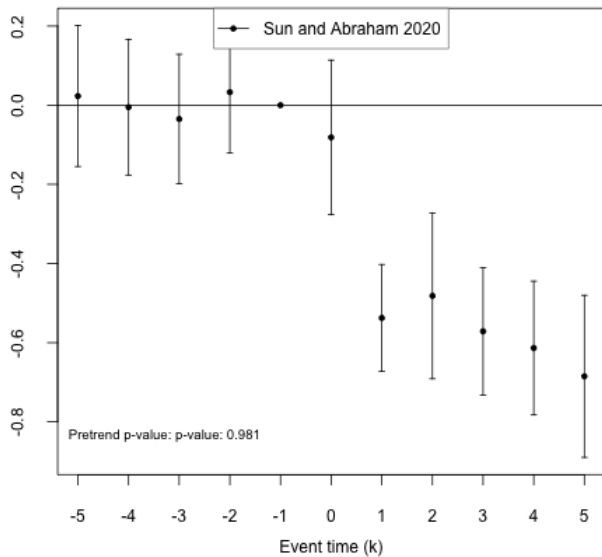
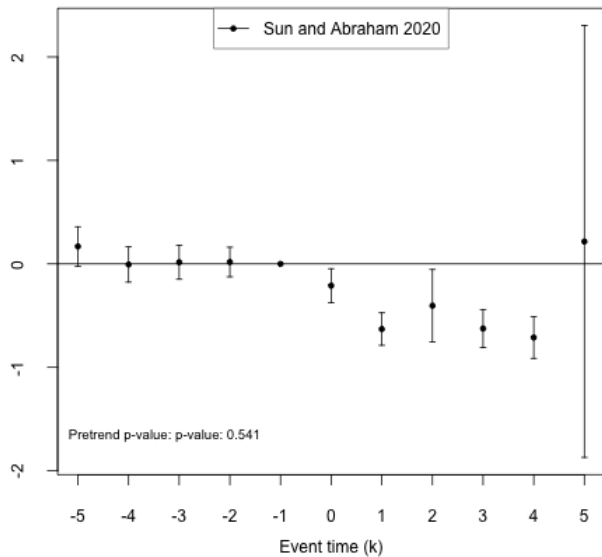


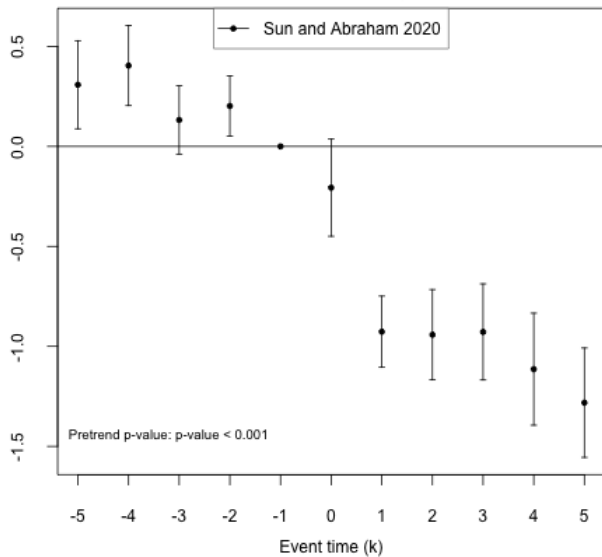
**major\_minor\_release\_count**



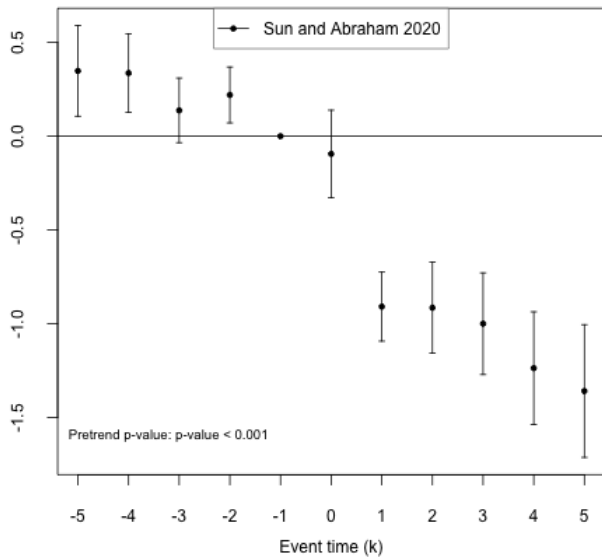
**overall\_new\_release\_count**



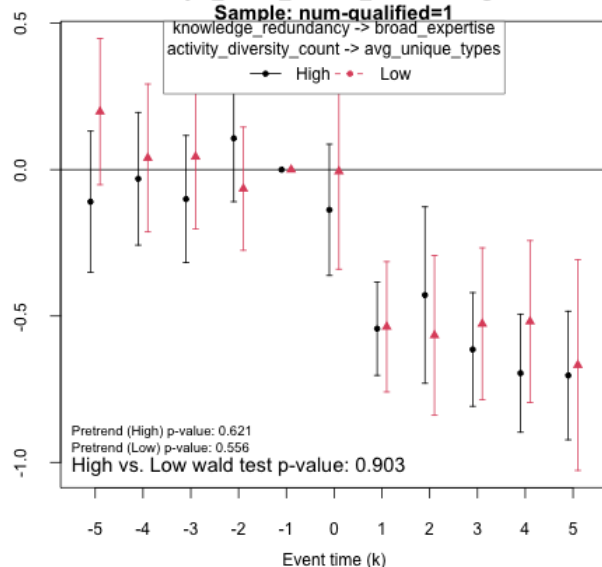
**pull\_request\_merged**



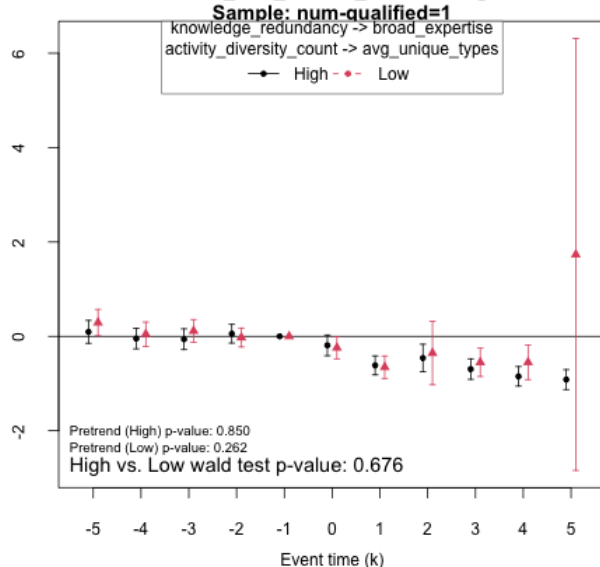
**pull\_request\_opened**



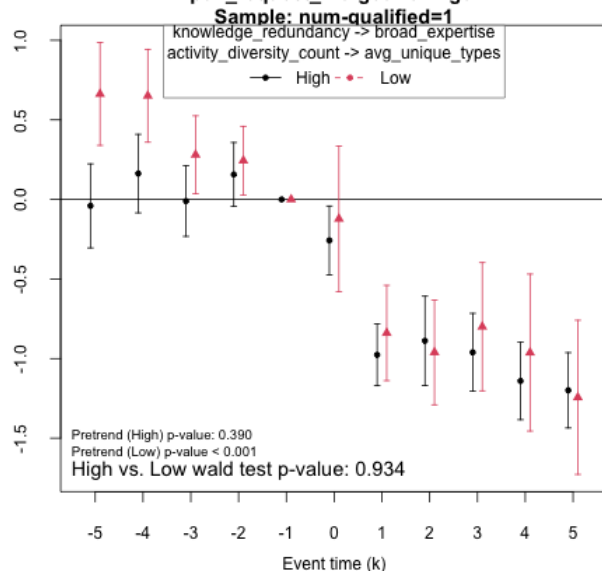
major\_minor\_release\_count rolling5



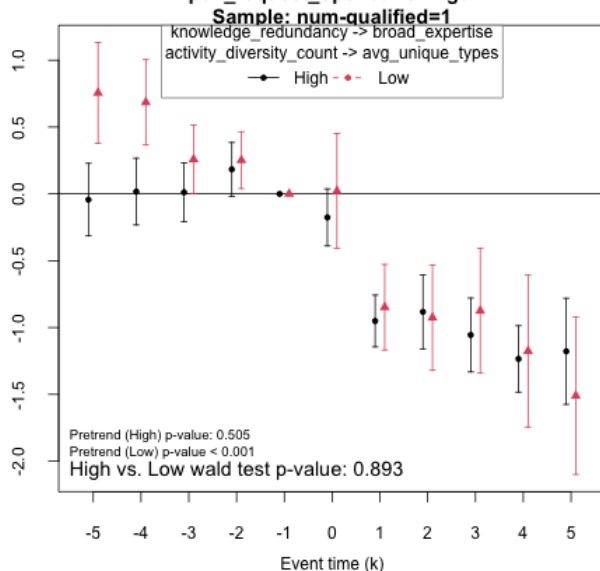
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

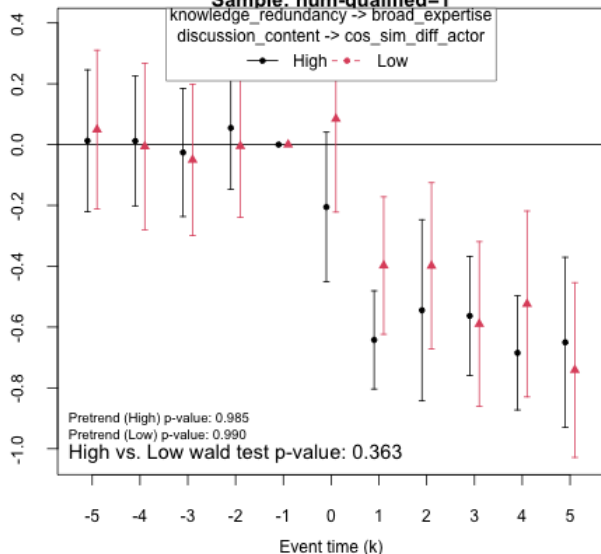


major\_minor\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -> broad\_expertise  
discussion\_content -> cos\_sim\_diff\_actor

—●— High —●— Low

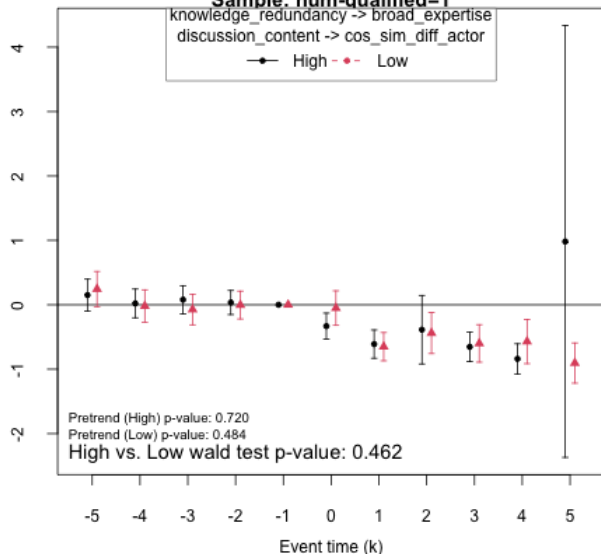


overall\_new\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -> broad\_expertise  
discussion\_content -> cos\_sim\_diff\_actor

—●— High —●— Low

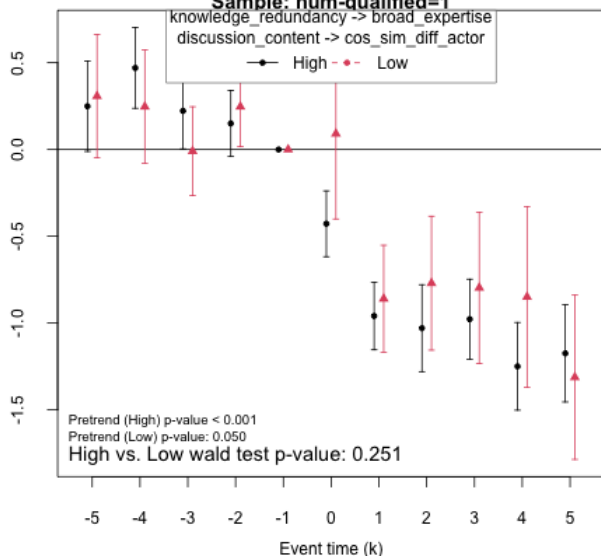


pull\_request\_merged rolling5

Sample: num-qualified=1

knowledge\_redundancy -> broad\_expertise  
discussion\_content -> cos\_sim\_diff\_actor

—●— High —●— Low

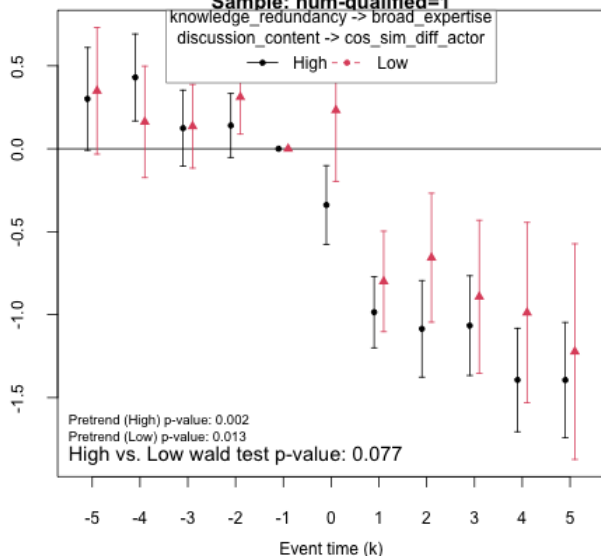


pull\_request\_opened rolling5

Sample: num-qualified=1

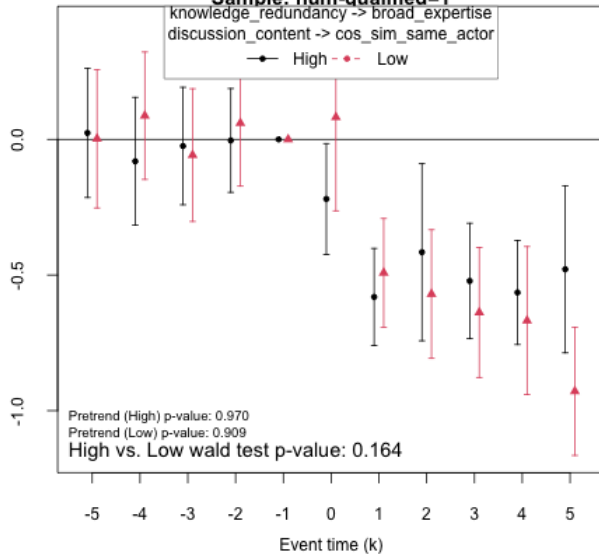
knowledge\_redundancy -> broad\_expertise  
discussion\_content -> cos\_sim\_diff\_actor

—●— High —●— Low



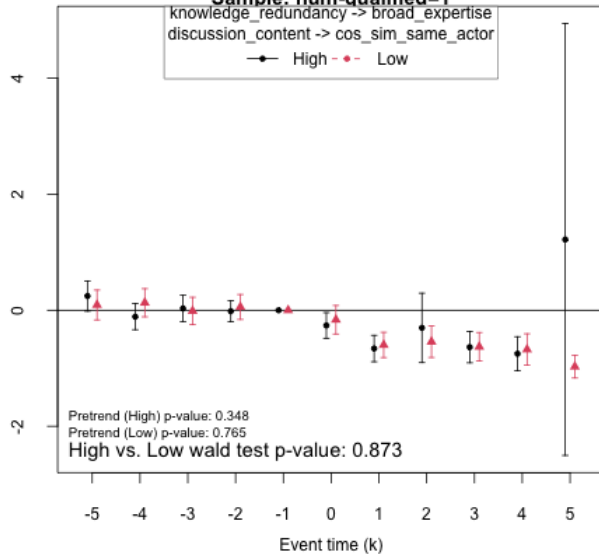
major\_minor\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy->broad\_expertise  
discussion\_content->cos\_sim\_same\_actor  
—●— High —●— Low

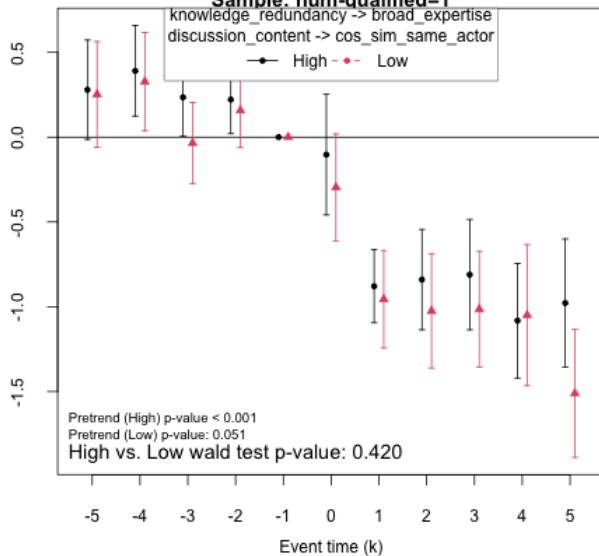
overall\_new\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy->broad\_expertise  
discussion\_content->cos\_sim\_same\_actor  
—●— High —●— Low

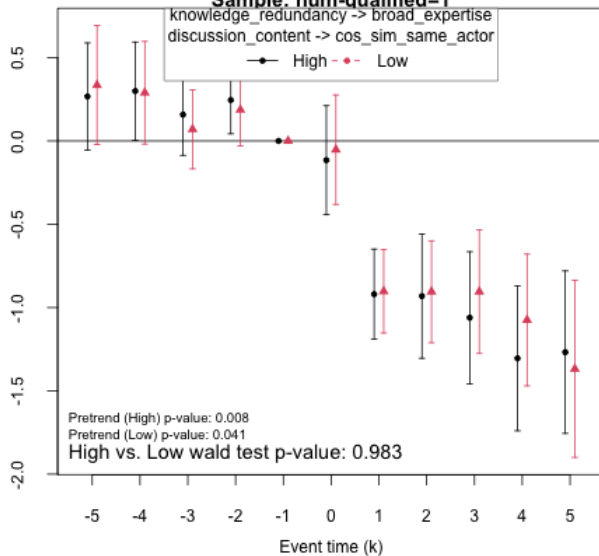
pull\_request\_merged rolling5

Sample: num-qualified=1

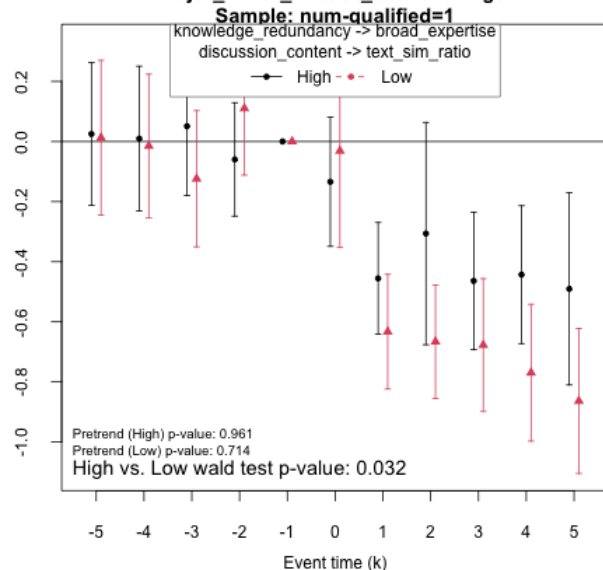
knowledge\_redundancy->broad\_expertise  
discussion\_content->cos\_sim\_same\_actor  
—●— High —●— Low

pull\_request\_opened rolling5

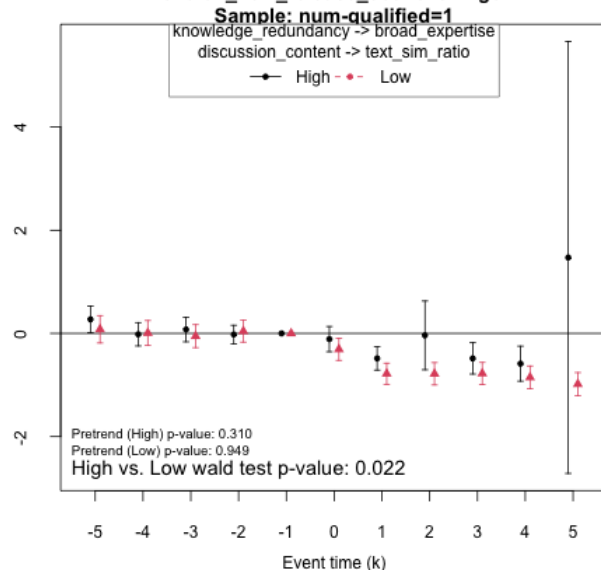
Sample: num-qualified=1

knowledge\_redundancy->broad\_expertise  
discussion\_content->cos\_sim\_same\_actor  
—●— High —●— Low

