Fama-Macbeth:

1a) Simple CAPM verification:

Create time series regression: excess stock return = intercept + beta(excess market return)

To estimate betas.

Using these betas, we use cross sectional regression to calculate “gammas”:

Excess stock return = intercept + (estimated betas)(excess market return)

Now to verify if CAPM holds:

Conduct hypothesis test: H0 : intercept = 0 , H1 : intercept =/= 0

We want to hopefully find intercept = 0 (for capm to hold)

Evaluation – if not why not! What assumptions did we make? How did we group data – does that make a difference? Does it make a difference if we use value weighted opposed to equal weights??

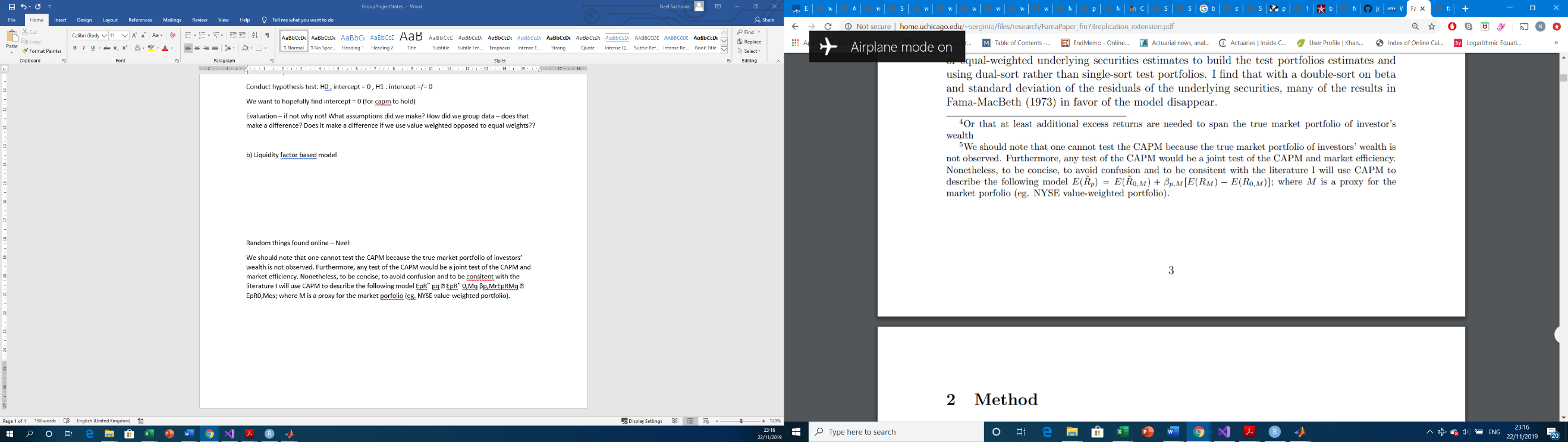
b) Liquidity factor based model

<https://faculty.chicagobooth.edu/lubos.pastor/research/>

Null values from 1962 – 1967 for liquidity (hence removed from our research)

3 factors: aggregate Liquidity. Innovations in liquidity, Traded Liquidity Factor

Random things found online – Neel:

We should note that one cannot test the CAPM because the true market portfolio of investors’ wealth is not observed. Furthermore, any test of the CAPM would be a joint test of the CAPM and market efficiency.

<http://home.uchicago.edu/~serginio/files/research/FamaPaper_fm73replication_extension.pdf>

Interesting article on Pastor Stambaugh and liquidity factors

<https://reader.elsevier.com/reader/sd/pii/S0165176517305268?token=58305A5975A2F4CCEEA33631EAB3C08AF77636C89340771AACE60C6B272AD37B26587D34D06376542D90DCAAEAE250C5>

Apparently this guy says Pastor’s liquidity measure is trash:

<https://www.researchgate.net/publication/222579336_Do_Liquidity_Measures_Measure_Liquidity>

To ask Roman:

Liquidity factors or factor???

Rebalancing betas

T-statistic (HAC – newey west)