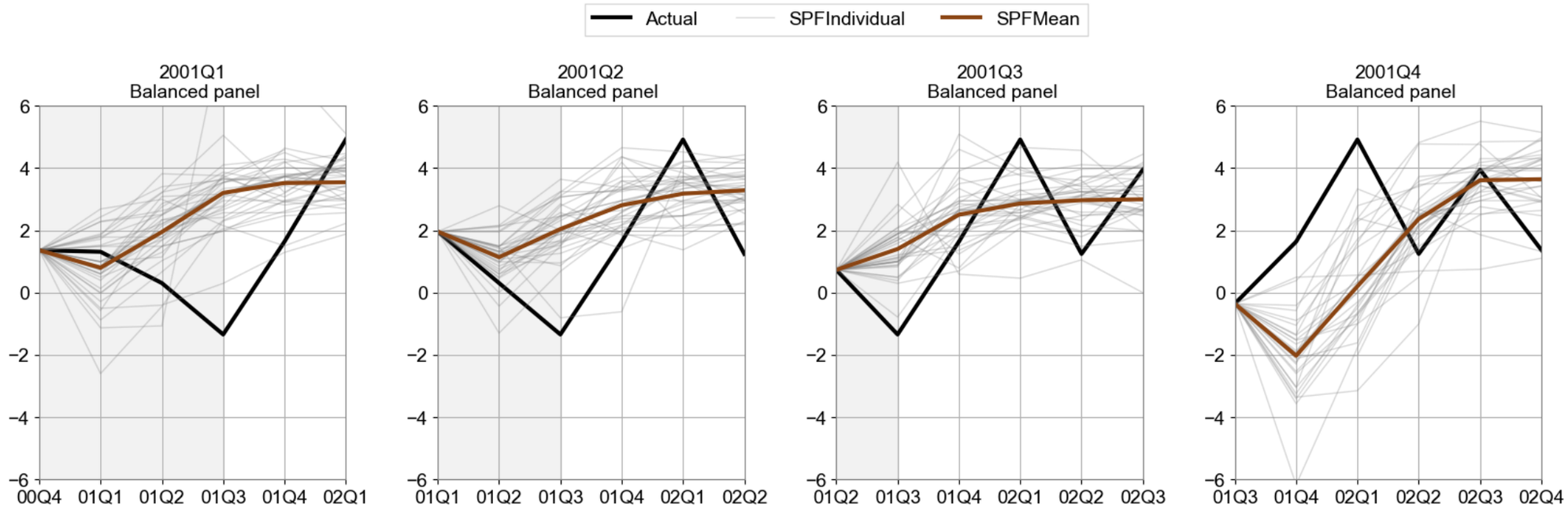
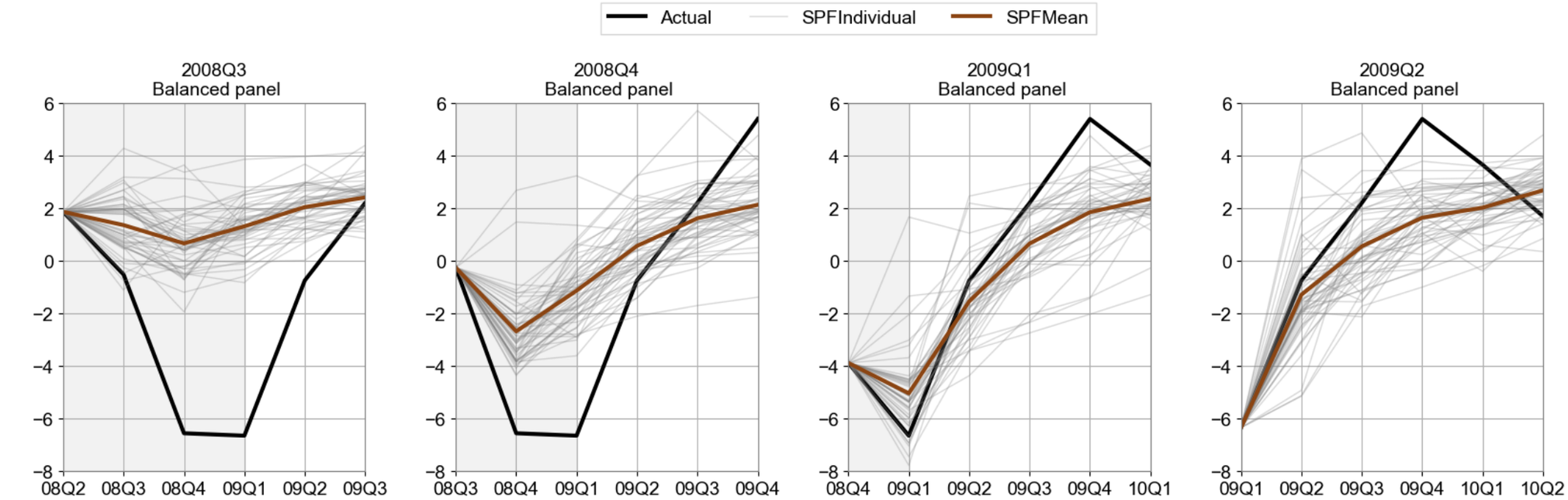
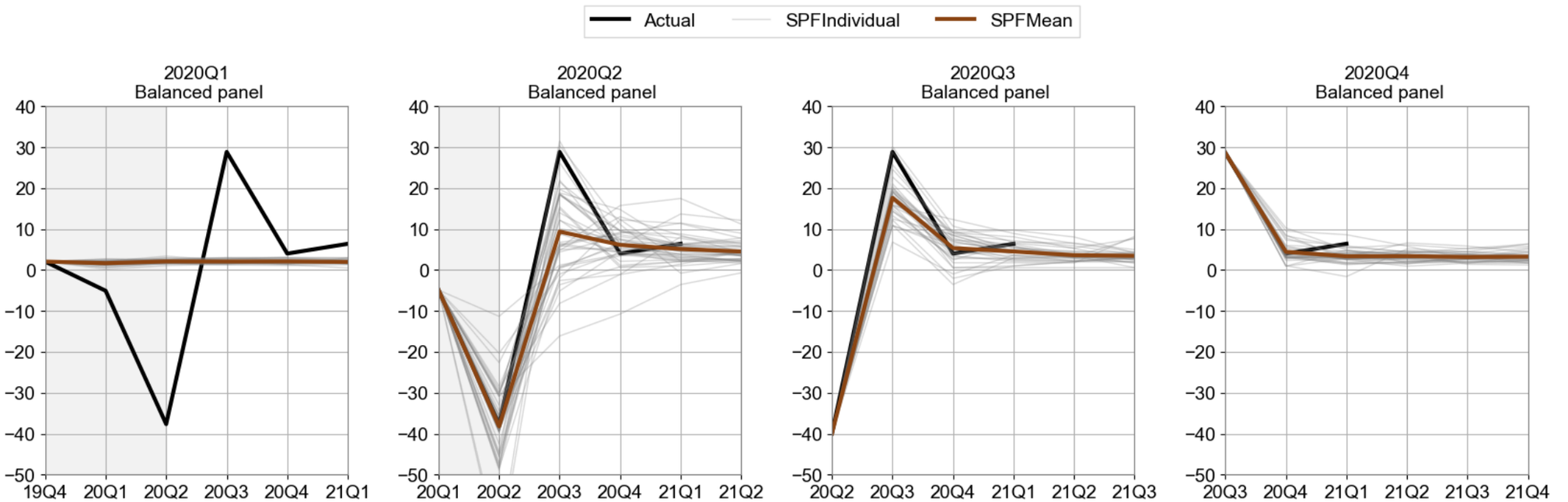
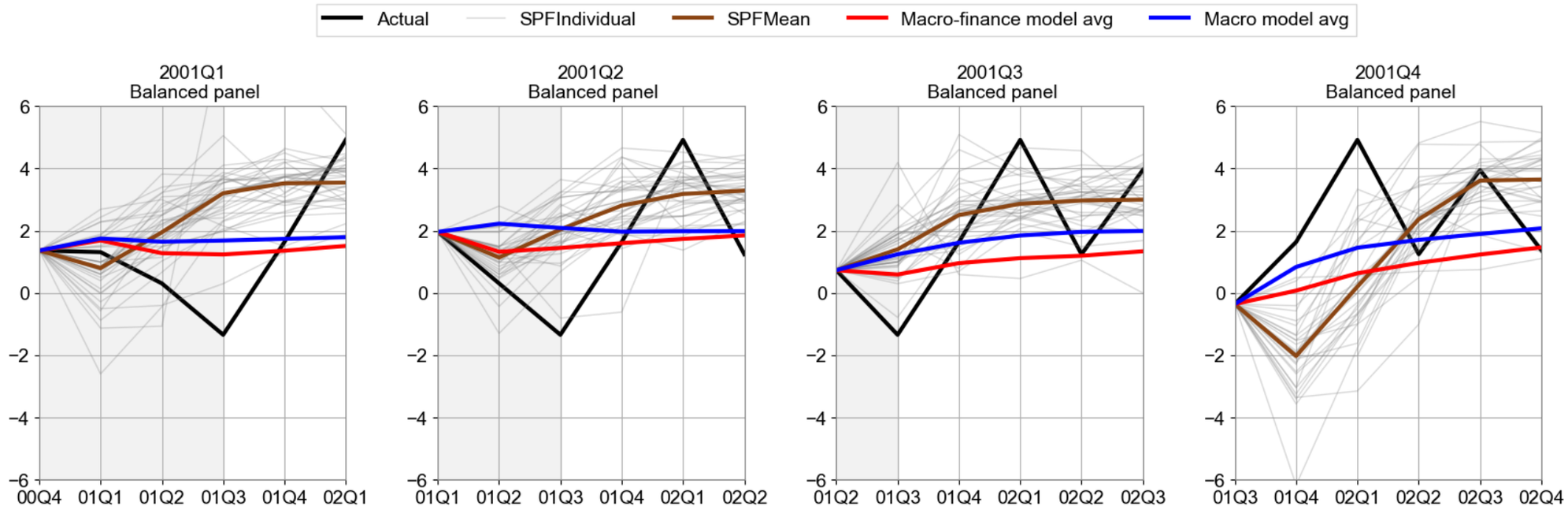
# 1 Actual Data vs SPF Forecast