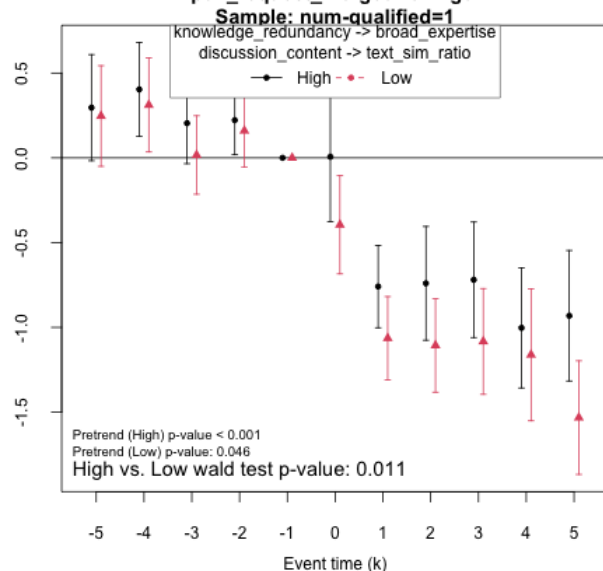
major\_minor\_release\_count rolling5



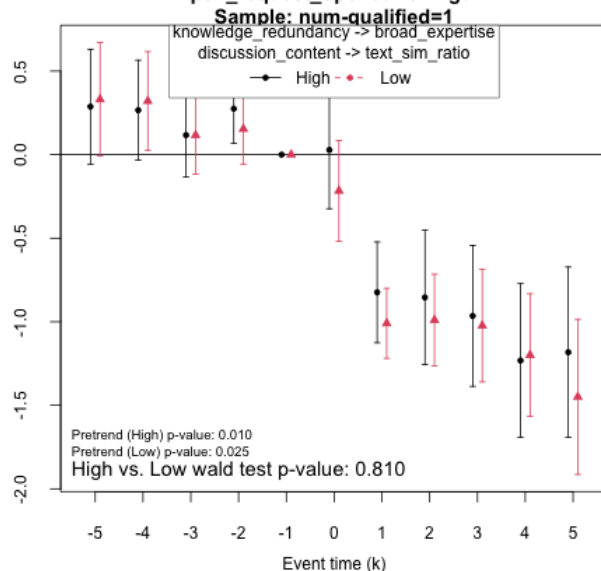
overall\_new\_release\_count rolling5



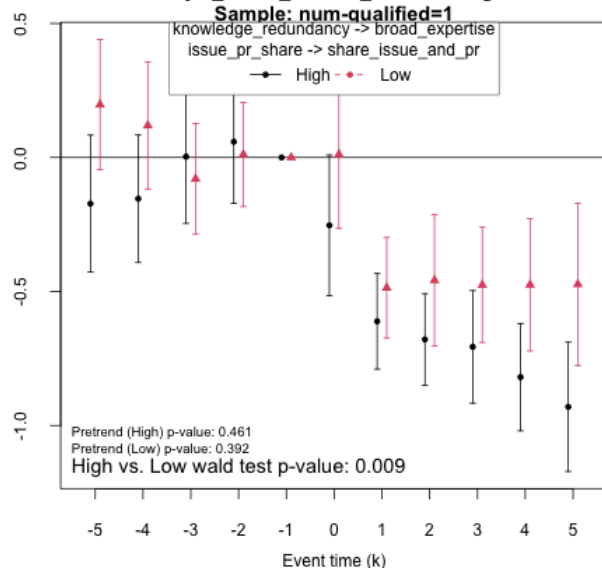
pull\_request\_merged rolling5



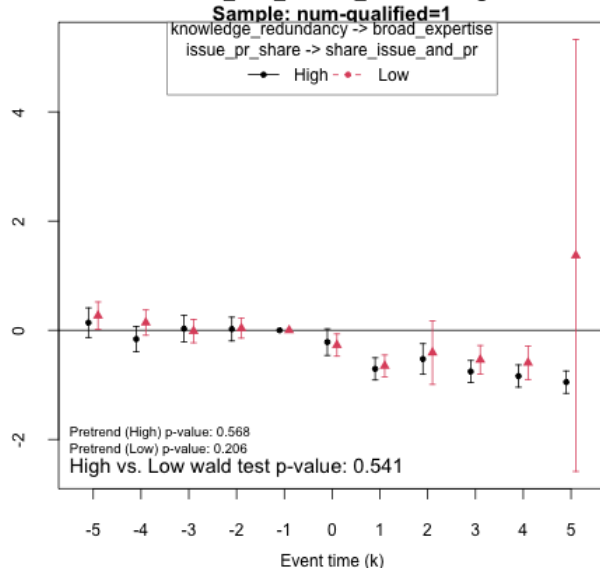
pull\_request\_opened rolling5



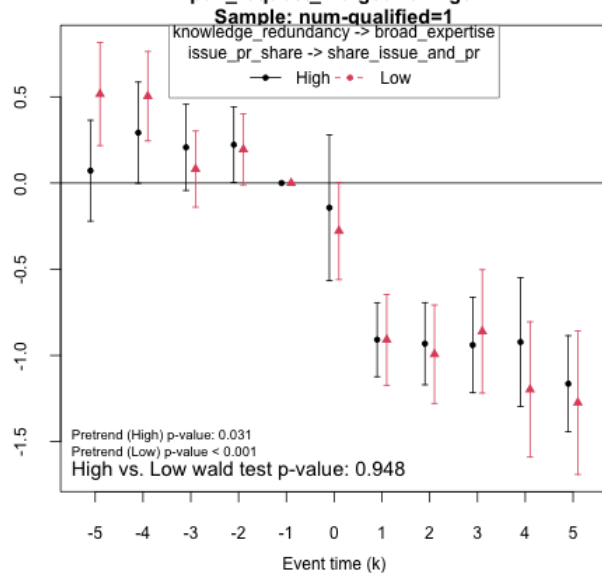
major\_minor\_release\_count rolling5



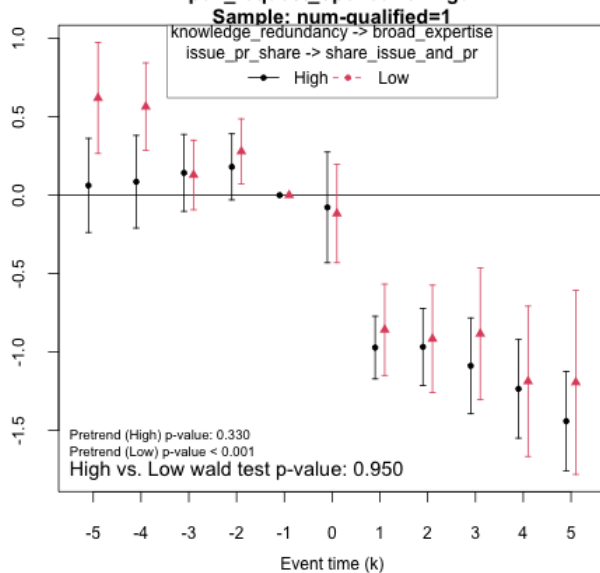
overall\_new\_release\_count rolling5



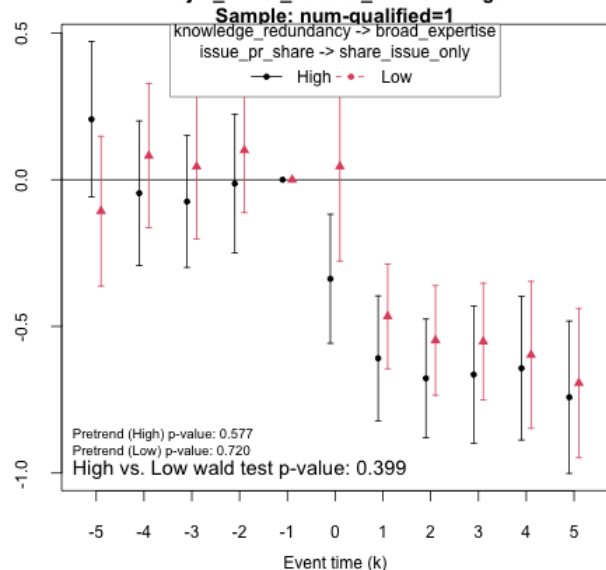
pull\_request\_merged rolling5



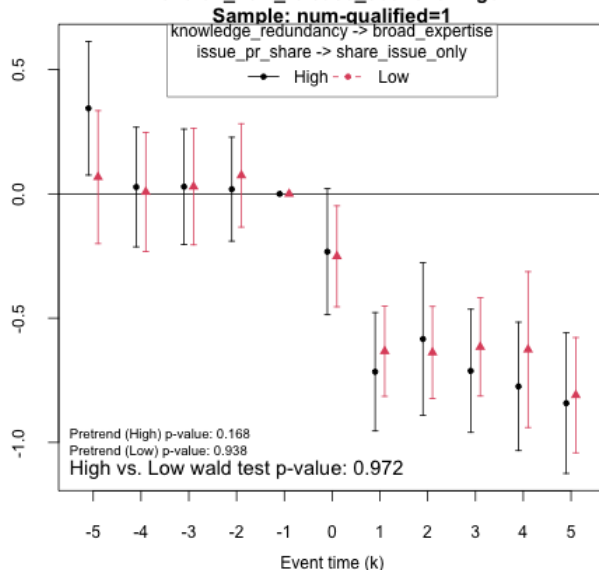
pull\_request\_opened rolling5



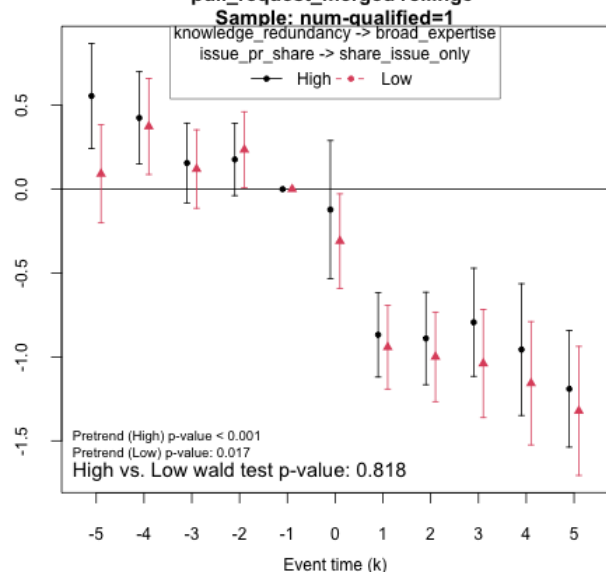
major\_minor\_release\_count rolling5



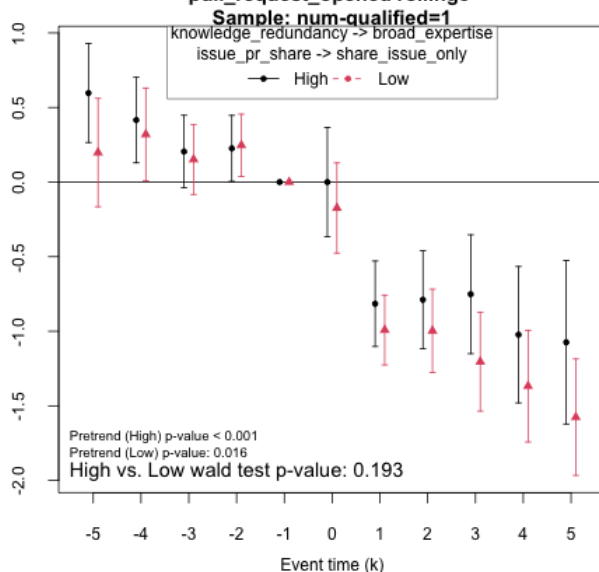
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5



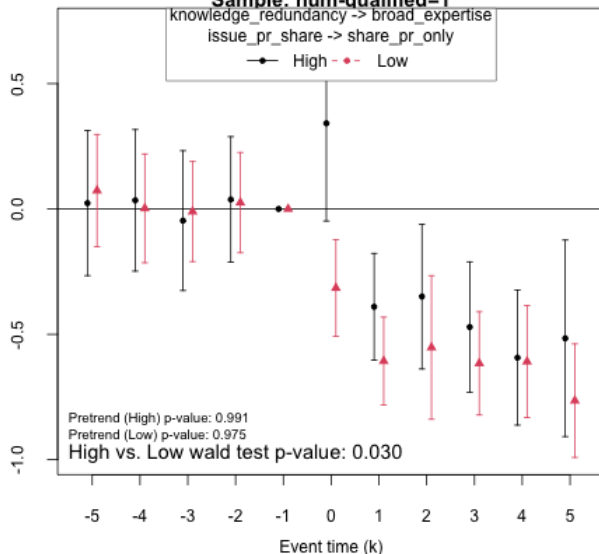
major\_minor\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; broad\_expertise

issue\_pr\_share -&gt; share\_pr\_only

—●— High —●— Low



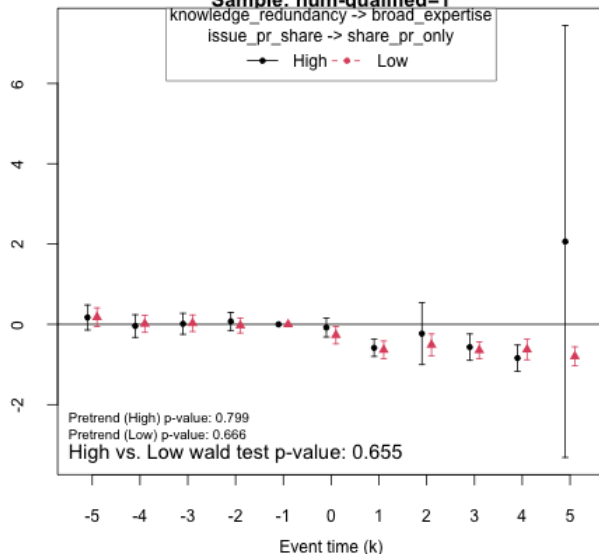
overall\_new\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; broad\_expertise

issue\_pr\_share -&gt; share\_pr\_only

—●— High —●— Low



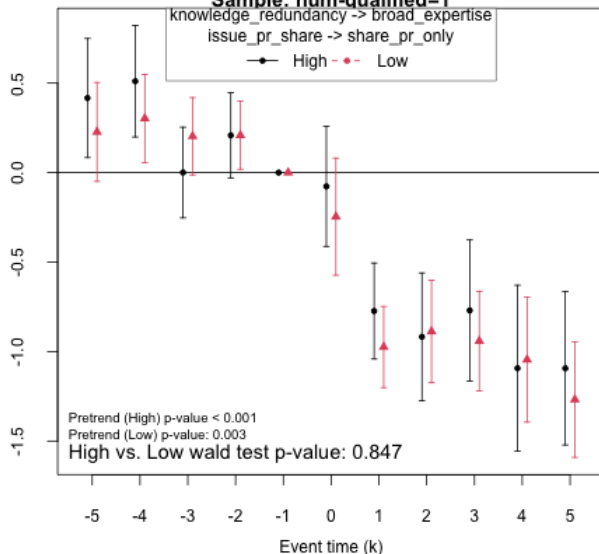
pull\_request\_merged rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; broad\_expertise

issue\_pr\_share -&gt; share\_pr\_only

—●— High —●— Low



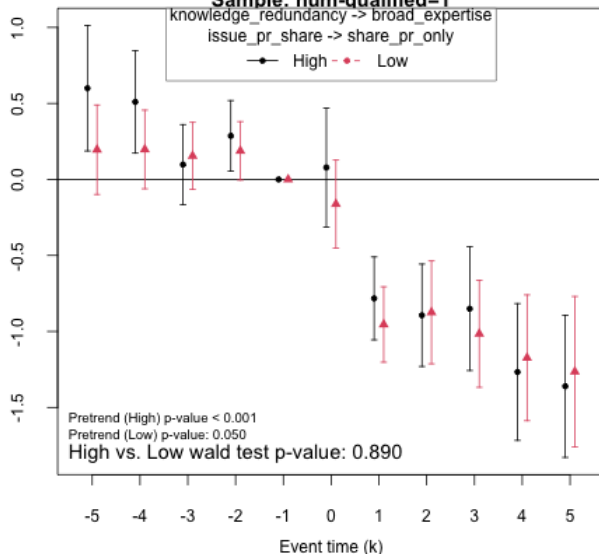
pull\_request\_opened rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; broad\_expertise

