fdm ferra data models

Forecast RSA GDP

- Background

  • 2020Q1 GDP released tomorrow

- Goal

  • Prepare a simple data driven forecast

- Use built in ARIMA functionality

- RHS

  • ln(GDP)

- LHS

  • ARIMA(1, 1, 1)

  • ARIMA(2, 1, 2)

  • ARIMA(1, 1, 1)(1, 1, 1)[4]

  • ARIMA(2, 1, 2)(2, 1, 2)[4]

- Look at range, AIC, parameter stability

NO constant	QOQ Annualised	AIC	Stability
1, 1, 1	-0.5%	-798	stable
2, 1, 2	-0.3%	-789	stable, >1coef
1, 1, 1 // 1, 1, 1	-3.0%	-723	stable
2, 1, 2 // 2, 1, 2	-1.8%	-706	less stable

Constant	QOQ Annualised	AIC	Stability
1, 1, 1	0.4%	-794	stable
2, 1, 2	0.4%	-790	stable
1, 1, 1 // 1, 1, 1	-3.1%	-722	stable
2, 1, 2 // 2, 1, 2	-1.7%	-707	took EXTREMELY long CG did not converge less stable