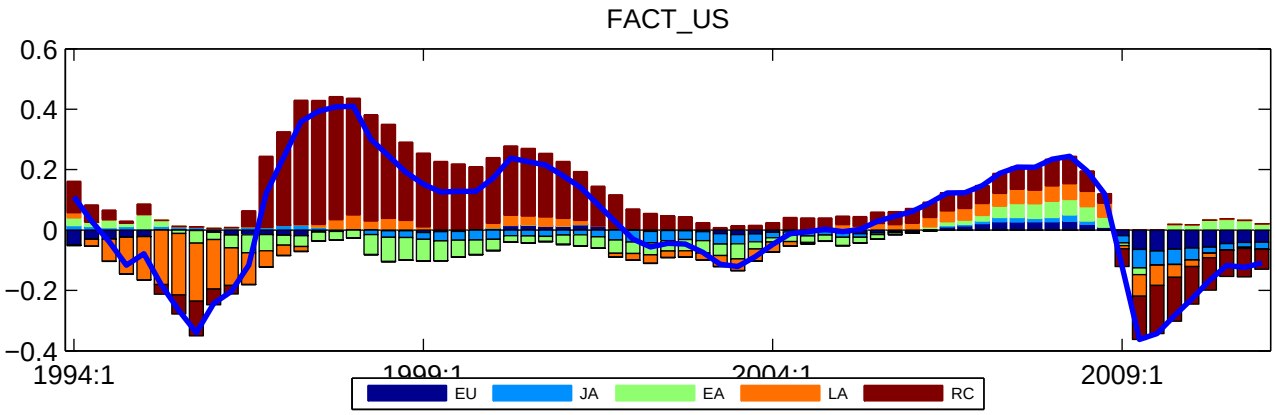


Figure 14: Real Rate And Equilibrium US



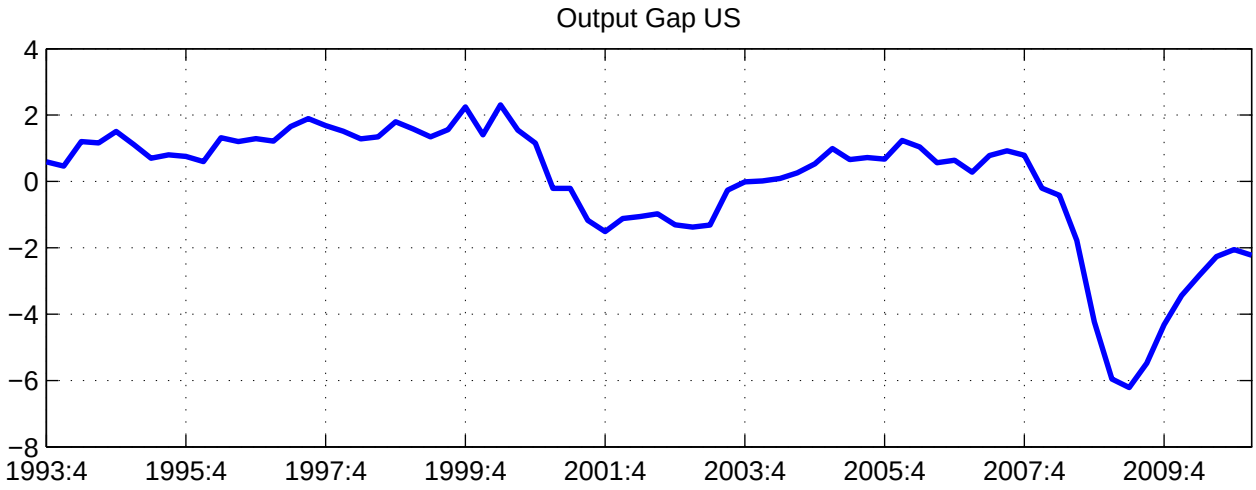


Figure 15: FACT_US

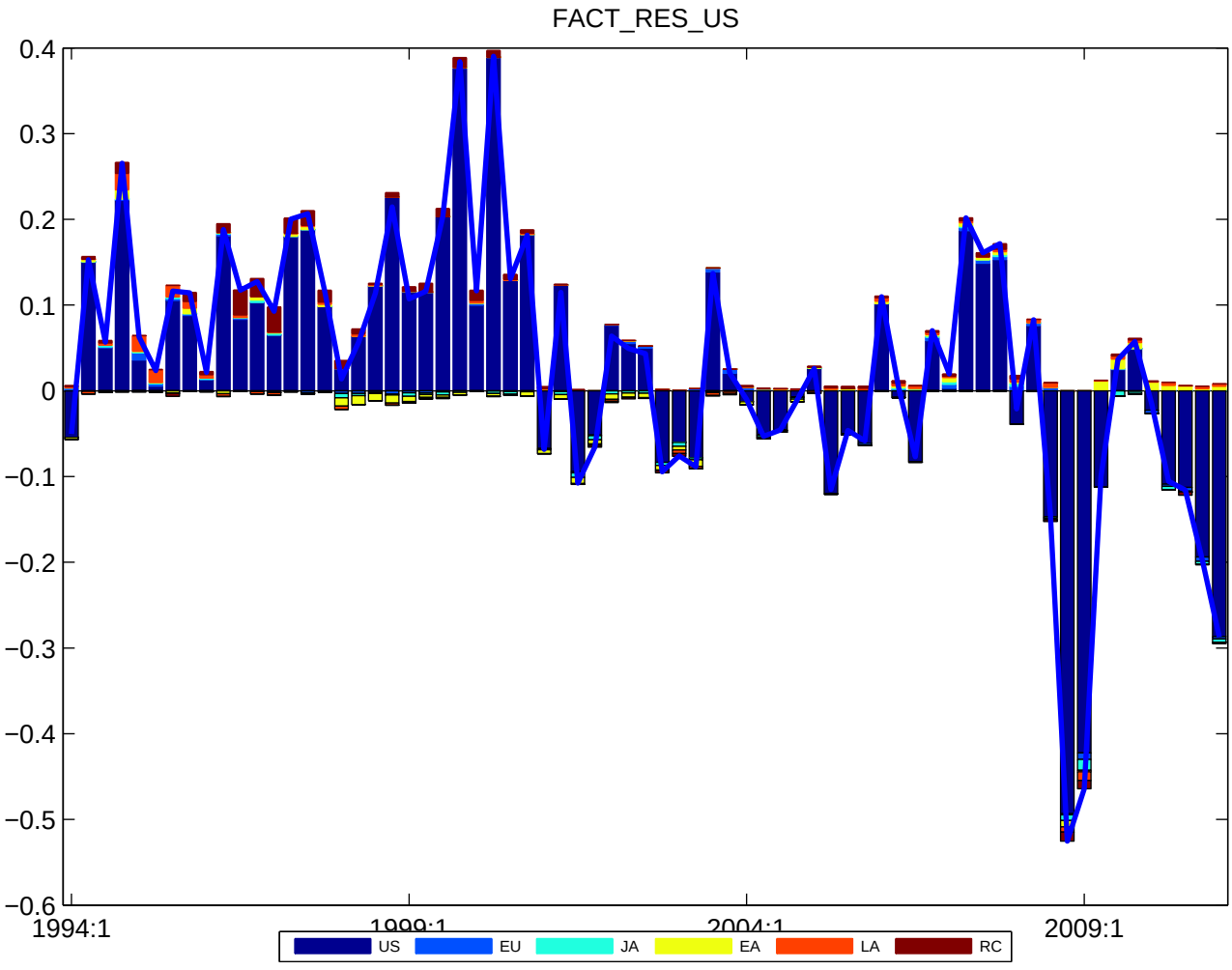


Figure 16: FACT_RES_US

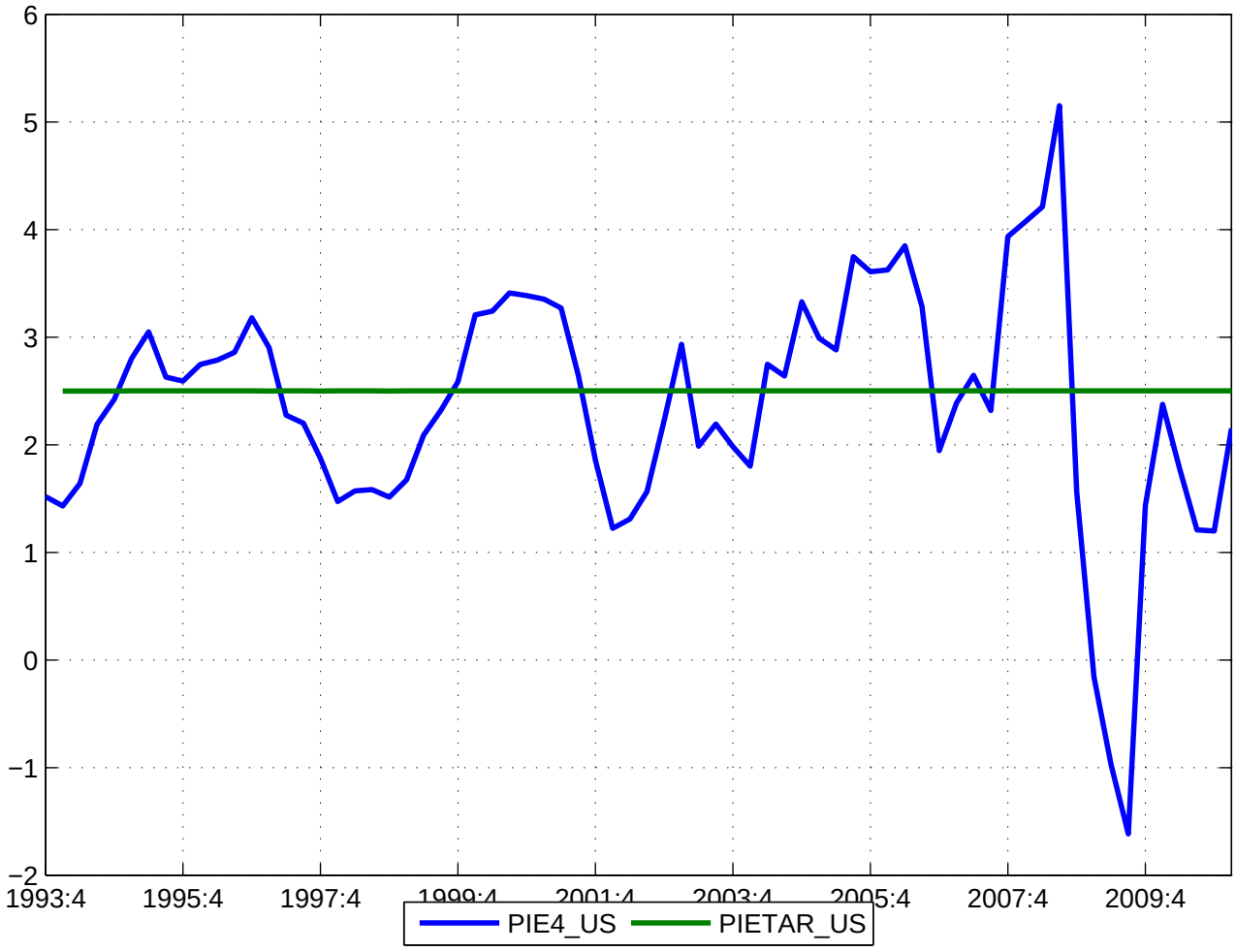


Figure 17: Inflation and Target US

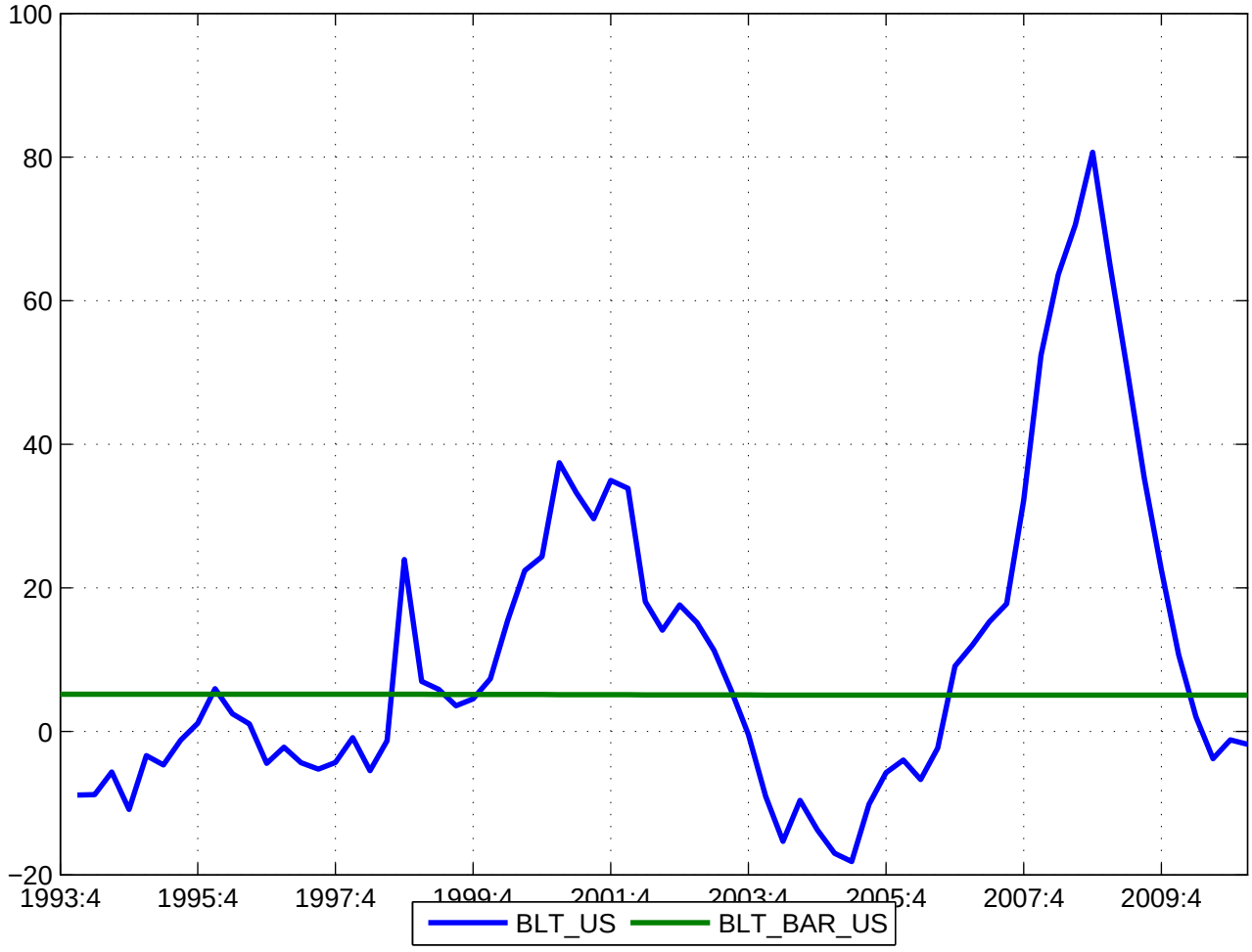


Figure 18: BLT_US

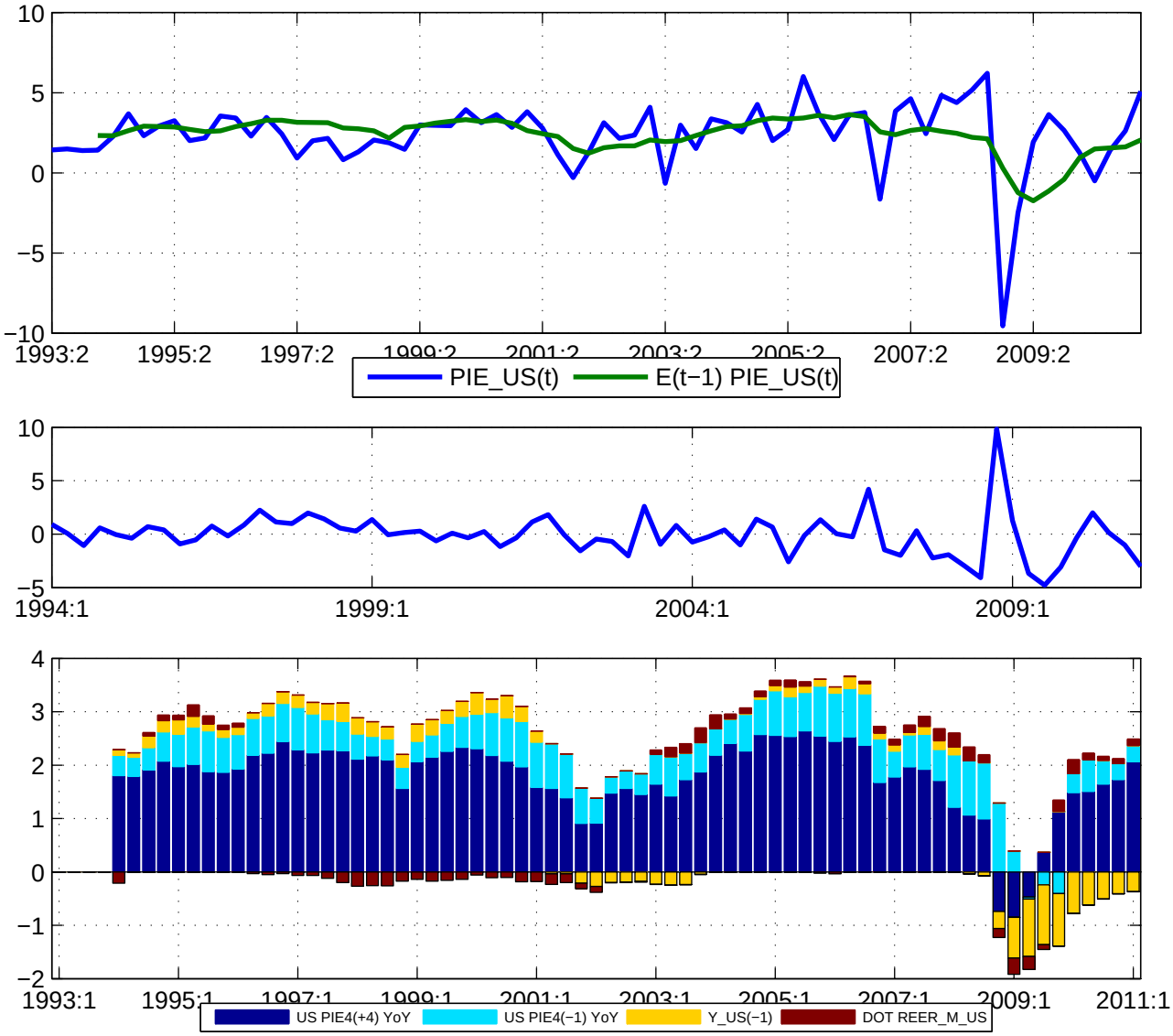


Figure 19: PIE_US_fit

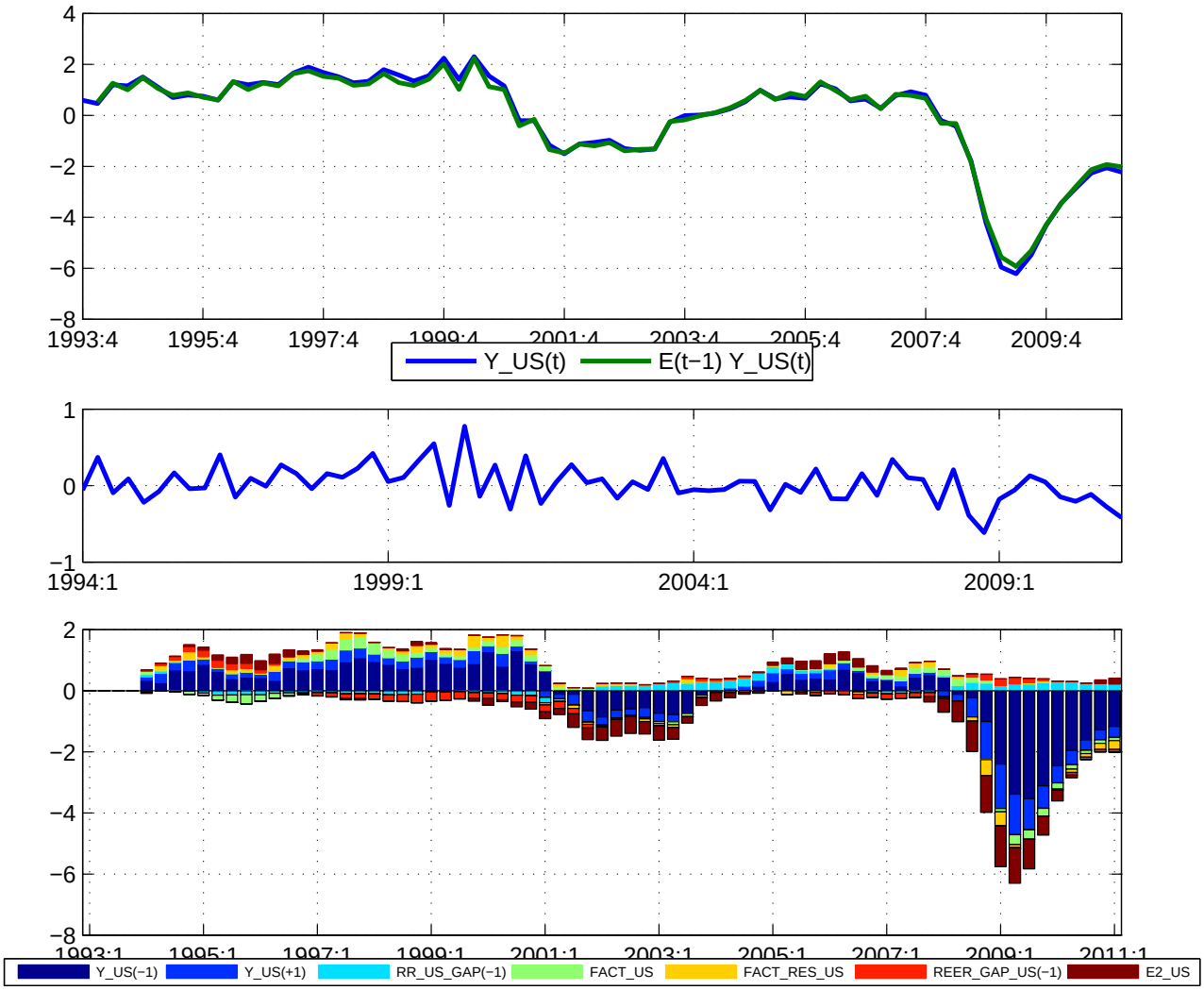


Figure 20: Y_US_fit

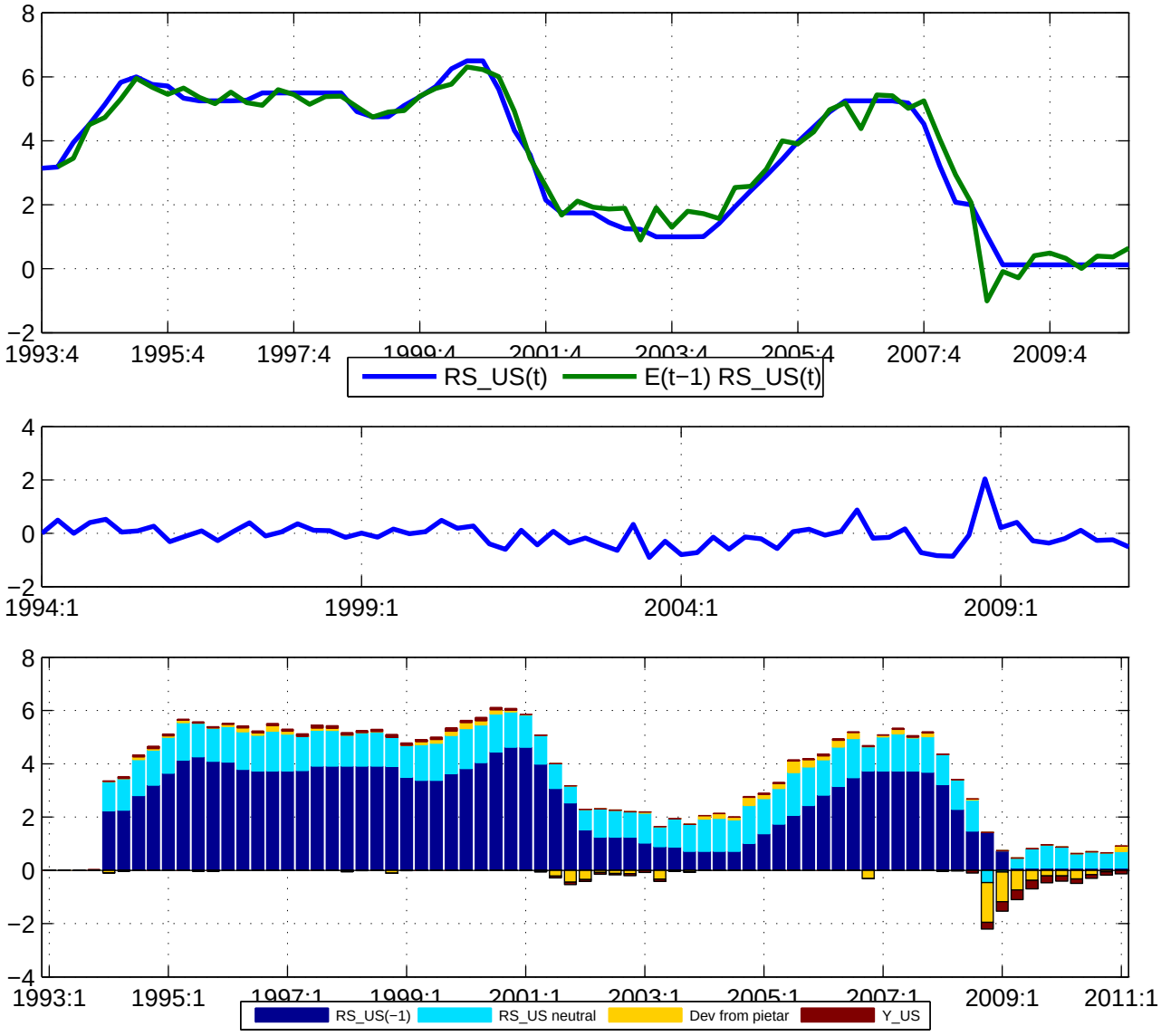


Figure 21: RS_US_fit

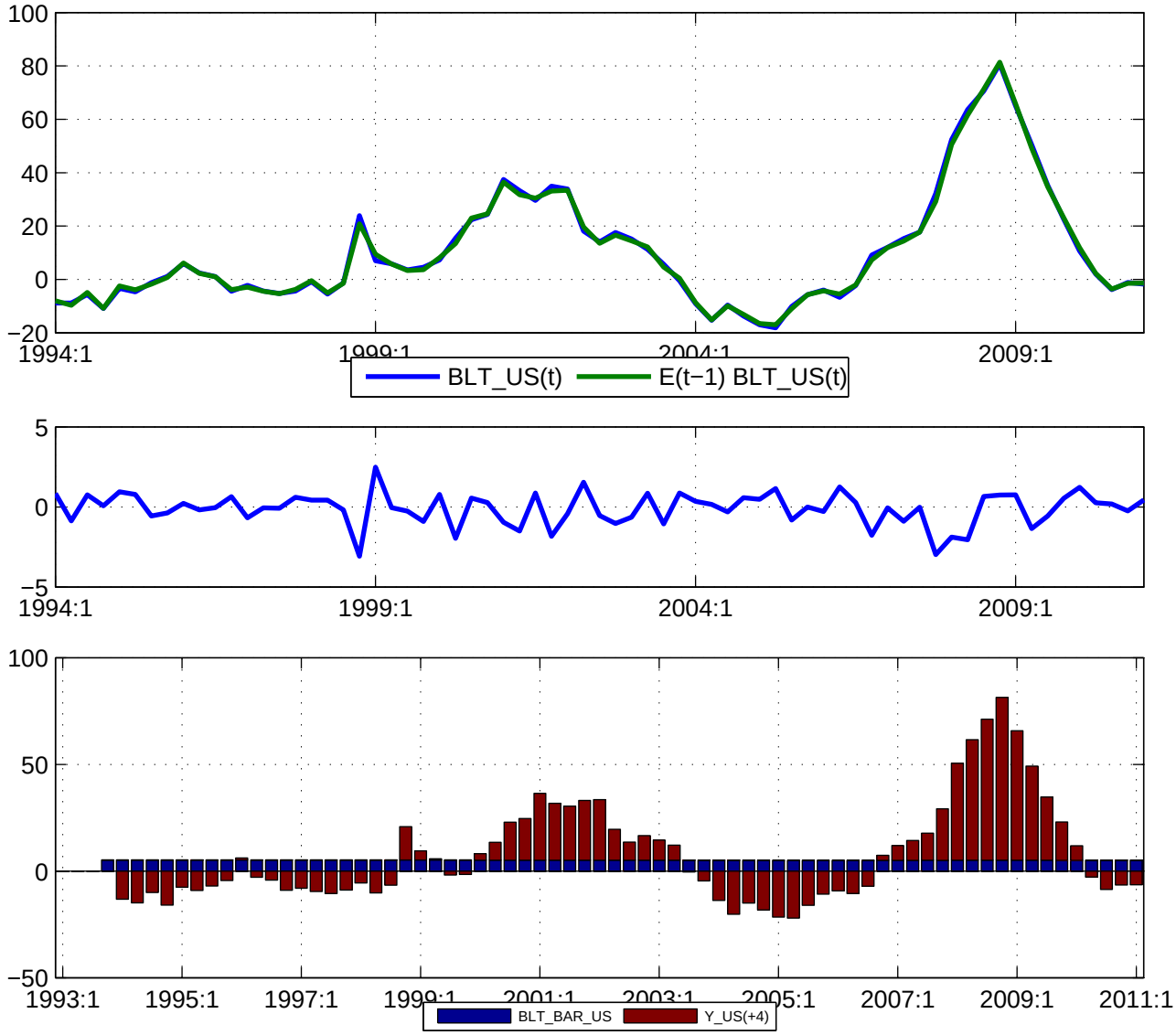


Figure 22: BLT_US_fit

File for TP_US_fit not found

File for US Long Rate and Term Premium not found

File for TP_US_all not found

File for TP1_US_fit not found

File for US 1-year Rate and Term Premium not found