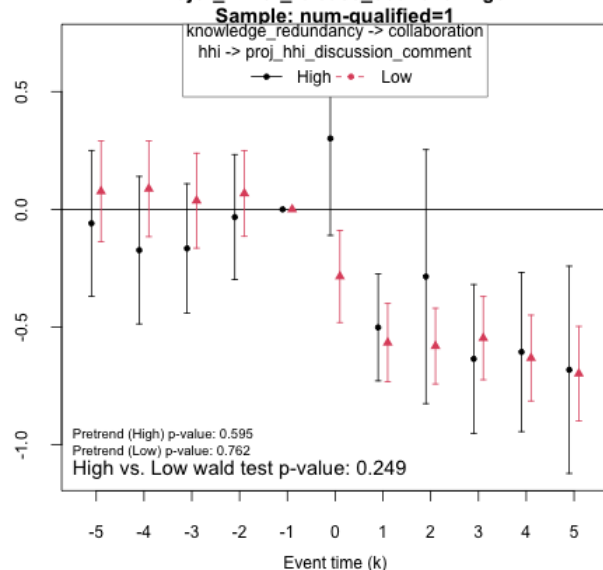
issue\_pr\_share -&gt; share\_pr\_only

—●— High —●— Low

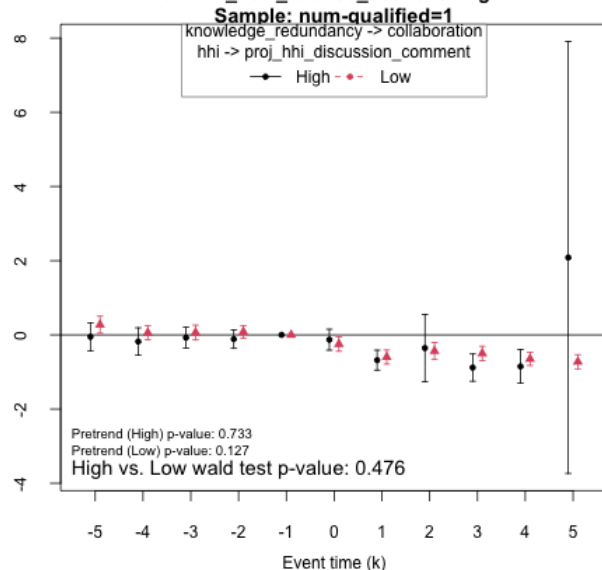




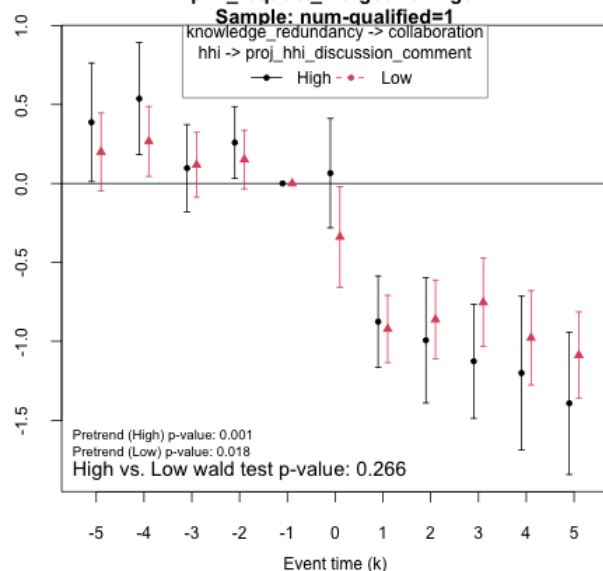
major\_minor\_release\_count rolling5



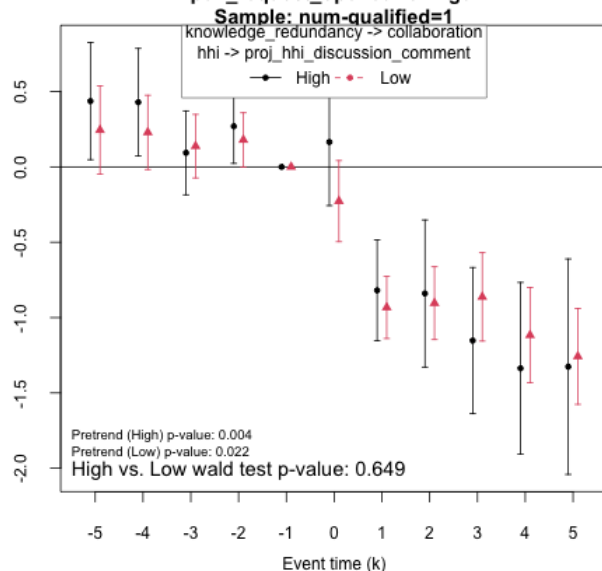
overall\_new\_release\_count rolling5



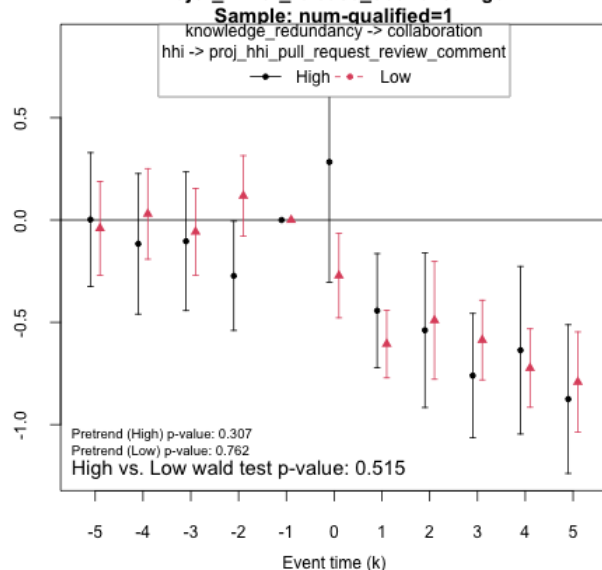
pull\_request\_merged rolling5



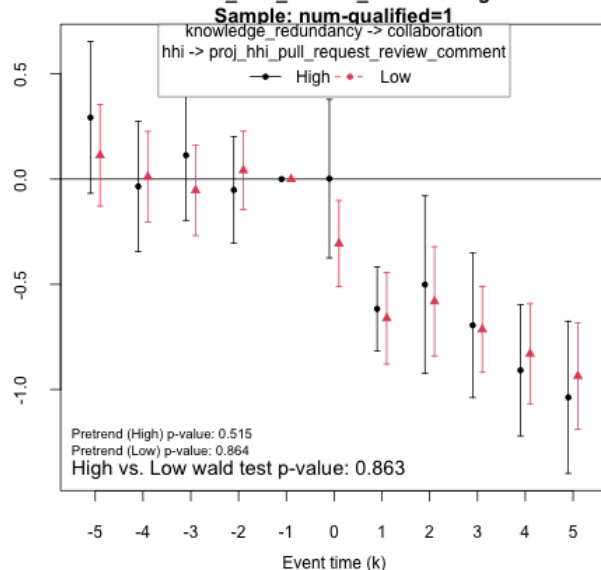
pull\_request\_opened rolling5



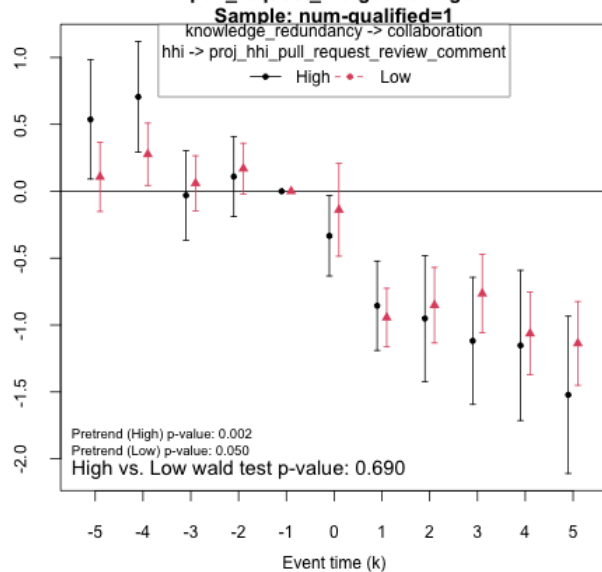
major\_minor\_release\_count rolling5



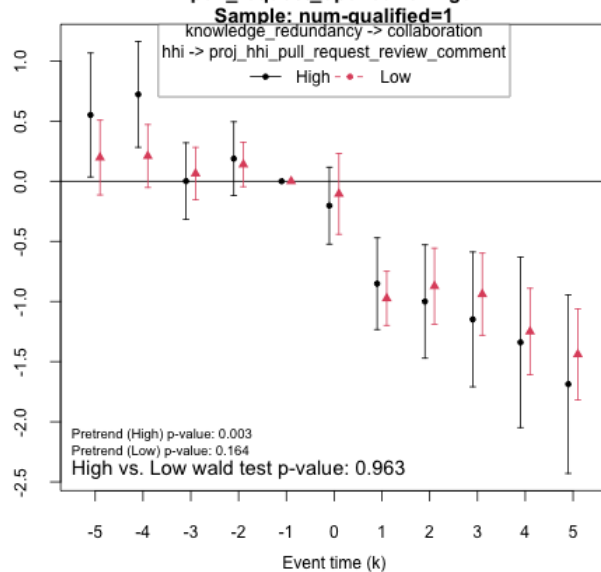
overall\_new\_release\_count rolling5



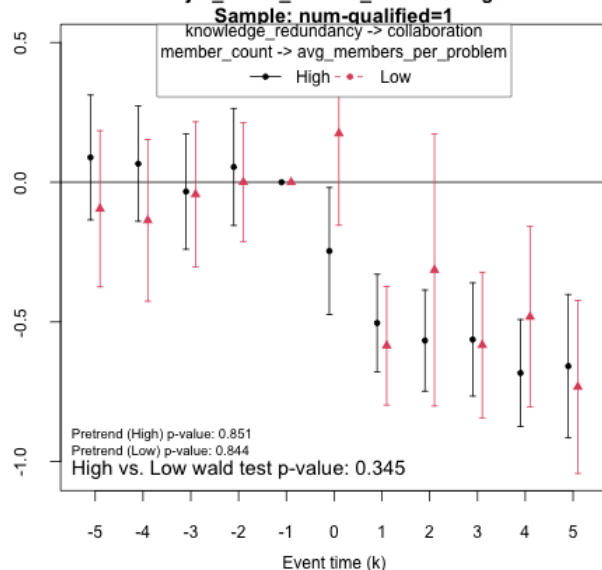
pull\_request\_merged rolling5



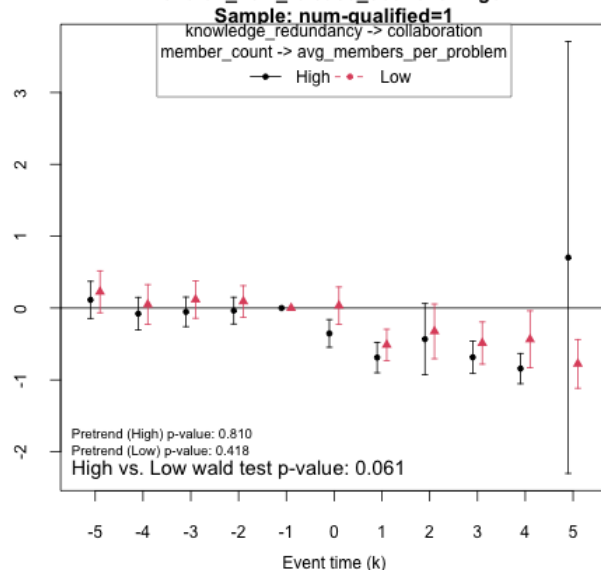
pull\_request\_opened rolling5



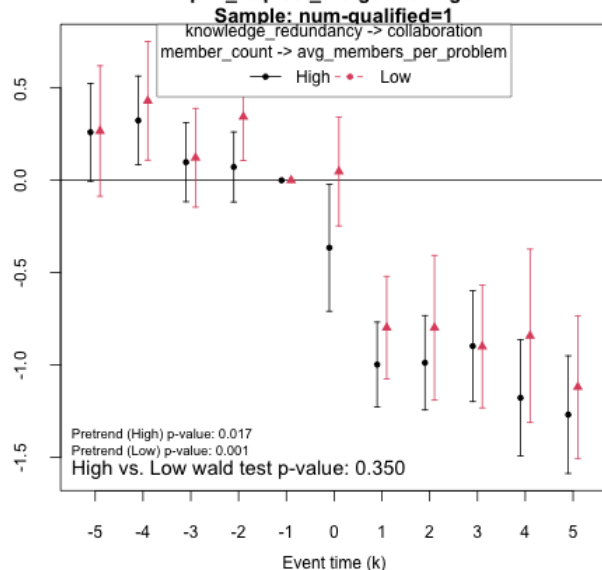
major\_minor\_release\_count rolling5



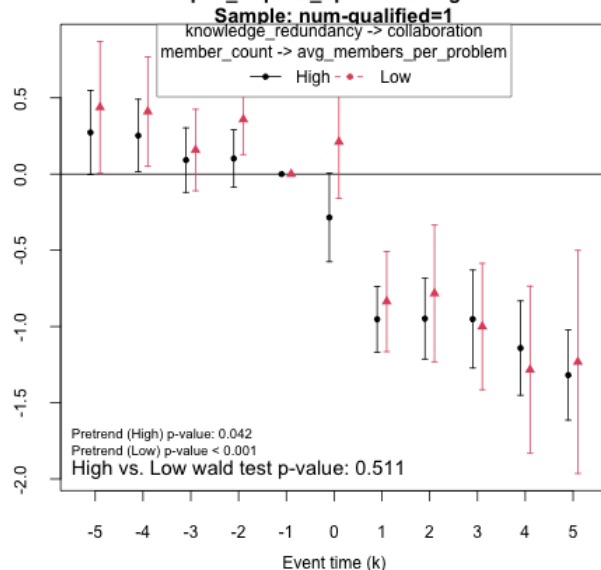
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5

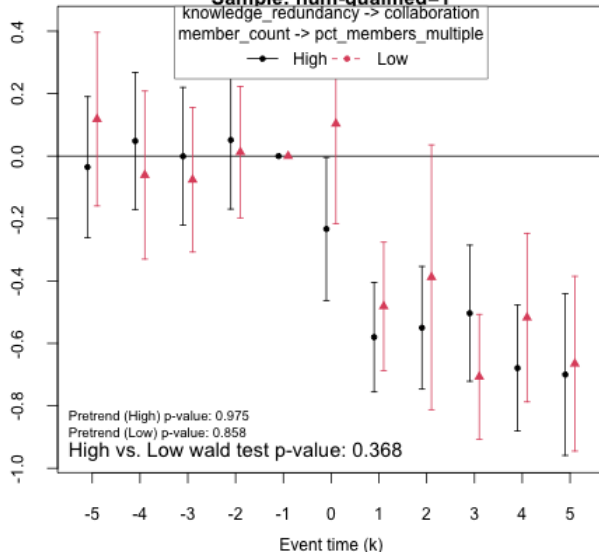


pull\_request\_opened rolling5



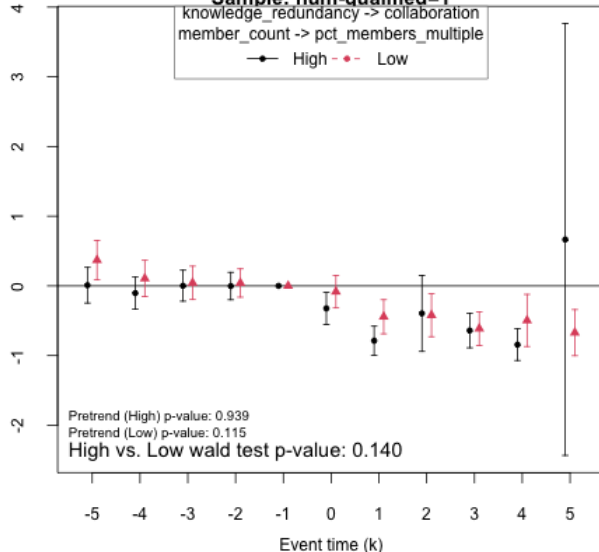
major\_minor\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -> collaboration  
member\_count -> pct\_members\_multiple  
—●— High —●— Low

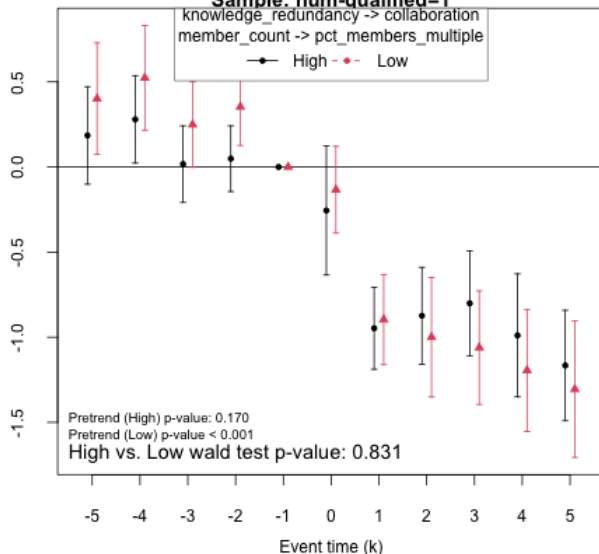
overall\_new\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -> collaboration  
member\_count -> pct\_members\_multiple  
—●— High —●— Low

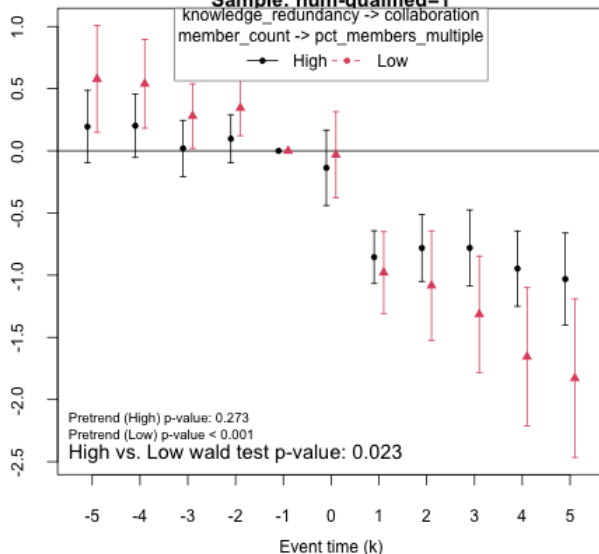
pull\_request\_merged rolling5

Sample: num-qualified=1

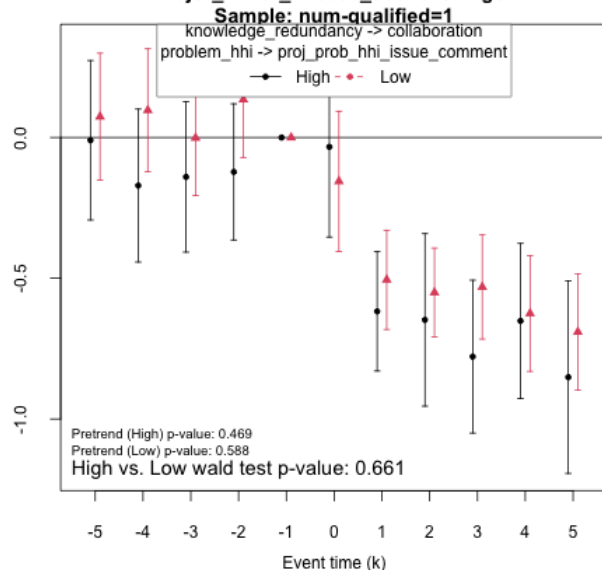
knowledge\_redundancy -> collaboration  
member\_count -> pct\_members\_multiple  
—●— High —●— Low

pull\_request\_opened rolling5

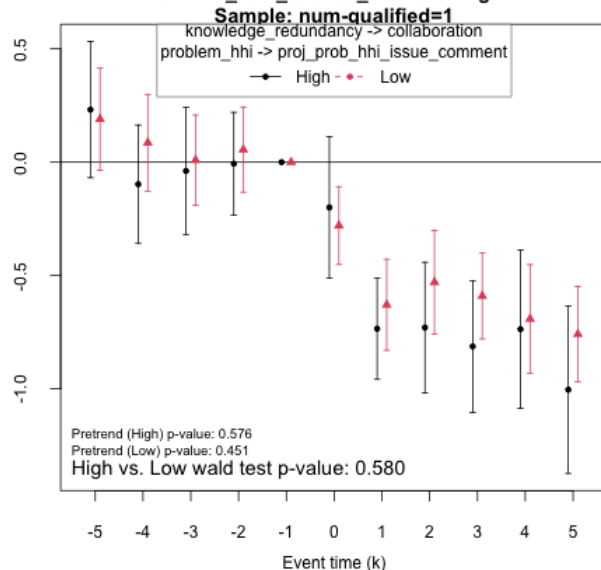
Sample: num-qualified=1

knowledge\_redundancy -> collaboration  
member\_count -> pct\_members\_multiple  
—●— High —●— Low

