

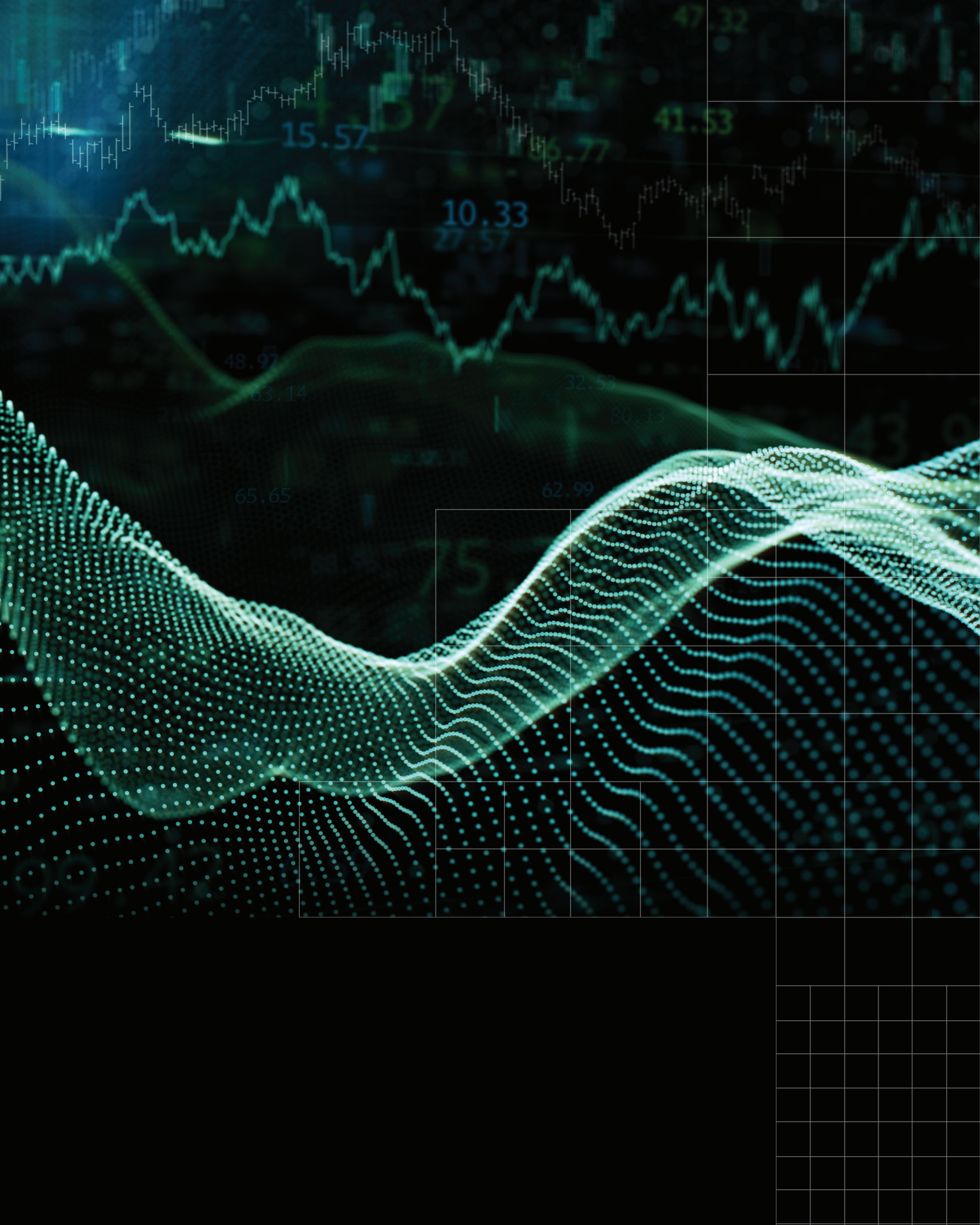
A complete & dynamic central bank solution.

Government

Central Banks

Bloomberg

Bloomberg Professional Services



15.57

10.33

41.53

48.97

63.14

32.57

30.15

65.65

62.99

57.57

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57.57

39.57

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Powerful and secure for every workflow step.

Central banks are playing an increasingly vital role in global economies, having implemented unprecedented monetary policy and been tasked with sustaining financial stability. As the role of central banks has evolved, so, too, has Bloomberg. Long the go-to technology provider for reserve management, Bloomberg now offers a sophisticated, end-to-end workflow that covers most central bank activities on a single, integrated platform.

