2022 ACTIVITIES
CLICK TO REGISTER

LIVE EVENTS

E-LEARNING

CLICK HERE

REPLAYS FOR EXPERTS
WHAT ARE THE 3 KEY TRENDS WE ARE WITNESSING AT THE IBFI LEVEL?

**TREND N°1:** This long-lasting pandemic has had a substantial impact on the ways we cooperate: they have become virtual and this will continue after the crisis.

The most striking case is the rising use of online meeting platforms such as Zoom or Webex but also E-learning tools. The first consequence is the creation of new webs of international cooperation. Virtual cooperation means a striking new worldwide openness. The virtual format abolishes borders and opens all voluntary institutions to the world and to new networks of relationships. It is true for both the providers and beneficiary sides of capacity building. A second consequence is that virtual modalities will last. They are less expensive and have a low carbon footprint. They are also complementary to in-persons actions. However, face-to-face activities will still have a huge role in international cooperation. It is crucial to know each other in real life and when possible first contacts should happen in person. Physical meetings must be organised regularly to revitalise and reinforce the links.

**TREND N°2:** The rise of digital technologies opens new horizons and allows leapfrogging.

The main impact is that central banks can start from scratch and be able to deploy the most advanced technologies. Indeed, digital technologies are lowering barriers to entry for many activities. The emergence of digital finance in a very large number of countries is striking. Many institutions are even considering the use of central bank digital money, including as a way to promote financial inclusion.

**TREND N°3:** A huge increase of supply and demand in international cooperation and capacity building.

It is the end of in-persons bottlenecks. For instance, the IBFI has in the virtual mode 3 times more audience for its live events: 3700 versus 1200 to in-person events in the past; also over 1000 users on the e-learning platform and 1450 users of the replay-video for more than 1500 hours of views of our video replays. Climate change and central bank digital currency are the current hot topic. They are the top of the iceberg.

This flipbook provides much more on IBFI activities and programs. It presents our 2021 benchmarks. This is unique information on the recent trends in central banking.

Jean-Luc Quémard
Head of the International Banking and Finance Institute (IBFI)
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After having moved all IBFI’s activities online during the period of the Covid19 pandemic, we are now preparing to come back to a normal situation. Our new services will remain active and will still complement our offer, providing learners with a wider range of solutions.

The IBFI proposes trainings covering all central bank functions. Topics evolve according to the needs expressed by our partners. The in-persons seminars include theoretical and practical presentations, situational exercises and case studies. Online events are shorter and focused on presentations.

The IBFI also provides technical assistance under two forms: mobilising Banque de France experts to take part in bilateral or multilateral missions (IMF, World Bank, EU) or welcoming study visits of delegations from foreign central banks and supervisory bodies at the Banque de France. We offer now virtual missions or study visits.

Live events: Training seminars and Webinars

The in-persons seminars provided through the IBFI’s annual catalogue are our primary mode of action. They consist in 3 to 5 day training sessions the content of which changes according to the needs expressed by our partners. They include theoretical and practical presentations, simulation exercises and case studies. Participants are often brought together in smaller groups to foster interaction around a particular topic. Sharing experiences and networking are key. The IBFI proposes also webinars on current topics. They usually last 1h30. The IBFI live events are open to all central bank staff through a call for application.
**Video learning and E-learning**

The **IBFI** makes available videos of experts participating in its seminars. It is the Video library, a video platform created by a French start-up. It is a unique source of expert resources on all central banking activities. Video replays are available at any time, on any type of tool and usercentric.

The **IBFI** proposes also an e-learning tool for its central banks users thanks to its video library. Learners’ progress is monitored and quizzes enable them to validate their understanding and identify areas for improvement. A certificate is delivered after a successful training.

**Tailored training**

We receive numerous requests to organise specialised or customised training programmes. Thus, aside from our traditional training seminars which are open to all central banks, we conduct tailored projects on a bilateral or regional basis. They can be virtual. Such specialised support may consist in study trips in France or virtual training sessions of small groups of central bankers, or may take the form of bespoke training sessions, held on our premises or within the partner central bank. In this latter case, we seek to involve, to the greatest extent possible, employees from other central banks of the same region, so that any such initiative may benefit the largest number of persons. These sessions are only launched after an in-depth study of existing requirements and a thorough examination of the most adequate means of satisfying demand. The duration of these events is variable, ranging from two to five days. Attendance may be combined with participation to seminars included in the **IBFI’s** annual programme and videoconferences.

**Partnerships**

The **IBFI** has a broad network of partners worldwide. In addition to our bilateral cooperation with other central banks or international institutions such as the IMF or the World Bank, we build partnerships with regional institutions, in order to deliver training services suited to the local context and challenges, and to limit travel expenses for participants.

A partnership agreement was recently signed between the Banque de France and Expertise France (a subsidiary of the French Development Agency). This agreement provides a framework and funding for the provision of Banque de France experts for technical support or training missions undertaken by Expertise France. It offers new opportunities for our experts by allowing them to work within a coordinated offer of French expertise, particularly on European programmes.
High-level workshops

Throughout the year, the IBFI organises technical workshops upon an invitation-only basis. The organisation of these workshops is highly dependent on economic and financial news and the evolution of challenges faced by central banks.

These workshops aim at bringing together the main central bank specialists who are called upon to tackle a common issue. Participants come from various geographic zones and from diverse areas of expertise (macroeconomists, economic policy specialists, experts specialised in financial stability issues, as well as specialists of the markets, payment systems, regulatory and supervisory matters, or the internal management of central banks).

Workshops organised by the IBFI allow for a matching of experience, including with other public institutions and private sector players, in order to bring about the emergence of solutions possibly suited to the various local contexts.

For the proper progress of the debates, it is essential that all participants in these workshops have prior extensive knowledge in the area concerned.

Videoconference support and dialogue

The IBFI is equipped with the infrastructure necessary for the organisation of videoconferencing among the experts of our partners and of the Banque de France. Such a cooperation mode is particularly suited to the review of a highly specific topic, requiring a short time period (one or two hours) of work in common.

Participation in projects organised by third parties

Experts within the IBFI, or appointed by the IBFI also participate in training projects organised and financed by third parties, whether national or regional central banks, international financial institutions such as the IMF and the World Bank, and regional institutions such as the CEF (Center of Excellence in Finance).
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### Categories

- Economic analysis and statistics
- Financial stability and prudential supervision
- Markets and operations
- Governance, administration and communication
NEW SURVEY: ASSESSMENT OF THE IBFI ACTIVITY

An excellent feedback: 4,3/5

A survey among central banks worldwide

The IBI has launched in October 2021 a survey to previous participants or HR counterparts in central banks worldwide. It received around 320 answers from 72 countries. The different activities of the IBFI are rated at a high level, as illustrated hereafter:
- IBFI seminars: 4,4/5
- Impact on staff work of IBFI training: 4,3/5
- IBFI online seminars: 4,3/5
- Video replays: 4,4/5
- Technical assistance: 4,3/5

Why?

The respondents stress in particular the high level of expertise of speakers, the good organization and the interactivity and networking allowed in IBFI seminars.

What about our on-line live events?

While respondents often consider the face-to-face format as irreplaceable and overall a most effective mode of trainings, the online format, which has been the rule since the start of the pandemic are very well received. For several respondents it allows to bring together more participants and speakers from a wider area, and many wish it remains part of the standard programs provided by the IBFI.
What about our innovations?

The video replays provided by the IBFI are also very much appreciated as allowing to overcome somehow the effects of time-zone differences for online events and reviewing the training, making it more efficient. The French translations of the replays are also very well received by French speaking participants.

Among possible innovations mentioned: online training over a longer period (currently all IBFI training last up to 1 week), hybrid formats, the use of podcasts, shorter dedicated videos, further workshops with case studies. Some respondents stress the need to enhance the certification of trainings.

What are the needs?

As regarding the themes of seminars, respondents put forward not surprisingly major themes of current central banking as: financial stability, payment systems (including central bank digital currency issues) economic modelling and research, governance (in particular risk management and transformation), statistics (in particular BoP), data protection, sustainable finance. For technical assistance, the needs appear more focused on issues related to market operations, big data and sustainable growth, which cover nearly 60 % of the expressed needs.
ASSESSMENT OF THE IBFI TRAINING AND TECHNICAL ASSISTANCE
(MOST FREQUENT QUOTES)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Seminars</td>
<td>4.4</td>
</tr>
<tr>
<td>Video Replays</td>
<td>4.4</td>
</tr>
<tr>
<td>Online Seminars</td>
<td>4.3</td>
</tr>
<tr>
<td>Usefulness for Work</td>
<td>4.3</td>
</tr>
<tr>
<td>Technical Assistance</td>
<td>4.3</td>
</tr>
</tbody>
</table>

