



**RÉPUBLIQUE
FRANÇAISE**

*Liberté
Égalité
Fraternité*



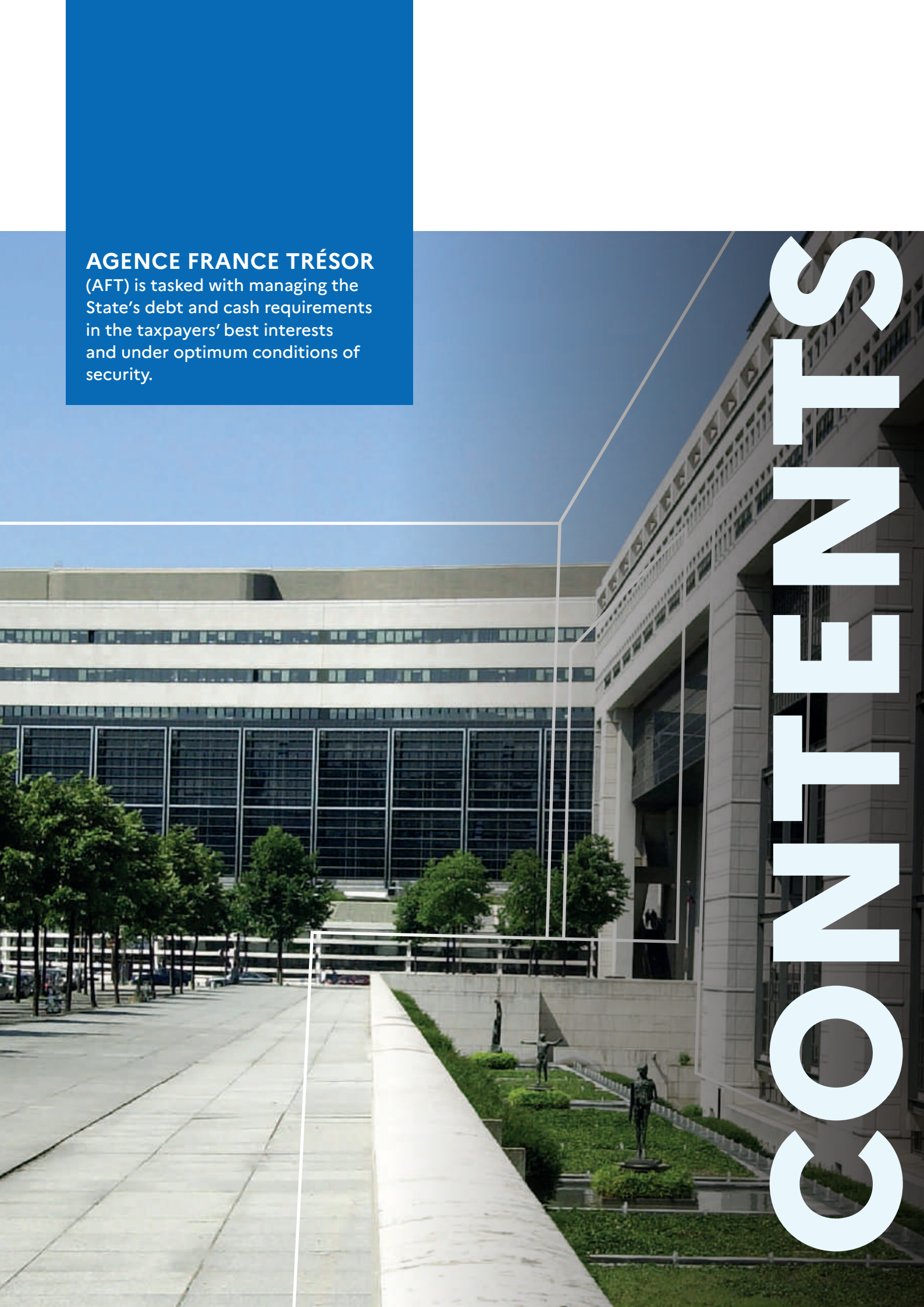
**AGENCE
FRANCE TRÉSOR**

Annual Report 2022



AGENCE FRANCE TRÉSOR
(AFT) is tasked with managing the State's debt and cash requirements in the taxpayers' best interests and under optimum conditions of security.

**STATEMENTS
ON
ECONOMY**





Editorial

BY EMMANUEL
MOULIN

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Editorial



“With a 2.5% growth rate, France has once again demonstrated its economic resilience to the shocks.”

