



The first picture describes how proportion of negative words influences the median value of filing period excess return on stocks and we can see from the result picture that the negative influence is more significant when we use the financial dictionary instead of Harvard dictionary. The reason is that some of the negative words in Harvard dictionary do not have negative meaning in financial reports. So we can exclude these words using financial dictionary so the result is more accurate.

The second picture describes how term weighted negative words influences the median value of filing period excess return on stocks and we can see from the result picture that the negative influence is more significant when we use the financial dictionary instead of Harvard dictionary. Also, when we use tf.idf instead

of proportion of negative words, the result is more significant because we can offset some negative words' influence by log transformation and attenuating the high frequency words' importance.

Therefore, the most significant result is the term weighted negative words using FIN-NEG dictionary. We can see the negative words have a bad influence on the filing date return of Dow 30 stocks from the result picture.