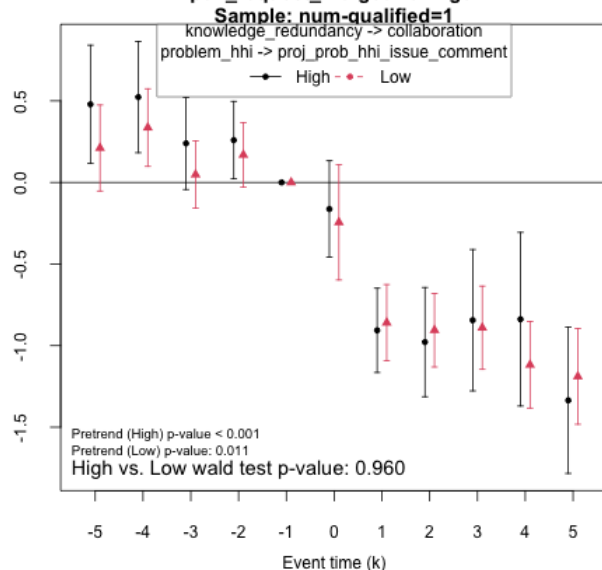
major\_minor\_release\_count rolling5



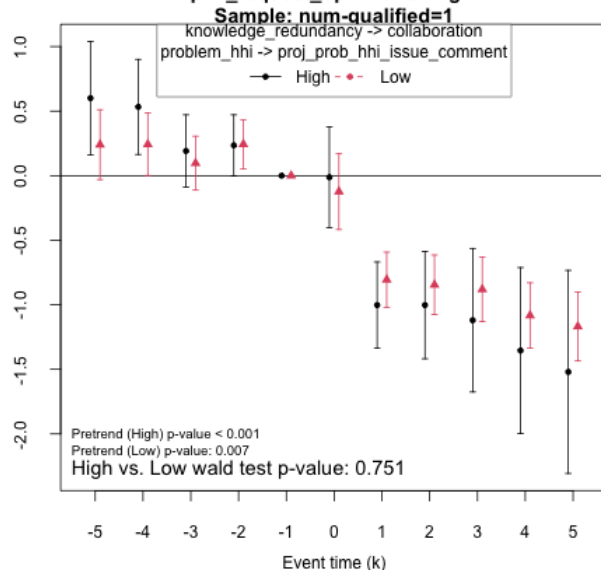
overall\_new\_release\_count rolling5



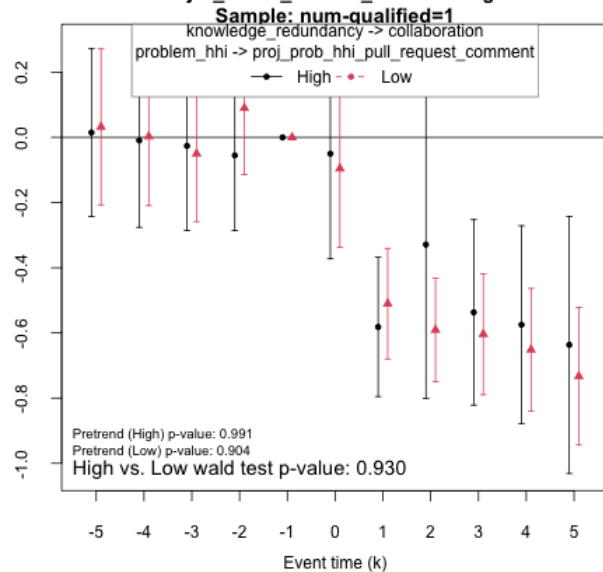
pull\_request\_merged rolling5



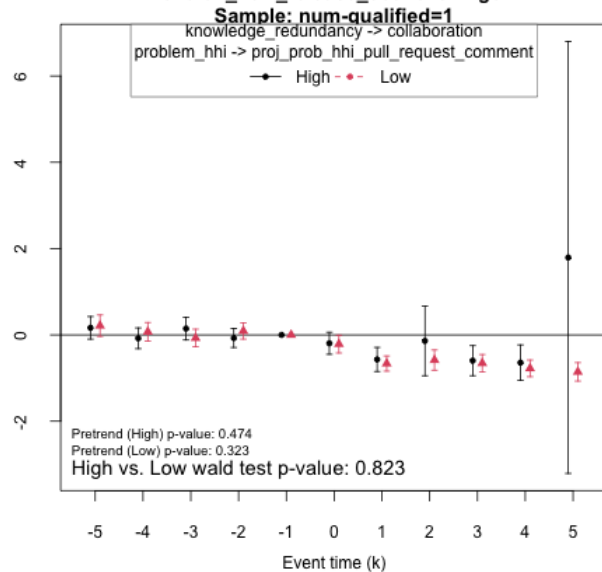
pull\_request\_opened rolling5



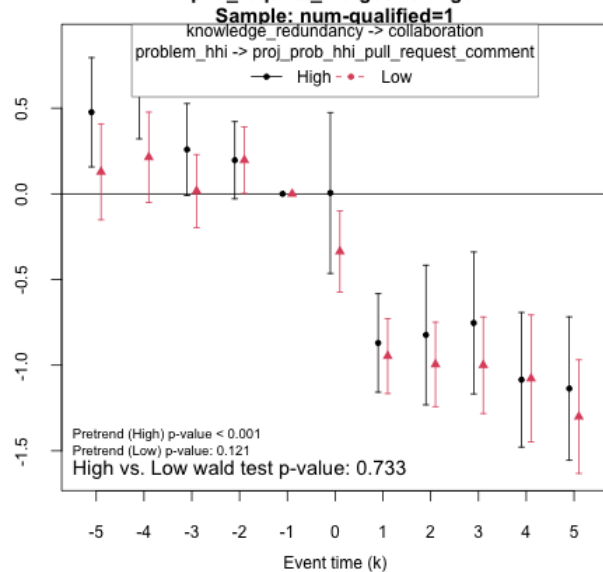
major\_minor\_release\_count rolling5



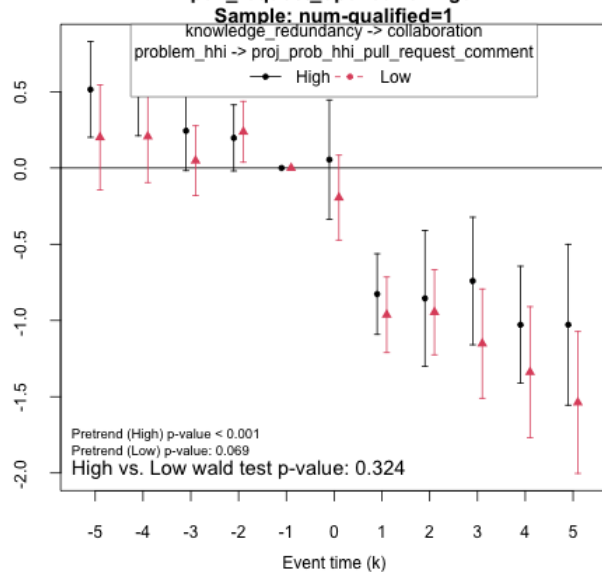
overall\_new\_release\_count rolling5



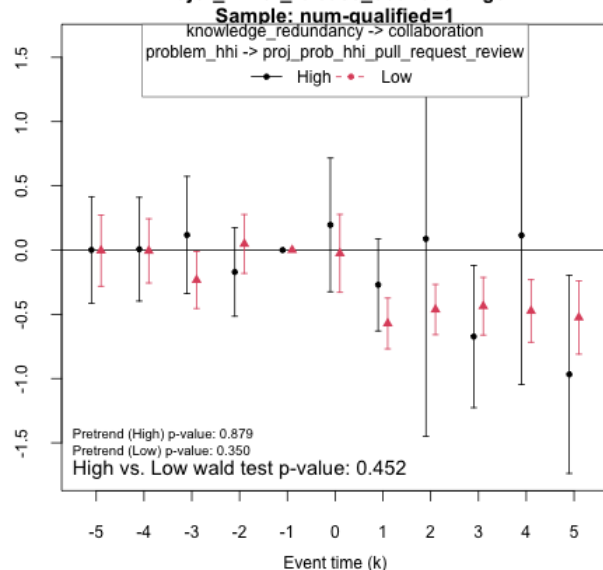
pull\_request\_merged rolling5



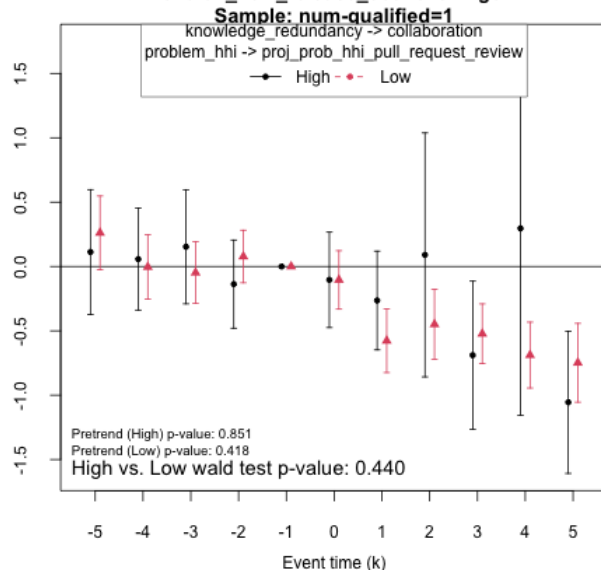
pull\_request\_opened rolling5



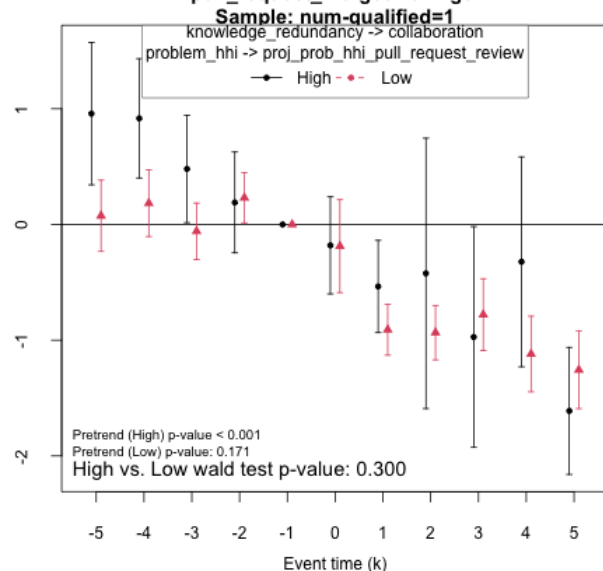
major\_minor\_release\_count rolling5



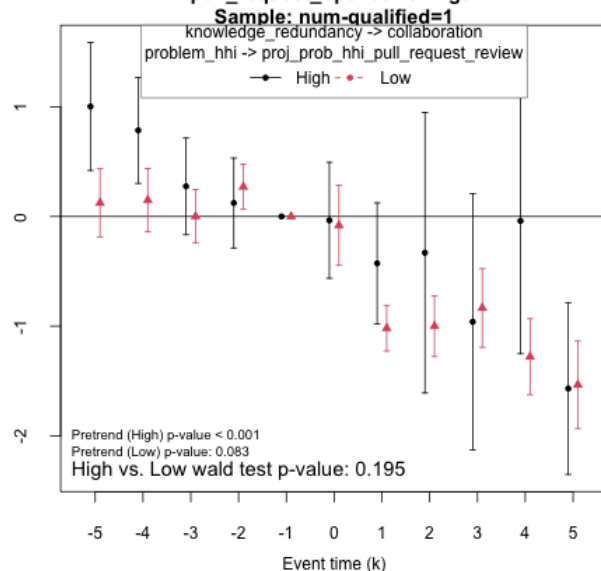
overall\_new\_release\_count rolling5



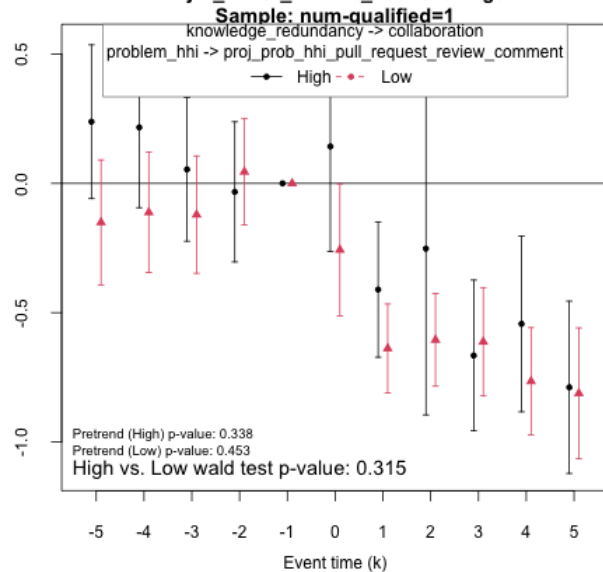
pull\_request\_merged rolling5



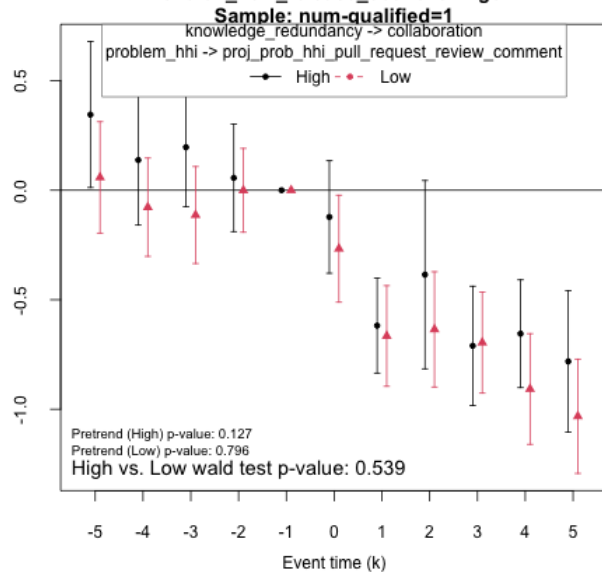
pull\_request\_opened rolling5



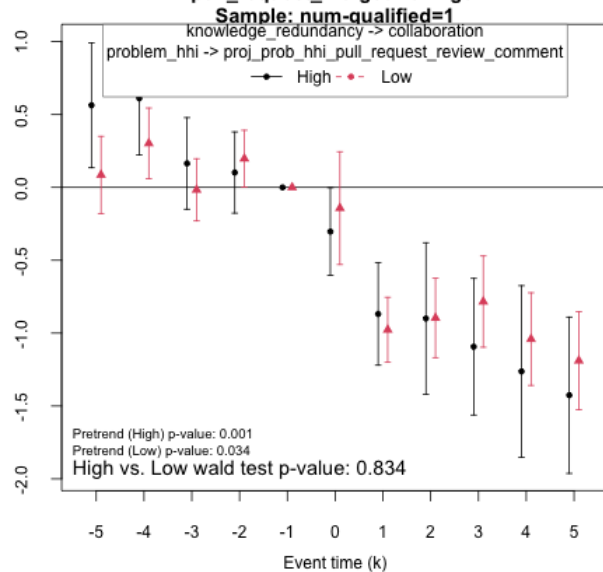
major\_minor\_release\_count rolling5



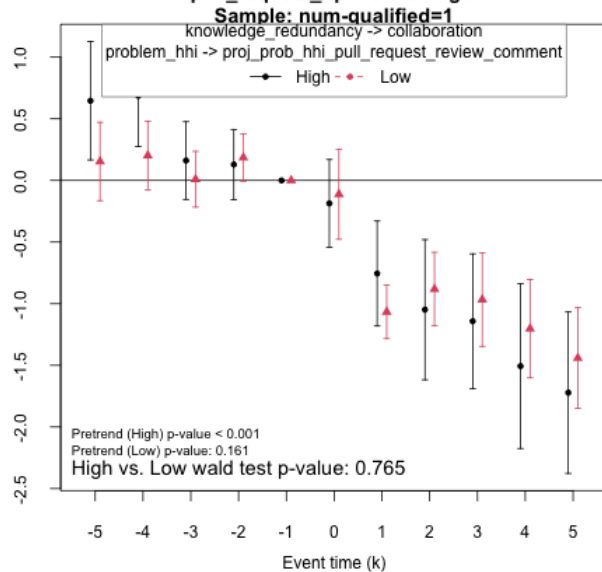
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5

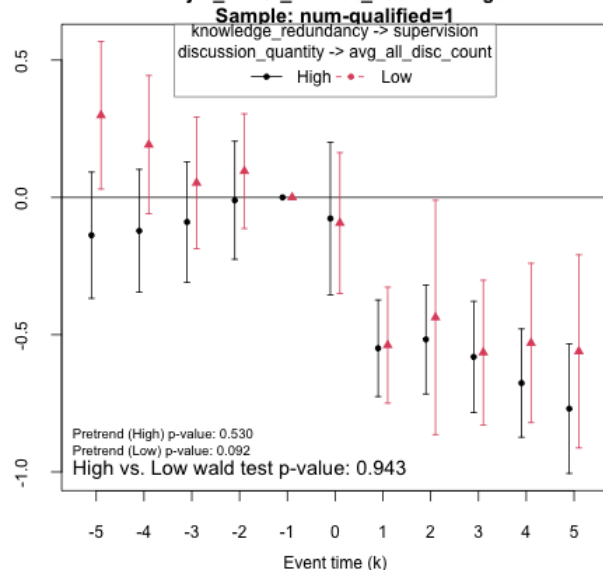


pull\_request\_opened rolling5

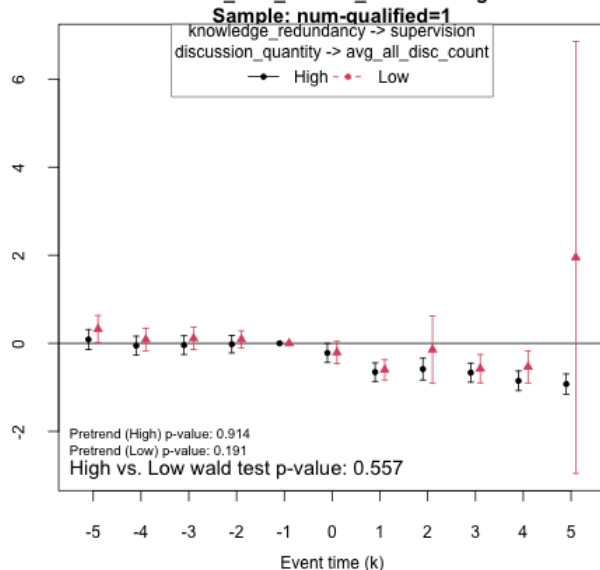




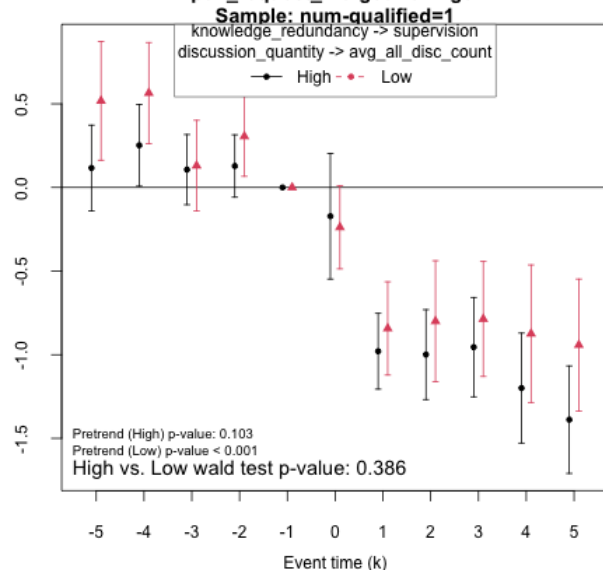
major\_minor\_release\_count rolling5



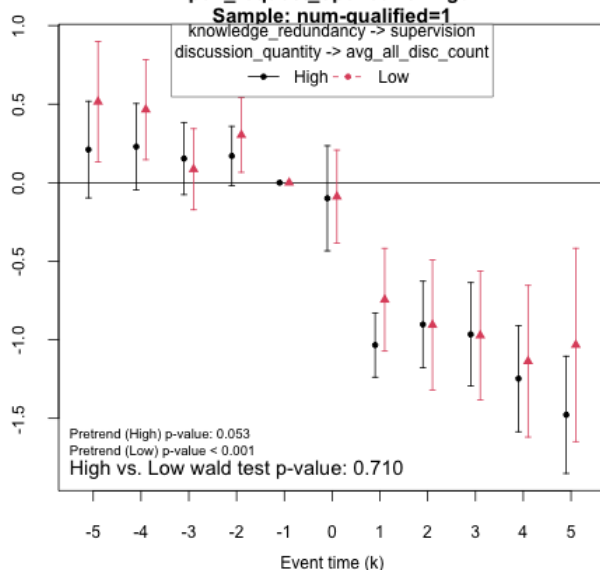
overall\_new\_release\_count rolling5



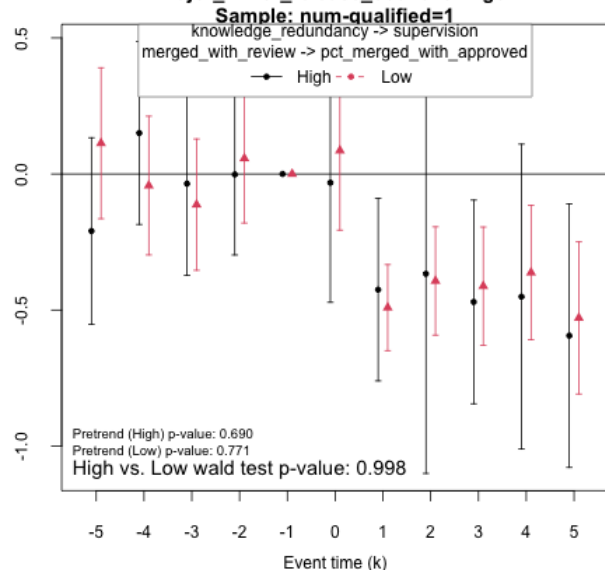
pull\_request\_merged rolling5



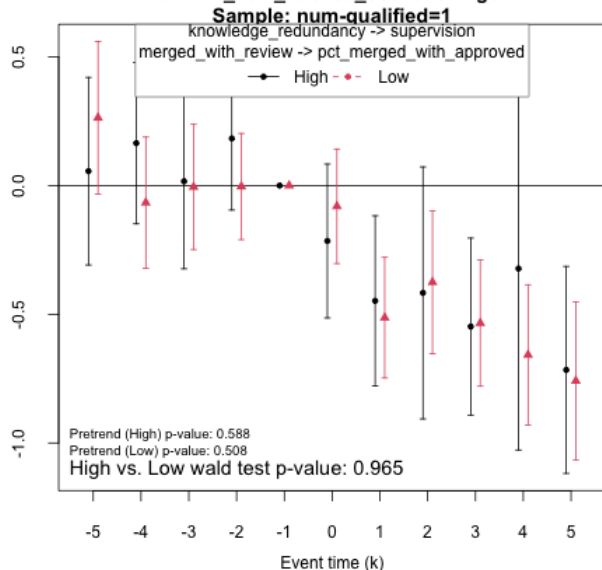
pull\_request\_opened rolling5



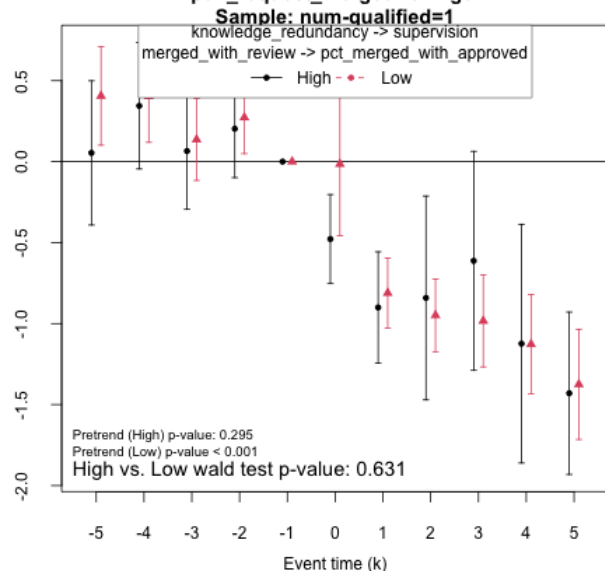
major\_minor\_release\_count rolling5



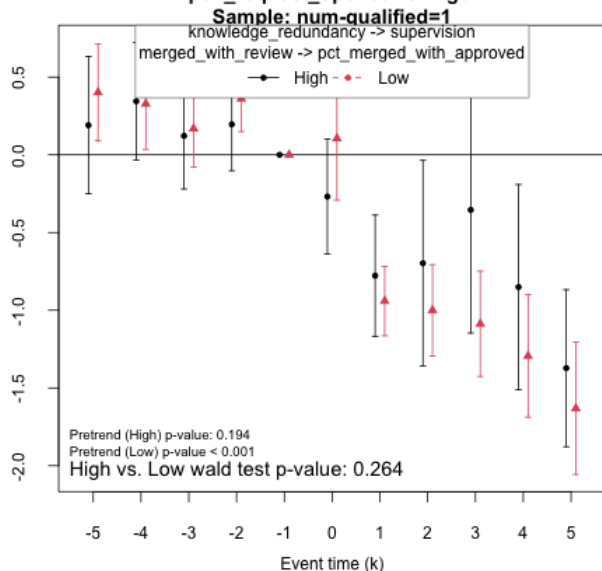
overall\_new\_release\_count rolling5



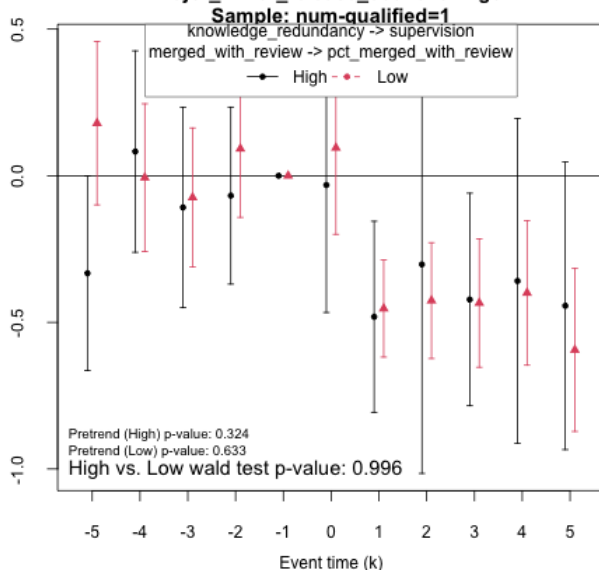
pull\_request\_merged rolling5



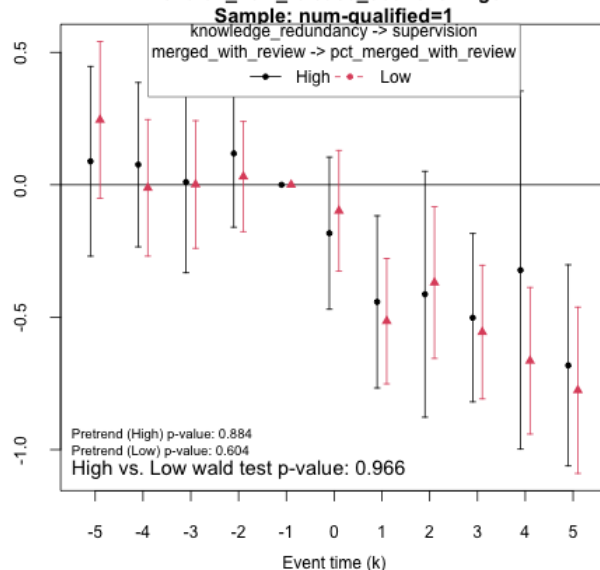
pull\_request\_opened rolling5



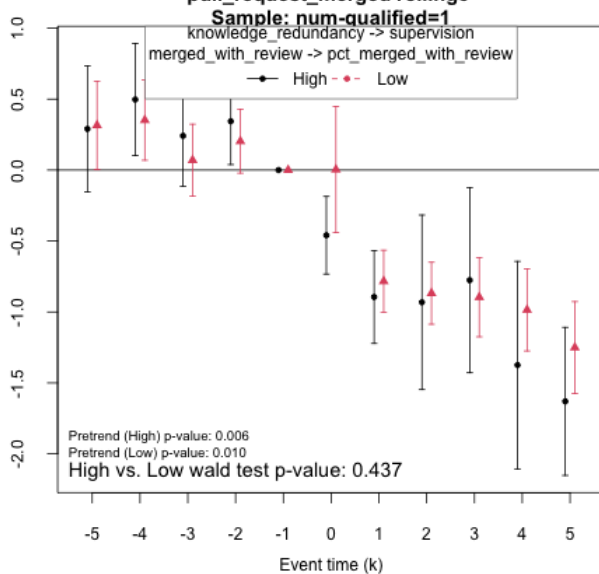
major\_minor\_release\_count rolling5



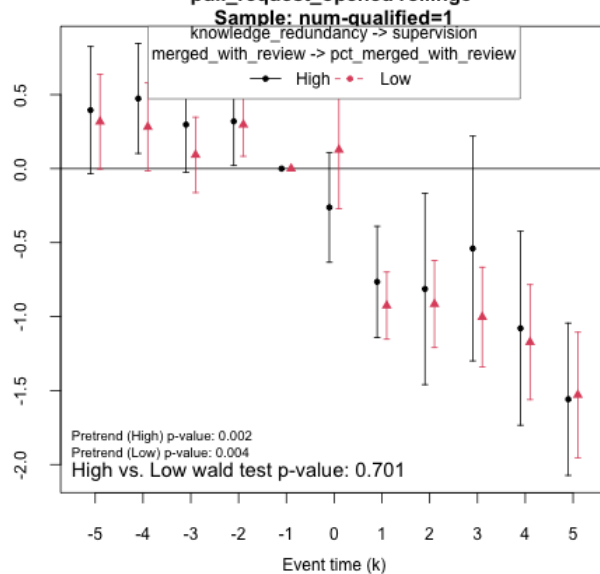
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