SEMINARS: DOMAINS OF INTEREST
(MOST FREQUENT QUOTES)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Stability / CBDC</td>
<td>18%</td>
</tr>
<tr>
<td>ECO / Research / Modelling</td>
<td>11%</td>
</tr>
<tr>
<td>Other Governance / Audit</td>
<td>9%</td>
</tr>
<tr>
<td>Market and Operations</td>
<td>8%</td>
</tr>
<tr>
<td>Big Data / AI</td>
<td>7%</td>
</tr>
<tr>
<td>Statistics (in particular BOP)</td>
<td>6%</td>
</tr>
</tbody>
</table>
### Seminars: Domains of Interest (Continued) (Most Frequent Quotes)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Quote Percentage</th>
</tr>
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<tbody>
<tr>
<td>Anti Money Laundering</td>
<td>5%</td>
</tr>
<tr>
<td>Data Protection/Cybersecurity</td>
<td>5%</td>
</tr>
<tr>
<td>FinTech/RegTech</td>
<td>5%</td>
</tr>
<tr>
<td>Transformation/Strategy</td>
<td>4%</td>
</tr>
<tr>
<td>Sustainable Finance</td>
<td>4%</td>
</tr>
<tr>
<td>Risk Management</td>
<td>4%</td>
</tr>
<tr>
<td>Consumer Protection/Financial Inclusion</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Needs for Technical Assistance (Most Frequent Quotes)

<table>
<thead>
<tr>
<th>Domain</th>
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<tbody>
<tr>
<td>Market and Operations</td>
<td>26%</td>
</tr>
<tr>
<td>Big Data/Digital</td>
<td>17%</td>
</tr>
<tr>
<td>Sustainable Growth</td>
<td>13%</td>
</tr>
<tr>
<td>Financial Stability</td>
<td>9%</td>
</tr>
<tr>
<td>Statistics</td>
<td>9%</td>
</tr>
<tr>
<td>International Relations</td>
<td>4%</td>
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<tr>
<td>Economics/Research</td>
<td>4%</td>
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<tr>
<td>Cybersecurity</td>
<td>4%</td>
</tr>
<tr>
<td>Payment System, CBDC</td>
<td>4%</td>
</tr>
<tr>
<td>Risk Management</td>
<td>4%</td>
</tr>
<tr>
<td>Strategy</td>
<td>4%</td>
</tr>
</tbody>
</table>
IBFI KEY FIGURES

1551 HOURS OF REPLAYS VIEWED

3700 PARTICIPANTS TO LIVE EVENTS

1450 USERS ON LEARNING CHANNELS

33 ON-LINE SEMINARS

10 WEBINARS

34 VIRTUAL MISSIONS

170 INSTITUTIONS
THE IBFI WORLD

Countries:

- AFGHANISTAN
- ALBANIA
- ALGERIA
- ARUBA
- ANGOLA
- SAUDI ARABIA
- ARGENTINA
- ARMENIA
- AUSTRALIA
- AUSTRIA
- AZERBAIJAN
- BAHRAIN
- BANGLADESH
- BELARUS
- BELGIUM
- BENIN
- BOSNIA-HERZEGOVINA
- BOTSWANA
- BRÁZIL
- BULGARIA
- BURKINA FASO
- BURUNDI
- CAMBODIA
- CAMEROON
- CAPE VERDE
- CENTRAL AFRICAN REPUBLIC
- CHAD
- CHILE
- CHINA
- CYPRUS
- COLOMBIA
- COMOROS
- CONGO
- COSTA RICA
- CROATIA
- CZECH REPUBLIC
- DJIBOUTI
- DEMOCRATIC REPUBLIC OF CONGO
- DOMINICAN REPUBLIC
- EGYPT
- ECUADOR
- EL SALVADOR
- EQUATORIAL GUINEA
- ESTONIA
- ETHIOPIA
- FIJI
- FINLAND
- FRANCE
- GABON
- GAMBIA
- GEORGIA
- GERMANY
- GHANA
- GREECE
- GUINEA CONAKRY
- GUINEA-BISSAU
- HAITI
- HONG KONG
- HUNGARY
- INDIA
- INDONESIA
- IRAQ
- ICELAND
- ISRAEL
- ITALY
- IVORY COAST
- JAMAICA
- JAPAN
- JORDAN
- KAZAKHSTAN
- KENYA
- KOSOVO
- KUWAIT
- KYRGYZSTAN
- LAOS
- LATVIA
- LEBANON
- LIBERIA
- LIBYA
- LITHUANIA
- LUXEMBOURG
- MADAGASCAR
- MALAYSIA
- MALI
- MALTA
- MOROCCO
- MAURITIUS
- MAURITANIA
- MEXICO
- MOLDOVA
- MONGOLIA
- MONTENEGRO
- MOZAMBIQUE
- NEPAL
- NETHERLANDS
- NIGER
- NIGERIA
- NEW ZEALAND
- NORTH MACEDONIA
- PAKISTAN
- PALESTINE
- PANAMA
- PERU
- PHILIPPINES
- POLAND
- PORTUGAL
- ROMANIA
- RUSSIA
- SENEGAL
- SERBIA
- SEYCHELLES
- SINGAPORE
- SLOVAKIA
- SLOVENIA
- SOUTH KOREA
- SPAIN
- SUDAN
- SRI LANKA
- SWEDEN
- SURINAME
- SOUTH AFRICA
- SWAZILAND
- TAJIKISTAN
- TAIWAN
- TANZANIA
- THAILAND
- TOGO
- TUNISIA
- TURKEY
- UKRAINE
- UGANDA
- UNITED STATES
- URUGUAY
- UZBEKISTAN
- VIETNAM
- YEMEN
- ZAMBIA

Geographical Regions:

- Middle East
- North Africa
- Sub-Saharan Africa
- Latin America
- Asia and Oceania

- 19% North Africa
- 13% Middle East
- 8% Sub-Saharan Africa
- 14% Latin America
- 8% Asia and Oceania

- 31% Europe
IBFI BENCHMARKS

THE FIGURES/GRAPHS SHARE THE RESULTS OF SURVEYS AMONG PARTICIPANTS AT THE IBFI SEMINARS. THE FULL BENCHMARKS AND LISTS OF RESPONDING COUNTRIES SHARE ARE AVAILABLE ON WWW.BANQUE-FRANCE.FR/EN/IBFI/NEWS
GOVERNANCE, ADMINISTRATION AND COMMUNICATION

2021 BENCHMARKS
DIGITALIZATION AND INNOVATION MOVING FORWARD
2021 Benchmarks

Have you created a governance framework specific to innovation?

- Yes: 45%
- No: 55%

Does your bank use the blockchain technology? If yes, at which stage?

- No: 63%
- Experimental: 28%
- Production: 9%

Does your bank use machine learning technology? If yes, at which stage?

- No: 56%
- Experimental: 23%
- Development: 14%
- Production: 7%
HAVE YOU CREATED ONE OR SEVERAL INTERNAL «LABS» TO BRING TOGETHER START-UPS AND YOUR INSTITUTION’S UNITS?

YES 34%

NO 66%

HAVE YOU CREATED ONE/SEVERAL CO-WORKING SPACES? IF YES DO YOU ENCOURAGE «CO-CONSTRUCTION WORK» WITH DIFFERENT TEAMS IN THE SAME SPACE?

YES 31%

NO 64%

5%
Yes even with co-construction work

ARE THERE TRAINING SESSIONS OR FAMILIARIZATION EVENTS ORGANIZED ON DIGITALIZATION FOR STAFF?

YES 66%

NO 34%
ARE THERE SPECIFIC SUPPORT MEASURES TARGETED TOWARDS MANAGERS TO HELP THEM ADAPT FOR TO DIGITALIZATION AND TO GOOD PRACTICES SUCH AS REDUCING CARBON FOOTPRINT AND SOCIAL IMPACT?

YES 29%  NO 71%

IF TOP-MANAGEMENT IS WELL INVOLVED INTO THE MANAGERIAL INNOVATION, HOW?

- 23% Annual MANAGERS’ day
- 51% More delegated decisions
- 26% Shortening the validation process of memos

TOWARDS WHICH CLOUD IS YOUR BANK TURNING?

- 61% PRIVATE
- 39% HYBRID
- 0% PUBLIC
HAVE YOU DEVELOPED ‘APPS’ ACCESSIBLE BY SMARTPHONE, PROVIDING REMOTE ACCESS TO YOUR INFORMATION’S SYSTEMS?

YES 45%

NO 55%

HAVE YOU UPGRADED YOUR IT SYSTEMS TO CONSUME MORE SERVICES IN THE CLOUD?

28% Experimental

34% No

17% Development

21% Production

GOVERNANCE, ADMINISTRATION AND COMMUNICATION
IS THERE A SPECIFIC LEGISLATION RELATED TO PERSONAL DATA PROTECTION IN YOUR JURISDICTION?

82

DID THE GDPR (GENERAL DATA PROTECTION REGULATION) INITIATE A REVIEW OF LEGISLATION?

YES 83%
NO 17%

DID YOU MAKE CHANGES IN YOUR ORGANIZATION AFTER THE ENTRY INTO FORCE OF THE GDPR IN MAY 2018?

NO 31
YES 48
HAVE BANKS AND COMPANIES FROM YOUR COUNTRY PROVIDING SERVICES TO EU RESIDENTS DESIGNATED A REPRESENTATIVE IN THE EU AS POINT OF CONTACT?

- YES: 34
- NO: 10
- N/A: 31

DOES THE GENERAL PUBLIC IN YOUR COUNTRY WORRY ABOUT THEIR PERSONAL DATA PROTECTION?

- YES: 86%
- NO: 14%
HOW CENTRAL BANKS MANAGED TELEWORK AND COVID INTERNALLY?
IN THE COVID-19 CONTEXT, ARE MEETINGS WITH VISITORS PROHIBITED?