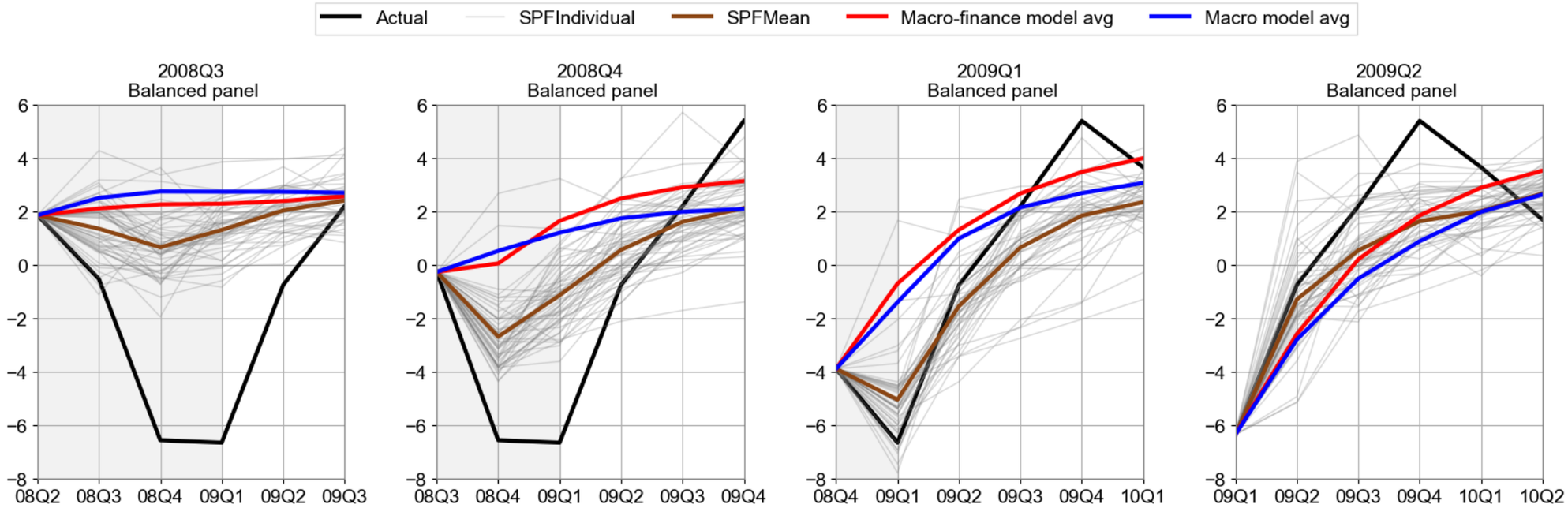


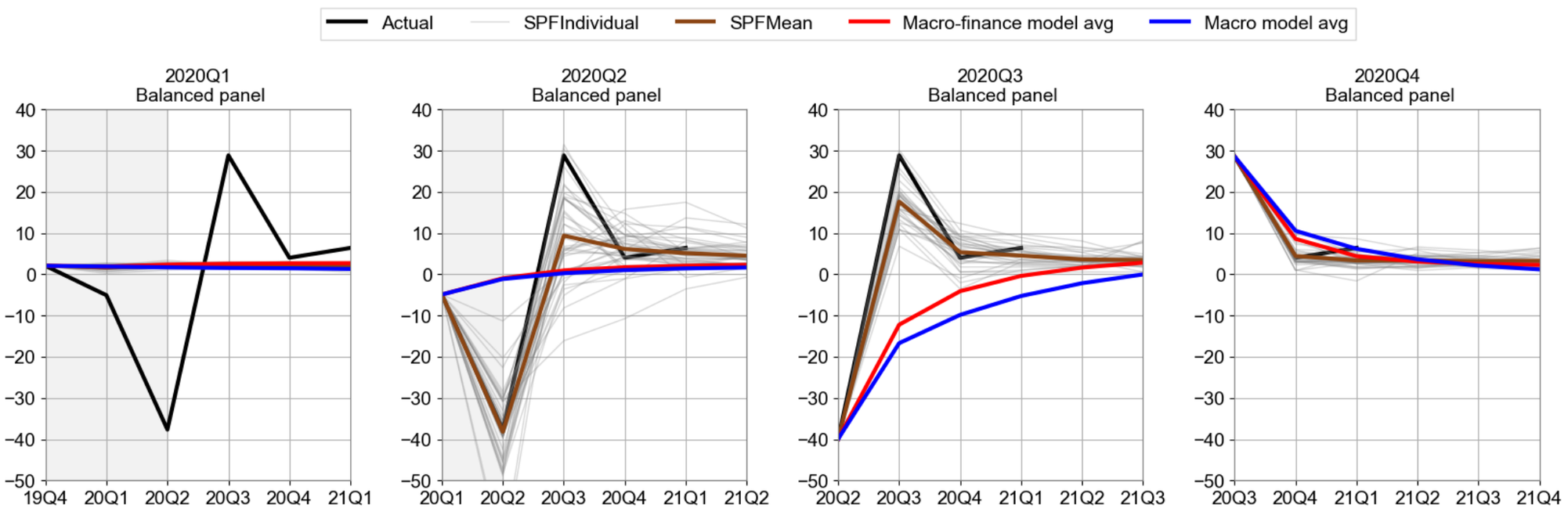

Actual
SPFIndividual
SPFMean
2008Q3
Balanced panel
2008Q4
Balanced panel
2009Q1
Balanced panel
2009Q2
Balanced panel
6
4
2
0
−2
−4
−6
−8
08Q2 08Q3 08Q4 09Q1 09Q2 09Q3
08Q3 08Q4 09Q1 09Q2 09Q3 09Q4
08Q4 09Q1 09Q2 09Q3 09Q4 10Q1
09Q1 09Q2 09Q3 09Q4 10Q1 10Q2


Actual
SPFIndividual
SPFMean
2020Q1
Balanced panel
2020Q2
Balanced panel
2020Q3
Balanced panel
2020Q4
Balanced panel
40
30
20
10
0
−10
−20
−30
−40
−50
19Q4 20Q1 20Q2 20Q3 20Q4 21Q1
20Q1 20Q2 20Q3 20Q4 21Q1 21Q2
20Q2 20Q3 20Q4 21Q1 21Q2 21Q3
20Q3 20Q4 21Q1 21Q2 21Q3 21Q4

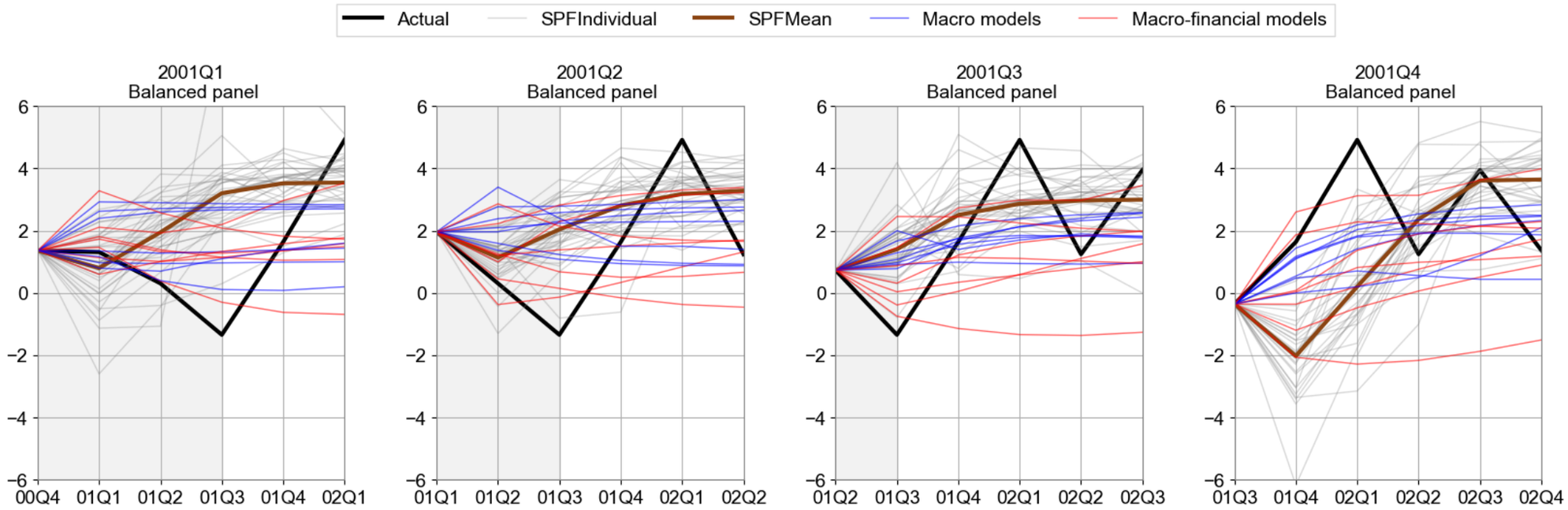
## 2 Macro Financial Model vs Macro Model, Average