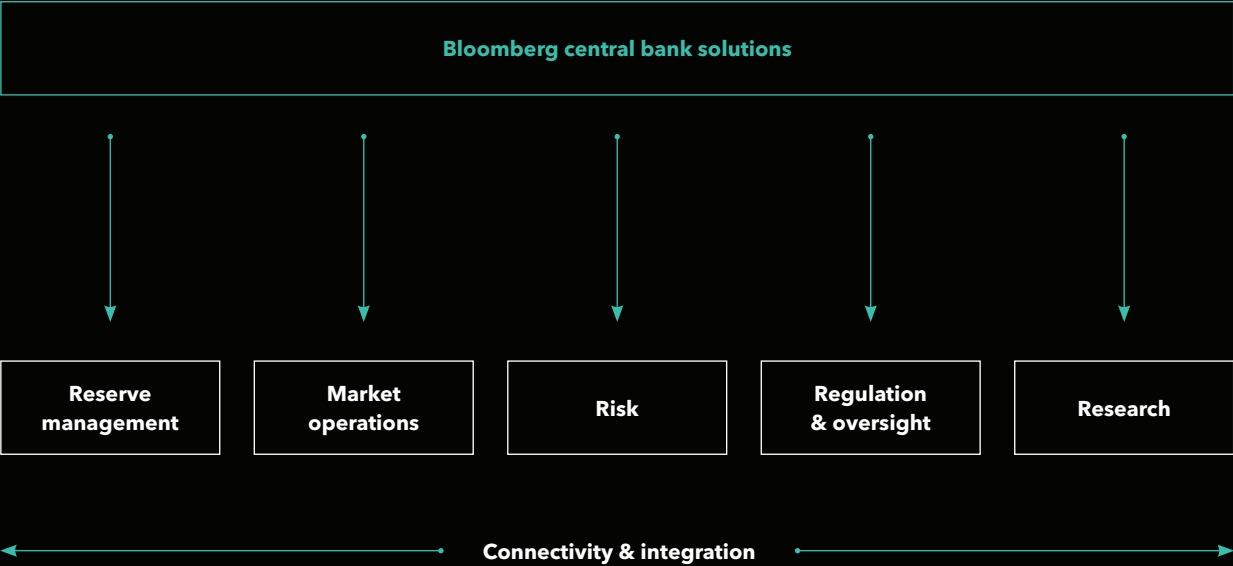
The majority of central banks around the world are using Bloomberg enterprise solutions as a part of their workflow.

Bloomberg's comprehensive and secure solutions enable central banks to act quickly and decisively to conduct open market operations, control risk, oversee markets and manage foreign reserves. Our tools adapt to your needs and the markets – so you always remain on the cutting edge.

A robust workflow, on a single platform.

Powerful solutions for every step

Bloomberg's comprehensive and secure solutions enable central banks to act quickly and decisively to conduct open market operations, control risk, oversee markets and manage foreign reserves. Our tools adapt to your needs and the markets – so you always remain on the cutting edge.



Liquidity to yield, tools to manage foreign reserves.

Central banks have built up substantial foreign reserves, making investment management more complex – especially for those banks that have moved into higher-yielding assets. This has necessitated the use of adaptive, global, multi-asset solutions for portfolio management, trading, compliance and operations. Bloomberg delivers just such a solution, combined with a complete suite of benchmarking, risk management and return attribution tools, including the ability to measure the liquidity of your individual positions.

Scalable technology

For central banks, Bloomberg's Asset and Investment Manager (AIM) delivers global, multi-asset solutions for portfolio management, trading, compliance and operations. AIM is designed to offer the most scalable asset management technology in the market – one that allows clients to grow assets on existing investments and to quickly expand into new asset classes, markets or investment styles without disruption. Bloomberg can also restrict trading to the instruments that match your investment guidelines.

Portfolio & risk management

With data feeding natively and direct connectivity to trading facilities, AIM is designed to offer the most scalable asset management technology in the market – one that allows clients to grow assets on existing investments and to quickly expand into new asset classes, markets or investment styles without disruption.

97% of central banks say safety and capital preservation is a highly relevant investment principle. As a reserve manager, your positions must remain liquid and high quality; you must plan for every possibility and execute accordingly. In every case, Bloomberg has you covered. Bloomberg's Portfolio & Risk Analytics (PORT) solution for reserve managers empowers you with the tools required to successfully implement your portfolio investment and risk management strategies.