File for TP3_US_fit not found

File for US 3-year Rate and Term Premium not found

File for TP5_US_fit not found

File for US 5-year Rate and Term Premium not found

File for TP10_US_fit not found

File for US 10-year Rate and Term Premium not found

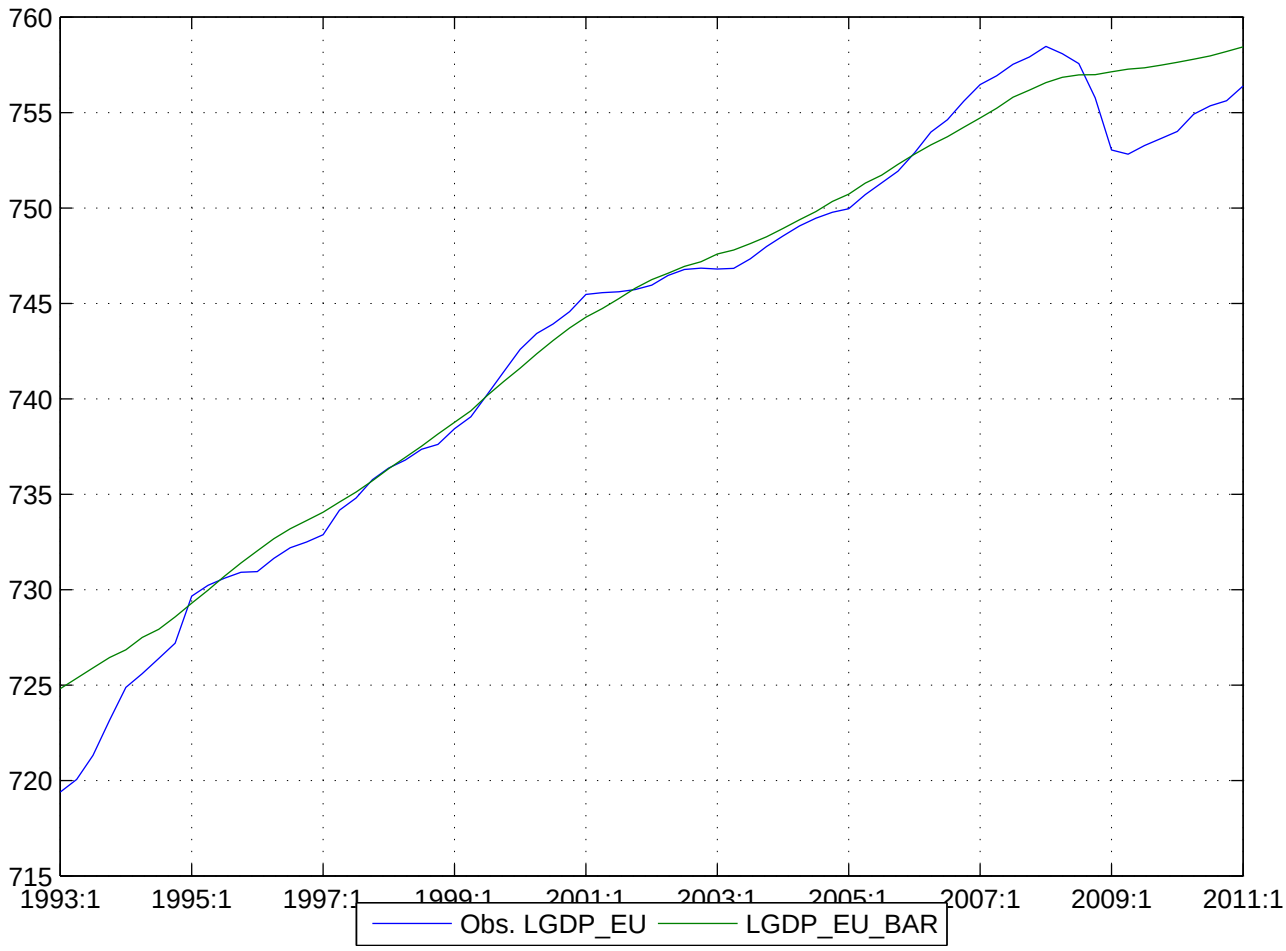


Figure 23: EU GDP level

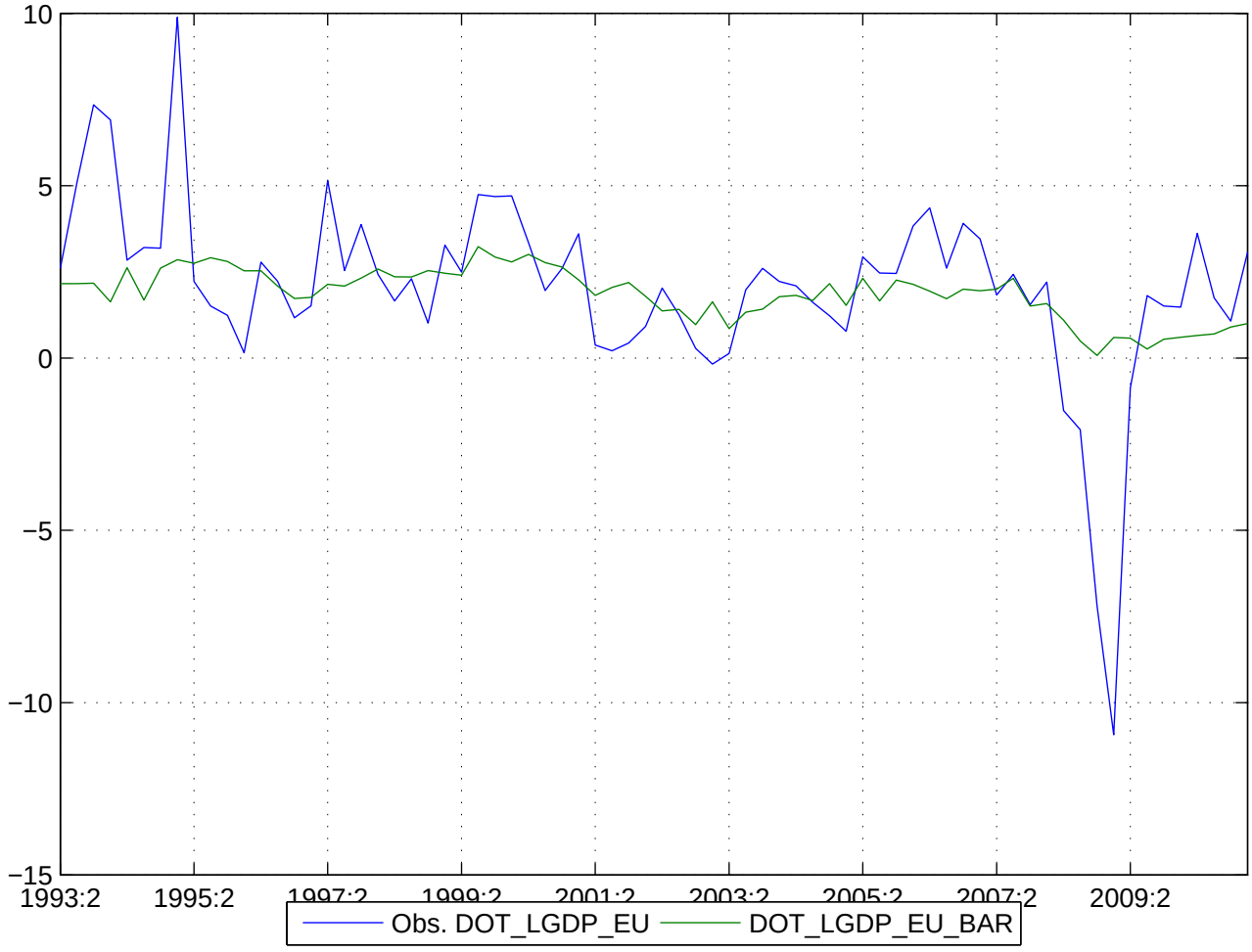


Figure 24: EU GDP growth

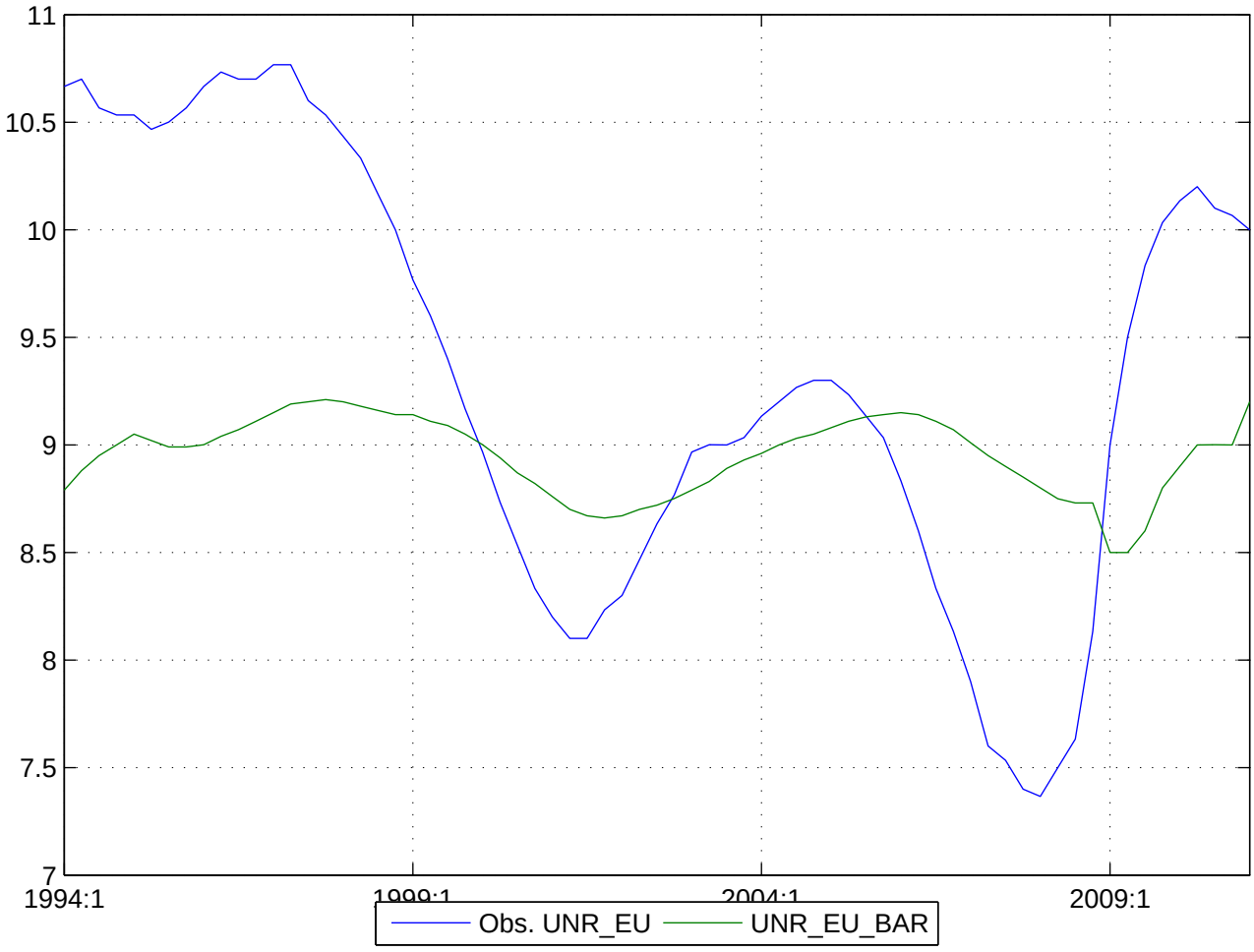


Figure 25: EU Unemployment

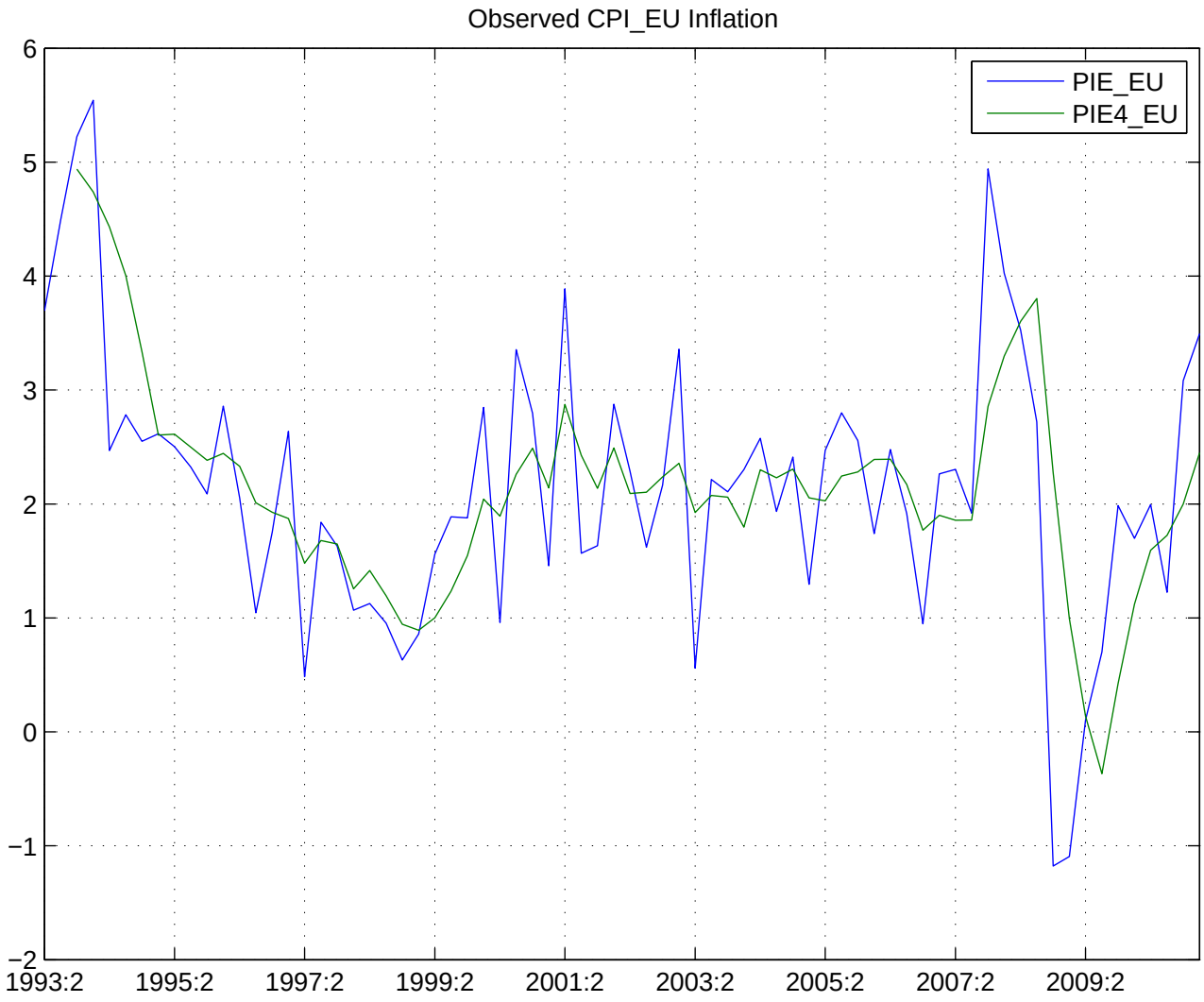


Figure 26: PIE_EU

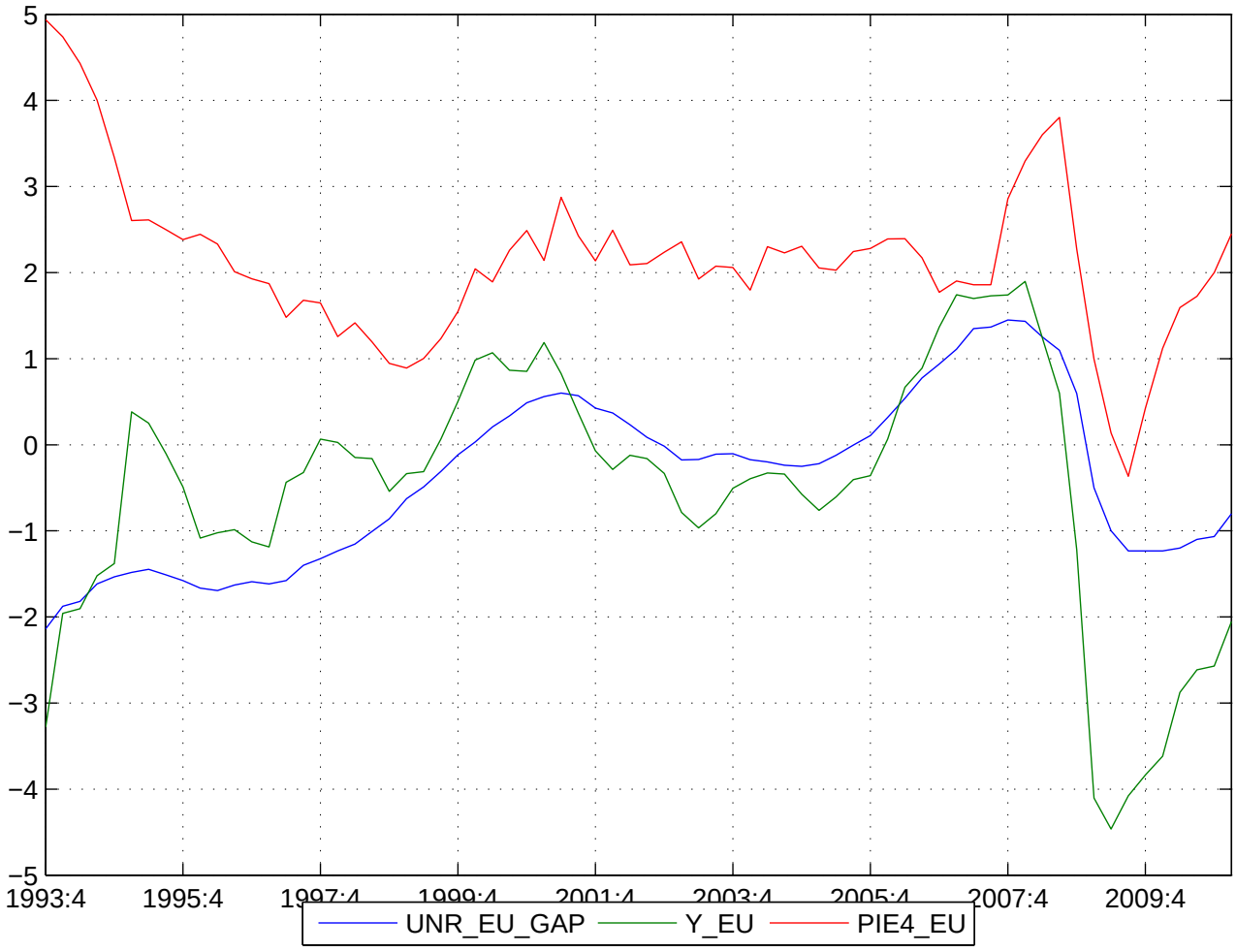


Figure 27: EU_GAP

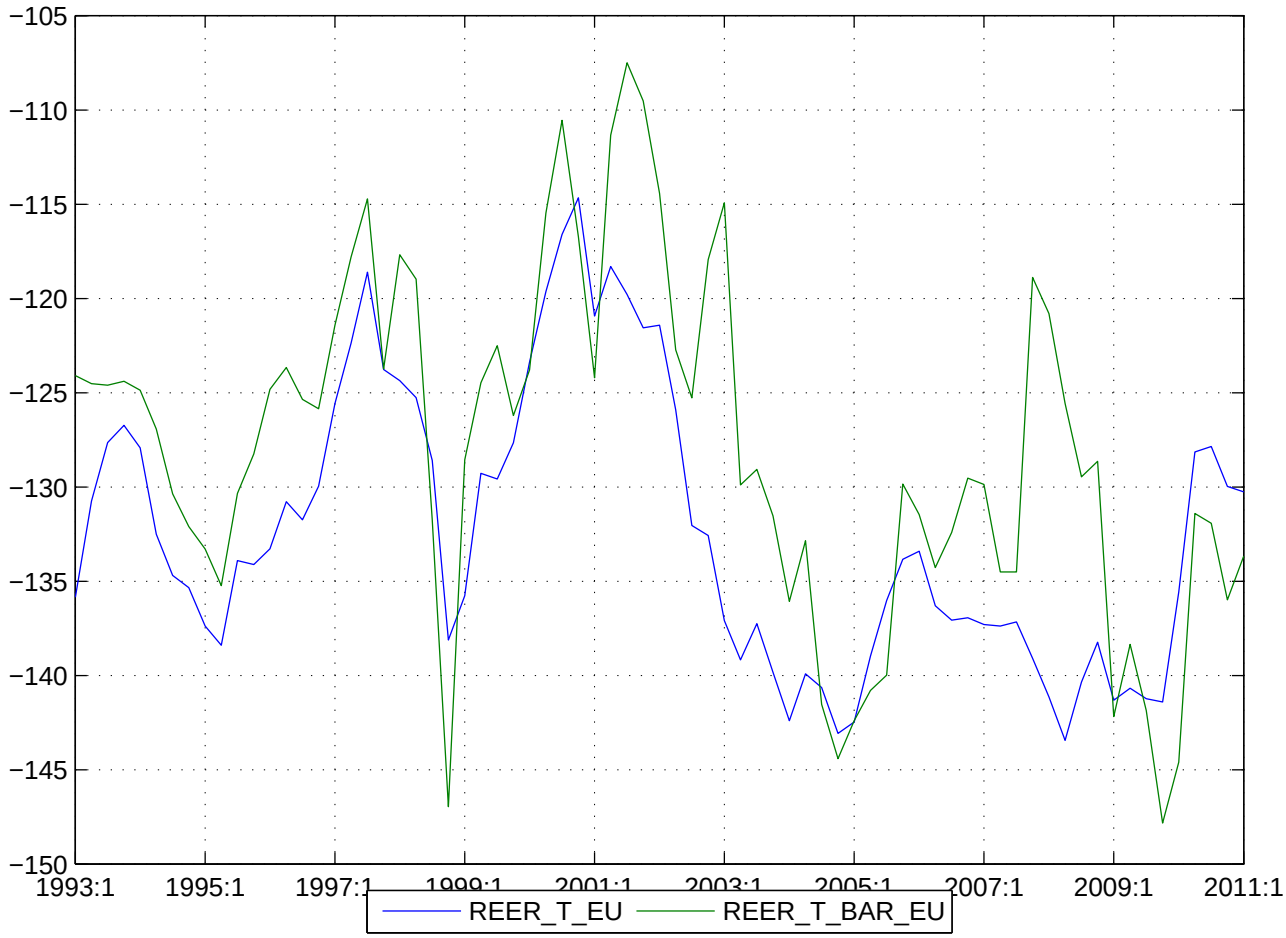


Figure 28: REER_T_EU

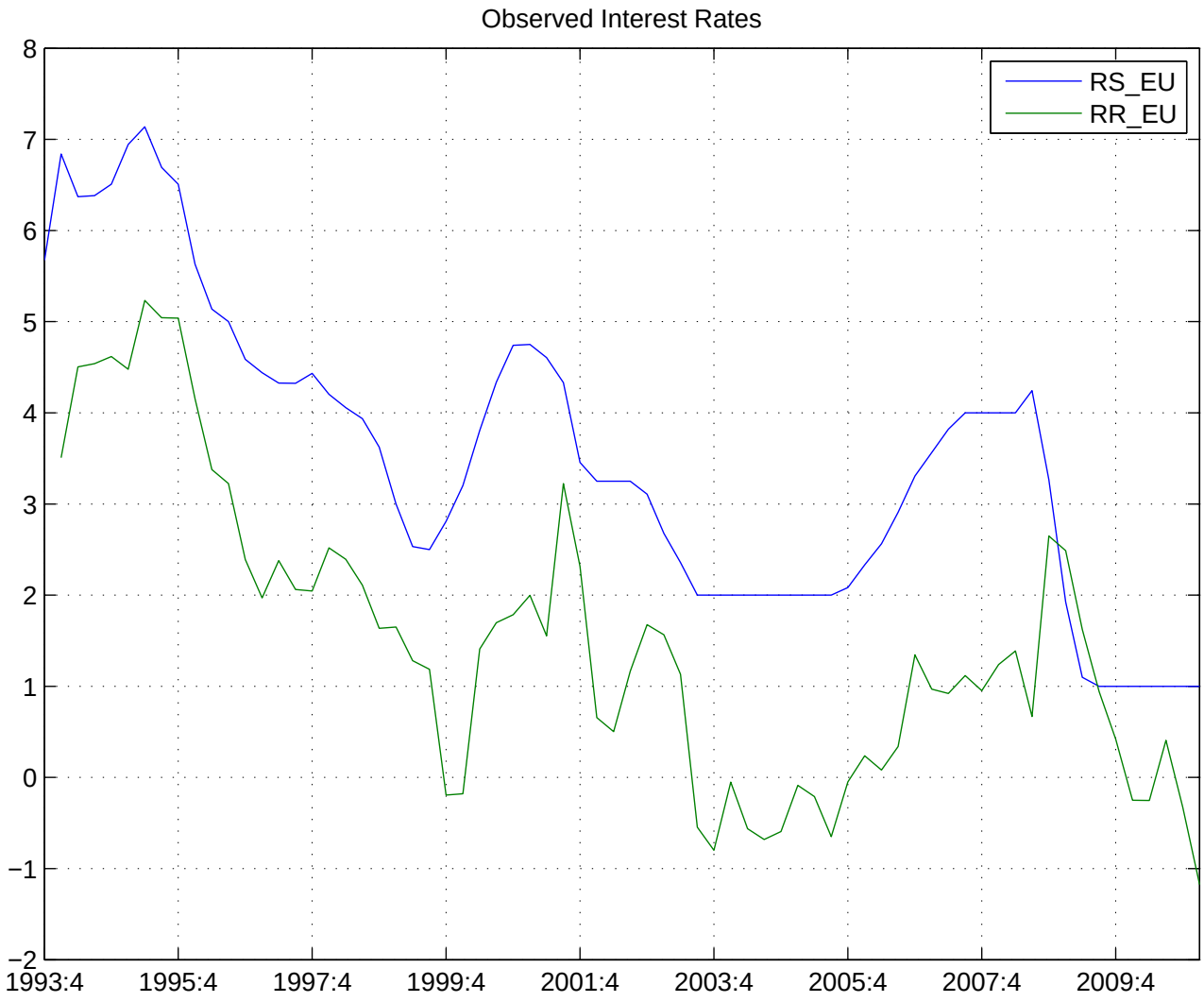


Figure 29: RR_EU

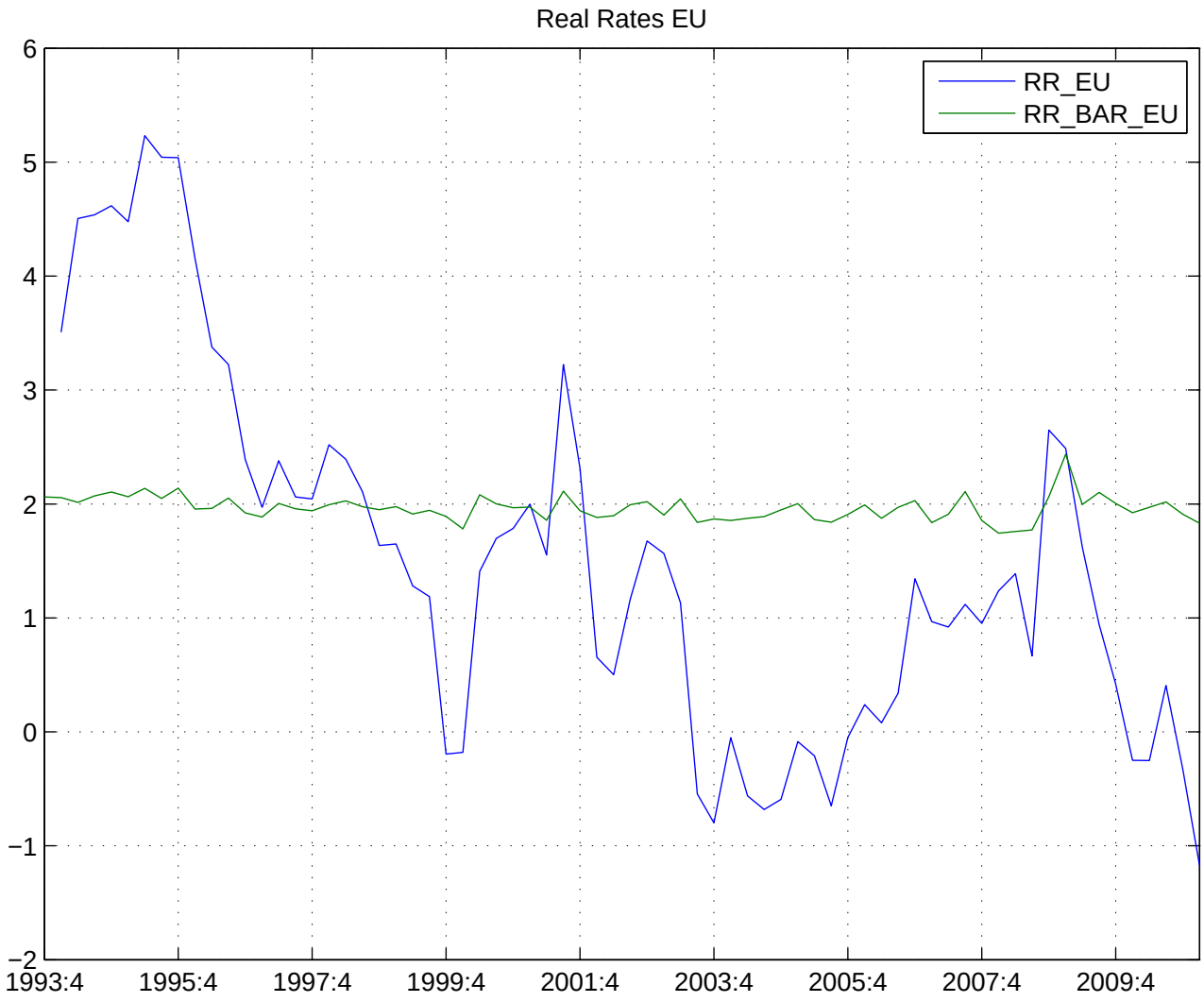
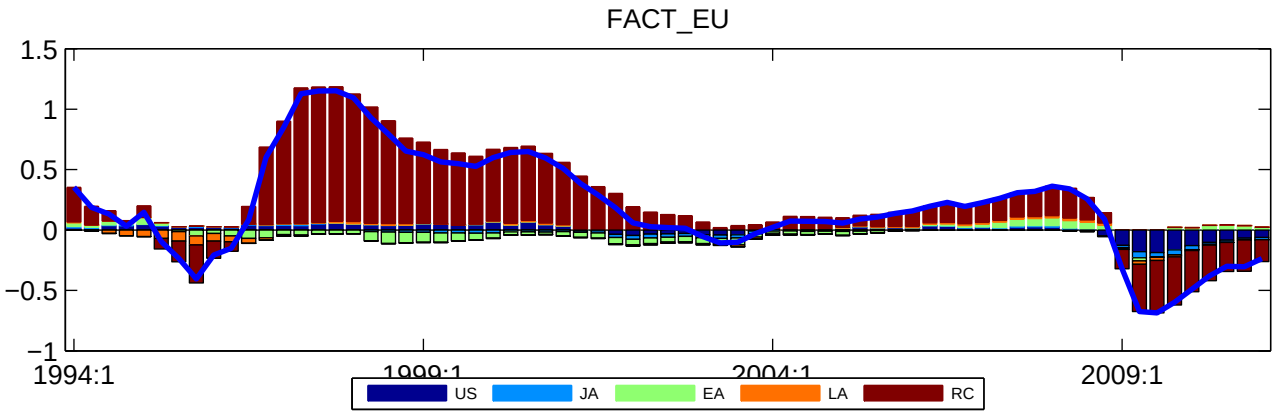