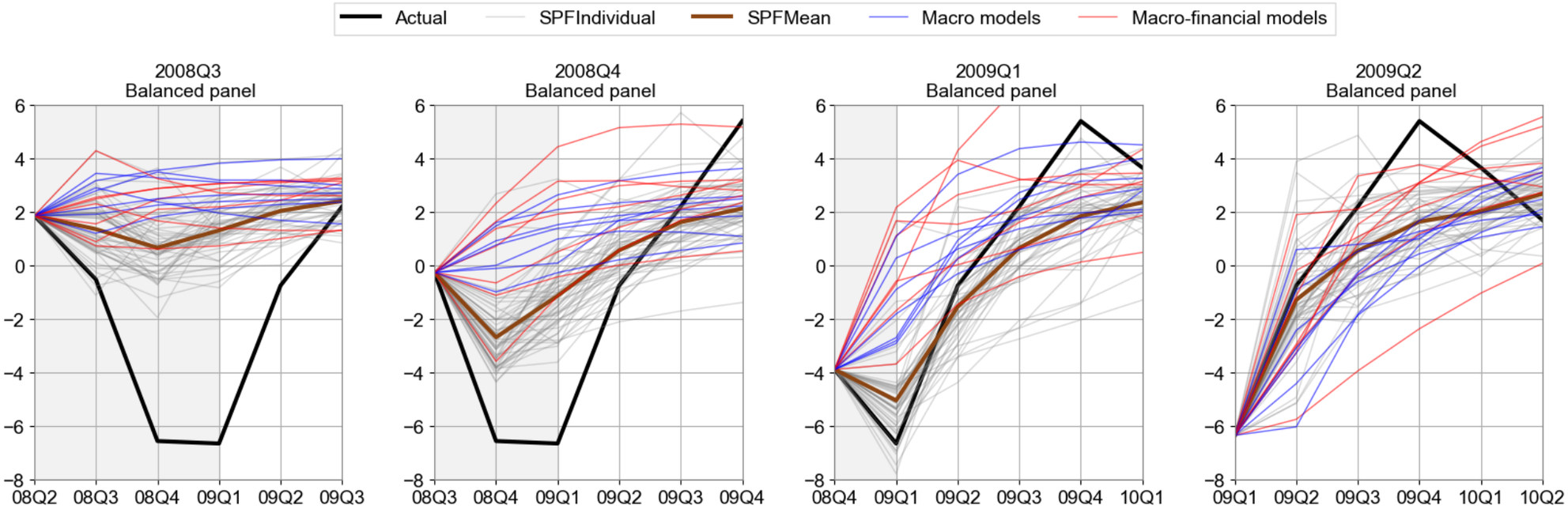


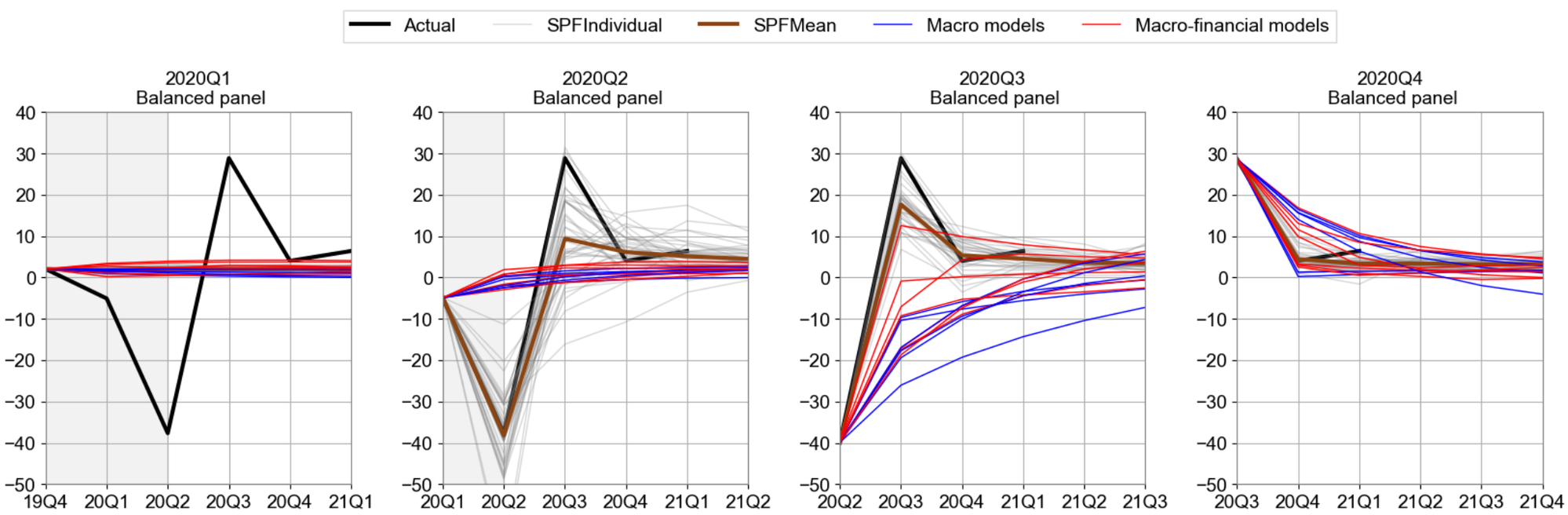

Actual
SPFIndividual
SPFMean
Macro-finance model avg
Macro model avg
2008Q3
Balanced panel
2008Q4
Balanced panel
2009Q1
Balanced panel
2009Q2
Balanced panel
6
4
2
0
−2
−4
−6
−8
08Q2 08Q3 08Q4 09Q1 09Q2 09Q3
08Q3 08Q4 09Q1 09Q2 09Q3 09Q4
08Q4 09Q1 09Q2 09Q3 09Q4 10Q1
09Q1 09Q2 09Q3 09Q4 10Q1 10Q2


Actual
SPFIndividual
SPFMean
Macro-finance model avg
Macro model avg
2020Q1
Balanced panel
2020Q2
Balanced panel
2020Q3
Balanced panel
2020Q4
Balanced panel
40
30
20
10
0
−10
−20
−30
−40
−50
19Q4 20Q1 20Q2 20Q3 20Q4 21Q1
20Q1 20Q2 20Q3 20Q4 21Q1 21Q2
20Q2 20Q3 20Q4 21Q1 21Q2 21Q3
20Q3 20Q4 21Q1 21Q2 21Q3 21Q4

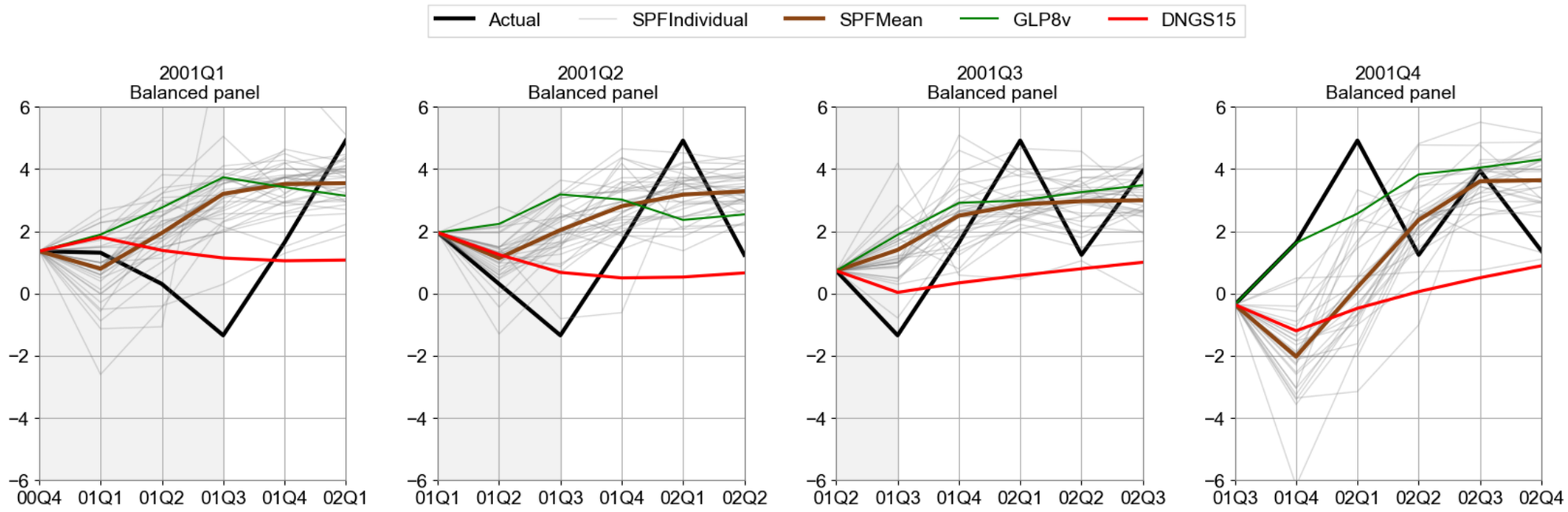
## 3 Macro Financial Model vs Macro Model, Individual models

