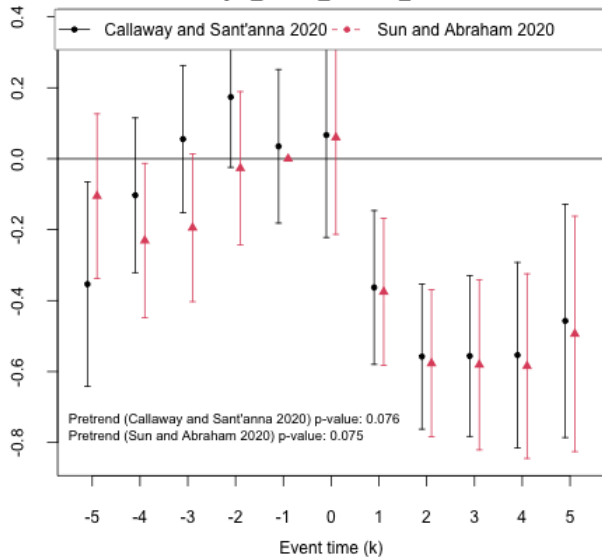
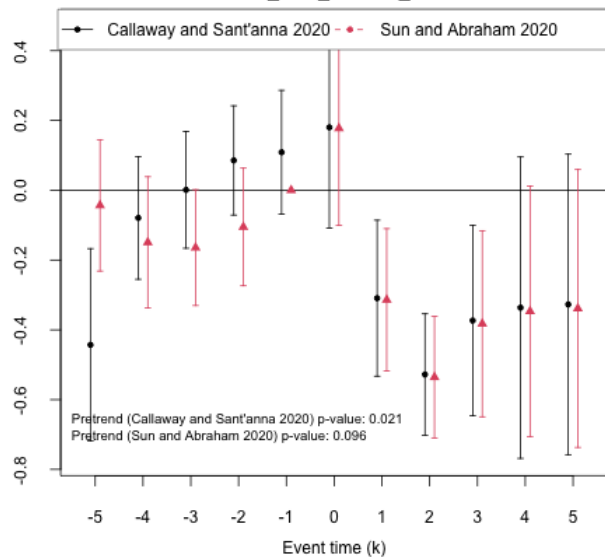


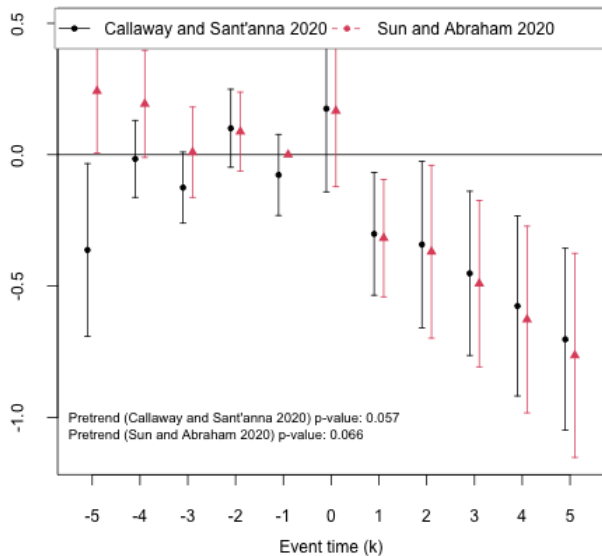
major\_minor\_release\_count



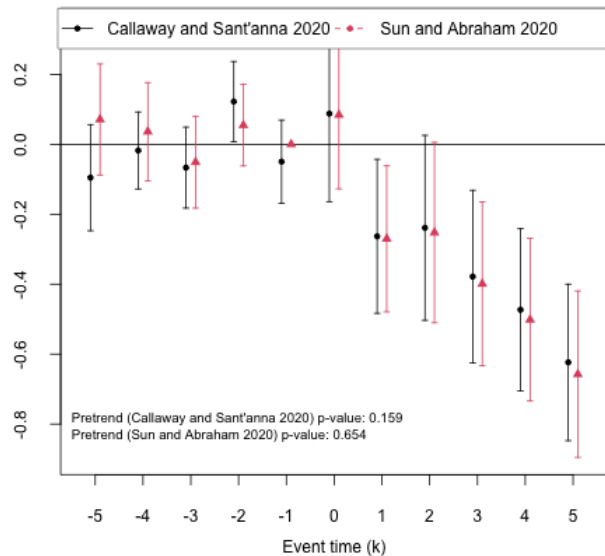
overall\_new\_release\_count



pull\_request\_merged



pull\_request\_opened



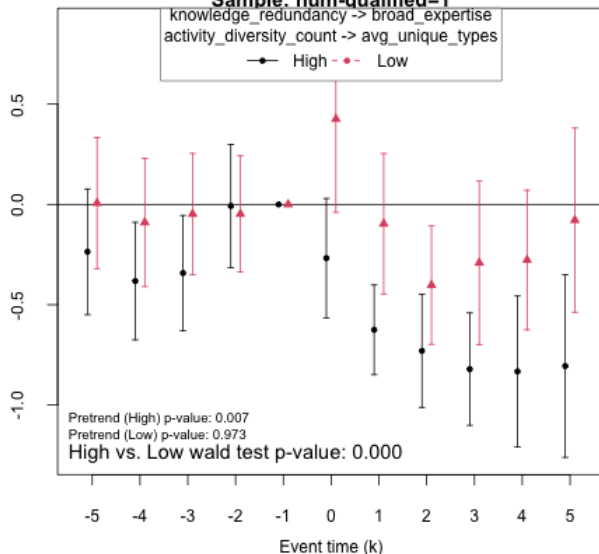
major\_minor\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; broad\_expertise

activity\_diversity\_count -&gt; avg\_unique\_types

—●— High —●— Low



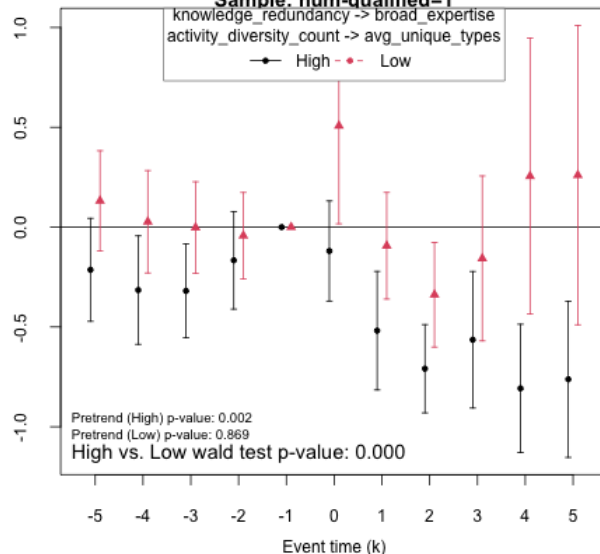
overall\_new\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; broad\_expertise

activity\_diversity\_count -&gt; avg\_unique\_types

—●— High —●— Low



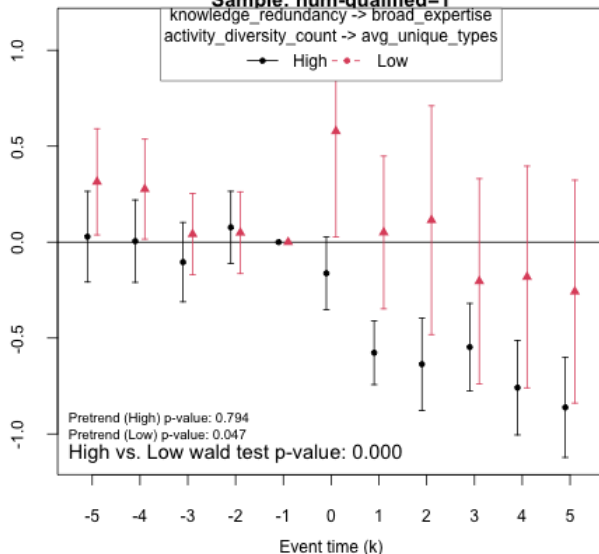
pull\_request\_merged rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; broad\_expertise

activity\_diversity\_count -&gt; avg\_unique\_types

—●— High —●— Low



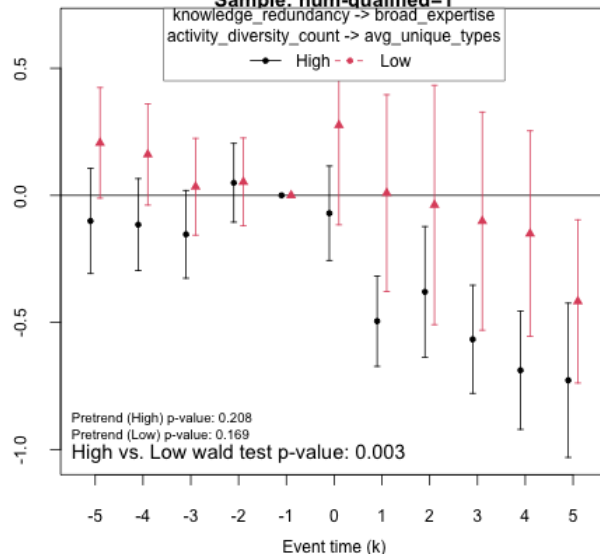
pull\_request\_opened rolling5

Sample: num-qualified=1

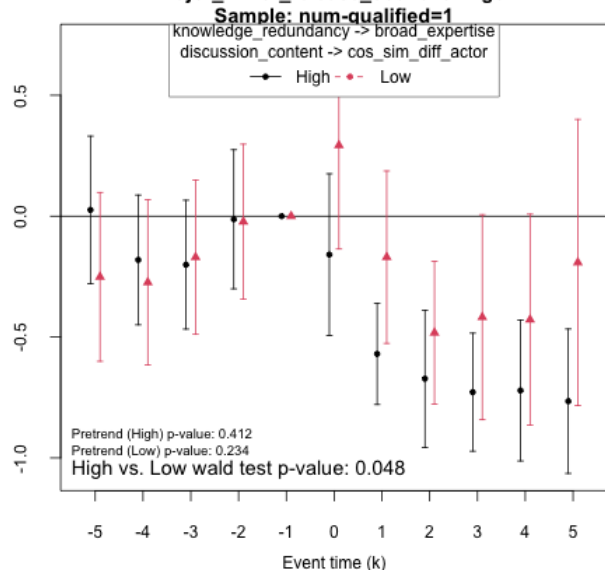
knowledge\_redundancy -&gt; broad\_expertise

activity\_diversity\_count -&gt; avg\_unique\_types

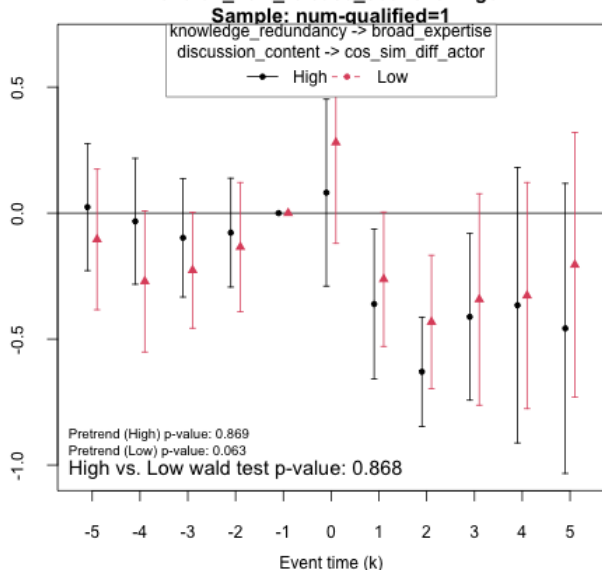
—●— High —●— Low



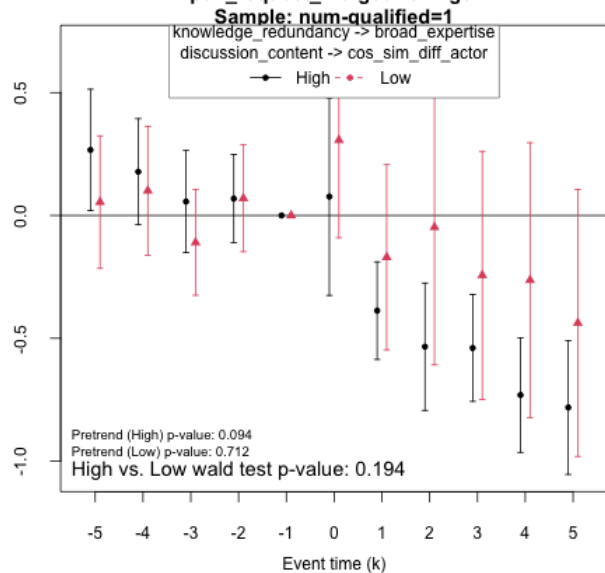
major\_minor\_release\_count rolling5



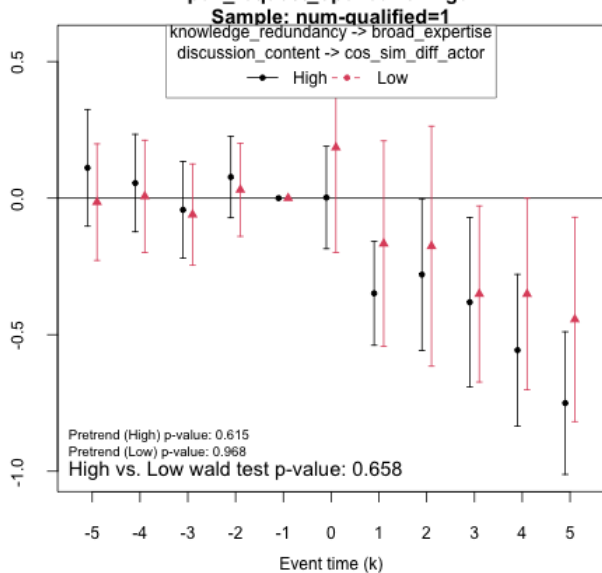
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

