Readme

# Table 1~Table 5, Figure 1

Each sub-directory contains everything needed to produce the name of the directory.

**Table 1:**

1. Program  
   Table1\_Data\_Summary.sas generates the results for the summary table 1.
2. Data  
   FirmInfo.txt contains individual firm information including PERMNO(stock level identifier), StYear(start year of firm history), EdYear(end year of firm history), Nyprc(# of yearly price observations), Nydiv(# of yearly dividend observations), Cnt (whether the firm history is continuous), Id\_div (whether the firm ever paid dividend) .
3. Result  
   Output\_Table1.xlsx contains the results from Table1\_Data\_Summary.sas.

**Table 2:**

1. Programs  
   Table2\_1Panel.sas estimates all three panel models (balanced panel, unbalanced panel, and unbalanced panel for the firms ever paid dividend );  
   Table2\_2PortfolioRegression.m estimates the regression model for several aggregate measures (Equal Weight1, Capital Weight1, Equal Weight2, Capital Weight2, S&P500 since 1926, S&P500 since 1871).
2. Data  
   Obsinfo.txt are used to execute Table2\_1Panel.sas. It contains the number of observations (obs) by firm (PERMNO);  
   Reg\_gen\_\*.txt are used to execute Table2\_1Panel.sas. Those files contain PERMNO, Year, GD(future dividend growth), and DP(dividend-price ratio);  
   PortDataK\*.txt are used to execute Table2\_2PortfolioRegression.m. Those files contain Year, GD, DP, and Cat, which are identifier of aggregate measures (EW1: Equal Weight1, CW1: Capital Weight1, EW2: Equal Weight2, CW2: Capital Weight2, SP500\_1926: S&P500 since 1926, SP500\_1871: S&P500 since 1871).
3. Result  
   Output\_Table2.xlsx contains the summarized results from above programs.

**Table 3:**

1. Program  
   Table3\_IndReg\_HAC.m estimates the regression model by firm.
2. Data  
   ind\_firm\_regdataK\*.txt are used to execute Table3\_IndReg\_HAC.m. These files contain Permno, Year, GD, and DP.
3. Result  
   Output\_Table3.xlsx contains the summarized results(Sheet=’Table3’) and detailed results(Sheet=’K10’, ‘K20’, ’K30’, and ‘K50’) from Table3\_IndReg\_HAC.m.

**Figure 1:**

1. Program  
   Figure1.m generates the Figure 1.
2. Data  
   Figure1.txt is used to execute Figure1.m. It contains NFA (# of firms aggregated), Estimates (beta coefficient of aggregated model), se (standard error of beta estimates from the aggregated model), beta\_i\_hat (beta coefficient from the individual firm model), and se\_i (standard error of beta estimates from the individual firm model)
3. Output  
   Figure1.png is created from Figure1.m.

**Table 4:**

1. Programs  
   Table4\_1Vol\_test\_WK\_287firms.m generates the volatility test result for the first case (Unbalanced Panel: 287 firms); The explicit result is stored at “Summary” in workspace;

Table4\_2Vol\_test\_WK\_38firms.m generates the volatility test result for the second case (Balanced Panel: 38 firms); The explicit result is stored at “Summary” in workspace;

Table4\_3Vol\_test\_WK\_ew\_port\_all.m generates the volatility test result for the third case (Equal Weight 1: 287 firms); The explicit result is stored at “Final\_rst” in workspace;

Table4\_4Vol\_test\_WK\_cw\_port\_all.m generates the volatility test result for the fourth case (Cap Weight 1: 287 firms); The explicit result is stored at “Final\_rst” in workspace;

Table4\_5Vol\_test\_WK\_ew\_port\_fs38.m generates the volatility test result for the fifth case (Equal Weight 1: 38 firms); The explicit result is stored at “Final\_rst” in workspace;

Table4\_6Vol\_test\_WK\_cw\_port\_fs38.m generates the volatility test result for the sixth case (Cap Weight 1: 38 firms); The explicit result is stored at “Final\_rst” in workspace;

Table4\_7Vol\_test\_WK\_sp500\_1926.m generates the volatility test result for the seventh case (S&P 500 (1926)); The explicit result is stored at “Final\_rst” in workspace;

Table4\_8Vol\_test\_WK\_sp500\_1872.m generates the volatility test result for the seventh case (S&P 500 (1872)); The explicit result is stored at “Final\_rst” in workspace;

HQ\_Pr.m: Hannan-Quin procedure to select the optimal AR order.

1. Data  
   CRSP\_D.txt is used to execute for the first two cases. Annual dividends (real valued) for individual stocks are included.  
   CRSP\_P.txt is used to execute for the first two cases. Price (real valued) for individual stocks are included.  
   EW\_port\_all\_PD.txt, CW\_port\_all\_PD.txt, EW\_port\_FS38\_PD.txt, and CW\_port\_FS38\_PD.txt are used to execute for the next four cases. They contain P(real valued price) and D(real valued dividend ).  
   SP500\_RealPD.txt is used to execute the last two cases: Table4\_7Vol\_test\_WK\_sp500\_1926.m and Table4\_8Vol\_test\_WK\_sp500\_1872.m. It contains Price(real valued) and Dividend(real valued).
2. Output\_Table4.xlsx contains the summarized results from above programs.

**Table 5:**