Figure 30: Real Rate And Equilibrium EU



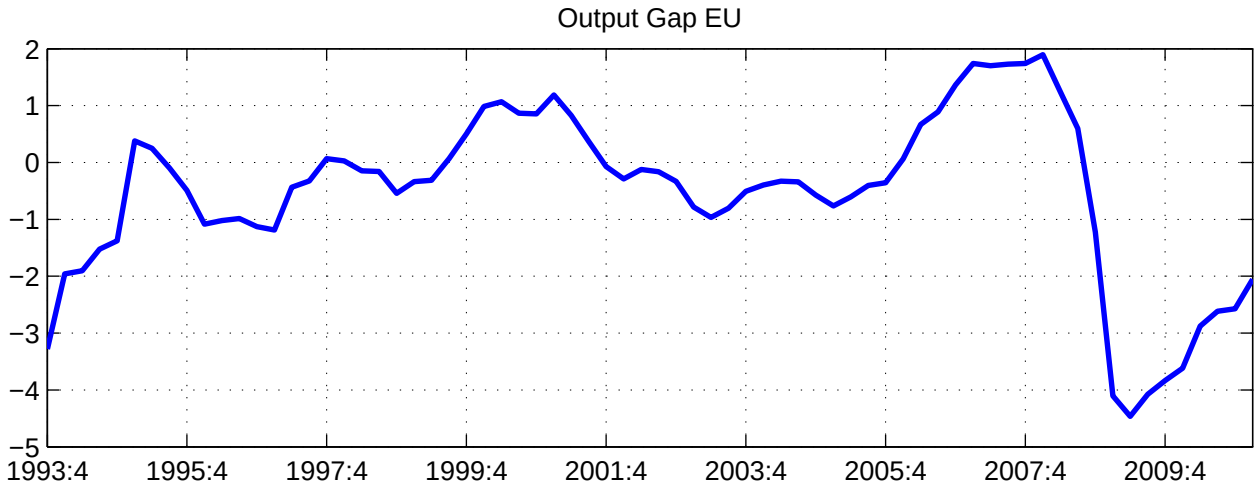


Figure 31: FACT_EU

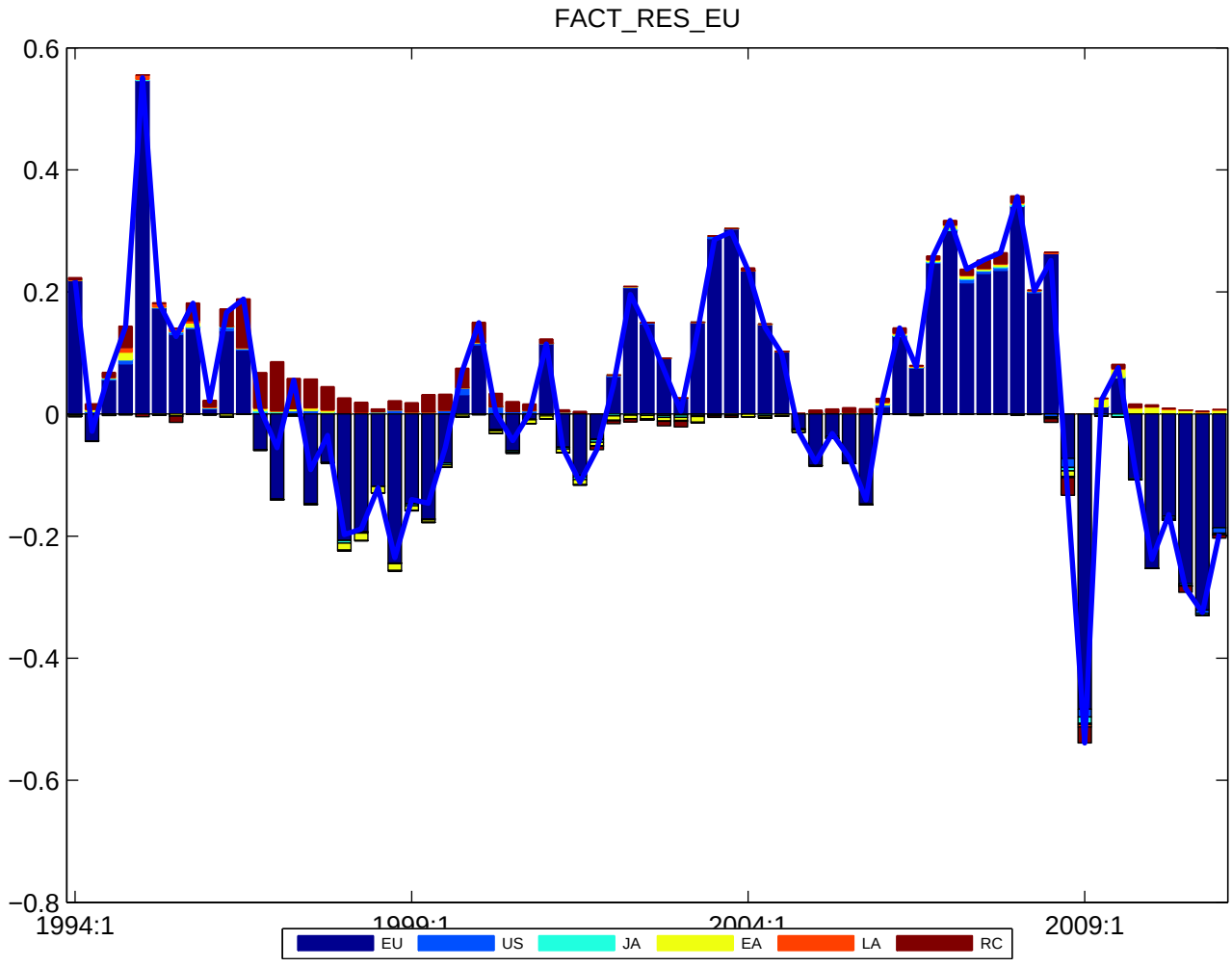


Figure 32: FACT_RES_EU

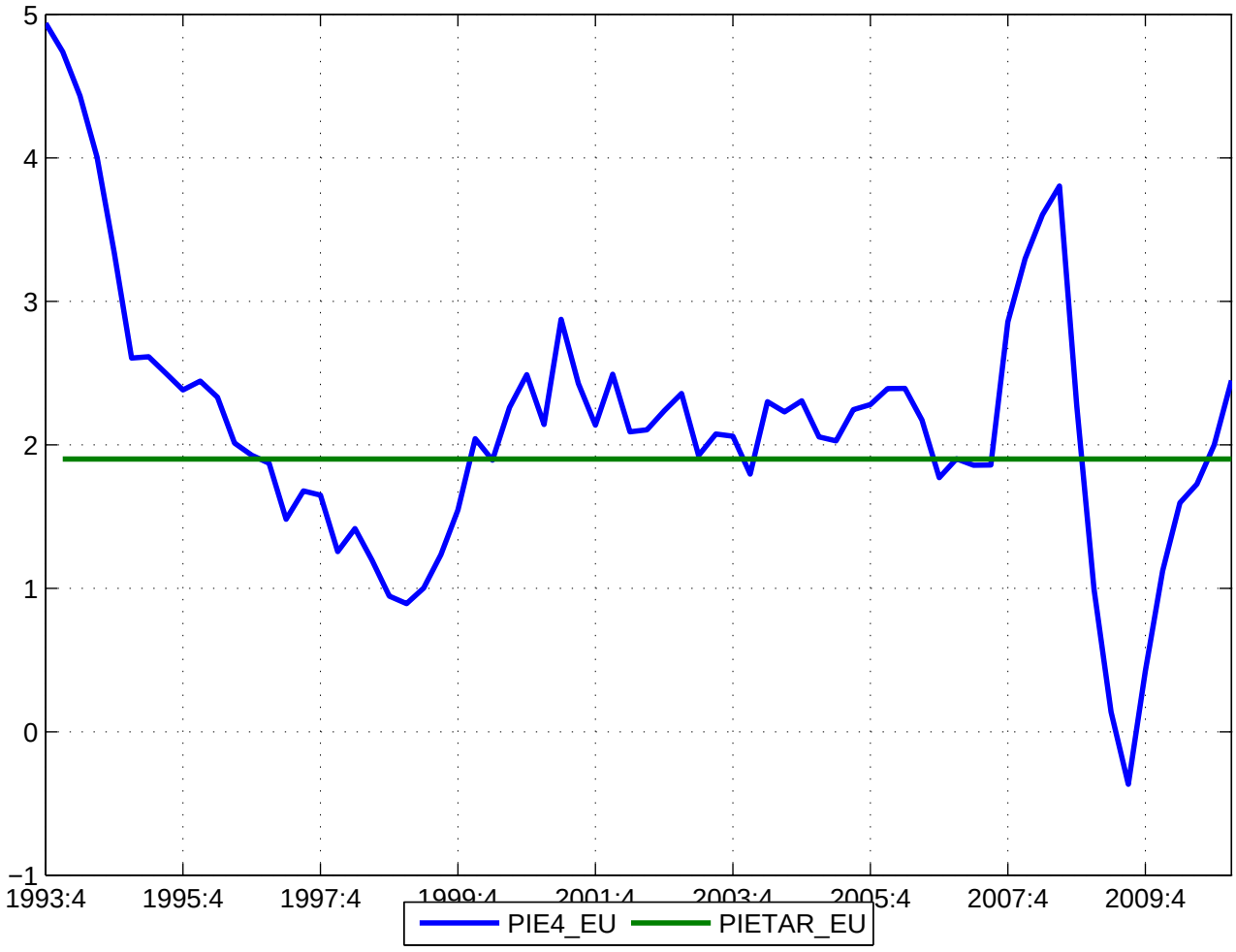


Figure 33: Inflation and Target EU

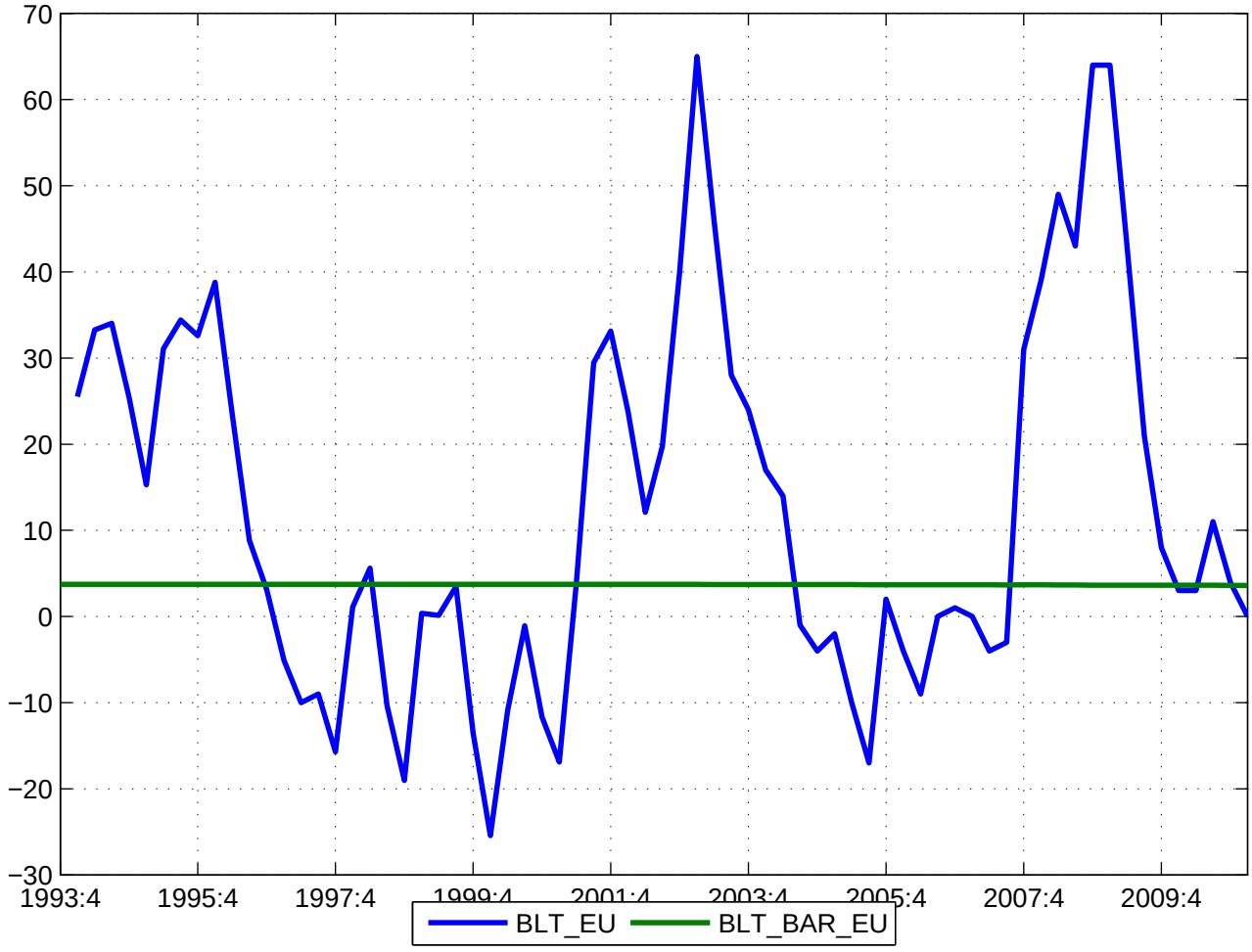


Figure 34: BLT_EU

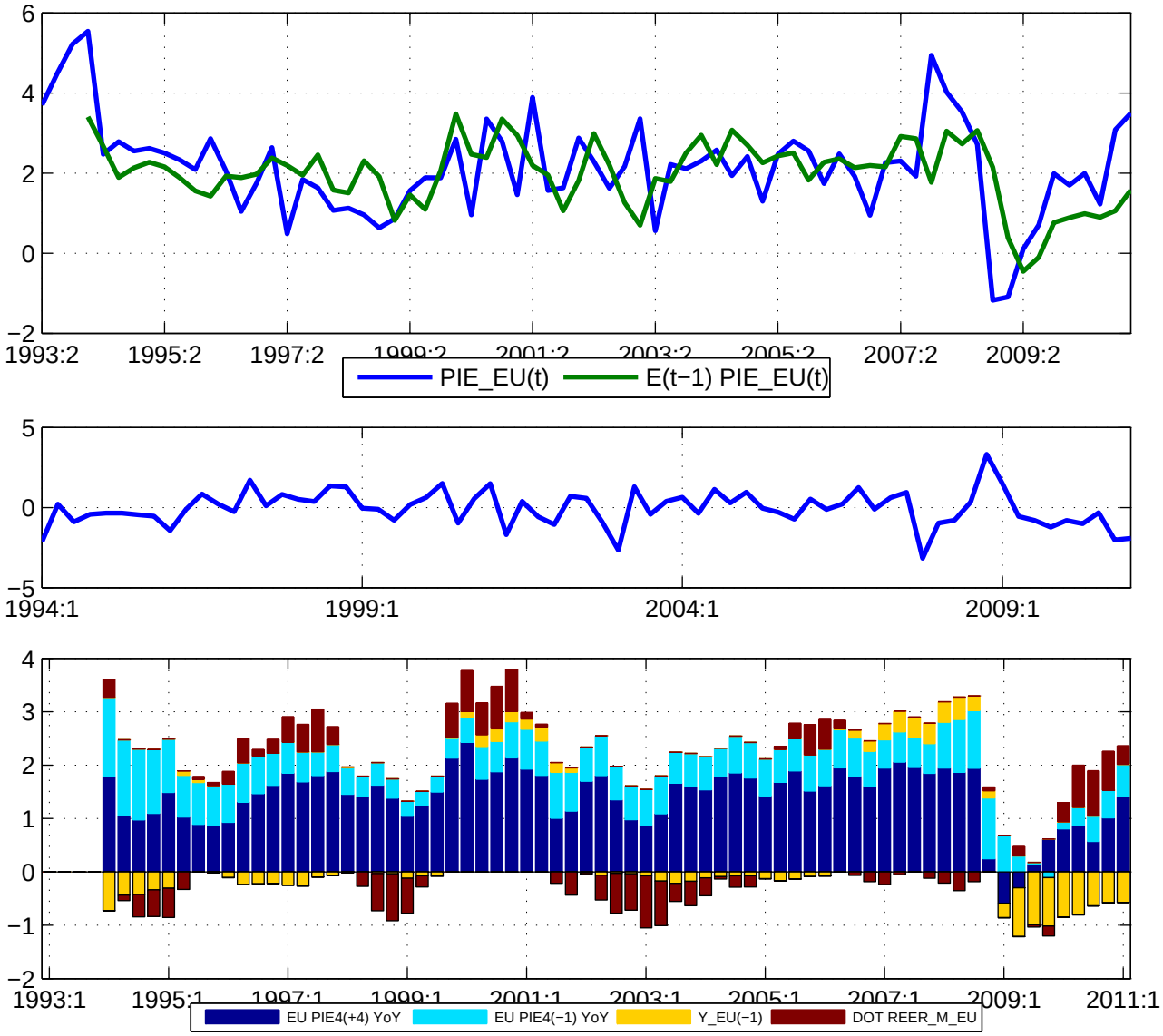


Figure 35: PIE_EU_fit

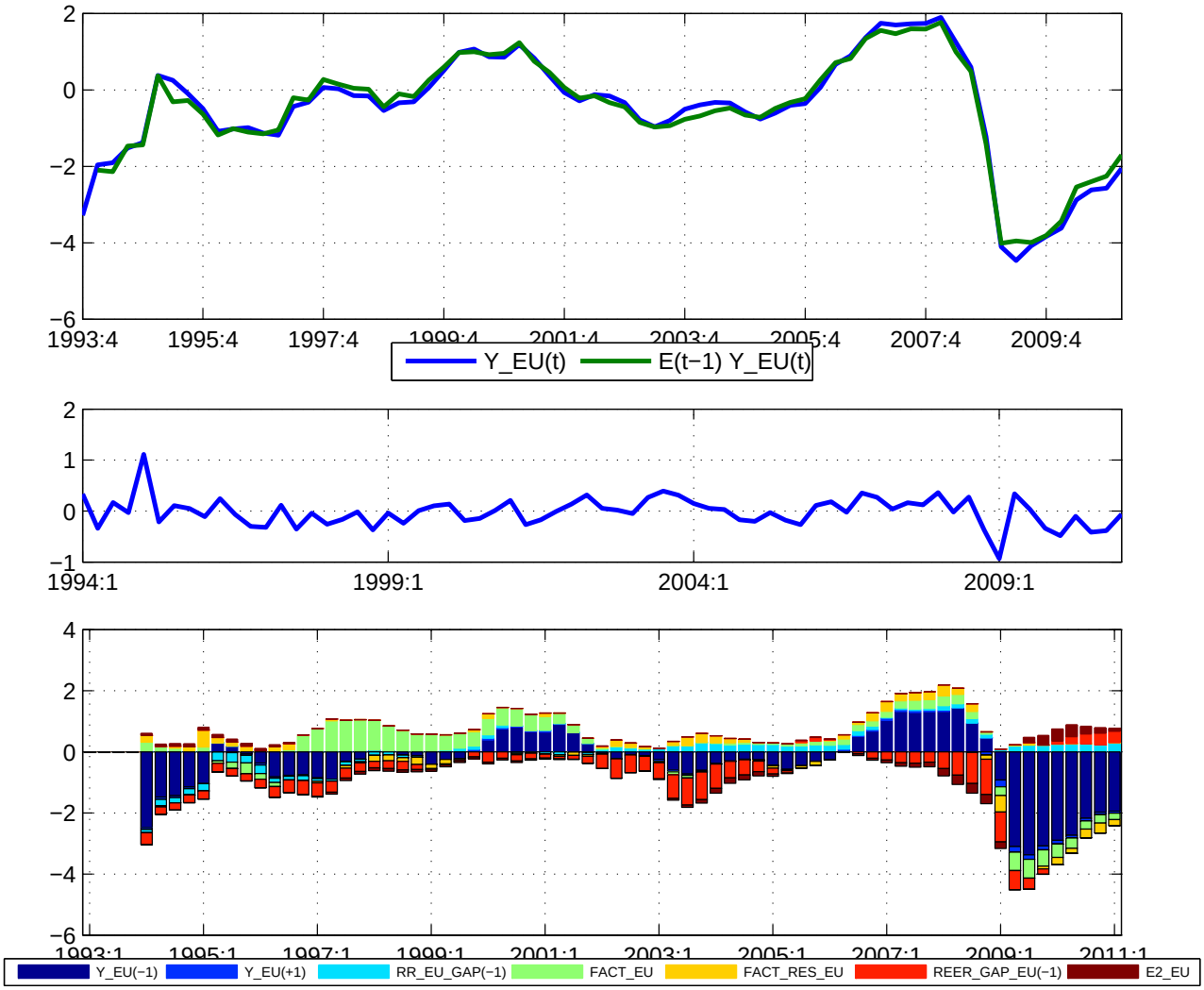


Figure 36: Y_EU_fit

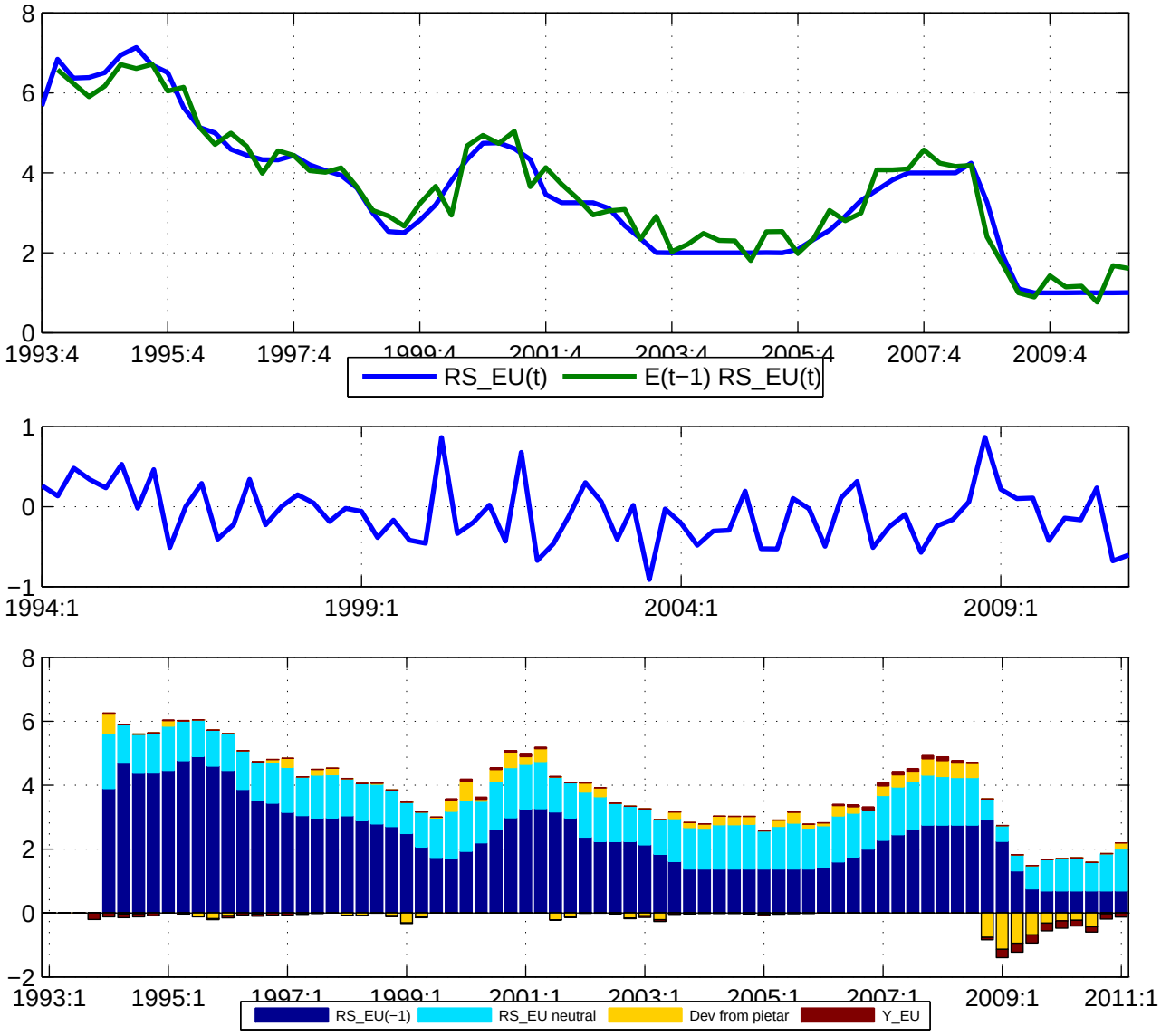


Figure 37: RS_EU_fit

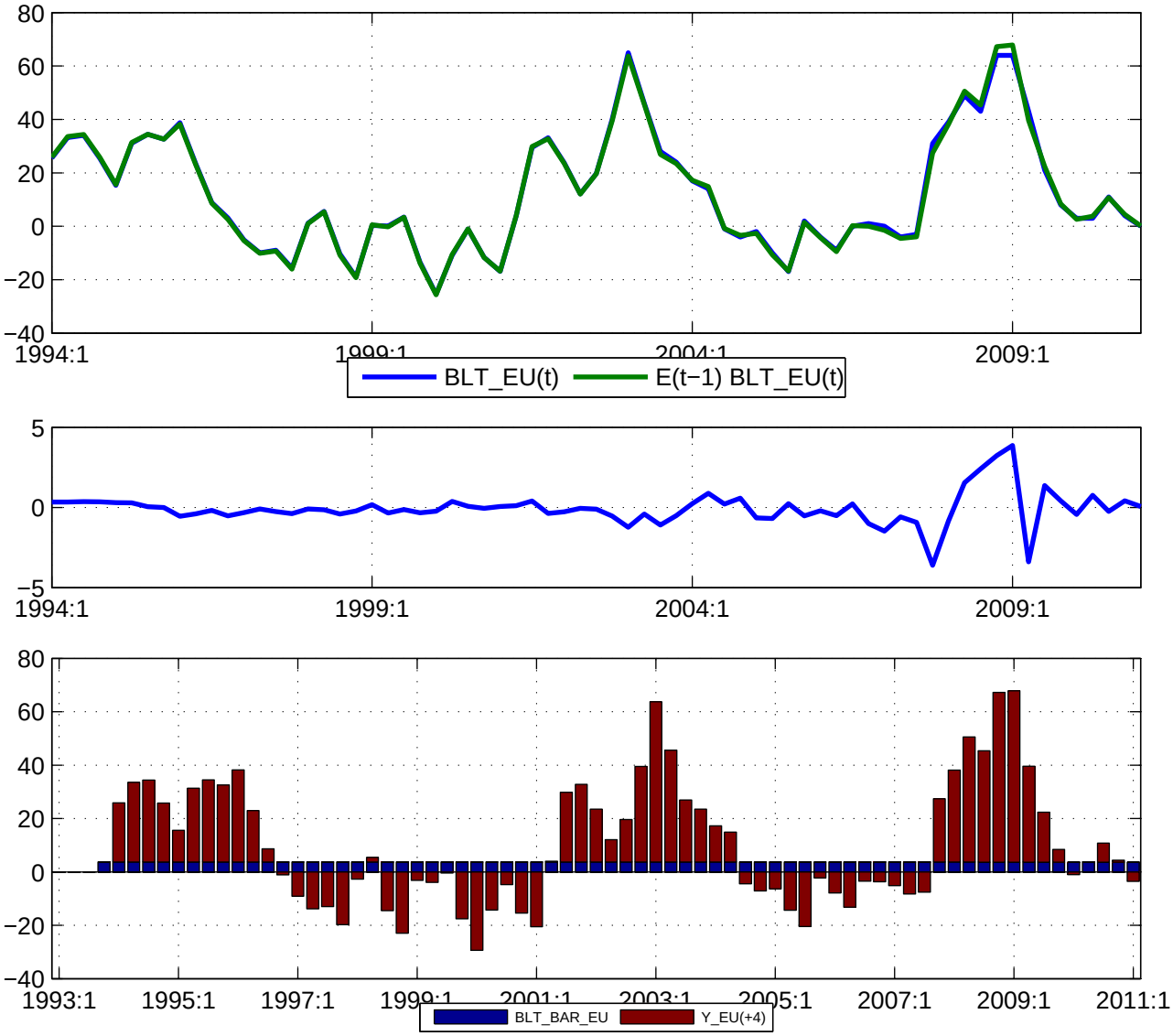


Figure 38: BLT_EU_fit

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File for US 5-year Rate and Term Premium not found