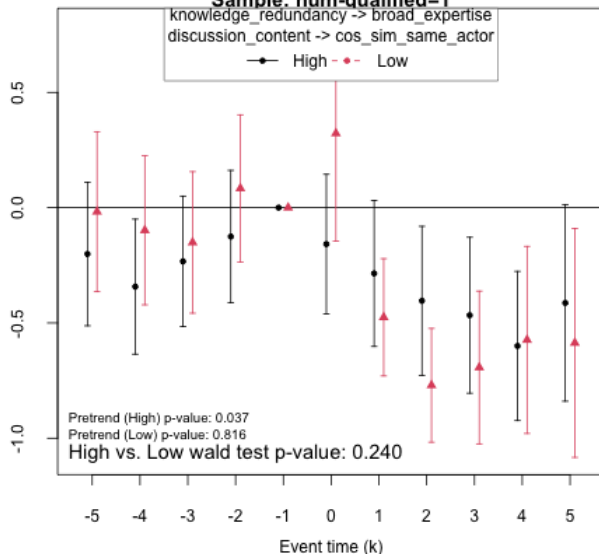


major\_minor\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

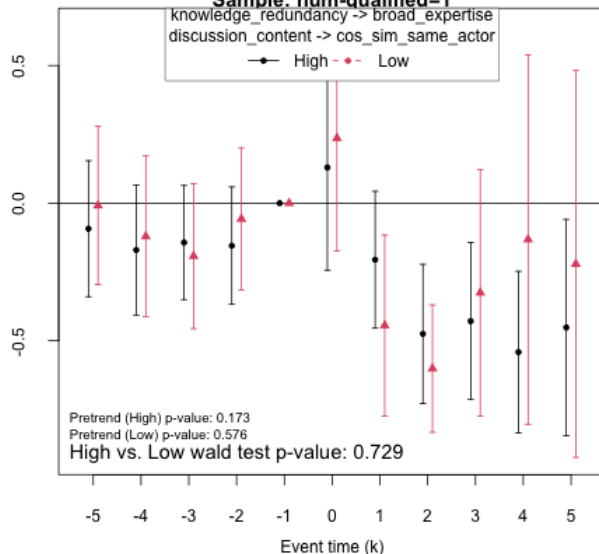


overall\_new\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

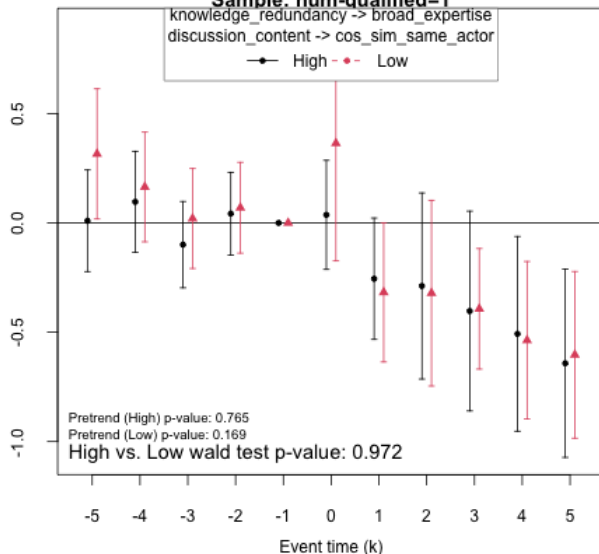


pull\_request\_merged rolling5

Sample: num-qualified=1

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

—●— High —●— Low

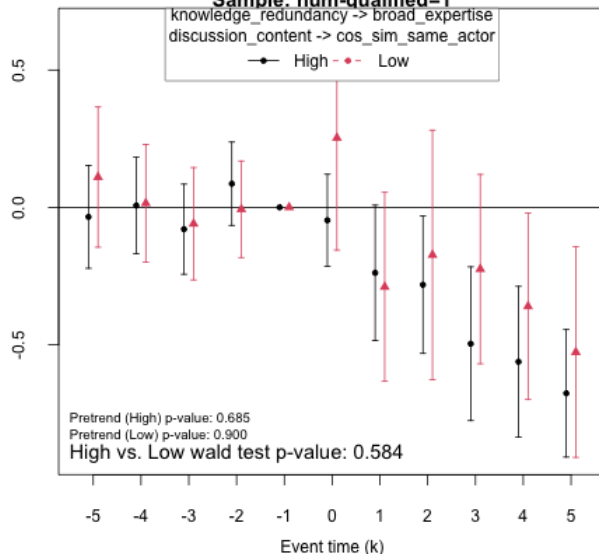


pull\_request\_opened rolling5

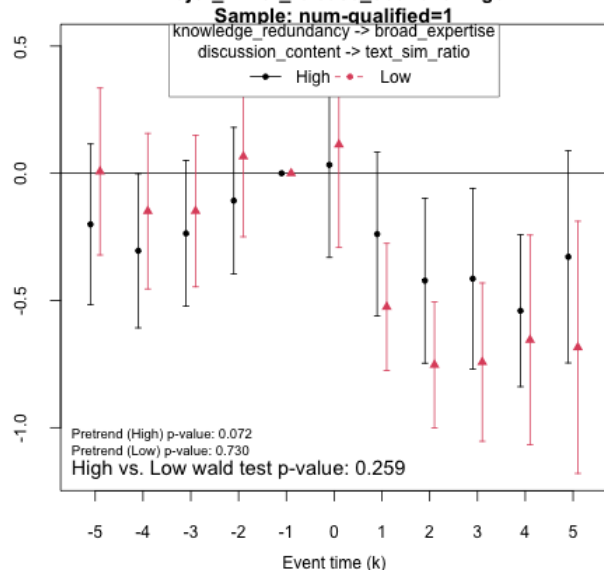
Sample: num-qualified=1

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

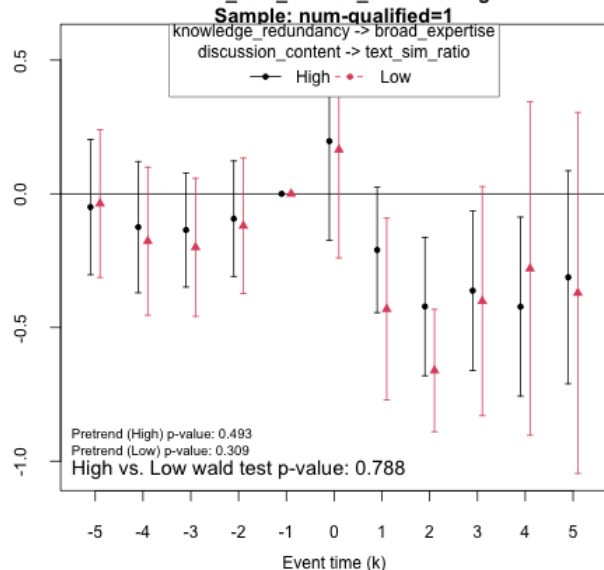
—●— High —●— Low



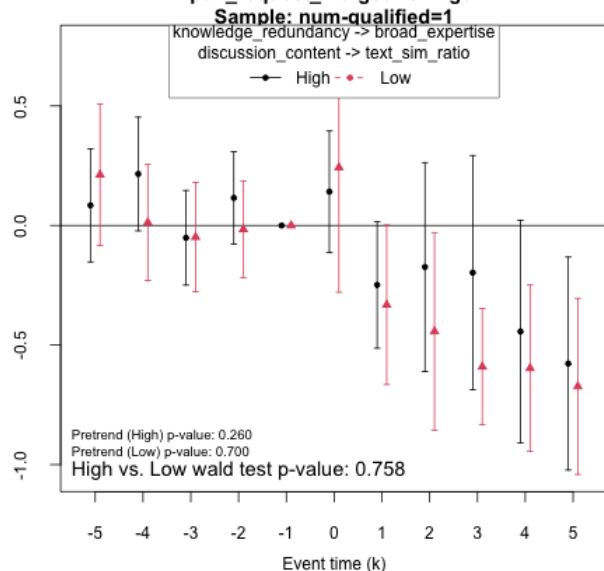
major\_minor\_release\_count rolling5



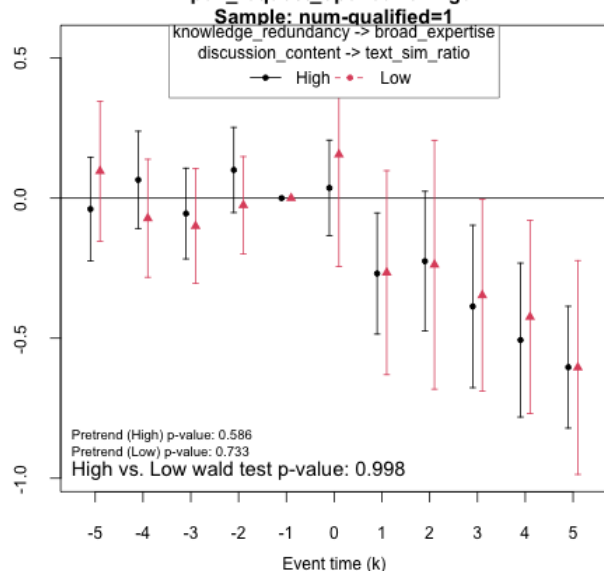
overall\_new\_release\_count rolling5



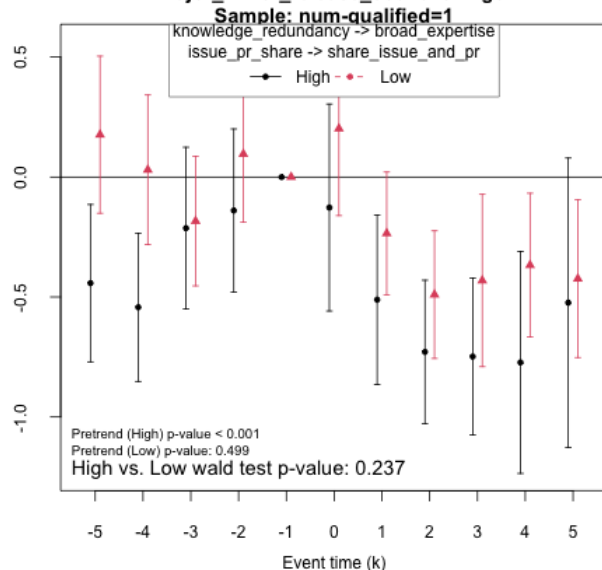
pull\_request\_merged rolling5



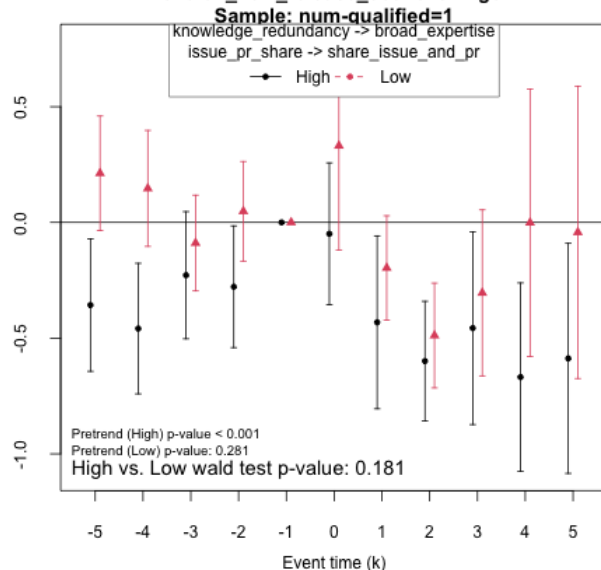
pull\_request\_opened rolling5



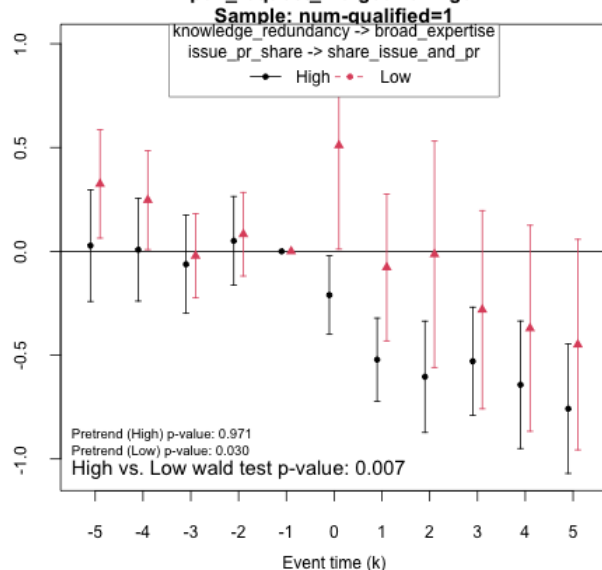
major\_minor\_release\_count rolling5



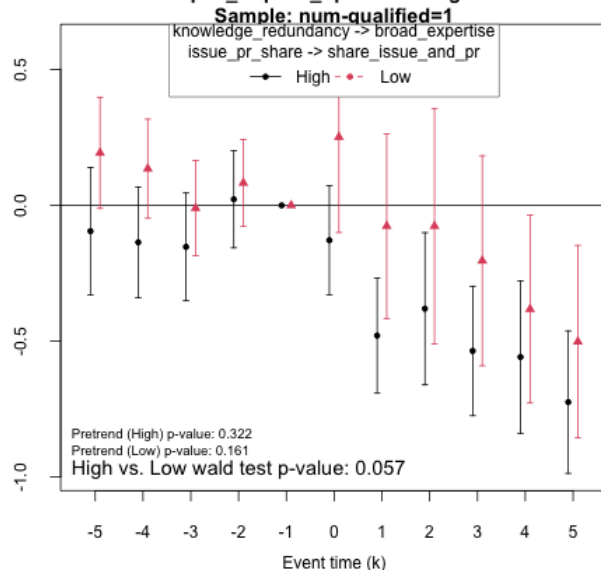
overall\_new\_release\_count rolling5



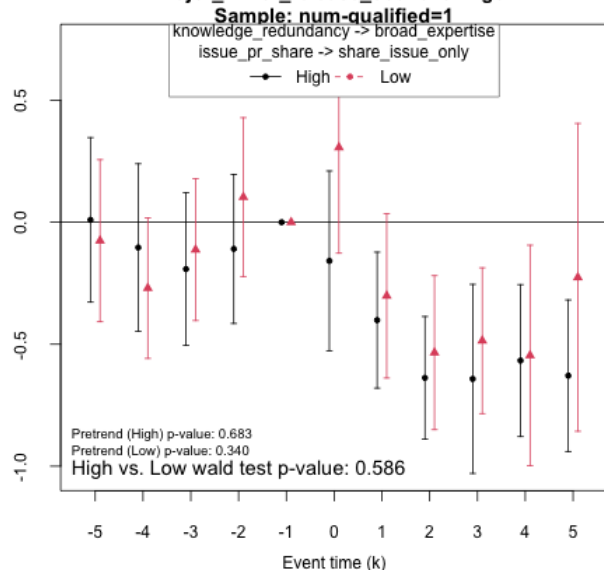
pull\_request\_merged rolling5



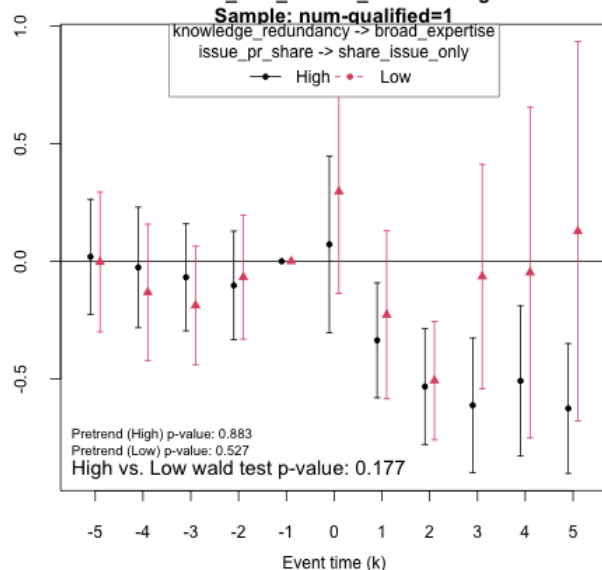
pull\_request\_opened rolling5



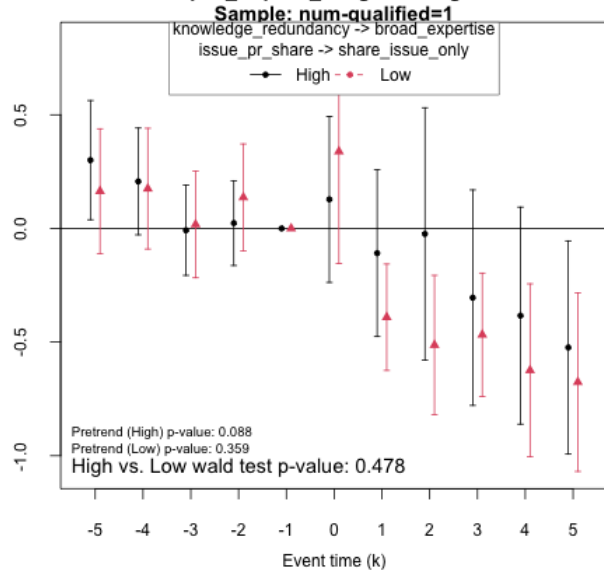
major\_minor\_release\_count rolling5



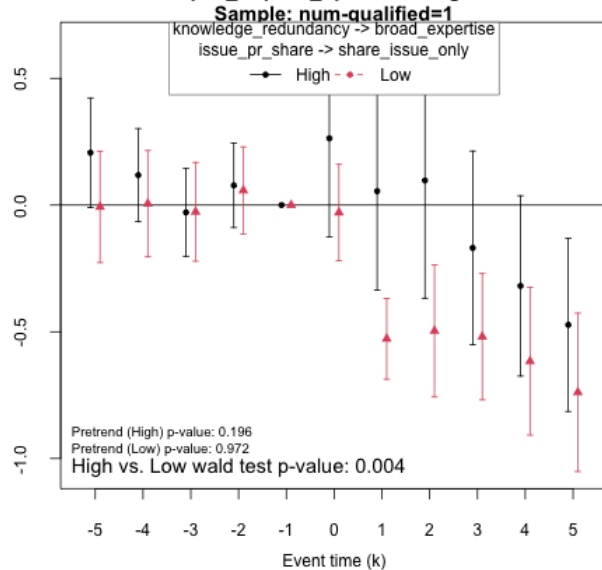
overall\_new\_release\_count rolling5



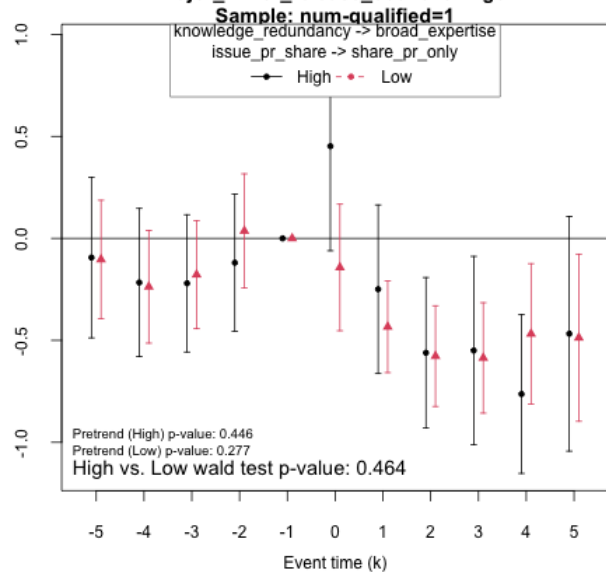
pull\_request\_merged rolling5



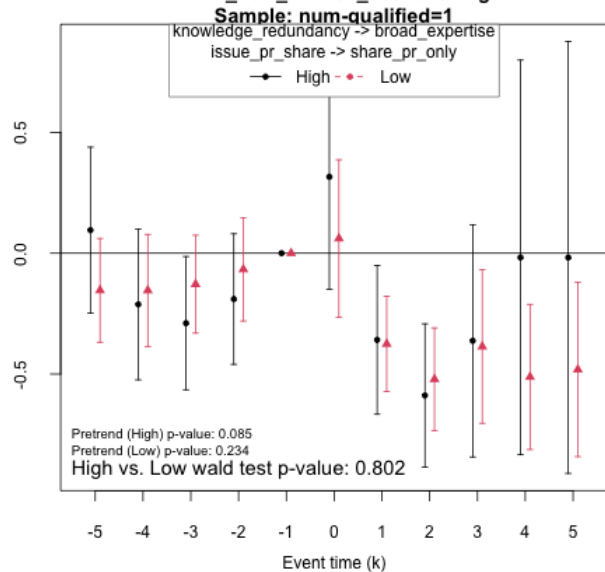
pull\_request\_opened rolling5



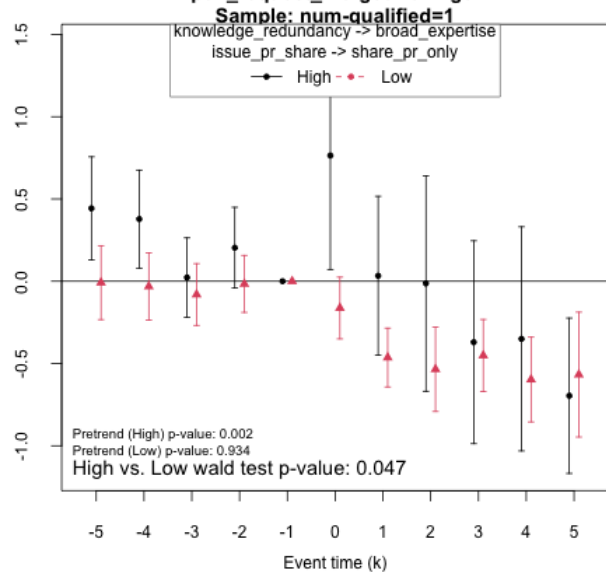
major\_minor\_release\_count rolling5



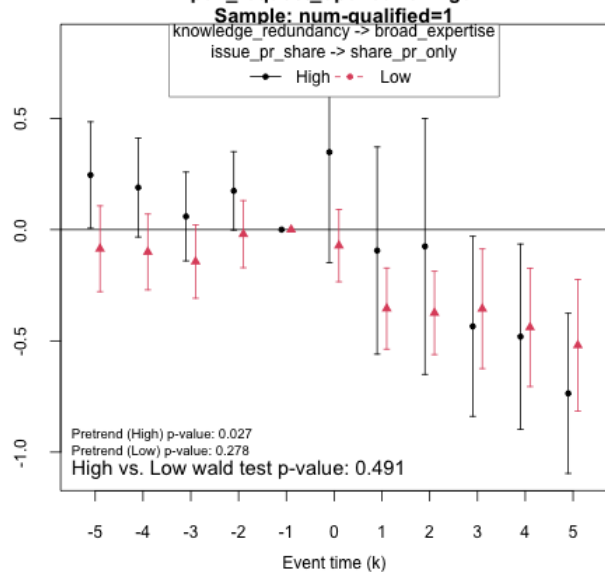
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5

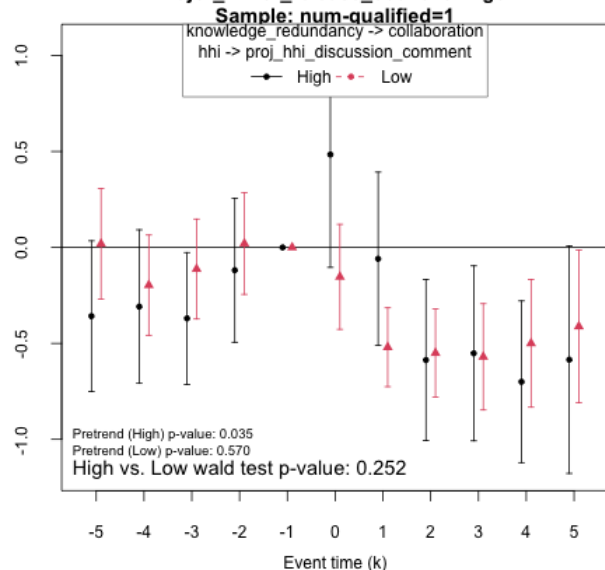


pull\_request\_opened rolling5

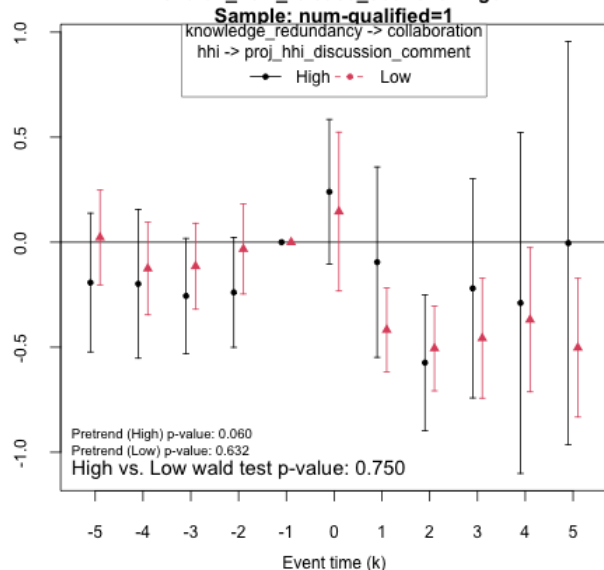




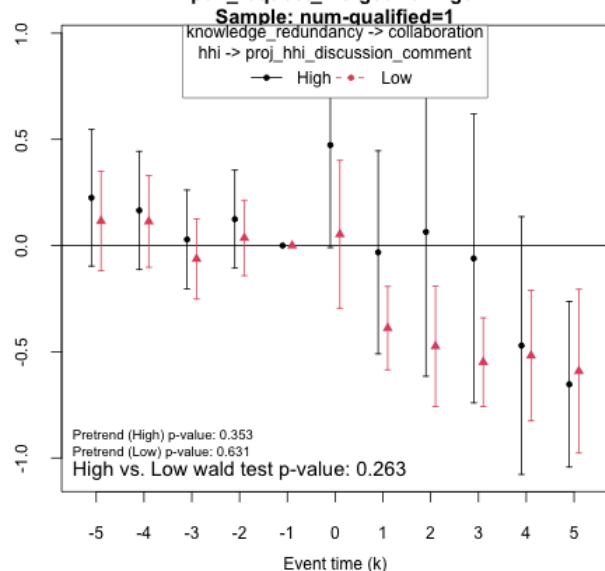
major\_minor\_release\_count rolling5



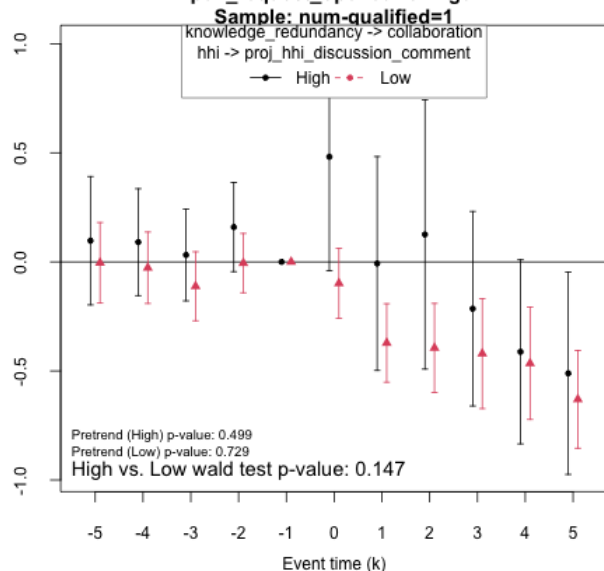
overall\_new\_release\_count rolling5



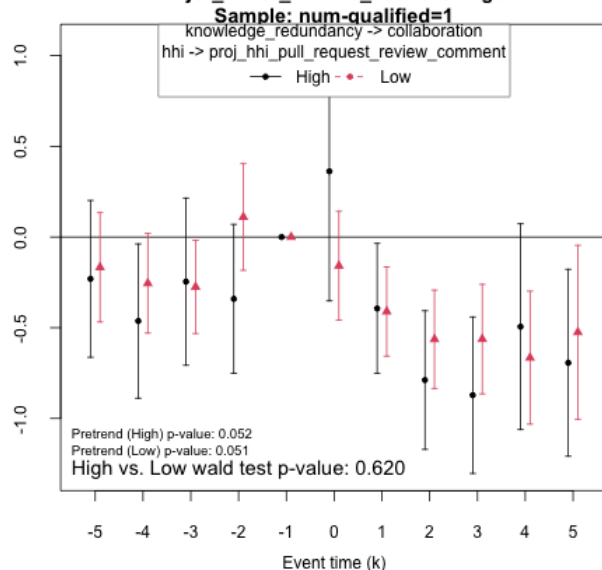
pull\_request\_merged rolling5



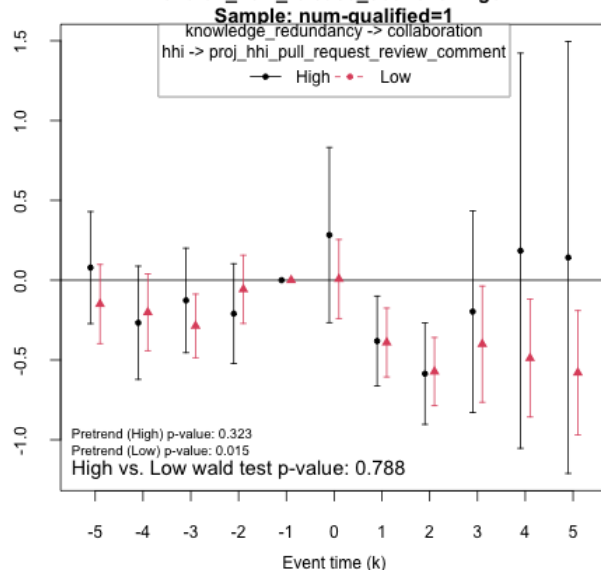
pull\_request\_opened rolling5



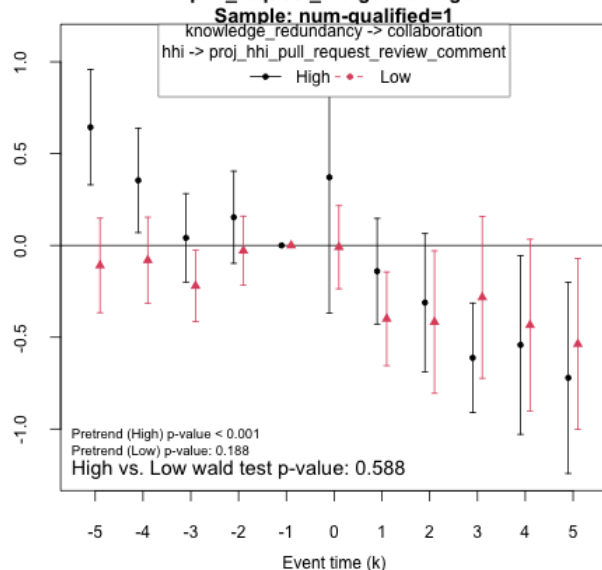
major\_minor\_release\_count rolling5



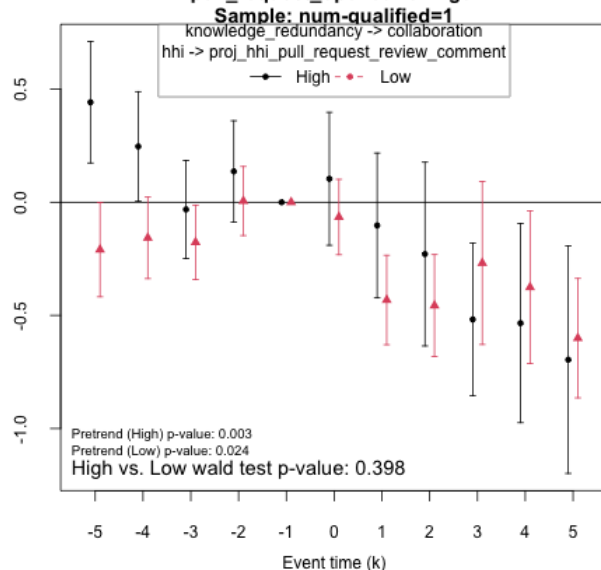
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5