- Yes: 81%
- No: 19%

DO YOU KEEP OPEN COLLECTIVE SPACES LIKE THE COMPANY RESTAURANT, CAFETERIAS?

- Yes: 44%
- No: 56%

HAVE YOU USED BACK-UP PREMISES / SITES?

- Yes: 53%
- No: 47%
WHAT MEASURES ARE IN PLACE TO PREVENT PEOPLE FROM BUMPING INTO EACH OTHER IN OFFICES?

- Introduction of signage inside the building, in particular to indicate the directions of traffic in the corridors: 36%
- Dedicated accesses to the entrances – exits of the building: 36%
- Reduction of the number of authorized persons per meeting room: 93%

DO YOU HAVE SPECIFIC MEASURES FOR CLEANING DOORS HANDLES?

- YES: 71%
- NO: 29%

ARE YOU ABLE TO ACCESS TO YOUR SAFETY AND SECURITY INFRASTRUCTURE VIA EXTERNAL SECURED ACCESS?

- YES: 43%
- NO: 57%
DUE TO COVID19, WHICH MEASURES ARE TAKEN FOR SOCIAL DISTANCING AT WORKPLACES?

- 25% Physical modifications to ergonomy of more than 20% of work stations
- 94% Alternate days for staff presence at their desk

DO YOU PLAN TO INITIATE OR GENERALIZE THE USE OF FLEX OFFICE FOR THE USE OF YOUR WORKSPACES?

- 40% YES
- 60% NO

HAD YOUR CENTRAL BANK DESIGNED AND UPDATED BUSINESS CONTINUITY PLANS AND/OR CONTINGENCY PLANS?

- 40% YES
  - Yes in the main operational sensitive areas
- 60% NO
  - Yes, in all units or almost
HUMAN RESOURCES MANAGEMENT SHIFTING TOWARDS SKILLS AND HUMAN DEVELOPMENT
DOES THE HR STRATEGY PROVIDE MAJOR INPUTS INTO THE GLOBAL CORPORATE STRATEGY?

- Yes: 69%
- No: 10%
- I don’t know: 21%

IS THERE A MULTI-YEAR HR STRATEGY?

- Yes: 49%
- No: 16%
- In Project: 19%
- I don’t know: 16%

IS THE HR FUNCTION CENTRALISED OR DECENTRALISED? IS IT CONSIDERED BY OPERATIONAL MANAGERS AS A BUSINESS PARTNER?

- CENTRALIZED: 33
- DECENTRALIZED: 3
- BUSINESS PARTNER: 3
WHICH RECRUITMENT CHANNELS? COMPETITIVE EXAMS VERSUS PRIVATE CONTRACTS

31% COMPETITIVE EXAMS ONLY
9% PRIVATE CONTRACTS
60% BOTH

ANY DIFFICULTIES IN RECRUITING? IF YES, BECAUSE OF SALARY LEVEL/EDUCATIONAL LEVEL/CAREER PERSPECTIVES?

13 YES, SALARIES
14 NO
10 YES, CAREER PERSPECTIVE
6 YES, EDUCATIONAL LEVEL

Number of answers
DO YOU HAVE A DIVERSITY AND INCLUSION POLICY (GENDER, AGE, DISABILITY...)?

- Yes on gender: 28%
- Yes on disability: 16%
- Yes on age: 3%
- No: 53%

FOR WHOM IS INTERNAL JOB ROTATION ENCOURAGED? SENIOR EXECUTIVES / ALL STAFF?

- Senior Executives: 0%
- All Staff: 77%
- Junior Executives: 23%

DO MANAGERS HAVE YEARLY INDIVIDUAL OBJECTIVES?

- All: 56%
- A Few: 6%
- Most: 28%
- None: 10%
WHICH MANAGERS HAVE CONDITIONAL BONUS SCHEMES?

- Senior or Executive Managers: 15%
- All Managers: 22%
- None: 63%

HAVE YOU EXPERIENCED AN HR REFORM IN THE LAST 3 OR 5 YEARS?

- Yes: 56%
- No: 44%

IF YES, A REFORM COVERING WHICH ASPECTS?

- Sizing: 6
- Appraisal: 10
- Career: 11
- Reward: 7
- Talent Management: 14
- Other/None: 12

Number of answers:

- Governance, Administration and Communication
DOES THE PLAN SET QUANTITATIVE OBJECTIVES IN TERMS OF BUDGET?

15% SENIOR OR EXECUTIVE MANAGERS

22% ALL MANAGERS

63% NONE

HAVE YOU EXPERIENCED AN HR REFORM IN THE LAST 3 OR 5 YEARS?

YES 56%

NO 44%

IF YES, A REFORM COVERING WHICH ASPECTS?

- SIZING: 6
- APPRAISAL: 10
- CAREER: 11
- REWARD: 7
- TALENT MANAGEMENT: 14
- OTHER/NONE: 12

Number of answers
HOW CORPORATE STRATEGY IS STRUCTURING CHANGE IN CENTRAL BANKS
DO YOU SEE A LOW, MEDIUM OR HIGH PROBABILITY TO A MATERIAL CHANGE IN YOUR CENTRAL BANK’S CURRENT MANDATE, FOR ITS MAIN FUNCTIONS WITHIN THE NEXT 5 YEARS?

- **Low**: 38%
- **Medium**: 43%
- **High**: 9%

IF YOU HAVE A MULTI-YEAR STRATEGIC PLAN, IS TRANSFORMATION THE MAIN PURPOSE? IS DIGITALIZATION A STRATEGIC AXIS OF YOUR PLAN?

- **Transformation oriented**: 67%
- **Digitalisation as strategic axis**: 49%
- **No**: 33%
DOES THE PLAN SET QUANTITATIVE OBJECTIVES IN TERMS OF BUDGET?

YES 38%

NO 62%

ARE THERE ‘AMBASSADORS’ IN YOUR BANK, IN CHARGE OF COMMUNICATING STRATEGIC TRANSFORMATIONS WITHIN THE BUSINESS LINES?

23% No
38% A few top executives
40% A few managers

ARE STRATEGY REVIEWS MONTHLY/ QUARTERLY/ YEARLY?

22% Monthly
44% Quarterly
33% Annually
WHAT APPROACH IS USED FOR THE PREPARATION AND FORMULATION OF THE STRATEGY? TOP-DOWN / BOTTOM-UP / COLLABORATIVE / FOCUSED TOWARDS STAKEHOLDERS?

41% Top-down

44% Collaborative approach

9% Focused towards stakeholders

IS THE STRATEGIC PERFORMANCE MANAGED AND MONITORED? IF YES, DO YOU USE KEY PERFORMANCE INDICATORS? ARE WARNINGS GIVEN TO THE BOARD?

71% Key Performance Indicators

10% No

24% Warnings
DO YOU HAVE A PROJECT PORTFOLIO MANAGER ROLE/FUNCTION OR STRUCTURE?

- YES: 66%
- NO: 34%

DO YOU HAVE CENTRAL COORDINATION OF PROJECTS & PROGRAMMES (PROJECT MANAGEMENT OFFICE?)

- YES: 64%
- NO: 36%
REDUCING THE CARBON FOOTPRINT OF A CENTRAL BANK

UKRAINE, SWEDEN, NETHERLANDS, PORTUGAL, MALAYSIA, UNITED KINGDOM, SPAIN, SINGAPOUR, LITHUANIA, PHILIPPINES, PAKISTAN, KOREA, AUSTRALIA, NEPAL, SRI-LANKA, IRELAND, FRANCE, GERMANY, ITALY, MOLDOVA, MALTA, DENMARK, COLOMBIA, JAPAN, BELGIUM, TUNISIA, MOROCCO, CONGO-RDC-KINSHASA, GREECE, NAMIBIA
IS YOUR INSTITUTION EXPECTED TO PLAY A CENTRAL ROLE IN RESPONDING TO CLIMATE AND ENVIRONMENTAL ISSUES?

- Yes swiftly: 40%
- Yes in the long run: 48%
- No: 6%
- Do not know: 6%

DOES YOUR INSTITUTION HAVE A GOVERNANCE SCHEME DEDICATED TO THE IMPLEMENTATION MANAGING AND MONITORING OF A CSR POLICY? (MULTIPLE CHOICE >100)

- Yes, a high level reporting line for the CSR-DD Unit: 15%
- CSR Unit within a Department: 20%
- CSR actions explicated in Strategy: 39%
- No CSR policy, no CSR unit: 33%
DOES YOUR STRATEGIC PLAN EMBED A PART ON ENVIRONMENTAL, SOCIAL RESPONSIBILITY AND GOVERNANCE (ESG)?

Yes for the internal: 29%
Yes for the external: 0%
Yes for internal and external: 48%
No: 10%
Do not know: 14%

IF YES, IS IT ORIENTED INTERNALLY, EXTERNALLY OR BOTH?

Yes for the internal: 27%
Yes for the external: 7%
Yes for internal and external: 46%
No, the strategy does not include an ESG component: 7%
Do not know: 12%
DOES YOUR INSTITUTION MONITOR AND COMMUNICATE ON REDUCING ITS CARBON FOOTPRINT INTERNALLY, EXTERNALLY IN THE PUBLIC DOMAIN?

Yes with internal communication: 41%
Yes with external communication: 32%
No: 27%

DOES YOUR INSTITUTION PROMOTE SOFT TRANSPORT FOR ITS STAFF?

