

## “Sharing central bank knowledge” – the Deutsche Bundesbank’s economic education activities

*The Deutsche Bundesbank reaches out to the general public through a diverse range of printed materials, online resources and public events, providing information about its legal mandate, the tools it uses and the extent to which it achieves its objectives. This type of information has long been sought after, particularly by schools, especially since monetary policy is on the upper secondary school curriculum in several of Germany’s federal states. This is why, a number of years ago, the Bundesbank developed a range of educational resources and events tailored primarily to the needs of teachers and schoolchildren.*

*This economic education programme provides a basic grounding in the areas of money, monetary stability, central banks and the financial system. It aims to enable the general public to gain a better understanding of the importance of price stability as well as the tasks of the Bundesbank and the Eurosystem. The focus is on “central bank knowledge”, which is essentially derived from the Bundesbank’s core areas of responsibility: monetary policy, the financial and monetary system, banking supervision, cash management and cashless payments.*

*The Bundesbank has recently redesigned its economic education programme, improving its substance and significantly expanding its volume. As part of this overhaul, the Bundesbank’s Money Museum was reopened to the public in December 2016 following a major revamp of its layout and contents.*

## Aims and contents of economic education activities

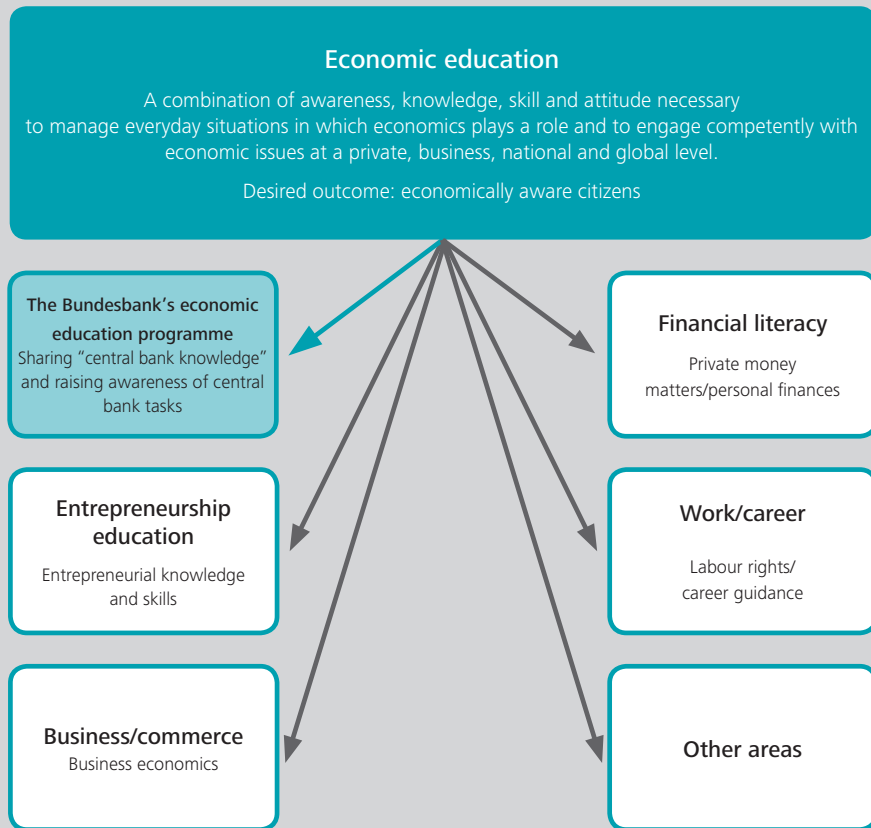
*Central bank's stability-oriented policy also needs public support if long-term price stability is to be maintained*

The Eurosystem central banks have a legal mandate to maintain price stability in the euro area over the medium term. The Bundesbank's economic education programme is designed to help fulfil this mandate. That is because one of the most important factors in preserving long-term price stability is knowing that the general public understands and supports the stability orientation of monetary policy and trusts the central bank's work. Building and maintaining this trust can be achieved more readily if the

public has an idea of the central bank's tasks, goals and tools, as well as the extent to which it achieves its objectives – and, not least, if it understands which economic policy objectives fall outside the central bank's remit.

The Bundesbank's economic education activities therefore use a variety of approaches to give its different target groups a basic grounding in the topics of money, monetary stability, central banking and the financial system. The desired outcome is a deeper public understanding of the importance of monetary stability as well as the tasks of the Bundesbank and the Eurosystem. At the same time, the Bun-

### Areas of economic education



desbank's outreach activities help it fulfil the accountability and reporting obligations it has towards the general public as an independent central bank. Economic education differs from the Bundesbank's other communication activities in two respects, one being that it largely involves conveying basic knowledge, the other that it is tailored to specific target groups.