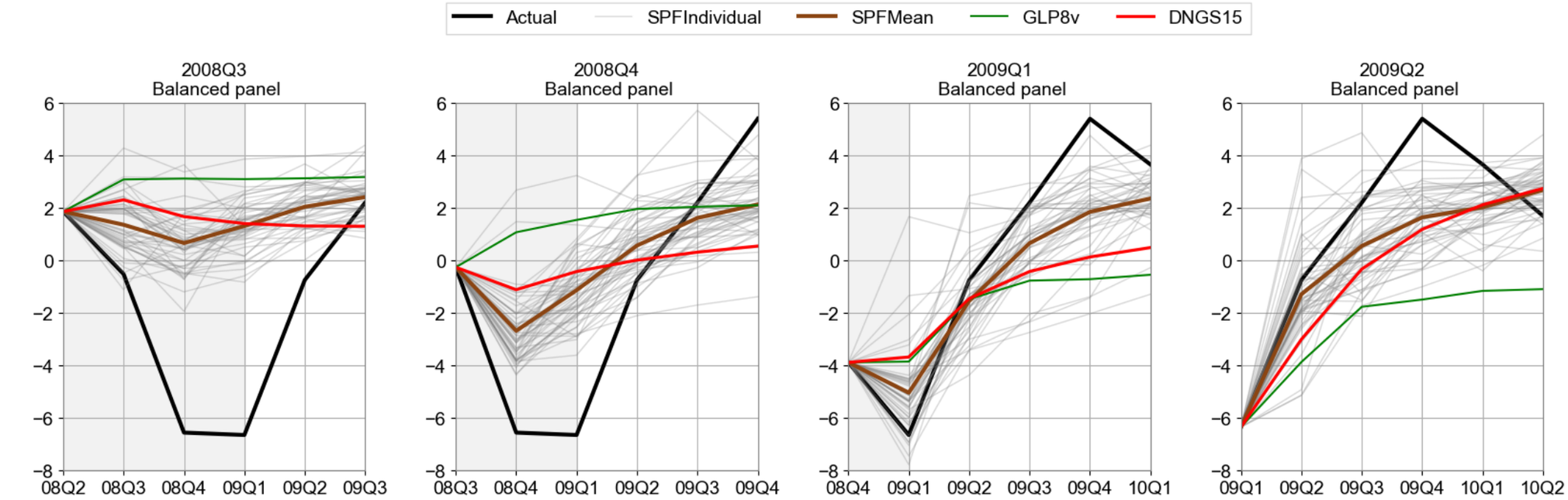


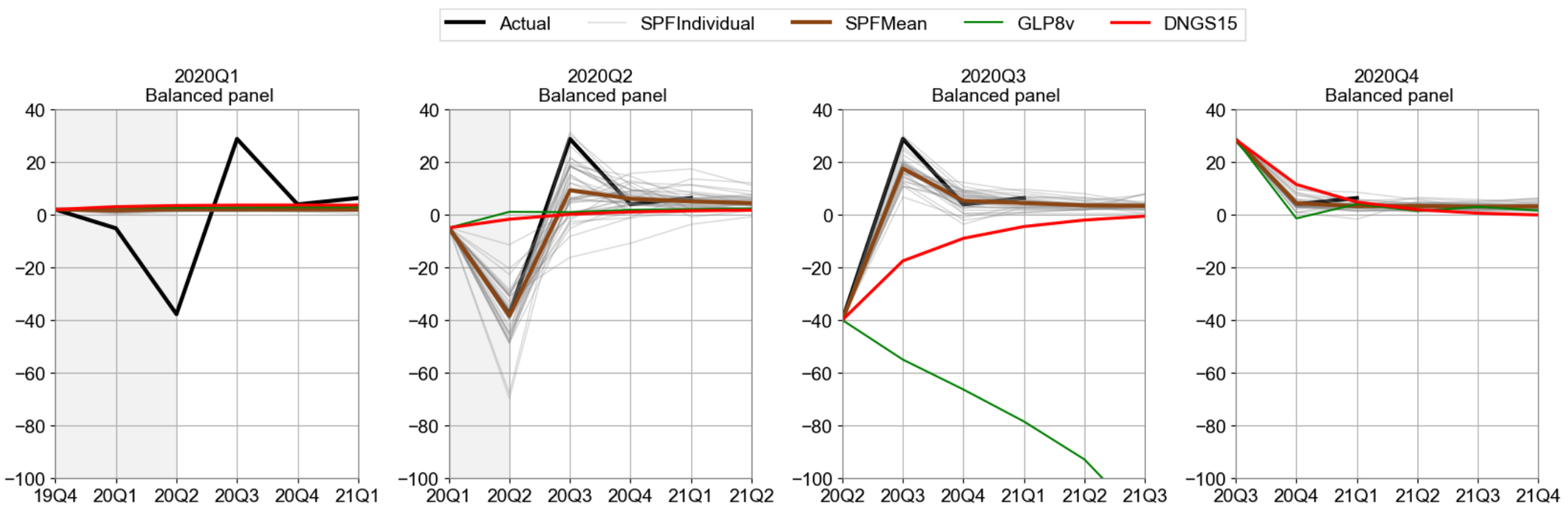

Actual
SPFIndividual
SPFMean
Macro models
Macro-financial models
2008Q3
Balanced panel
2008Q4
Balanced panel
2009Q1
Balanced panel
2009Q2
Balanced panel
6
4
2
0
−2
−4
−6
−8
08Q2 08Q3 08Q4 09Q1 09Q2 09Q3
08Q3 08Q4 09Q1 09Q2 09Q3 09Q4
08Q4 09Q1 09Q2 09Q3 09Q4 10Q1
09Q1 09Q2 09Q3 09Q4 10Q1 10Q2


Actual
SPFIndividual
SPFMean
Macro models
Macro-financial models
2020Q1
Balanced panel
2020Q2
Balanced panel
2020Q3
Balanced panel
2020Q4
Balanced panel
40
30
20
10
0
−10
−20
−30
−40
−50
19Q4 20Q1 20Q2 20Q3 20Q4 21Q1
20Q1 20Q2 20Q3 20Q4 21Q1 21Q2
20Q2 20Q3 20Q4 21Q1 21Q2 21Q3
20Q3 20Q4 21Q1 21Q2 21Q3 21Q4

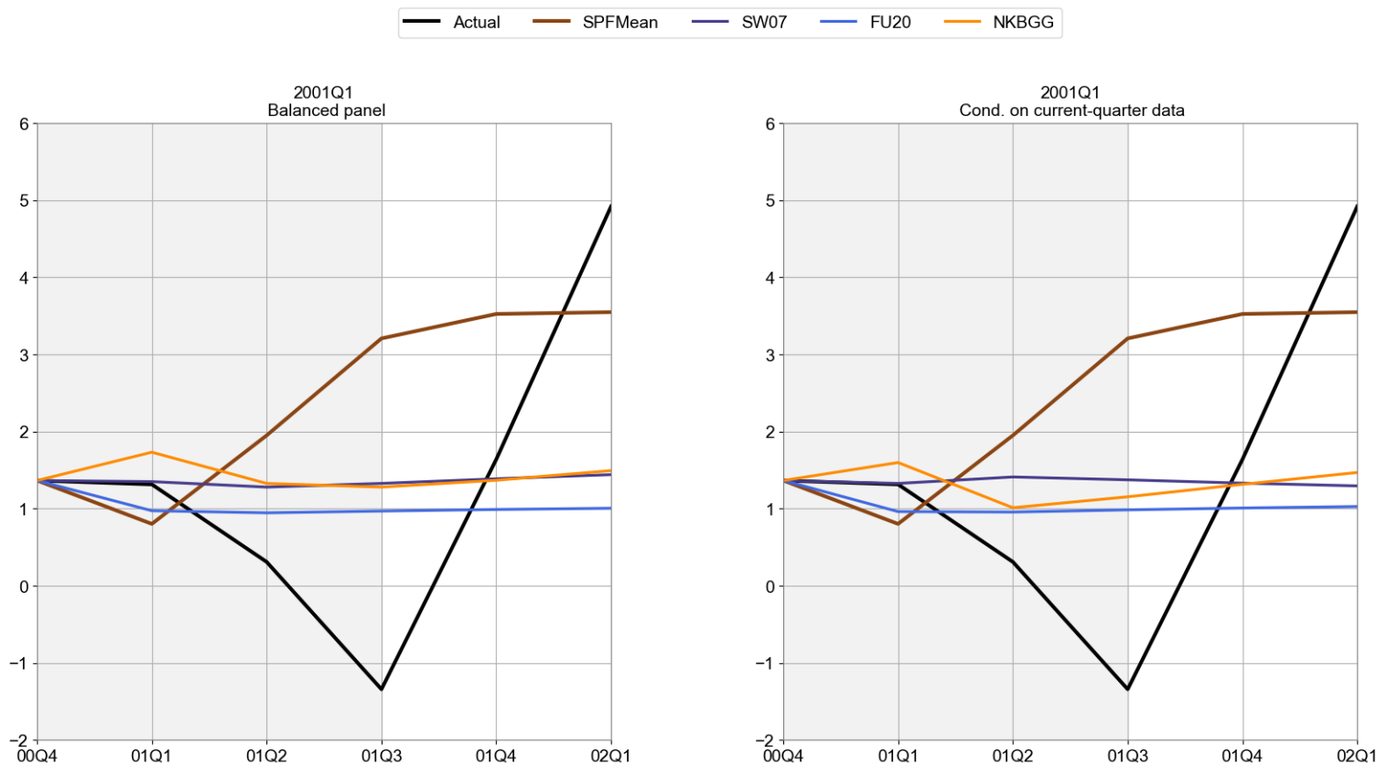
# 4 Structural Model vs BVAR, DNGS15 vs GLP8v