Our platform will help you make quicker, more-informed decisions and enable you to measure market-related and security-specific risk exposures for your portfolios. We also offer separate solutions for externally and internally managed reserves, including customized benchmark solutions through Bloomberg indices, the biggest family of fixed income indices.

Liquidity assessment

To ensure your position's liquidity, Bloomberg also offers a liquidity assessment tool (LQA) that makes quantitative estimates through traditional market-impact models and machine-learning techniques to account for all the relevant factors influencing a security's liquidity.

Global connectivity

The Bloomberg Market Data Feed (B-PIPE) enables global connectivity to consolidated, normalized market data in real time and end-of-day reference prices for all exchange-traded securities and some exchange indices.

Electronic Trading Solutions

Bloomberg offers a powerful suite of electronic trading platforms spanning fixed income, foreign exchange, equities, derivatives and precious metals that can be seamlessly integrated into your order management, risk management and back office systems.

← Bloomberg Terminal →

Global Data • News • Analytics • Fully Hosted • Bloomberg Anywhere



Portfolio Management



Trading



Compliance



Operations

- Analytics
- Decision support
- Position management
- Risk management

- Order management
- Electronic trading & execution
- Multi-asset coverage
- Multi-venue access

- Regulatory requirements
- Investment & internal guidelines
- Flexible template based rule construction
- Centralized surveillance

- Allocation & matching
- Multi-asset trade settlement
- Real-time connectivity & integration
- Reconciliation
- Trusted data

Seamless market operations across asset classes.

Liquidity and market stability are paramount. Bloomberg helps you seamlessly provide both, whether you're conducting open market operations, including servicing the marginal lending facility, or buying or selling currency. Bloomberg can also streamline your debt issuance cycle from registration to auction to settlement. Bloomberg's debt management system not only digitizes your internal processes, it provides real-time access at an individual or enterprise level to Bloomberg's entire universe of market data.

A powerful solution

Bloomberg's comprehensive solutions enable central banks to act quickly and decisively to conduct open market operations, control risk, oversee markets and manage foreign reserves. Our tools adapt to your needs and the markets – so you always remain on the cutting edge. When it comes to implementing monetary policy and conducting market operations, global central banks are facing increasingly complex challenges.

Risks stemming from execution to settlement are mounting, requiring a dynamic, scalable solution to provide full operational control and prepare you for the future. Bloomberg – the central nervous system of global financial markets – can provide just that.

A secure, scalable, platform

When it comes to implementing monetary policy and conducting market operations, global central banks are facing increasingly complex challenges. Risks stemming from execution to settlement are mounting, requiring a dynamic, scalable solution to provide full operational control and prepare you for the future. Bloomberg AIM can provide just that: end-to-end global, multi-asset solutions for market operations as they are today and may be in the future.

Tightly integrated workflow

AIM integrated with the Bloomberg Auction System (BAS)* platform supports the entire trade life cycle, collateral management and treasury and liquidity management. Bloomberg's STP solution is a real-time multi-asset class platform that streamlines post-trade (middle office) workflows. Bloomberg can assist with issuance registration as well as generate trade settlement instructions to the custodian and integrate internally to generate other mandatory SWIFT messages for the custodian.

