

5 April 2024

Letter of Reference - To whom it may concern

This is to confirm that **Piotr Antoniak** worked from 1st April 2022 to 30th June 2023 and at the European Central Bank (ECB) in the Policy Interaction Team of the Macprudential Policy Division within the Directorate General Macprudential Policy and Financial Stability (DG-MF). Piotr first worked one year as trainee and then as research analyst.

During his time in the Macprudential Policy (MAP) Division, Piotr was involved in several tasks including various internal analytical notes and presentations, the maintenance and development of the division's data infrastructure, the development of an analytical tool on parallel regulatory constraints.

At the ECB, Piotr managed to quickly familiarize himself with various granular data sets used in the division and he has maintained and further developed a sophisticated data infrastructure used for microeconomic analyses on the interaction between monetary policies and macroprudential policies on the banking system. In this context, he has been able not only to work with several programming languages (SQL, R, Matlab, STATA, Python etc.) but also to understand complicated IT issues in order to properly connect to other internal granular bank-level data. In addition, he became fluent on detailed regulatory and accounting definitions which were key to appropriately manage the database.

Piotr was selected for his job because of his technical skills and especially the knowledge and interest in banking combined with good programming skills. The key project which was assigned to Piotr has been the development of a stress testing model to evaluate the bindingness of parallel regulatory constraints such as the total capital, the leverage ratio, the liquidity coverage ratio, and the net stable funding ratio requirements. This model has been a key milestone for the division and is currently used in our policy assessment. It involves the projection for about 2000 banks of key banks' ratios, based on very granular data. Piotr has managed to develop this model under high time pressure and with several parallel requests for different analysis. In this framework, he managed to meet deadlines and to know how to prioritize the development of different parts according to the needs. In his work, he showed the right balance of creativity, independent thinking and pragmatism. He constructively took initiative to propose alternative solutions and short-cuts in the face of time and resource constraints.

Last but not least, Piotr integrated well into the team and the division. He is a good team player, sharing technical expertise on modelling, programming and statistical techniques with others. He supported more junior members of the team to sort out several issues thanks to his programming skills and knowledge of the data.

I believe that Piotr has the potential to become a valuable asset for your institution. I thank him for his excellent contributions to the Macroprudential Policy Division, and wish him all the best for the future, both on a personal and professional level. I remain at your disposal for any further questions you may have.



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