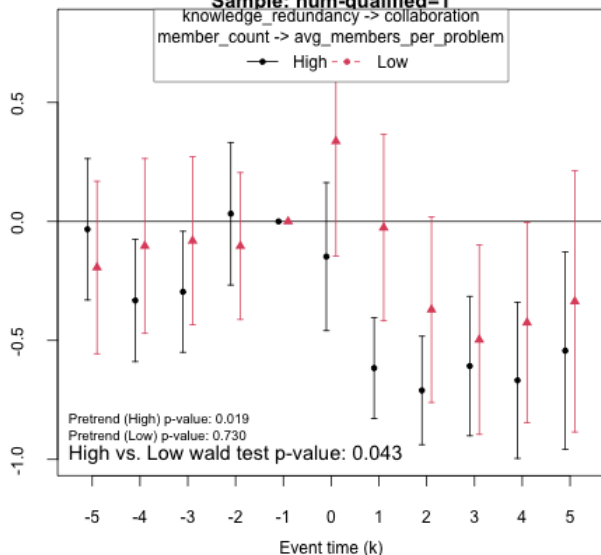
major\_minor\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; collaboration

member\_count -&gt; avg\_members\_per\_problem

—●— High —●— Low



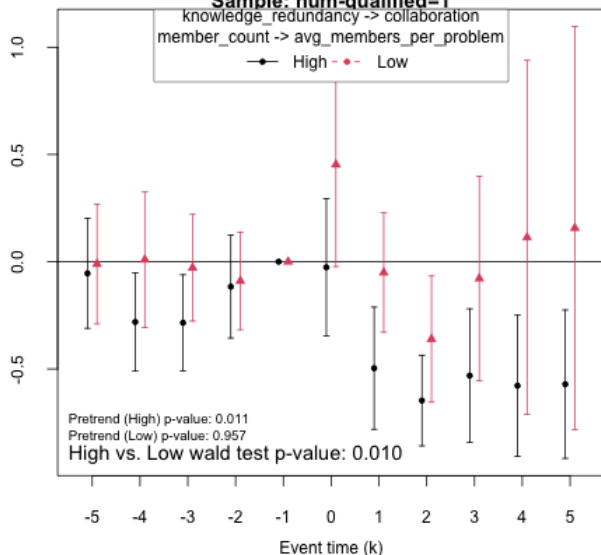
overall\_new\_release\_count rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; collaboration

member\_count -&gt; avg\_members\_per\_problem

—●— High —●— Low



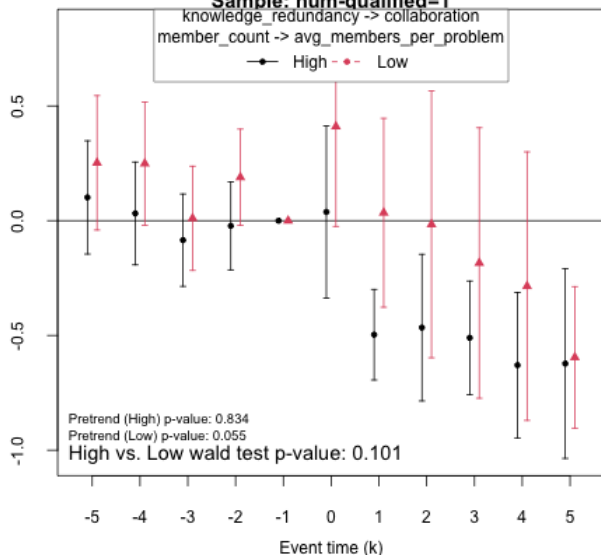
pull\_request\_merged rolling5

Sample: num-qualified=1

knowledge\_redundancy -&gt; collaboration

member\_count -&gt; avg\_members\_per\_problem

—●— High —●— Low



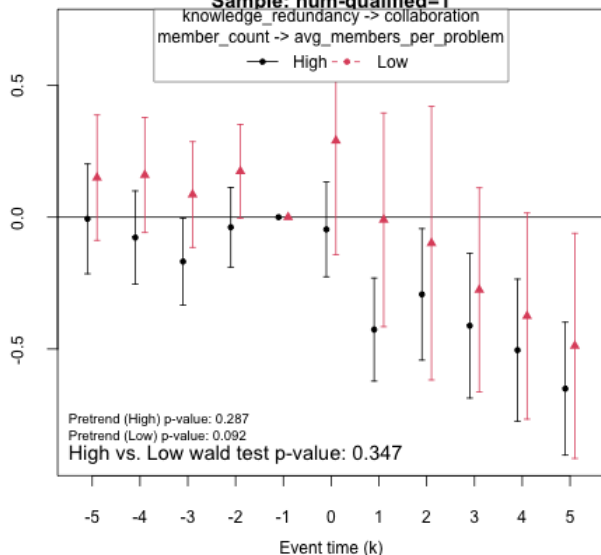
pull\_request\_opened rolling5

Sample: num-qualified=1

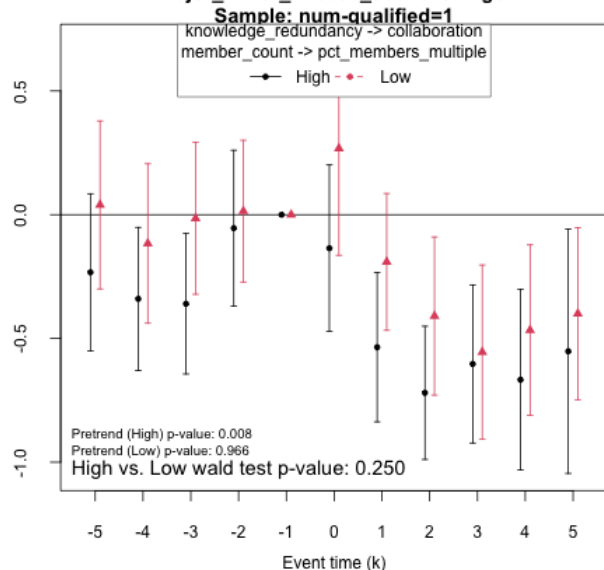
knowledge\_redundancy -&gt; collaboration

