Statistics Traineeship 2017

Frankfurt am Main

The Directorate General Statistics (DG/S) of the European Central Bank (ECB) is seeking recent graduates or students who have completed at least their first cycle of education (bachelor’s degree) at the closing date of this vacancy.

DG/S is responsible for developing, compiling and disseminating the statistics and the related statistical indicators that the ECB needs to conduct its monetary policy and macroprudential tasks, and that enable the other functions of the ECB (including banking supervision), the Eurosystem and the European System of Central Banks (ESCB) to be carried out. DG/S also provides statistical support to the European Systemic Risk Board (ESRB).

For this purpose, DG/S cooperates closely with other ECB business areas, the national central banks of the Member States of the European Union (EU), the European Commission (especially Eurostat), European and national supervisory authorities, international organisations and the national statistical institutes of EU Member States.

DG/S currently comprises six divisions:

External Statistics Division

This Division develops, compiles and disseminates the euro area’s external statistics and statistical indicators, in particular the balance of payments, the international investment position, internal reserve assets and effective exchange rates. It compiles data on securities issues statistics and manages the Centralised Securities Database (CSDB), which includes micro-level information on financial instruments (securities). In addition, it takes care of the ECB’s centralised market data services.

Macroeconomic Statistics Division

This Division develops, compiles and disseminates the statistics regarding the financial and non-financial sector accounts for the euro area. This includes balance sheets and transactions for all sectors (e.g. households and non-financial corporations) of the economy. It also develops, compiles and/or disseminates statistics on prices and costs, output and demand, the labour market and government finance and, where appropriate, liaises with the primary producers of such data.

Monetary and Financial Statistics Division

This Division develops, compiles and disseminates the balance sheet and interest rate statistics regarding monetary financial institutions (including statistics on monetary aggregates), investment funds, insurance corporations and pension funds, and other financial intermediaries. In addition, it maintains and continuously enhances a register of reference data on financial intermediaries and compiles and disseminates statistics relating to financial stability, systemic risk monitoring, financial integration and financial markets – including a wide range of high frequency market data, yield curves and short-term European paper (STEP) statistics. Implementation work is ongoing relating to
the collection of granular credit and credit risk data. New statistics regarding the daily euro money market and enhanced statistics on annual payment systems within the EU Member States are also produced and disseminated.

Statistics Development/Coordination Division

This Division develops new types of statistics and statistical indicators (current projects include work relating to financial stability, financial derivatives, securities holdings, banknotes and payment cards). It also develops, compiles and disseminates statistics on surveys relating to household finance and consumption and access to finance of enterprises. In addition, it contributes to work on European and global statistical standards, including the reconciliation of statistical and supervisory reporting frameworks, and the Banks' Integrated Reporting Dictionary.

Statistical Information Services Division

This Division develops and applies the statistical tools and procedures for collecting, producing, managing and disseminating the ECB’s statistics through various channels (databases, website, publications, etc.); it is also involved in the development and maintenance of the Statistical Data Warehouse (SDW). The Division provides IT support to internal and external users of the databases, implements best practices in statistical data exchange and management, and harmonises statistical processes. This includes cross-divisional tasks such as the development of an integrated data management enabling the common processing of ECB data such as monetary policy, banking supervision and payment systems data. In the context of the banking supervision, tasks involve the configuration and testing of the IT system used to collect and manage supervisory data.

Supervisory Statistics Division

This Division develops, collects, compiles and disseminates the datasets and quantitative risk reports for supervisory purposes. This entails the coordination, receipt, quality management and reconciliation of supervisory data of credit institutions. In addition, it produces derived statistics or indicators for the quantitative risk assessment system (RAS) as well as for other statistical and analytical needs within the ECB. In close cooperation with national central banks/national competent authorities, it develops and implements methodologies (e.g. completeness checks, outlier analysis, data clustering, etc.) in order to assess the quality of the supervisory data collected. It contributes to the further development and harmonisation of supervisory information in close collaboration with banking supervision business areas and in cooperation with the European Banking Authority. Further information on the work of DG/S can be found on the statistics pages of the ECB’s website.

The successful applicant will be entrusted with the following main tasks:

- participating actively in the work of one of the divisions;
- gaining an insight into conceptual, methodological and operational work on statistics in a policy-oriented environment;

- working independently, under the guidance of a mentor, using their initiative and interacting with other members of staff.
Trainees may also have an opportunity to complete a conceptual or empirical study, suitable for presentation at an internal seminar. Typically, around 35 trainees are recruited to work on different tasks and projects each year. Some examples are given below.

- In the Macroeconomic Statistics Division, trainees may work on the compilation, statistical analysis and dissemination of general economic statistics, such as price and output statistics. Trainees may also work on: compiling and analysing the financial and non-financial accounts; statistics on household wealth; government finance statistics; and developing new publication formats. Trainees may also be involved in work on seasonal adjustment.