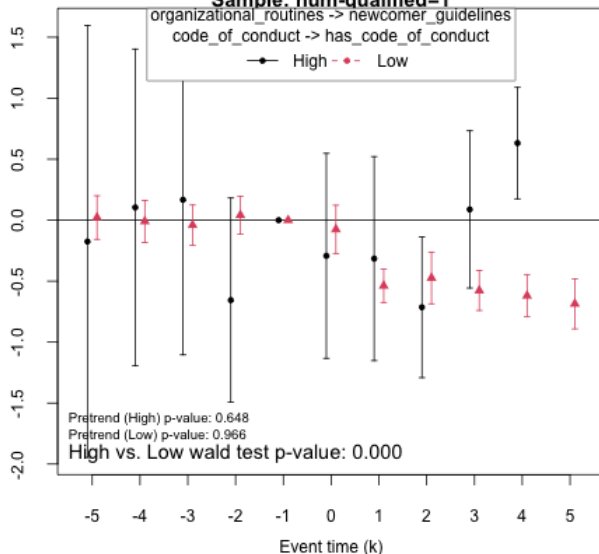


major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
code\_of\_conduct -> has\_code\_of\_conduct

—●— High —●— Low

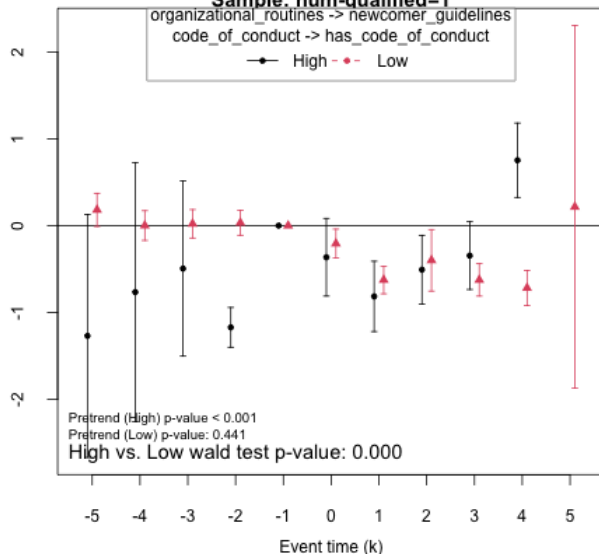


overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
code\_of\_conduct -> has\_code\_of\_conduct

—●— High —●— Low

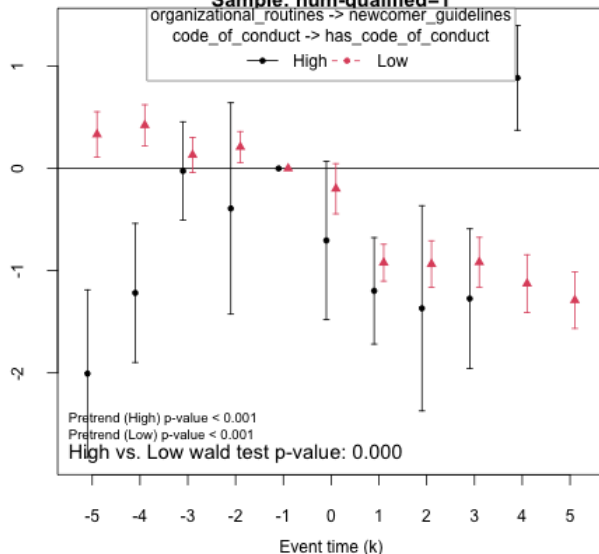


pull\_request\_merged rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
code\_of\_conduct -> has\_code\_of\_conduct

—●— High —●— Low

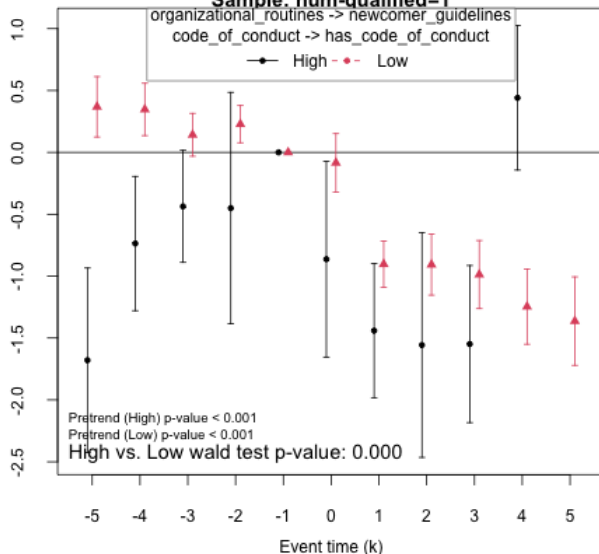


pull\_request\_opened rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
code\_of\_conduct -> has\_code\_of\_conduct

—●— High —●— Low

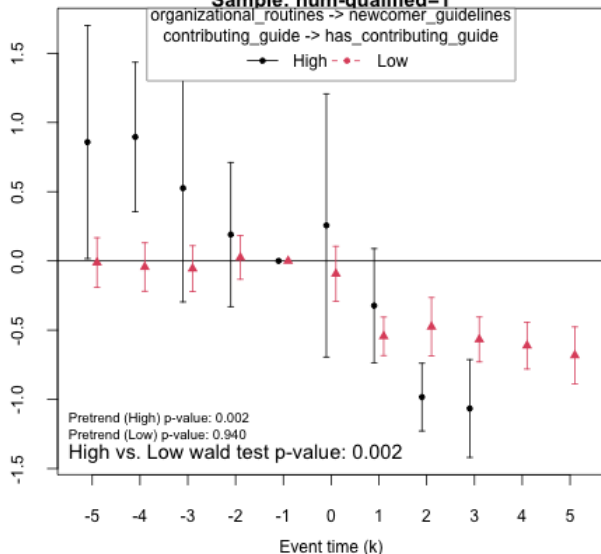


major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
contributing\_guide -> has\_contributing\_guide

—●— High —●— Low

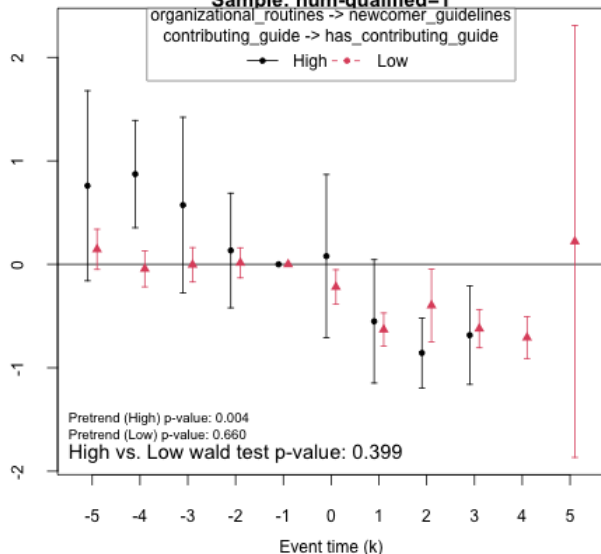


overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
contributing\_guide -> has\_contributing\_guide

—●— High —●— Low

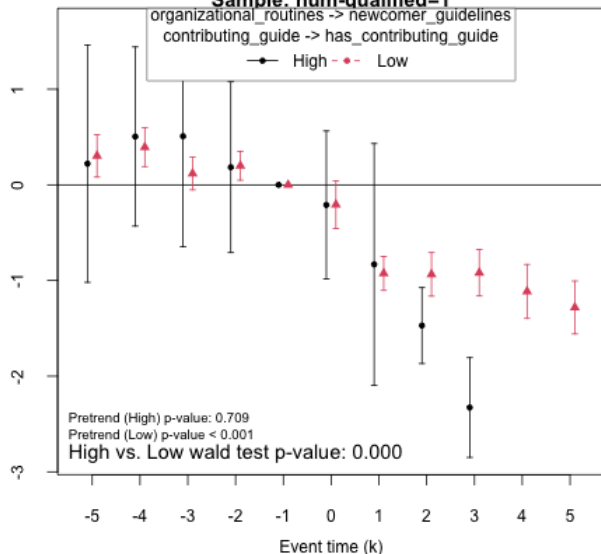


pull\_request\_merged rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
contributing\_guide -> has\_contributing\_guide

—●— High —●— Low

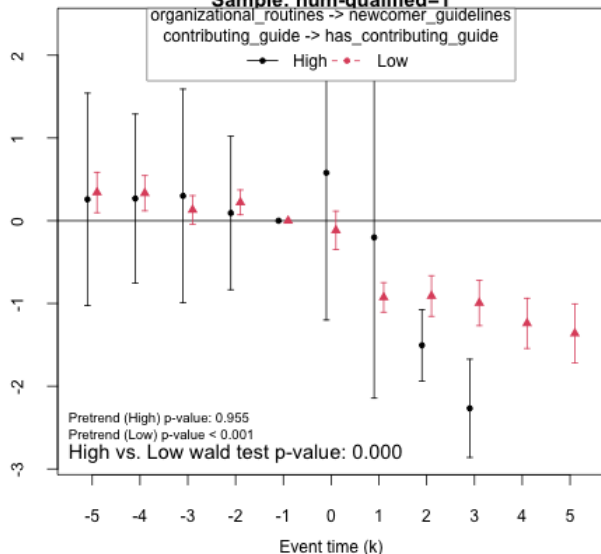


pull\_request\_opened rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
contributing\_guide -> has\_contributing\_guide

—●— High —●— Low

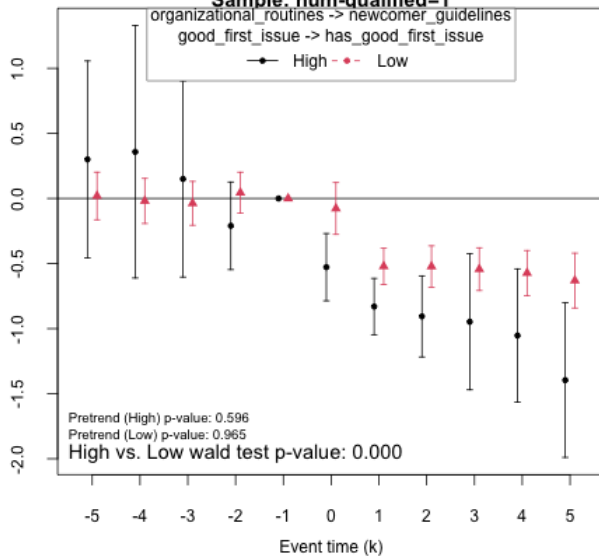


major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
good\_first\_issue -> has\_good\_first\_issue

—●— High —●— Low

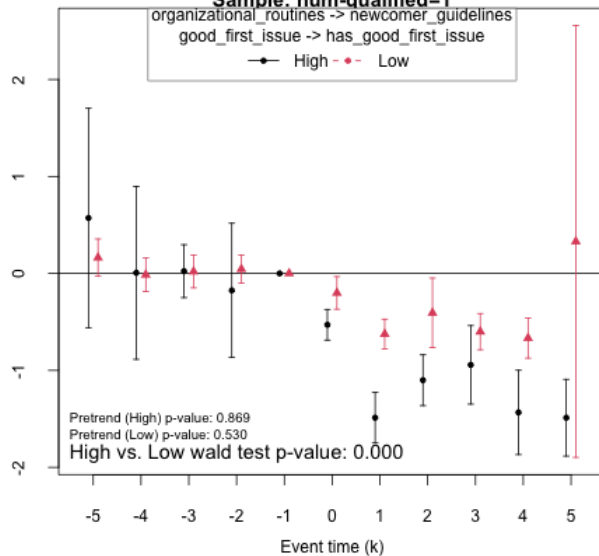


overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
good\_first\_issue -> has\_good\_first\_issue

—●— High —●— Low

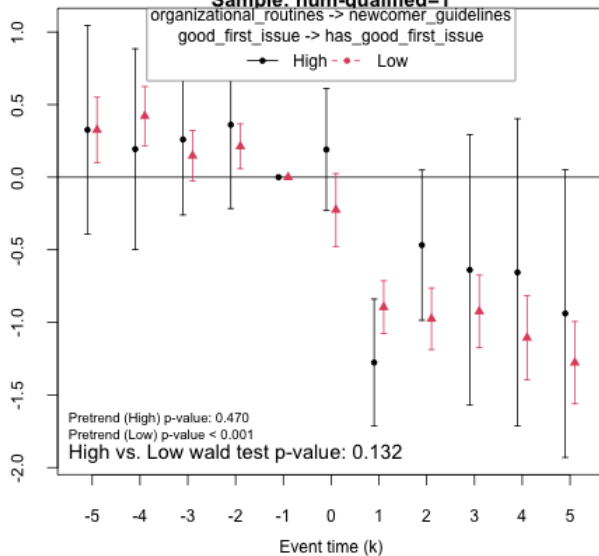


pull\_request\_merged rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
good\_first\_issue -> has\_good\_first\_issue

—●— High —●— Low

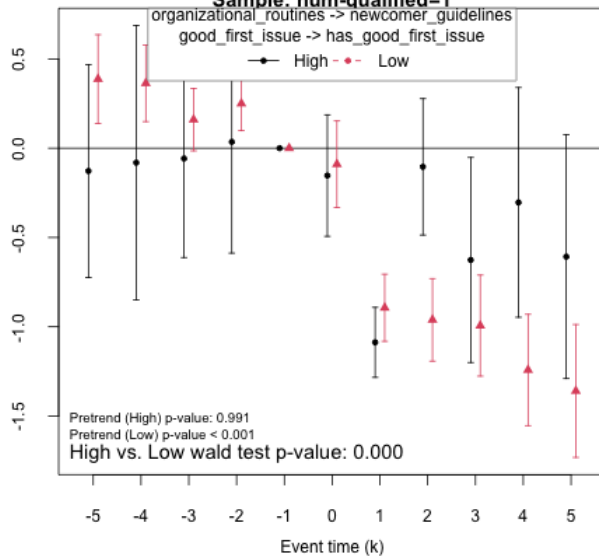


pull\_request\_opened rolling5

Sample: num-qualified=1

organizational\_routines -> newcomer\_guidelines  
good\_first\_issue -> has\_good\_first\_issue

—●— High —●— Low

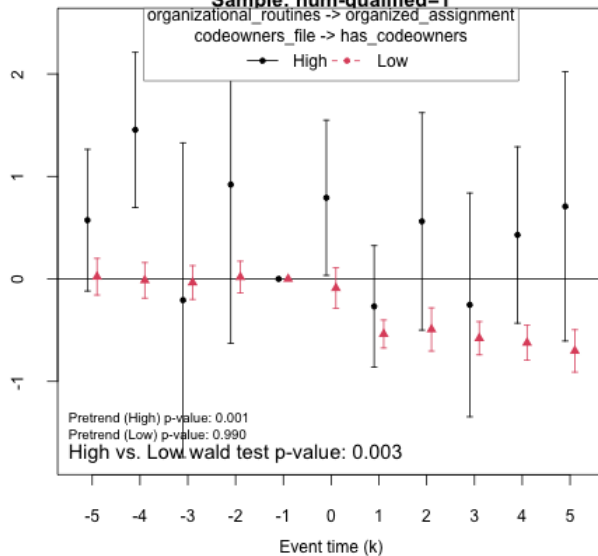


major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
codeowners\_file -> has\_codeowners

—●— High —●— Low

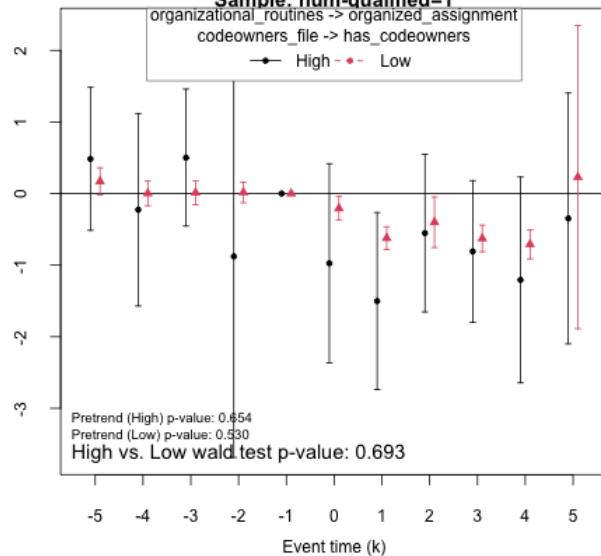


overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
codeowners\_file -> has\_codeowners

—●— High —●— Low

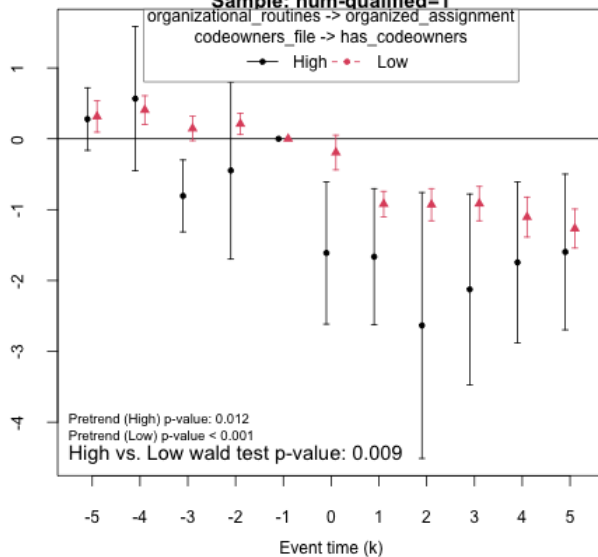


pull\_request\_merged rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
codeowners\_file -> has\_codeowners

—●— High —●— Low

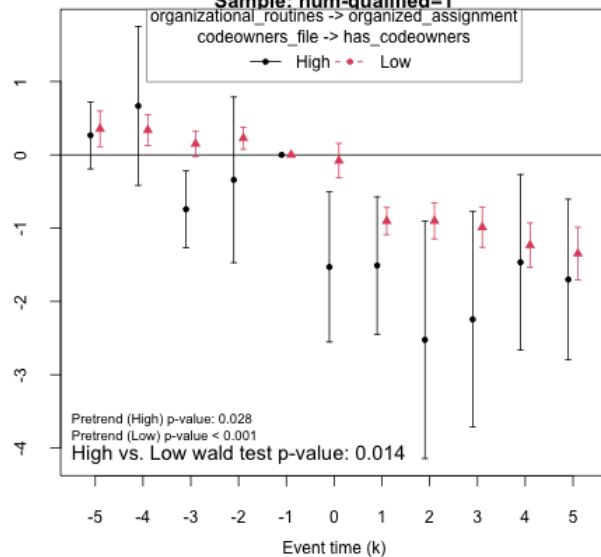


pull\_request\_opened rolling5

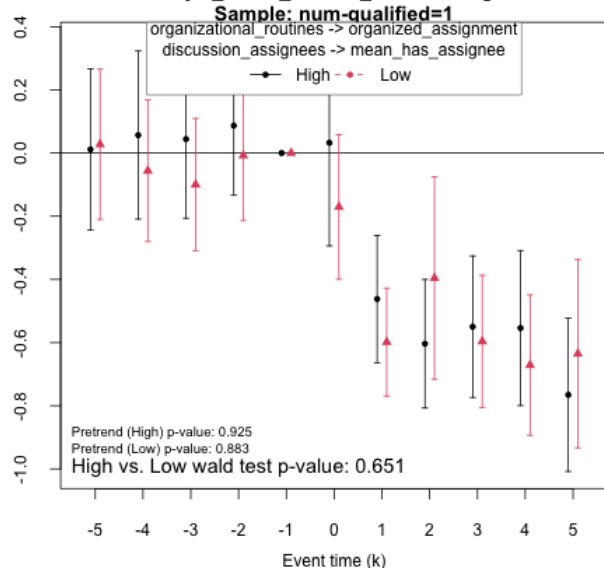
Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
codeowners\_file -> has\_codeowners

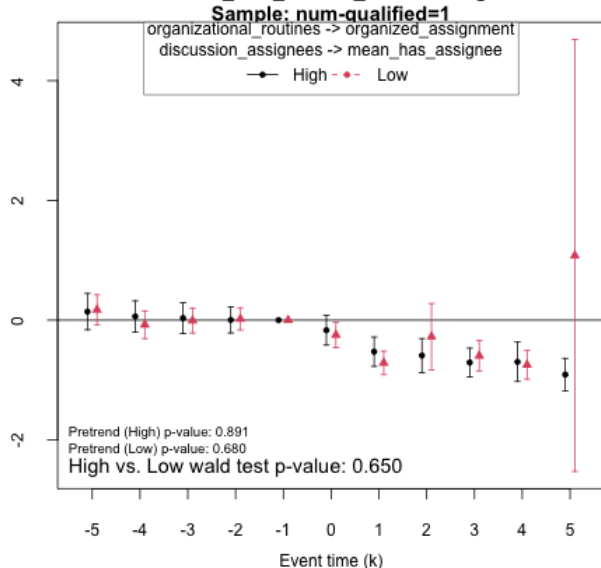
—●— High —●— Low



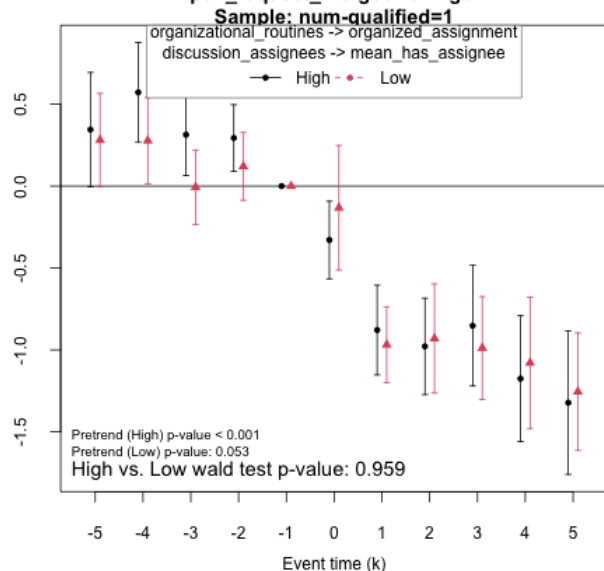
major\_minor\_release\_count rolling5



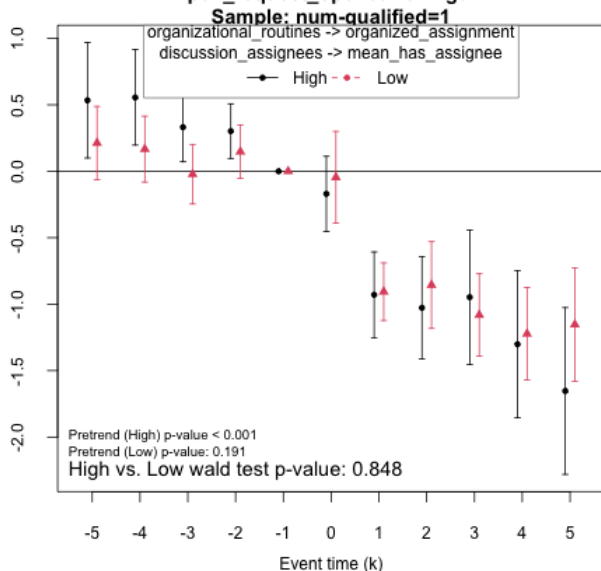
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5