*"Central bank knowledge" is one area of economic education*

The focus of the Bundesbank's economic education activities is on sharing "central bank knowledge" – that is to say, the subject matter is mainly geared to the Bank's core areas of responsibility, which are monetary policy, the financial and monetary system, banking supervision, the provision of cash, and cashless payments. By sharing central bank knowledge, the Bundesbank covers one specific area of economic education (see the chart on page 34).

The Bundesbank's economic education programme does not directly cover financial literacy, which deals with private money matters, or the topics of investor and consumer protection. However, it does explain issues and instruments which have a bearing on these areas (for example, What is a share? What is a loan?) if the context requires.

## Target groups of the Bundesbank's economic education

*Target groups of the Bundesbank's economic education: teachers, schoolchildren and students*

The Bundesbank's economic education programme consists of lectures and educational materials, the latter available in printed format or online for download from the Bundesbank's website. In target group terms, the programme mainly reaches out to teachers, trainee teachers, schoolchildren and students of economics. That said, the learning resources, certain lectures, and the Money Museum adjacent to the Bundesbank's Central Office in Frankfurt am Main are available for use by the general public, too.

*Main target group: teachers*

Teachers are the main target group of the Bundesbank's economic education activities, giv-

en their role as multipliers who pass on the central bank knowledge they acquire to large numbers of schoolchildren over the course of their careers. Working together with teachers therefore allows the Bundesbank to maximise the benefit of its educational resources, which can be best achieved by focusing on teachers covering monetary policy topics. Besides reaching out to incumbent school teaching staff, the Bundesbank's programme is also aimed at trainee teachers who are either still at university or in practical training.

Depending on which federal state they are in, German schools treat the subjects of economics, finance and currencies with different levels of importance and cover them in different areas of the curriculum. As a result, monetary policy is not part of teacher training courses everywhere in Germany, or makes up just a fraction of the syllabus. Against this backdrop, the Bundesbank's economic education programme allows teachers to find out for themselves about central banking or brush up on their existing knowledge.

Young people are the second major target group for the Bundesbank's economic education activities. The focus here is on students in upper secondary education, given that central banking-related topics (especially monetary policy) are mostly taught to these older schoolchildren at both general secondary schools and vocational schools. Learning resources are also available for primary and lower secondary school pupils, although these levels have not been a focus of the Bank's lectures in the past.

*Another important target group: the younger generation*

Another group at which the Bundesbank's range of economic education services is aimed are students whose courses cover aspects of monetary policy. Both students of economics-related subjects, and also those studying economics as a non-core subject, such as law students, normally need extra information and also use the educational resources provided by the Bundesbank.

## Economic education in an international context and in the field of research

Much like the Bundesbank, many other central banks offer educational materials that are specifically designed for use in a school classroom setting. Such services are provided by virtually all Eurosystem central banks, including the European Central Bank, as well as by the US Federal Reserve and the Swiss National Bank, for example. The available materials range from comics to textbooks with worksheets, and include online games along with educational films accessible via the internet.

While some other central banks are also active in the area of financial literacy, the Bundesbank has focused its range of educational media on conveying central bank knowledge. The Bundesbank does, nonetheless, monitor developments at both the national and international level in the field of general financial education. In this connection, the Bundesbank – just like the Federal Financial Supervisory Authority (BaFin) – is a member of the International Network on

Financial Education (INFE) under the aegis of the Organisation for Economic Co-operation and Development (OECD). This network was established in 2008 and currently counts just under 100 public institutions from more than 70 countries as full members. The INFE draws up international recommendations and guidelines on financial education. Furthermore, the INFE coordinates international comparative studies to determine, for example, the level of financial literacy in various countries.

Questions relating to general knowledge about financial matters are also of relevance to the field of economic research. This is the context in which the Bundesbank's Research Centre dedicates itself to this topic. The Bank's Research Centre investigates, for example, what relationship exists between the level of financial literacy and households' investment and savings decisions.

## Economic education activities performed by Central Office and Regional Offices

*Central Office plans and coordinates education activities and develops resources*

Both the Bundesbank's Central Office in Frankfurt am Main and the Regional Offices are responsible for the Bank's economic education activities. Central Office manages the strategic planning and coordination of education activities and is responsible for developing and updating educational resources and their quality assurance. Its tasks also include designing the overarching public image for the Bundesbank's economic education activities and running the Money Museum, including the lecture service.