member\_count -&gt; avg\_members\_per\_problem

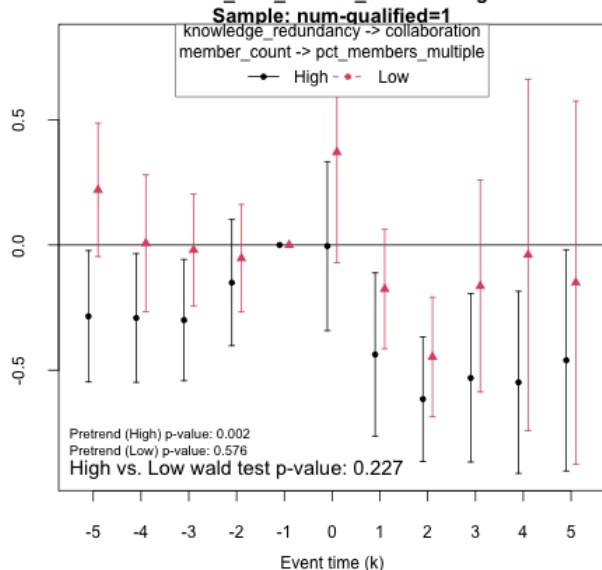
—●— High —●— Low



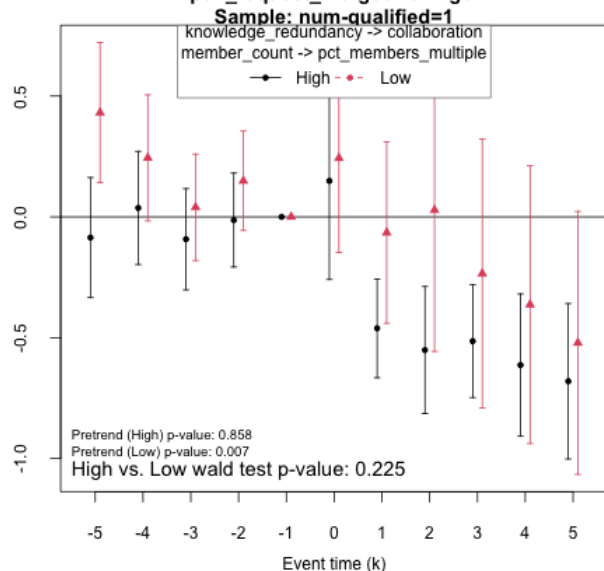
major\_minor\_release\_count rolling5



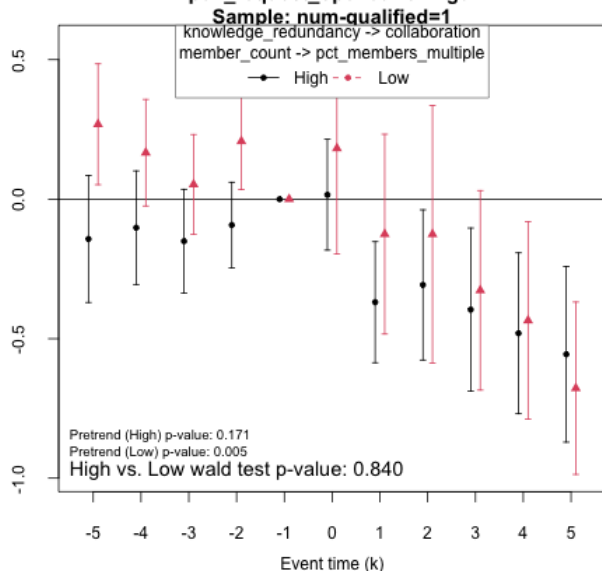
overall\_new\_release\_count rolling5



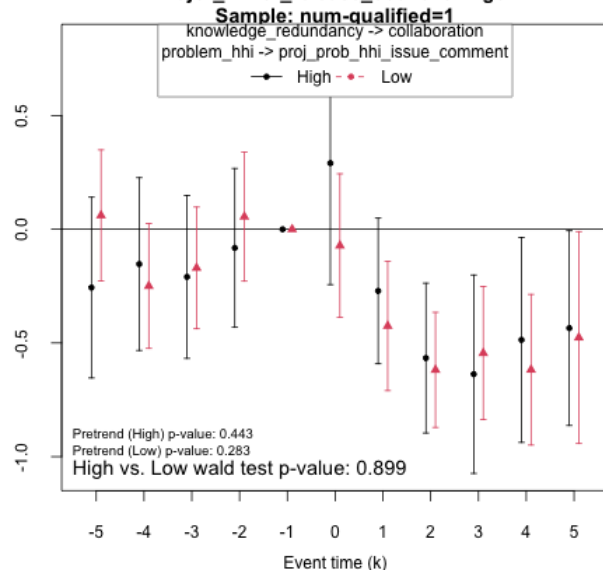
pull\_request\_merged rolling5



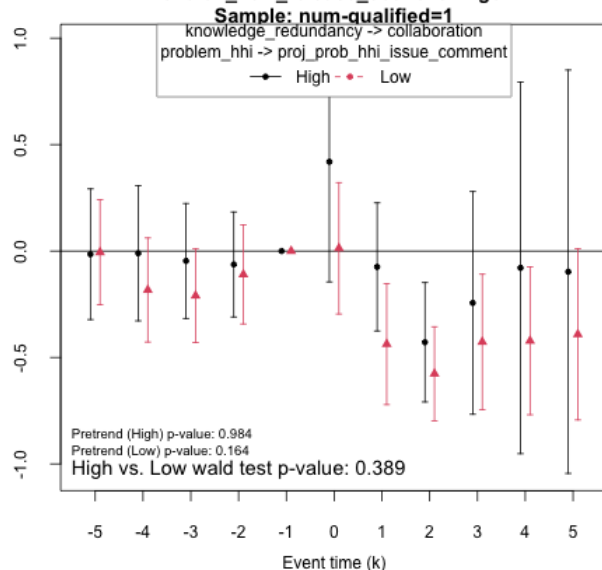
pull\_request\_opened rolling5



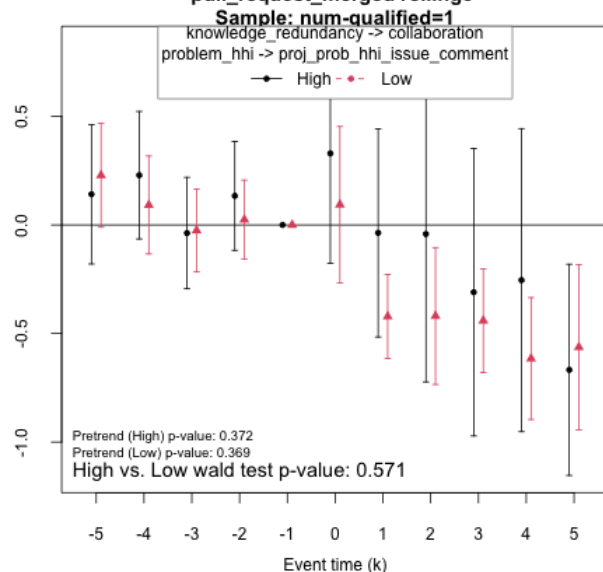
major\_minor\_release\_count rolling5



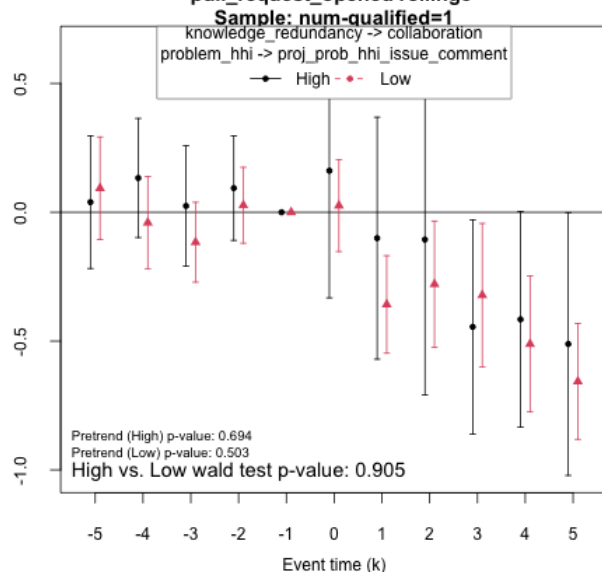
overall\_new\_release\_count rolling5



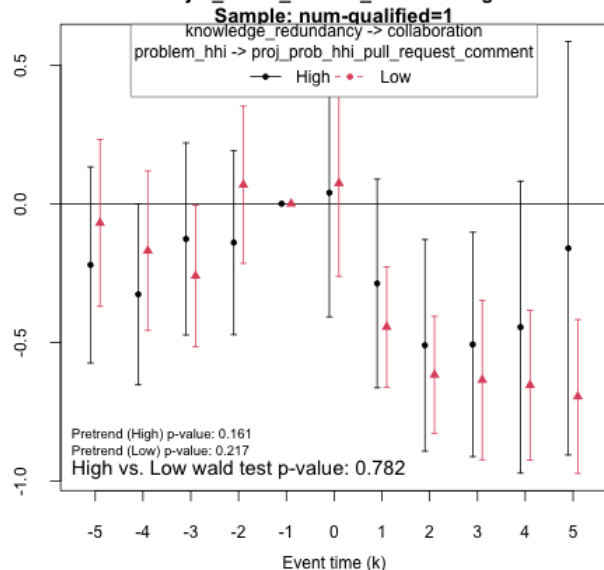
pull\_request\_merged rolling5



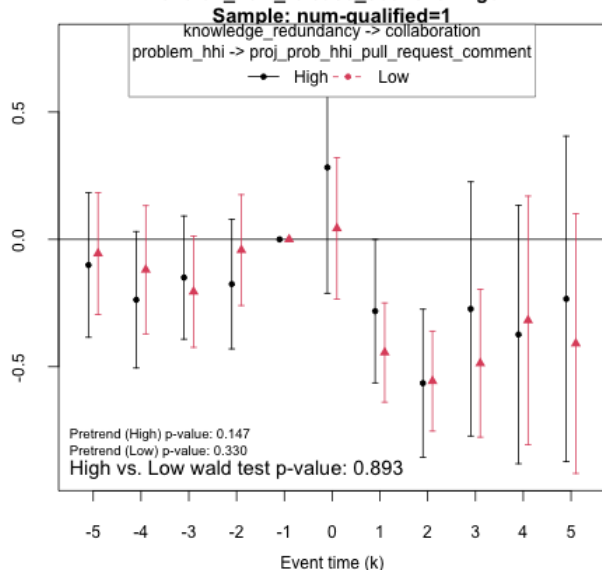
pull\_request\_opened rolling5



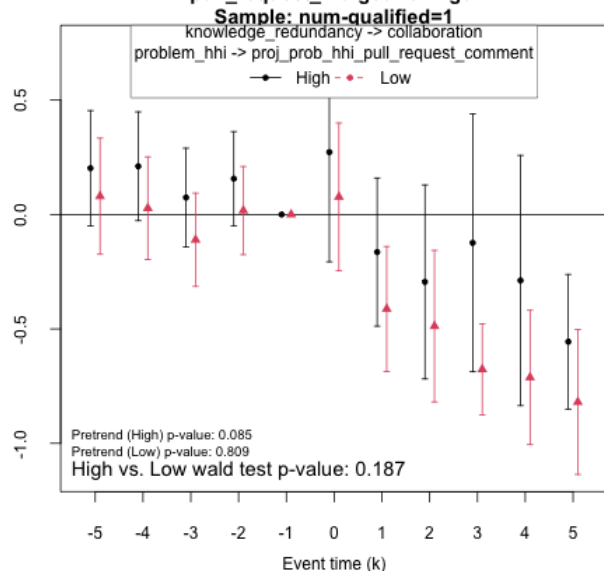
major\_minor\_release\_count rolling5



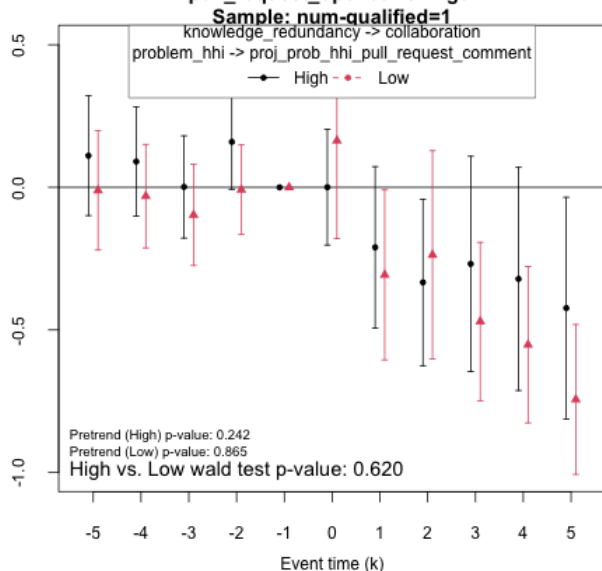
overall\_new\_release\_count rolling5



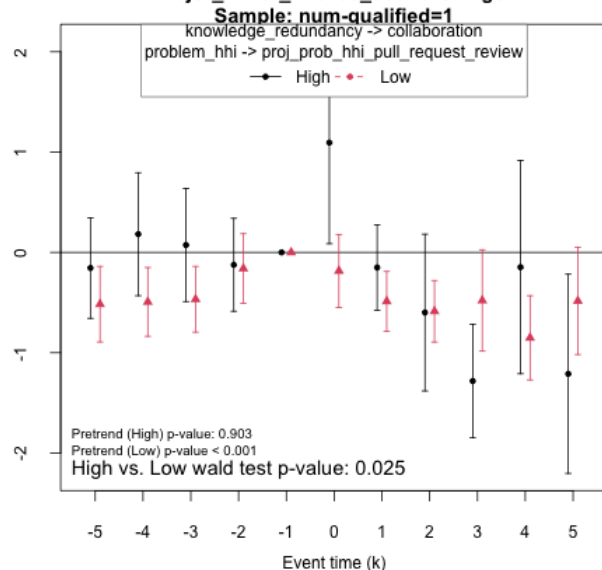
pull\_request\_merged rolling5



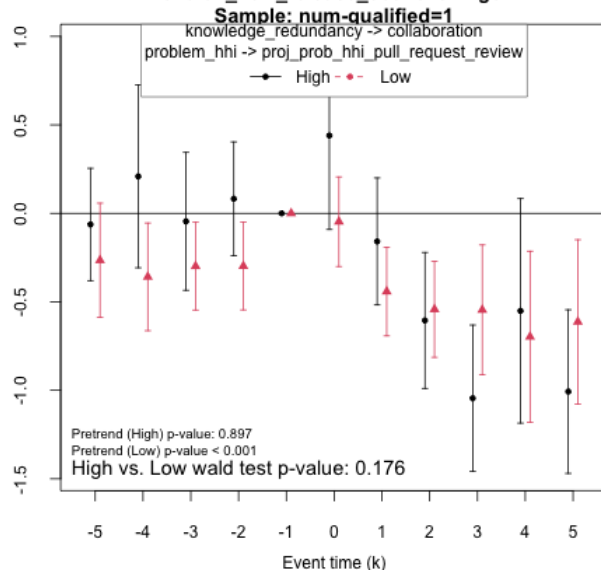
pull\_request\_opened rolling5



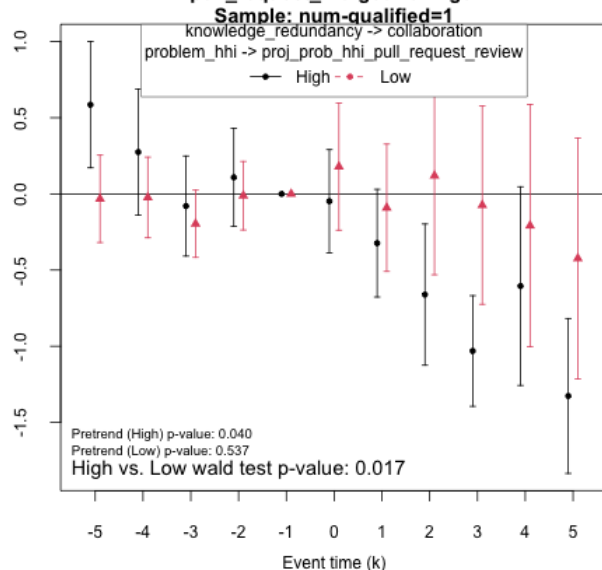
major\_minor\_release\_count rolling5



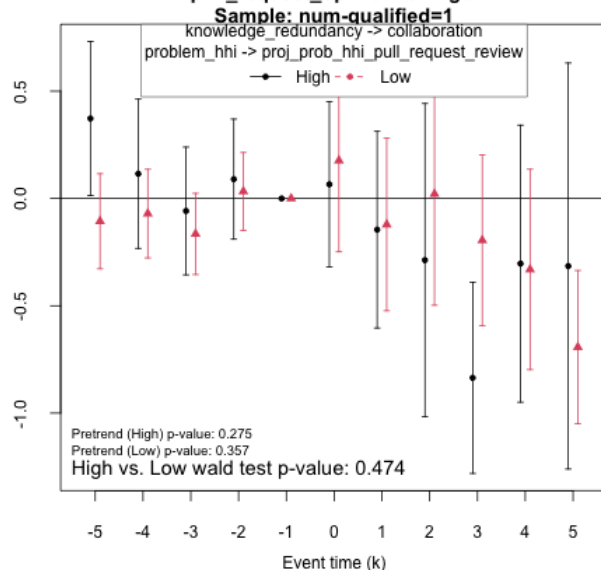
overall\_new\_release\_count rolling5



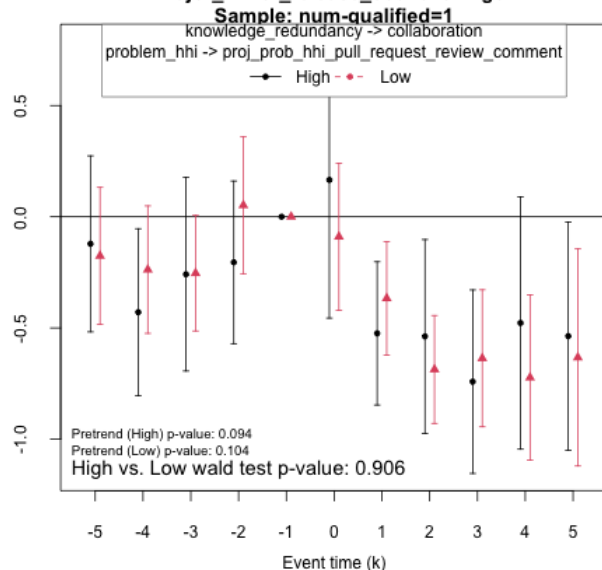
pull\_request\_merged rolling5



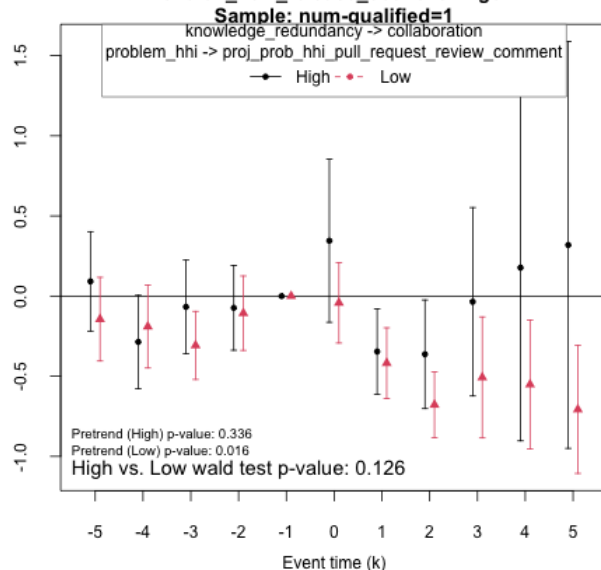
pull\_request\_opened rolling5



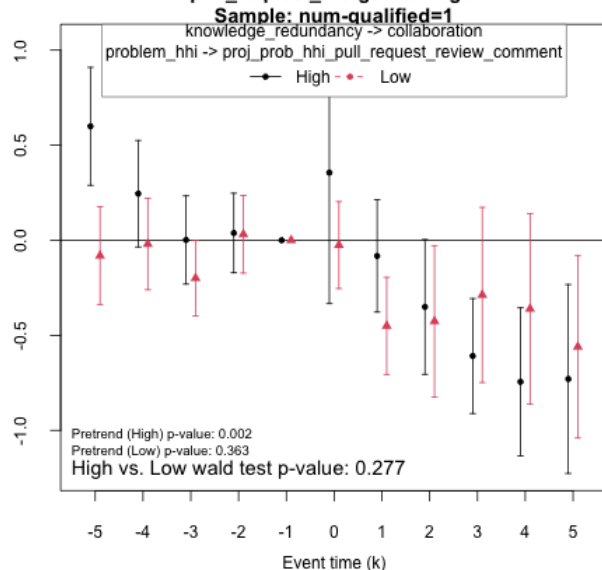
major\_minor\_release\_count rolling5



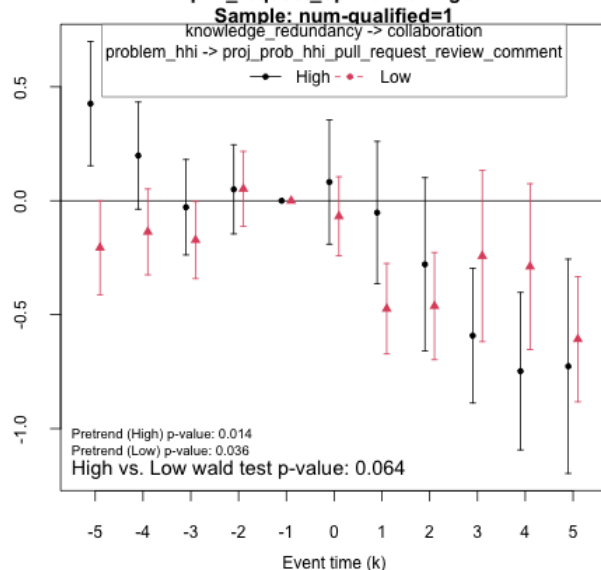
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5

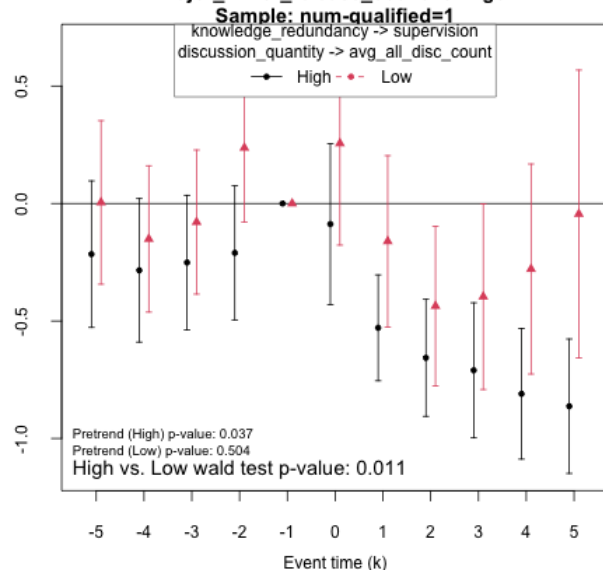


pull\_request\_opened rolling5

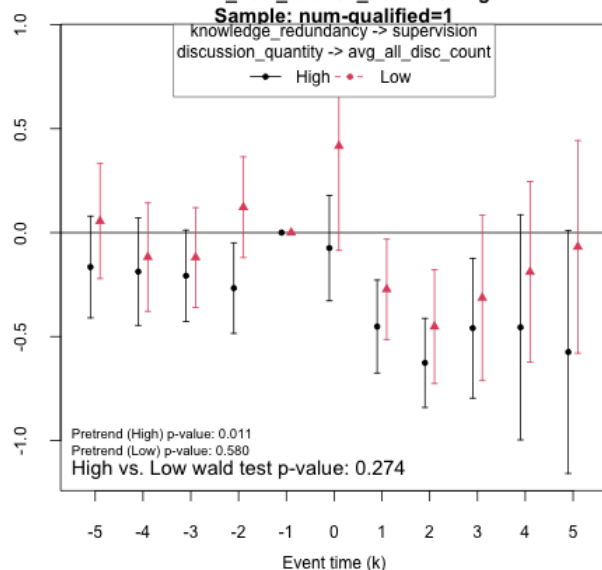




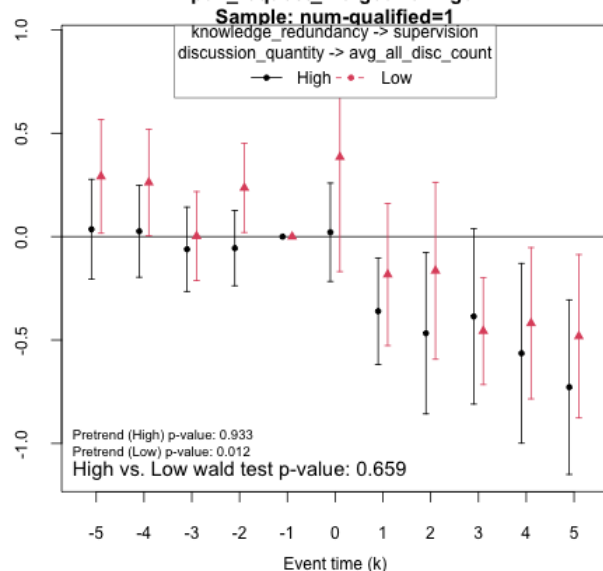
major\_minor\_release\_count rolling5



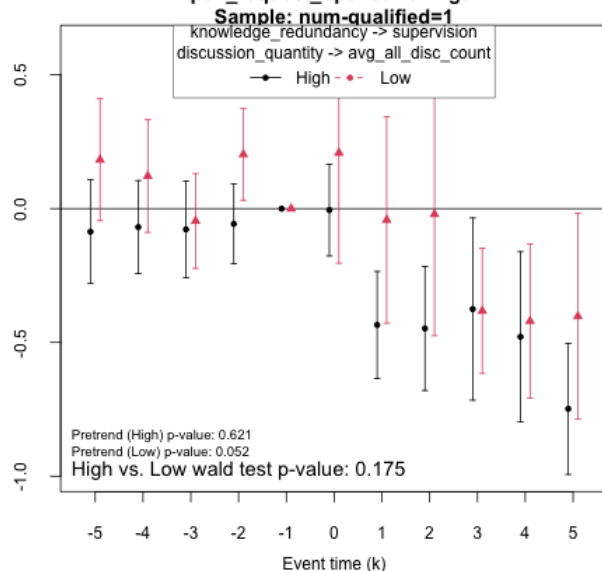
overall\_new\_release\_count rolling5



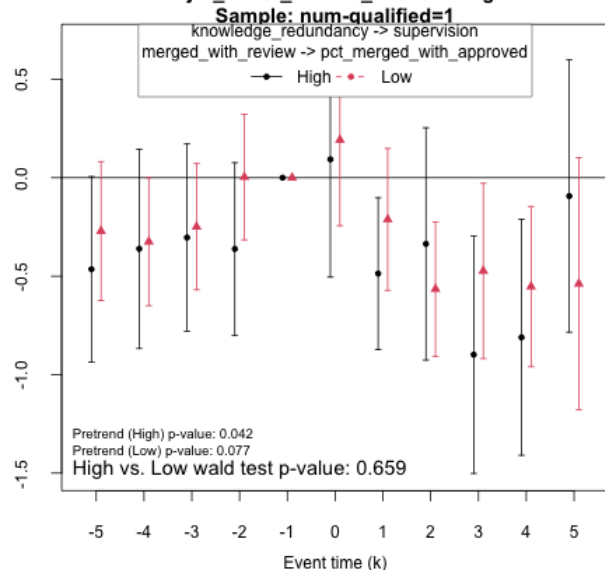
pull\_request\_merged rolling5



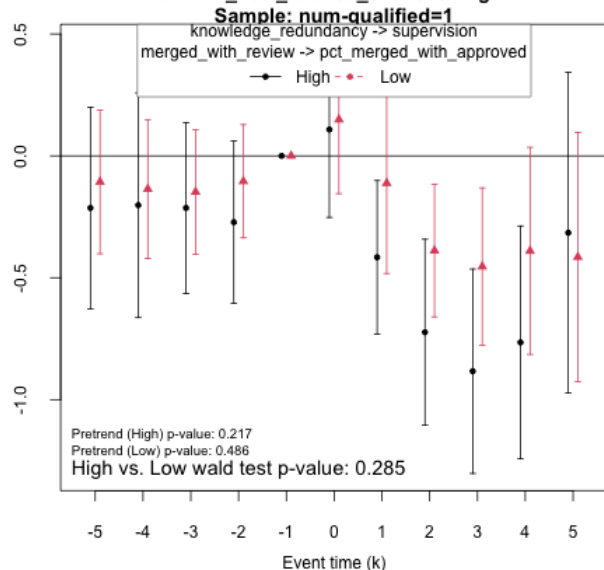
pull\_request\_opened rolling5



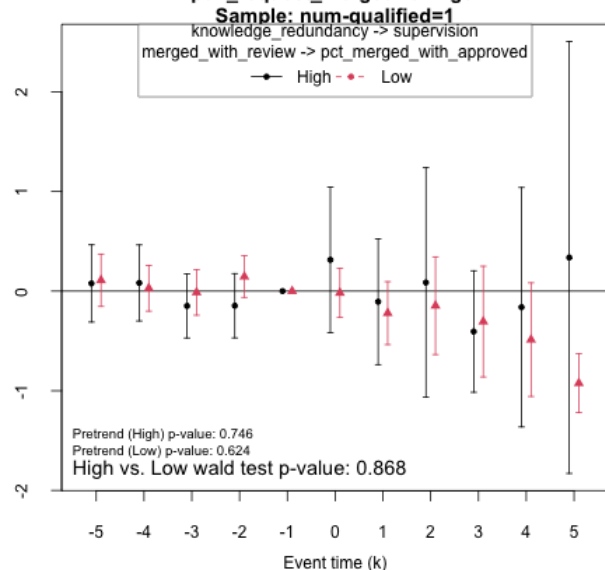
major\_minor\_release\_count rolling5



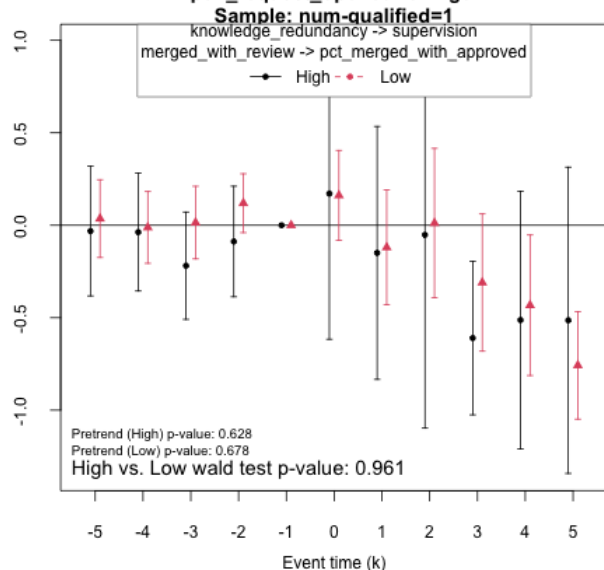
overall\_new\_release\_count rolling5



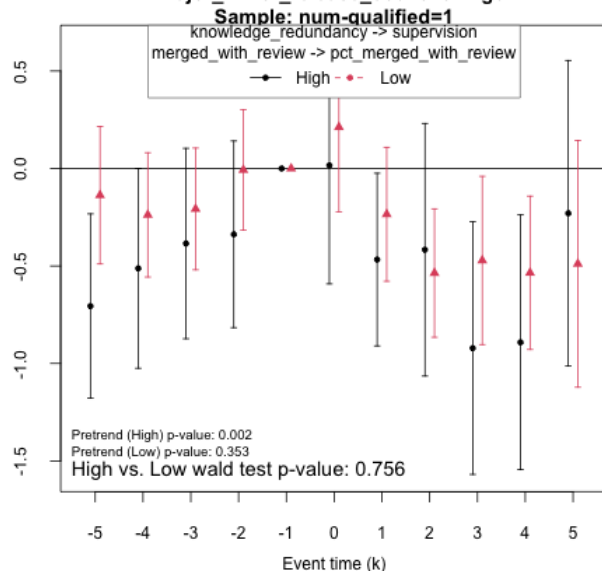
pull\_request\_merged rolling5



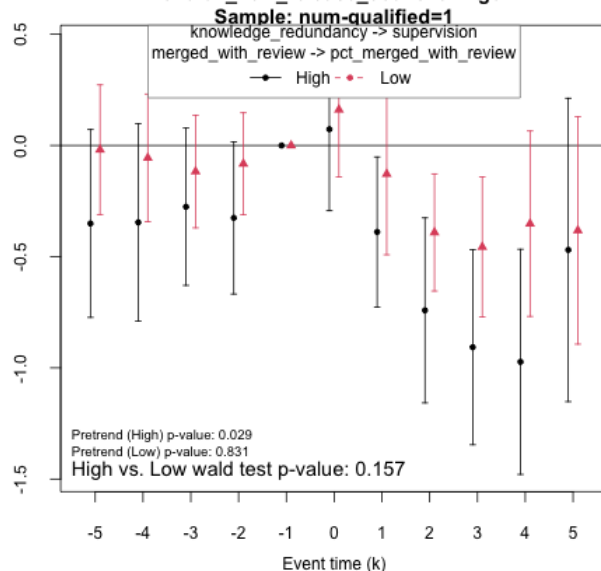
pull\_request\_opened rolling5



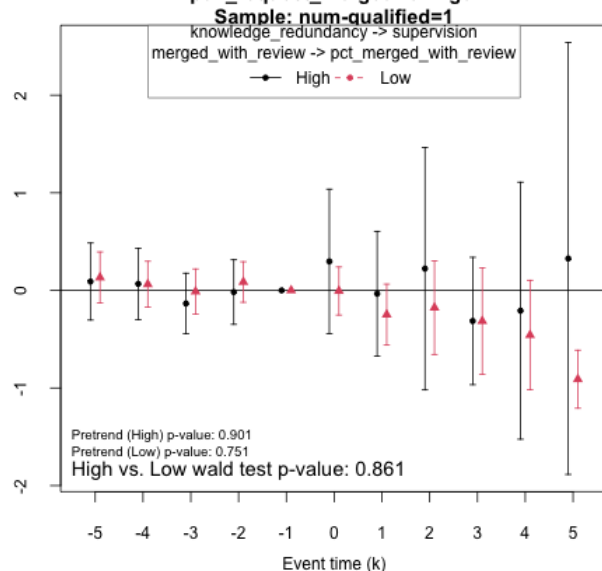
major\_minor\_release\_count rolling5



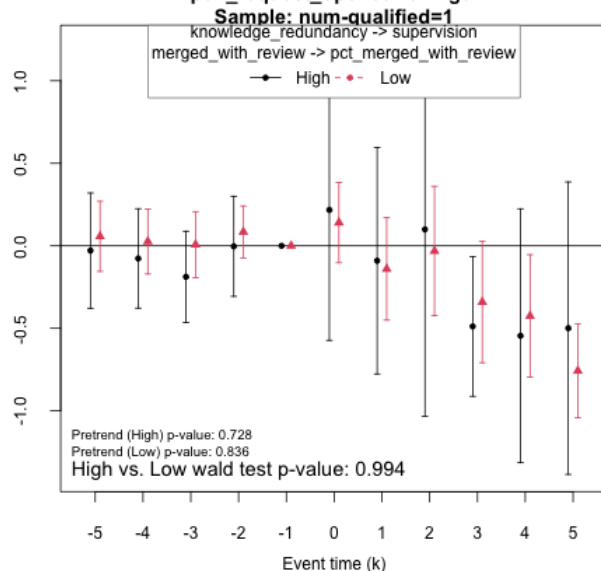
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