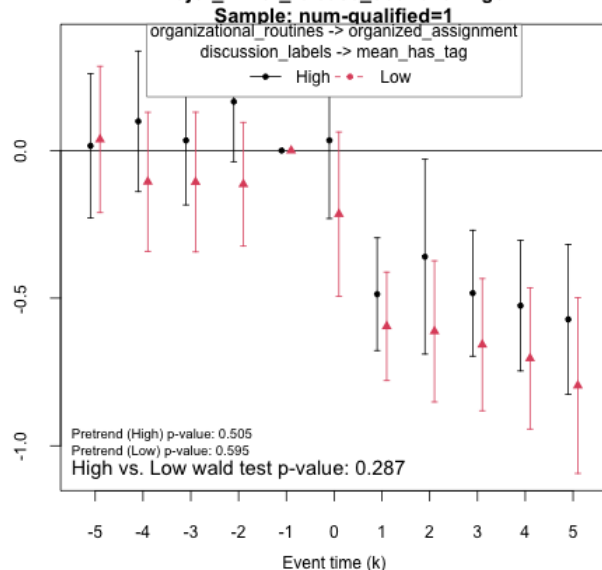


pull\_request\_opened rolling5

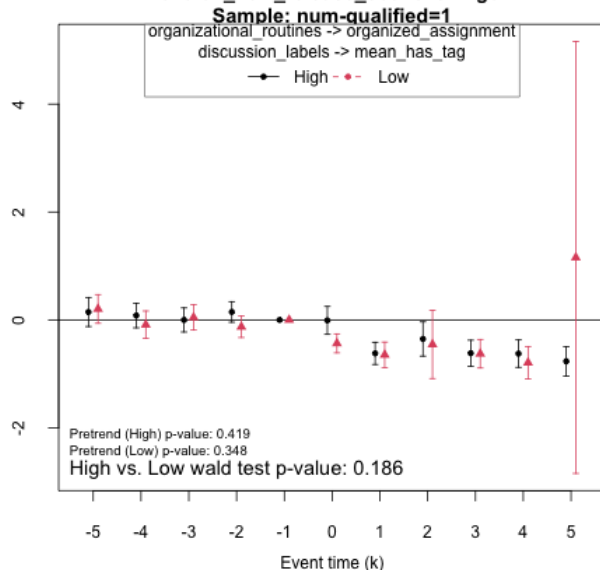




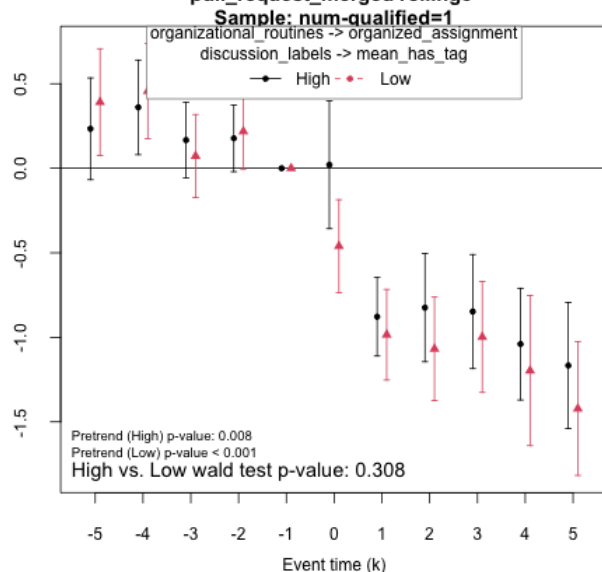
major\_minor\_release\_count rolling5



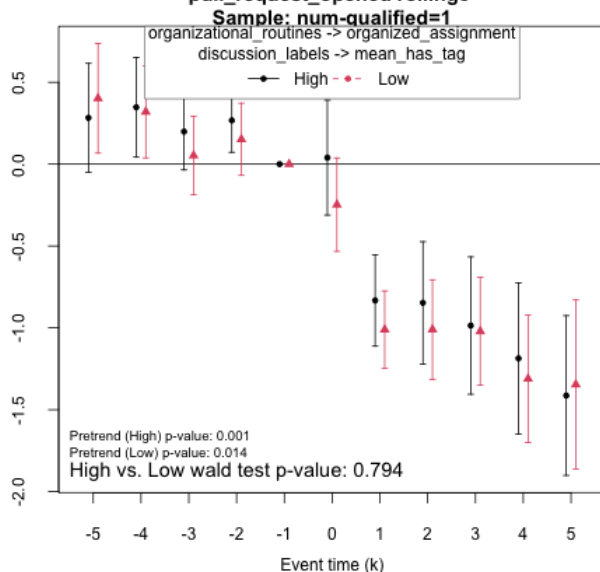
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

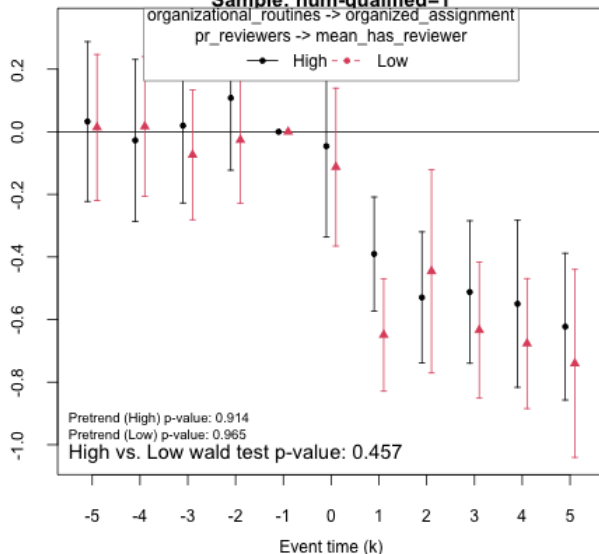


major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
pr\_reviewers -> mean\_has\_reviewer

—●— High —●— Low

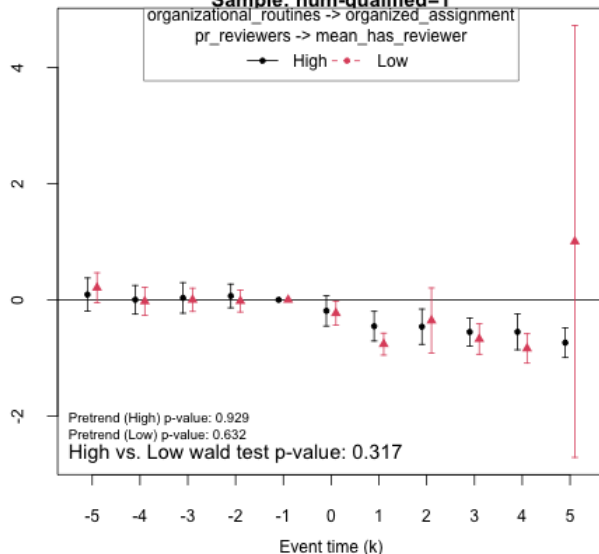


overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
pr\_reviewers -> mean\_has\_reviewer

—●— High —●— Low

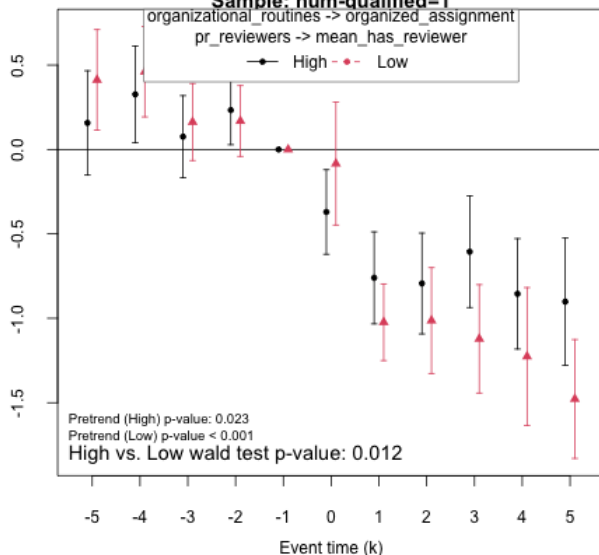


pull\_request\_merged rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
pr\_reviewers -> mean\_has\_reviewer

—●— High —●— Low

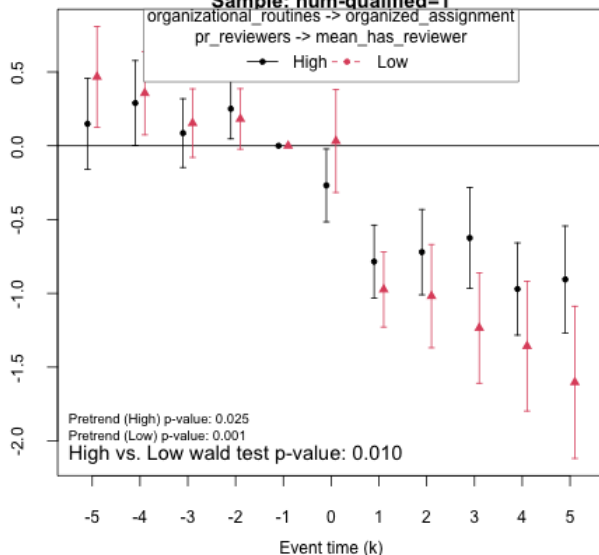


pull\_request\_opened rolling5

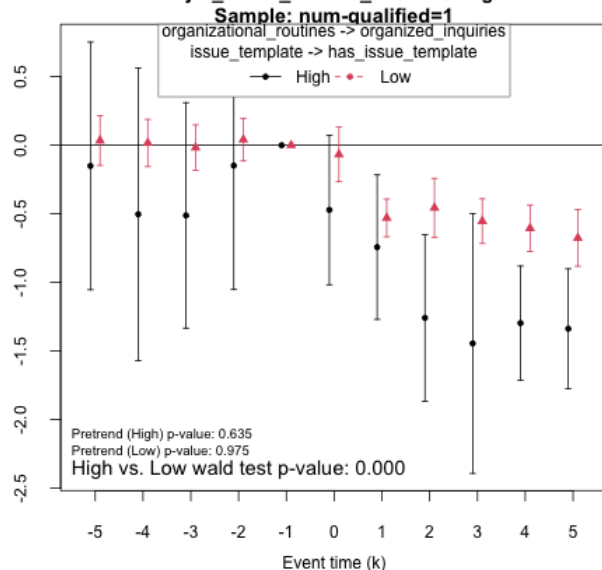
Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
pr\_reviewers -> mean\_has\_reviewer

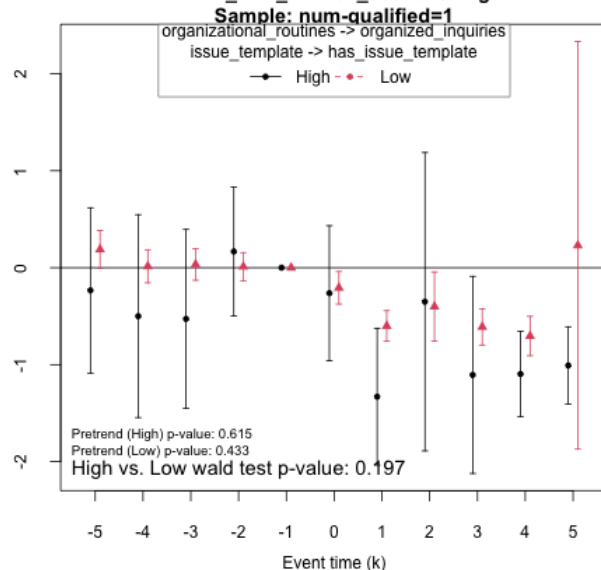
—●— High —●— Low



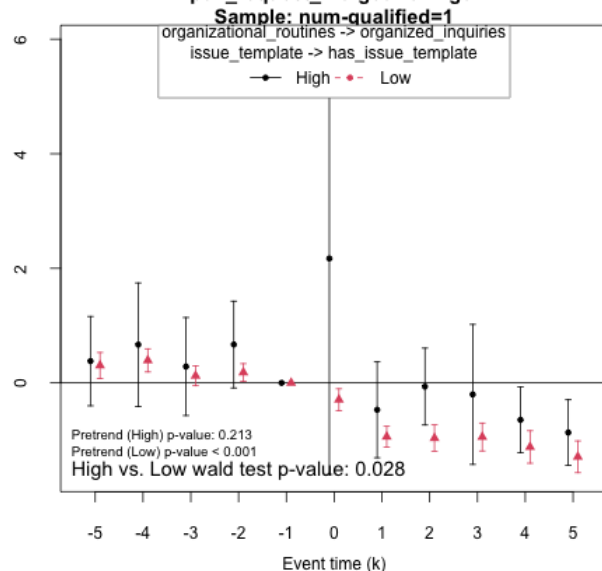
major\_minor\_release\_count rolling5



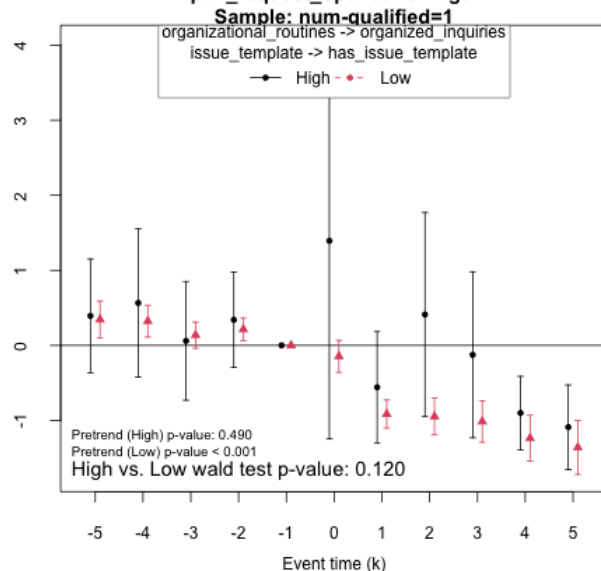
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5



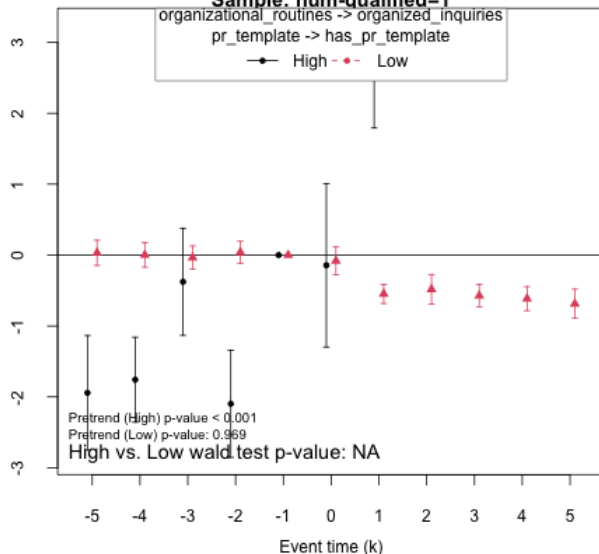
major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -&gt; organized\_inquiries

pr\_template -&gt; has\_pr\_template

● High - ● Low



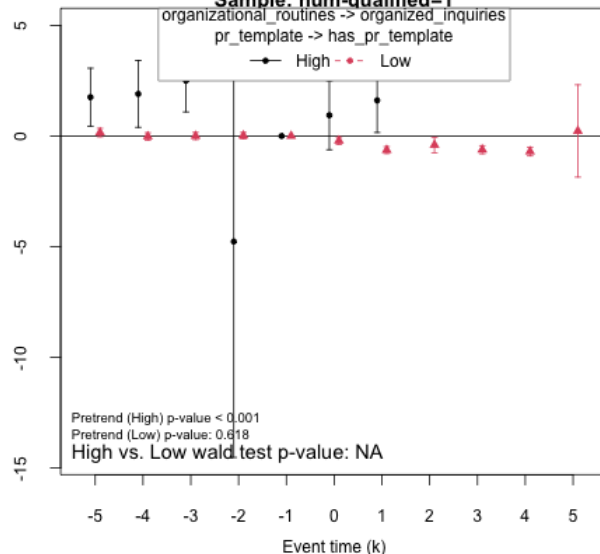
overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -&gt; organized\_inquiries

pr\_template -&gt; has\_pr\_template

● High - ● Low



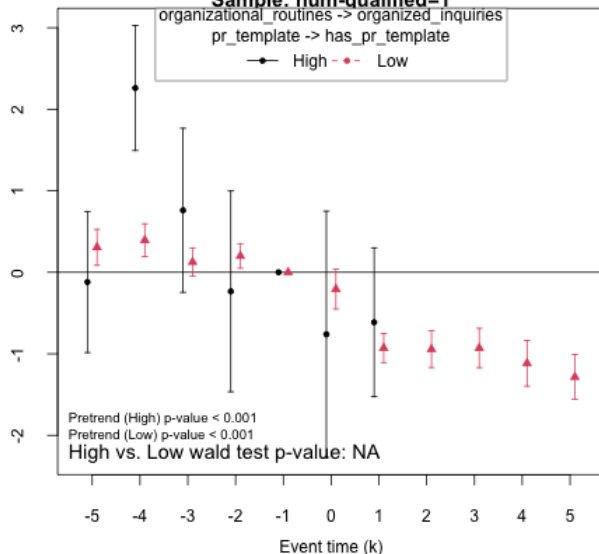
pull\_request\_merged rolling5

Sample: num-qualified=1

organizational\_routines -&gt; organized\_inquiries

pr\_template -&gt; has\_pr\_template

● High - ● Low



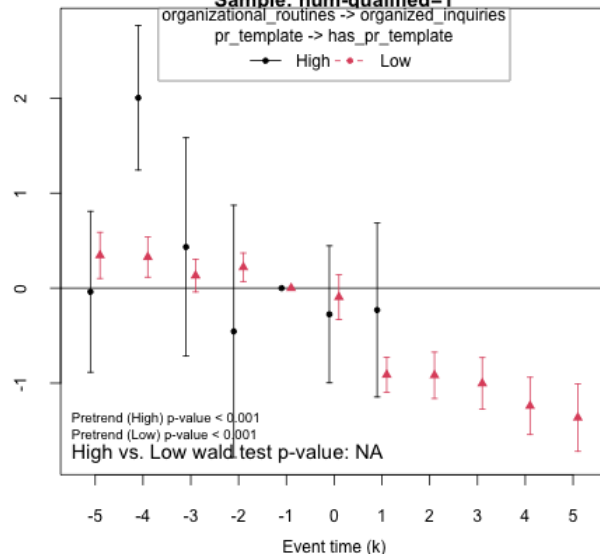
pull\_request\_opened rolling5

Sample: num-qualified=1

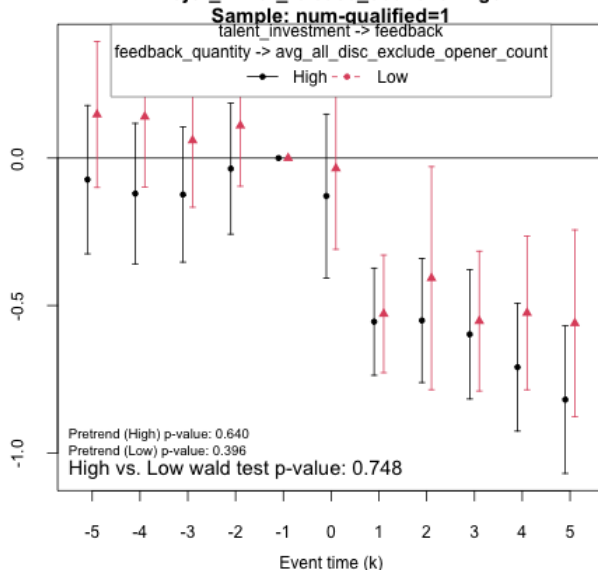
organizational\_routines -&gt; organized\_inquiries