File for TP10_EU_fit not found

File for US 10-year Rate and Term Premium not found

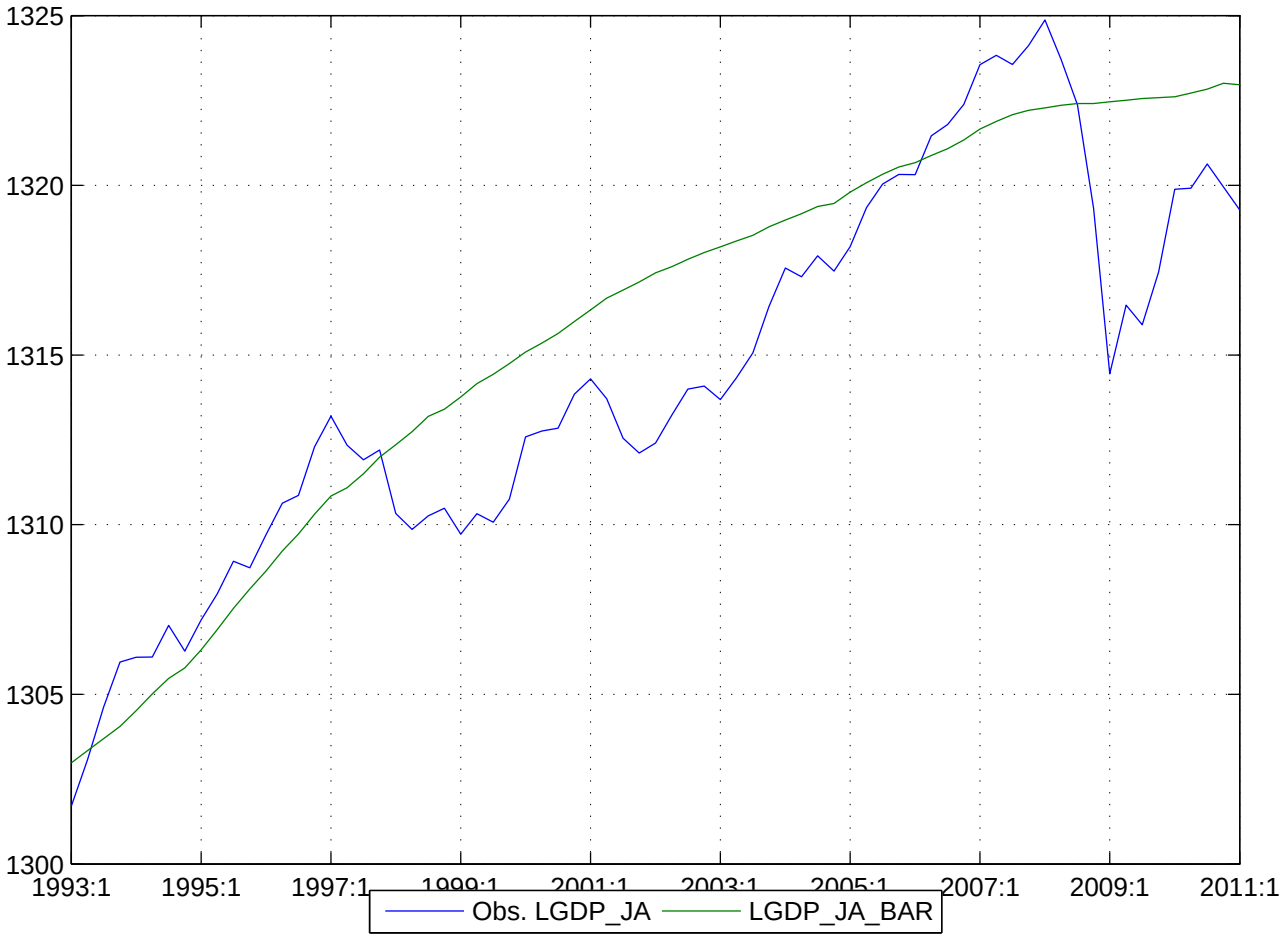


Figure 39: JA GDP level

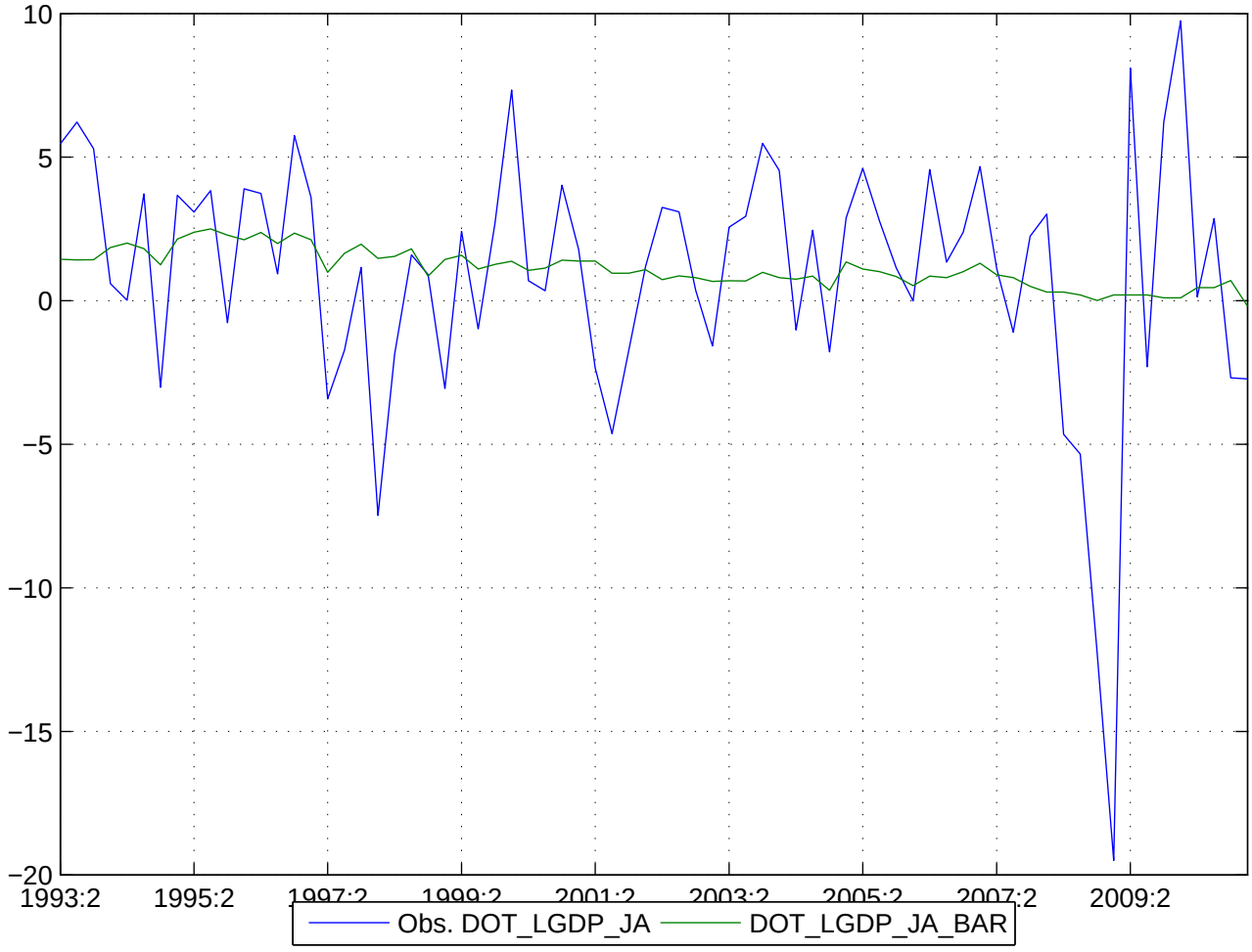


Figure 40: JA GDP growth

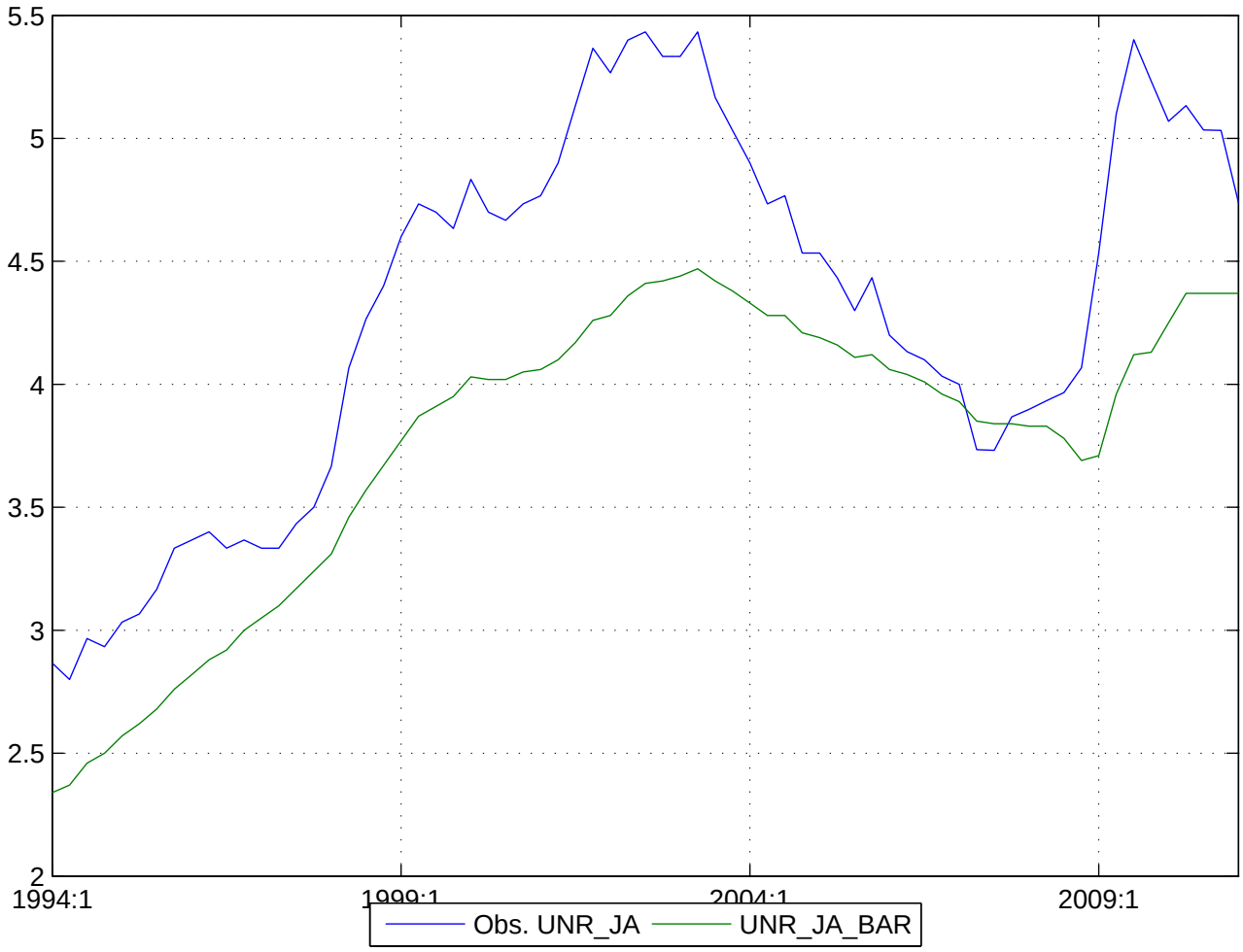


Figure 41: JA Unemployment

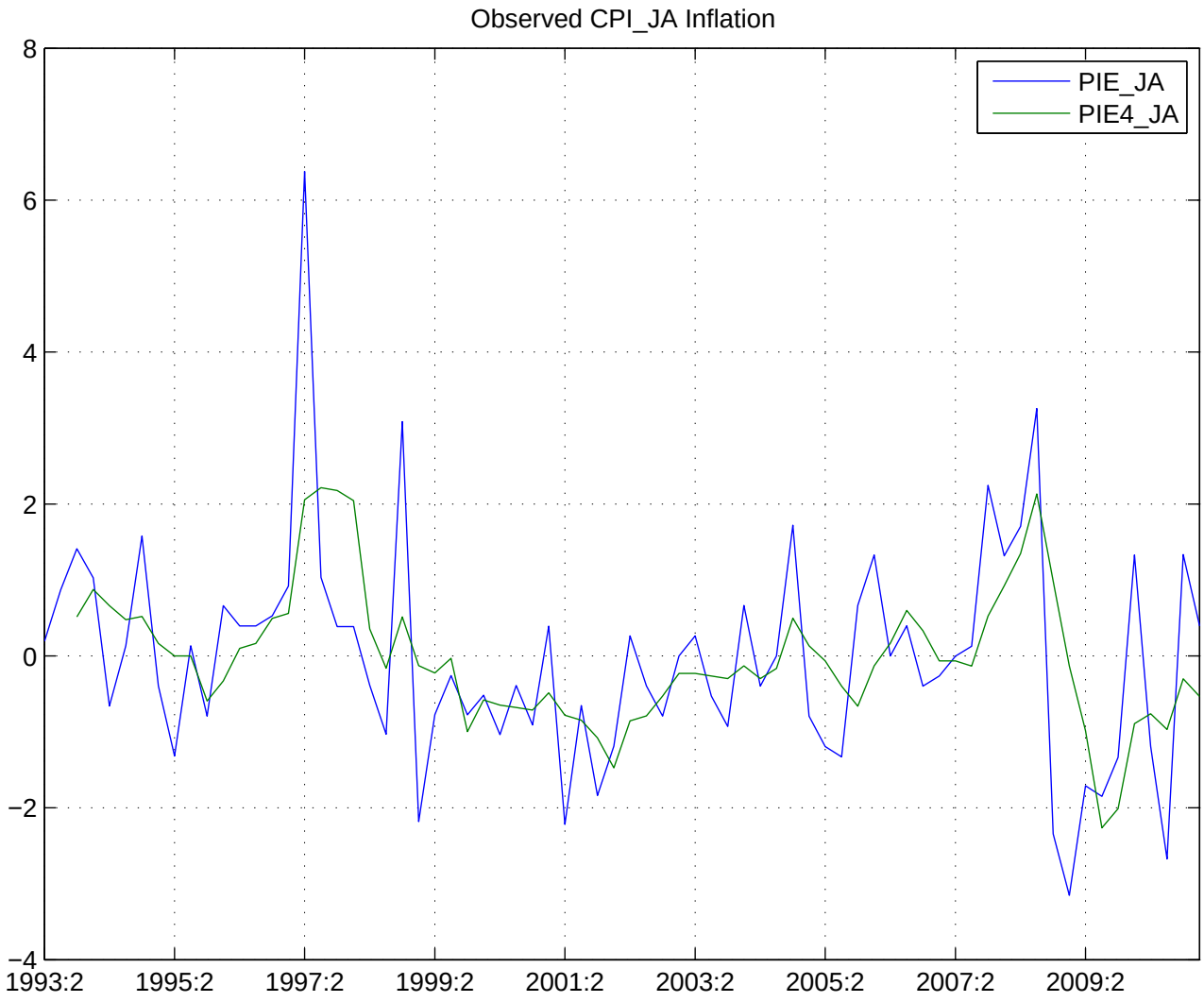


Figure 42: PIE_JA

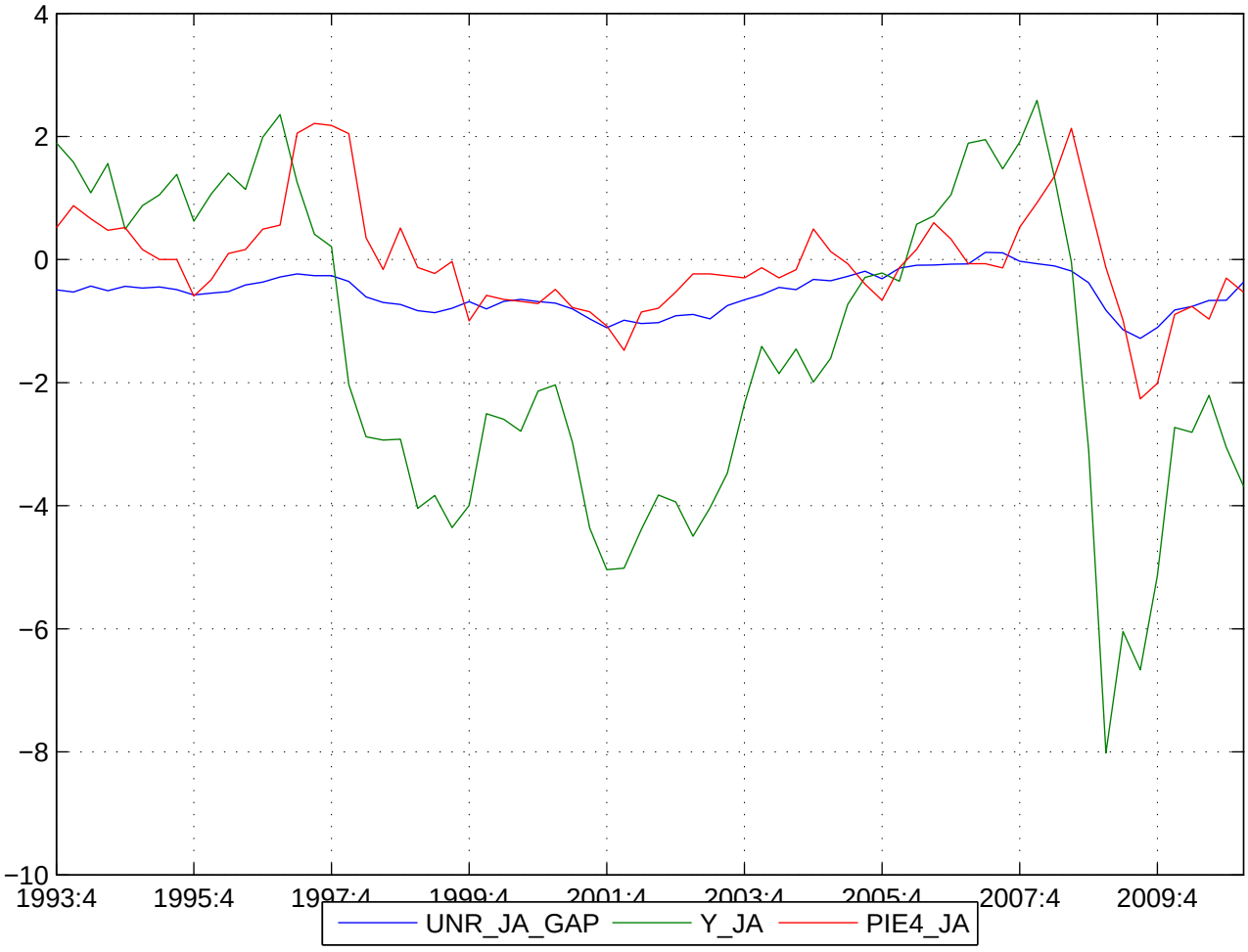


Figure 43: JA_GAP

Figure 44: REER_T_JA

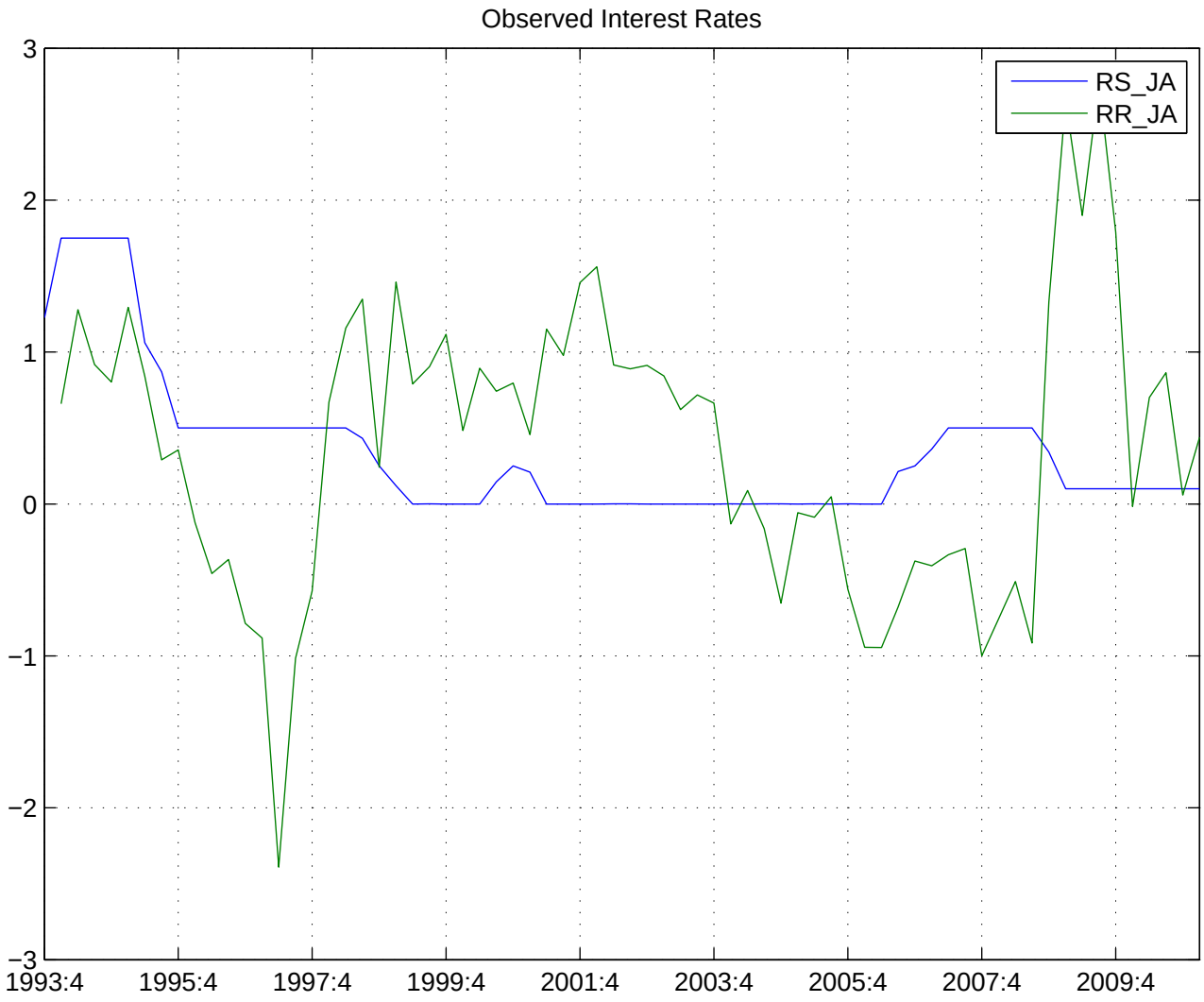


Figure 45: RR_JA

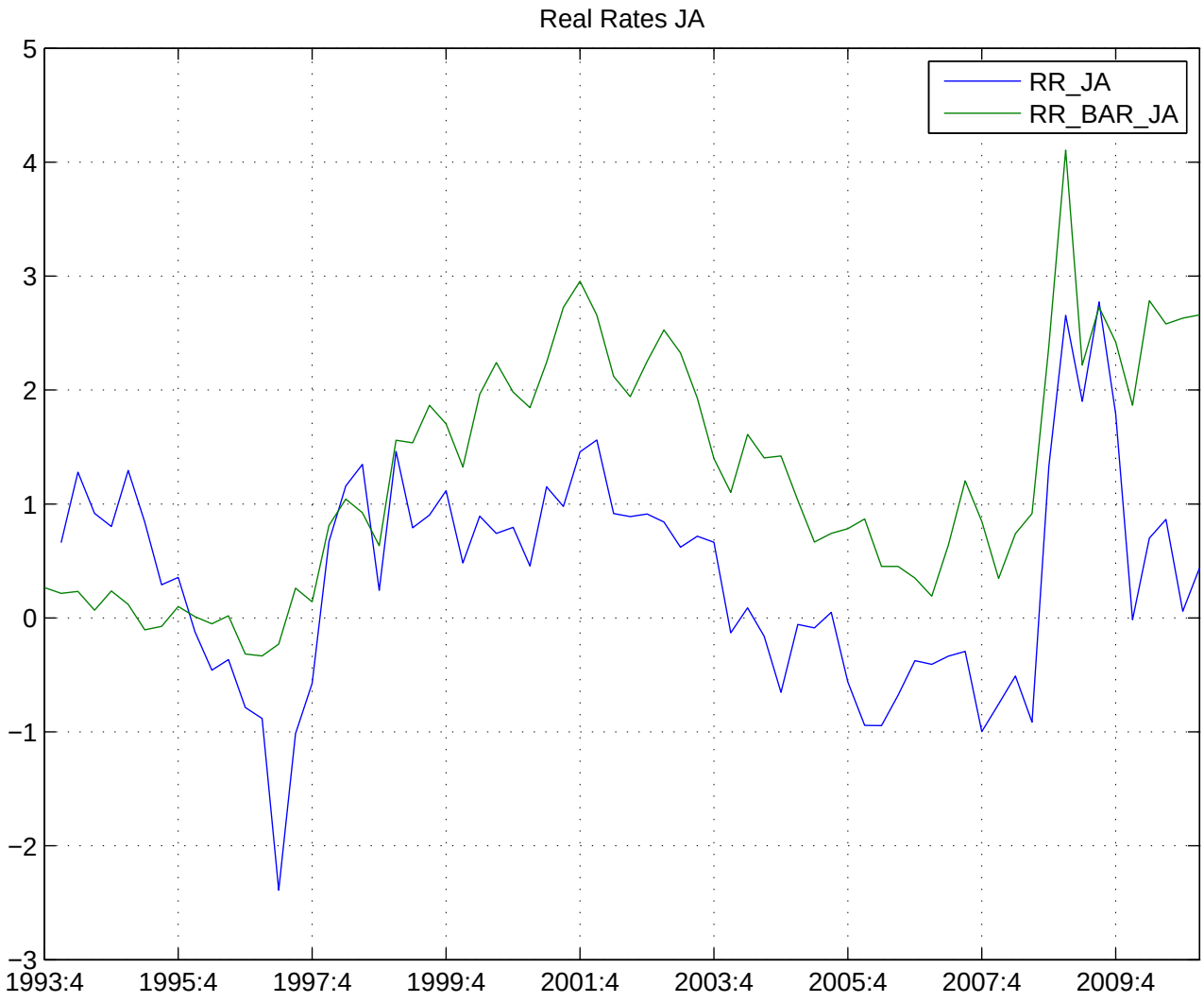
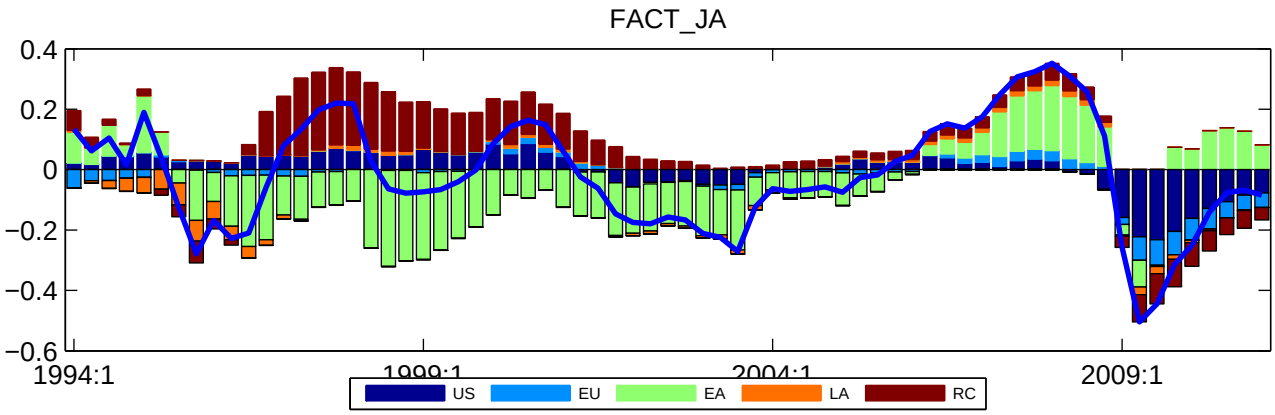