France's economy in 2022: resilience to geopolitical and economic shocks

2022 SEEMED TO START WITH AN EFFECTIVE POST-CRISIS MOMENTUM DRIVEN BY AN UNPRECEDENTED ECONOMIC RECOVERY THAT STARTED IN 2021.

The war in Ukraine, sparked off by Russia in February, has reshuffled the cards in this balance, giving rise to major geopolitical and economic upheavals, with the roll-out of sanctions against Russia and spiralling inflation. Faced with this situation, the main world central banks, including the European Central Bank (ECB), have embarked on a policy of rapid monetary normalisation to fight inflation. In parallel, the French government has introduced measures (€43.6bn for 2022) to protect businesses and households.

With a 2.5% growth rate, France has once again demonstrated its economic resilience to such shocks. This growth reflects high domestic demand sustained by dynamic

investment and, despite inflation, resilience in household spending most of the year.

The French consumer price inflation rate was still one of the lowest in Europe, +6.0% in 2022, thanks in part to the structural benefit of having an energy mix among those least exposed to Russia, and also to the government's proactive policies, with the introduction of price caps on energy, the fuel rebate and the energy cheque. These temporary measures have gradually been abolished: the fuel discount, initially extended to mid-November, ended in December 2022, while the exceptional energy cheque ended in March 2023.

In other respects, the French labour market demonstrated great robustness; thanks to the recovery that began in 2021 and the effects of structural reforms made in previous years, at the end of 2022 the employment rate for French people aged between 15 and 64 rose to 68.1%, a record since 1975. Further to the economic recovery at the beginning of the year and the positive effects of the France Relance (France Recovery) plan, 337,100 new jobs were created, primarily in private sector. This momentum also led to the unemployment rate falling to its lowest level since March 2008, down to 7.2% of job-seekers in the last quarter of 2022. Despite the impact of inflation on business, the support provided to microbusinesses and small and medium-sized enterprises

helped them cope with their energy challenges while safeguarding jobs.

In order to fight inflation, which was significantly higher than the 2% target, the ECB, together with the central banks of the main developed economies, has adapted its reactive policy by ending the monetary easing policies it had pursued since the 2008 financial crisis. For the first time in 10 years, the ECB raised its rates in July 2022. The State's 10-year borrowing rates gradually rose out of the negative zone, reaching 3.10% at the end of the year.

This decision has also gone hand in hand with the end of the Emergency Purchase Programme (PEPP) set up during the pandemic, followed by a gradual reduction in its balance sheet (€15bn per month).

Agence France Trésor addressed this context of significant geopolitical, economic and financial upheaval by adhering to its principles of consistency, foresight and transparency. This strategy again proved to be sound and, combined with the commitment and effectiveness of its staff and France's creditworthiness, enabled it to fulfil its task of financing government policies for the benefit of all.

Emmanuel Moulin
CHIEF EXECUTIVE OF THE TREASURY
AND CHAIR OF AFT

A word from AFT Chief Executive



“

In 2022, the inflation shock and the normalising of monetary policy ended a decade of historically low rates.

”

DESPITE A TURBULENT MARKET AND FAR-REACHING MEASURES TAKEN TO MITIGATE THE IMPACT OF INFLATION ON HOUSEHOLDS AND BUSINESSES, THE MEDIUM TO LONG-TERM FINANCING PROGRAMME REMAINED UNCHANGED AT €260BN, THE SAME LEVEL AS IN 2021, AND SHORT-TERM DEBT WAS REDUCED BY €7BN.

In January 2022, monetary policy normalisation in the euro area was a medium-term prospect. A few weeks later, Russia's invasion of Ukraine triggered a process that was to put a stop to a decade of zero or negative money market rates. In the summer, the European Central Bank discontinued its net asset purchases and started raising its market rates. Illustrating the speed of this normalisation, the yield on 10-year treasury bonds (OATs) on the secondary market, virtually 0% at the beginning of the year, topped 3% by the end of 2022, the highest level for over 10 years.