pr\_template -&gt; has\_pr\_template

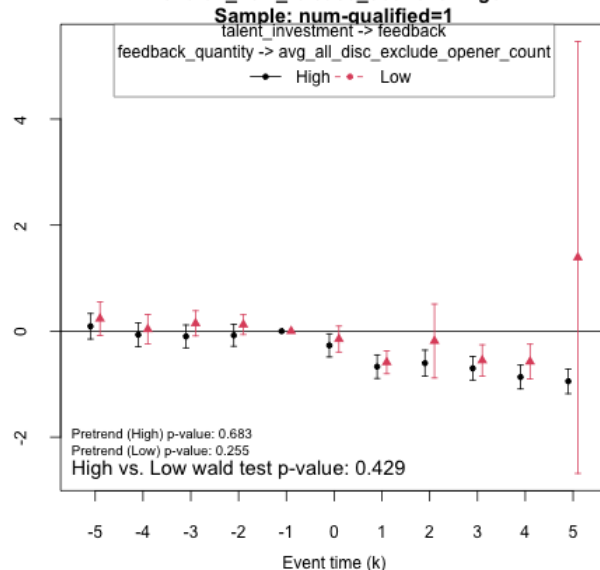
● High - ● Low



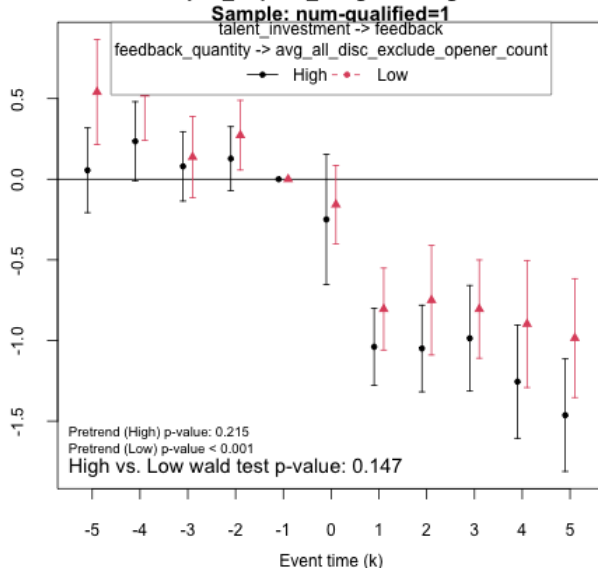
major\_minor\_release\_count rolling5



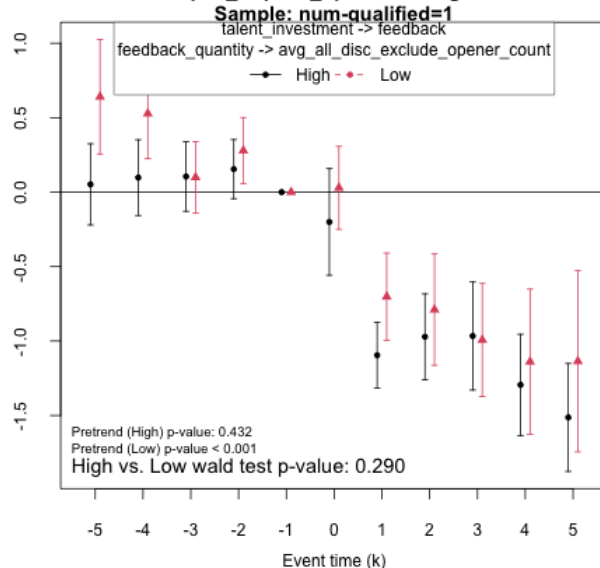
overall\_new\_release\_count rolling5



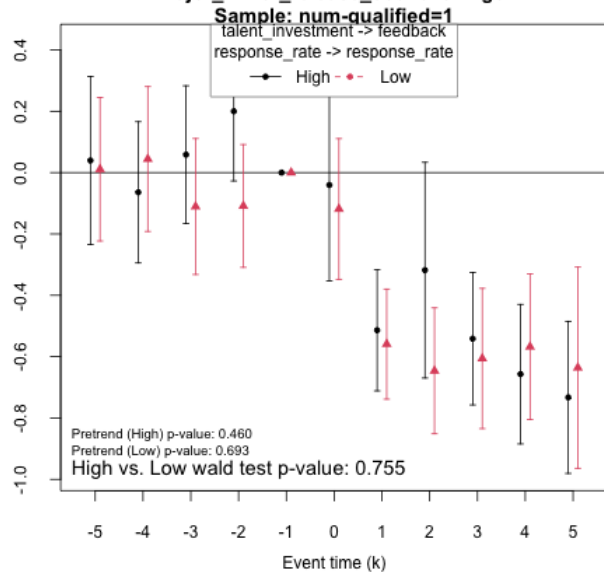
pull\_request\_merged rolling5



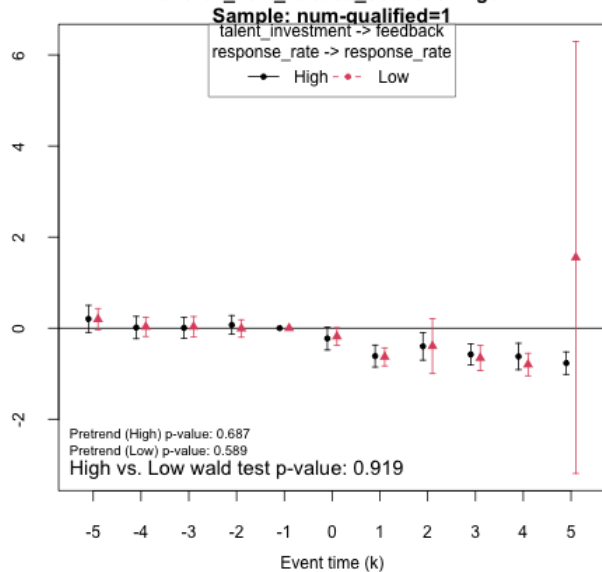
pull\_request\_opened rolling5



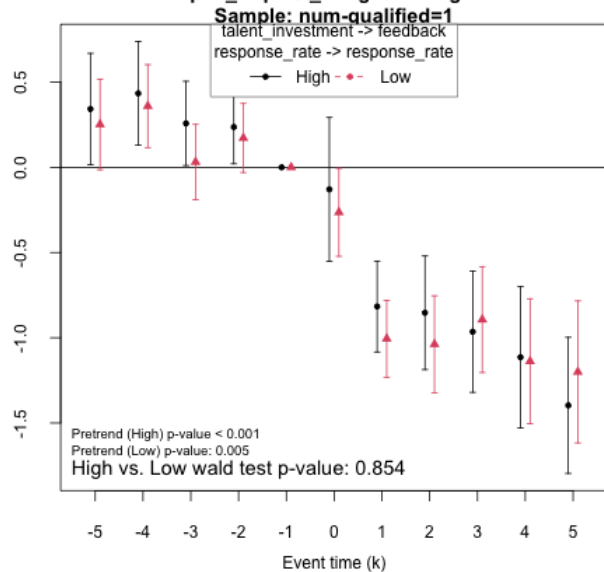
major\_minor\_release\_count rolling5



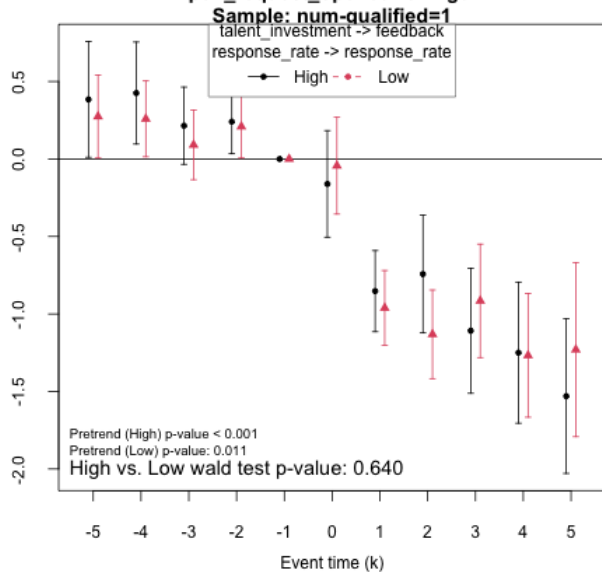
overall\_new\_release\_count rolling5



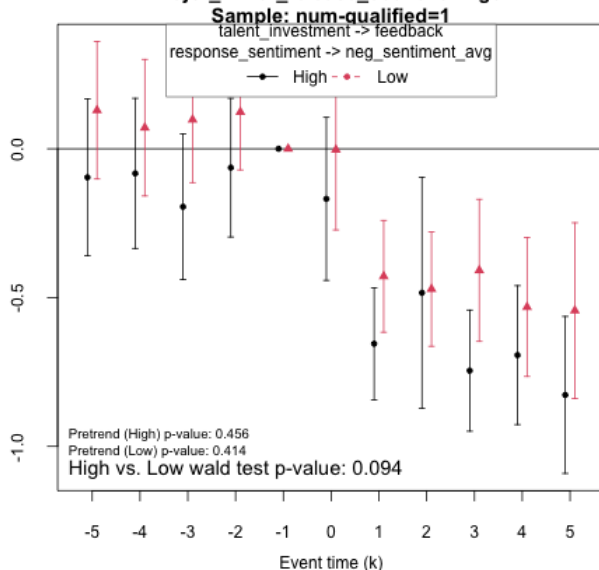
pull\_request\_merged rolling5



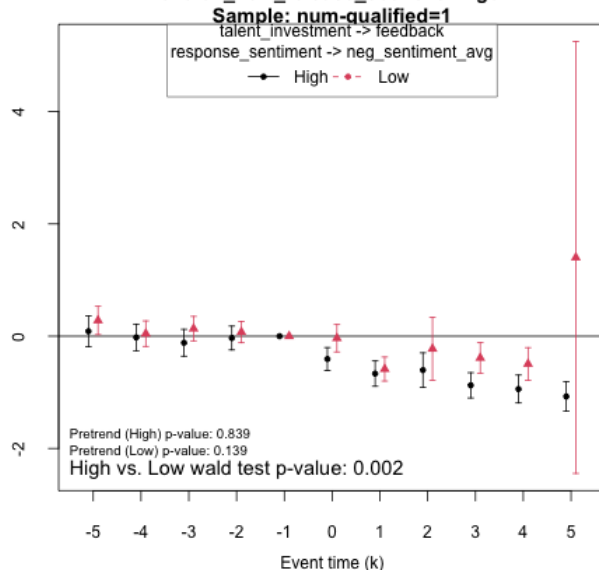
pull\_request\_opened rolling5



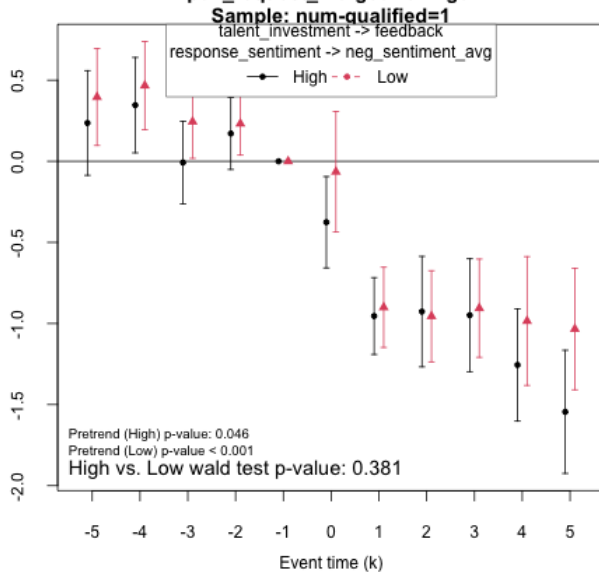
major\_minor\_release\_count rolling5



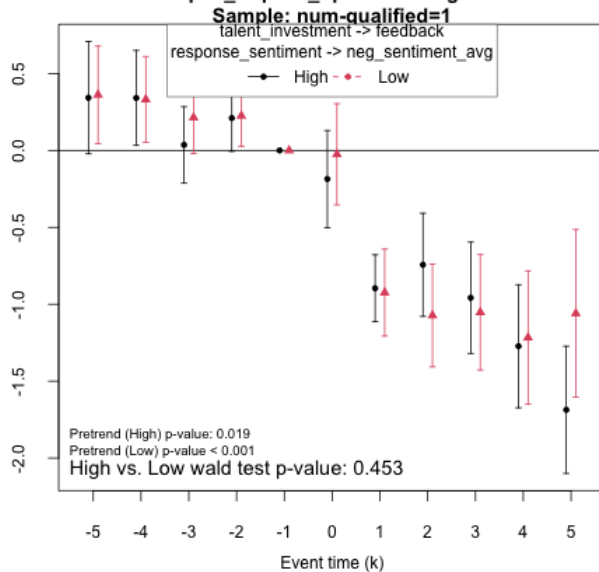
overall\_new\_release\_count rolling5



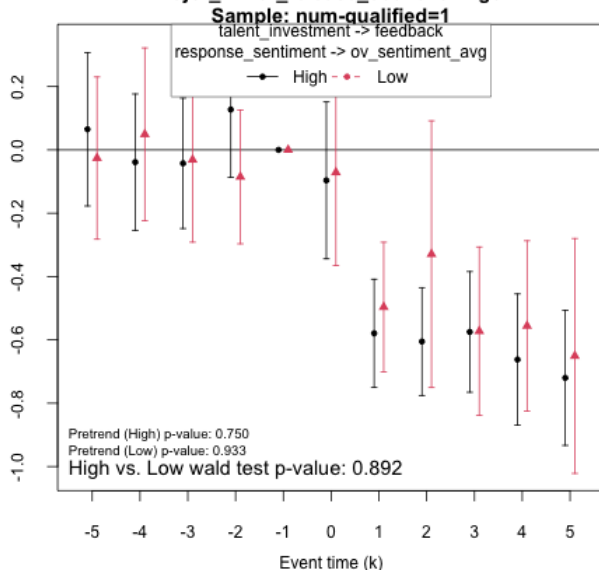
pull\_request\_merged rolling5



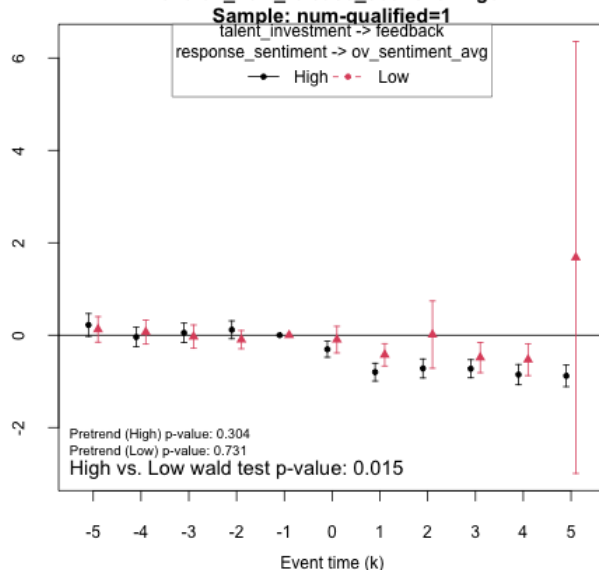
pull\_request\_opened rolling5



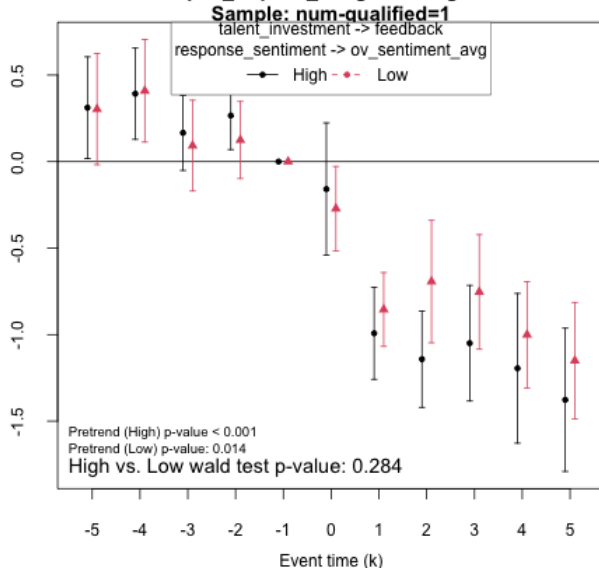
major\_minor\_release\_count rolling5



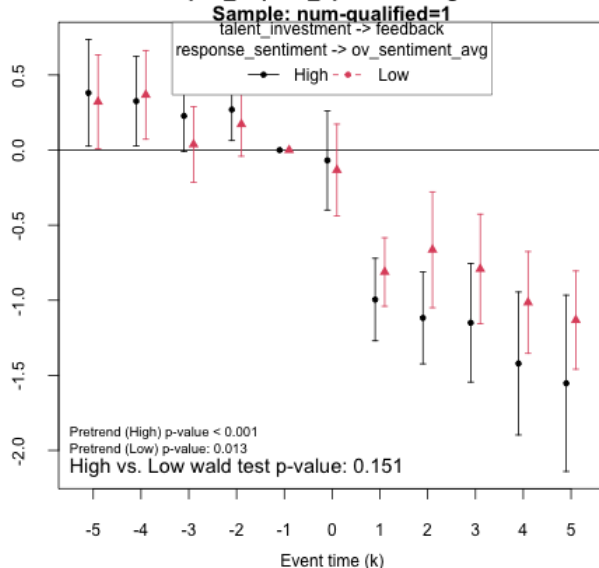
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5

