

## 2<sup>nd</sup> Assignment

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### Assignment Title:

### Default risk premium and the yield curve

**Submission deadline: June 7<sup>th</sup>, 2024**

**Please submit the assignment via “Εργασίες” in the eclass of the unit.**

#### **SUMMARY:**

You are employed by a major investment firm. The firm is looking to invest in the 10year sovereign bond markets of various countries across the globe. To do so, they are interested in conducting research on the default risk and term structure of interest rates. Your task is to collect data for a chosen country and analyse the main determinants of the default risk premium and term structure.

#### **DETAILED DESCRIPTION OF WORK:**

Your report must fulfil the following specific tasks:

1. Collect daily, weekly or monthly data for your chosen country's 10yr sovereign bond, as well as, a reference 10yr sovereign bond (these will be used for the default risk premium calculation).
2. Collect data of the same frequency for the 3m treasury-bill of your chosen country (these will be used for the term structure calculation).
3. Collect data of the same frequency for the relevant explanatory variables of the default risk premium and the term structure.  
(All data in tasks 1 to 2 must have the same period and of the same frequency, i.e., daily, weekly or monthly – suggested period is 10 to 20 years).
4. Estimate two separate models to evaluate the impact of the chosen explanatory variables on (i) the default risk premium and (ii) the term structure.
5. Write a report analyzing the findings of your research. You are required to demonstrate a logical and coherent interpretation of theory and research findings, illustrating your arguments with appropriate diagrams where necessary.

**NOTE:** For your explanatory variables concentrate on country-level or global data.

The report must include the following sections: (i) Introduction (10 marks), (ii) Brief review of the literature (20 marks), (iii) Analysis of Data and Justification of Research Method (20 marks), (iv) Empirical Findings and their Interpretations (40 marks), (v) Conclusions, Recommendations and Harvard-style Reference list (10 marks).

#### **WORD COUNT:**

The total length of the assignment is **2500 words**. You will need to submit the report in a word document along with an excel file with the raw data.

Below you can find some papers that you could take ideas from for your report:

- Alessandria, G., Bai, Y., & Deng, M. (2020). Migration and sovereign default risk. *Journal of Monetary Economics*, 113, 1-22.
- Badics, M. C., Huszar, Z. R., & Kotro, B. B. (2023). The impact of crisis periods and monetary decisions of the Fed and the ECB on the sovereign yield curve network. *Journal of International Financial Markets, Institutions and Money*, 101837.
- Basurto, M. A. S., Caceres, C., & Guzzo, V. (2010). Sovereign spreads: Global risk aversion, contagion or fundamentals?. *International Monetary Fund*.
- Chatterjee, S., & Eyigungor, B. (2012). Maturity, indebtedness, and default risk. *American Economic Review*, 102(6), 2674-2699.
- De Pooter, M., Ravazzolo, F., & Van Dijk, D. J. (2010). Term structure forecasting using macro factors and forecast combination. *FRB International Finance Discussion Paper*, (993).
- Dewachter, H., & Lyrio, M. (2006). Macro factors and the term structure of interest rates. *Journal of Money, Credit and Banking*, 119-140.
- Giordano, L., Linciano, N., & Soccorso, P. (2012). The determinants of government yield spreads in the euro area. *CONSOB Working Papers No. 71*.
- Gürkaynak, R. S., & Wright, J. H. (2012). Macroeconomics and the term structure. *Journal of Economic Literature*, 50(2), 331-367.
- Paccagnini, A. (2016). The macroeconomic determinants of the US term structure during the Great Moderation. *Economic Modelling*, 52, 216-225.
- Rho, C., & Saenz, M. (2021). Financial stress and the probability of sovereign default. *Journal of International Money and Finance*, 110, 102305.