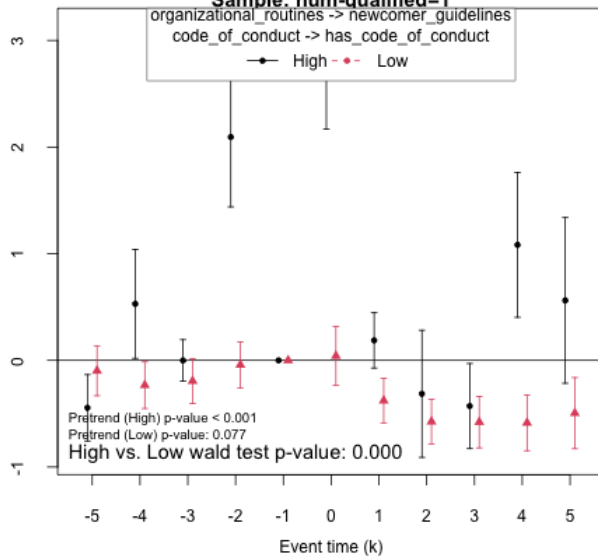


major\_minor\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

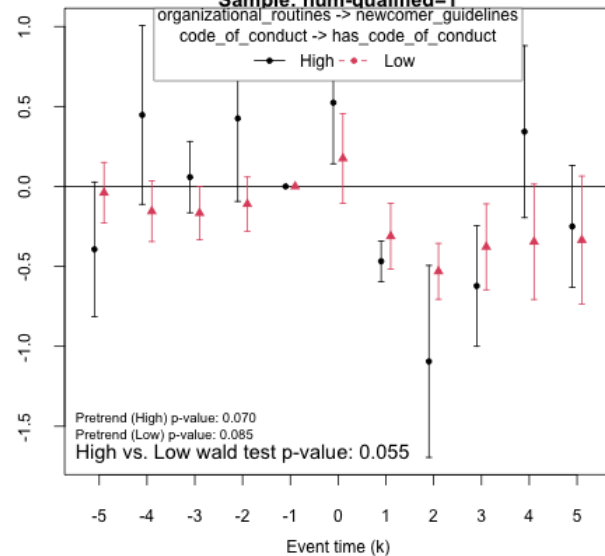


overall\_new\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

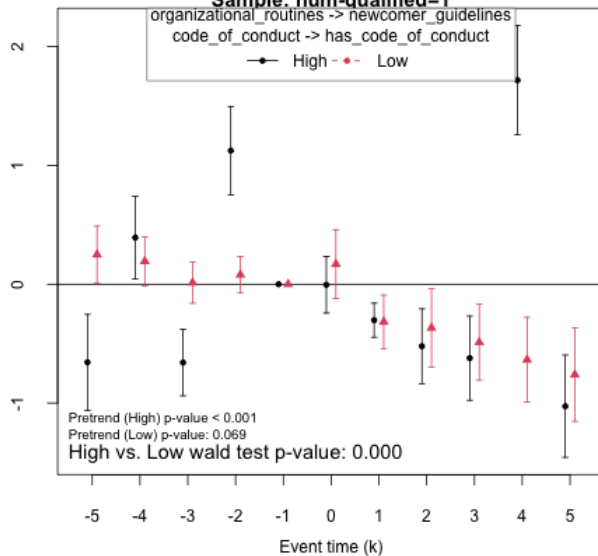


pull\_request\_merged rolling5

Sample: num-qualified=1

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

—●— High —●— Low

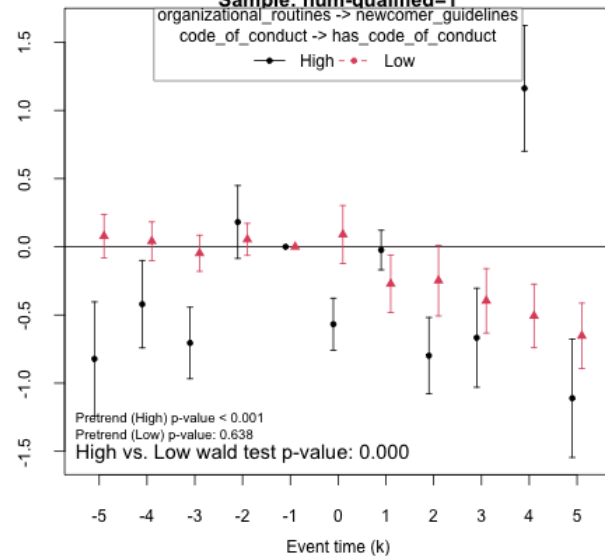


pull\_request\_opened rolling5

Sample: num-qualified=1

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

—●— High —●— Low

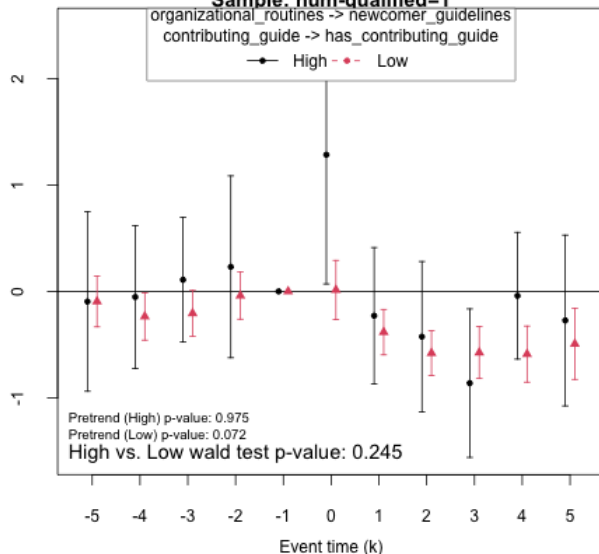


major\_minor\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

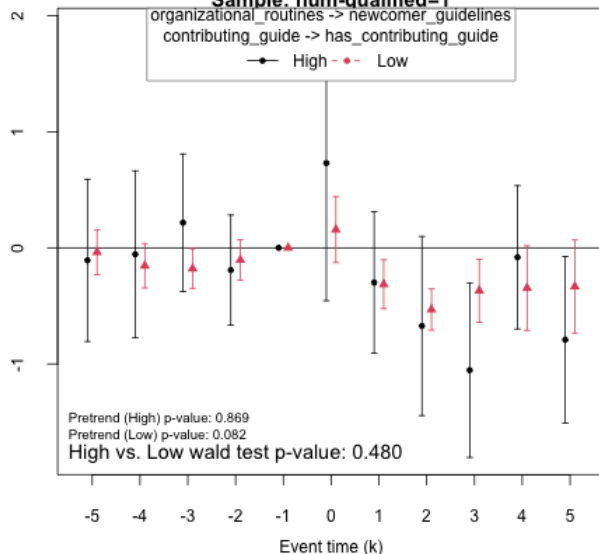


overall\_new\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

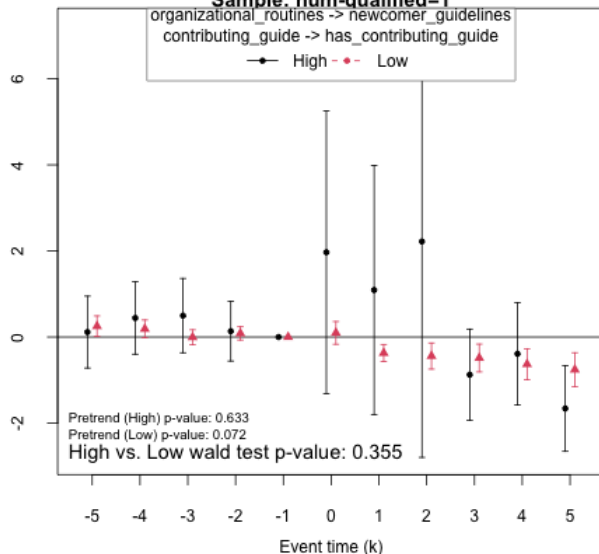


pull\_request\_merged rolling5

Sample: num-qualified=1

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

—●— High —●— Low

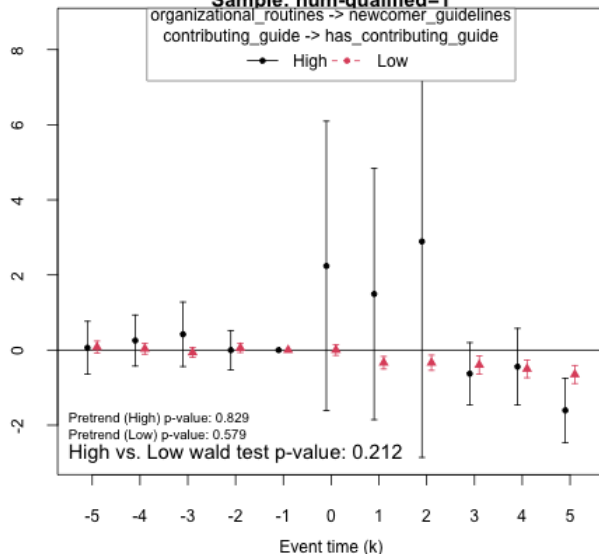


pull\_request\_opened rolling5

Sample: num-qualified=1

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

—●— High —●— Low

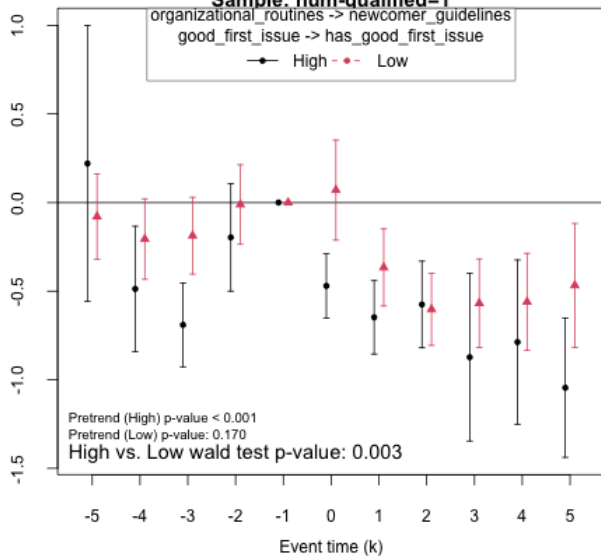


major\_minor\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

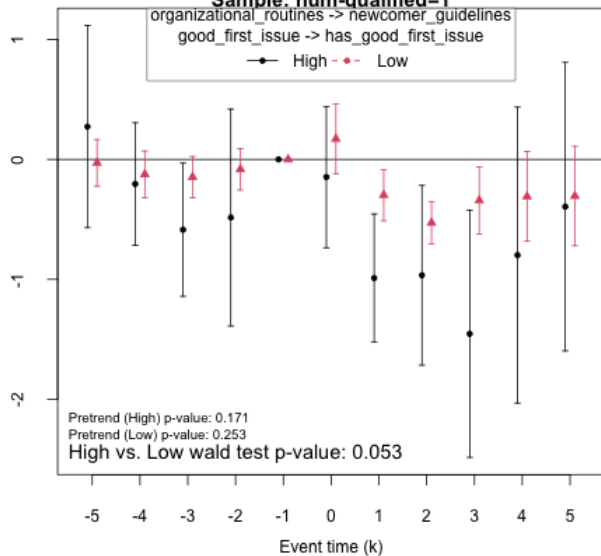


overall\_new\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

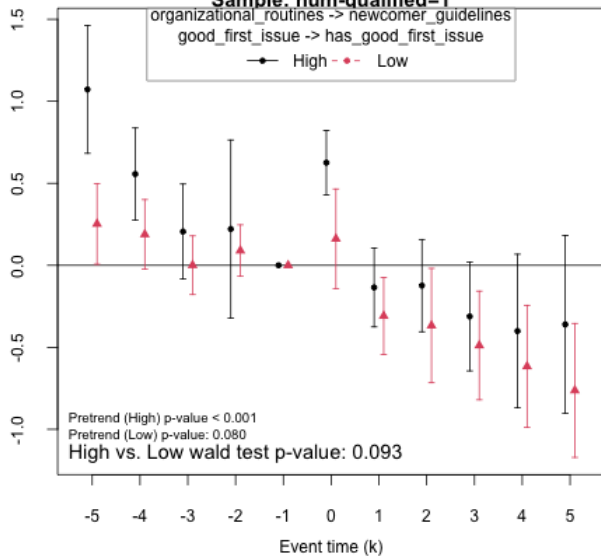


pull\_request\_merged rolling5

Sample: num-qualified=1

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

—●— High —●— Low

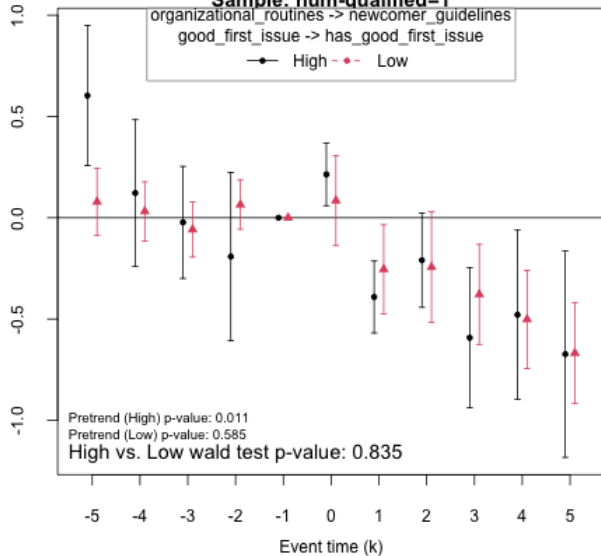


pull\_request\_opened rolling5

Sample: num-qualified=1

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

—●— High —●— Low

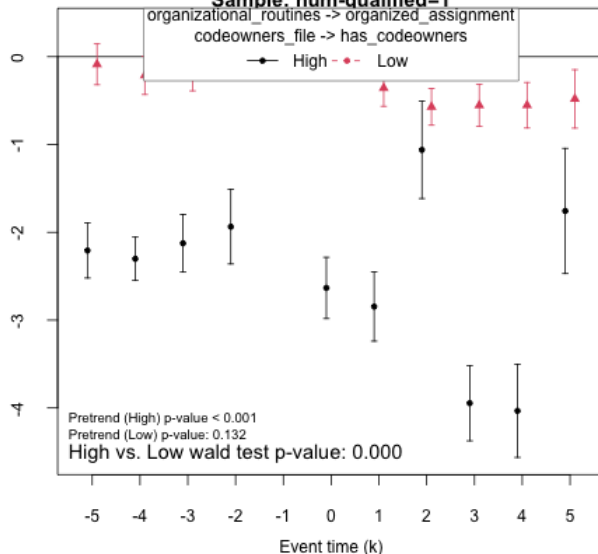


major\_minor\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

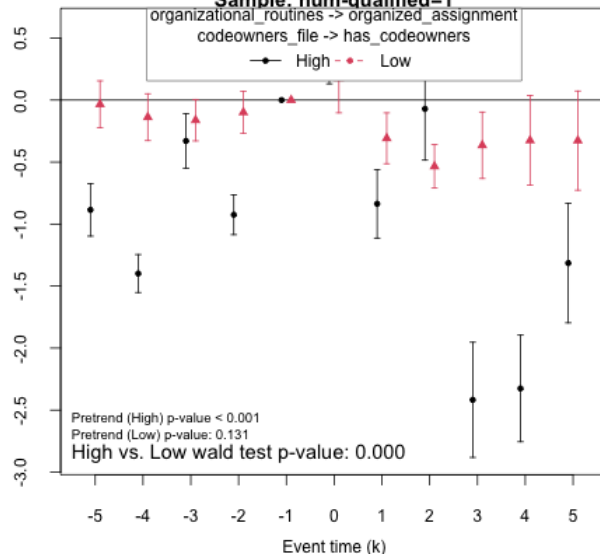


overall\_new\_release\_count rolling5

Sample: num-qualified=1

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

—●— High —●— Low

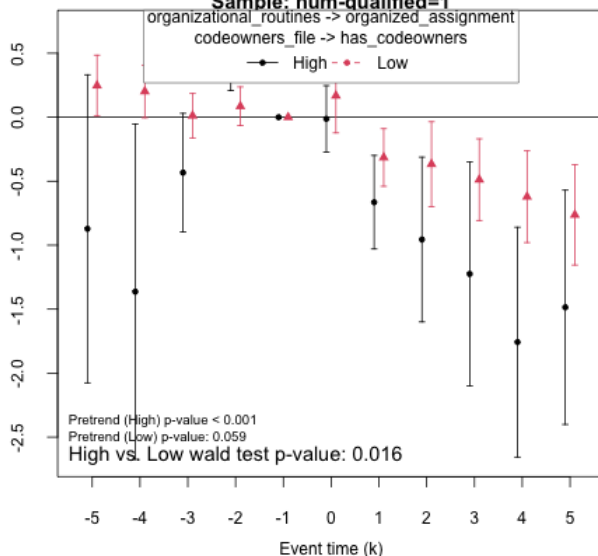


pull\_request\_merged rolling5

Sample: num-qualified=1

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

—●— High —●— Low

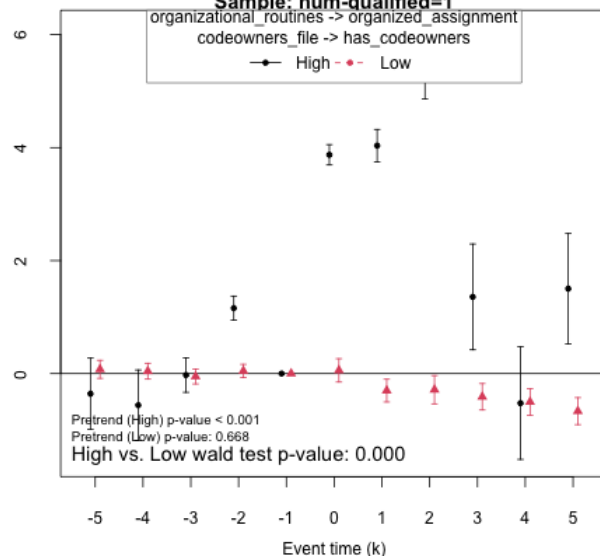


pull\_request\_opened rolling5

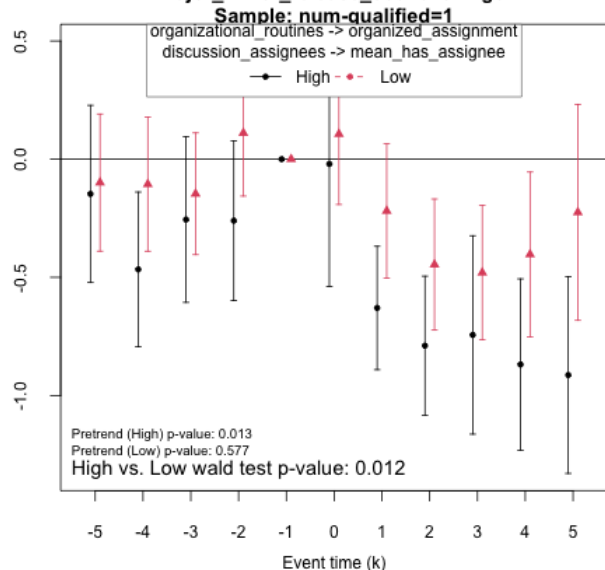
Sample: num-qualified=1

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

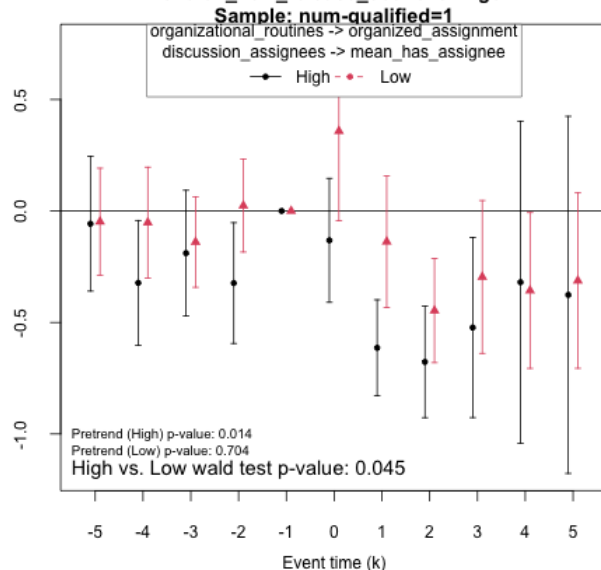
—●— High —●— Low



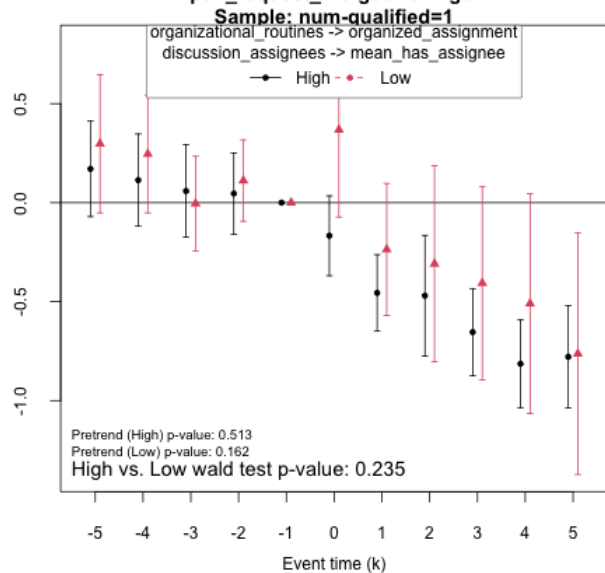
major\_minor\_release\_count rolling5



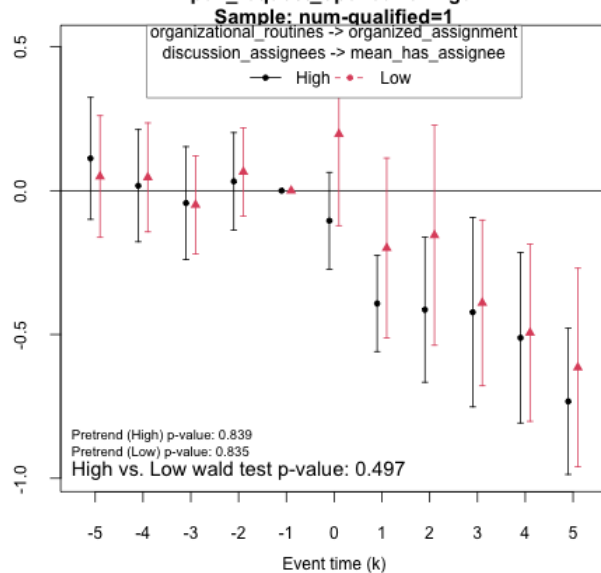
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



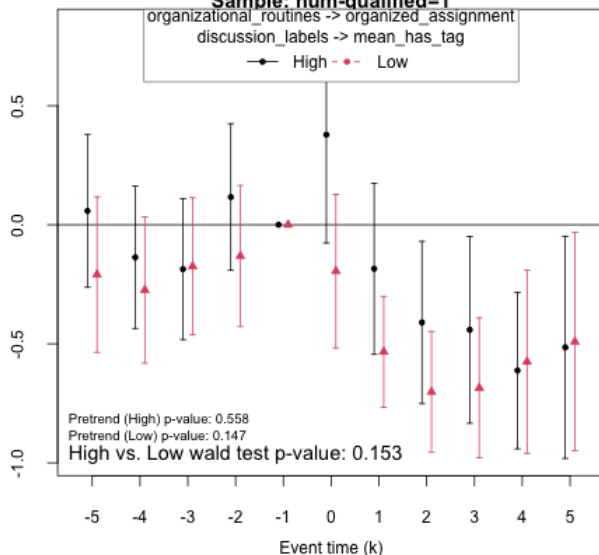
pull\_request\_opened rolling5





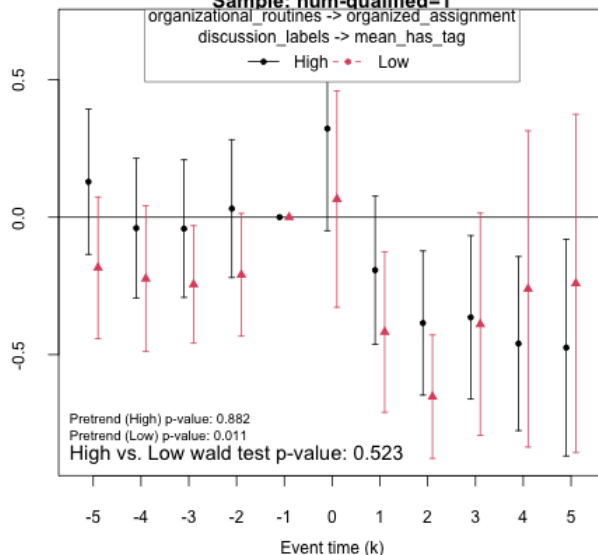
major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
discussion\_labels -> mean\_has\_tag  
—●— High —●— Low