*Regional Offices organise lectures and network in their regions*

The Bundesbank's nine Regional Offices plan, design and run the lectures that form part of the Bank's economic education services in their local area. Their tasks notably include networking with schools, higher education institutions and educational establishments, which also in-

clude ministries of education and educational authorities, as well as teacher training institutions. Germany has a very heterogeneous education system because education falls within the remit of each state government. The decentralised approach which the Bundesbank takes to its economic education activities means that it can make suitable allowances for the diverse idiosyncrasies of each federal state when planning and holding lectures and teacher training seminars. The Bank can therefore deliver events that are tailored to suit the particular needs in a specific region.

To support these activities, the Bundesbank's Central Office and Regional Offices work with a large number of universities in the field of teacher training and cooperate with economic institutions. It has arrangements with universities in Berlin, Bonn, Frankfurt, Kiel, Leipzig and Saarbrücken, for example. In addition, it maintains a wide range of contacts with teacher training institutions in the respective federal states.

*Cooperation with teacher training institutions*

### Cooperation with teacher training institutions (selection)

- Akademie für Lehrerfortbildung und Personalführung, Dillingen an der Donau
- Akademie für Politische Bildung, Tutzing
- Landesinstitut für Lehrerbildung und Schulentwicklung (LI Hamburg)
- Institut für Lehrerfort- und -weiterbildung in Mainz und in Saarbrücken
- Institut für Qualitätsentwicklung an Schulen Schleswig-Holstein (IQSH)
- Landesakademie für Fortbildung und Personalentwicklung an Schulen, Esslingen
- Landesinstitut für Schulqualität und Lehrerbildung Sachsen-Anhalt (LISA)
- Multiplikatorennetzwerk ökonomische Bildung in Hessen
- Sächsische Bildungsagentur (SBA)
- Thüringer Institut für Lehrerfortbildung, Lehrplanentwicklung und Medien (Thillm)

Deutsche Bundesbank

*Networking with institutions for economic education and teachers*

Another way in which the Bundesbank works with other providers of education programmes is by networking with the relevant institutions for economic education. These include the Institute for Economic Education (IÖB) in Oldenburg, the Center for Economic Education (ZÖBIS) in Siegen and the Association for Economic Education in Secondary Schools (VÖBAS), to name just a few. The Bundesbank also boasts its very own stand at didacta, Germany's major annual education fair, to help it stay in touch with teachers. What is more, the Bank showcases its economic education programme at the Frankfurt and Leipzig Book Fairs, as well as at a variety of consumer fairs. Teachers can also sign up for the Bank's regular newsletter to find out about the latest economic education activities and upcoming events.

### Wide range of educational resources on offer

*"Geld und Geldpolitik" – the Bundesbank's flagship economic education publication*

All the Bundesbank's educational resources, be they in print or electronic format, are developed and produced centrally. The offering comprises resources that, for the most part, are specifically designed for use in schools. The entire repertoire of resources can be found on the Bundesbank's website,<sup>1</sup> meaning that

they are also available to the general public. The Bank's flagship educational resource is *Geld und Geldpolitik* (Money and monetary policy), a book aimed at pupils in upper secondary education. This cornerstone of the Bundesbank's work in economic education can be traced back to previous publications that have been undergoing continual improvement since 1970. The book teaches its readers about cash, book money, banking and financial supervision, European monetary policy and its institutions, and the international financial and monetary system. It explains the basics, provides historical context and discusses more recent developments in the wake of the financial and sovereign debt crisis. In addition, each chapter is accompanied by teaching materials that can be used in the classroom in conjunction with the book. An online version of this book, which tackles topics in greater depth and contains links to other websites for further reading, is also available.

The resources available to lower secondary schoolchildren currently comprise modular worksheets and factsheets on topics such as money, monetary stability and monetary union, with even more resources scheduled for roll-out in 2017. As for primary school pupils, the

*Resources for lower secondary and primary schools*

<sup>1</sup> [www.bundesbank.de/education](http://www.bundesbank.de/education)

Bank's offering includes the publication *Mein Euro – Spiel- und Rechengeld* (My euro – play and counting money), which comes complete with worksheets. There is also a reading book entitled *Dem Geld auf der Spur* (All eyes on the money trail).