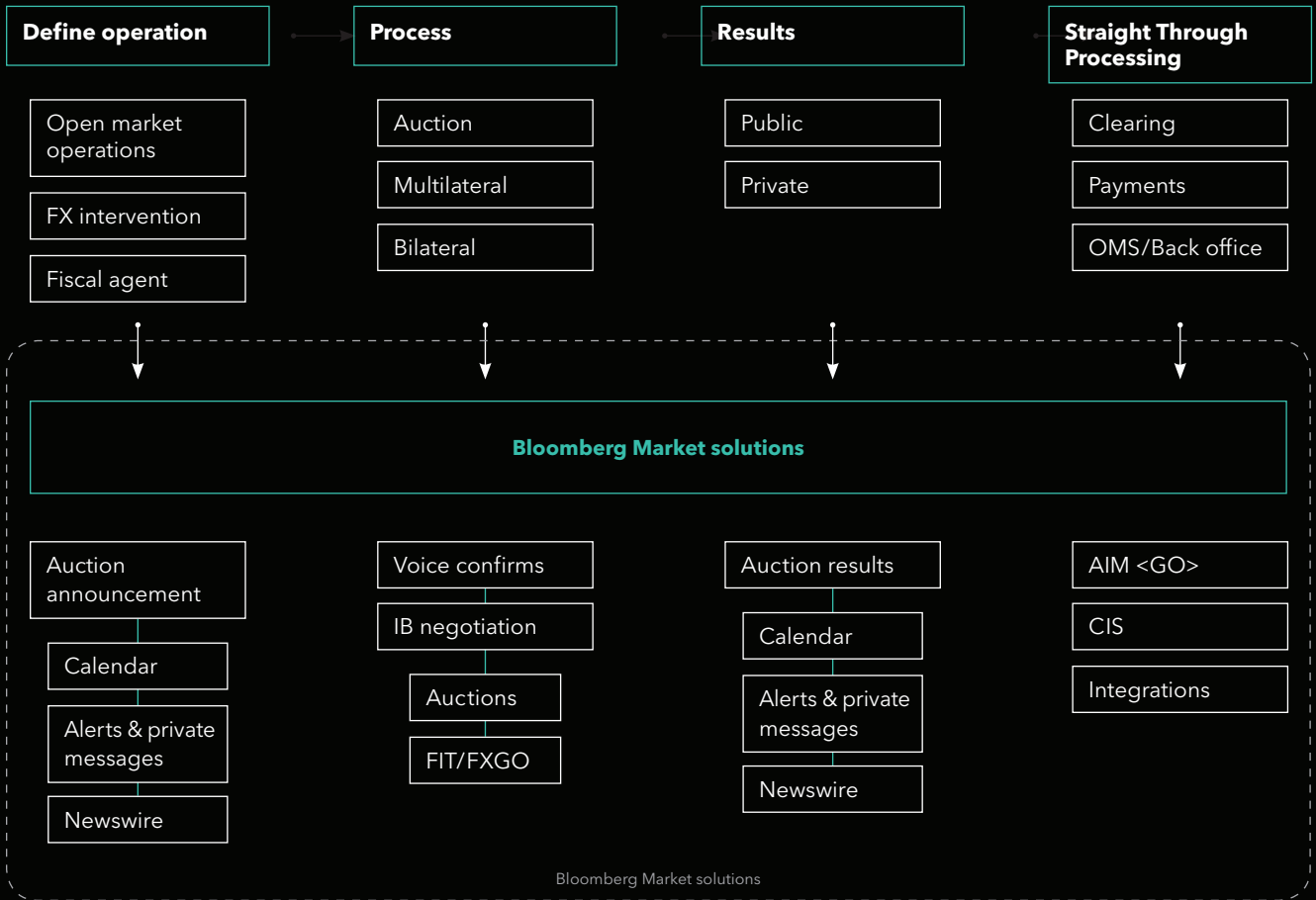
Rigorous operational governance

Our solution provides operational governance with access control and privileging based on different roles and responsibilities as well as a complete audit trail from order generation to trade settlement with custodians.

Calculation engine for benchmark rates

Bloomberg offers an open architectural calculation engine that permits central banks to upload interbank transaction or other market data to seamlessly generate and visualize benchmark and reference rates.

*Bloomberg Auction System (BAS) provides central banks, monetary authorities or exchanges with a robust auction solution in a secure and user-friendly environment. BAS supports a full range of asset classes, including fixed income, money markets and FX. The platform can support sales, buybacks, switches and repo.



Measuring & mitigating internal & external risk.

Understanding risk is a vital part of central banking. From managing portfolio risk to evaluating systemic risk and mitigating operational risks, Bloomberg's tools and data have you covered.

Bloomberg's Multi-Asset Risk System (MARS) is a comprehensive suite of risk management tools that enables central banks to act quickly and decisively to conduct open market operations, control risk, oversee markets and manage foreign reserves. Our tools adapt to your needs and the markets – so you always remain on the cutting edge.

Market risk

To establish a truly efficient workflow, your data supply chain requires high-quality, consistent and robust information from a single source. Bloomberg offers consolidated access to 35 million instruments across all asset classes; rapid, real-time market data at your fingertips; key reference data and more. Whether analyzing your positions or the broader market, Bloomberg offers a range of risk analytics as well as an in-house staff of professionals providing in-depth analysis and data sets on industries, governments, credit, litigation and economic factors.

Counterparty risk

Whether you are calculating the probability of default or the credit valuation adjustment (CVA) across your holdings, Bloomberg has the solutions you need. Bloomberg allows you to construct custom fixed income curves to visualize the evolution of interest rates and evaluate the value of bonds relative to a benchmark.