- Substituting train to plane: 25%
- Bonus on the purchase of an electric bicycle or bicycle: 8%
- Teleworking to reduce travel: 56%
- No: 50%

IS YOUR INSTITUTION SUBJECT TO REGULATIONS ON ITS BUILDINGS: (MULTIPLE CHOICE >100)

- For energy consumption: 31%
- For carbon footprint: 17%
- For construction and/or renovation material used: 14%
- Others: 14%
- Do not know: 19%
- No: 42%
DOES YOU INSTITUTION IMPLEMENT AND MONITOR A POLICY TO REDUCE CONSUMPTIONS OF...?
(MULTIPLE CHOICE >100)

- Yes, the paper: 64%
- Yes, the energy: 61%
- Yes, the water: 33%
- Neither: 17%
- Do not know: 14%
- Yes, the plastic: 31%

DOES YOU INSTITUTION USE EXTERNAL EVALUATION/CERTIFICATION OF THE RESULTS OF ITS ENVIRONMENTAL POLICY? (MULTIPLE CHOICE >100)

- ISO14001: 19%
- ISO26000: 6%
- External audit of the CSR policy: 17%
- No: 47%
- Do not know: 28%
IN Volvement into carbon offsetting...

• In your financial system

- Yes: 40%
- Not yet but in progress: 31%
- No: 29%

• In your institution

- Yes, financing environmental projects: 6%
- Yes, financing multi-impact project (social impact): 9%
- Not yet but in progress: 37%
- No: 49%

Do you manage and monitor your stakeholders expectations regarding “CSR issues”?

- 22% Yes, contractors and suppliers
- 17% Yes, staff
- 14% Yes, medias
- 14% Yes, professional organizations
- 19% No
- 8% Others
- 42% Do not know

Governance, administration and communication
LATEST TRENDS IN CENTRAL BANK’S INTERNAL AUDIT FUNCTION

ARUBA, SOUTH AFRICA, CZECH REPUBLIC, SPAIN, KOSOVO, INDIA, NAMIBIA, KYRGYZ REPUBLIC, IRELAND, UKRAINE, MALAYSIA, COMORES, TURKEY, NEPAL, PAKISTAN, BULGARIA, CROATIA, MORROCO, BRASIL, COSTA RICA, SRI LANKA, CHILE, MAURITANIA, ROMANIA, ARMENIA, NIGERIA, LUXEMBOURG, MADAGASCAR, MOLDOVA, BELARUS, HAÏTI, SERBIA, JORDAN, SLOVENIA, CHAD, CENTRAFRIQUE, GABON, GUINÉE-EQUATORIALE, CONGO-BRAZZAVILLE, CAMEROON, TUNISIE, MEXIQUE, FRANCE
WHAT IS THE EXPECTED EVOLUTION OF THE STAFF OF...

- **INCREASE**
  - Your bank’s staff: 43%
  - The Audit’s staff: 47%
  - The Control, Risk, Inspection functions: 60%

- **STABLE**
  - Your bank’s staff: 50%
  - The Audit’s staff: 50%
  - The Control, Risk, Inspection functions: 37%

- **DECREASE**
  - Your bank’s staff: 7%
  - The Audit’s staff: 3%
  - The Control, Risk, Inspection functions: 3%

IS THE 3 LINES OF DEFENCE MODEL IMPLEMENTED?

- No/in project: 13%
- Partly/underway: 34%
- Yes/finalized: 53%

DOES THE AUDIT HAVE AN INTERNAL QUALITY ASSURANCE PROGRAM?

- No: 16%
- Yes: 84%
IS ARTIFICIAL INTELLIGENCE USED IN THE AUDIT FUNCTION?

- YES: 12%
- NO: 88%

ARE YOUR AUDIT METHODOLOGIES TO BE COMPLETED OR UPDATED?

- Finalized: 52%
- Partly/underway: 40%
- No/in project: 8%

DOES YOUR IT AUDIT USE A TECHNICAL REPOSITORY?

- YES: 61%
- NO: 39%
MOBILITY FORT AUDITORS COMPARED TO OTHER BANK DEPARTEMENTS?

More turnover 11
Same turnover 49
Less turnover 40

EXTERNAL PROFESSIONAL CERTIFICATIONS ARE

Systematic 16%
Encouraged 78%
None 6%
EXTERNAL AND INTERNAL COMMUNICATION
SUPPORTING CENTRAL BANKS’ TRANSFORMATION

ARMENIA, BELARUS, BRAZIL, BOSTWANA, COLOMBIA, CYPRUS, EGYPT, FRANCE, GEORGIA, JORDAN, HAITI, IRELAND, INDIA, KAZAKHSTAN, LAOS, LATVIA, LEBANON, MAURITANIA, MOLDOVA, MOROCCO, NEPAL, NIGERIA, PAKISTAN, PHILIPPINES, PORTUGAL, SPAIN, SRI-LANKA, TUNISIA
INTERNAL COMMUNICATION: DOES AN INTRANET PAGE/SPACE FEATURE NEWS CONCERNING EVENTS OF ALL BANK’ DEPARTMENTS?


- Self-initiative: 12
- Written by Units: 20
- Rewriting by Communication team: 24

HAVE YOU INTRODUCED A STAFF FEED-BACK FUNCTIONALITY FOR COMMENTS ON INTRANET/INTERNAL PLATFORM?

- YES: 38%
- NO: 62%
EXTERNAL COMMUNICATION: DO YOU PUBLISH PRESS RELEASES ON REPORTS OF YOUR BANK LIKE ANNUAL REPORTS / BALANCE OF PAYMENTS / FINANCIAL STABILITY REVIEWS?

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>SOME</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

DOES YOUR EXTERNAL COMMUNICATION TARGET SPECIFIC AND DIFFERENTIATED AUDIENCES?

- **YES**: 68%
- **NO**: 32%

IS INTERNAL COMMUNICATION ON CORPORATE STRATEGY:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Monthly</td>
<td>11%</td>
</tr>
<tr>
<td>Quartely</td>
<td>27%</td>
</tr>
<tr>
<td>Ad hoc</td>
<td>49%</td>
</tr>
<tr>
<td>None/Other</td>
<td>13%</td>
</tr>
</tbody>
</table>
FOR YOUR INTERNAL AND EXTERNAL PUBLICATIONS, AS WELL AS FOR EVENTS, HAVE YOU DEVELOPPED INCLUSIVE AND LOWER ENVIRONNEMENTAL IMPACT PRATICES?

DURING THE COVID EPISODES, HAVE YOU OPENED A SPECIFIC PAGE ON INTRANET FOR COMMUNICATING ON COVID?

DURING COVID 19 LOCKDOWN, DID YOU SEND MESSAGES TO PERSONAL EMAIL ADDRESSES OR MOBILE PHONE NUMBERS OF YOUR STAFF?
DOES YOUR INSTITUTION COMMUNICATE THROUGH SOCIAL NETWORKS?

<table>
<thead>
<tr>
<th>Social Network</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>Facebook</td>
<td></td>
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<tr>
<td>Youtube</td>
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<tr>
<td>Twitter</td>
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<td></td>
</tr>
<tr>
<td>Linkedin</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

DO YOU ENCOURAGE YOUR STAFF TO DISSEMINATE INFORMATION DIRECTLY ON SOCIAL NETWORKS?

**No:** 80%

**Yes:** 20%
ECONOMIC ANALYSIS AND STATISTICS

2021 BENCHMARKS
MACROECONOMIC FORECASTING IN CENTRAL BANKS
NUMBER OF STAFF INVOLVED IN FORECASTING

- Below 5: 22
- 5-20: 58
- 20-50: 14
- Above 50: 6

TYPE OF MODELS USED

- Semi-structural models: 81%
- Nowcasting or survey based models: 65%
- DSGE models: 50%
- Non traditional data: 17%
INTEREST RATES ASSUMPTIONS

- Market based: 75%
- Other: 25%

SCOPE OF FORECASTING

- GDP, Inflation: 98%
- Output Gap: 67%
- Economic Sectors (Services, Energy, Automobile etc...): 33%
- Financial Projections: 29%
- Debt, Fiscal Sustainability: 27%
- Sector (Households, NFC,...) Accounts: 24%
- International Environment: 16%

SOURCES OF DIFFICULTIES

- Data: 68%
- Staff resources: 61%
- Staff qualifications: 34%
- IT: 30%
- Coordination: 20%
- Independence from policy maker: 7%
IMPROVING EXTERNAL STATISTICS

ANSWERS TO A QUESTIONNAIRE AT THE IBFI SEMINAR ON EXTERNAL STATISTICS

(22-24 NOVEMBER 2021)
MOST IMPORTANT FIELDS OF IMPROVEMENT IN EXTERNAL STATISTICS. (SCORE 1-5)

<table>
<thead>
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<th>Field</th>
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<tbody>
<tr>
<td>FISIM</td>
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<tr>
<td>SERVICES BY MODE OF SUPPLY</td>
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<tr>
<td>INTERNATIONAL INVESTMENT POSITION</td>
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<td>INTRA-GROUP FLOWS</td>
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<tr>
<td>TRADE IN VALUE ADDED</td>
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<tr>
<td>REMITTANCES</td>
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<tr>
<td>SERVICES</td>
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WAYS TO IMPROVE BOP STATISTICS (SCORE 1-5)