*Additional resources available on the website*

In addition, the educational section of the Bundesbank's website is home to a variety of statistical charts containing economic and monetary policy data for use in the classroom. These include, for instance, charts on consumer price inflation, exchange rate changes and policy rate developments. The charts are updated quarterly and can be downloaded directly from the website, so teachers can readily incorporate them into their own teaching materials. Teachers are also welcome to download infographics featured in the *Geld und Geldpolitik* book, which provide a condensed overview of various topics – the composition of the ECB Governing Council being just one example – and likewise put them straight to use in a classroom setting.

Yet another resource on the Bundesbank's website is its extensive glossary, which contains around 700 terms and acronyms from the field of central banking. Many glossary entries include links to related entries and in-depth Bundesbank articles.

*Animated educational films shine light on complex topics*

Another resource that the Bundesbank's website uses to explain complex and abstract topics from the world of central banking as clearly as possible are animated educational films, for which a unique graphic concept was developed. Furthermore, the website features interactive applications such as an inflation/deflation calculator and a quiz.

*Media package on price stability produced with federal states' media institute*

Every now and then, the Bundesbank teams up with other public sector institutions to produce educational resources. Working together with the FWU Institut für Film und Bild in Wissenschaft und Unterricht, the joint educational media institute for Germany's federal states, the Bundesbank developed a media package

on the topic of price stability, which comprises a film and supplementary teaching resources. The film follows two young people who find themselves in situations where their lives are directly affected not only by money and price stability but also by monetary policy measures undertaken by the Eurosystem. As well as including both a German and English-language version of the film, the media package includes a barrier-free version with an audio description track. Produced in 2015, the media package won the Comenius EduMedia Award, a prestigious prize for digital educational media awarded by the Society for Pedagogy, Information and Media (GPI).

Germany's public broadcaster in the federal state of Hesse, Hessischer Rundfunk, also ranks among the Bundesbank's cooperation partners. As part of the hr2 radio station's "Kinderfunkkolleg", a course of audio lectures for children covering various topics, the two partners developed the 25-part series "Kohle, Cash und Pinkepinke" (Dosh, cash and dough) on various money-related topics, which was broadcast once a fortnight starting in October 2015 and was made starring children, for children. These episodes are also available for download as podcasts on a separate website, which, as well as boasting a wide range of teaching materials, is home to audio puzzles, reports on school media projects and glossary entries.<sup>2</sup>

*"Kinderfunkkolleg Geld" in cooperation with Hessischer Rundfunk*

## ■ Lectures and seminars

Expanding on the Bundesbank's diverse and varied range of educational resources are its lectures and seminars, which form the second pillar of its economic education programme. These events are offered nationwide and individually tailored to each target audience's requirements, not least as a result of Germany's education system differing from state to state. The topics that these events should ideally cover and the audience's educational background

*Lectures form second pillar of Bundesbank's economic education programme*

<sup>2</sup> [www.kinderfunkkolleg-geld.de](http://www.kinderfunkkolleg-geld.de)

## The new Money Museum: a unique venue which makes learning an experience

The Bundesbank established the Money Museum back in 1999 as a venue dedicated to economic education. Its presentation of the topic of monetary policy and use of an attractive repertoire of multimedia were so pioneering that it inspired a great many other central banks to emulate these approaches. Since opening its doors, the Bundesbank's Money Museum has welcomed around 40,000 visitors a year, most of whom are schoolchildren.

After more than ten years of faithful service, elements of the exhibition were slowly beginning to show their age, not just in terms of their content and design, but also with regard to the technology. This prompted the Bundesbank's Executive Board to decide in 2011 that the Bank's Money Museum needed to be overhauled. In December 2013, following a public call for tenders, the Executive Board awarded a contract to Stuttgart-based museum planning



Photograph: Uwe Nölke



specialists Milla & Partner to design and build an exhibition space that best implemented the Money Museum approach developed by the Bank's Directorate General Economic Education. After three years of intensive cooperation between Bundesbank experts and more than a dozen external firms, Bundesbank President Jens Weidmann reopened the Money Museum, as planned, on 16 December 2016.

The Money Museum invites visitors to learn the basics about money, its history and the tasks and responsibilities of central banks. Its overriding message is the importance of stable money for the economy and society at large. In its new and revamped form, the exhibition presents the Bundesbank as a central bank that, within the context of the Eurosystem, performs essential tasks to safeguard the functional viability of money – nationally, throughout Europe and around the

world. Thematically, the exhibition does not mirror the structure of the Bundesbank as an institution but looks at money from the vantage point of a central bank. It reflects critically on a number of issues on the basis of examples taken from history.