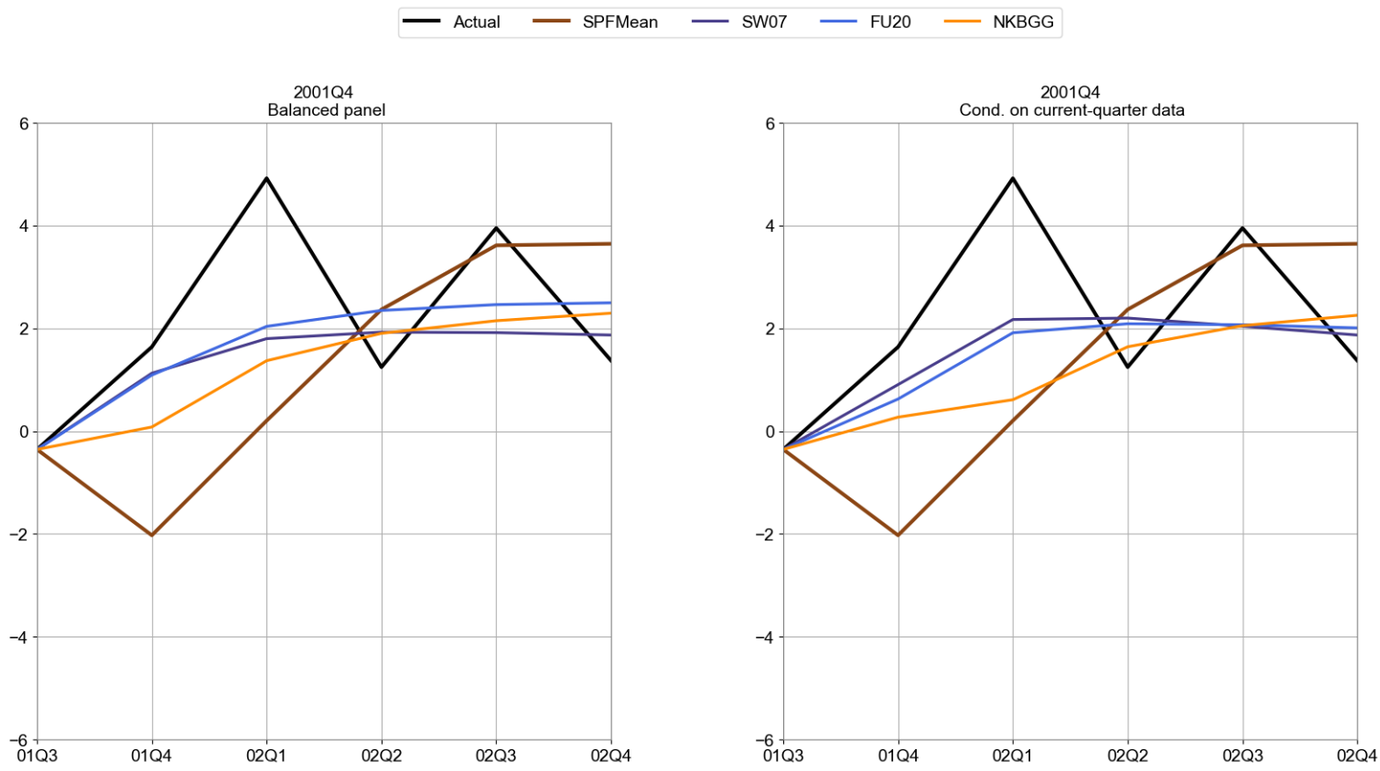

Actual
SPFIndividual
SPFMean
GLP8v
DNGS15
2008Q3
Balanced panel
2008Q4
Balanced panel
2009Q1
Balanced panel
2009Q2
Balanced panel
6
4
2
0
−2
−4
−6
−8
08Q2 08Q3 08Q4 09Q1 09Q2 09Q3
08Q3 08Q4 09Q1 09Q2 09Q3 09Q4
08Q4 09Q1 09Q2 09Q3 09Q4 10Q1
09Q1 09Q2 09Q3 09Q4 10Q1 10Q2

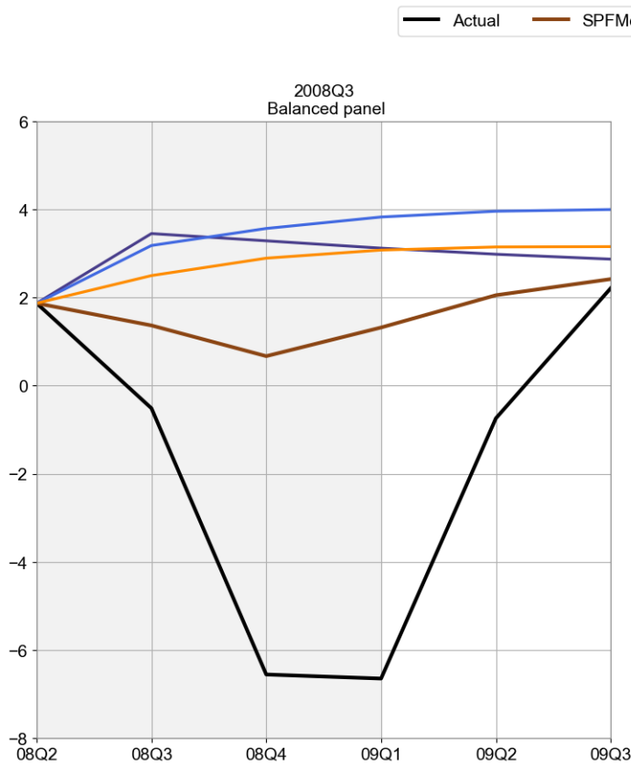

Actual
SPFIndividual
SPFMean
GLP8v
DNGS15
2020Q1
Balanced panel
2020Q2
Balanced panel
2020Q3
Balanced panel
2020Q4
Balanced panel
40
20
0
−20
−40
−60
−80
−100
19Q4 20Q1 20Q2 20Q3 20Q4 21Q1
20Q1 20Q2 20Q3 20Q4 21Q1 21Q2
20Q2 20Q3 20Q4 21Q1 21Q2 21Q3
20Q3 20Q4 21Q1 21Q2 21Q3 21Q4

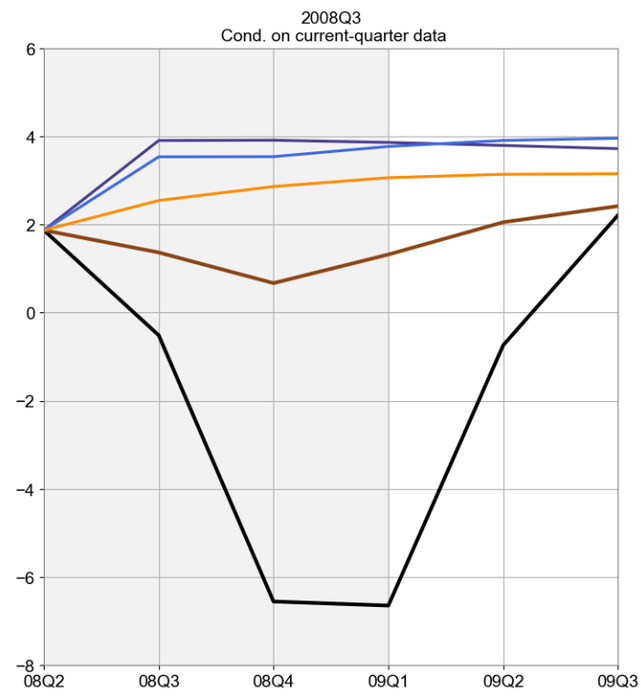
# 5 Top 3 models, by year quarter, based on RMSE

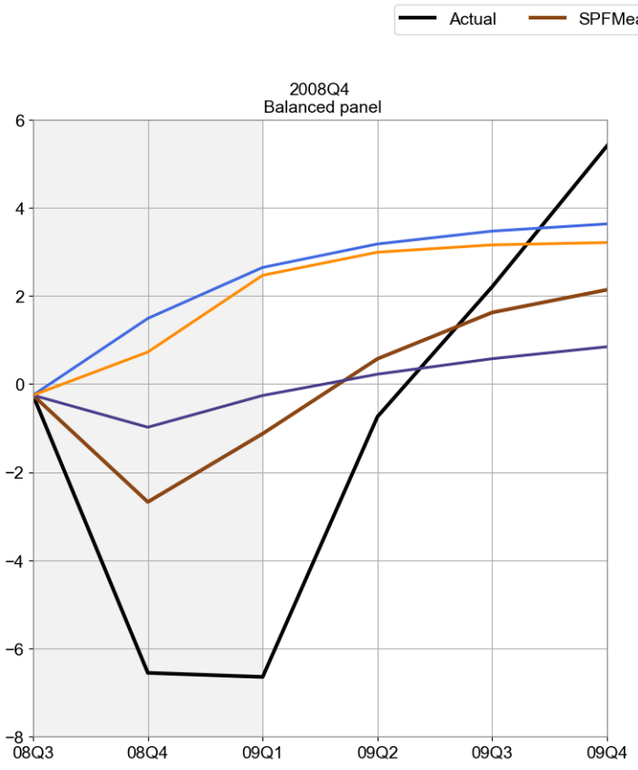


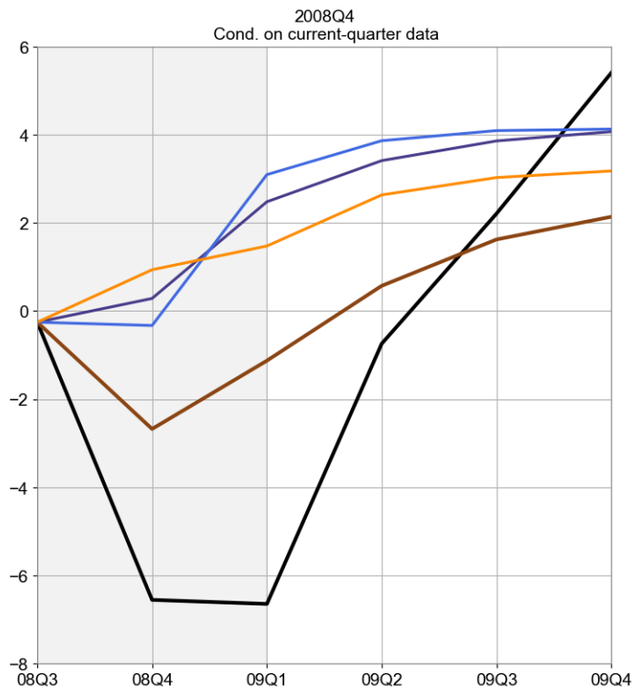
Actual
SPFMean
SW07
FU20
NKBGG
2001Q3
Balanced panel
2001Q3
Cond. on current-quarter data
6
5
4
3
2
1
0
−1
−2
01Q2
01Q3
01Q4
02Q1
02Q2
02Q3