Figure 46: Real Rate And Equilibrium JA



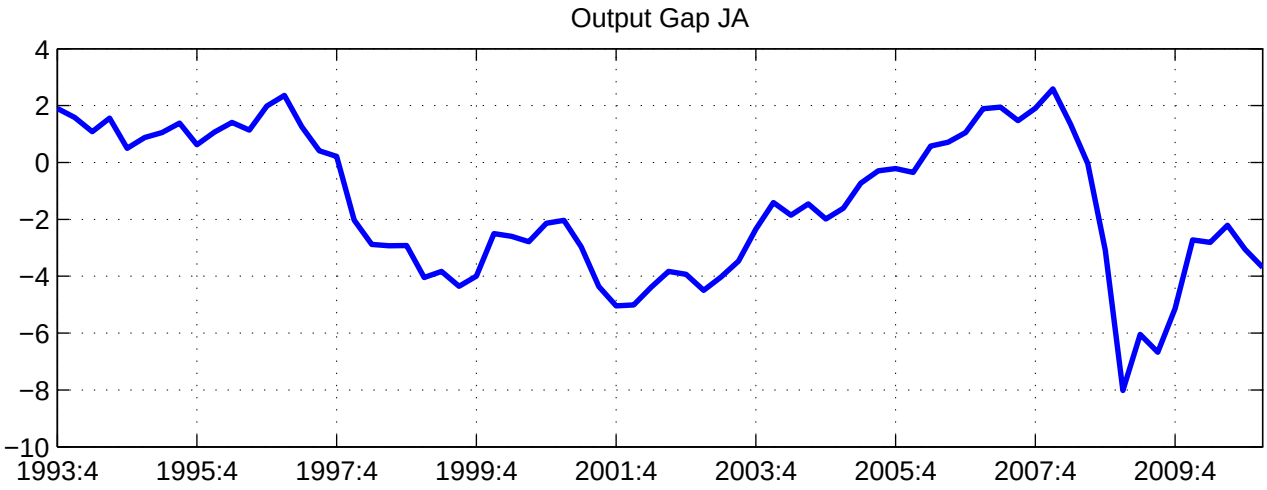


Figure 47: FACT_JA

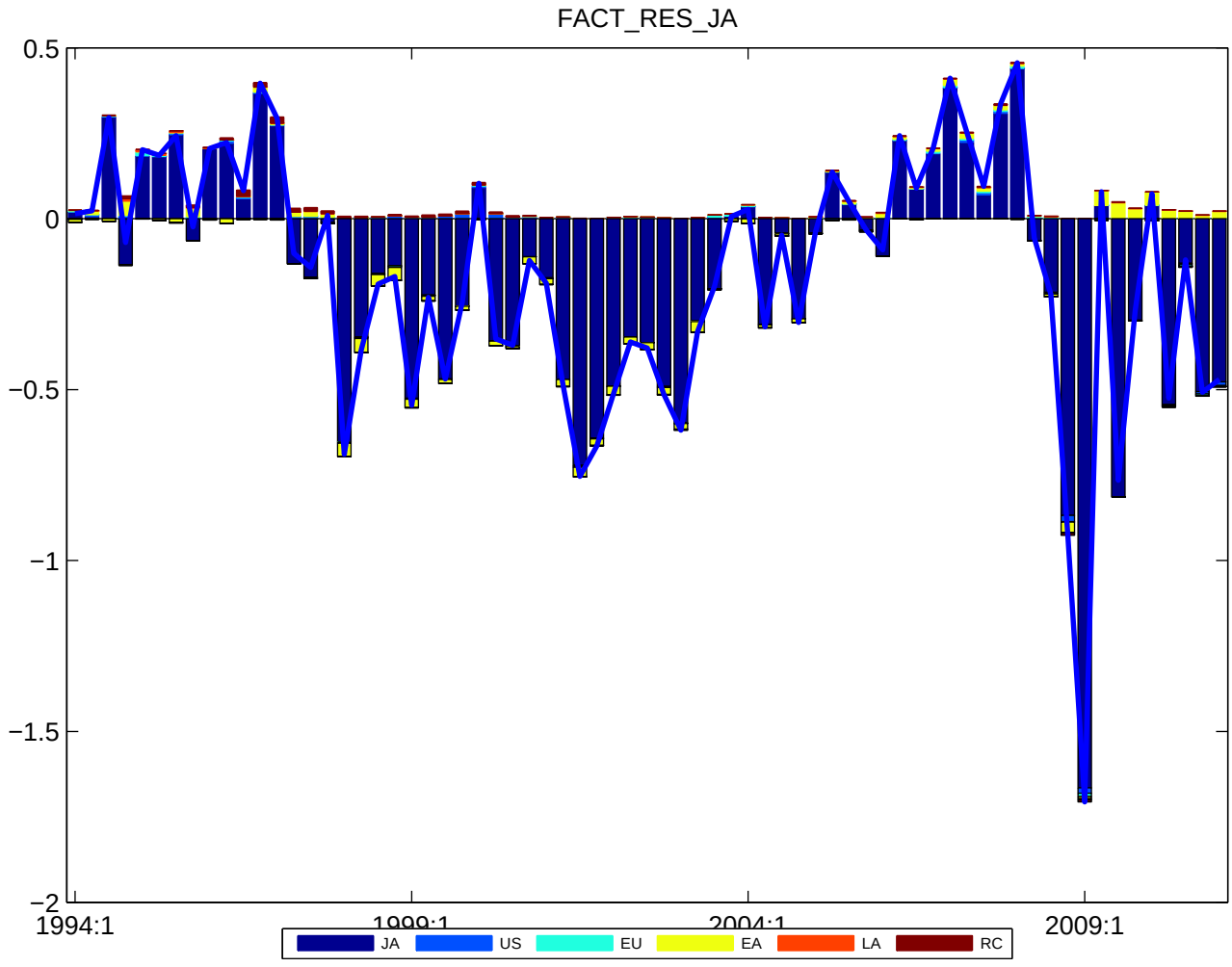


Figure 48: FACT_RES_JA

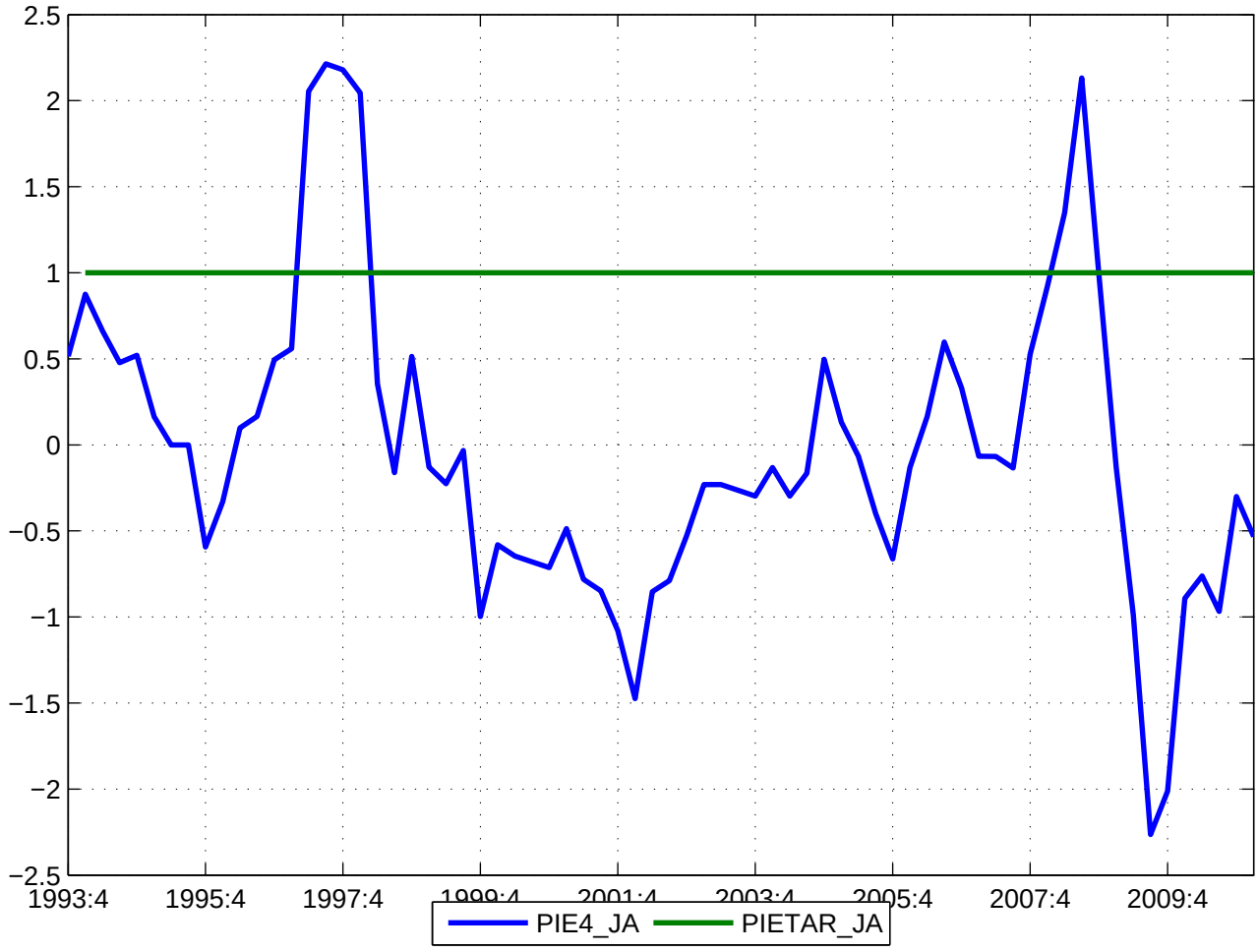


Figure 49: Inflation and Target JA

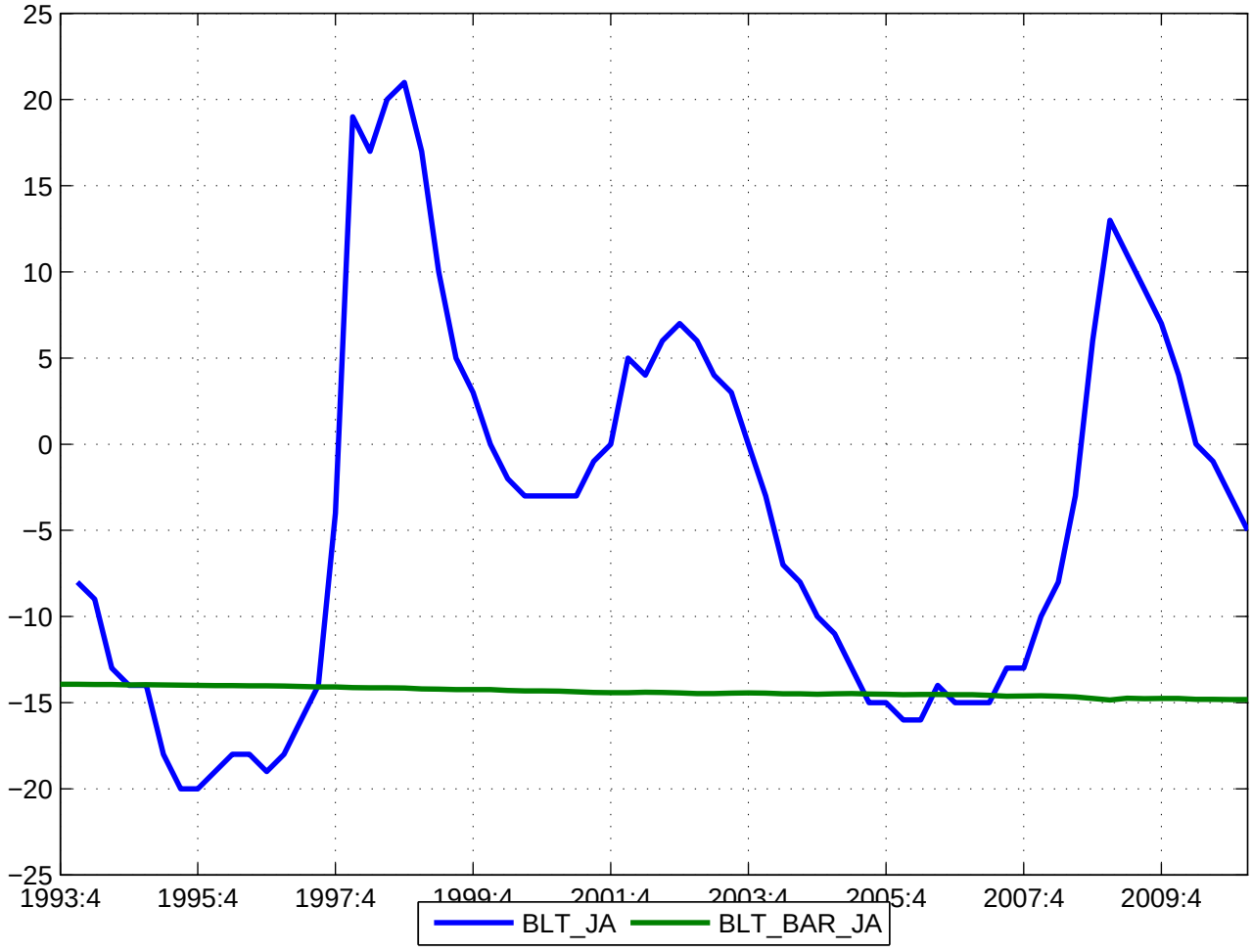


Figure 50: BLT_JA

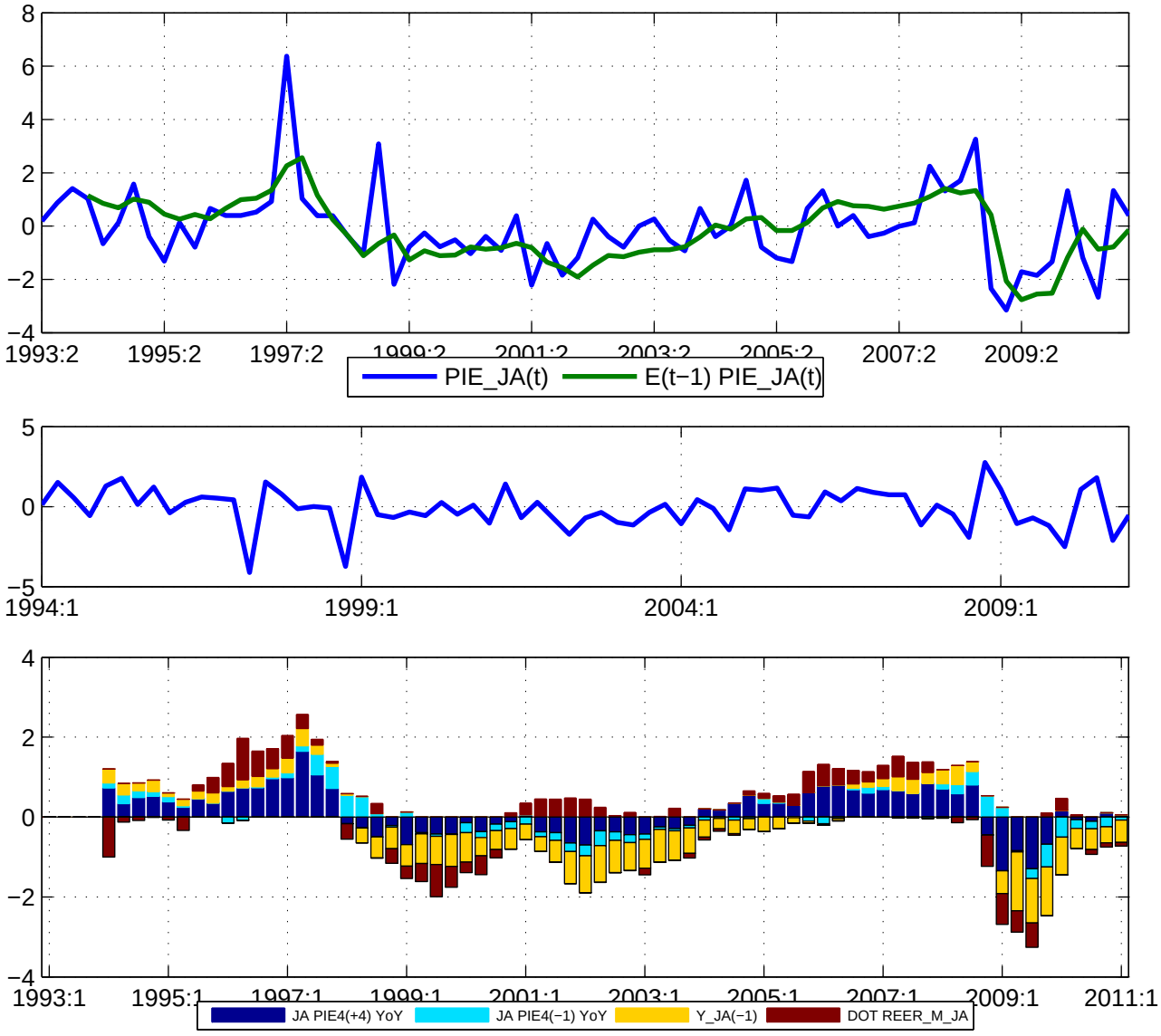


Figure 51: PIE_JA_fit

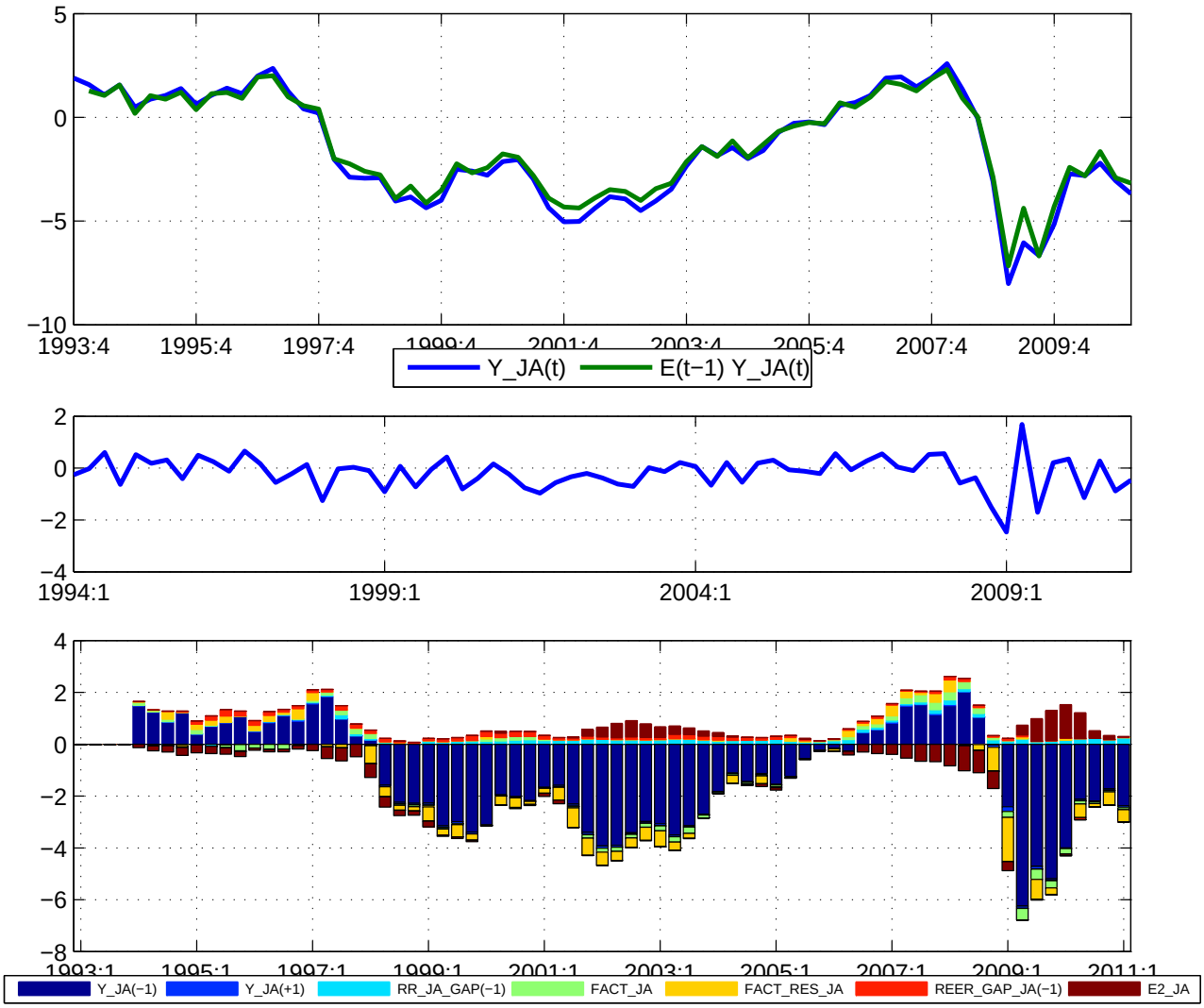


Figure 52: Y_JA_fit

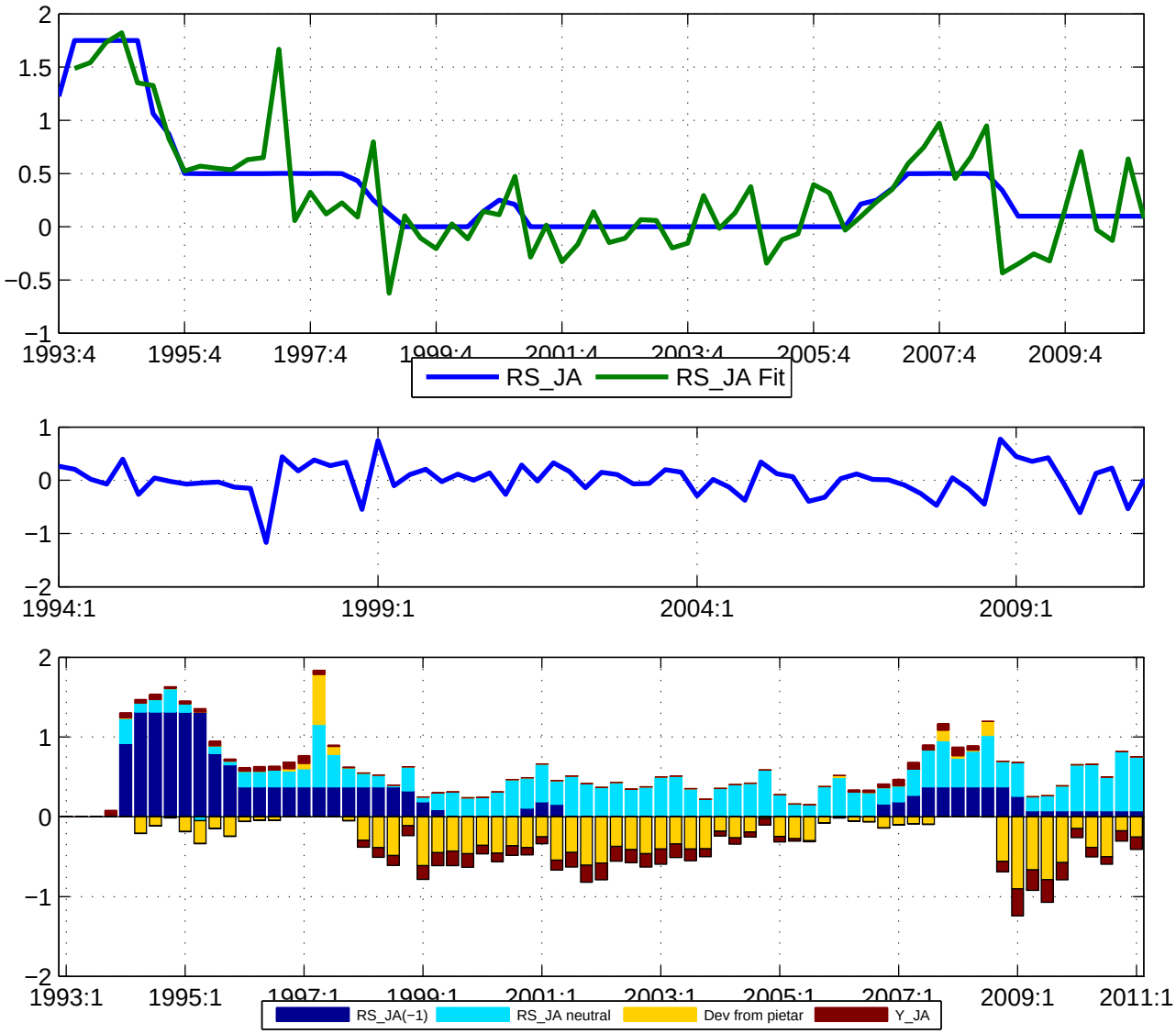


Figure 53: RS_JA_fit

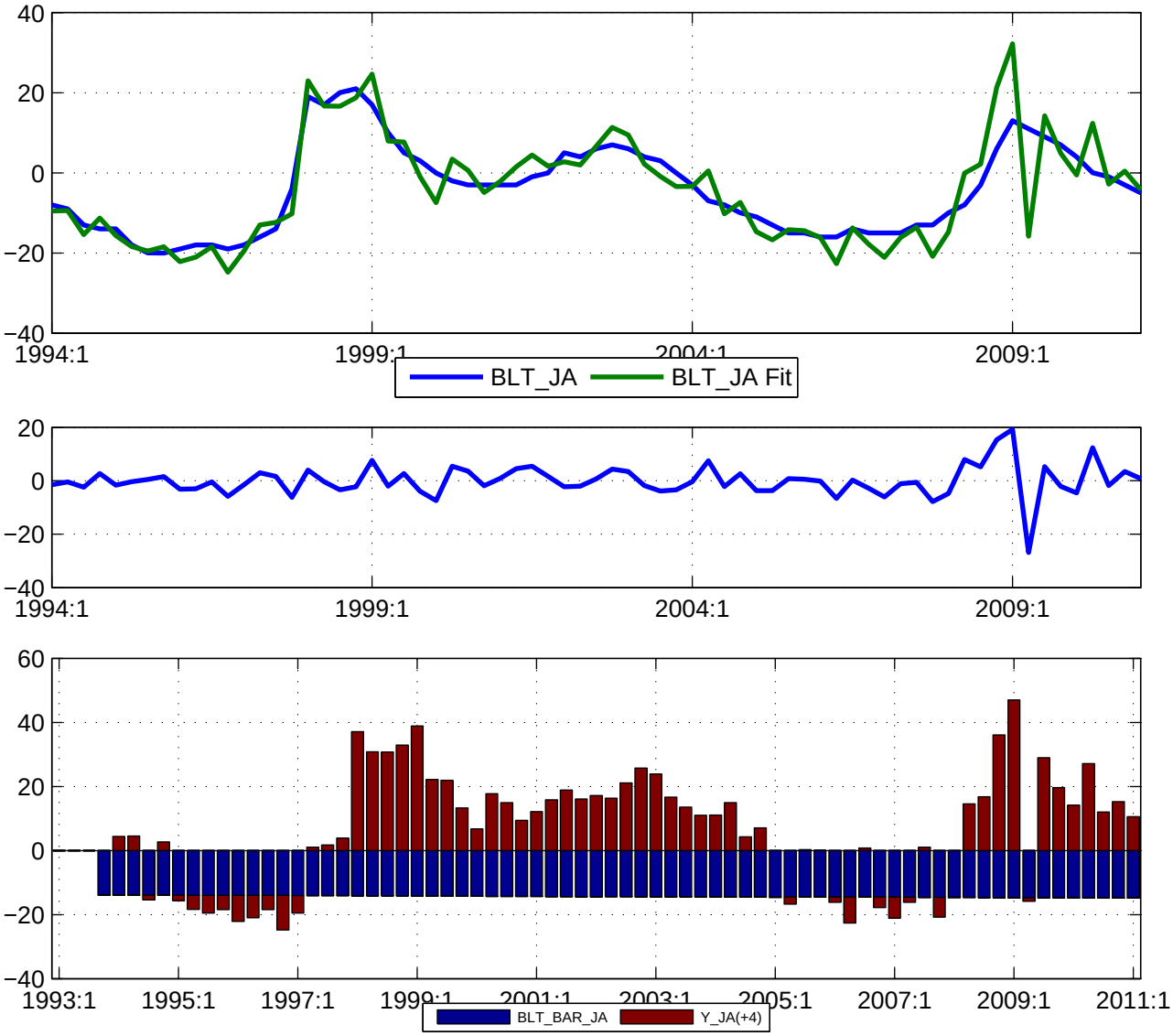


Figure 54: BLT_JA_fit

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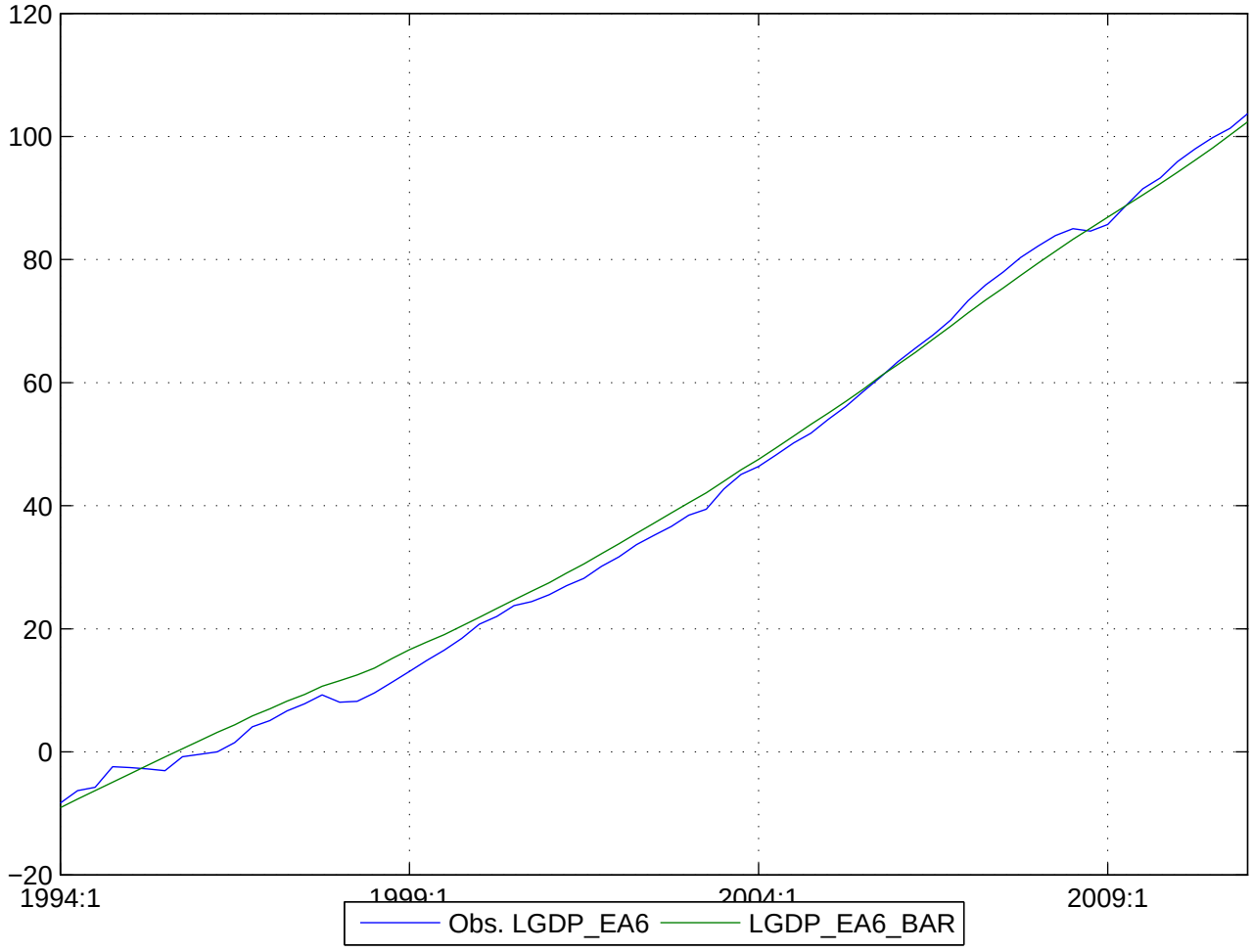


Figure 55: EA GDP level

Figure 56: EA GDP growth

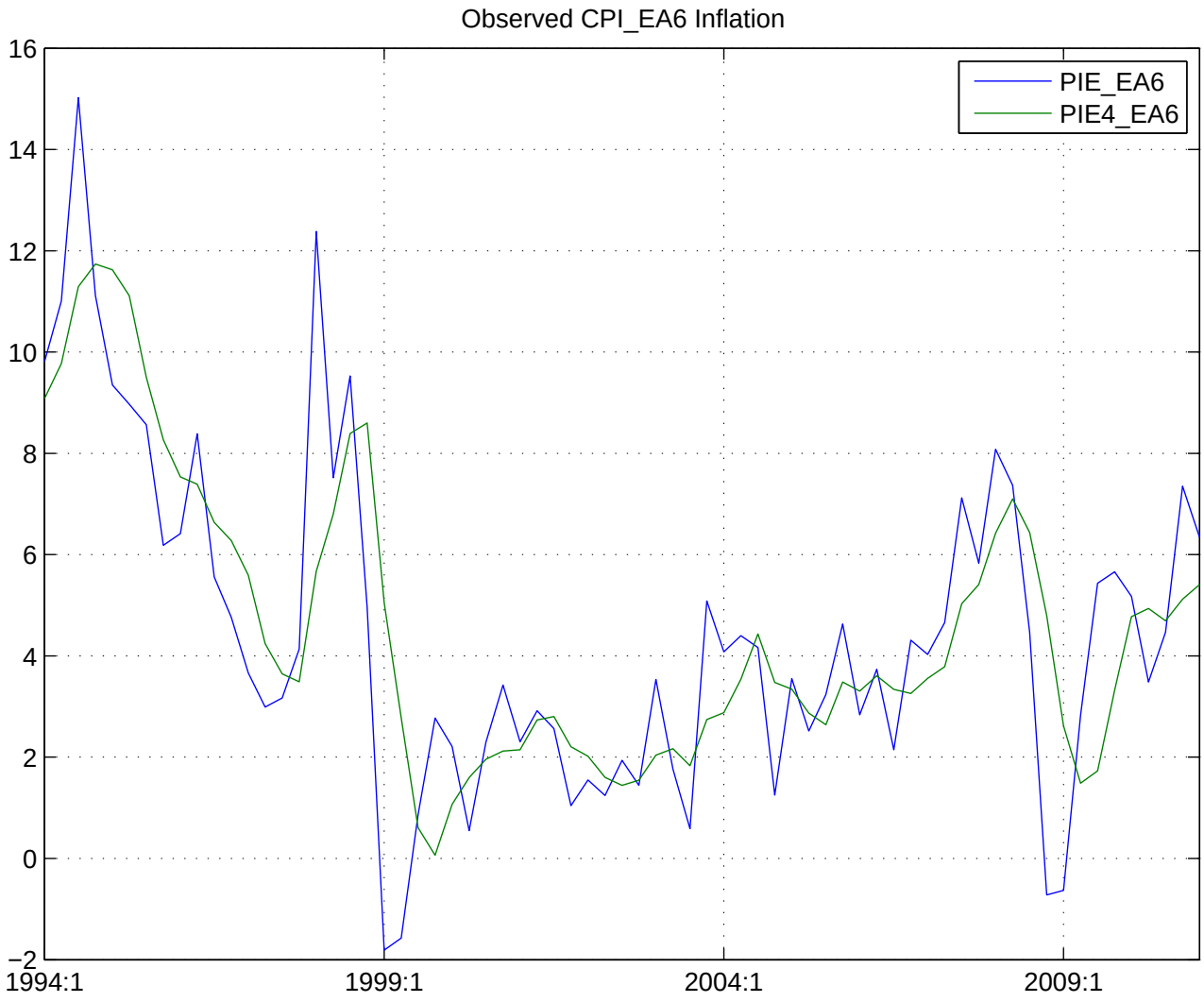


Figure 57: PIE_EA

Figure 58: EA_GAP

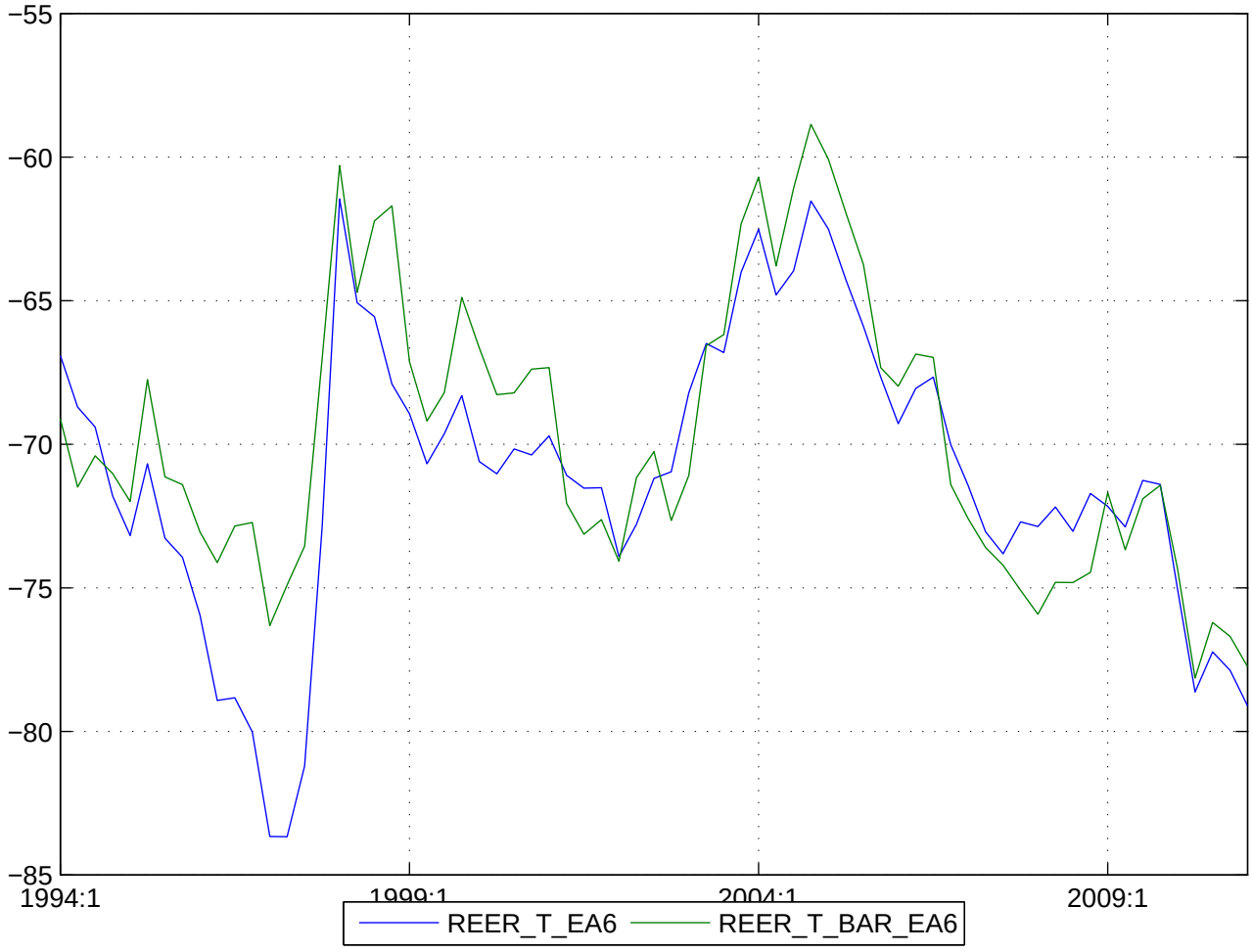


Figure 59: REER_T_EA

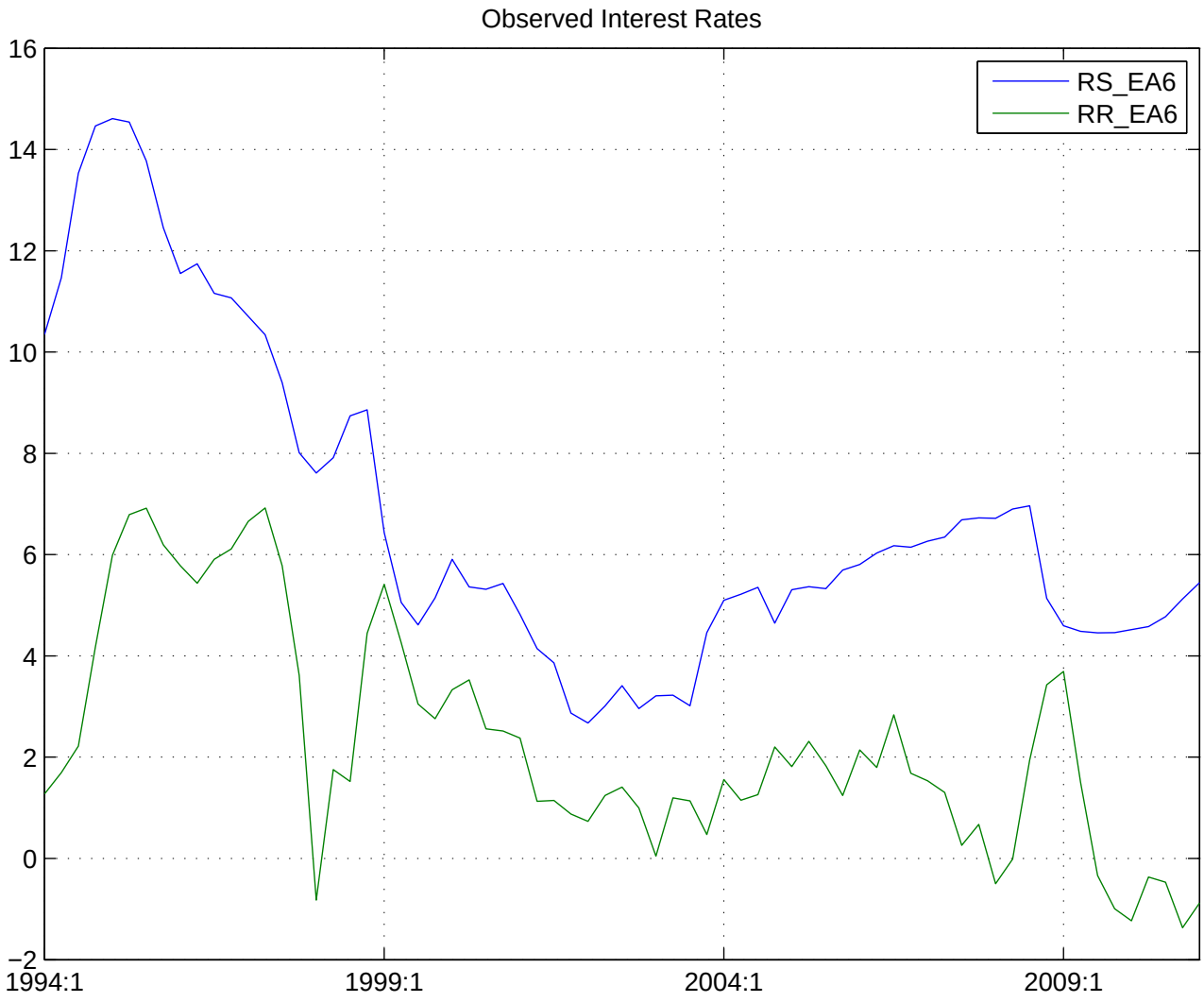


Figure 60: RR_EA

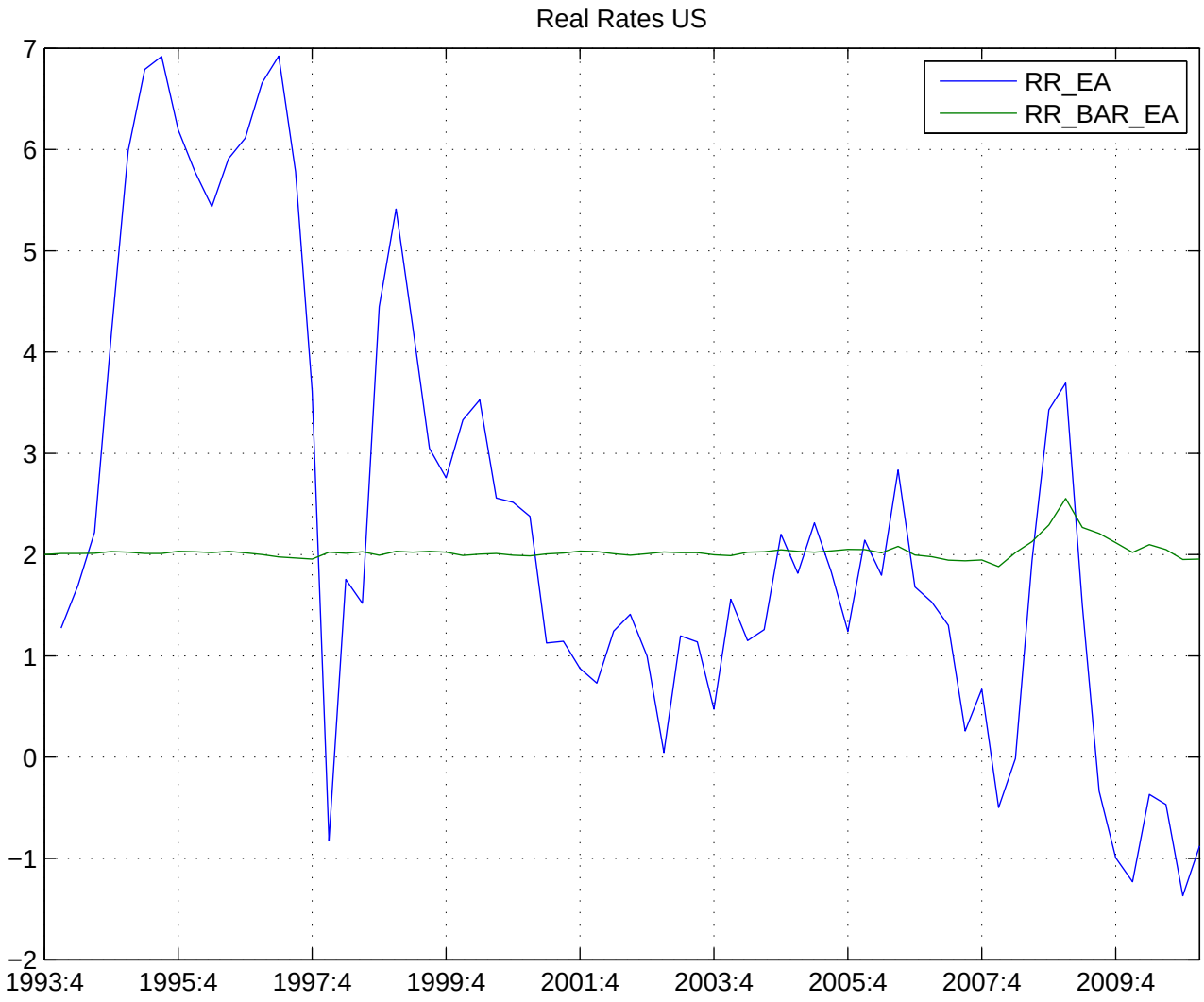
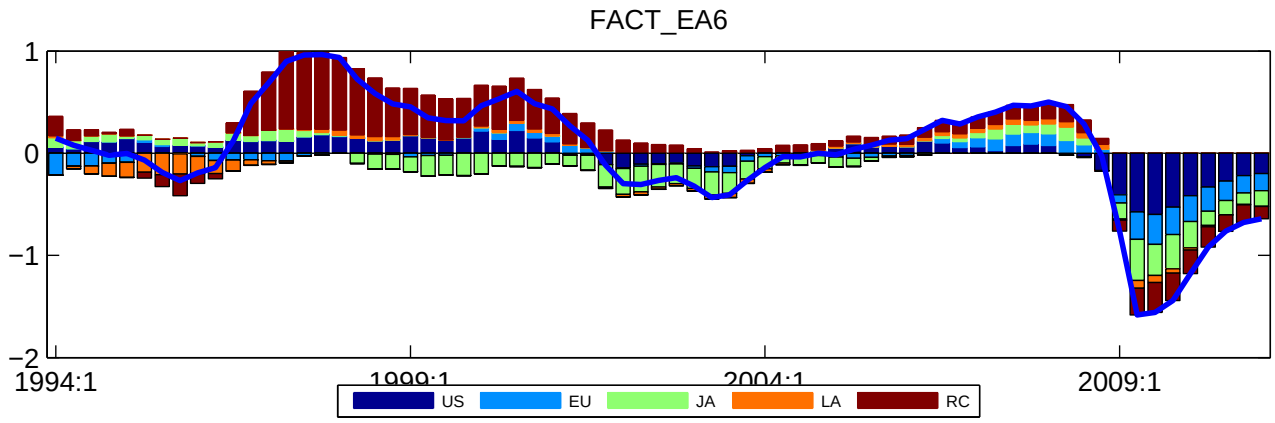