The Money Museum lets the general public learn and experience for themselves what money and central banks stand for. Central banking topics can be somewhat abstract, so the exhibition makes them more approachable by embedding them in everyday situations that visitors will probably encounter in real life (for example, a bank branch, a supermarket or a bureau de change). Individual display cases present topics specifically for children. More than 40 interactive media stations use playful approaches to present exhibition content (including quizzes, memory games and puzzles) and impart more detailed knowledge.





Photograph: Uwe Nölke

Most of the exhibition is accessible to persons with disabilities. A conscious decision was made to position wall captions, images and graphics at different heights, and key statements are written in large, high-contrast type. There is an audio guide to the exhibition for the visually impaired, and the entire exhibition is captioned in German and English.

The exhibition is ideal for self-directed visits. By arrangement, visitors can enhance their museum experience by making use of educational services such as guided tours, discovery tours and workshops, and a lecture service for school groups and students. Since its renovation, the Money Museum now houses three lecture rooms for presentations and discussions, as well as a museum education room.

The tour leads visitors through the four themed areas: "Cash", "Book money", "Monetary policy" and "Global money". In each one, the left-hand side of the outer wall of the tour route explains the current and general context and illustrates the central bank's tasks in that particular field. The interior wall, meanwhile, explores the theme from a historical perspective. At

the entrance of each themed area is what is known as a "supersign", which offers a "speed read" of the key issues and messages in each area. The museum boasts dedicated rooms (cabinets) which present individual topics in greater detail and provide an immersive experience for visitors.

One of the exhibition's highlights is a 12.5 kilogramme bar of gold which visitors are permitted to touch and lift. At the heart of the exhibition tour lies a 360° cinema. Three films use stimulating and thought-provoking elements to immerse visitors in different experiences and challenge them to reflect on, question and discuss what they see.

are determined upfront. This format aims to enable participants to pose questions and critically discuss topics. As well as taking place on Bundesbank premises, events are also hosted by external venues such as schools, universities and teacher training institutions. Teacher training seminars tend to last anywhere between half a day and a full day, whereas events for schoolchildren typically consist of a 90-minute talk, including time for discussion. Meanwhile, events for students are normally offered in conventional formats such as lectures and seminars spanning one or several days.

*High demand  
for lectures*

In 2016, total attendance figures across more than 1,600 economic education events reached around 52,000. Now that the Money Museum has reopened following its closure for renovation, lectures will also resume at the Bundesbank's Central Office in 2017. As a result, it is safe to assume that total attendance figures at such events are likely to rise further.

Further to the established lecture programme, Bundesbank President Dr Jens Weidmann has been meeting with teachers from all over Germany once a year since 2013 to exchange views on current monetary policy issues and the manner in which they are taught in the classroom. Dr Weidmann has also been regularly meeting with schoolchildren in a similar format since 2014.

*Generation Euro  
Students' Award  
competition*

Another of the Bundesbank's tasks in the field of education is the coordination at the national level of the Generation Euro Students' Award competition, an initiative set up by the European Central Bank. In this competition, teams of school pupils from euro-area countries tackle questions on monetary policy. The German final of this competition is held at the Bundesbank's Central Office, with the subsequent European final being hosted by the European Central Bank.

## ■ Quality assurance

The Bundesbank has measures in place to assure the quality of its economic education activities. Working groups from the Regional Offices and Central Office prepare standardised presentation slides on lecture topics for which demand is greatest. As well as making it possible to leverage synergies when preparing lectures, this approach also safeguards their professional quality, ensures that presentations have a consistent look and guarantees that they are updated on an ongoing basis. On top of this, all lectures are evaluated internally by means of participant surveys, which enables speakers to receive direct feedback from their audiences.

*Internal  
evaluation*

Evaluation specialists from Univation – Institut für Evaluation Dr. Beywl & Associates GmbH assessed the range of economic education services offered by the Bundesbank at the end of 2015/start of 2016. This exercise set out to explore whether the existing economic education services were properly tailored to their target groups, had the desired reach and met their outlined objectives. An external academic advisory committee made up of distinguished university lecturers from the field of economic education also played a role in the evaluation.

*External  
evaluation*

This external evaluation concluded that the Bank's range of services should be maintained and refined, affirming that the Bundesbank's economic education services are expedient, rated highly by the target groups and bear the hallmarks of the Bank's expert status and neutrality. It also confirmed that the programme stood out on account of the high degree of expertise provided, its up-to-date content and its real-world applicability. The reach of the Bank's economic education services and the extent to which the respective target groups are familiar with them were noted as points with potential for further development. In addition, the provision of teaching and learning materials was cited as another area with room for improvement. There are plans to repeat this external evaluation every five years.