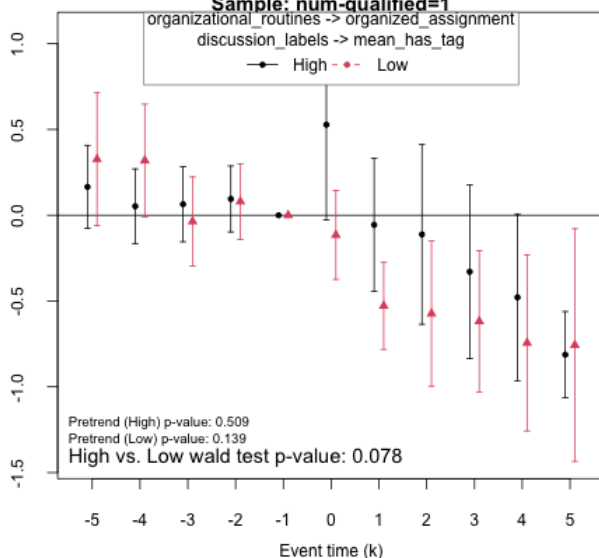
overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
discussion\_labels -> mean\_has\_tag  
—●— High —●— Low

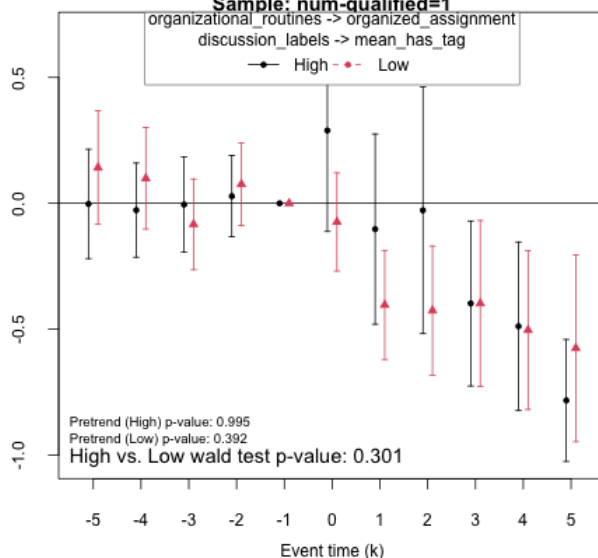
pull\_request\_merged rolling5

Sample: num-qualified=1

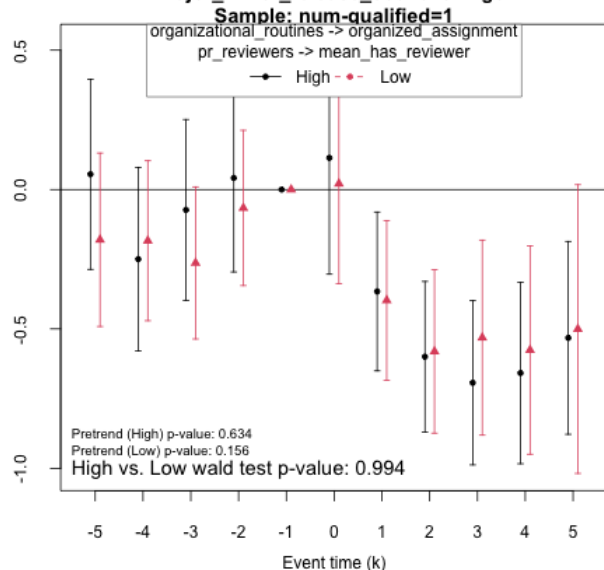
organizational\_routines -> organized\_assignment  
discussion\_labels -> mean\_has\_tag  
—●— High —●— Low

pull\_request\_opened rolling5

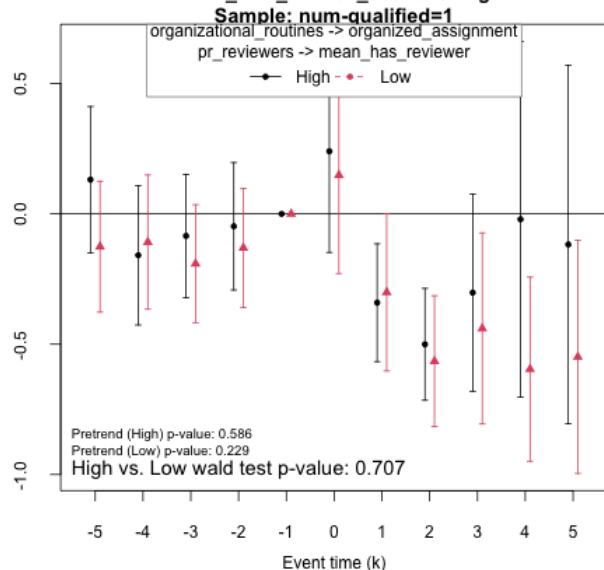
Sample: num-qualified=1

organizational\_routines -> organized\_assignment  
discussion\_labels -> mean\_has\_tag  
—●— High —●— Low

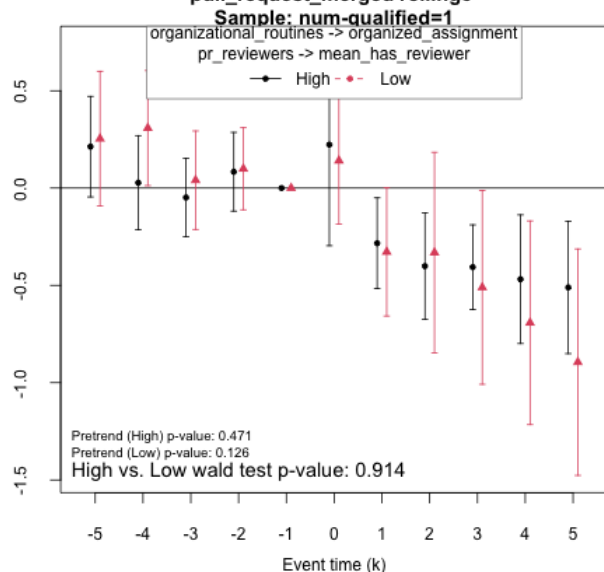
major\_minor\_release\_count rolling5



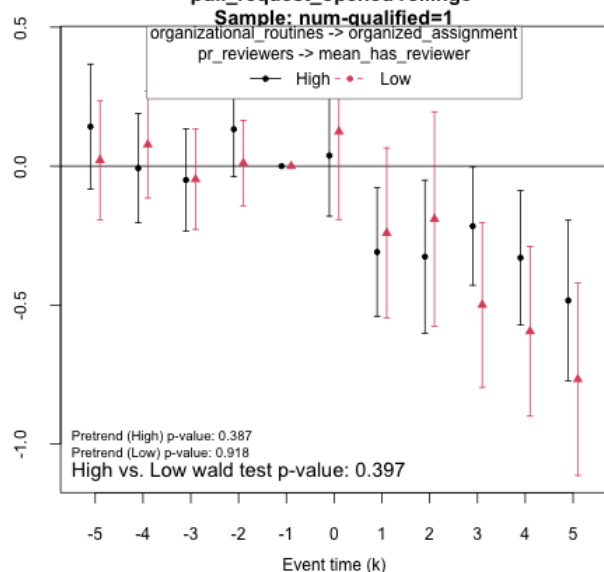
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

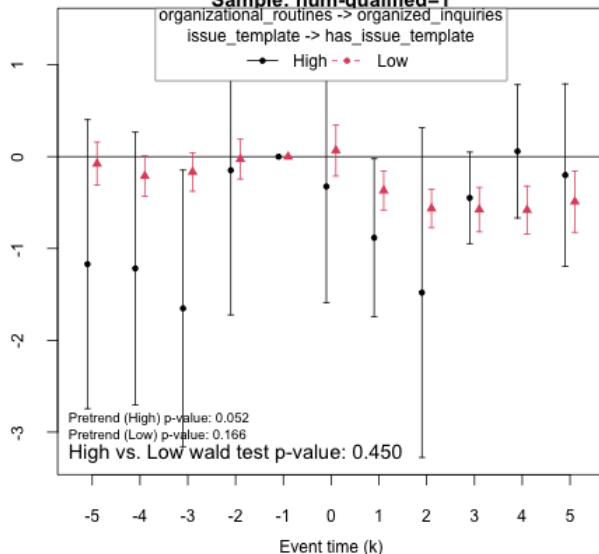


major\_minor\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_inquiries  
issue\_template -> has\_issue\_template

—●— High —●— Low

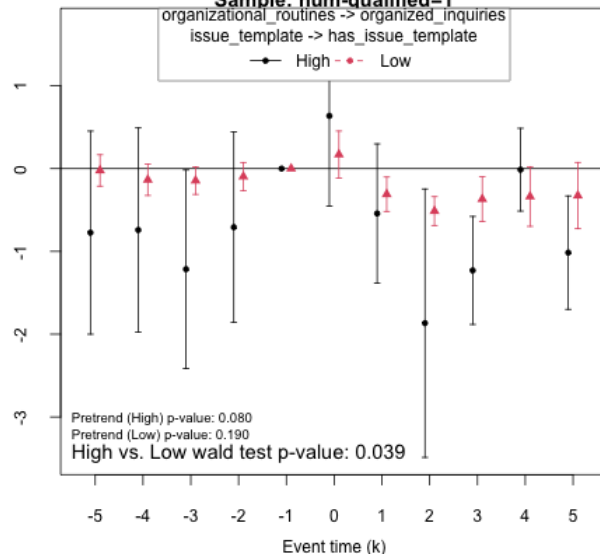


overall\_new\_release\_count rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_inquiries  
issue\_template -> has\_issue\_template

—●— High —●— Low

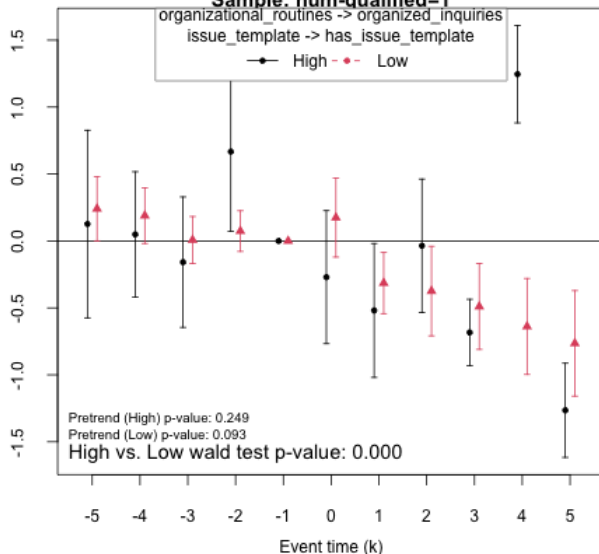


pull\_request\_merged rolling5

Sample: num-qualified=1

organizational\_routines -> organized\_inquiries  
issue\_template -> has\_issue\_template

—●— High —●— Low

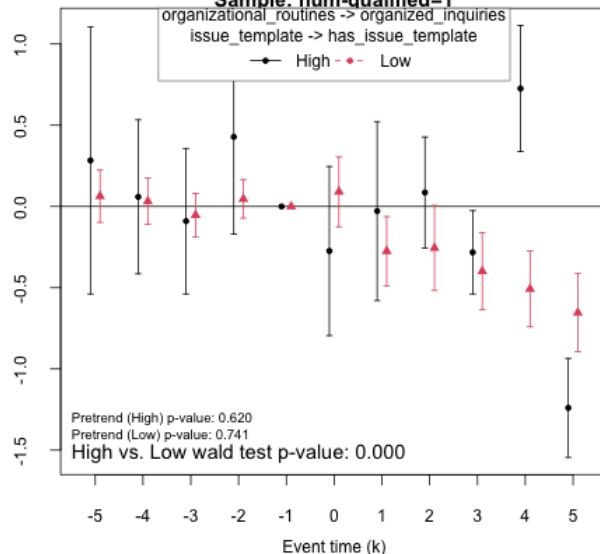


pull\_request\_opened rolling5

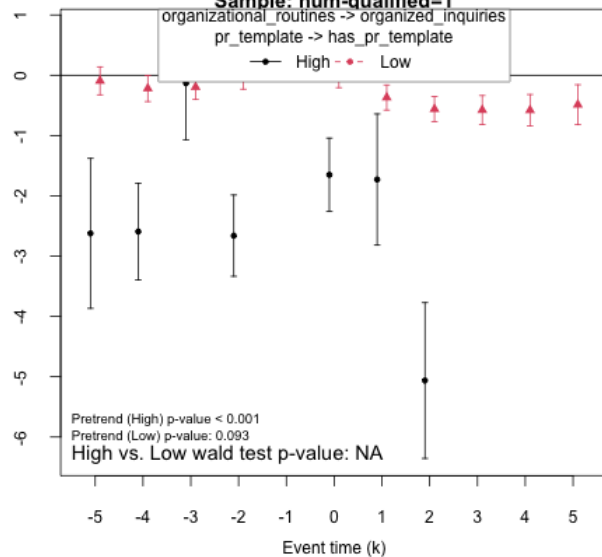
Sample: num-qualified=1

organizational\_routines -> organized\_inquiries  
issue\_template -> has\_issue\_template

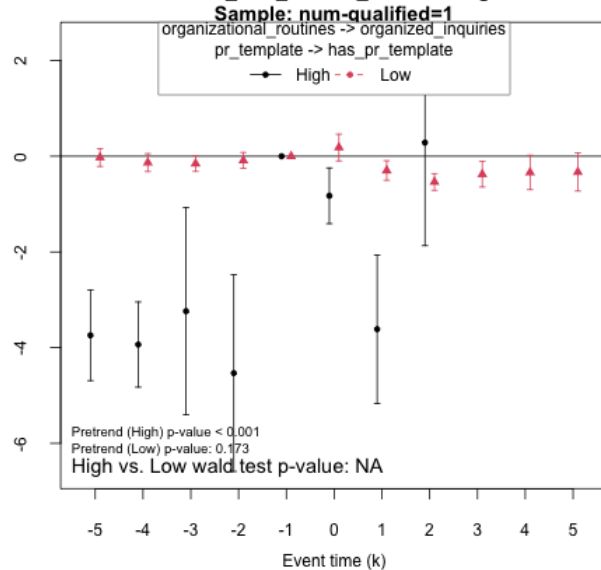
—●— High —●— Low



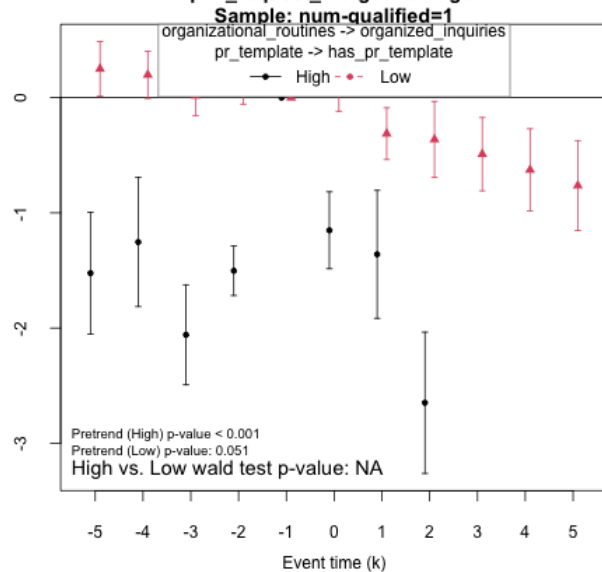
major\_minor\_release\_count rolling5



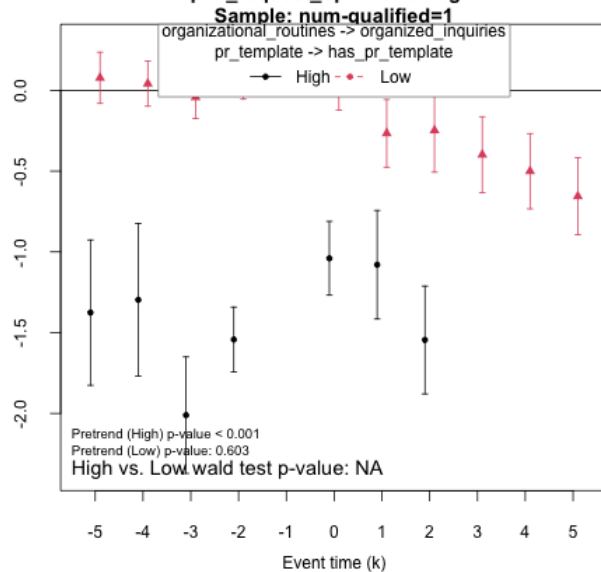
overall\_new\_release\_count rolling5



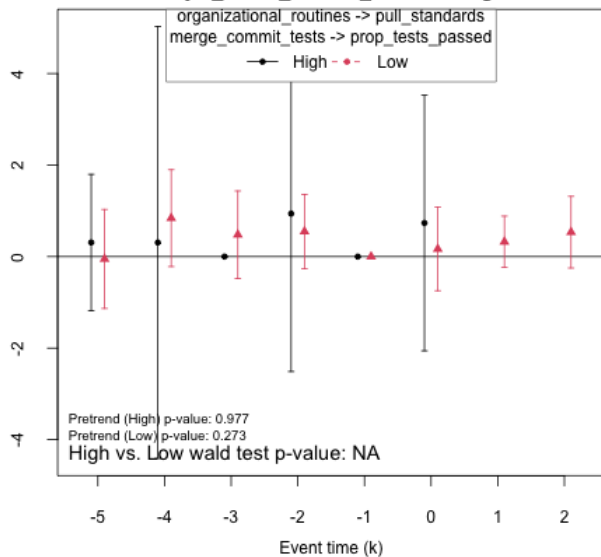
pull\_request\_merged rolling5



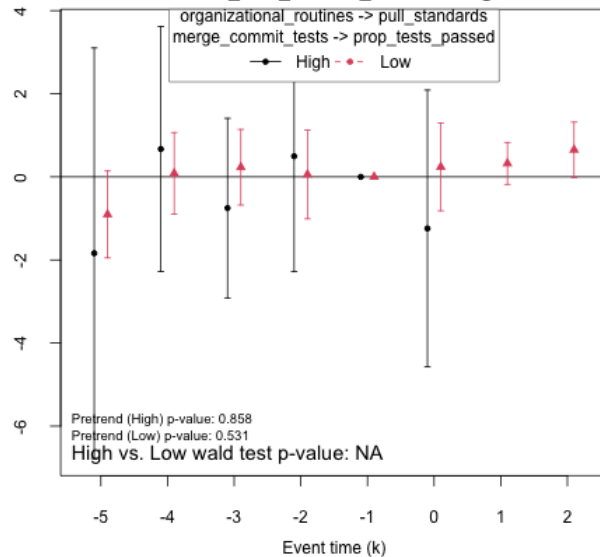
pull\_request\_opened rolling5



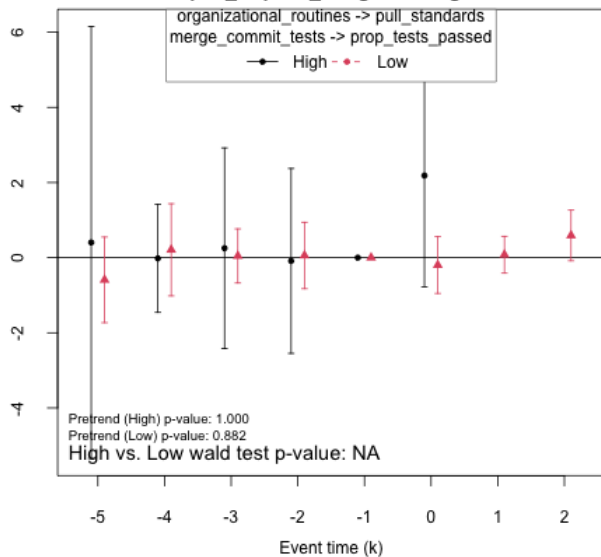
**major\_minor\_release\_count rolling5**



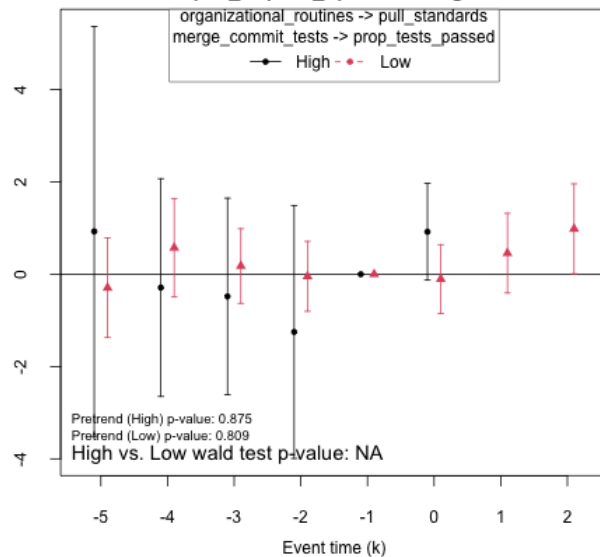
**overall\_new\_release\_count rolling5**



