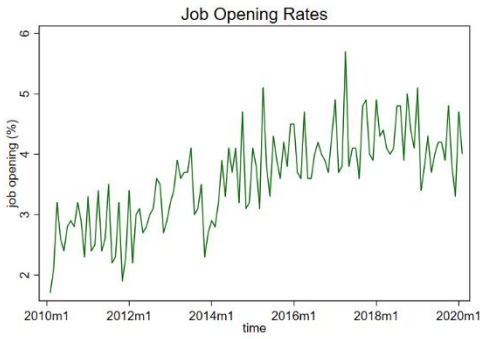
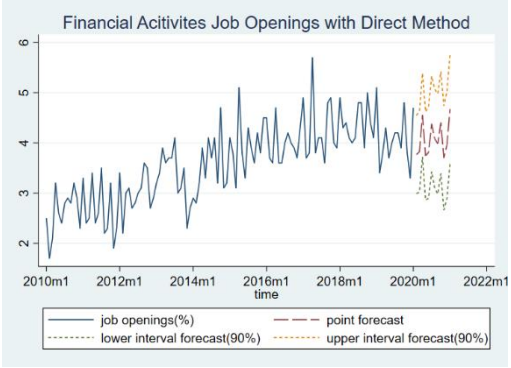
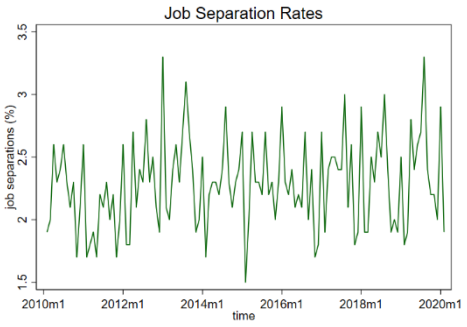
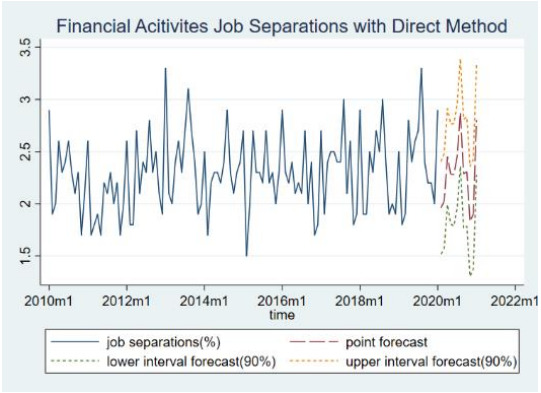





```
. list time point lower upper if time>=tm(2020m2)
```

	time	point	lower	upper
231.	2020m2	3.767972	2.988396	4.547547
232.	2020m3	3.822261	3.02035	4.624172
233.	2020m4	4.556118	3.722154	5.390081
234.	2020m5	3.74002	2.859895	4.620144
235.	2020m6	3.812964	2.898472	4.727456
236.	2020m7	4.379835	3.430357	5.329313
237.	2020m8	4.084233	3.098217	5.070248
238.	2020m9	3.981671	2.982346	4.980995
239.	2020m10	4.405355	3.389627	5.421083
240.	2020m11	3.69846	2.659898	4.737022
241.	2020m12	3.964253	2.896935	5.031571
242.	2021m1	4.675307	3.588608	5.762007





	time	point	lower	upper
231.	2020m2	1.960529	1.516892	2.404166
232.	2020m3	2.025403	1.568067	2.482739
233.	2020m4	2.452746	1.992119	2.913373
234.	2020m5	2.284244	1.804806	2.763682
235.	2020m6	2.279036	1.788485	2.769587
236.	2020m7	2.454086	1.954823	2.95335
237.	2020m8	2.875263	2.360911	3.389614
238.	2020m9	2.287399	1.764476	2.810322
239.	2020m10	2.308717	1.785624	2.831809
240.	2020m11	1.830856	1.303155	2.358557
241.	2020m12	1.899274	1.372662	2.425886
242.	2021m1	2.801872	2.274552	3.329193

After comparing our forecasting results to the actual data, our forecasts of job separation and job opening rates for February 2020 for Financial Activities are pretty accurate. As shown in above figures, both of the actual data fall within our forecast intervals. Since the time series plots are hard to observe, the third figure on each line shows a list of our point and interval forecasts. According to Bureau of Labor Statistics, the actual job separation rate for February 2020 is 1.9% which is inside the forecast interval of [1.516892, 2.404166] and is very close to the point forecast of 1.960529. The actual job opening rate for February 2020 is 4.0% which is inside the forecast interval of [2.988396, 4.547547] and is close to the point forecast of 3.767972. As a result, under regular circumstances, a decision maker would have been wise to follow our forecast, and we will not change our model even if we knew the actual realization in advance. With special incidences like the current pandemic outbreak, the model needs to be modified based on the cases.

As mentioned in the second report, we were expecting the actual job opening rate to be lower than the point forecast (still inside the forecast interval) and the actual job separation rate to be higher than the point forecast (still inside the forecast interval) due to the COVID-19. However, the actual job opening and separation rates are not affected for February 2020. We think this is because in February 2020, US was not affected much by COVID-19 because the infected rate was very low, and people believed that there would not be serious infection in the future in the US. However, as the pandemic started to get very serious in March and forced quarantines started to be applied to states, especially the lockdown in New York in March, we believe the job opening and separation rates would be out of the forecast interval from March 2020, more specifically, much higher job separation rates and much lower job opening rates. To improve this project or forecasting process, we can include other variables like wages by occupations or earnings by industry and try VAR model to better capture the trend and patterns.