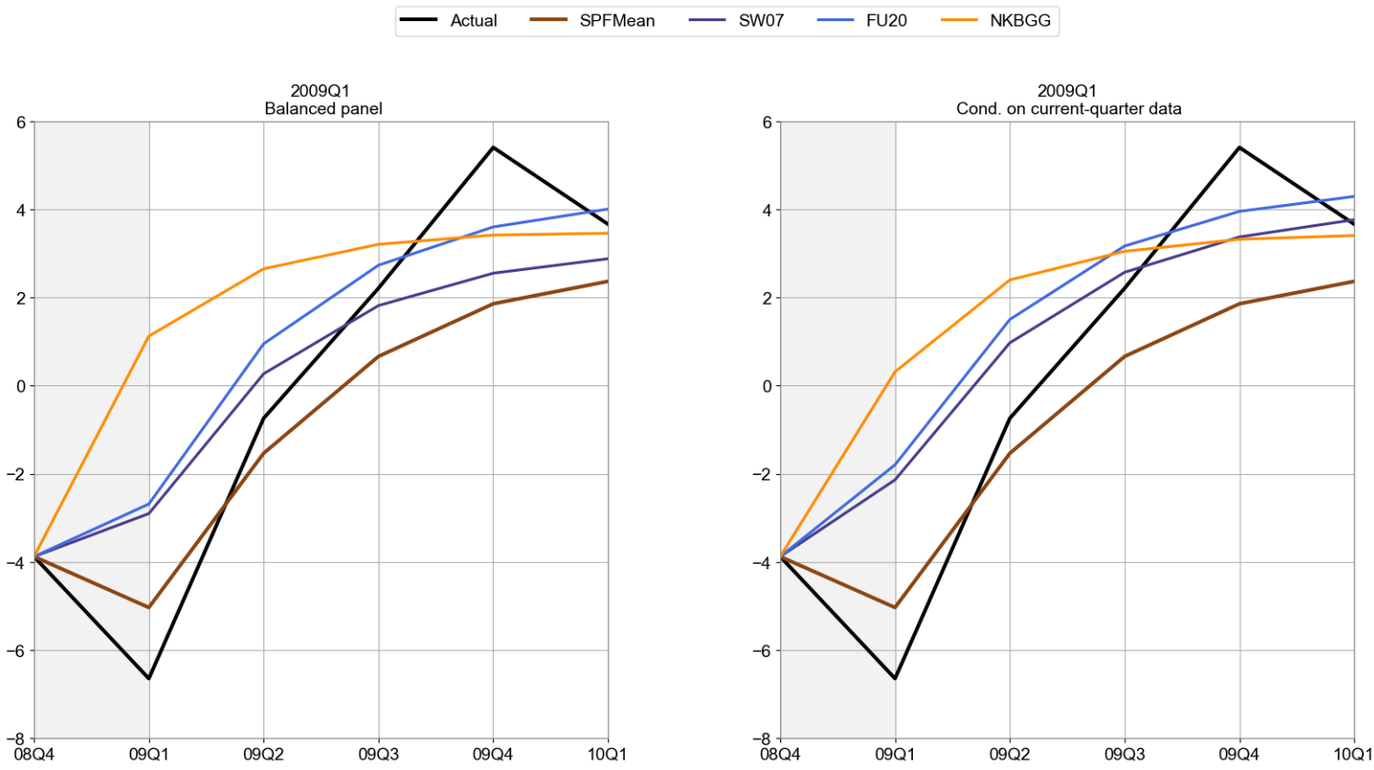

Actual
SPFMean
SW07
FU20
NKBGG
2001Q4
Balanced panel
2001Q4
Cond. on current-quarter data
6
4
2
0
−2
−4
−6
01Q3
01Q4
02Q1
02Q2
02Q3
02Q4

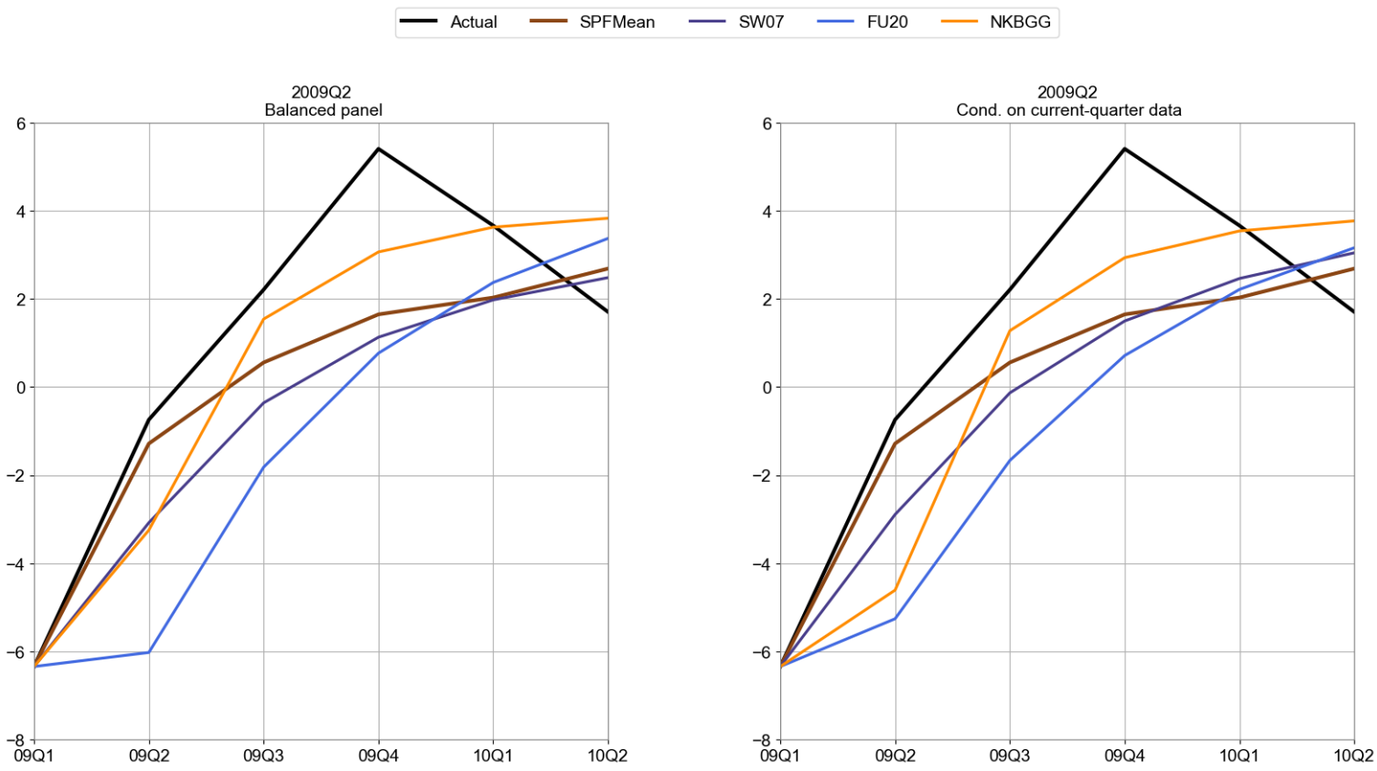

Actual
SPFMean
SW07
FU20
NKBGG
2008Q3
Balanced panel
6
4
2
0
−2
−4
−6
−8
08Q2
08Q3
08Q4
09Q1
09Q2
09Q3


2008Q3
Cond. on current-quarter data
6
4
2
0
−2
−4
−6
−8
08Q2
08Q3
08Q4
09Q1
09Q2
09Q3

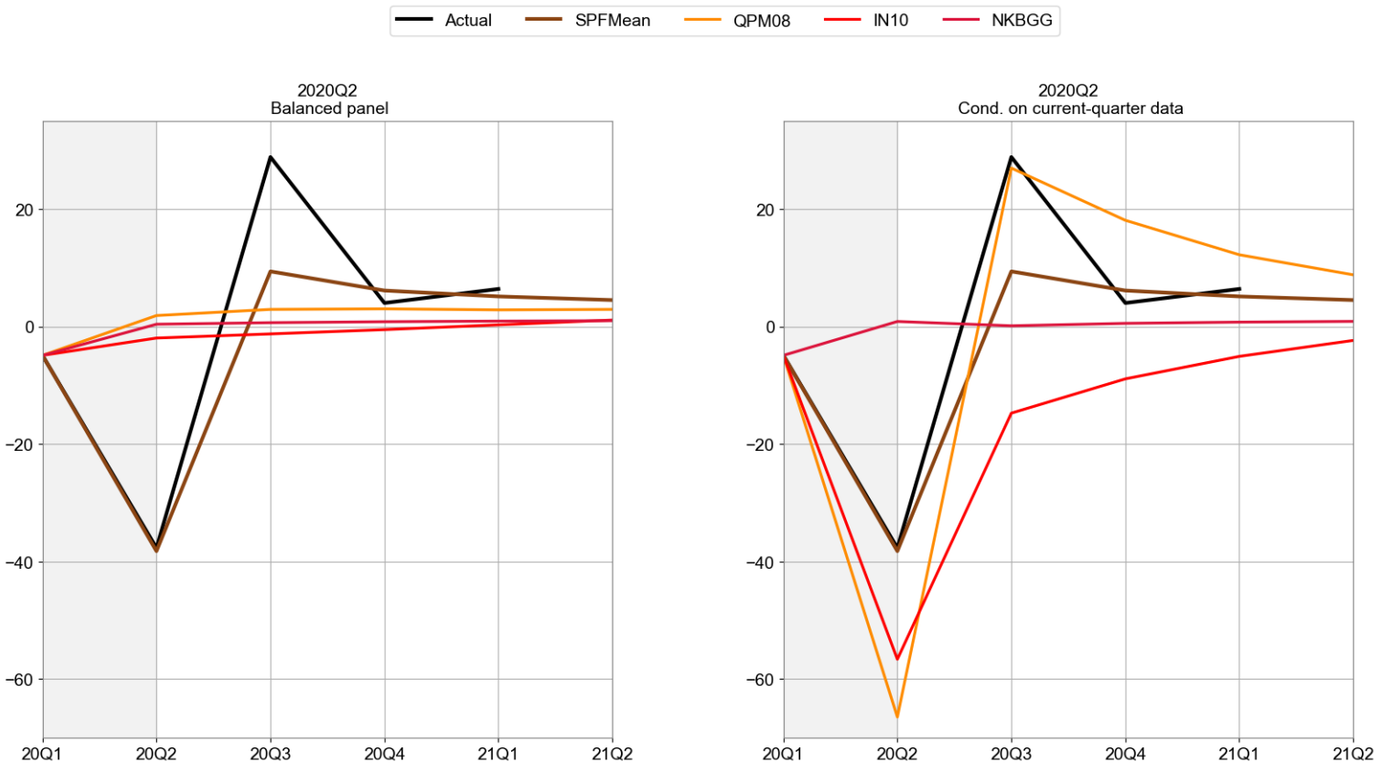

Actual
SPFMean
SW07
FU20
NKBGG
2008Q4
Balanced panel
6
4
2
0
−2
−4
−6
−8
08Q3
08Q4
09Q1
09Q2
09Q3
09Q4