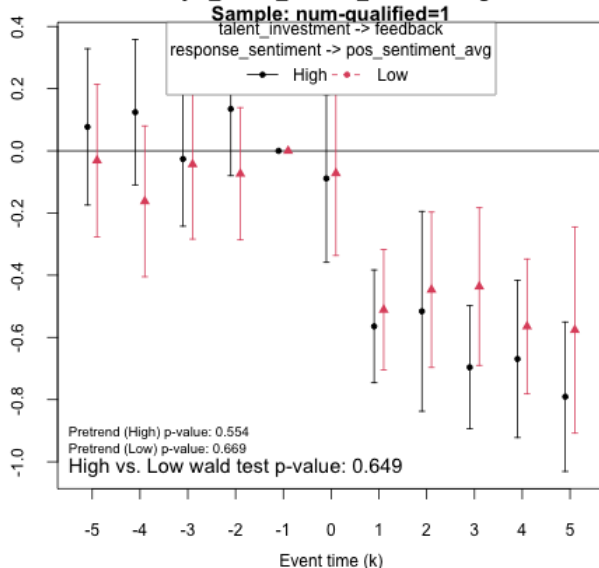


pull\_request\_opened rolling5

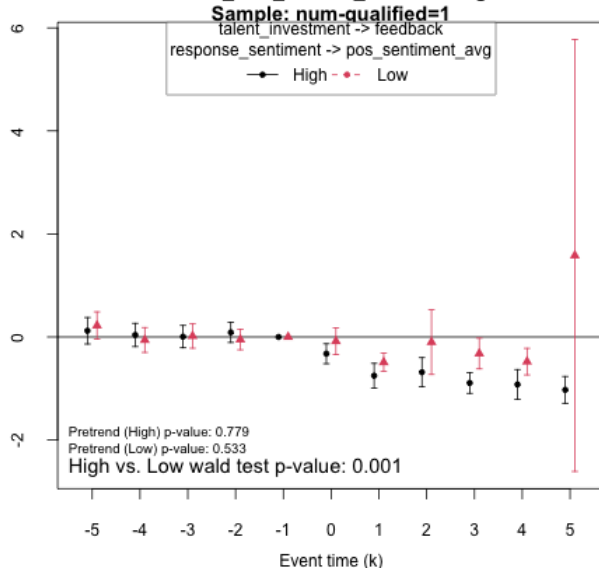




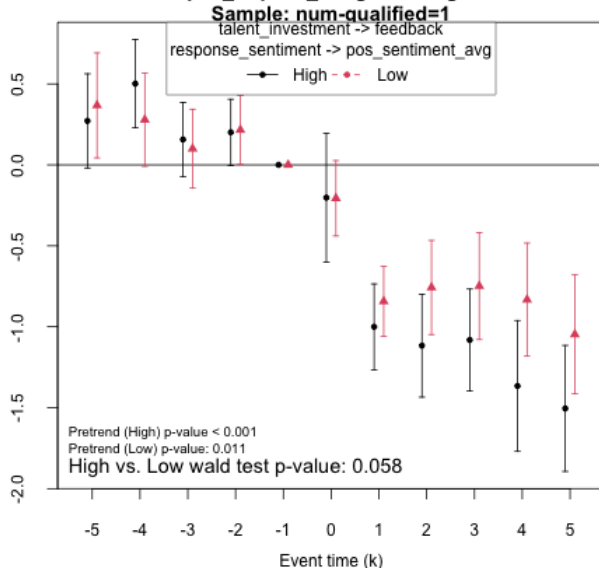
major\_minor\_release\_count rolling5



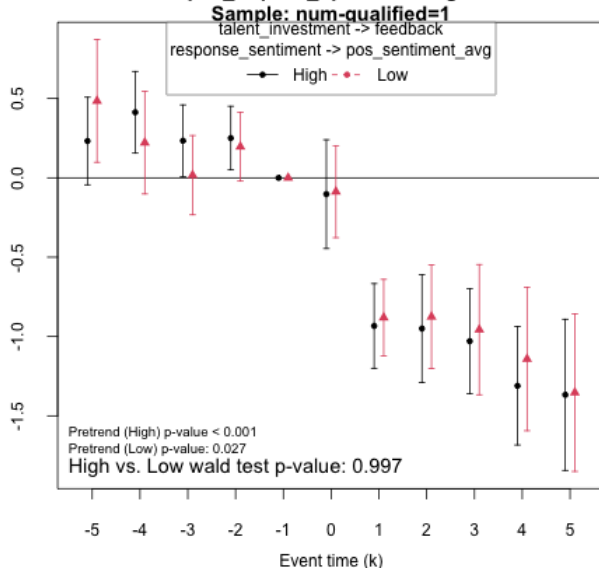
overall\_new\_release\_count rolling5



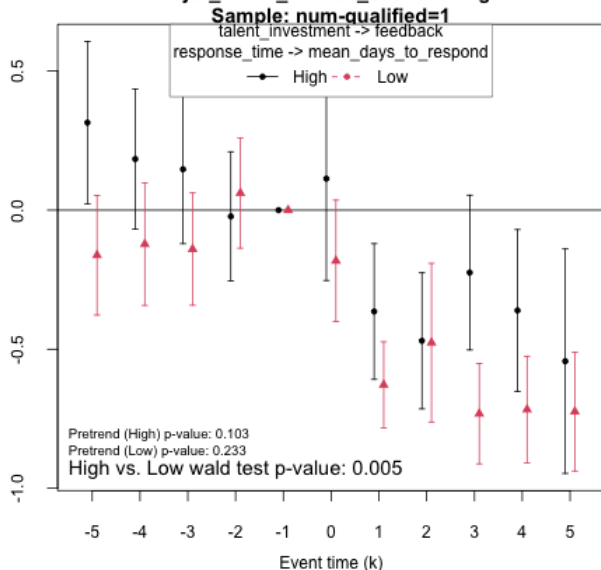
pull\_request\_merged rolling5



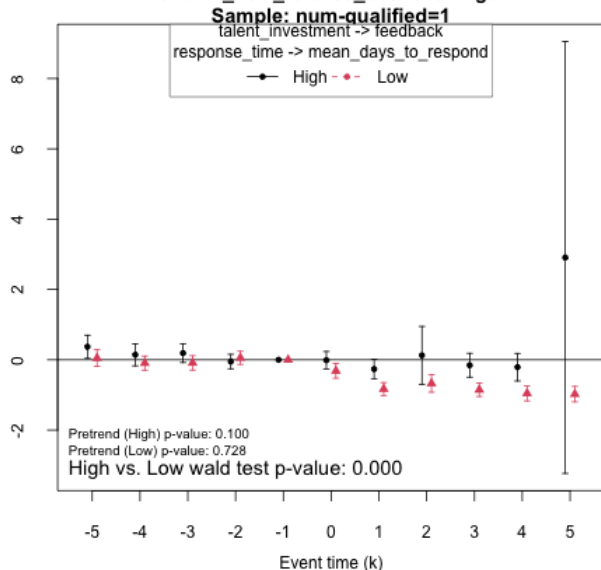
pull\_request\_opened rolling5



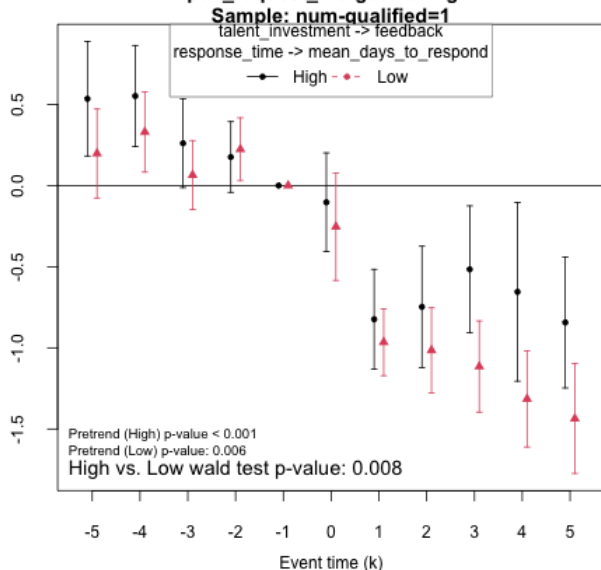
major\_minor\_release\_count rolling5



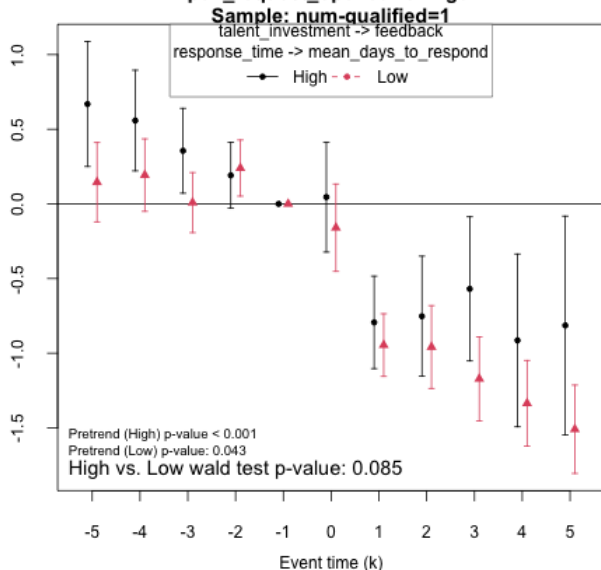
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5



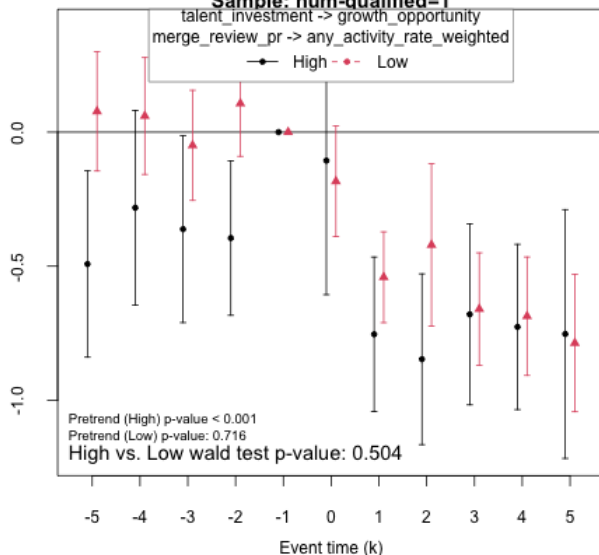
major\_minor\_release\_count rolling5

Sample: num-qualified=1

talent\_investment -&gt; growth\_opportunity

merge\_review\_pr -&gt; any\_activity\_rate\_weighted

—●— High —●— Low



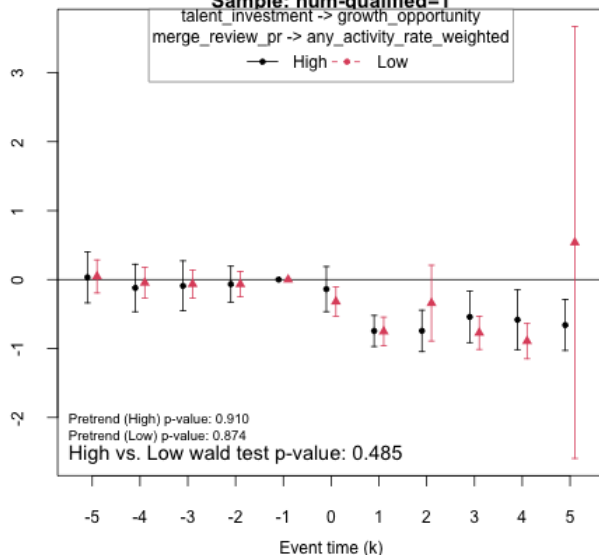
overall\_new\_release\_count rolling5

Sample: num-qualified=1

talent\_investment -&gt; growth\_opportunity

merge\_review\_pr -&gt; any\_activity\_rate\_weighted

—●— High —●— Low



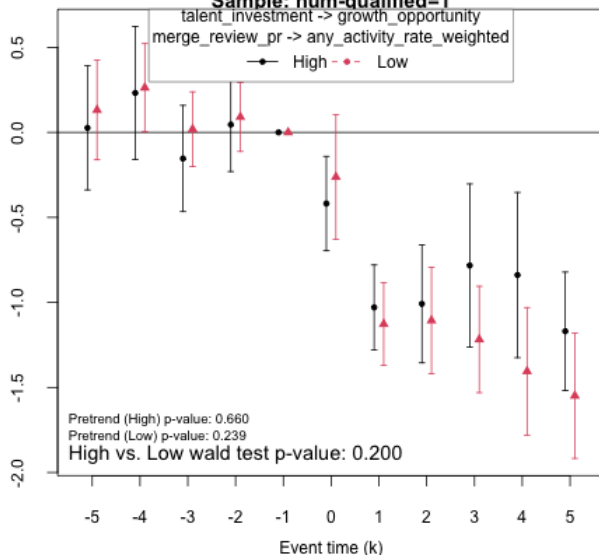
pull\_request\_merged rolling5

Sample: num-qualified=1

talent\_investment -&gt; growth\_opportunity

merge\_review\_pr -&gt; any\_activity\_rate\_weighted

—●— High —●— Low



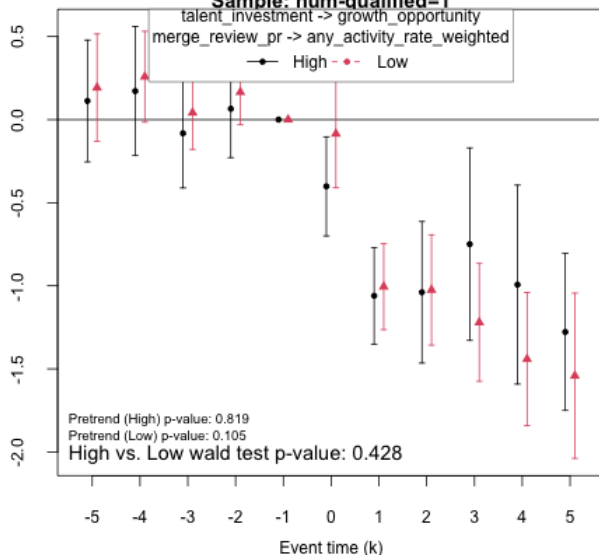
pull\_request\_opened rolling5

Sample: num-qualified=1

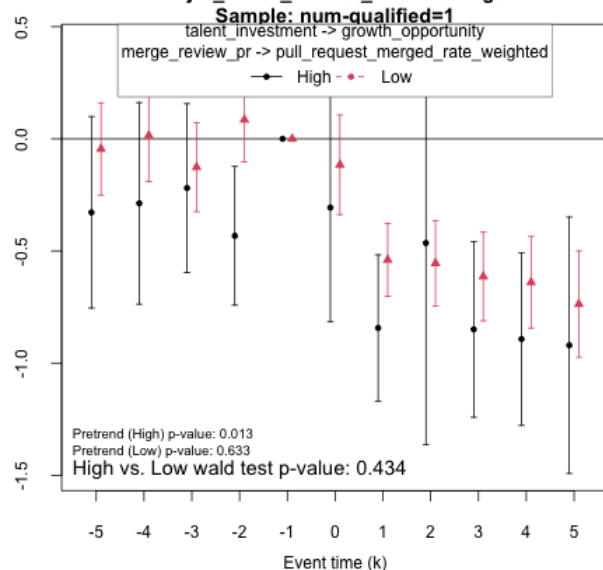
talent\_investment -&gt; growth\_opportunity

merge\_review\_pr -&gt; any\_activity\_rate\_weighted

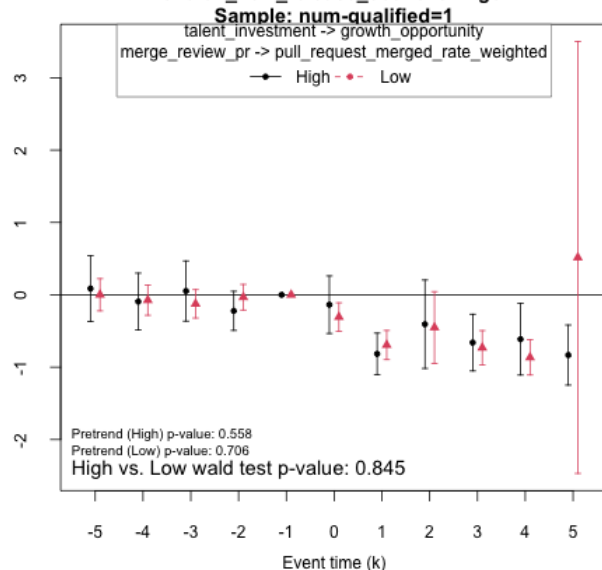
—●— High —●— Low



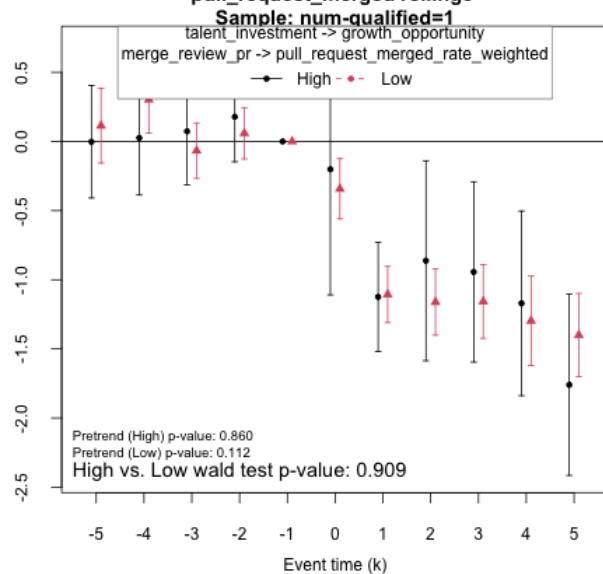
major\_minor\_release\_count rolling5



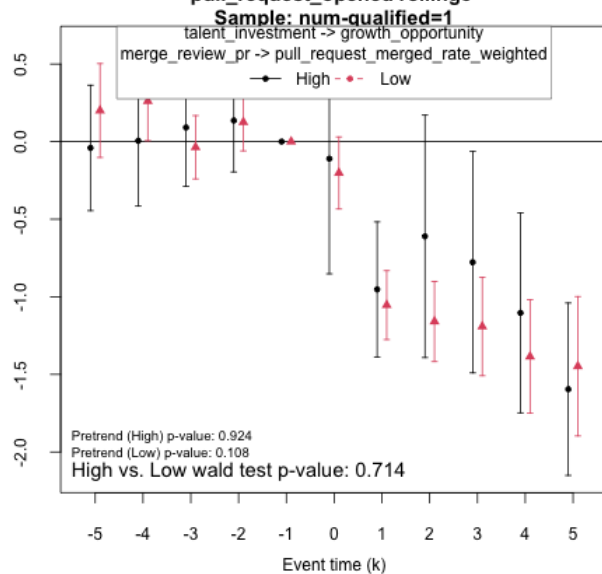
overall\_new\_release\_count rolling5



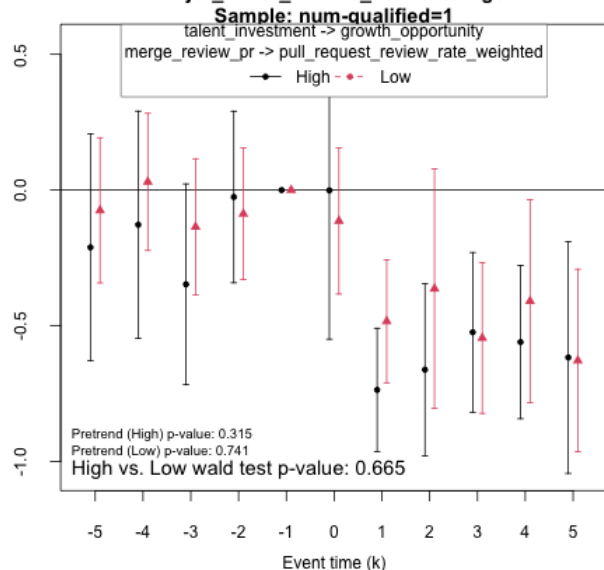
pull\_request\_merged rolling5



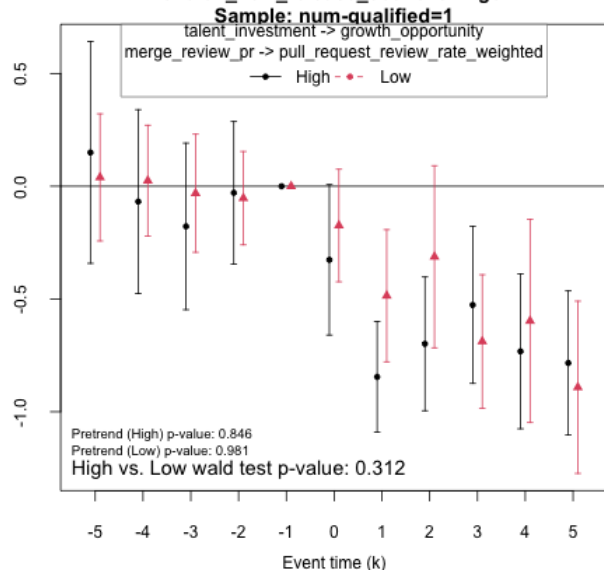
pull\_request\_opened rolling5



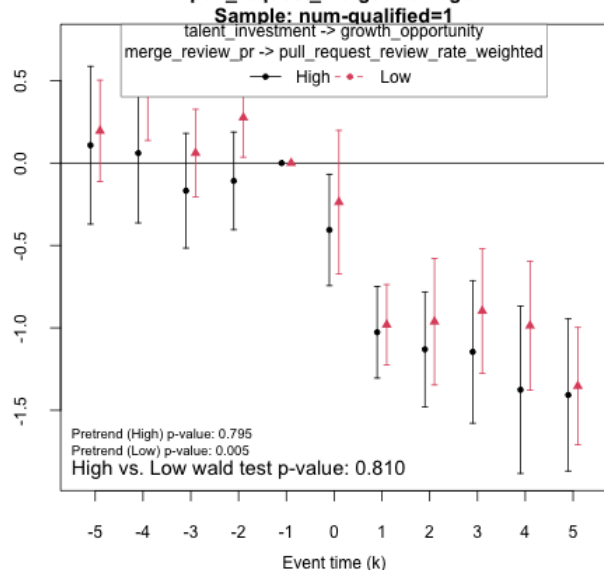
major\_minor\_release\_count rolling5



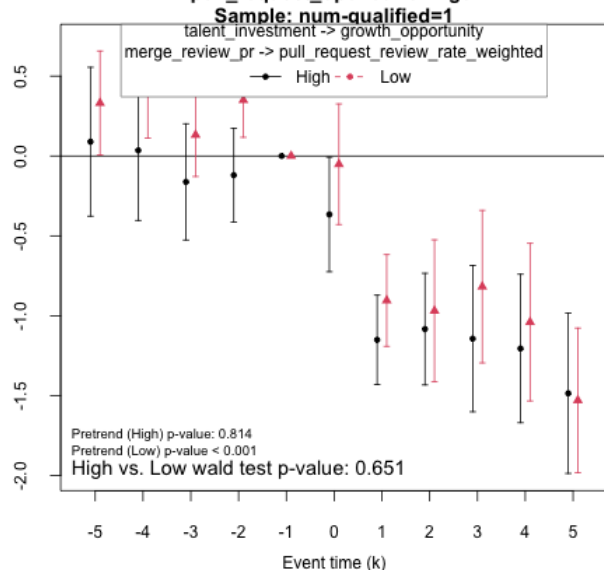
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

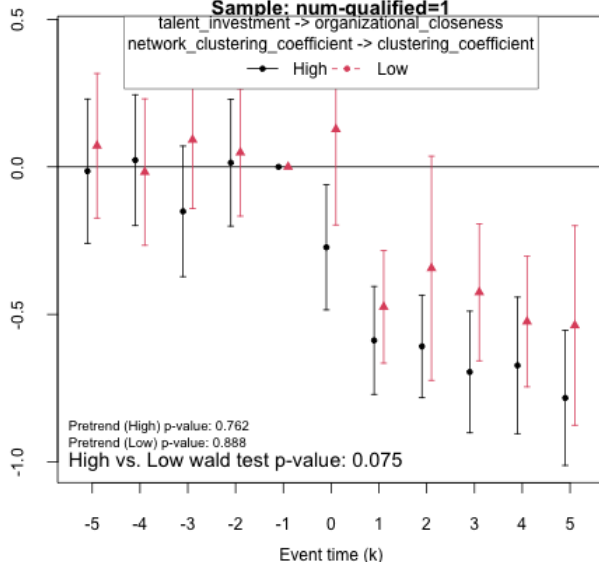


major\_minor\_release\_count rolling5

Sample: num-qualified=1

talent\_investment -> organizational\_closeness  
network\_clustering\_coefficient -> clustering\_coefficient

—●— High —●— Low

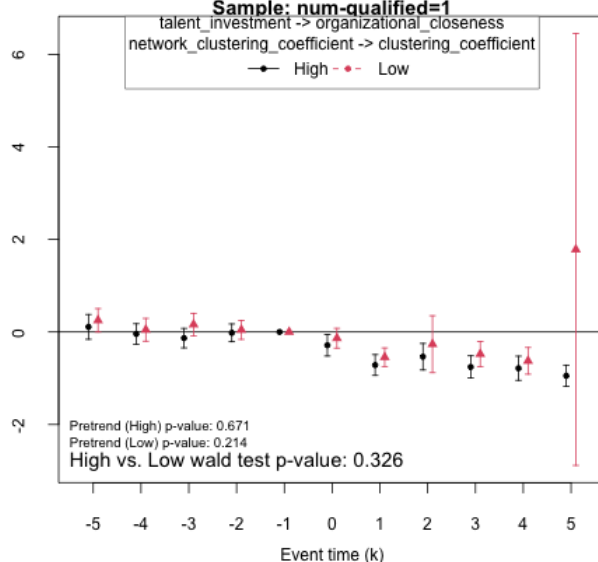


overall\_new\_release\_count rolling5

Sample: num-qualified=1

talent\_investment -> organizational\_closeness  
network\_clustering\_coefficient -> clustering\_coefficient

—●— High —●— Low

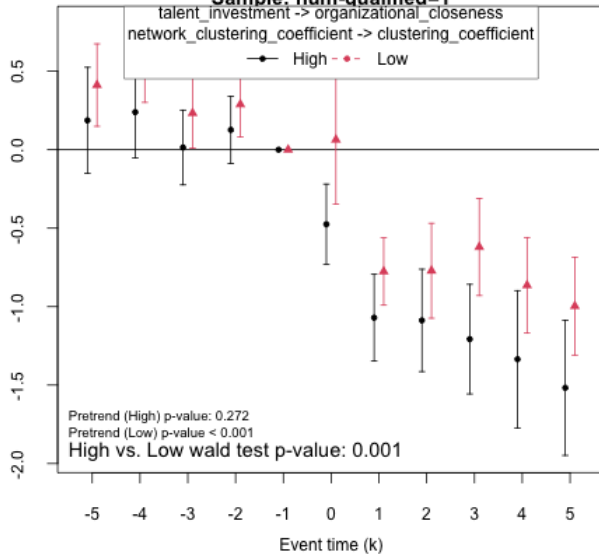


pull\_request\_merged rolling5

Sample: num-qualified=1

talent\_investment -> organizational\_closeness  
network\_clustering\_coefficient -> clustering\_coefficient

—●— High —●— Low



pull\_request\_opened rolling5

Sample: num-qualified=1

talent\_investment -> organizational\_closeness  
network\_clustering\_coefficient -> clustering\_coefficient

—●— High —●— Low