Also, after two exceptional years marked by a slightly negative average OAT issue rate, it rose to 1.43% in 2022. Similarly, the average rate of short-term debt issues (Treasury bonds - BTFs) rose to 0.19% in 2022. The impact of the interest rate rise on the State's debt service will nonetheless be gradual, as and when the existing debt is refinanced, given its long average residual maturity, which in 2022 stood at a record 8.5 years. The return of positive short-term rates also heralds major changes in AFT activity, with the resumption of proactive management of the State's entire debt with a view to achieving better returns on the money market in the taxpayers' best interests. Considering the risk that this sudden inflow of cash could unsettle the rise in interest rates, the European Central Bank nonetheless decided to grant States temporary returns to put off this disruption till 2023 and thereby allow AFT and its counterparts to best prepare for it.

The return of inflation also directly impacted debt servicing costs in 2022, through the existing stock of index-linked bonds, which amounted to €17bn more of index-linking supplement than in 2021. Rising inflation also led to growing demand for these instruments, which accounted for nearly 10% of the financing programme. In

January, this trend enabled a new 30-year European syndicated index-linked OAT to be issued, the OAT€i 0.10% maturing on 25 July 2053, for a total of €3bn at a record negative real rate of -0.926%, and, in May, the issue of the first green index-linked OAT, the OAT€i 0.10% 25 July 2038, which saw an unprecedented level of demand (27 billion euros) and an issue of €4bn at the real rate of -0.415%.

True to its tradition of innovation and with the backing of primary dealer banks (SVTs), in 2022 AFT therefore continued to develop the green sovereign bonds market, launching an instrument that allows investors to fund their green transition while also hedging against inflation. The rise in energy prices also led to a reduction in the volume of green OATs issued in 2022, due to the reduction in eligible green expenditures as long as market prices exempt the State from subsidising certain producers of renewable energy. The outstanding amount of the three green OATs nonetheless reached a total of €52bn at the end of 2022, which was still the highest sovereign outstanding amount for such products.

Despite a turbulent market and far-reaching measures taken to mitigate the impact of inflation on households and businesses, the medium to long-term financing programme remained unchanged at €260bn, the same level as in 2021, and short-term debt was reduced by €7bn. This is because the boost in tax revenue and the funding raised during the pandemic absorbed the cost of these measures.

Fulfilment of commitments made in previous years also kept AFT's teams busy in 2022, as they issued €38bn of social bonds on behalf of CADES in 2022, making CADES the biggest global issuer of such bonds again this year, with a total of €100bn social security debt assumed by CADES following the pandemic. AFT also assumed a second phase of SNCF

debt dated 1 January 2022 for a total of €10bn, and completed an initial amortisation of the Covid-related debt of €1.9bn.

Lastly, 2022 was also marked by a return to normal working habits, after two years working with personal protective measures, rotations of staff and online meetings. It also saw a gradual resumption of meetings with investors in France and worldwide, accounting for roughly a hundred meetings in 17 countries.

Thanks to the commitment of all its staff, the partnership forged with the primary dealers, the well-informed advice of its strategic committee, the quality of the *Banque de France's* services and due observance of its well-established principles of foresight, transparency, consistency and innovation, in 2022 AFT continued to ensure the financing of the State by offering investors safe liquid assets.

Cyril Rousseau
AFT CHIEF EXECUTIVE

ABOUT AFT

At the end of 2022, AFT had **47 staff members** (20 women and 27 men; 21 contract employees and 26 civil servants).

AFT's staff members are notable for the diversity of their education and experience.

They share the same values as the Directorate General of the Treasury, namely **commitment, loyalty, openness and team spirit.**

All staff members adhere to strict commitments with regard to professional ethics.



Agence France Trésor is a department with national scope reporting to the Directorate General of the Treasury and the Ministry for the Economy and Finance.

Tasks and functions

TASKS

MANAGING THE STATE'S CASH REQUIREMENTS

Agence France Trésor (AFT) manages the State's cash requirements so that it can meet all its financial commitments at all times, whatever the circumstances.

This management role covers the year as a whole, as well as day-to-day developments. Forecasts of the receipts and disbursements of the State and of Treasury correspondents are constantly updated. Flows into and out of the account are monitored in order to be able to meet any temporary cash requirements.

MANAGING THE STATE'S DEBT

AFT is tasked with managing debt in the taxpayers' best interest. Its strategy takes a long-term view, while tracking the market closely. This strategy promotes liquidity across the full range of AFT's debt securities, while maintaining full transparency and a commitment to combining innovation and security.