Figure 61: Real Rate And Equilibrium EA



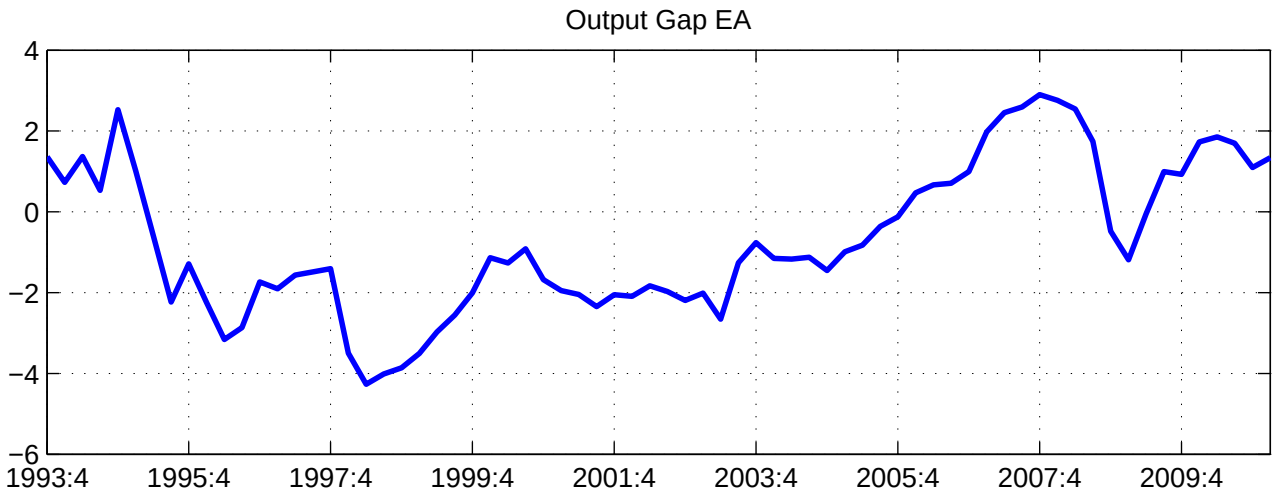


Figure 62: FACT_EA

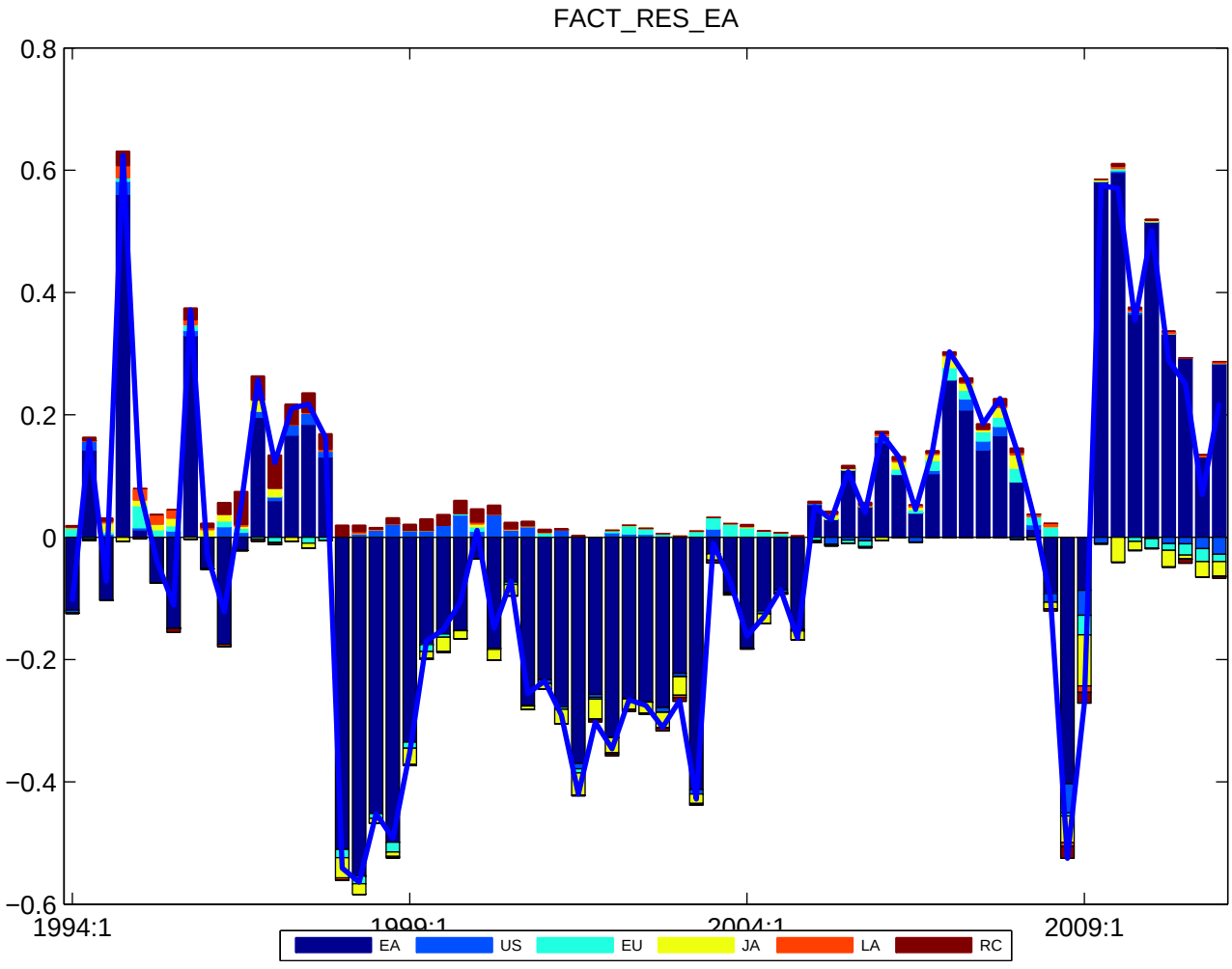


Figure 63: FACT_RES_EA

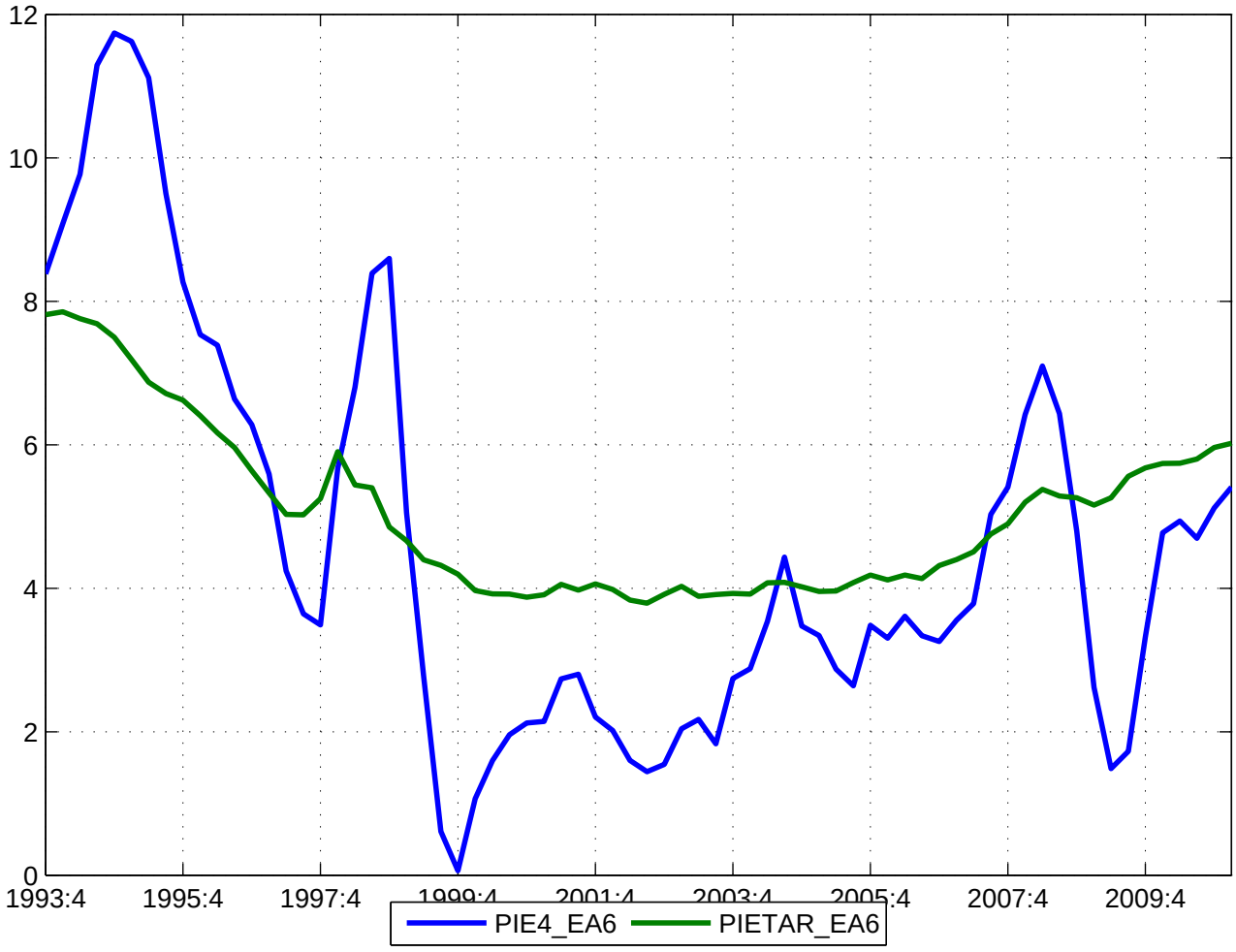


Figure 64: Inflation and Target EA

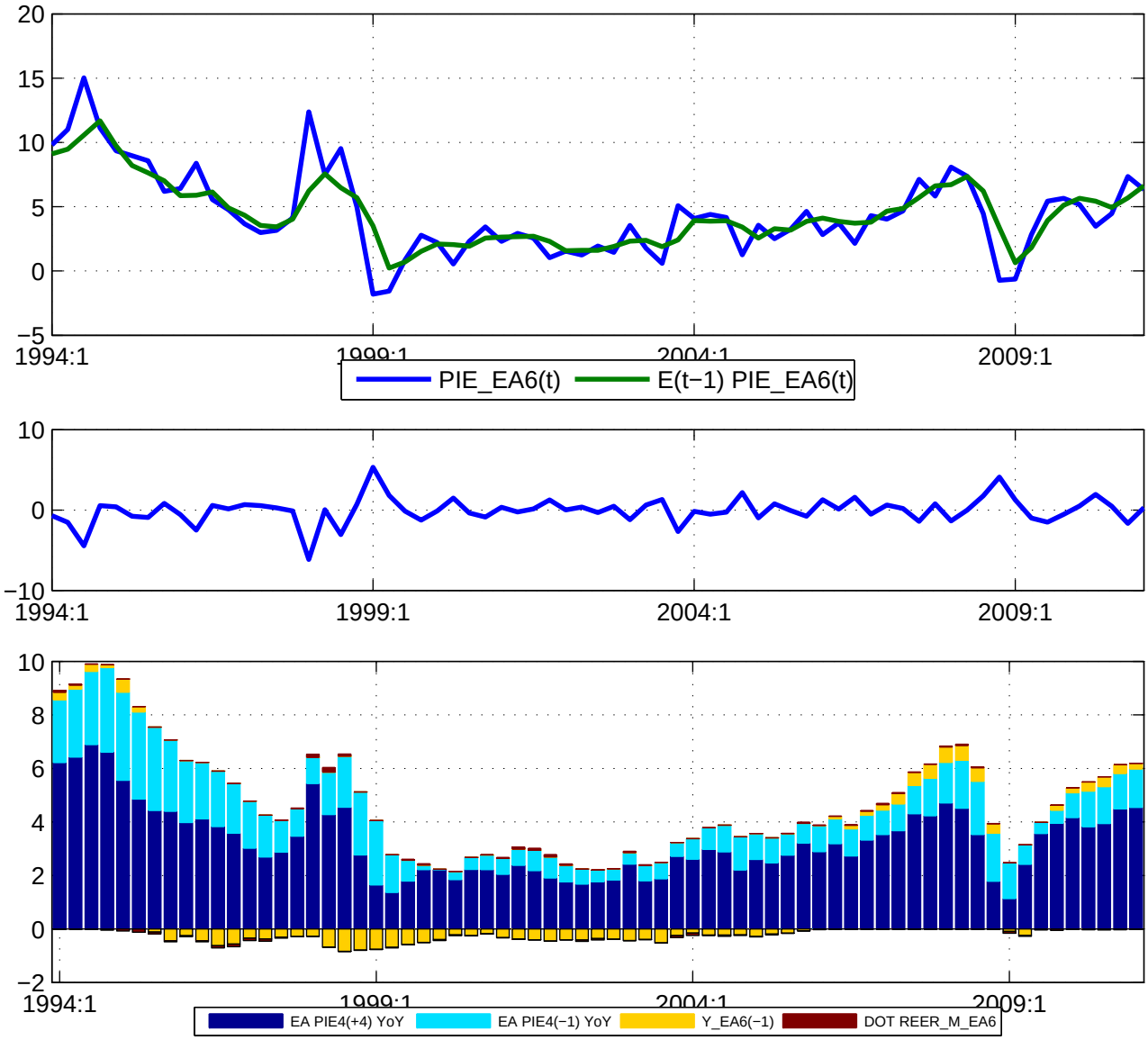


Figure 65: PIE_EA_fit

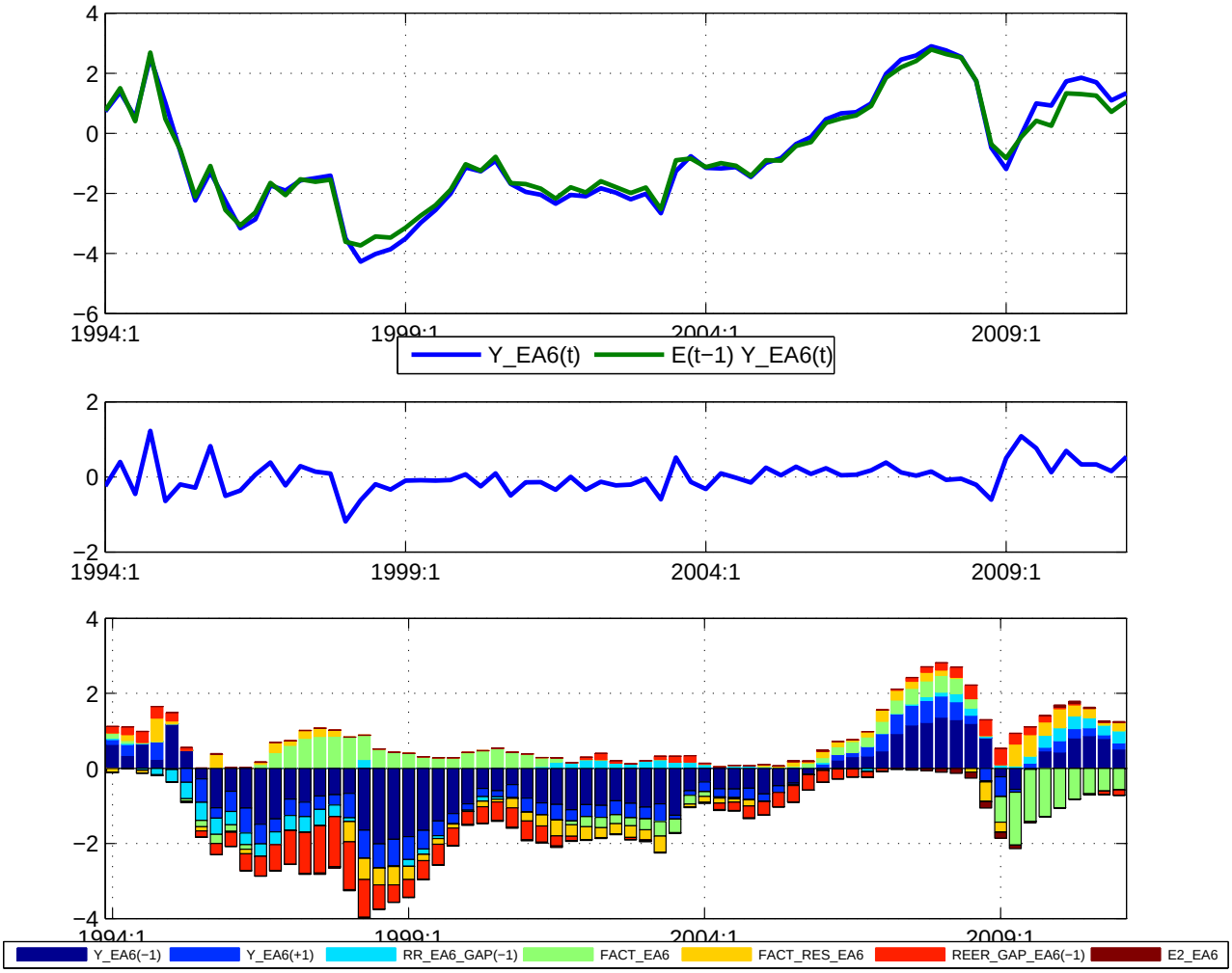


Figure 66: Y_EA_fit

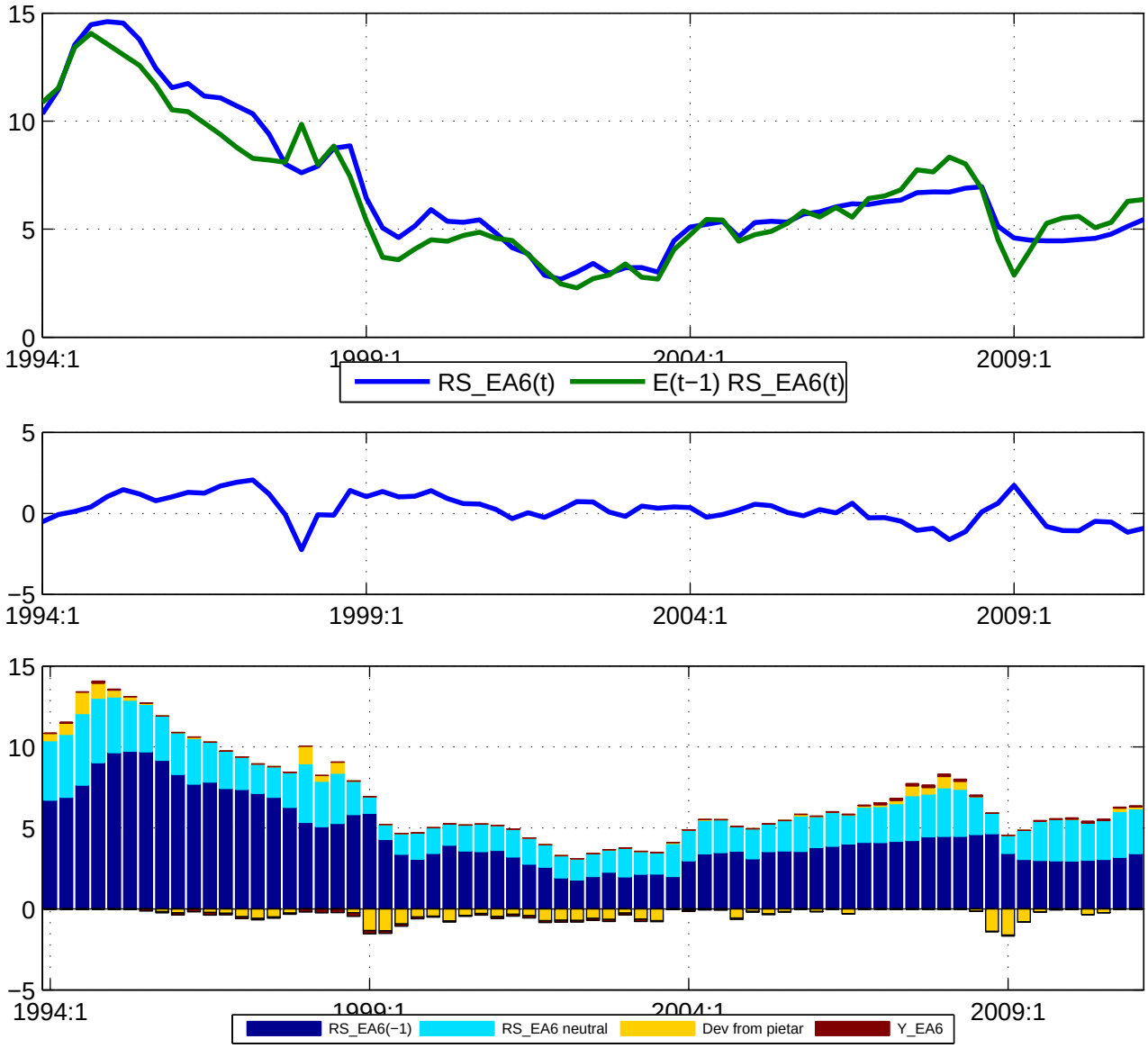


Figure 67: RS_EA_fit

Figure 68: LA GDP level

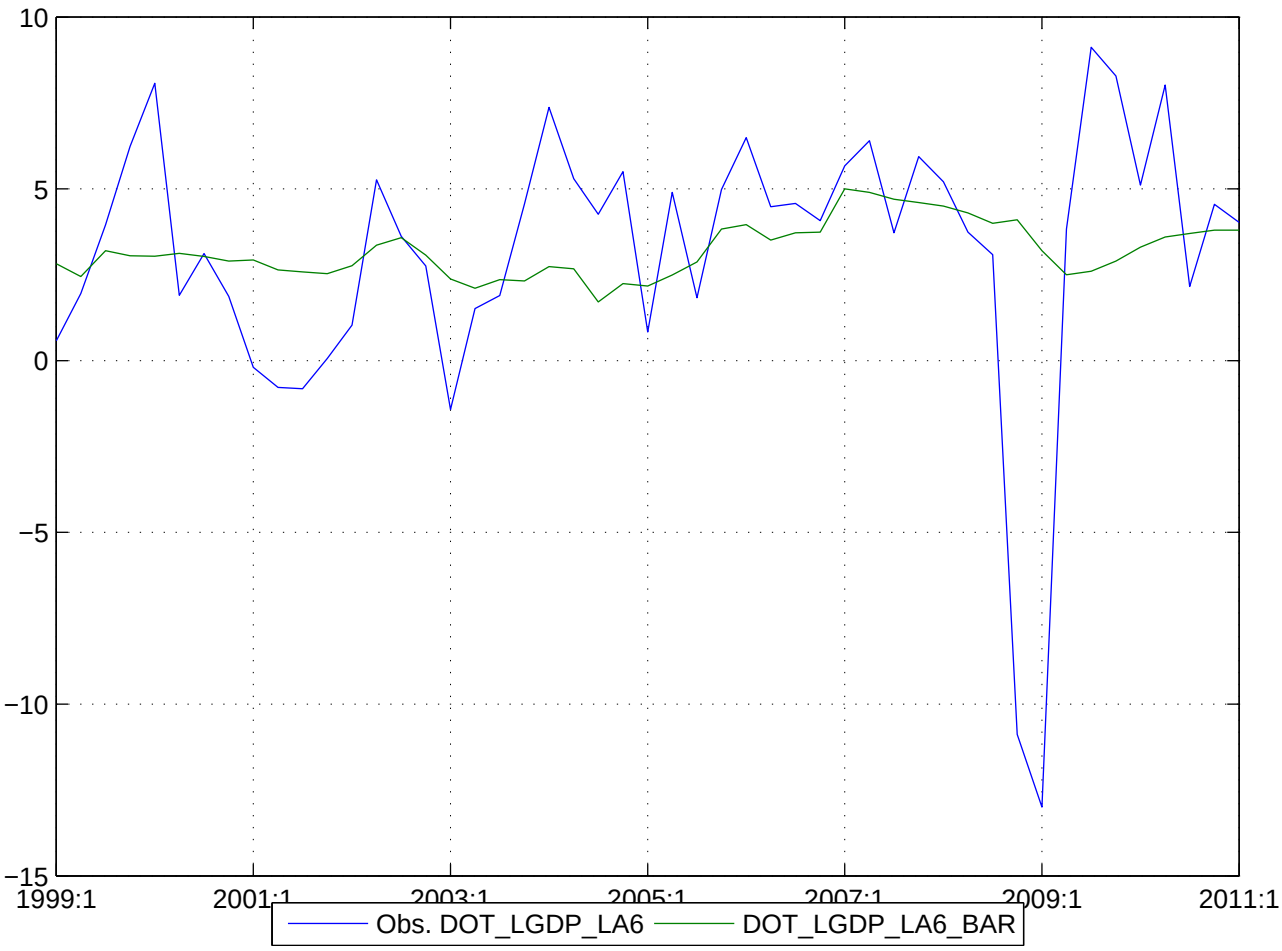


Figure 69: LA GDP growth

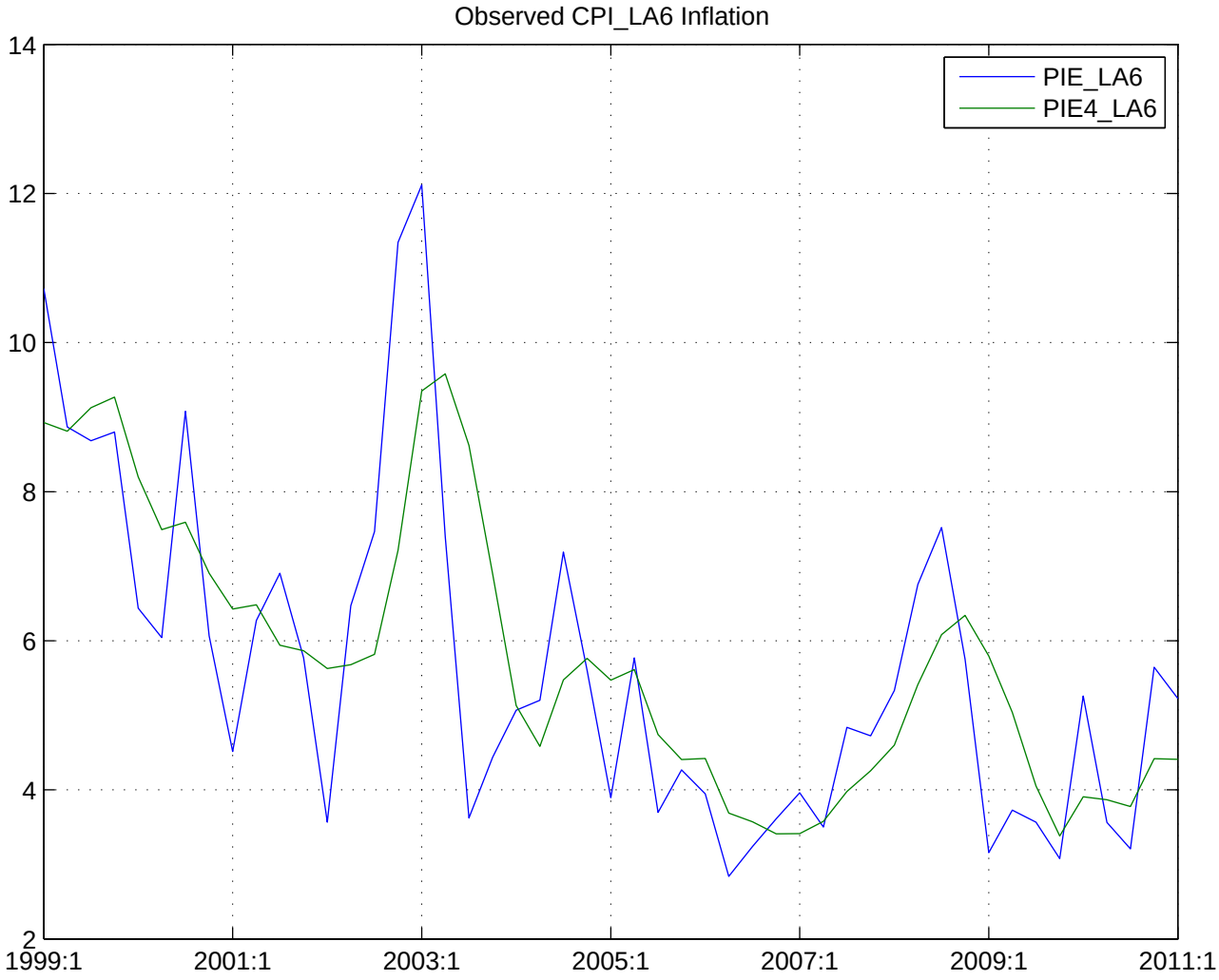


Figure 70: PIE_LA

Figure 71: LA_GAP

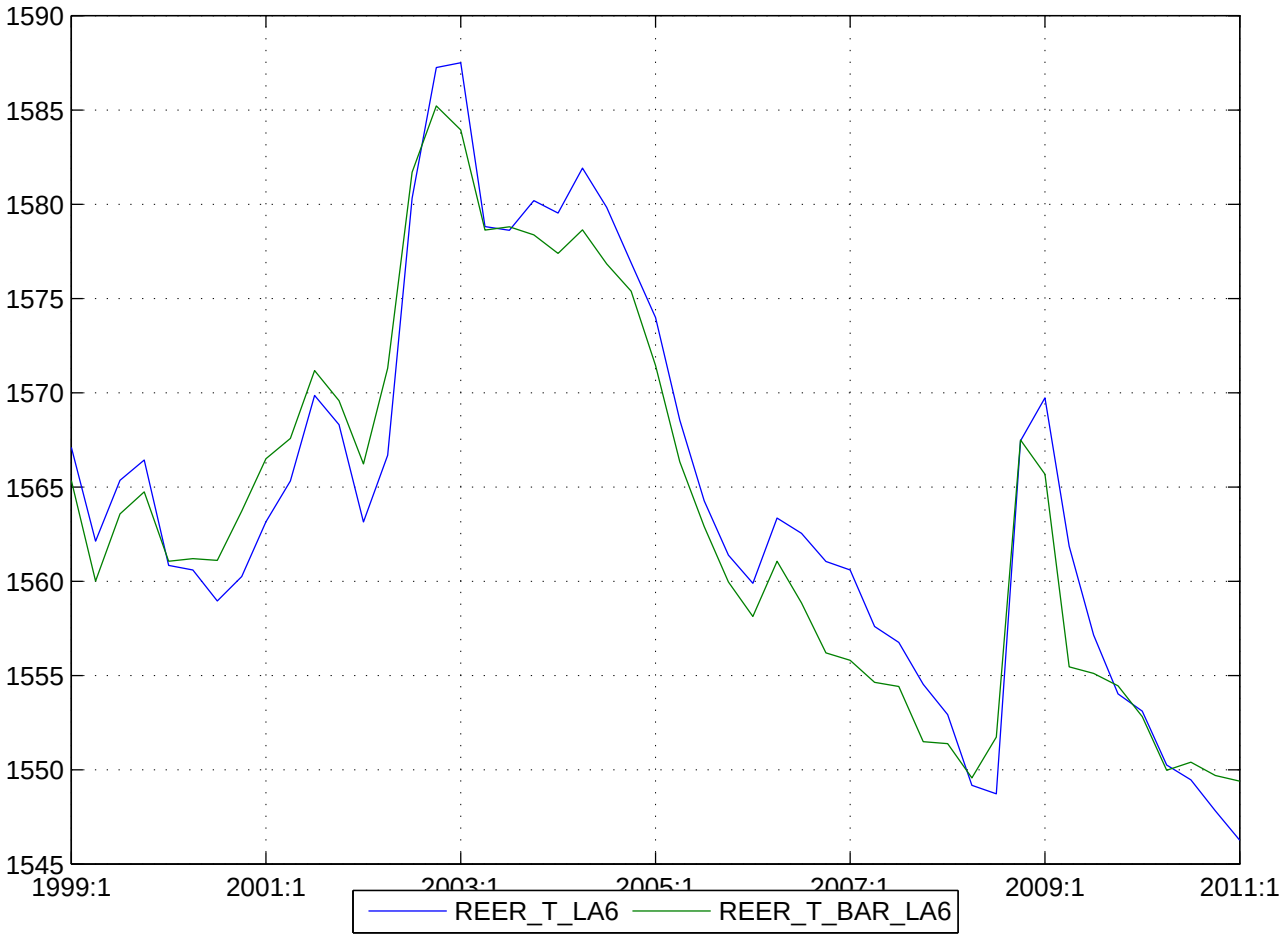


Figure 72: REER_T_LA

Figure 73: RR_LA

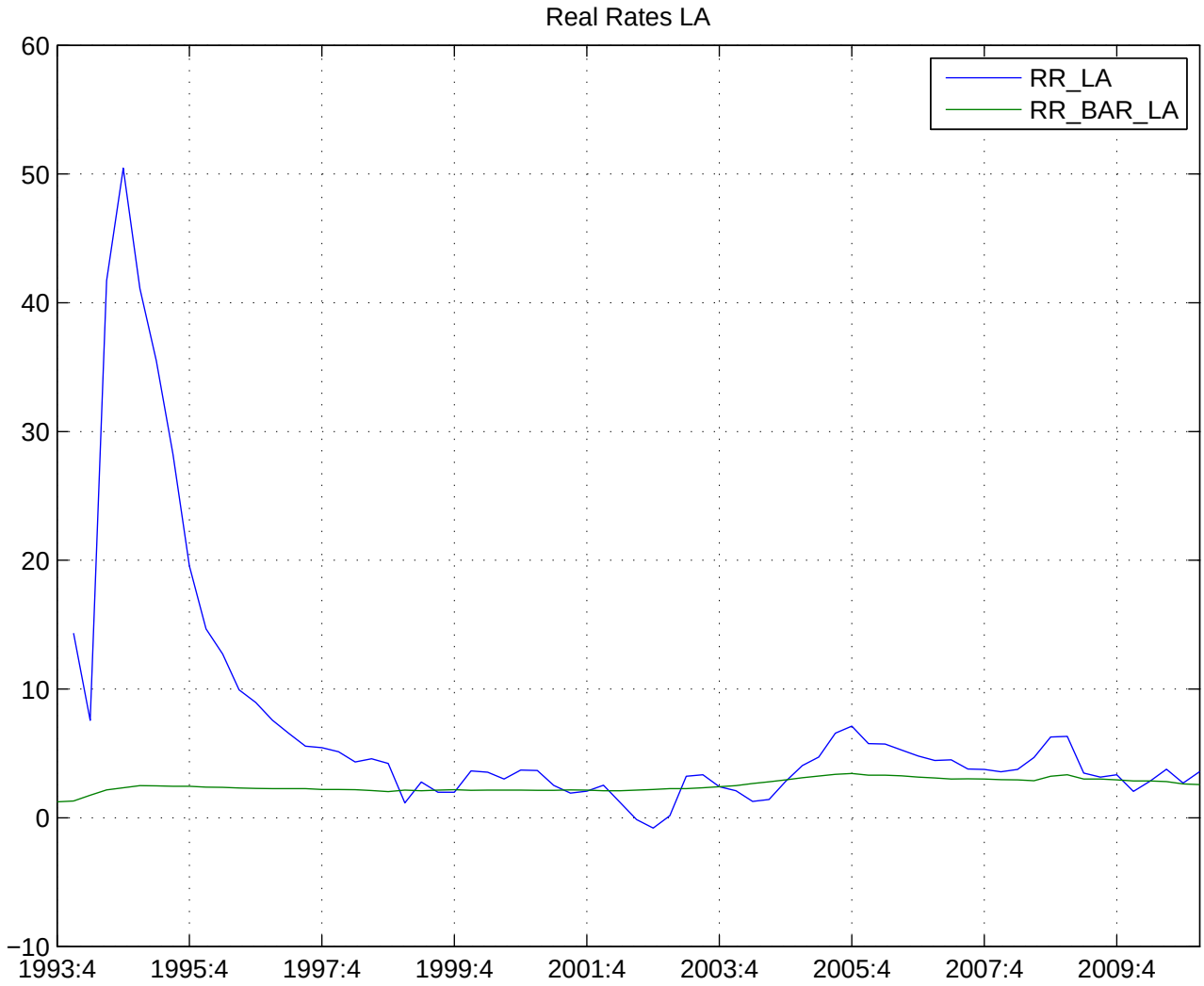
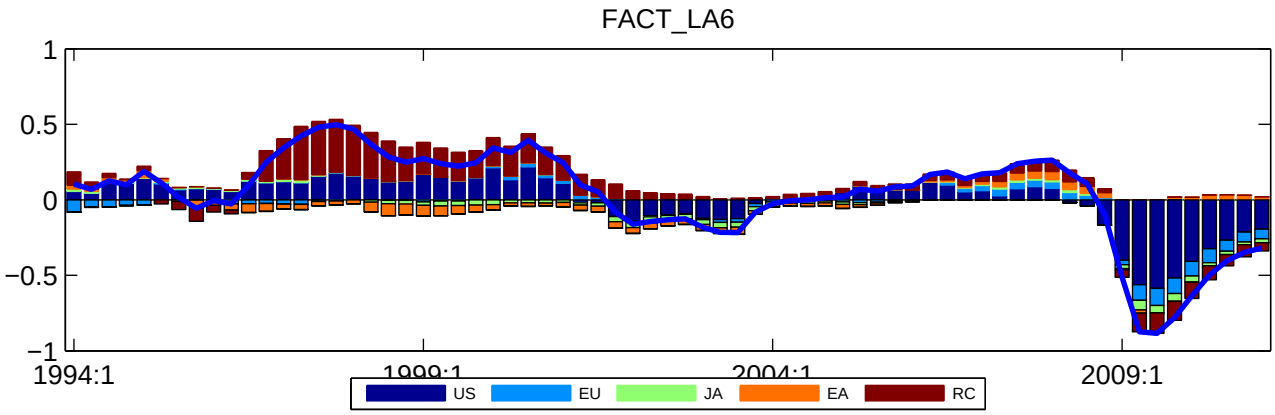