<table>
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<tbody>
<tr>
<td>Better or wider data publications</td>
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<tr>
<td>Using non-traditional data</td>
<td></td>
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<tr>
<td>More / better surveys</td>
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<tr>
<td>Enhancing global data sets</td>
<td></td>
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<tr>
<td>Upgrading of IT systems</td>
<td></td>
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<tr>
<td>Training staff</td>
<td></td>
</tr>
<tr>
<td>More resources</td>
<td></td>
</tr>
<tr>
<td>Integration with other statistics</td>
<td></td>
</tr>
<tr>
<td>Contacts with large reporting agents</td>
<td></td>
</tr>
<tr>
<td>Cooperation with national institutions</td>
<td></td>
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<tr>
<td>Cooperation with foreign compilers</td>
<td></td>
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<tr>
<td>Knowledge of methodology</td>
<td></td>
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</table>

2021 BENCHMARKS
BIG DATA IN CENTRAL BANKS

ANSWERS TO A SURVEY AT THE IBFI VIRTUAL SEMINAR ON THE USE OF BIG DATA IN CENTRAL BANKS (9-10 MARCH 2021)

41 ANSWERS FROM 23 COUNTRIES
IS BIG DATA MANAGEMENT CENTRALISED IN ONE DEPARTMENT?

<table>
<thead>
<tr>
<th></th>
<th>NO</th>
<th>YES</th>
<th>MITIGATED</th>
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<tr>
<td></td>
<td>9.0</td>
<td>4.0</td>
<td>3.0</td>
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HOW DOES YOUR CENTRAL BANK VIEW THE CONTRIBUTION OF BIG DATA TO POLICY?

<table>
<thead>
<tr>
<th></th>
<th>AUXILIARY</th>
<th>CORE</th>
<th>MARGINAL</th>
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<td>8.0</td>
<td>6.0</td>
<td>2.0</td>
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</tbody>
</table>
MAIN CHALLENGES REGARDING BIG DATA DEVELOPMENTS (1-5)

0.5 1 1.5 2 2.5 3 3.5 4 4.5

Human resources | Data quality heterogeneity | Technical infrastructure | Governance | Cyber security

3.7 | 3.7 | 3.3 | 2.7 | 2.6

DOMAINS OF APPLICATIONS OF CURRENT BIG DATA PROJECTS

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5

Eco analysis / forecast | Statistics | IT | Macroeconomic | Banking supervision | HR

3.5 | 3.4 | 3.1 | 2.7 | 2.7 | 2.2

ECONOMIC ANALYSIS AND STATISTICS
FROM DATA LAKE TO DATA PLATFORM

34 COUNTRIES

ALBANIA, ARMENIA, PHILIPPINES, ROMANIA, MEXICO, FRANCE, IRELAND, KENYA, CAMBODIA, SRI LANKA, BRASIL, MOLDOVA, SLOVENIA, PORTUGAL, LAOS, MAURITIUS, MADAGASCAR, PAKISTAN, UKRAINE, LUXEMBURG, SOUTH KOREA, ETHIOPIA, SENEGAL, TOGO, BENIN, IVORY COAST, MALI, NIGER, BURKINA FASO, GUINEA-BISSAU, SPAIN, MALAYSIA, MAROC
HAVE YOU DESIGNED A ‘DATA MANAGEMENT GOVERNANCE’ WITHIN YOUR CENTRAL BANK?

**YES** 35%  
**NO** 65%

WHAT ARE THE DOMAINS OF APPLICATION OF YOUR CURRENT BIG DATA PROJECTS?  
(MULTIPLE CHOICE >100%)

- Economic analytics/forecast: 58%  
- Statistics: 71%  
- IT: 42%  
- Macro-prudential: 33%  
- Banking supervision: 44%  
- Human Resources: 13%  
- Other: 16%  
- NA: 9%

WHAT ARE THE MAIN CHALLENGES REGARDING BIG DATA DEVELOPMENTS AT YOUR CENTRAL BANK? (POSSIBLE MULTIPLE CHOICE >100%)

- Human resources: 45%  
- Data quality heterogeneity: 76%  
- IT: 64%  
- Macro-prudential: 50%  
- Banking supervision: 33%  
- Human Resources: 10%
AT WHAT STAGE IS YOUR DATAPLATFORM/DATA LAKE DEPLOYMENT PROJECT AT YOUR CENTRAL BANK?

IF YES

- Operational: 17%
- In experimentation: 14%
- In investigation/study: 55%
- We do not plan to deploy in the near future: 14%

On-premise/private cloud: 71%
Public cloud: 11%
Hybrid: 18%
WHICH ON-PREMISE DATA PLATFORM HAVE YOU DEPLOYED /ARE YOU PLANNING TO DEPLOY:

(MULTIPLE CHOICE >100%)

- Open source /Hadoop: 35%
- Oracle: 48%
- SQL server: 45%
- Other: 3%
- NA: 18%

WHICH TECHNOLOGIES ARE YOU USING/PLANNING TO USE ON YOUR DATA PLATFORM?

- Data warehousing: 92%
- Data virtualisation: 47%
- Data catalogue: 42%
- AI/ML platform: 29%
- Other: 3%
THE COMMITMENT TO GREEN FINANCE IN CENTRAL BANKS: A NEW CHALLENGE

INDIVIDUAL ANSWERS WILL BE KEPT CONFIDENTIAL, ONLY SYNTHETIC RESULTS WILL BE DISPLAYED

ARGENTINA, AZERBAIJAN, BELARUS, BRASIL, CAMBODIA, COLOMBIA, COSTA-RICA, FRANCE, GREECE, HAITI, HUNGARY, ICELAND, INDIA, ISRAEL, JORDAN, LAOS, LATVIA, MALAYSIA, MALTA, MEXICO, MOLDOVA, MONGOLIA, MOROCCO, NEW-ZEALAND, PAKISTAN, PORTUGAL, ROMANIA, RUSSIA, SAUDI ARABIA, SERBIA, SLOVAKIA, SLOVENIA, UKRAINE
DO ANNUAL REPORTS OF LARGE COMPANIES HAVE TO INCLUDE DISCLOSURE ON ENVIRONMENTAL AND SOCIAL RESPONSIBILITY?

- No: 26%
- Not yet but in progress: 25%
- On a voluntary basis: 26%
- Yes, mandatory: 23%

DO BANKS AND INSURANCE IN YOUR COUNTRY SHOW CLIMATE COMMITMENT IN THEIR LENDING, INVESTMENT POLICIES?

- No: 26%
- Some of them: 60%
- Most all of them: 18%

ARE THERE LEGAL OBLIGATIONS IN THE BANKING AND FINANCIAL SECTOR TO USE SAVINGS TO FINANCE THE ECOLOGICAL TRANSITION?

- Yes: 6%
- Not yet but in progress: 31%
- No: 63%
DOES YOUR CENTRAL BANK CONDUCT RESEARCH WORK LINKED TO CLIMATE CHANGE OR ENERGY TRANSITION?

- No: 16%
- Not yet but in progress: 60%
- Yes with publications already: 24%

DOES YOUR CENTRAL BANK CONDUCT MODELLING WORK LINKED TO CLIMATE CHANGE AND/OR ENERGY TRANSITION?

- No: 35%
- Not yet but in progress: 43%
- Yes with publications already: 22%

FOR GREEN FINANCE, IS THERE A STRUCTURED COOPERATION FRAMEWORK BETWEEN FINANCE MINISTRY, SUPERVISORY AND MARKET AUTHORITIES AND YOUR CENTRAL BANK?

- Permanent committee/structure: 7%
- Dedicated secretariat ensuring regular reporting: 4%
- Occasional committee or structure: 30%
- No/Not yet: 59%
IS YOUR INSTITUTION INVOLVED IN CARBON OFFSETTING? (FINANCING ACTIONS REDUCING EMISSIONS OF CARBON DIOXIDE OR OTHER GREENHOUSE GASES)

- No: 65%
- Not yet but in progress: 25%
- Yes financing environmental projects: 11%

ARE FINANCIAL INSTITUTIONS IN YOUR COUNTRY INVOLVED IN CARBON OFFSETTING?

- Yes: 13%
- Not yet but in progress: 38%
- No: 50%

DO YOU HAVE STATISTICAL MEASURES OF FINANCIAL ACTORS’ CONTRIBUTION TO FINANCING THE ECOLOGICAL TRANSITION?