AN AUTONOMOUS, ACCOUNTABLE AGENCY WITH NATIONAL SCOPE

AFT is an agency with national scope (SCN) that reports to the Ministry for the Economy, Finance and Industrial and Digital Sovereignty and the Director General of the Treasury. It has the required visibility and resources to carry out its activities, particularly as regards navigating complex financial markets and maintaining close relations with all financial stakeholders.

The fact that AFT reports to the Directorate General of the Treasury at the Ministry for the Economy, Finance and Industrial and Digital Sovereignty means that it has access to the full range of information it needs to carry out its strictly defined tasks, often liaising closely with other structures at the Ministry, such as the Budget Directorate and the Public Finances Directorate General.

AFT is staffed by civil servants who are fully conversant with the government's financial procedures, and by market professionals under contract with the government. Staff members serve in operational functions (cash management, market transactions, risk management and post-trade procedures, information technology), analytical functions (strategic modelling, macro-economics and legal) and communication functions.

FINANCING ACTIVITIES CARRIED OUT ON BEHALF OF CADES

On 1 October 2017, the staff of France's Social Security Debt Repayment Fund (CADES) and AFT joined forces to create a centre of excellence for the issuance of French government securities. As part of this arrangement, CADES has given AFT operational responsibility for its financing activities. AFT acts in the name and on behalf of CADES, using its own seconded staff.

Following constitutional bylaws and acts promulgated on 7 August 2020 in response to the pandemic and its impact on social security finances, which authorised the transfer of €136bn of social security debt, the social security debt repayment date of 2024 was postponed to 2033.

After a transfer of €20bn of debts in 2020 and €40bn in 2021, a third phase of debt assumption totalling €40bn was completed in 2022. CADES completed a medium- and long-term financing programme totalling €38.1bn. A total of 12 issues were successfully launched on international financial markets. The majority of the funds were raised by issuing social bonds, for 11 loans denominated in euros and dollars, for a total of €38bn, with maturities ranging from 3 to 10 years.

Furthermore, in line with the transparency commitments made when the social bond issues were arranged in September 2020, in 2022 CADES published its second social bonds allocation and performance report on the funds raised in this respect in 2021.

KEY FIGURES:

→ Since 1996: €360bn assumed in debt and €224bn redeemed.

FUNCTIONS

To perform its State debt and cash management tasks, AFT has a directorate general, a secretariat general and the following units:

1. "CASH" UNIT:

- Cash forecasts;
- Relations with the *Banque de France* as the Treasury's banker;
- Relations with government authorising officers and accountants;
- Cash management transactions: loans and deposits, repo transactions in government securities.

2. "DEBT" UNIT:

- Auctions, syndicated issues, buybacks;
- Relations with the primary dealers;
- Proactive debt management transactions;
- Promoting Treasury securities to investors.

3. "POST-TRADE AND RISK MONITORING" UNIT:

- Reviewing and settling financial transactions and reporting all data to the Ministry's Budget and Accounting Control Department;
- Redemption and coupon payments;
- Monitoring credit, counterparty and settlement risks for all financial transactions; management of margin calls;
- Administrative management of the Public Debt Fund (CDP);
- Overseeing auctions of carbon quotas for France as part of the European Union's greenhouse gas emissions trading system (EU-ETS).

4. "RESEARCH AND STRATEGY" UNIT:

- Quantitative contribution to the definition and execution of the State's financing strategy;

- Monitoring fixed-income markets and relations with primary dealers' strategists;
- Coordinating working groups with other public sector issuers (EU, OECD, etc.);
- Secretariat for the AFT Strategic Committee.

5. "MACROECONOMICS" UNIT:

- Assessing how fixed income markets are affected by the macroeconomic and financial climate, fiscal and monetary policies and discussions on structural policies;
- Talking with French and foreign investors and market stakeholders;
- Relations with rating agencies.

6. "SUSTAINABLE FINANCE" UNIT:

- Coordinating the interministerial process for selecting green expenditures eligible for Green OATs;
- Tracking the allocation of green expenditures and producing the Allocation and Performance Report;
- Overseeing the work of the Green OATs Evaluation Council;
- Monitoring best practices and standards in sustainable finance;
- Contributing to the promotion and reach of Green OATs;
- Supporting the CADES social bond programme.