Banking sector risk

Along with the ability to construct custom yield curves and calculate default probabilities using market data or your own proprietary data, Bloomberg offers a full suite of products to monitor sector risk. From fundamental data, debt exposure and analysts' ratings. Bloomberg also maintains detailed dashboards, which include data and analysis by Bloomberg Intelligence (BI) analysts, on European, North American and Asian banks. BI has a team of more than 250 experienced research professionals and economists, with senior analysts averaging 20 years of buy- and sell-side experience.

Internal risk

Changing regulatory requirements, new communication platforms, and rapidly growing data volumes can make compliance daunting. Enterprises are struggling to manage surveillance and investigations across various communication sources – managing trade data further exacerbates the issue. A complex and dynamic regulatory environment requires an integrated, up-to-the-minute approach to compliance. Bloomberg Vault provides supervision and surveillance tools, cutting-edge investigative functionality, advanced reporting and immutable storage for recordkeeping requirements.

Reserve management

Open market operations

Banking supervision

Bloomberg risk management tools

Market risk

Counterparty risk

Sector risk

Internal risk

Front office risk

- Intraday position mark-to-market & greeks
- Term structure risk reports
- What-if & pre-trade analysis (incl. XVA, PFE & VaR)
- Scenarios & stress testing
- P&L Explain
- Portfolio margin calculations (Cleared IM & SIMM)
- Lifecycle management
- Regulatory risk analytics (PRIIPs)

Valuations

- Snapshots
- Report scheduler
- Automated delivery

XVA

- Valuation adjustments for OTC derivatives (XVA), incl. CVA, DVA, FVA & MVA
- Counterparty credit risk exposure metrics (PFE)
- What-if analysis
- Counterparty risk & CVA regulatory capital
- XVA sensitivities
- XVA & exposure stress testing

Market risk

- Full revaluation VaR & expected shortfall
- Greeks, scenario analysis & stress testing
- FRTB regulatory capital
- Buy- and sell-side regulatory reporting

Collateral management

- Legal documentation management
- Margin workflow (IM & VM)
- Automated messaging
- In-system reconciliation
- SIMM
- Portfolio margin calculations

Bloomberg Intelligence (BI)

- Fundamental data
- Debt exposure analysis
- Ratings
- Reports

Bloomberg Terminal credit analytics functions

Bloomberg Vault

- Supervision
- Surveillance
- Investigation
- Reporting

STP, CIS

- Integration services to minimize operational risk

Pricing library

- Contract creation
- Lifecycle
- Documentation generation
- Robust models
- Pricing
- API & services delivery

Bloomberg risk management tools

Financial stability through regulation & oversight.

Bloomberg helps central banks fulfill their oversight and regulatory responsibilities, including monitoring FX, fixed income and OTC markets in real time. We also offer a real-time, event-driven newsfeed. Maintaining efficient markets and financial stability is an increasingly important part of central banking. Whether fixed income or foreign exchange markets, Bloomberg's solutions have you fully covered.

Trading oversight & financial stability

Bloomberg provides a transactional surveillance tool (BTCA) across equities, futures, FX, fixed income and exchange-traded derivatives. BTCA uses cutting-edge algorithms to sift through Bloomberg's extensive suite of underlying market data to identify potential market abuses, manipulation and suspicious trading through automated or on-demand reports. The system can also accept an external trade feed, which can be especially useful if the regulator has access to unpublished transaction reporting data.

Fixed income

Bloomberg's E-Bond trading and market surveillance system provides a complete, consolidated marketplace for government bonds, offering market participants a robust and flexible set of tools supporting the full trade workflow. In addition, it allows central banks to review market activity in real time with access to live pricing data across asset classes in both primary and secondary markets. Bloomberg can also act as a calculation agent for government fixed income and interbank benchmark indexes.

Foreign exchange

Bloomberg's FX electronic trading and communication platform, FXGO, is the premier multi-bank FX trading platform; it provides powerful functionality for price takers to execute foreign exchange transactions with their bank relationships and allows regulators to have real-time visibility of market activity and greater oversight of the FX market.

Bloomberg can act as the calculation agent for currency fixings through its BFIX family of benchmarks, which already cover a comprehensive list of global currencies. The benchmark is used by market participants who need to use foreign exchange rates for portfolio benchmarking, derivatives valuation, index construction and trade execution.

Banking sector

BI puts a large group of market-leading analysts at the disposal of any banking regulator. Producing thematic research and daily analysis that utilizes proprietary and officially released data, BI offers an unparalleled window into the health of any banking system, particularly if the sector has a heavy foreign-owned presence.