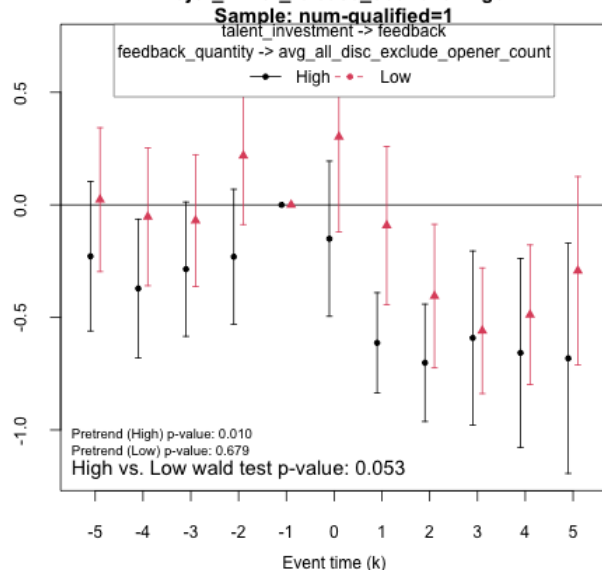
**pull\_request\_merged rolling5**



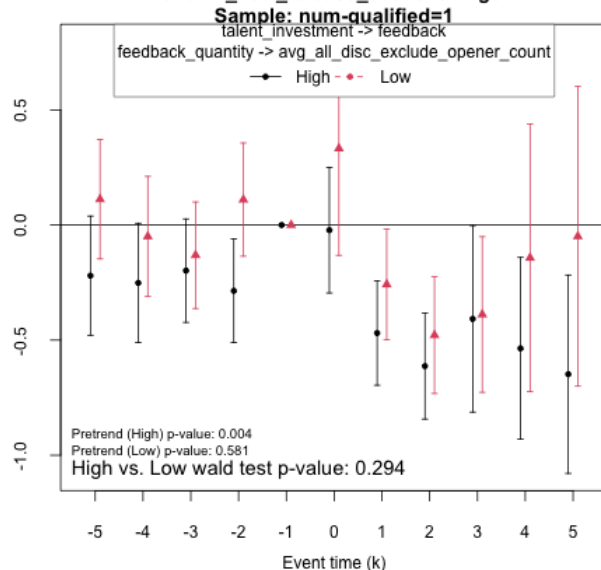
**pull\_request\_opened rolling5**



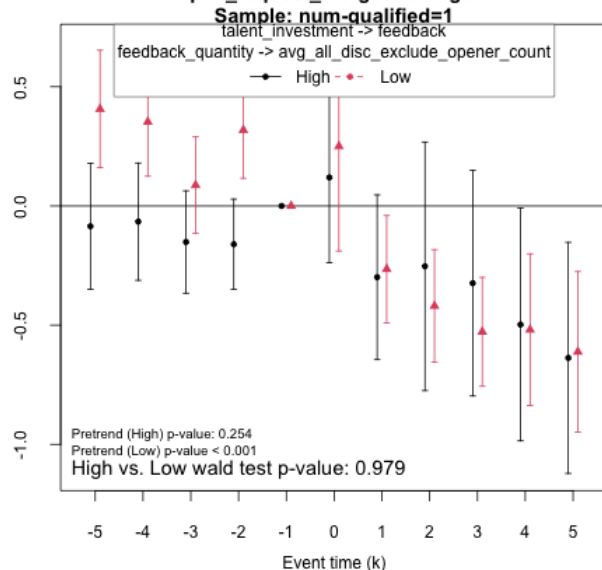
major\_minor\_release\_count rolling5



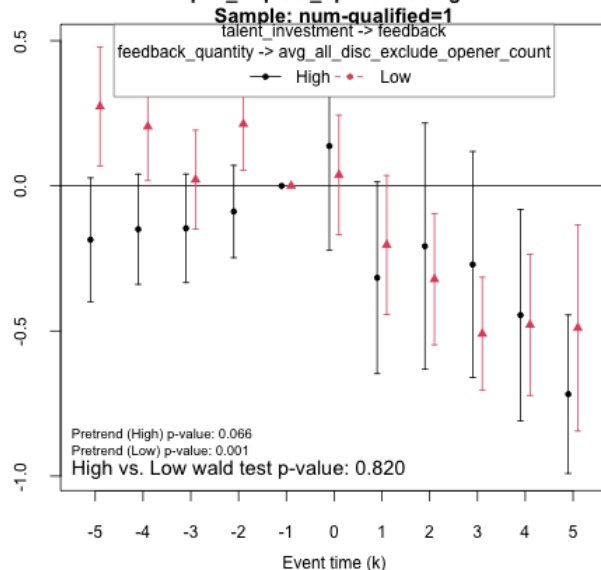
overall\_new\_release\_count rolling5



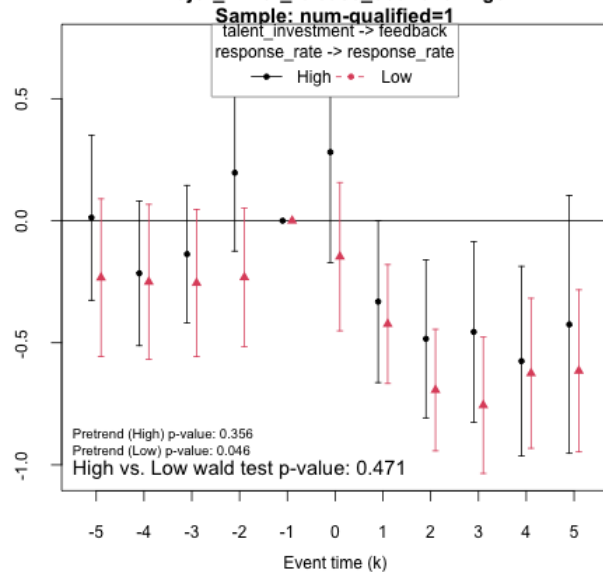
pull\_request\_merged rolling5



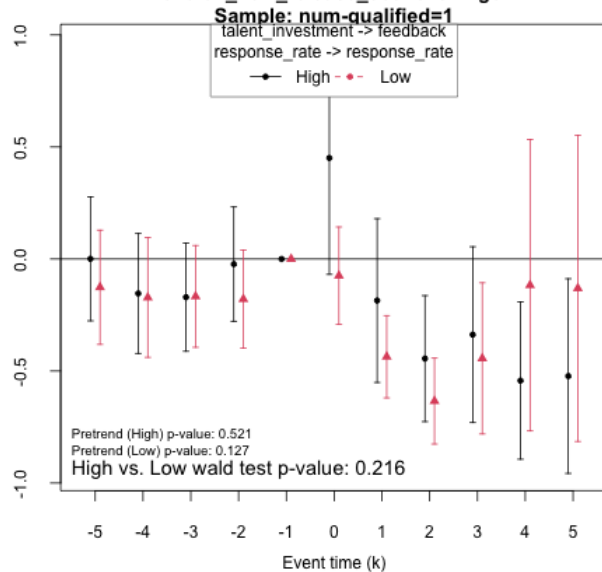
pull\_request\_opened rolling5



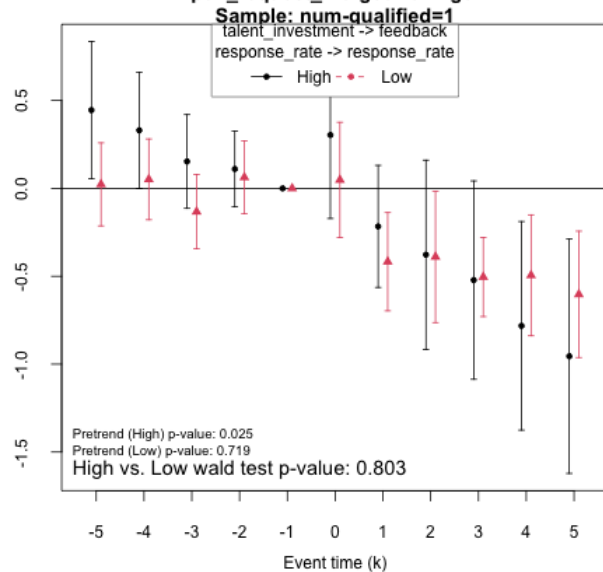
major\_minor\_release\_count rolling5



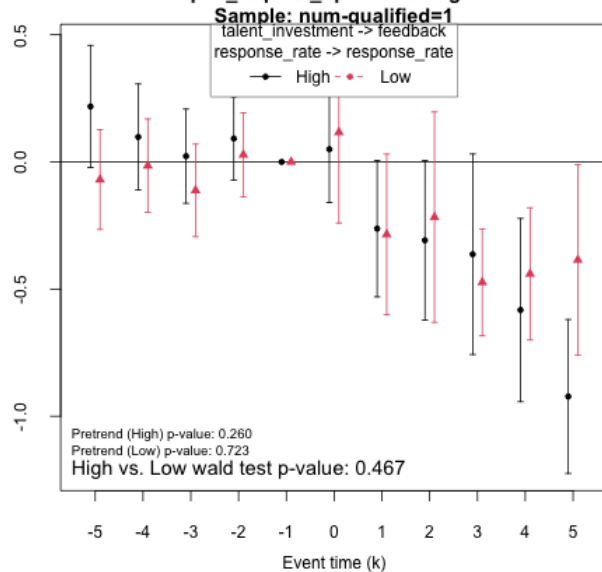
overall\_new\_release\_count rolling5



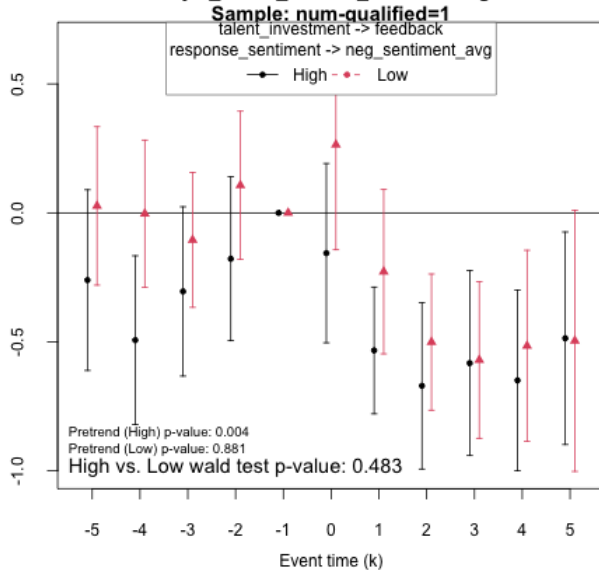
pull\_request\_merged rolling5



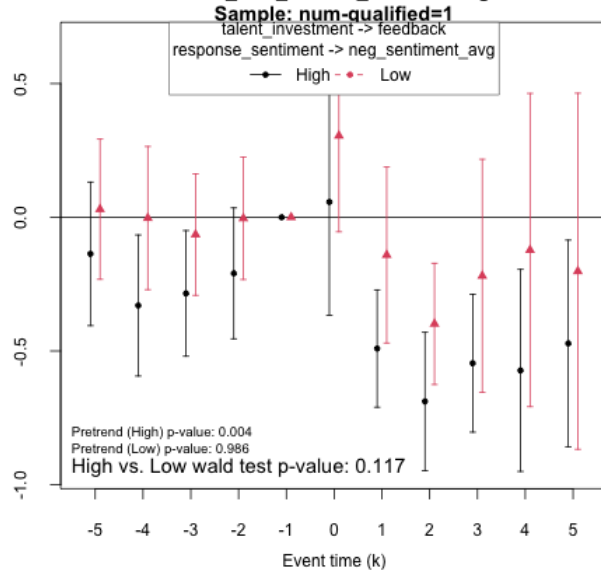
pull\_request\_opened rolling5



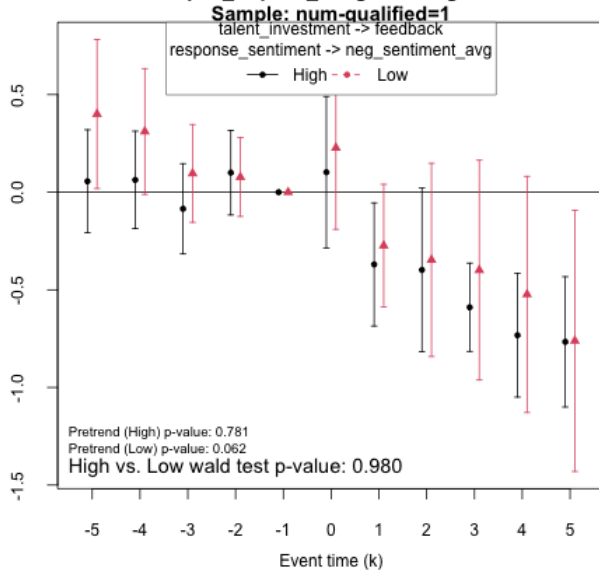
major\_minor\_release\_count rolling5



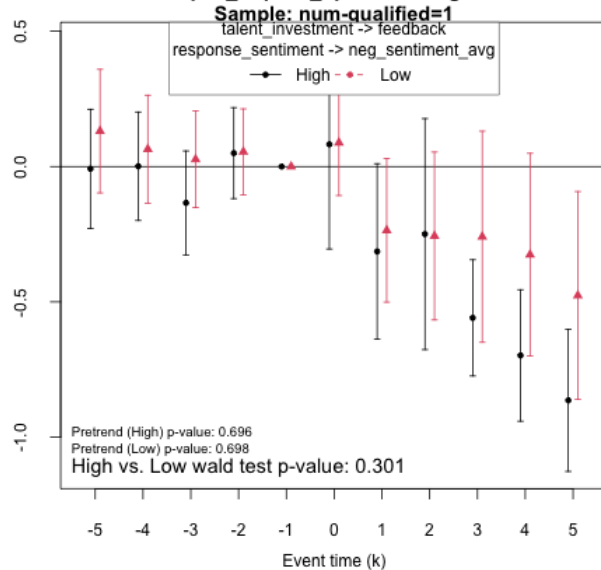
overall\_new\_release\_count rolling5



pull\_request\_merged rolling5

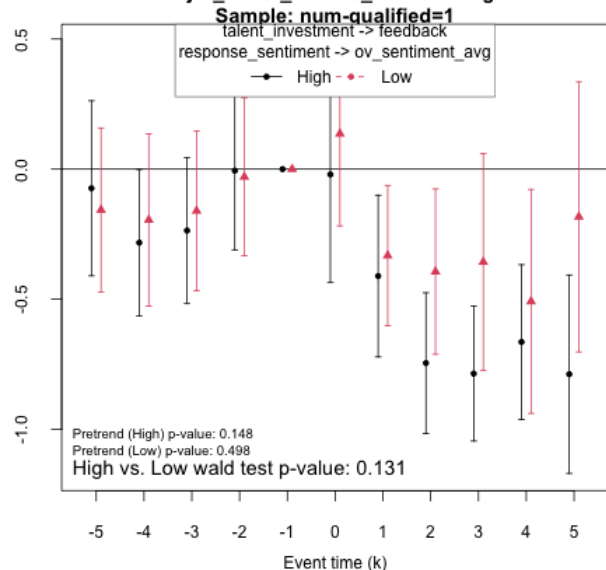


pull\_request\_opened rolling5

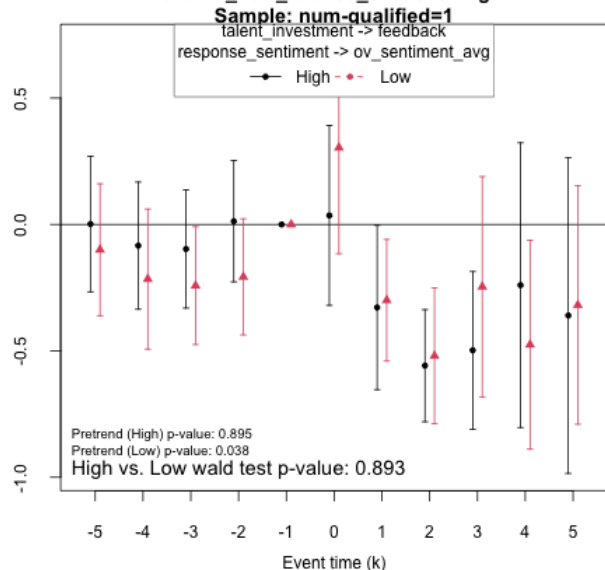




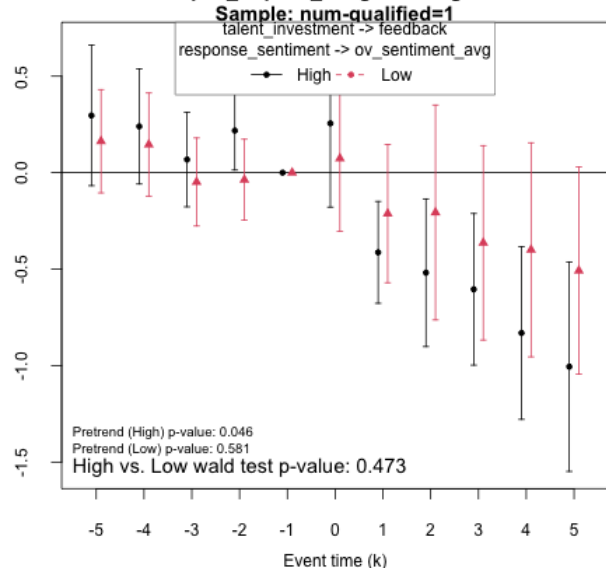
major\_minor\_release\_count rolling5



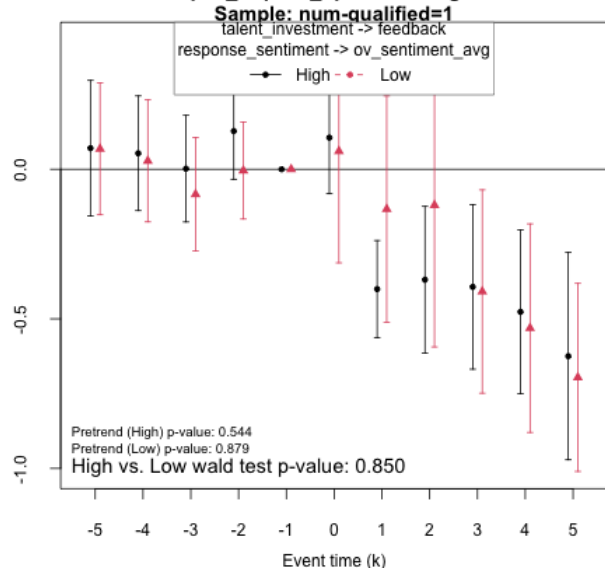
overall\_new\_release\_count rolling5



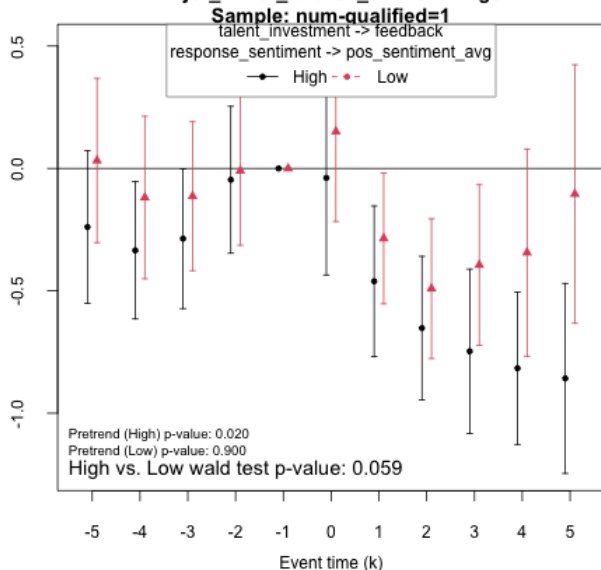
pull\_request\_merged rolling5



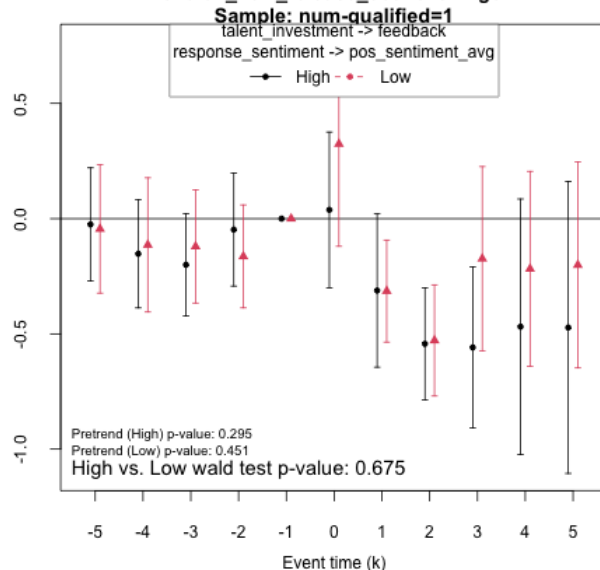
pull\_request\_opened rolling5



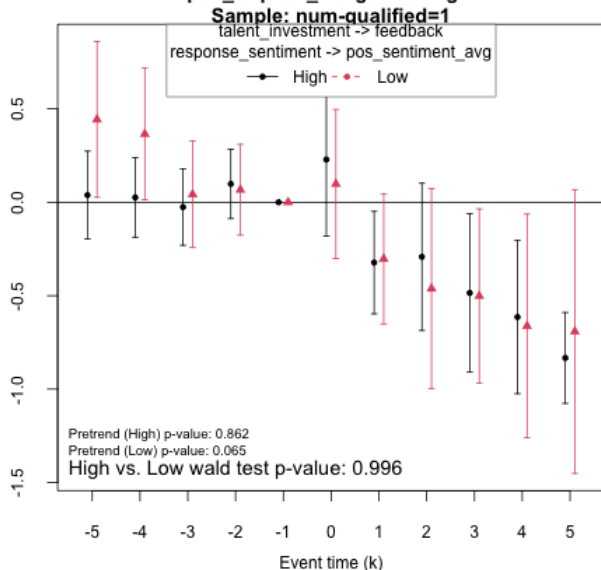
major\_minor\_release\_count rolling5



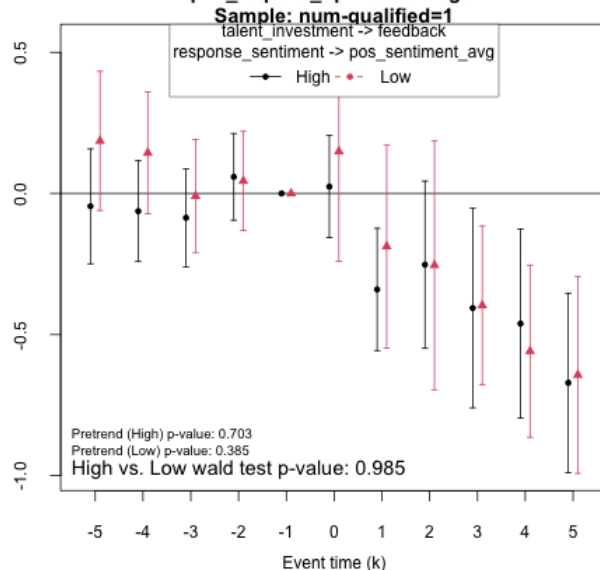
overall\_new\_release\_count rolling5