7. "INFORMATION TECHNOLOGY" UNIT:

- Administering and operating the information system to provide the information technology tools needed for AFT's tasks;

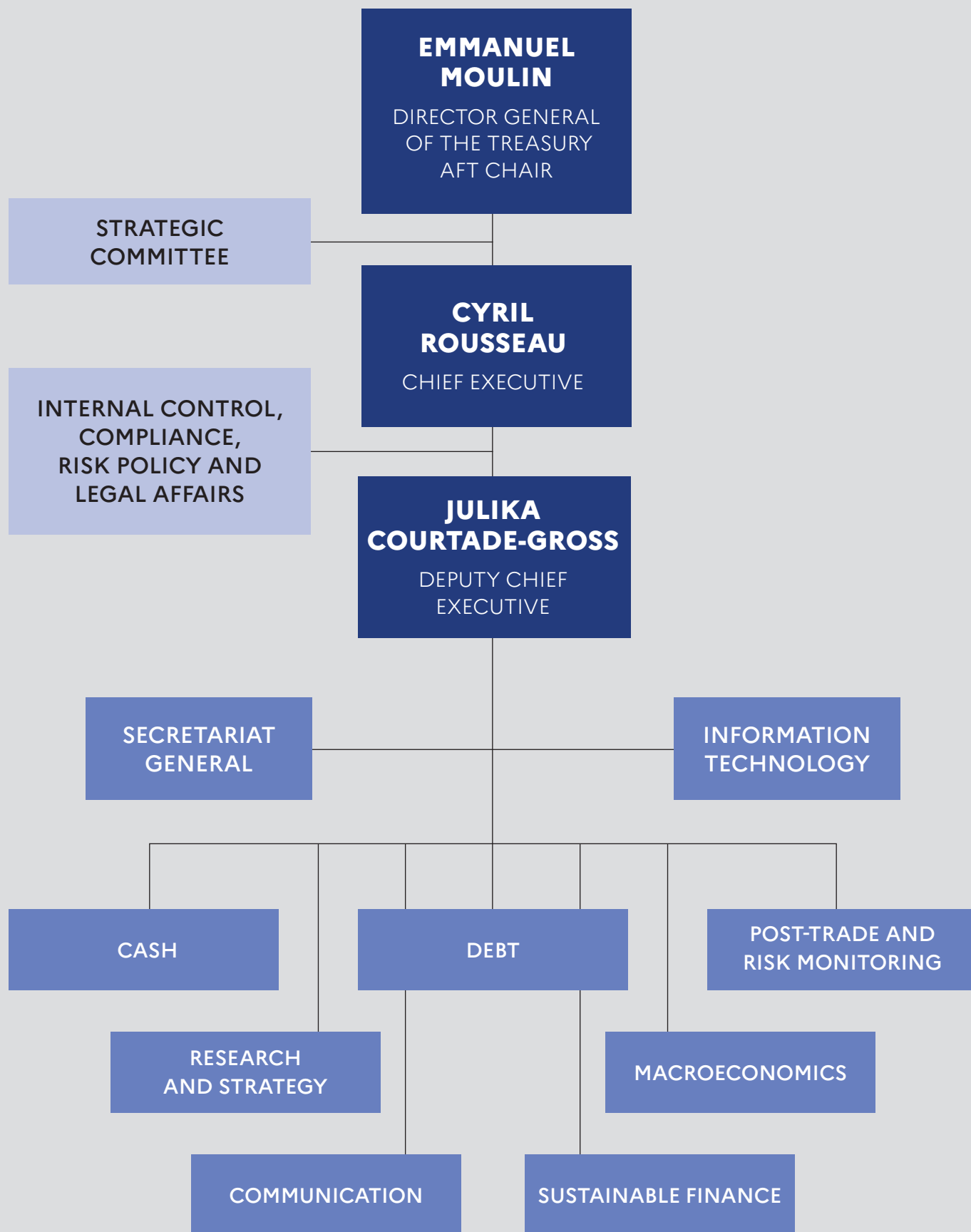
- Leading projects to implement new software and services;
- Monitoring and applying the information system security policy and maintaining information technology resources under the business continuity plan.

8. "INTERNAL CONTROL, COMPLIANCE, RISK POLICY AND LEGAL AFFAIRS" UNIT:

- Internal control of transactions, defining the general business framework and risk mapping for AFT and CADES;
- Implementing ministerial crisis management and business continuity instructions for the activities of AFT and CADES;
- Coordinating the AFT Risk Committee's audit, coordination and secretariat functions;
- Managing legal and compliance risks for AFT and CADES transactions;
- Managing rules of professional conduct for AFT staff, defining AFT confidentiality policy and monitoring their implementation.

