**Economics of Financial Markets (ECON30024/ECON90024) - Assignment 1**

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**Question 1 (5 page limit)**

1. **Ratio of total financial assets to GDP, where ’total financial assets’refers to total financial assets owned by Australian households and private nonfinancial businesses or corporations.**
2. **The financial sector’s contribution to GDP (i.e., its value added share of GDP), where the financial sector refers to the financial and insurance services industry in Australia.**
3. **The financial sector’s average wage relative to the average wage in all industries, where ‘average wage’ is usually measured by a full time male adult’s average weekly earnings.**

**Question 2**

1. **Find monthly data series for All Ordinaries and S&P/ASX 200 indices. Clearly state your data source and sample period in your report, but please do not include the observations of the data series in your report.**
2. **For each price index, calculate the corresponding return series. Do this using the exact formula for calculating rates of return on a price index or use the log-difference approximation. Then use the Box-Ljung test (also called Ljung-Box test) to test the joint significance of the first 12 autocorrelations of each return series.**
3. **Use a unit root test or a regression to test whether the logarithm of each price index follows a random walk. For the regression analysis, you can estimate a simple regression as discussed on slide 11 of Topic 2 (if you don’t have much experience in Econometrics), or try to estimate the regression of Groenewold and Kang (1993) as given in Eq. (3) of the paper, or estimate an alternative regression that you think suitable.**

**Question 3**

1. **Are you going to play the game in scenario 1)? Are you going to play the game in scenario 2)? Based on your decisions, comment on your degree of risk aversion in terms of absolute risk aversion (ARA) and relative risk aversion (RRA). That is, do you think you have increasing, decreasing or constant ARA, and increasing or decreasing RRA?**

We would be willing to play the first gamble but not the second. The key conclusion which can be drawn from this is that we are risk-averse, and that we have an increasing ARA and decreasing RRA. This implies we are less willing to take large risks relative to our wealth as it increases.

More specifically:

* Increasing ARA: playing the first gamble but not the second implies ARA increases with wealth we we’re less willing to risk a larger sum even when the relative proportion of wealth at stake is unchanged.
* Decreasing relative risk aversion: in both gambles the same proportion of wealth is at risk (50%), but we don’t want to take the second gamble means our risk aversion relative to our wealth decreases as our wealth increases.