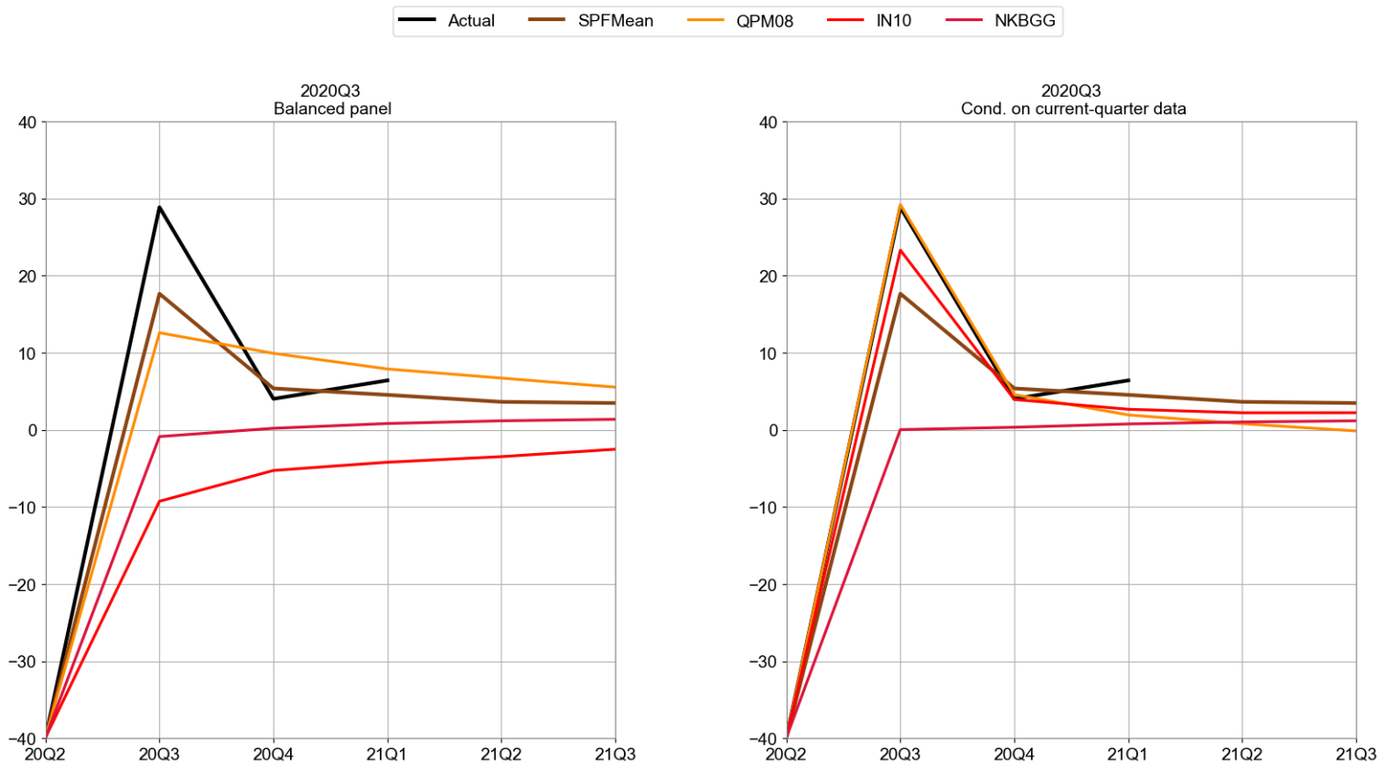

2008Q4
Cond. on current-quarter data
6
4
2
0
−2
−4
−6
−8
08Q3
08Q4
09Q1
09Q2
09Q3
09Q4

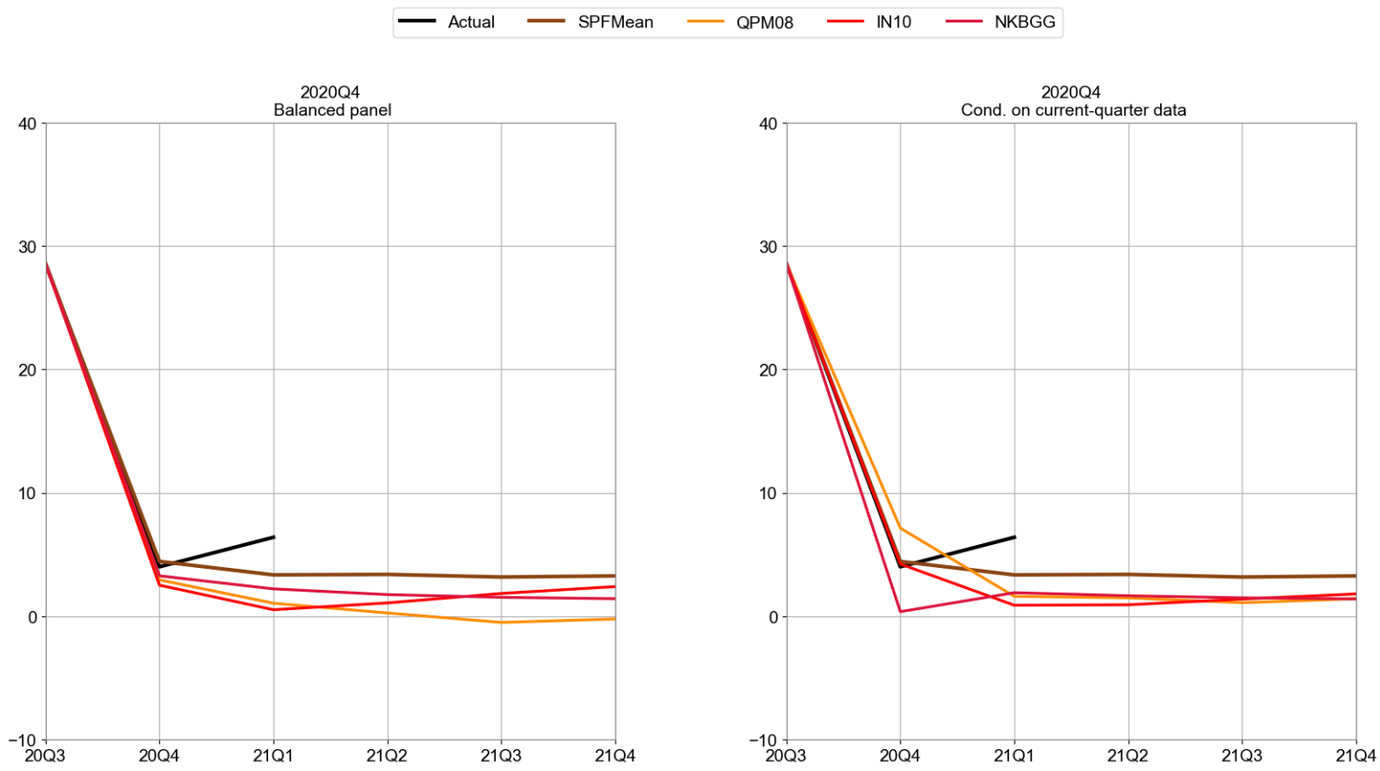

Actual
SPFMean
SW07
FU20
NKBGG
2009Q1
Balanced panel
2009Q1
Cond. on current-quarter data
6
4
2
0
−2
−4
−6
−8
08Q4
09Q1
09Q2
09Q3
09Q4
10Q1


Actual
SPFMean
SW07
FU20
NKBGG
2009Q2
Balanced panel
2009Q2
Cond. on current-quarter data
6
4
2
0
−2
−4
−6
−8
09Q1
09Q2
09Q3
09Q4
10Q1
10Q2