Figure 74: Real Rate And Equilibrium LA



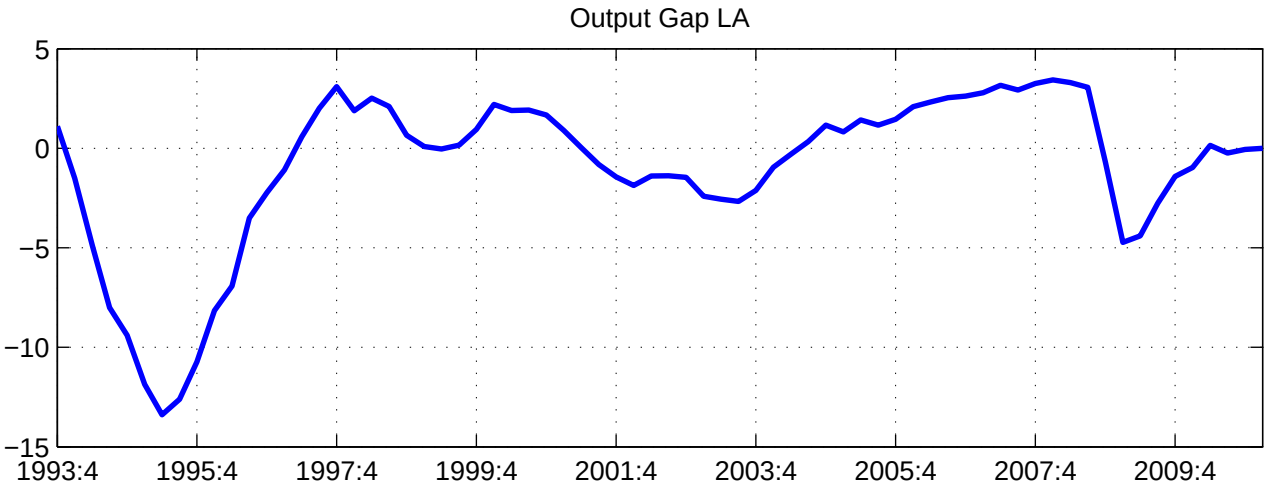


Figure 75: FACT_LA

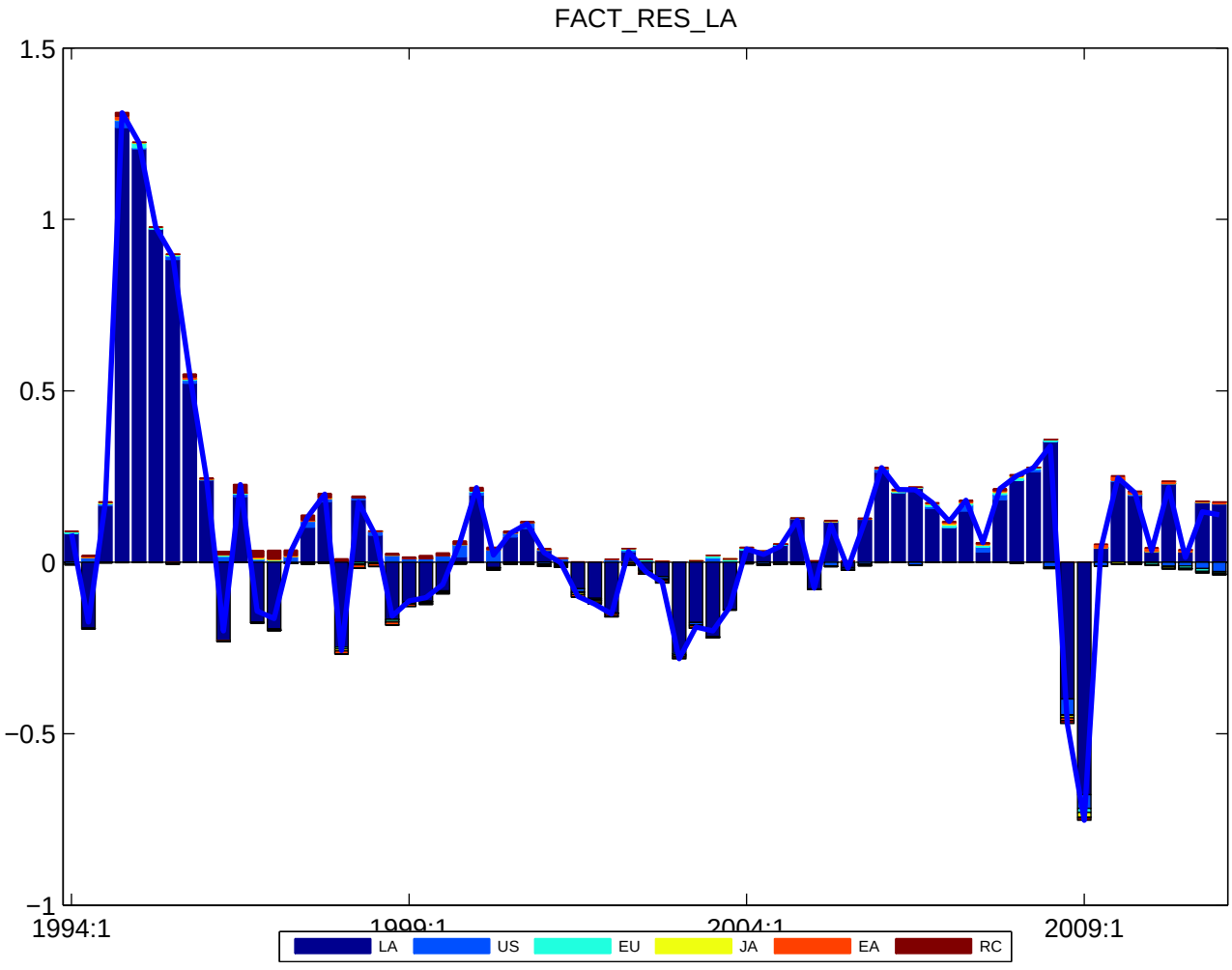


Figure 76: FACT_RES_LA

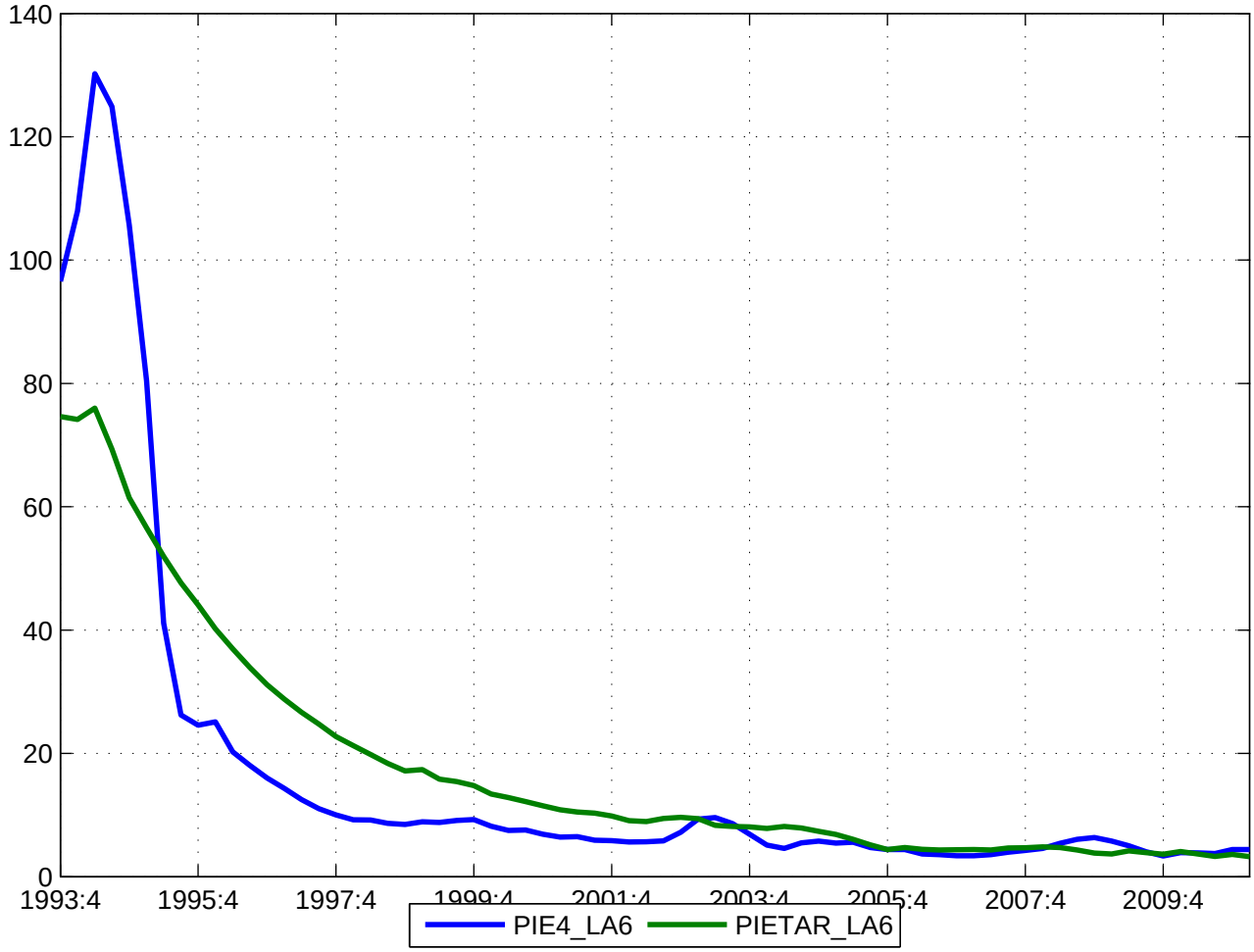


Figure 77: Inflation and Target LA

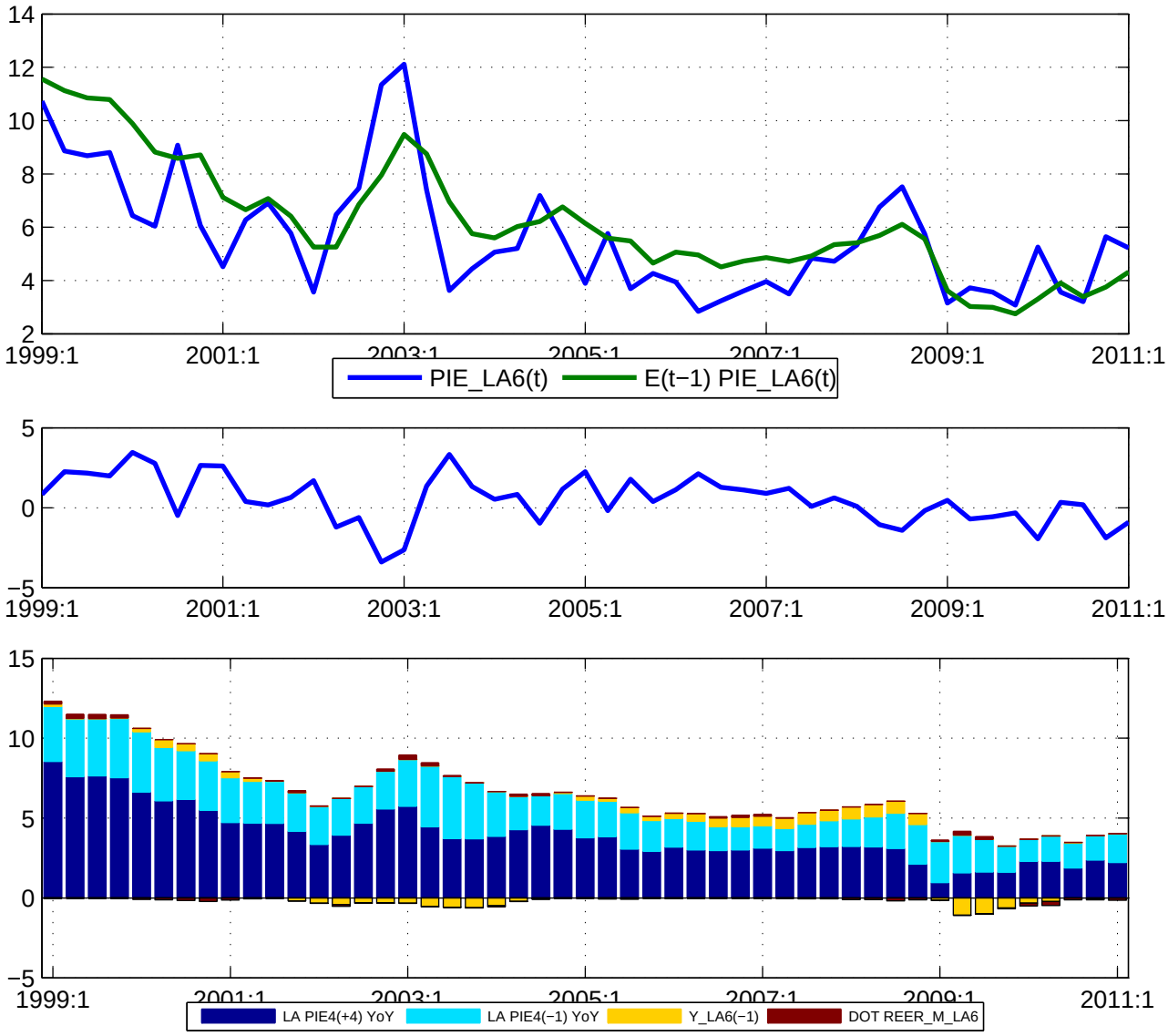


Figure 78: PIE_LA_fit

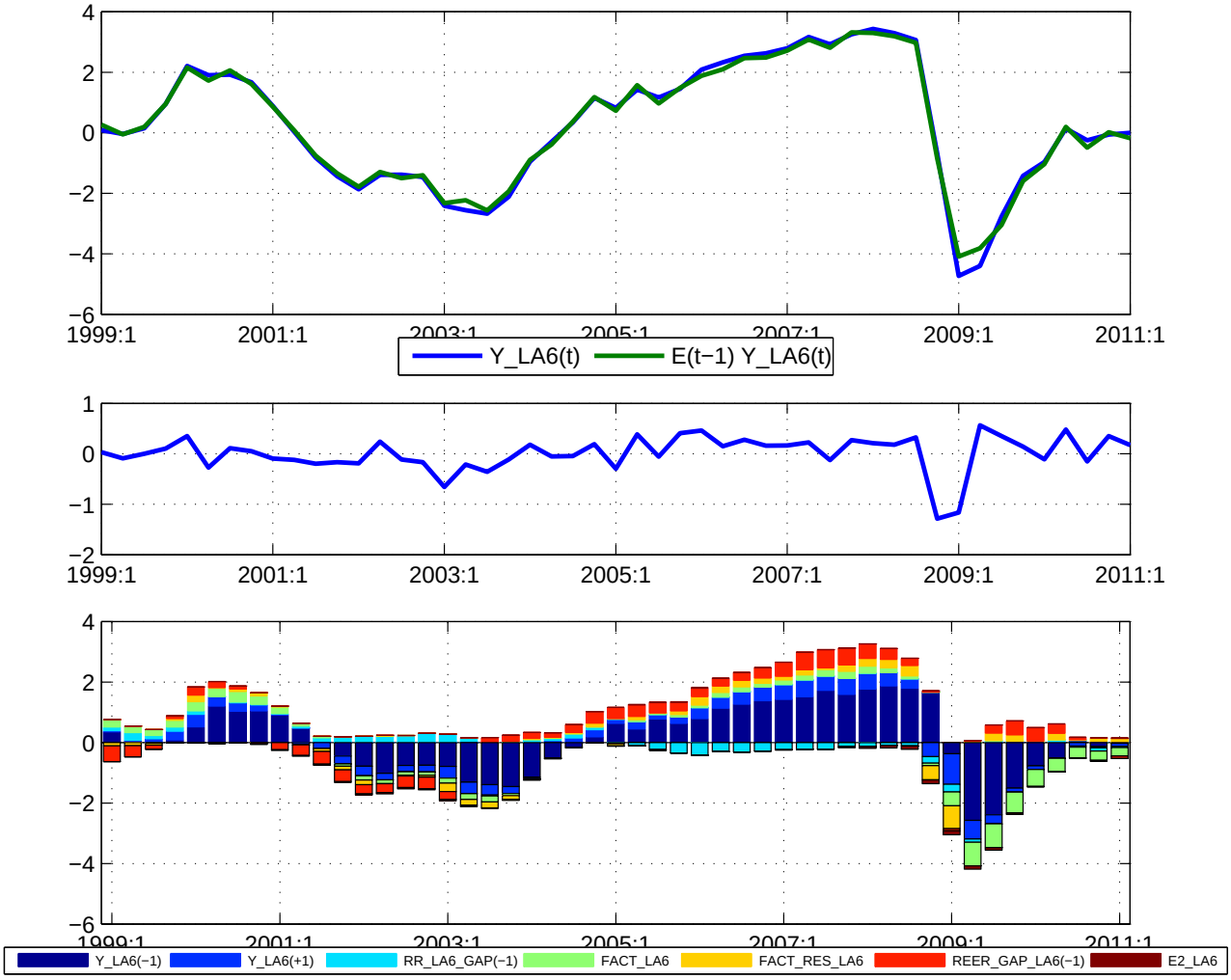


Figure 79: Y_LA_fit

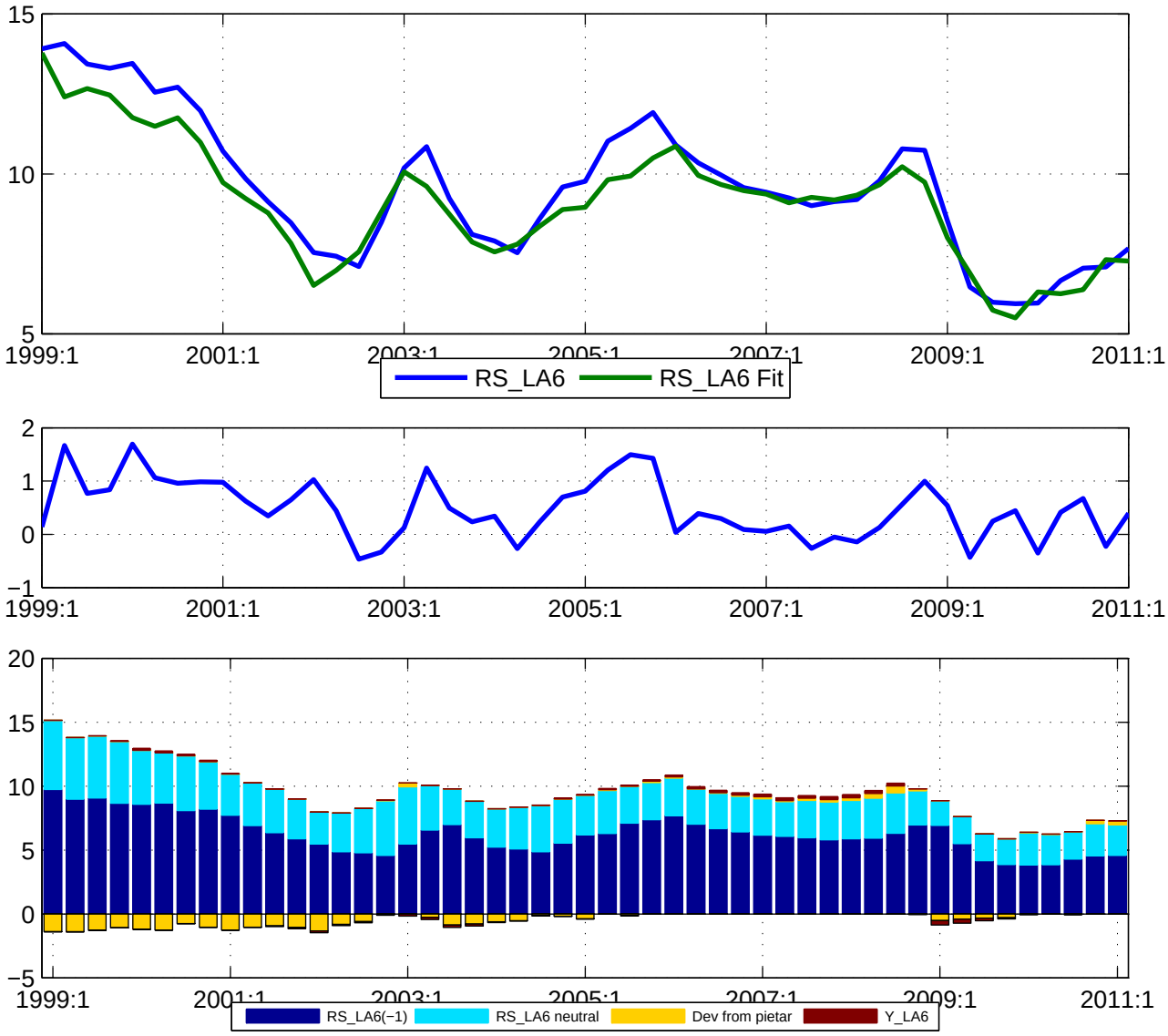


Figure 80: RS_LA_fit

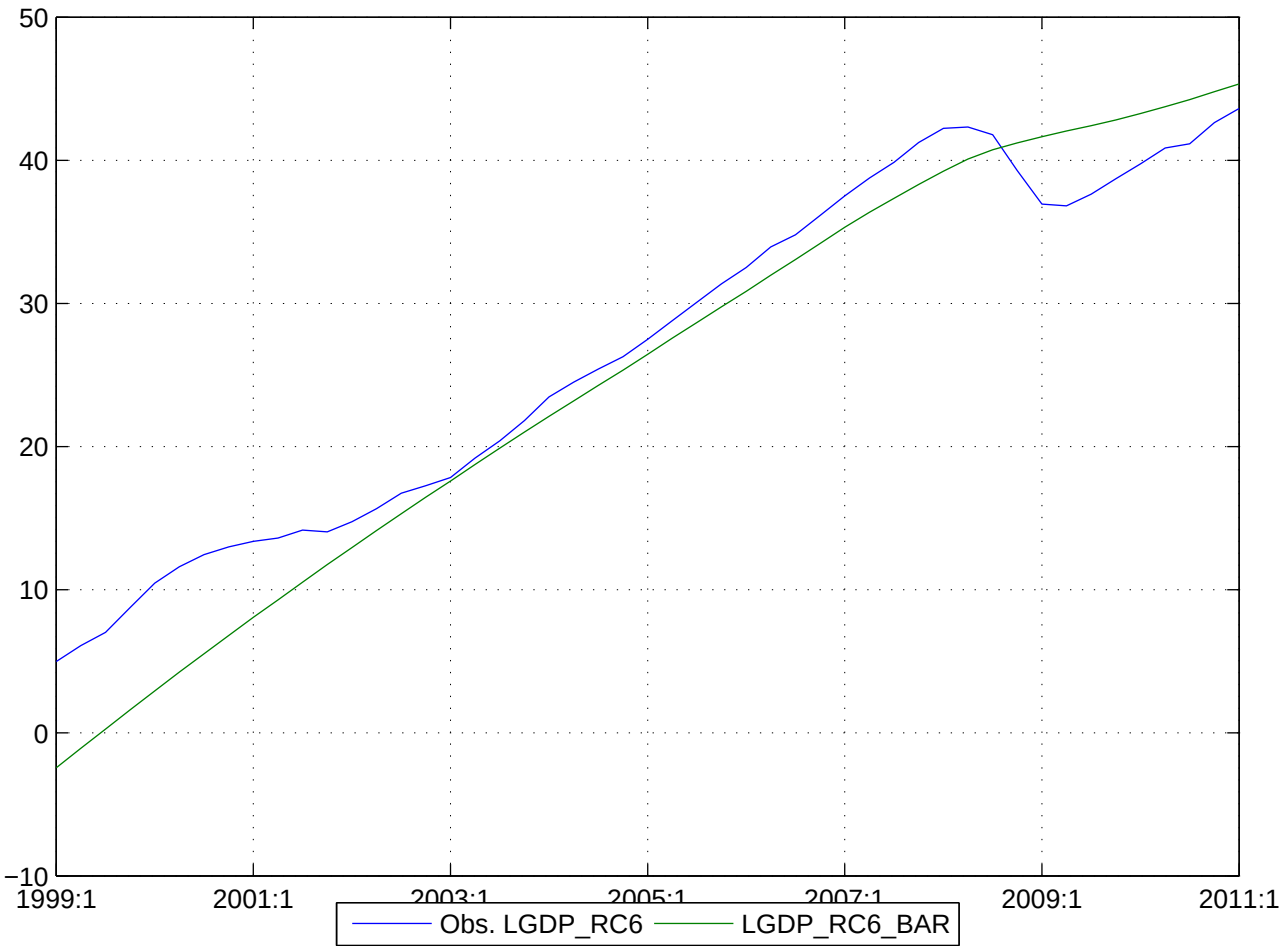


Figure 81: RC GDP level

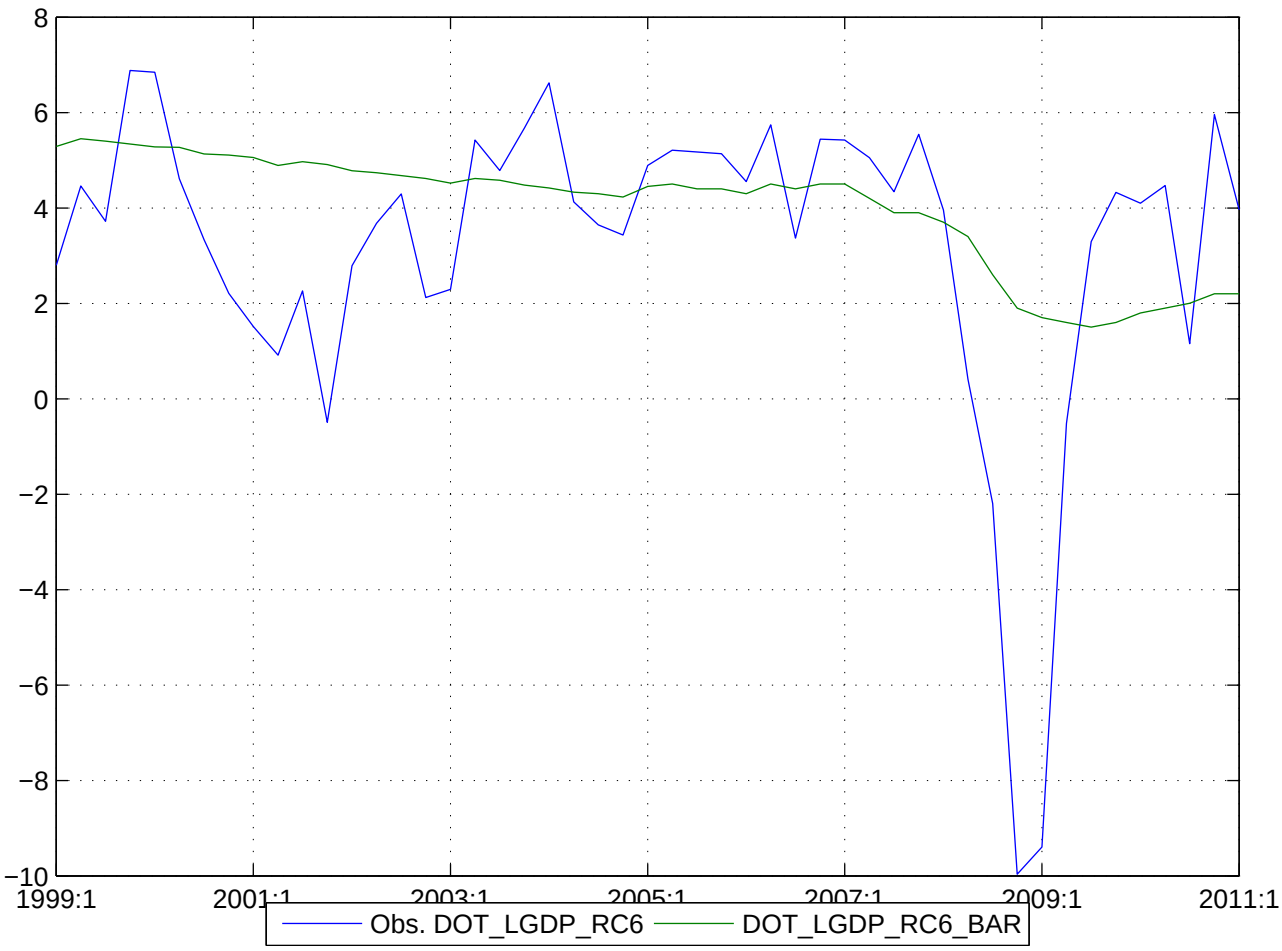


Figure 82: RC GDP growth

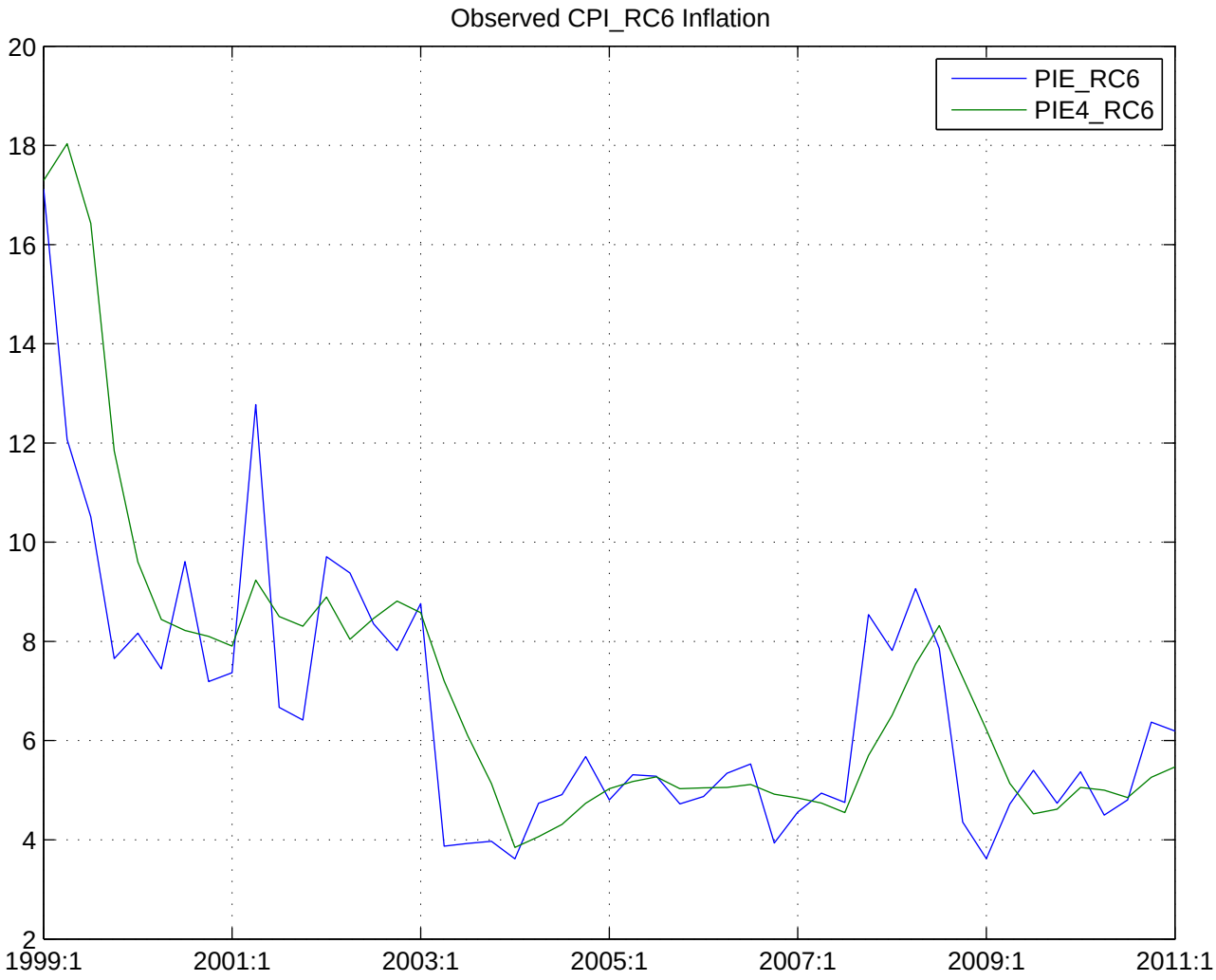


Figure 83: PIE_RC

Figure 84: RC_GAP

Figure 85: REER_T_RC

Figure 86: RR_RC

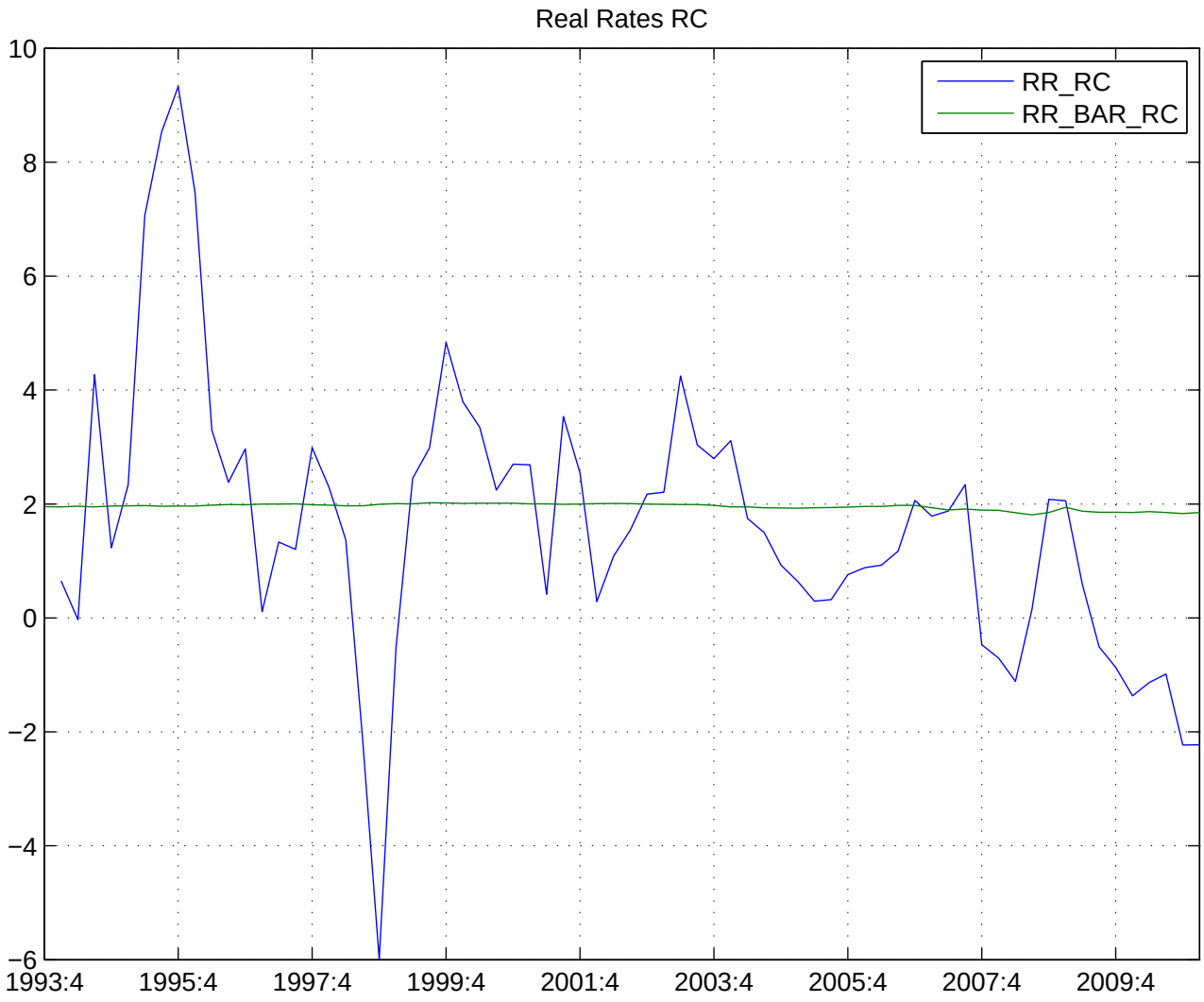
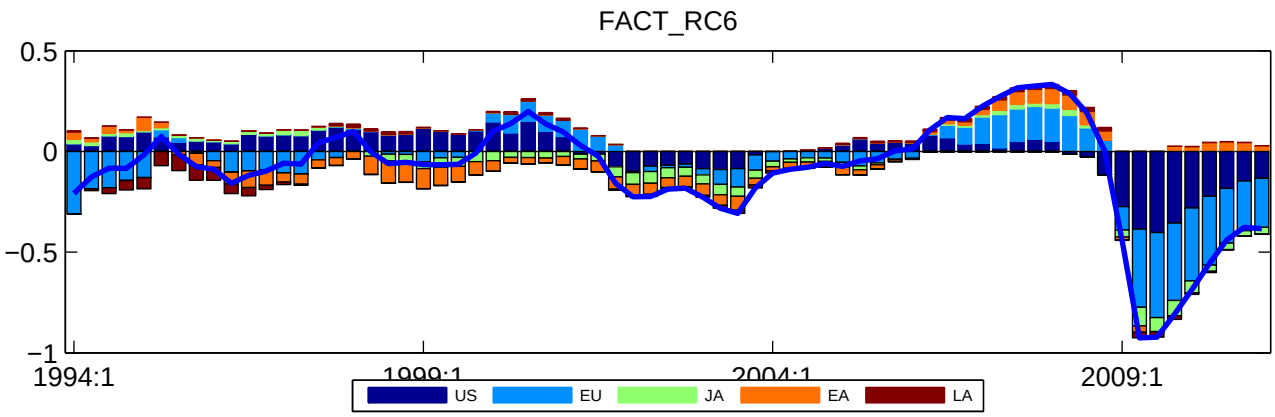