Bloomberg also offers powerful credit analysis tools that allow a regulator to assess the health of a bank's major borrowers and their distance to default using published data already contained within Bloomberg. Should the borrower be an entity that does not have published financial data, then a regulating entity can upload such private financial data it may have access to.

Liquidity of assets

Bloomberg's liquidity analysis tool is the ideal function to perform spot checks on assets identified within a bank's balance sheet as Level 2 A/B. This can also be useful when assessing assets used for other purposes such as collateral.

Connecting your research to financial markets.

A steady research flow is critical to properly conducting monetary policy and understanding how markets react. Along with a vast array of analytics and real-time data, Bloomberg provides you with the ability to publish your research directly to market participants in the same way they digest sell-side research. Tagged to the appropriate topic codes, your research becomes easily searchable by the entire financial community via the Bloomberg Terminal®.

Distributing research

Distributing your research over Bloomberg connects your cutting-edge analysis directly to those who need it most. RES <GO> includes research from more than 1,500 providers, including brokers, independent contributors, central banks, market research firms, industry associations and others. As a single destination for all research, RES makes it easy to access and share critical market and economic research.

Managing research

Bloomberg Research Management Solutions (RMS) provides the tools your firm needs to take control of your broker and internal research workflows. With powerful research analytics, entitlement controls and more, our RMS is your firm's single platform research solution on the Terminal and mobile.

Delivering data to markets

Bloomberg offers a suite of products to help central banks streamline data distribution in a simple, timely and impartial manner that reduces risks. We can work across multiple feed types and assist you with identifying the most efficient methodology for delivering data. Our Enterprise Multi-Vendor Contributions platform allows you to send data simultaneously to multiple vendors from a single-entry point. On the Terminal, we can build bespoke displays to curate your data for our global client base.

Conducting research

With real-time prices and time series data for more than 30 million market instruments coupled with a wide-array of fundamental data, reference data, news and analytics your demand for data and information will be met.

Whether analyzing data on the Terminal, building an excel model or feeding a firm-wide database or statistical package, Bloomberg has you covered. We also offer an event driven feed that includes a machine-readable version of our news and data, including breaking headlines, exclusive global coverage, analytics, structured financial data and global economic data.

In addition data and analytics, Bloomberg's in-house team of analysts are available to help you reach your goals.

Bloomberg Intelligence (BI) analysis covers the macro picture down to the operating, financial and valuation information at the company level. Driven by an experienced team of 250+ analysts, BI delivers an independent perspective providing in-depth analysis and data sets on industries and companies, as well as the government, credit, litigation and economic factors that can impact decision-making.

Additionally, Bloomberg's comprehensive ESG data set, advanced analytics and news driven fundamental ESG analysis is at the heart of Bloomberg's Sustainable Finance solutions.

Take control of your data.

Bloomberg's approach to connectivity and integration combines technology products to manage integrated systems, solution architects to design, build and analyze managed capital markets workflows, and professional services to implement changes at scale. Our approach is specifically designed to help firms reduce total cost of ownership, achieve faster time to market and improve transparency.

Connecting to Bloomberg

Our approach to connectivity continues to be of the highest priority receiving continued investment and focus to ensure that we maintain the reliance and trust of our customers with the ever increasing importance of placed on data security and reliability in the current climate. We offer the following methods of connectivity:

- SFTP (Secure File Transfer Protocol)
- IBM MQ (IBM Websphere MQ)
- FIX (Financial Information Exchange Protocol)
- API/Web services

Bloomberg provides tools and self-service capabilities through the Enterprise Console, which is designed to give complete operational control so clients can manage their hosted connectivity with Bloomberg.

Bloomberg SWIFT Service Levels, Security & Confidentiality

Bloomberg hosts and maintains SWIFT-provided hardware and software, enabling customers to leverage SWIFT-integrated Bloomberg solutions providing a number of tools to monitor and manage outbound and inbound SWIFT messages for trade and cash settlement, and reconciliation.

About the Bloomberg Terminal.

Since 1981, business and financial professionals have depended on the Bloomberg Terminal for the real-time data, news and analytics they need to make the decisions that matter. The Terminal provides information on every asset class — from fixed income to equities, foreign exchange to commodities, derivatives to mortgages — all seamlessly integrated with on-demand multimedia content, extensive electronic-trading capabilities and a superior communications network.

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Take the next step.

For additional information, press the <HELP> key twice on the Bloomberg Terminal®.

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