- Yes: 8%
- Not yet but in progress: 38%
- No: 55%
DOES YOUR INSTITUTION MONITOR ITS CARBON FOOTPRINT REDUCTION? IF SO, DOES IT COMMUNICATE ON IT INTERNALLY, EXTERNALLY (MULTIPLE CHOICE POSSIBLE)

- No: 26
- Yes with internal communication: 13
- Yes with external communication: 6

Number of answers

IS SUSTAINABILITY INTEGRATED BY YOUR CENTRAL BANK IN ITS FINANCIAL INVESTMENT STRATEGY? (MONETARY POLICY PORTFOLIOS OR OTHERS)

- No: 33%
- Yes: 34%
- Do not know: 33%
ENHANCING MONETARY AND FINANCIAL STATISTICS

ANSWERS TO THE QUESTIONNAIRE AT THE IBFI ONLINE SEMINAR ON MONETARY AND FINANCIAL STATISTICS (18-21 MAY 2021)
WAYS/DOMAINS OF IMPROVEMENT OF MONETARY AND FINANCIAL STATISTICS

2021 Benchmarks

1. Census
2. Loans data and survey
3. IT system and data processing
4. Global data sets
5. Relation with banks
6. Using big data

WAYS/DOMAINS OF IMPROVEMENT OF MONETARY AND FINANCIAL STATISTICS

1. Reconciliation between financial/non-financial account
2. Interest rates statistics
3. Methodology
4. Relation with national statistical institute
5. Cross-border transactions
6. International cooperation
WAYS/DOMAINS OF IMPROVEMENT OF MFS STATISTICS

HOW IMPROVING THE USE OF MONETARY AND FINANCIAL STATISTICS
CENTRAL BANK DIGITAL CURRENCY

IS YOUR INSTITUTION PRIMARILY INTERESTED IN:

- Wholesale CBDC: 20
- Retail CBDC: 21
- Both at equal importance: 113

MARKETS AND OPERATIONS
IS YOUR INSTITUTION INVOLVED IN:

105 Research on CBDC
30 Experimental work
19 Pilot work for eventual go live
39 None of these at this stage

WHAT ARE THE MAIN OPPORTUNITIES FOR CENTRAL BANKS TO ISSUE A RETAIL CBDC?

1st
Offer citizens a public alternative for the declining use of cash

2nd
Make the payment ecosystem more resilient

3rd
Give central banks new tools for monetary policy implementation

4th
Decrease cost of domestic payments
WHAT ARE THE MAIN RISKS ASSOCIATED WITH RETAIL CBDC?

1st
62
Negatively affect the funding of banks and increase the risk of digital runs

2nd
36
Create a reputational risk for the central bank if CBDC is misused for money laundering

3rd
31
Crowd out private innovation

WHERE COULD A WHOLESALE CBDC MAKE MOST GAINS IN TERMS OF EFFICIENCY OR RISK-REDUCTION?

Cross-boarder payments 73 1st
Securities settlement 41 2nd
Domestic payments 22 3rd
HAS YOUR INSTITUTION IMPLEMENTED THE 3-LINES-OF-DEFENCE MODEL?

49
YES

9
PLANNED

6
NO
HOW DO THE AUDIT FUNCTION AND THE SECOND LINE OF DEFENCE INTERACT, ESPECIALLY DURING AN AUDIT?

- **NO INTERACTION**: 11
- **THE SECOND LINE OF DEFENCE PROVIDES THE AUDIT FUNCTION WITH BASIC INTERNAL CONTROL INFORMATION (RISK MAPPING, PERCENTAGES OF CONTROL RESULTS, ETC.)**: 30
- **THE SECOND LINE OF DEFENCE PROVIDES THE AUDITORS WITH THEIR VIEWS ON THE FUNCTIONING OF OPERATIONS, FROM A RISK PERSPECTIVE**: 17

HOW HAS THE ORGANIZATION OF YOUR INSTITUTION BEEN ADAPTED IN TIMES OF COVID CRISIS?

- **Implementation of massive remote working**: 39
- **Rotating shifts on main site**: 39
- **Dedicated reporting towards the top management on activities**: 25
- **Intensification of existing controls**: 20
- **Activation of recovery sites**: 14
- **Creation of additional and dedicated controls in the framework of reference**: 13
- **Dedicated reporting towards the top management on internal control**: 10
- **No particular adaptation**: 2
IN 2020, HOW FREQUENT WAS THE REPORTING TO THE MANAGEMENT ON ACTIVITIES? (IF IMPLEMENTED)

- Daily: 5
- Weekly: 26
- Monthly: 19

IN 2020, HOW FREQUENT WAS THE REPORTING TO THE MANAGEMENT ON INTERNAL CONTROL? (IF IMPLEMENTED)

- 32% Monthly
- 12% Weekly
- 3% Daily

IN 2020, DID YOUR ACTIVITIES

- Slow down: 15
- Remain stable: 23
- Grow: 14
IN 2020, DID THE NUMBER OF INCIDENTS

- Decrease: 7
- Remain Stable: 41
- Increase: 4

BESIDES THE AUDIT FUNCTION, WHAT ARE THE RESOURCES DEDICATED TO INTERNAL CONTROL? (GIVE A PERCENTAGE OF TOTAL HR)

- <0.5% of the total HR: 14
- >0.5% and <1% of the total HR: 14
- >1% and <1.5% of the total HR: 10
- >1.5% and <2% of the total HR: 6
- >2% of the total HR: 14

WHAT IS THE PERCENTAGE OF STAFF THAT WORKED REMOTELY DURING THE LOCKDOWN?

- Less than 33%: 7
- Between 33% and 66%: 27
- More than 66%: 22
IS REMOTE WORKING STILL LARGELY IMPLEMENTED?

YES 33

NO 22

HOW MANY DAYS-A-WEEK IS THE RETURN ON SITE MANDATORY?

Number of days of on-site presence

0 22
1 7
2 7
3 4
4 2
5 8

Weighted average 1.62

On-site presence

WOULD EXTENDED REMOTE WORKING BE CONSIDERED AS:

35

Only a contingency procedure in case of crisis

22

A possibility for standard activity
FINANCIAL RISK MANAGEMENT IN A CENTRAL BANK

DO YOU AGGREGATE ALL FINANCIAL RISKS (MARKET, CREDIT AND OPERATIONAL RISKS) IDENTIFIED IN YOUR ORGANIZATION?

38% NO
62% YES
WHICH SOFTWARE DO YOU USE TO QUANTIFY AND FOLLOW RISK MEASURES?

- In house software: 19
- Bloomberg: 15
- MATLAB: 3
- Wallstreet for market risks: 2
- Other: 22

DO YOU HAVE AN INTERNAL CREDIT RISK ASSESSMENT TOOL OR DO YOU USE AN EXTERNAL RATING?

- External rating agency: 21
- In house tool: 17
WHAT ARE YOUR KEY INDICATORS TO ASSESS THE CREDIT QUALITY OF ISSUERS?

- **Rating** (Credit rating Agencies / Political indicators): 33
- **Market information** (CDS/Equity/Options/FX): 17
- **Balance sheet derived** (ROE Tier 1): 12
- **Other**: 10

DO YOU HAVE A MARGIN OF APPRECIATION IN THE ANALYSIS OR IS THE EVALUATION SYSTEM AUTOMATIC?

- **Margin appreciation**: 25
- **Automatised evolution**: 9
**DO YOU HAVE AN INTERNAL MARKET RISK ASSESSMENT TOOL?**

- **13 YES**
- **23 NO**

**HAVE YOU SET LIMITS TO MITIGATE MARKET RISKS? IF SO, OF WHAT NATURE?**

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<th>Limit Type</th>
<th>Number</th>
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<tbody>
<tr>
<td>No limit</td>
<td>6</td>
</tr>
<tr>
<td>Rate sensitivity (Duration)</td>
<td>13</td>
</tr>
<tr>
<td>Model based approach (VaR, ES99%)</td>
<td>5</td>
</tr>
<tr>
<td>Benchmark based approach (Tracking error)</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
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</tbody>
</table>

**WHAT ARE THE CONSEQUENCES IN CASE OF LIMIT BREACH?**

- **None**: 4
- **Risk mitigation measures**: 13
- **Internal reporting**: 20
IS YOUR RISK MANAGEMENT FUNCTION INDEPENDENT FROM THE INVESTMENT DIVISION?

30 YES

7 NO

IF YOUR RISK MANAGEMENT FUNCTION IS INDEPENDENT FROM THE INVESTMENT DIVISION, WHO DOES THE RISK MANAGEMENT DIVISION REPORT TO?

- 60% Risk Committee
- 17% Governor
- 3% Board
- 20% Other

Other
FINANCIAL MARKET INFRASTRUCTURES, PAYMENT SYSTEMS AND INSTRUMENTS

ARE THE PFMIs IMPLEMENTED IN A LAW AT NATIONAL LEVEL?

30 YES
12 NO
8 Partially
IS THERE ANY EQUIVALENT OF THE SYSTEMICALLY IMPORTANT PAYMENTS SYSTEMS (SIPS) ECB REGULATION IN YOUR COUNTRY?

39 YES
10 NO

DO YOU HAVE ANY CCP IN YOUR COUNTRY?

31 YES
15 NO

DOES YOUR AUTHORITY UNDERTAKE CCP ON-SITE INSPECTIONS OR REVIEWS?

24 YES
21 NO
IS THERE AN EQUIVALENT TO CSDR (REGULATION ON SETTLEMENT AND CENTRAL SECURITIES DEPOSITORIES) IN YOUR JURISDICTION?

39 YES

6 NO

IS THERE AN EQUIVALENT OF THE EUROPEAN PAYMENT SERVICE DIRECTIVE (PSD) IN YOUR JURISDICTION?

23 YES

20 NO

ARE PAYMENT/E-MONEY SERVICE PROVIDERS SUBJECT TO SPECIFIC RULES (NON-BANK LICENSE)?

37 YES

6 NO
WHAT IS THE CONSUMER PROTECTION REGIME REGARDING THE USE OF PAYMENT SERVICES/MEANS?

- Law: 34
- Commercial contract: 4
- None: 4

IS THERE A STATISTICAL FRAMEWORK IN PLACE TO SUPPORT THE OVERSIGHT?