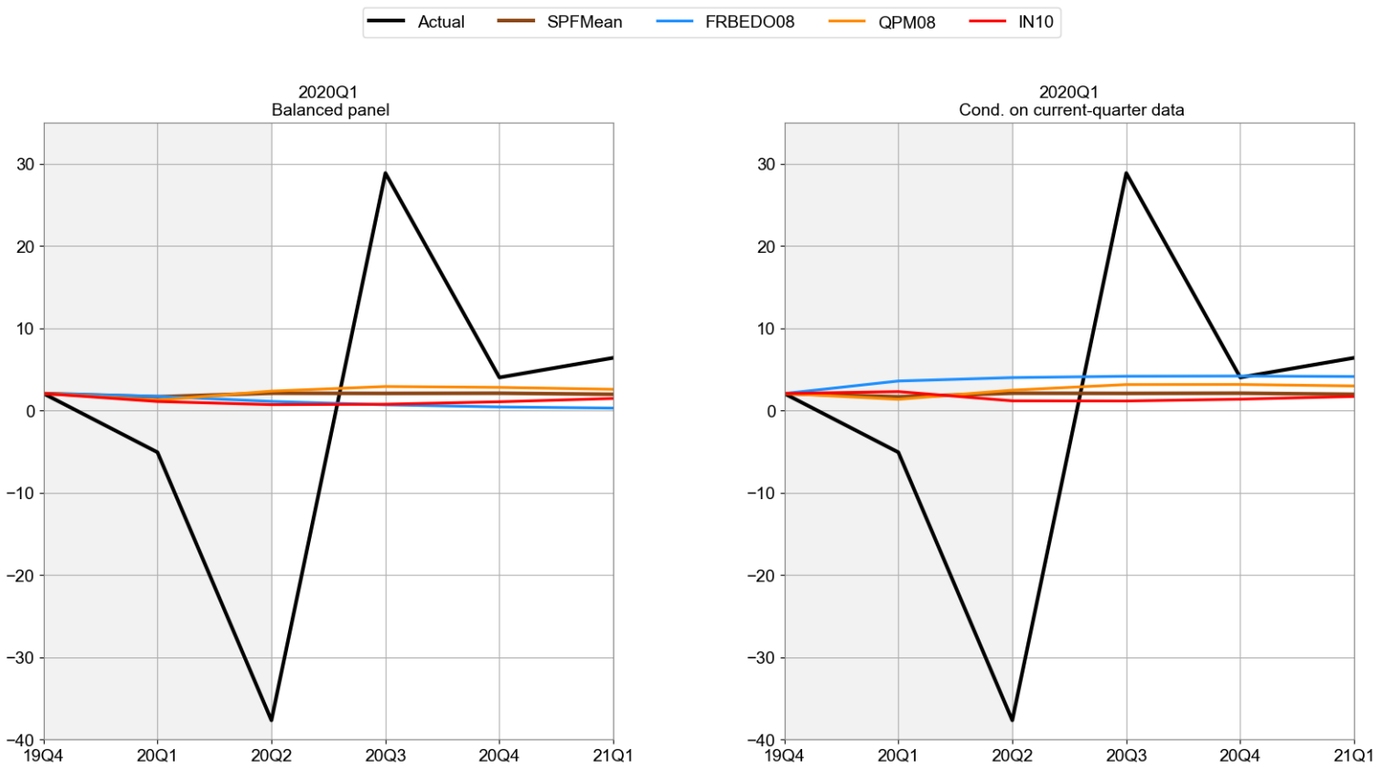
# 6 Top 3 models, current corona recession, based on RMSE on nowcast only, for scenario 1

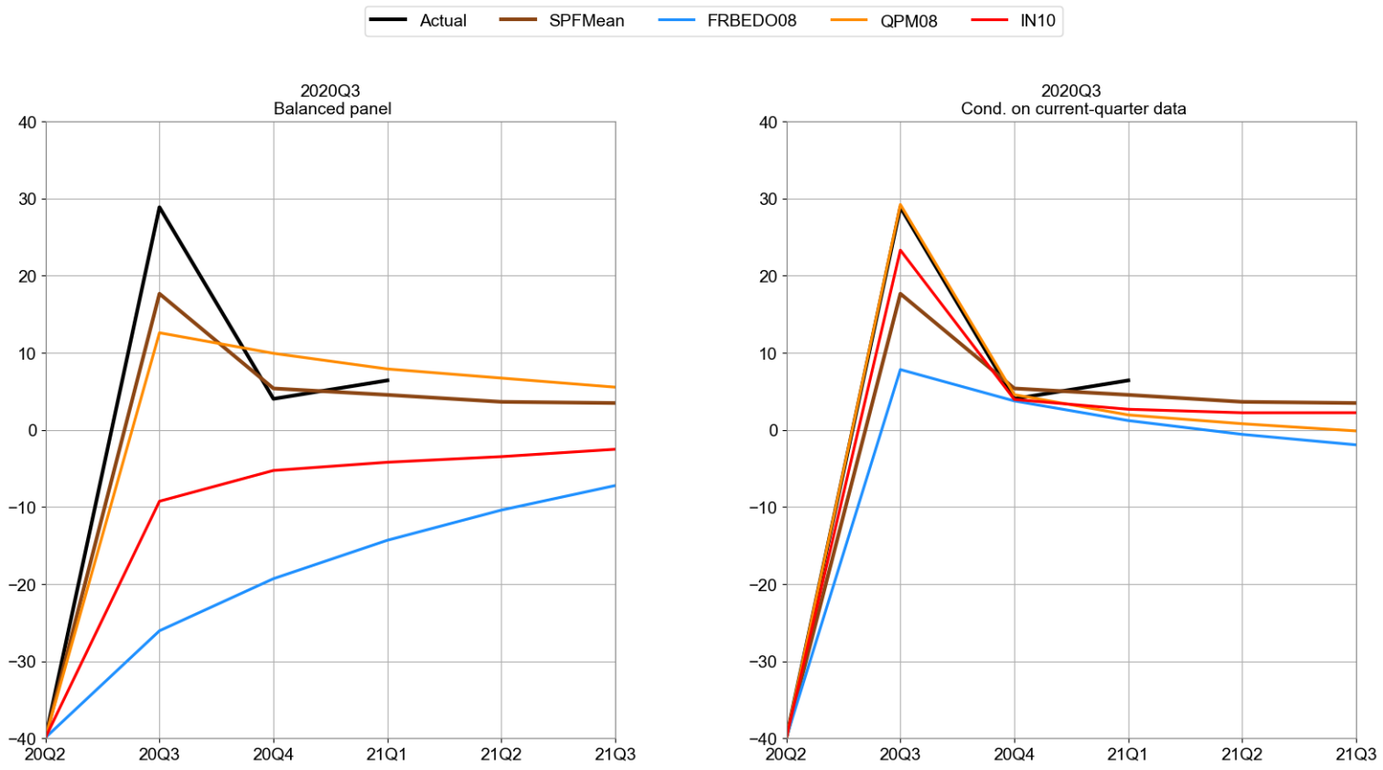


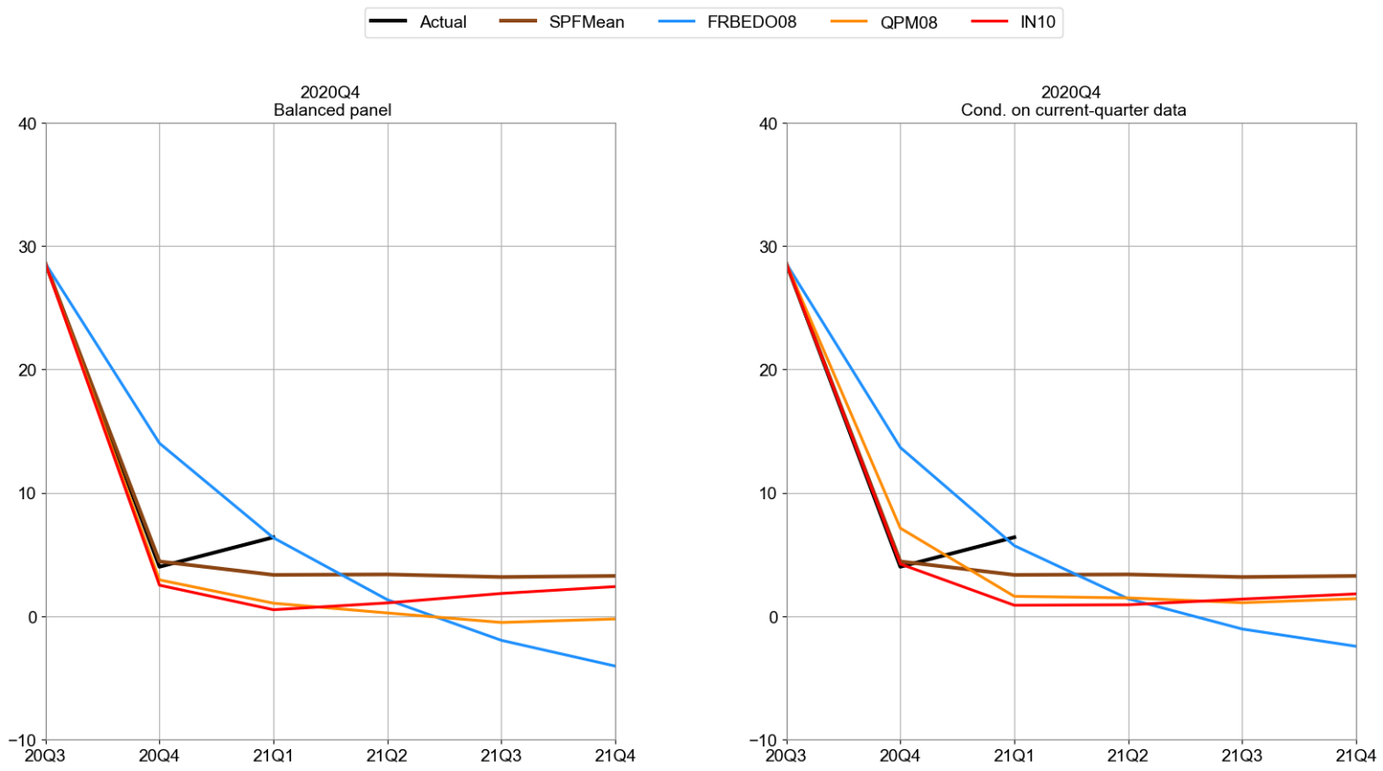

Actual
SPFMean
QPM08
IN10
NKBGG
2020Q3
Balanced panel
2020Q3
Cond. on current-quarter data
40
30
20
10
0
−10
−20
−30
−40
20Q2
20Q3
20Q4
21Q1
21Q2
21Q3


Actual
SPFMean
QPM08
IN10
NKBGG
2020Q4
Balanced panel
2020Q4
Cond. on current-quarter data
40
30
20
10
0
−10
20Q3
20Q4
21Q1
21Q2
21Q3
21Q4

# 7 Top 3 models, current corona recession, based on RMSE on nowcast only, for scenario 3




Actual
SPFMean
FRBEDO08
QPM08
IN10
2020Q3
Balanced panel
2020Q3
Cond. on current-quarter data
40
30
20
10
0
−10
−20
−30
−40
20Q2
20Q3
20Q4
21Q1
21Q2
21Q3


Actual
SPFMean
FRBEDO08
QPM08
IN10
2020Q4
Balanced panel
2020Q4
Cond. on current-quarter data
40
30
20
10
0
−10
20Q3
20Q4
21Q1
21Q2
21Q3
21Q4