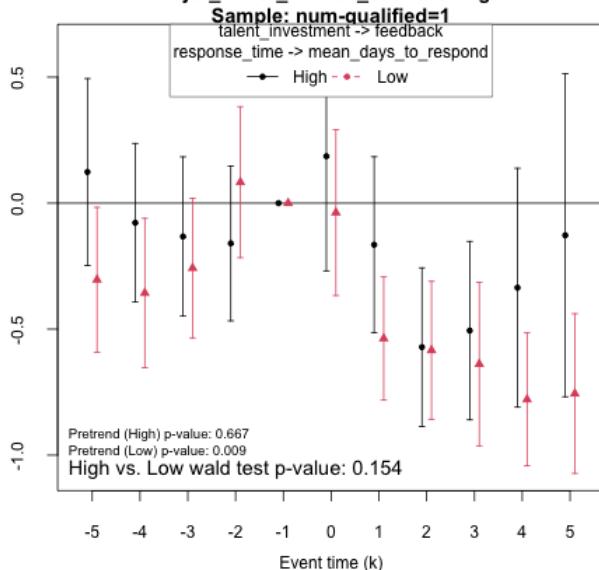
pull\_request\_merged rolling5



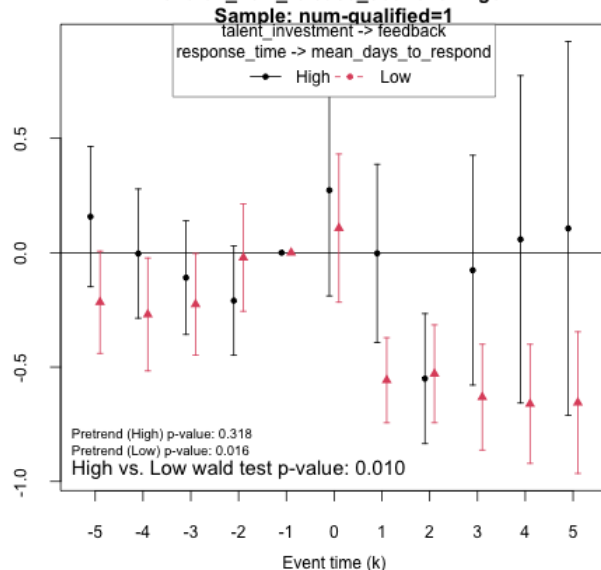
pull\_request\_opened rolling5



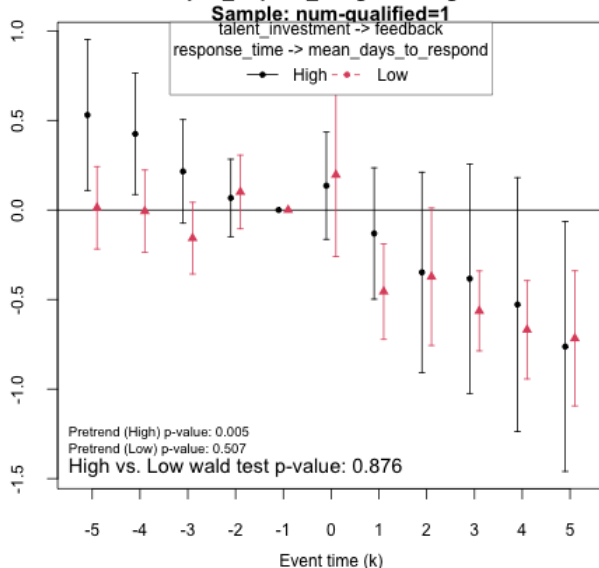
major\_minor\_release\_count rolling5



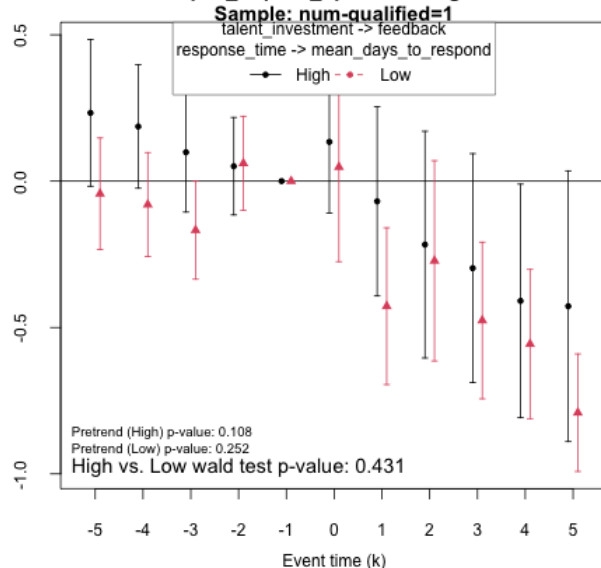
overall\_new\_release\_count rolling5



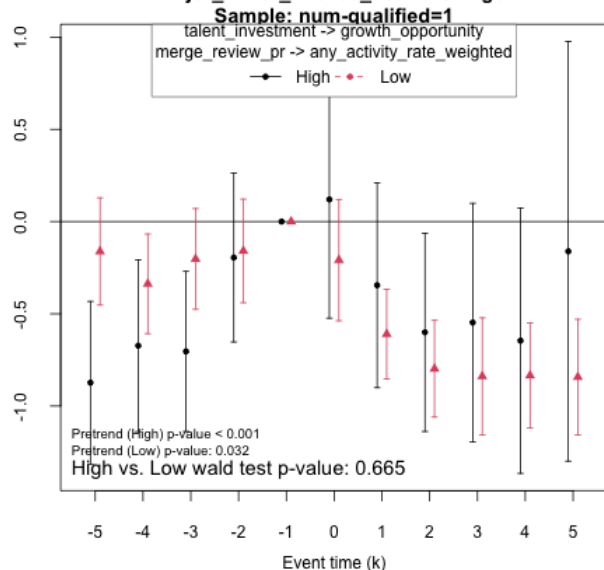
pull\_request\_merged rolling5



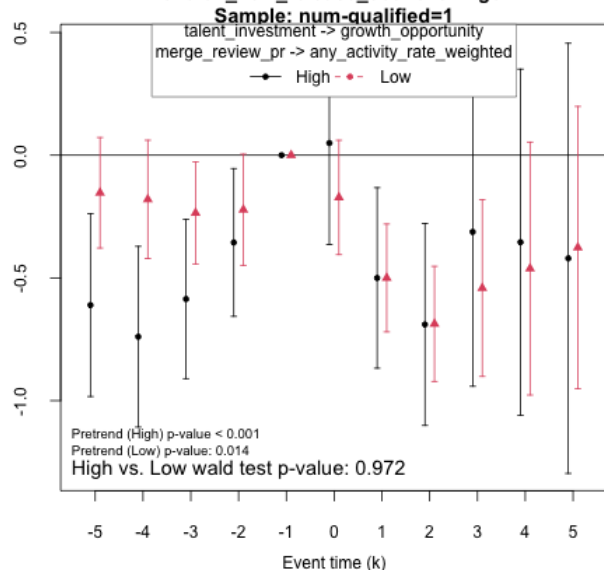
pull\_request\_opened rolling5



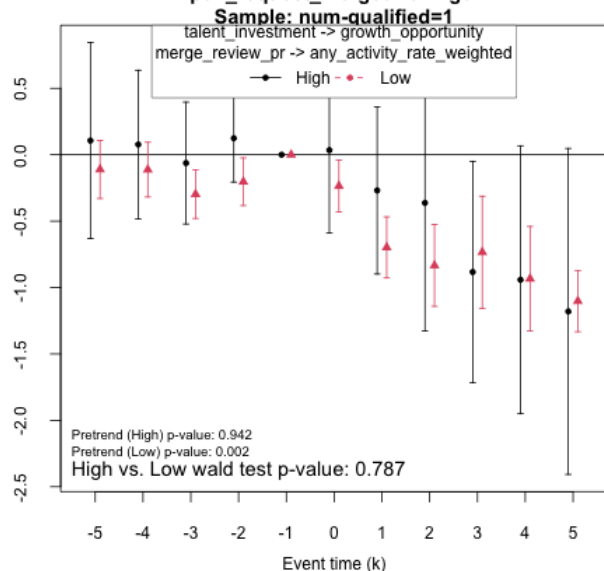
major\_minor\_release\_count rolling5



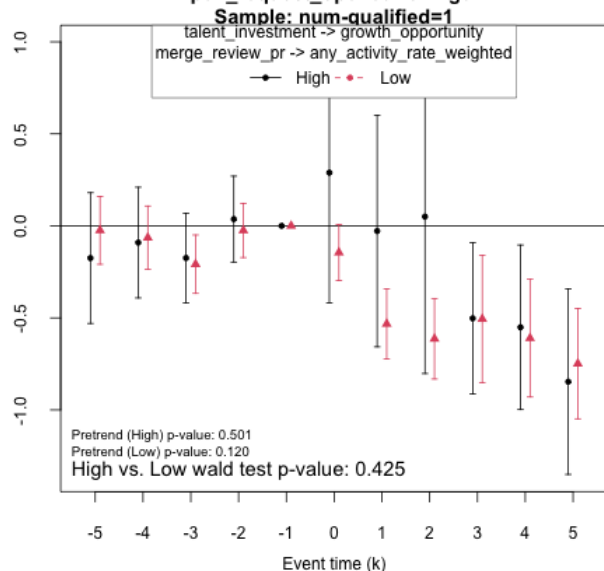
overall\_new\_release\_count rolling5



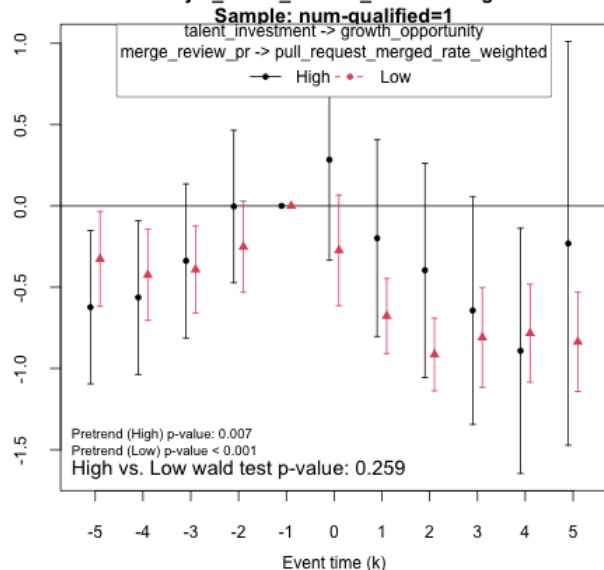
pull\_request\_merged rolling5



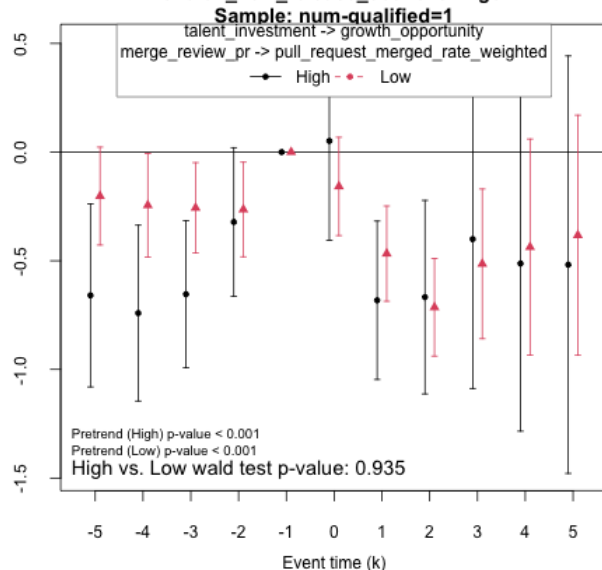
pull\_request\_opened rolling5



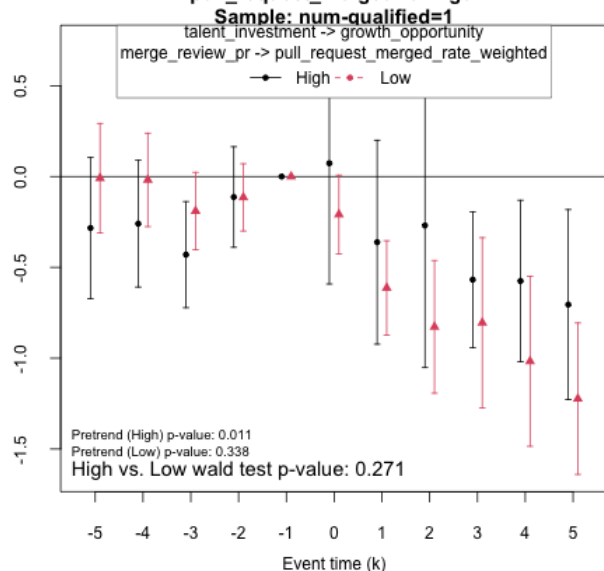
major\_minor\_release\_count rolling5



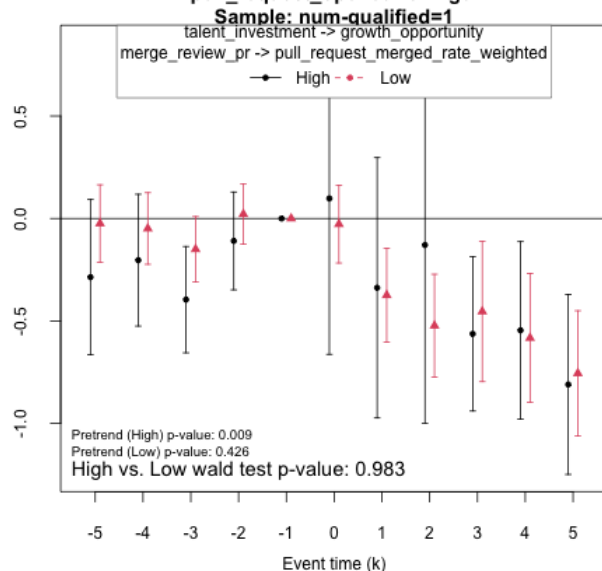
overall\_new\_release\_count rolling5



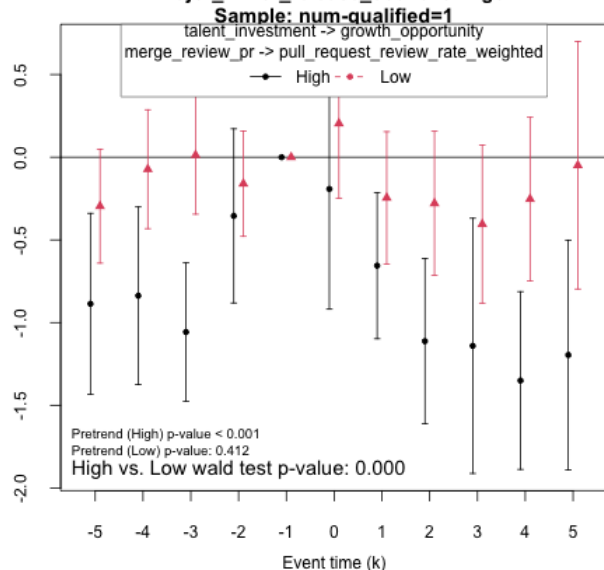
pull\_request\_merged rolling5



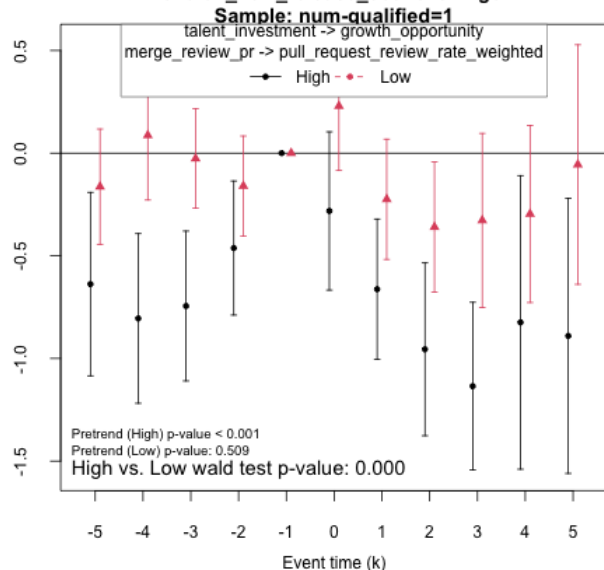
pull\_request\_opened rolling5



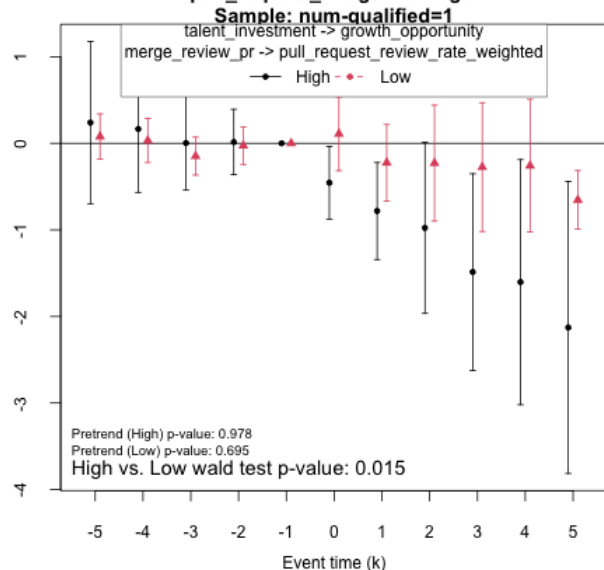
major\_minor\_release\_count rolling5



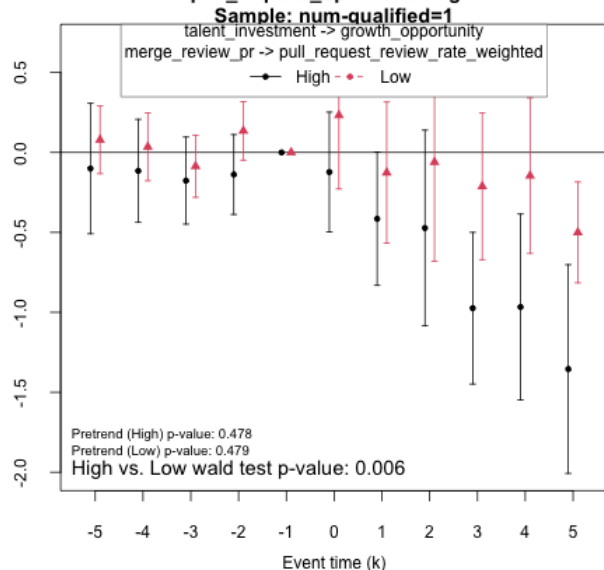
overall\_new\_release\_count rolling5



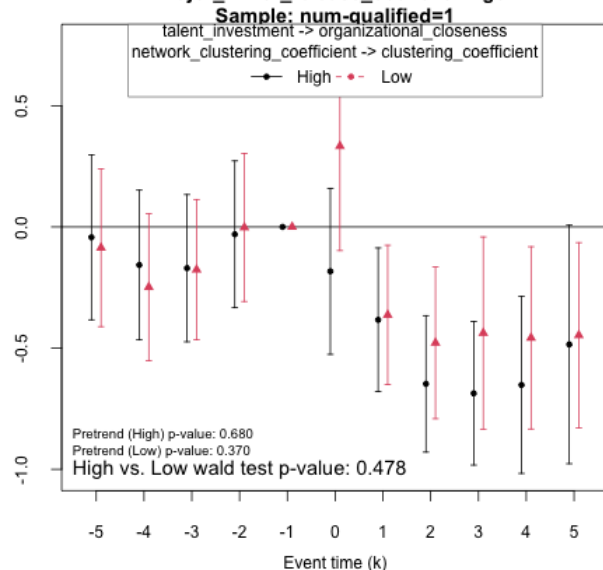
pull\_request\_merged rolling5



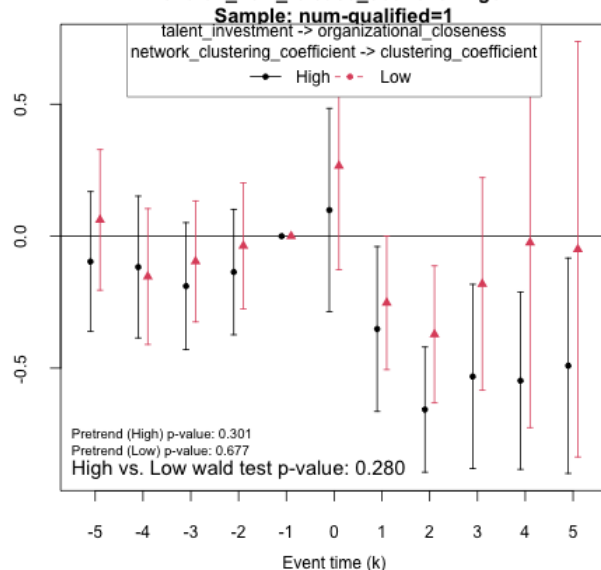
pull\_request\_opened rolling5



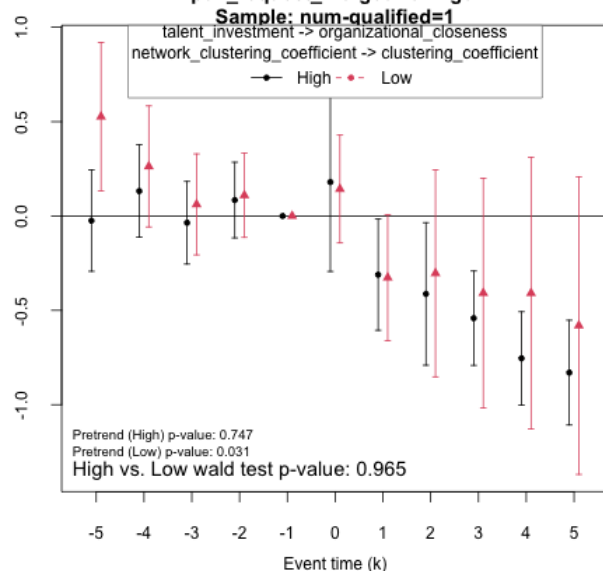
major\_minor\_release\_count rolling5



overall\_new\_release\_count rolling5



pull\_request\_merged rolling5



pull\_request\_opened rolling5