- Yes: 36
- No: 6

IS THERE A NATIONAL BANKING COMMITTEE DEALING WITH PAYMENTS?

- Yes: 24
- No: 19
HOW LONG HAVE YOU BEEN USING INSTANT PAYMENTS?

- Not using: 12
- Between 0 and 10 years: 28
- More than 10 years: 2

WHAT ARE THE MAIN INNOVATIONS IN TERMS OF PAYMENT SOLUTIONS IN YOUR COUNTRY?

- Mobile payments: 40
- E-wallets: 27
- Innovative authentication method (i.e. biometrics): 18
- Instant payments: 27
- Other: 6
FINANCIAL STABILITY

AND

PRUDENTIAL SUPERVISION
YOUR COUNTRY HAS ADOPTED A RESOLUTION FRAMEWORK FOLLOWING THE FSB’S KEY ATTRIBUTES OF EFFECTIVE RESOLUTION REGIMES FOR FINANCIAL INSTITUTIONS

IN YOUR COUNTRY BANKS HAVE TO PREPARE AND SET UP RECOVERY PLANS

A DISTRESSED BANK HAS ALREADY APPLY ITS RECOVERY PLAN IN YOUR COUNTRY
THE IMPLEMENTATION OF THE RECOVERY PLAN SAVED THE DISTRESSED BANK (NO IMPLEMENTATION OF FURTHER RESOLUTION MEASURES NEEDED)

<table>
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<th>Yes</th>
<th>No</th>
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<tr>
<td>19%</td>
<td>81%</td>
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WERE EARLY INTERVENTION MEASURES ALREADY APPLIED IN YOUR COUNTRY AFTER THE FAILURE OF A RECOVERY PHASE?

- Yes: 46%
- No: 54%

THE IMPLEMENTATION OF THESE EARLY INTERVENTION MEASURES SAVED THE DISTRESSED BANK (NO IMPLEMENTATION OF RESOLUTION MEASURES NEEDED)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>32%</td>
<td>68%</td>
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DID YOU COUNTRY ALREADY IMPLEMENTED ONE OF THE FOLLOWING RESOLUTION MEASURES?

- Bail-out (nationalisation or supporting the bank with public money): 29%
- Bridge bank (important activities that should be preserved are put in a bridge bank which is owned by the State who will try to sell it at short term): 14%
- Compulsory sale of assets: 21.5%
- Asset separation tool (bad bank) / defaulted assets are put in a bad bank which is owned by the State: 21.5%
- Bail-in (bank’s creditors have to support the cost of the bank’s losses): 14%

DID THE IMPLEMENTATION OF YOUR RESOLUTION FRAMEWORK RESULTED INTO A LITIGATION BEFORE COURTS?

- Yes: 29%
- No: 71%
DO YOU THINK THAT YOUR NATIONAL FRAMEWORK TO LIQUIDATE FIRMS FACING DIFFICULTIES IS APPROPRIATE FOR BANKS?

- Yes 39%
- No 61%

DID YOU COUNTRY ADOPTED A FRAMEWORK FOR ADDITIONAL OWN FUNDS IN ORDER FOR BANKS TO SUPPORT A BAIL-IN? EXAMPLE: TLAC OR MREL

- Yes 47%
- No 53%

DO YOU EXPECT BANKS TO FACE MORE DIFFICULTIES IN 2021?

- Yes 67%
- No 33%
ENSURING FINANCIAL STABILITY AND DESIGNING MACROPRUDENTIAL POLICIES

THIS BENCHMARK IS BASED ON A SURVEY OF 33 INSTITUTIONS AND CENTRAL BANKS THAT PARTICIPATED IN THE SEMINAR ON FINANCIAL STABILITY AND MACROPRUDENTIAL POLICIES OF CENTRAL BANKS
### WHAT ARE THE MAIN RISK FACTORS IN YOUR JURISDICTION?

<table>
<thead>
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<th>Risk Factor</th>
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<tbody>
<tr>
<td>Economic recession</td>
<td>3,4</td>
</tr>
<tr>
<td>Increase in NPA</td>
<td>2,9</td>
</tr>
<tr>
<td>High level of corporate &amp; SMEs debt</td>
<td>3,1</td>
</tr>
<tr>
<td>High level of public debt</td>
<td>3,6</td>
</tr>
<tr>
<td>Inflation</td>
<td>3,6</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>2,6</td>
</tr>
<tr>
<td>Financial markets risk</td>
<td>2,6</td>
</tr>
</tbody>
</table>

### HOW DO YOU MONITOR MACRO-FINANCIAL CONDITIONS?

- **92%**: Stress tests
- **86%**: Set of indicators
- **58%**: Models
- **42%**: Synthetic indicators (constructed by aggregating granular indicators mapped to the risk factors)
- **39%**: Experts group surveys from financial and real sectors
WHICH INSTRUMENTS HAVE BEEN ACTIVATED IN YOUR COUNTRY SO FAR?

- Loan to value ratio: 71%
- Counter cyclical buffer: 68%
- Leverage ratio: 65%
- Large exposures restrictions: 61%
- Systemic risk buffer: 58%
- Debt to income ratio: 45%
- Sectorial risk weights: 42%
- Capital flow measures: 39%
- DSTI: 26%
- Liquidity charges: 45%

WHAT ARE THE MAIN CHALLENGES GOING FORWARD REGARDING YOUR MACROPRUDENTIAL POLICIES?

- Closing data gaps: 70%
- Activating and calibrating instruments: 61%
- Developing an analytical framework for selecting risk factors: 55%
- Ensuring policies consistencies: 55%
- Implementing macroprudential policies in good times: 40%
- Implementing international coordination: 27%
BENCHMARK CONSUMERS PROTECTION, FINANCIAL EDUCATION AND INCLUSION
HAS YOUR COUNTRY ADOPTED A FINANCIAL EDUCATION STRATEGY AS ADVOCATED BY THE OECD?

40% YES

60% NO

WHAT ARE THE MAIN LIMITATIONS OR DIFFICULTIES ENCOUNTERED IN THE FIELD OF FINANCIAL EDUCATION?

“Low-income households could prefer informal sector for financial need while their access to financial service could be difficult”

“Limited financial knowledge of people who are eager to get financial services without learning about them”

“The national financial education program faces budget issues for its implementation”

“Not sufficiently reliable and educational information, there is a need to provide more financial education on any kind of media”

“Poverty and discrepancies between regions in terms of education, wealth-fare and unemployment”
WHAT HAS BEEN THE IMPACT OF THE COVID 19 PANDEMIC ON FINANCIAL EDUCATION IN YOUR COUNTRY?

“The pandemic slowed down awareness-raising actions”

“What Covid-19 has further delayed the implementation of the National Financial Literacy Program”

“Various methods of updating customers on the banking business under new normalcy are being carried out however it depends on the existence of sufficient communication infrastructure in the country”

“What the quality of infrastructure is satisfying, people was directed toward the digital channels when it comes to the financial services”

WHAT ARE THE TWO MAIN OBSTACLES TO ACCESS TO BASIC BANKING SERVICES IN YOUR COUNTRY?

| Difficulties related to the identification of individuals/customers | 6% |
| The small number of bank branches | 0% |
| Financial illiteracy | 53% |
| Poverty and low income | 35% |
| The absence of any obligation for banks to open a bank account to a natural person | 6% |
WHAT ARE THE OPPORTUNITIES OF DIGITAL FINANCE FOR LOW-INCOME CLIENTS?

“Allow them to carry out small-amount transactions locally”

“For some large countries digital finance is a quick and not expensive solution providing easy access to financial services, easy and secure way for transacting, ensuring that the funds are routed through the banking system, increasing the client base of the banks and allowing them to promote new products”

“Financial service at a lower cost”

“Better management of expenditure and income”

“Reduction in the rate of theft and loss risks during cash transactions”

WHAT ARE THE BARRIERS FOR DEVELOPING DIGITAL FINANCE?

“Operational risks including fraud, agent errors as well as inadequate data handling practices”

“May include relatively high data cost and cyber risk”

“Risk of poor credit practices by banks or more frequent registration of customers on payment incident databases which may lead to increased financial exclusion”

“People might not be able to manage properly these financial services”

“The absence of regulations governing the sector”

Operational risks including fraud, agent errors as well as inadequate data handling practices
WHAT HAS BEEN THE IMPACT OF THE COVID 19 PANDEMIC ON FINANCIAL INCLUSION IN YOUR COUNTRY?

- "Staff reduction at financial institutions"
- "Increase of the use of mobile banking and online purchase"
- "The short time frame for developing new programs, systems and products"
- "Decrease of the client’s income (job loss, growing fear of investing)"

HAS THE CENTRAL BANK A LEGAL MISSION OF FINANCIAL SERVICES CONSUMERS’ PROTECTION?

75% YES

25% NO
MAY YOUR AUTHORITY RECEIVE COMPLAINS AND CLAIMS FROM THE CONSUMERS AGAINST THE CREDIT INSTITUTIONS?

<table>
<thead>
<tr>
<th>YES</th>
<th>89%</th>
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<tbody>
<tr>
<td>NO</td>
<td>11%</td>
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PERIODICAL ALERTS AND WARNINGS AGAINST SOME DUBIOUS FINANCIAL PRODUCTS OR INSTITUTIONS ARE THEY BROADCASTED AMONG THE GENERAL PUBLIC?

