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***Prof. Michail Stamatakis***

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| **Date: 04.12.18** | **Last meeting’s date: N/A** |
| **Student names:**  Alexander Hedberg, Shervin Sharifi Rad | **Degree: MEng** |
| **Secondary academic supervisor:**  N/A | **PhD student/Researcher supervisor:**  Prof. Michail Stamatakis |
| **Project title:**  *Stochastic Modelling* | |
| **Summary of last meeting (as stated in email immediately following that meeting):**   1. Moving average rolling windows    1. Multiple windows should be plotted and compared    2. AR model would make the error term to go to zero since the data will be stationary; thus eliminating some of the process. If done, it should be hand in hand with the MA model 2. Data    1. The data seems interesting and worthy of the analysis    2. The data should be chosen in an isolated economic system where geopolitics or human drivers play little role (i.e. not energy or cryptocurrency)    3. The drivers should be macro-economic indices to mitigate anomalies risen from single transactions within a market   **Supervisor’s actions following last meeting:**   1. N/A | |
| **Main achievements since last meeting:**   1. Data frames correctly parsed and time series were formatted 2. Moving averages were calculated for the “real disposable personal income” and plotted along with the data 3. The reasons behind the peaks in the data were researched and causes were Quantitive easing and the financial crisis of 07 | |
| **Work planned for the coming period:**   1. Moving average rolling window:    1. Use centered rolling window and compare results    2. If offset persists use alternative autocorrelation function 2. Use literature to compare MA and AR models for forecasting 3. Plot autocorrelation function for various rolling windows | |
| **Items for discussion at this meeting:**   1. Requirements for the draft report due in January 2. The rolling window of the moving average    1. The current use of backward rolling window causes the MA to be constantly result in positive errors. 3. Meeting forms procedure | |

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Supervisor signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_