Figure 87: Real Rate And Equilibrium RC



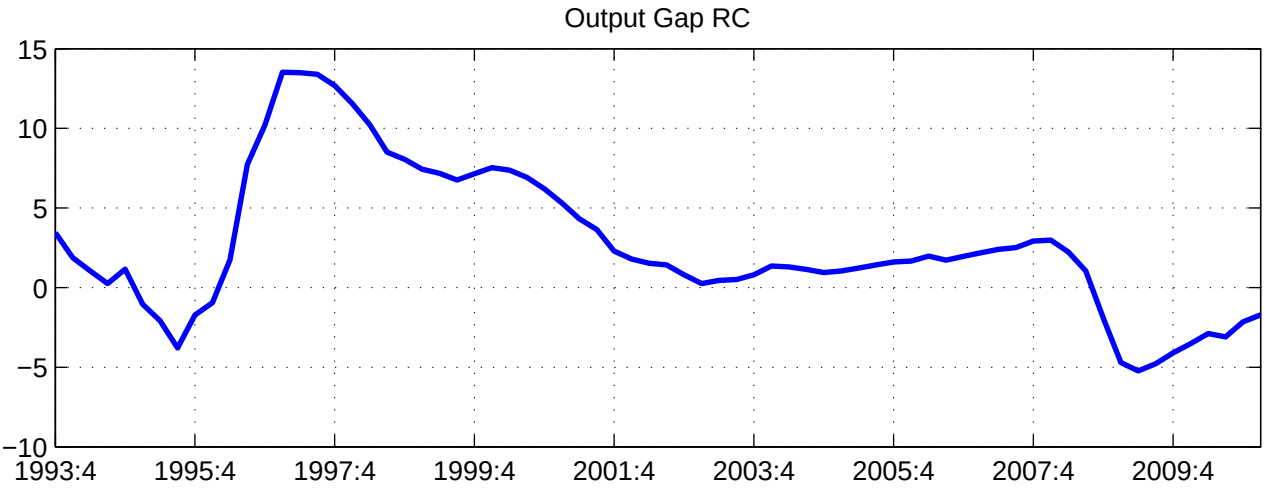


Figure 88: FACT_RC

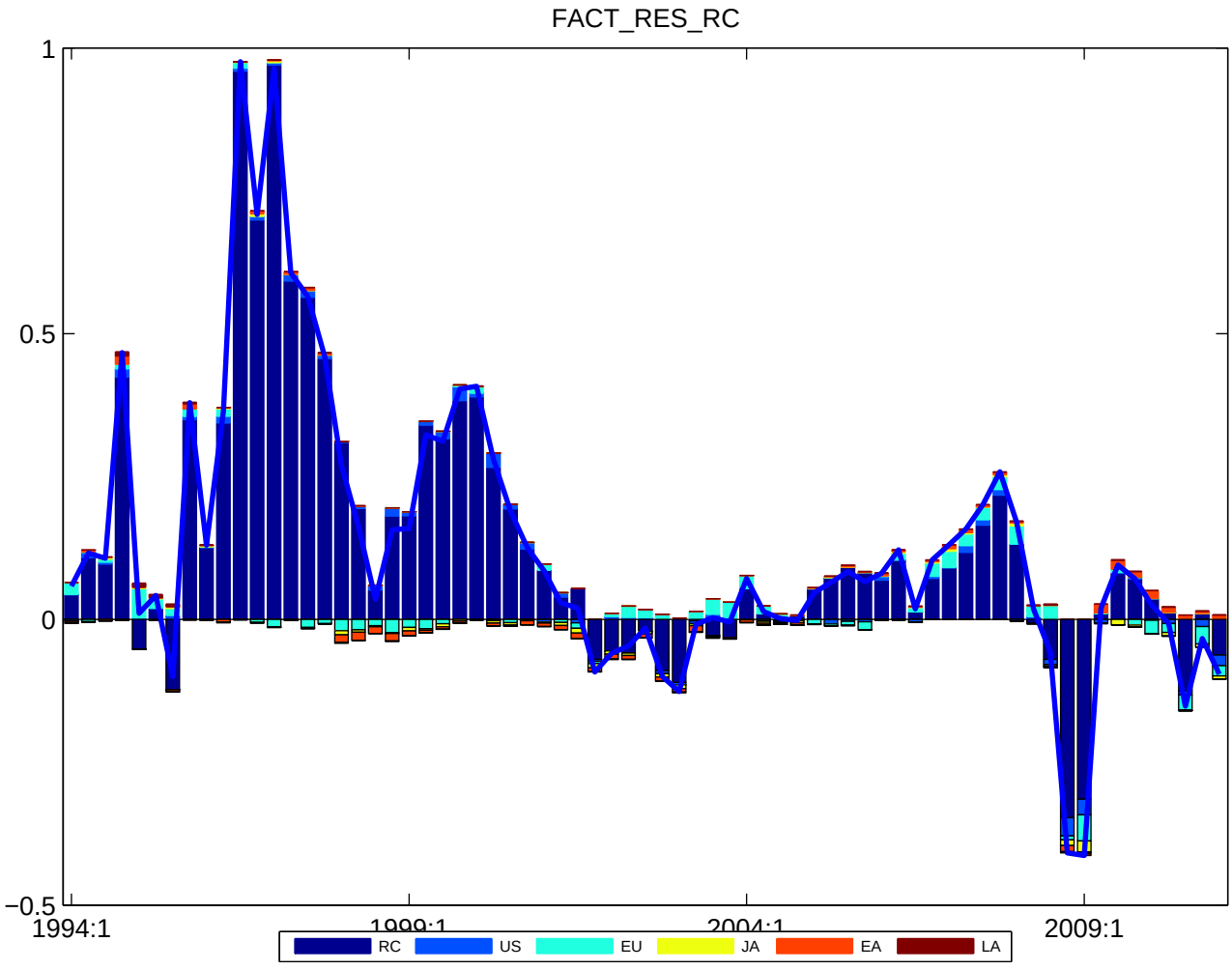


Figure 89: FACT_RES_RC

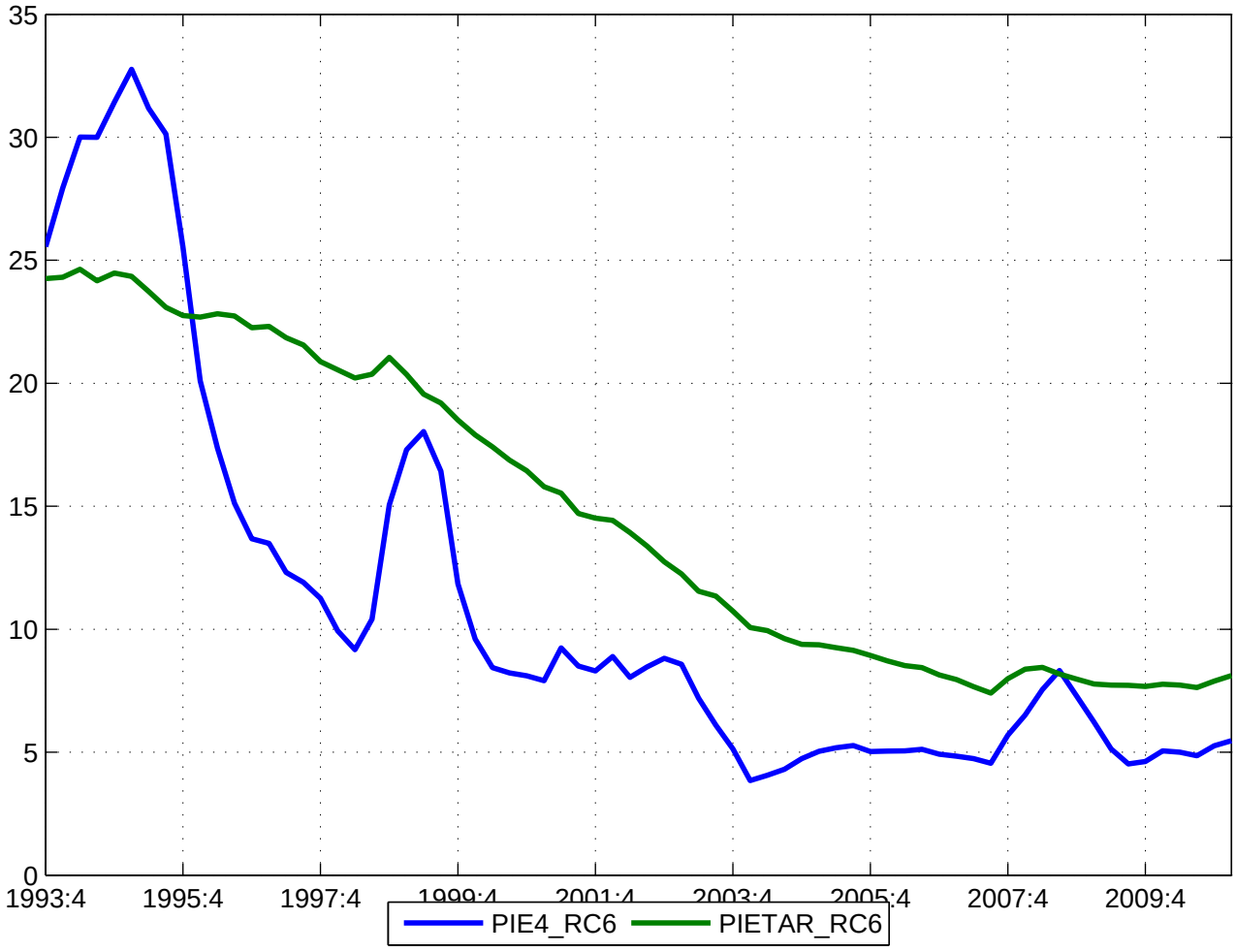


Figure 90: Inflation and Target RC

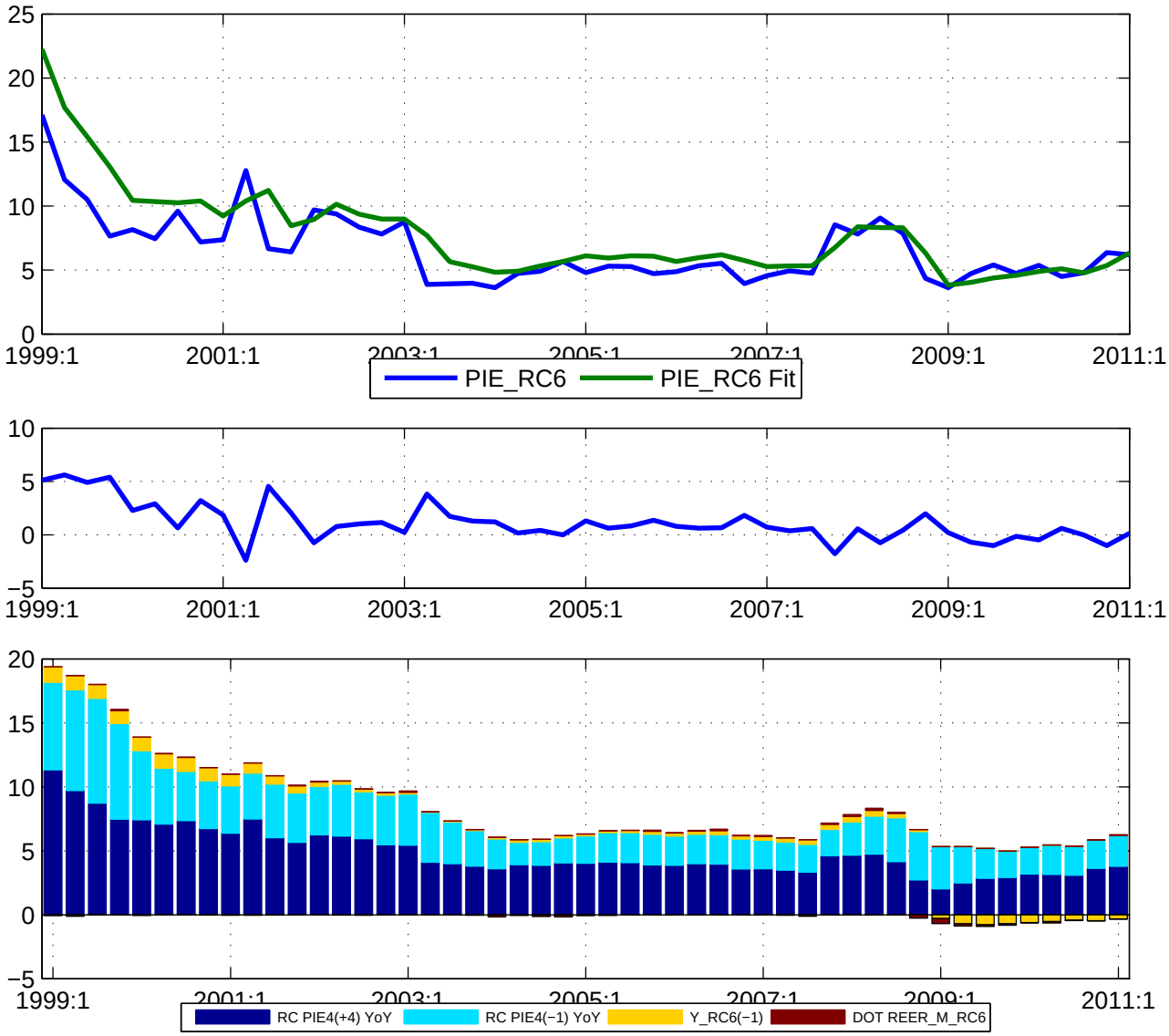


Figure 91: PIE_RC_fit

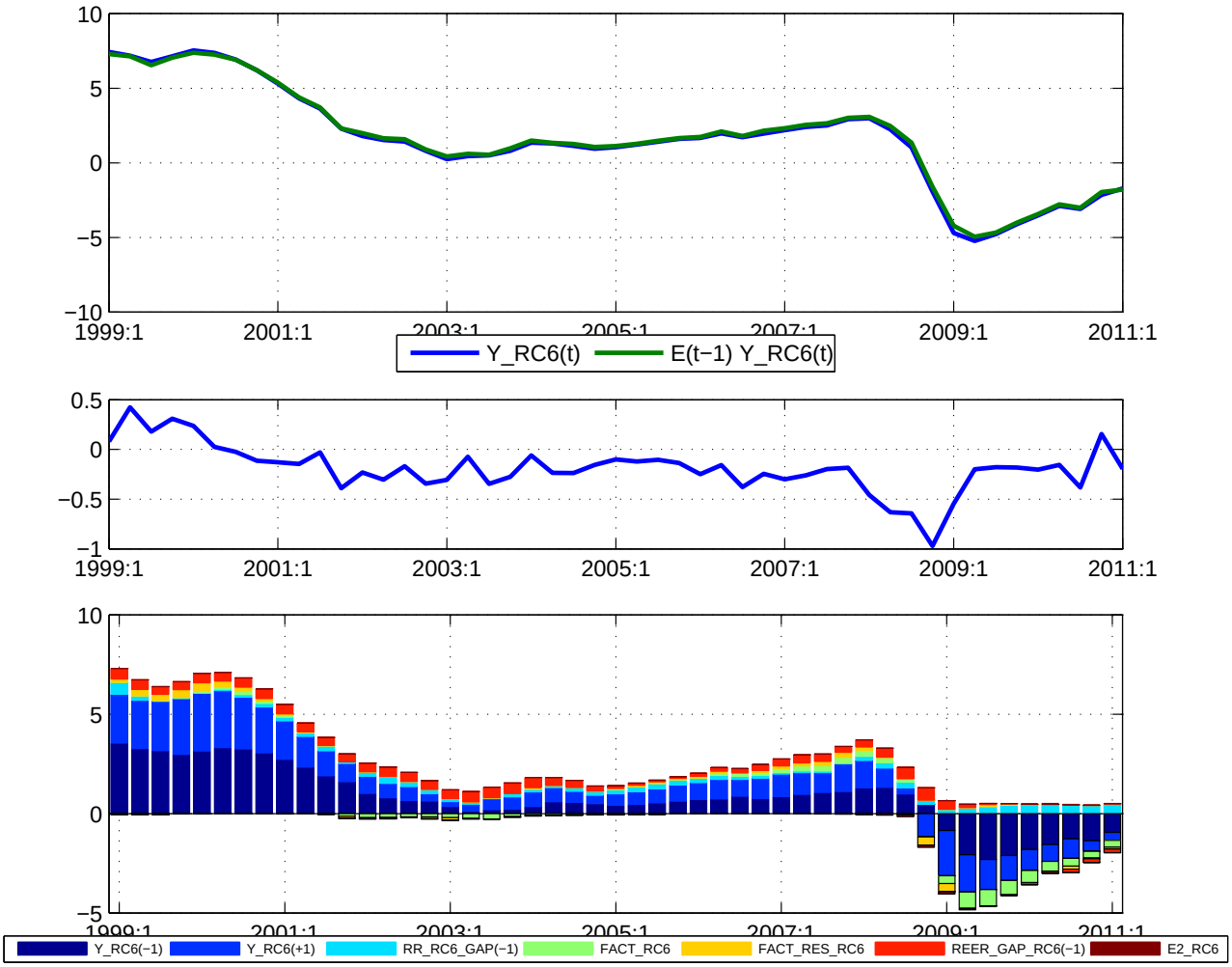


Figure 92: Y_RC_fit

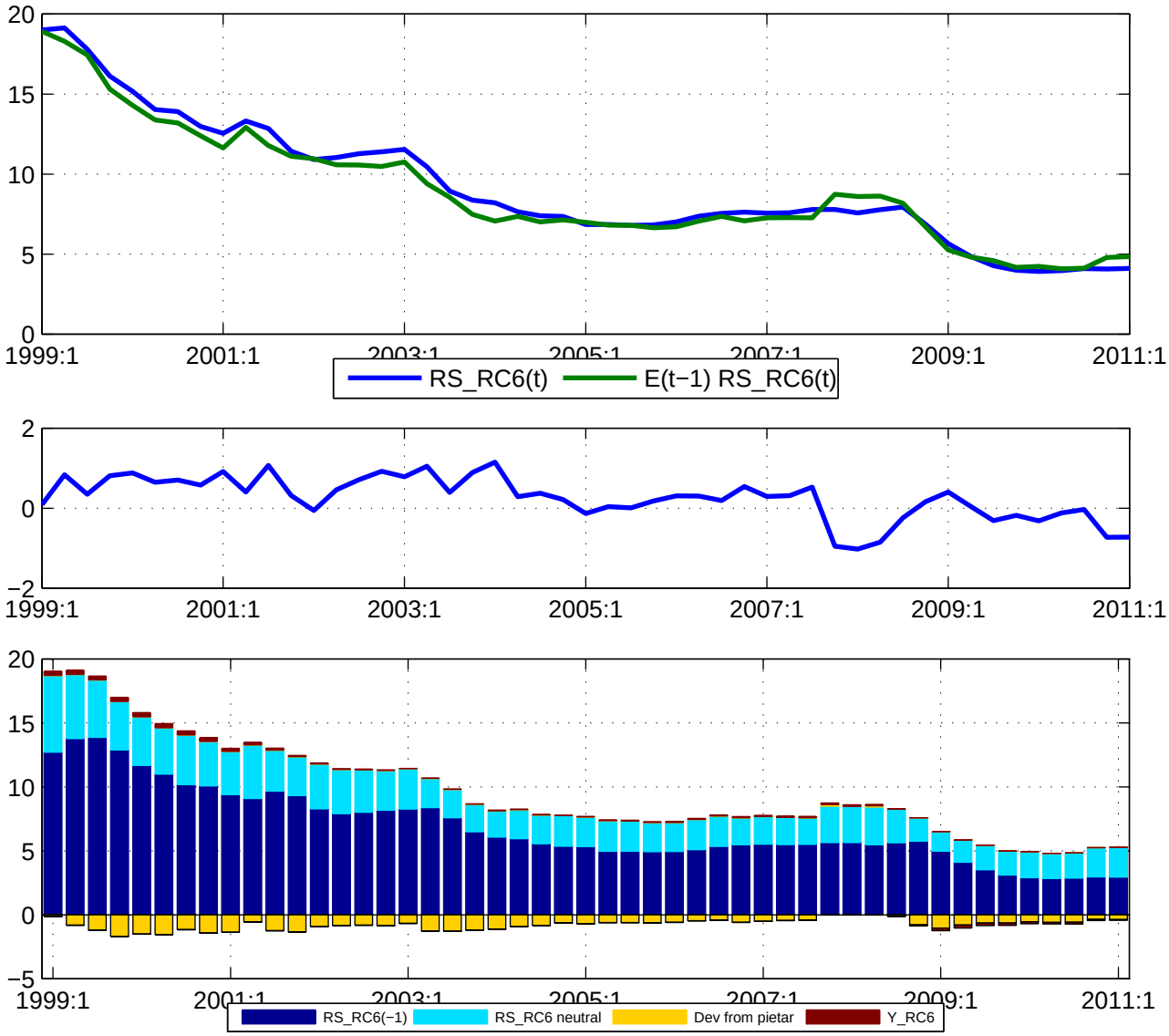


Figure 93: RS_RC_fit

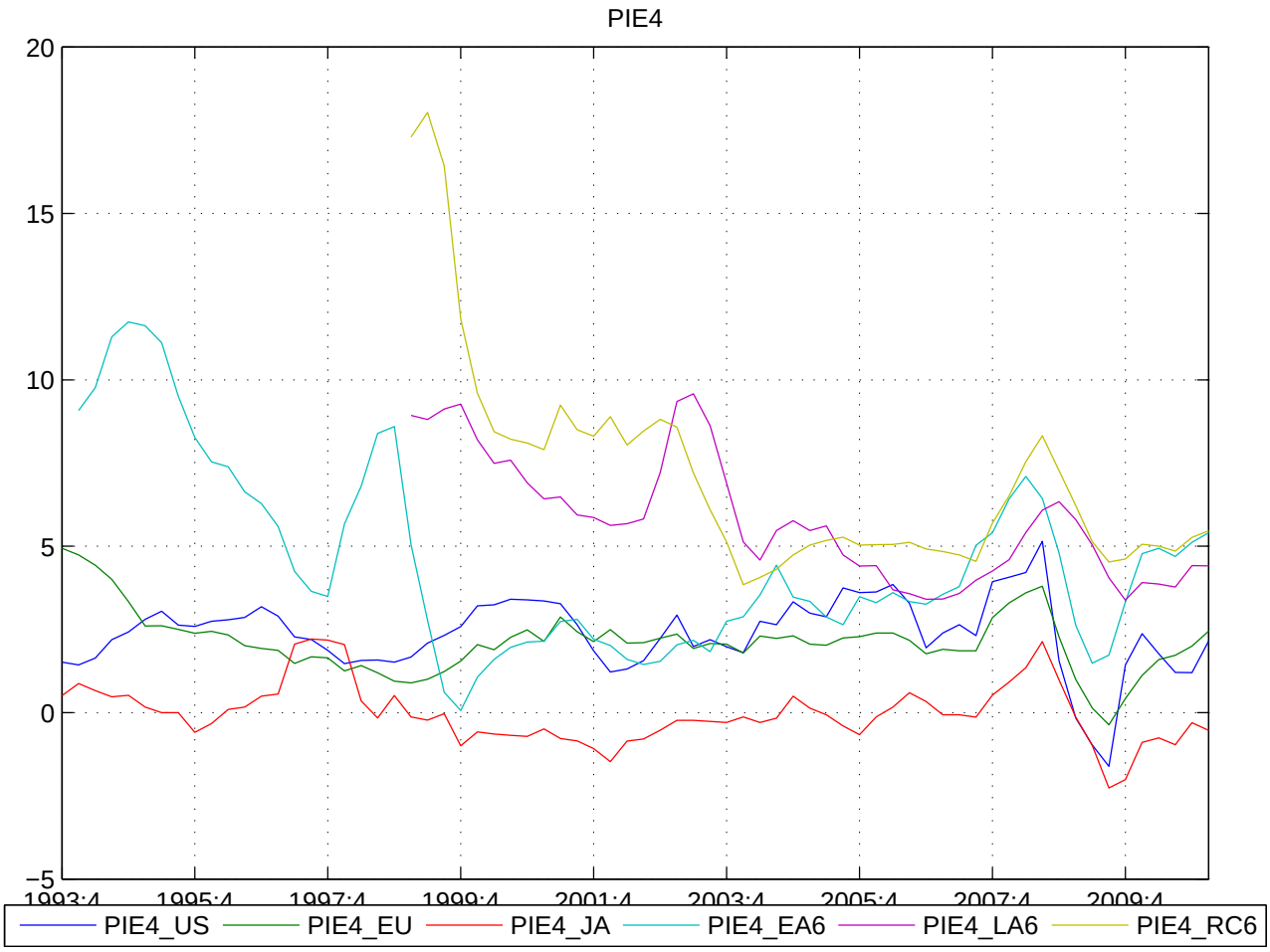


Figure 94: PIE4_comp

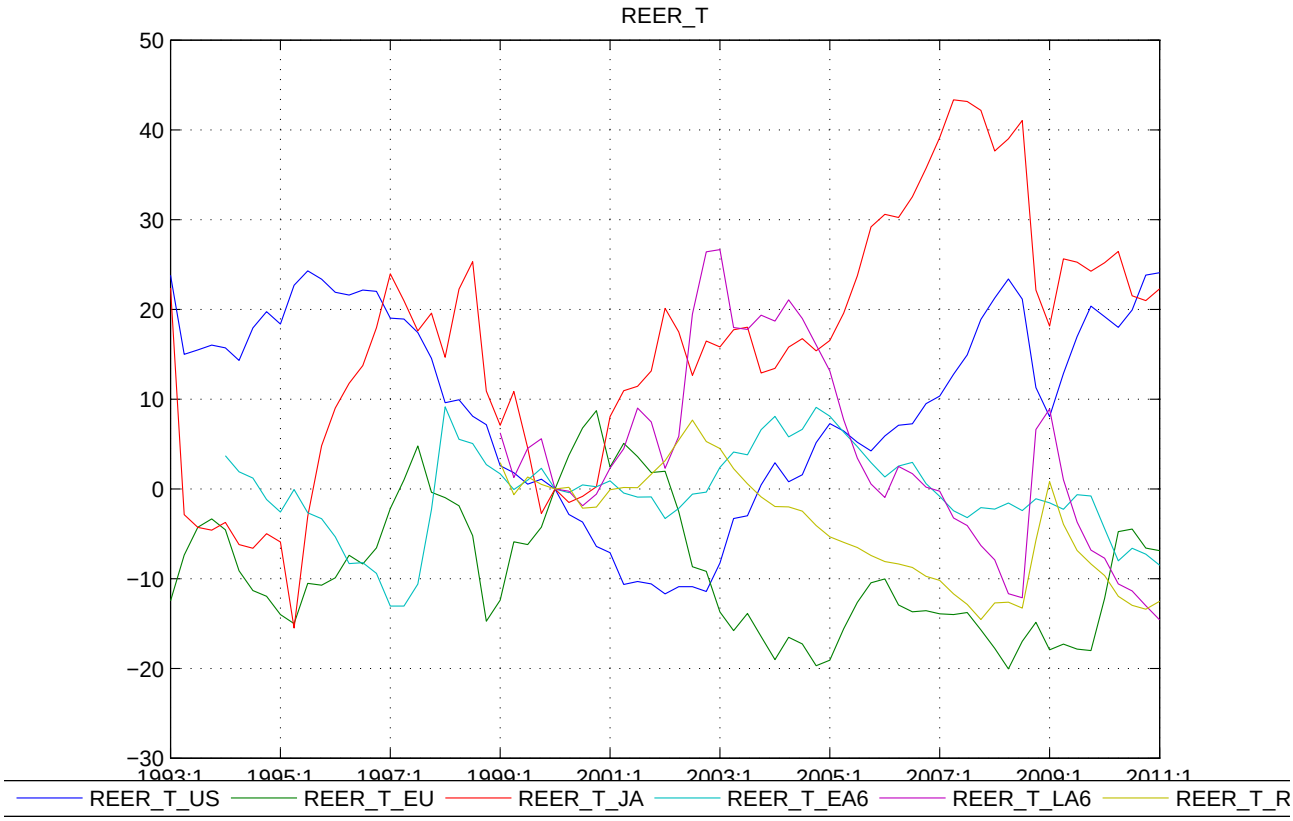


Figure 95: REER_T_comp

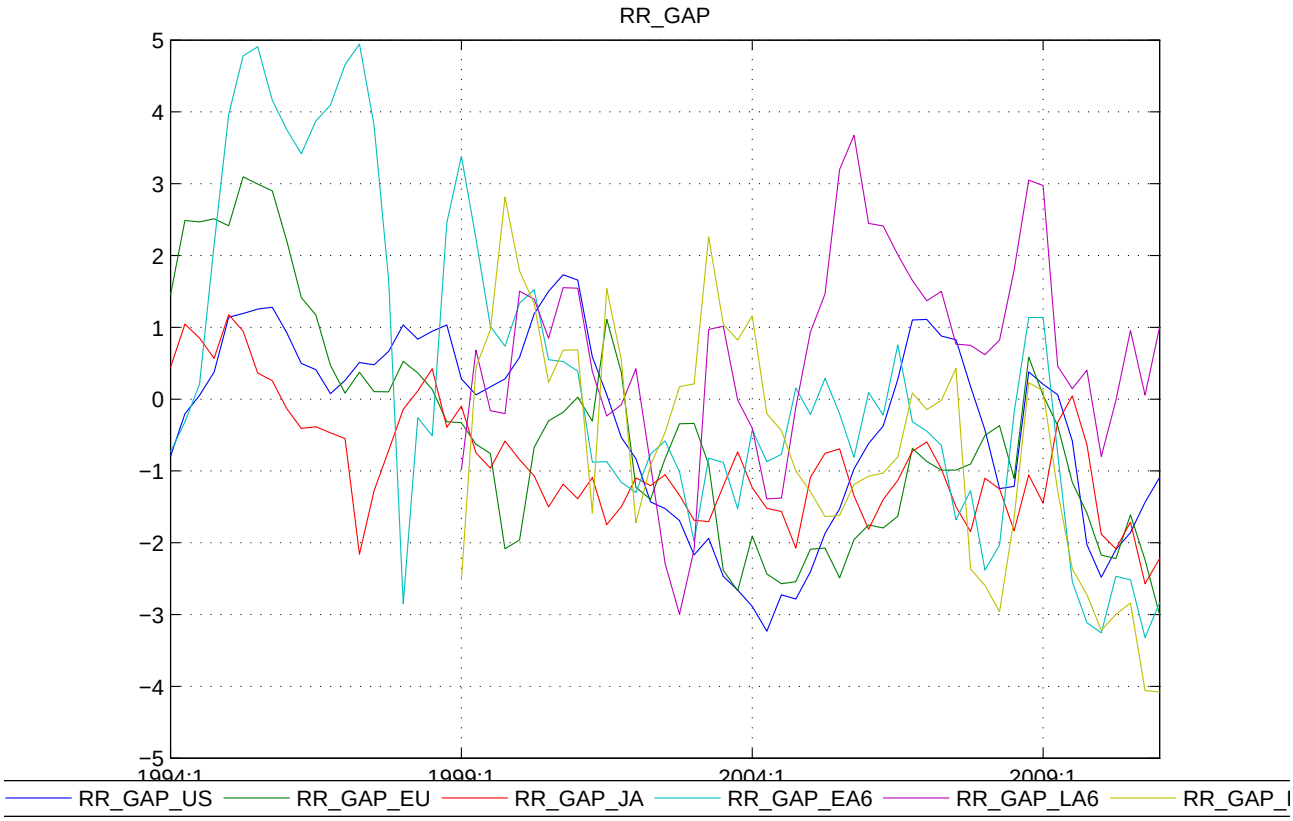


Figure 96: RR_GAPcomp

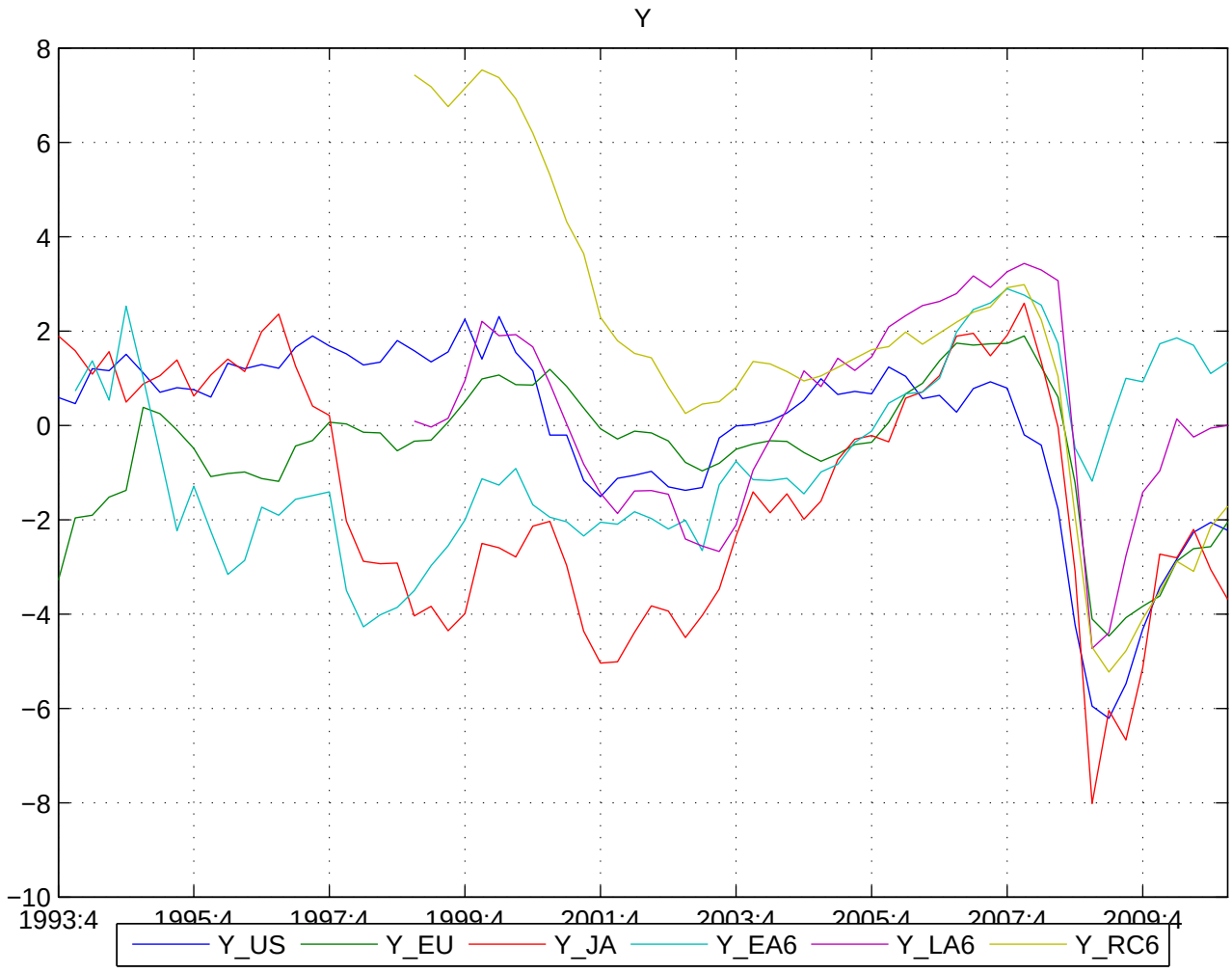


Figure 97: Y_comp

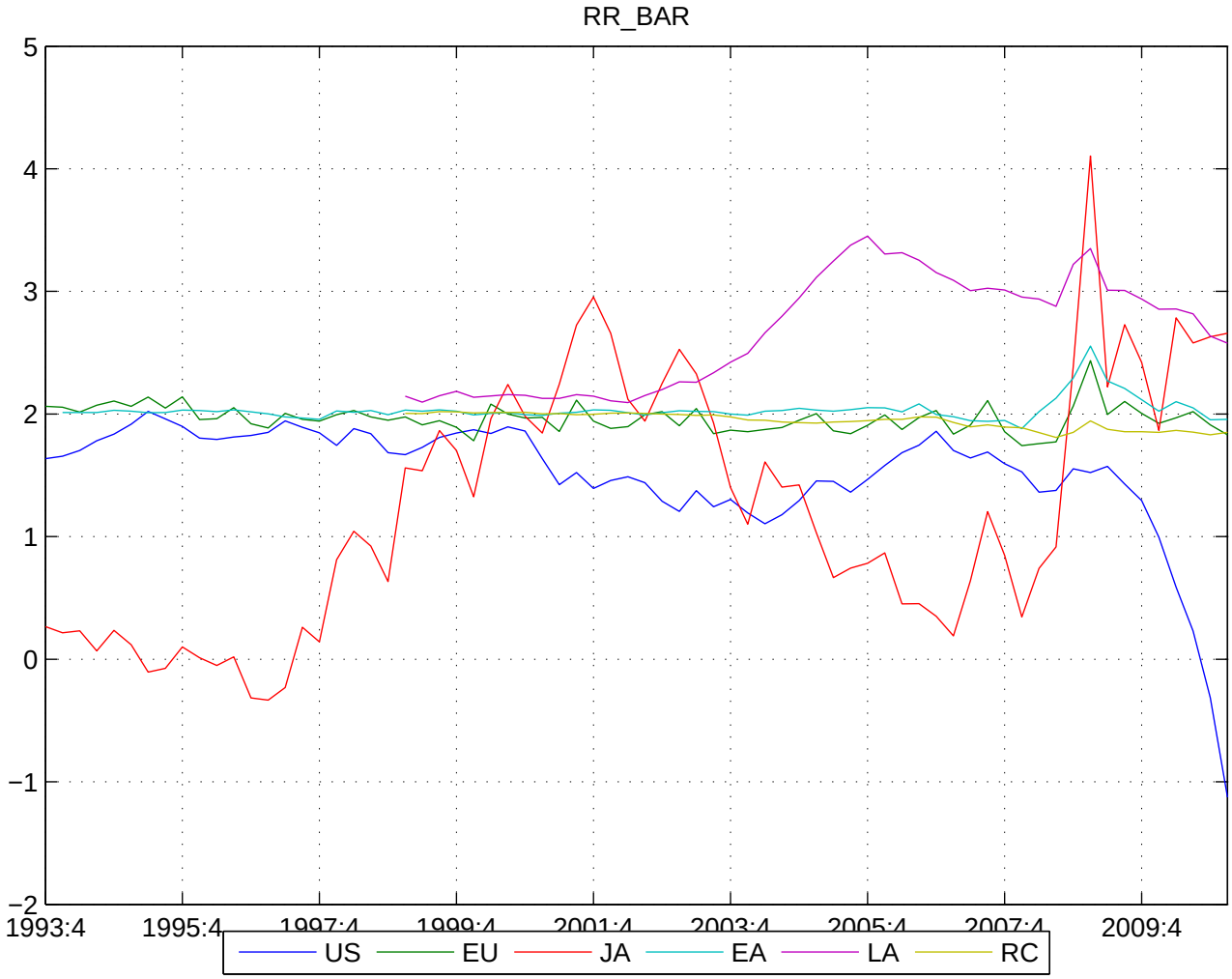


Figure 98: RR_BAR_comp

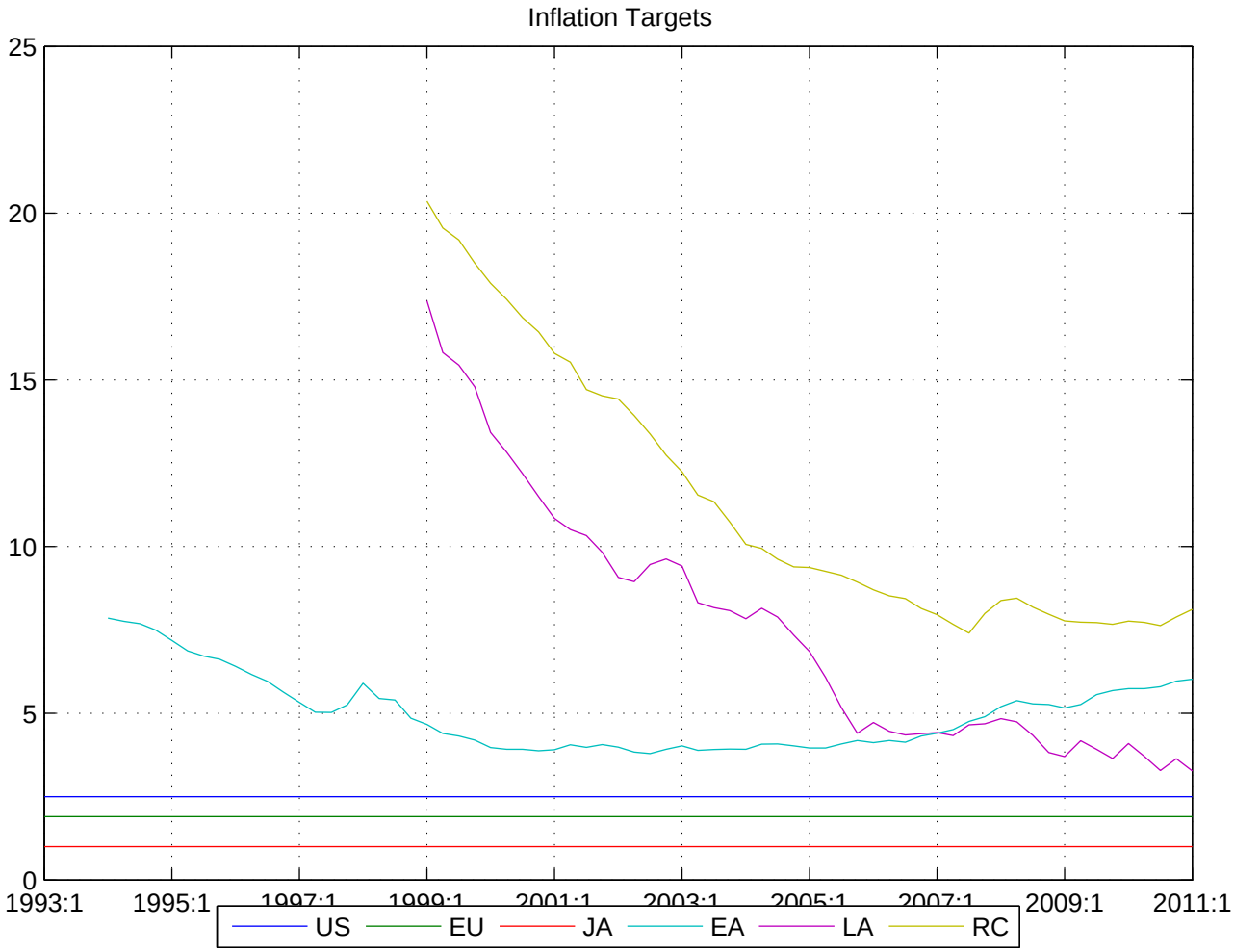


Figure 99: PIETAR_comp