- In the External Statistics Division, trainees may work on monitoring the quality of statistics on the balance of payments and international investment position, as well as methods and sources in EU Member States. They may also work on tasks related to the CSDB, which is a large micro database for security-related information. This could include involvement in regular data quality assessment, the development of new tools for data monitoring and data analysis (using programming languages such as R, VBA and SQL). In addition, trainees may be involved in the management of the ECB’s needs for commercial market data.

- In the Monetary and Financial Statistics Division, trainees may work on the collection, compilation, statistical analysis and dissemination of monetary and financial statistics, as defined above. In addition to contributing directly and actively to the Division’s core activities and projects, trainees are also involved in technical tasks related to data processing, such as the maintenance and development of tools in various programming languages (mainly FAME, R, VBA and SAS). Trainees may also take part in data analysis and support the development of new statistical products and projects, such as analytical credit and credit risk datasets as well as the register on financial institutions.

- In the Statistical Information Services Division, they may work on programming (mainly FAME, JAVA, SAS, Perl and UNIX scripts), data loading, metadata maintenance and definition, first-line support for the statistical business areas and end-users, maintenance of the hotline, testing of applications and various tasks related to the publication process. They may also support work on establishing the data governance and processes, semantics and the information system architecture required for an integrated management of granular data across the ECB.

- In the Supervisory Statistics Division, trainees may assist in the receipt, quality management and reconciliation of supervisory data of credit institutions; trainees may also assist in the production of derived statistics or indicators for the risk assessment system and for other statistical and analytical needs within the ECB. Furthermore, they may assist in organising and coordinating meetings, setting up agendas of related international working groups and contributing to the work of other international expert groups.

- In the Statistics Development/Coordination Division, trainees may work on: (i) designing, together with the banking industry, the Banks’ Integrated Reporting Dictionary; (ii) reconciling statistical and supervisory reporting requirements (including related legal aspects); (iii) developing and maintaining statistical datasets for financial stability purposes, with a focus on financial derivatives and asset-backed securities; (iv) securities holdings statistics; (v)
international payment cards; and (vi) preparing material for senior management, including speeches and presentations.

- In addition, trainees may be involved in the development and regular running of the joint European Commission/ECB survey on access to finance of enterprises (SAFE) and the Eurosystem Household Finance and Consumption Survey (HFCS).

**Qualifications and experience:**

Applicants must have the following knowledge and competencies:

- The traineeships are aimed at those who have completed at least their first cycle of education (bachelor’s degree) or equivalent at the closing date of this vacancy in economics, econometrics, statistics, mathematics, finance or other relevant disciplines (e.g. computer science).

Given the wide range of roles available to trainees, required competencies vary based on the Divisions’ requirements. The following competencies broadly sum up the skills required for these roles:

- an advanced command of English with proven drafting ability;
- an intermediate knowledge of at least one other official language of the EU;
- good IT skills and a working knowledge of MS Office (in particular Word, Excel and PowerPoint);

- familiarity with a statistical or mathematical software package and related computer programming experience (Access, Stata, Matlab, R, SAS, VBA or equivalent) and/or relational databases (Oracle, DB2, MySQL or equivalent) would be a major asset;

- knowledge of financial instruments, institutions and markets, as well as statistical methods, would be a major asset;
- knowledge of economic statistics and/or international statistical, accounting or supervisory standards would be an additional asset;
- familiarity with data analysis, advanced data analytics and/or data management would be an additional asset;

- familiarity with dynamic programming languages (Java, Perl or equivalent) would be an important asset in the Statistical Information Services Division;
- familiarity with the techniques and approach for the management of large data sets, data modelling and analysis of unstructured data (“Big Data”) would be an additional asset.

**Competencies:**

The successful candidate will have the following behavioural competencies:
has analytical and quantitative skills, and a proven ability to deliver results and provide innovative solutions to problems;

- communicates effectively, presenting complex issues in a clear and concise manner;
- shares information and supports colleagues in the attainment of common goals;

- can work independently, under the guidance of a mentor, using their initiative and interacting with other members of staff;
- examines issues critically and applies relevant approaches geared towards successful solutions;

- analyses complex datasets from diverse sources.

Further Information:

Traineeship of three to six months, with the possibility of an extension to up to 12 months in total.

Want to know more?

The recruitment process includes an online test on numerical reasoning, a pre-recorded interview and a Skype interview.

The selection committee may place suitable candidates on a reserve list, from which candidates may be appointed to similar positions in the same or another business area. It may also be decided to fill the position(s) advertised in this vacancy notice with a suitable candidate or candidates from the reserve list resulting from a recruitment procedure for a similar position. Candidates will be informed accordingly if this happens.

Reference: 2016-156-TRA EXT

Closing Date for Applications: Thu, 29 Sep 2016