67% YES

33% NO

WHAT HAS BEEN THE IMPACT OF THE COVID 19 PANDEMIC ON FINANCIAL SERVICES CONSUMER PROTECTION IN YOUR COUNTRY?

“The quality of the information on credit conditions has deteriorated”

“A greater number of complaints”

Some Central bank’s initiatives have not been well implemented in the banks and accordingly we have received many complaints

2021 BENCHMARKS
FIGHTING AGAINST MONEY LAUNDERING AND TERRORIST FINANCING, 2021
WHO IS RESPONSIBLE FOR THE IMPLEMENTATION OF AML/CFT IN YOUR INSTITUTION?

- Governor: 29%
- Vice-Governor: 21%
- General Director: 18%
- Director: 32%

HAS YOUR CENTRAL BANK IMPLEMENTED AN AML/CFT RISK-BASED APPROACH FOR ITS OWN OPERATIONS?

YES 86%

DOES YOUR AUTHORITY GIVE AN INDIVIDUAL AML/CFT RISK RATING FOR EACH COMMERCIAL BANK SUPERVISED IN YOUR COUNTRY?

YES 80%
Has your authority put in place a mapping of money laundering and terrorist financing risks in the banking sector?

**Yes 82%**

Which institutions are subject to AML/CFT obligations in your country?

- Commercial banks: 100%
- Insurance companies: 73%
- Public banks: 81%
- Microcredit institutions: 86%
- Payment institutions: 32%
- Crypto currency platforms: 41%
- Investment firms: 80%

What are the elements taken into account in your risk-based AML/CFT approach?

- Clients’ characteristics: 100%
- Countries or territories of origin or destination of funds: 97%
- Terms and conditions of transactions: 67%
- Nature of products and services offered: 90%
- Distribution channels: 87%
DOES YOUR AUTHORITY CONSIDER THAT COMMERCIAL BANKS IN YOUR COUNTRY SATISFACTORILY APPLY THE FOLLOWING AML/CFT ELEMENTS?

- Identification of the customer in business relations: 97%
- Vigilance with regard to correspondent bank: 85%
- Identification of the beneficial owner: 87%
- Vigilance with regard to politically exposed persons: 92%
- Remote client identification: 59%

ARE TOOLS FOR THE AUTOMATED DETECTION OF ATYPICAL OPERATIONS IMPLEMENTED?

YES 82%

DOES YOUR AUTHORITY USE ARTIFICIAL INTELLIGENCE TO DETECT FRAUDULENT BEHAVIOR?

YES 15%  NO 85%
The IBFI’s annual program offers free training seminars (on-line or face-to-face) and webinars.

For learners, the IBFI’s offer has also been expanded with a new e-learning tool that allows you to follow a training path through the numerous activities carried out within a central bank and a banking and insurance authority. The content is retrieved from our seminars and webinars, it is updated yearly and this tool provides training certificates to learners.

For experts, the IBFI provides an access to its video library. It is a unique content on central banking.

All our actions are exclusively for the managerial staff and experts of central banks and financial supervisory bodies.

Practical information for online seminars and webinars

- The registration to an online seminar or a webinar must be made via the Live Events calendar page on our website: Live Events | Banque de France (banque-france.fr).

- Central banks and other institutions intending to enrol a participant to an online seminar or a webinar must apply within 1 to 3 days before the date of the event. A notice of receipt is sent to candidates upon registration. Then all selected participants receive a message with a link to the video conferencing platform used. This message includes a username and password for each participant. The duration of the online seminars is usually from 3 to 5 days. The duration of a webinar is typically half a day. The online seminars and webinars are free of cost.

Practical information for the E-Learning tool (for learners)

- Our e-learning tool is accessible via the IBFI webpage on the “Banque de France” website: E-learning | Banque de France (banque-france.fr).

- Employees of central banks, supervisory authorities and foreign administrations are able to access training courses combining videos, quizzes and other e-learning modules. Completion certificates with detailed scores are granted to successful learners. This adaptable training tool allows employees to set their own pace. More, online courses will be added in various fields that are covered by the IBFI (financial stability, economics, statistics, financial market operations, IT security, human resources, etc.). This e-learning tool is free of cost for participants.
Practical information for the Video Library (for experts)

- Our video library is accessible via the following webpage: IBFI Video Library
- It gives an access to most of the contents produced during our seminars and seminars. It covers most of central banking activities. It is free of costs for participants.

Practical information for face-to-face seminars

Like other training centers run by central banks or international organizations, the IBFI was forced to suspend its live events during the pandemic. We hope to resume face-to-face seminars in Paris from June 2022.

Enrolment

- Central banks and other institutions intending to enrol a participant must apply before the deadline, 2 months before the date of the seminar, via the Live events calendar page on our website. Please specify the HR correspondent or superior validating the application. You are advised not to use special character, accents and copy-paste from word.
- A notice of receipt is sent to candidates upon registration. The answer is sent after the closing of the application period. Given the large number of applications received, applications are accepted depending on availability.
- Participants in the seminars must have a good command of one of the working languages mentioned in the training programme: French or English. Poor understanding of presentations and discussions goes against the smooth running of the seminar and compromises its efficiency.
- Two months prior to the seminar, the confirmed participants shall receive an official invitation letter by email, in particular for visa purposes. They are then requested to fill some practical information (social event, diet restrictions, traveling schedules and hotel for eligible countries) through the link provided.

Organisation

- The duration of the seminars is usually from 3 to 5 days. In the case of 5-day seminars, a half-day off is generally scheduled for participants. The seminars are held at our Paris headquarters.
- Our on-line platform enables participants to access the slides, various documents, practical information and is a forum for discussion or exchange of documents. Each participant will receive a password and ID to access the platform.
- We insist on the act that trainees have to attend every session of the seminar and sign the attendance sheet circulated every day.
**Cost coverage**

- Banque de France covers the following costs:
  - Training courses, lunches and coffee breaks, social events, all or part of the hotel costs for eligible countries.
- Trainees cover in particular the following costs: dinners, hotel (except for eligible countries, see the section “Accommodation” below), transport e.g. plane, taxi, metro.

**Accommodation**

Participants care for their own hotel reservation and payment. The IBFI provides a list of hotels nearby at negotiated rates. However, a partner hotel is proposed for participants eligible to the coverage of accommodation costs under the following conditions.

1. Participants from central banks of middle-income and industrialised countries. Banque de France does not cover accommodations costs.
2. Participants from central banks of countries of the HIPC (highly indebted poor countries) IMF/WB initiative. The Banque de France covers the accommodation costs from the night before to the night after the seminar (for example 6 nights for a 5-day seminar).
3. Participants belonging to the other Least Developed Countries (LDC). Banque de France covers half of the hotel nights (1).

The eligibility of the participants is automatically determined by the application platform. The accommodation cost average for eligible trainee implies (s)he stays at the partner hotel. The cost coverage applies for a single room with breakfast. It does not include: additional cost for twin-room, longer stay (additional nights before or after the seminar), mini-bar, telephone and other services.

(1) As the case might be, a figure rounded up to the nearest decimal number. For instance for a 4-day seminar implying 5 nights, the BDF shall cover 3 nights.

**Cancellations**

- **In case of withdrawal, it is absolutely necessary to inform us at least 10 days prior to the seminar.**
- **Given the large number of applications, a late cancellation deprived another applicant from joining the seminar and incurs cancellations fees.**

For those participants eligible to partial or total coverage, hotel cancellation fees in case of no-show be chargeable to the central bank of the participant involved. A restrictive position may-be adopted vis-à-vis any future applications from the latter.
THE IBFI TEAM

Louis Bê Duc

is senior economist in charge of external cooperation (sector “macroeconomics and statistics”) at the International Banking and Finance Institute of the Banque de France. He has also been senior economist at the European Central Bank, the European Commission and the Ministry of Finance, as well as Bank Supervisor at the Prudential Control and Resolution Authority and administrator of the Banque de France’s Foundation for Research.

Thierry Cusson

has held several positions in Financial Statistics, International Economics, European Relations and was seconded abroad to the Federal Reserve Bank (New York), to the European Parliament (Brussels) and to the Reserve Bank of India (Mumbai) before joining the IBFI. Since 2014 he has been in charge of seminars and technical assistance in the field of the support functions such as Internal Audit and Control, Accounting and Budget, Human resources, Governance, Change Management.

Hedi Jeddi

organizes all the work of the IBFI in the fields of banking supervision, financial stability and consumer’s protection and education. Hedi has worked for 10 years in banking supervision for the Autorité de Contrôle Prudentiel et de Résolution. He also worked in banking supervision and was a legal expert for the Reserve Bank of India in Mumbai.

Jean Luc Quémard

Since 2015, Jean-Luc Quémard is the Head of the International Banking and Financial Institute (IBFI). Jean-Luc was a member of Basle Committee and European Banking Authorities working groups. He joined the Banque de France in 1994. He published three books on credit risk and securitization frameworks. He is a lecturer at the Paris University and the South University (Toulon- France).

Yasmina Safy

is in charge of the Markets and Operations Unit. After graduating in electrical engineering, she worked during 22 years in the private sector mainly in the means of payments domain first in a large French bank, then as a project manager and a country representative at EBA CLEARING. She joined the Interbank Settlement Division of the Banque de France to conduct the French market migration to T2S (TARGET2 Securities).
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