9. "COMMUNICATIONS" UNIT:

- External communications; reporting on AFT's work and assignments, and promoting events to the financial community and the media;
- Internal communications: monitoring and gathering information, creating communication tools;
- Digital communications: website, social media and deploying AFT's digital presence.



The strategic committee

The Strategic Committee assists AFT in the performance of its tasks. The committee, along with the primary dealers, advises AFT on the main facets of the State's issuance policy. The committee acts in an advisory capacity to help AFT apply its issuance policy principles. Its members are leading French and international figures whose careers, experience and in-depth knowledge

of how financial markets work provide AFT with a broad range of skills and expertise.

More specifically, the Strategic Committee's role is to give its opinion on the principles governing the State's issuance policy and cash management. More generally, its role is to advise on any matter

related to AFT's business and on areas for improvement.

The Strategic Committee meets twice a year. The meetings are an opportunity to report on AFT's past activity and to set this activity against economic developments and present the assumptions that will underlie AFT's work in the future.

MEMBERS OF THE STRATEGIC COMMITTEE

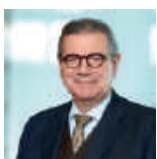
CHAIR



Mr Jacques de LAROSIÈRE

Former Governor of the *Banque de France*, former Managing Director of the IMF, former chair of the BERD

MEMBERS



Marc-Antoine AUTHEMAN

Former Chair of the Board of Directors of Euroclear



Laurence BOONE

Chief Economist at the OECD (until May 2022)



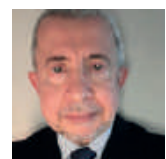
Günther BRÄUNIG

Former member of the Board of Directors of KfW



Satu HUBER

Former CEO of Elo Mutual Pension Insurance Company (until July 2022)



Assaad J. JABRE

Business consultant, former Vice-President of the International Finance Corporation (World Bank Group)



René KARSENTI

Former Chair of the International Capital Market Association (ICMA)



Chow-Kiat LIM

CEO of Government of Singapore Investment Corporation (GIC)



Dino KOS

Head of Global Regulatory Affairs of CLS



Bertrand de MAZIÈRES

Director General of Finance at the European Investment Bank (EIB)

Primary dealers

Primary dealers are AFT’s close counterparties for all of its market operations.

They advise and assist AFT with its issuance policy and debt management, and more generally, with any matter concerning the smooth operation of markets.

The members of the primary dealers’ group have changed over time. Their ranks grew from 13 in 1987 to 22 soon after 2000. They numbered fifteen for the period 2022-2024. Today’s group of primary dealers represents the diversity of institutions active on the French government debt market: major retail banks, specialised institutions, and French and foreign institutions.

At 31 December 2022, the group of primary dealers included four French institutions, two German institutions, three British institutions, five North American institutions and one Japanese institution. This diversity underlines the central role and appeal of French Treasury securities on the euro debt market.

It is the primary dealers’ responsibility to participate in auctions, place Treasury securities and ensure the liquidity of the secondary market.

AFT deals with them as necessary for them to perform their duties:

- Overseeing the proper functioning of primary issues;
- Ensuring the liquidity of the secondary market in French Treasury securities and maintaining their status as some of the euro area’s most liquid securities;

- Promoting the market for Treasury securities;
- Providing constant and highly pertinent advice to AFT on issuance policy, debt management, promoting the State’s creditworthiness, hedging the State’s financial risks and the workings of the fixed-income markets.

These duties are set out in a charter* that governs the relations between AFT and the primary dealers, who have signed the charter and pledged to comply with it. They also undertake to act ethically and comply with marketplace best practices when carrying out their transactions.











* Available at <https://www.aft.gouv.fr/en/primary-dealers-presentation>

2022 LEAGUE TABLE OF PRIMARY DEALERS

Since 1999, AFT has published an annual ranking of the most active primary dealers. The assessment of primary dealers' activity takes all their tasks into account: bidding at auctions, dealing on the secondary market, and qualitative aspects of their relationship with AFT (operational quality, quality of advice, and the closeness and stability of the relationship with AFT).

For the overall ranking, each of the 15 primary dealers is given a score of up to 100 points; up to 40 points for their involvement in auctions, up to 30 points for their presence on the secondary market and up to 30 points for the qualitative aspects.

GENERAL RANKING OF THE TOP 10 INSTITUTIONS:

	1	
	 BNP PARIBAS	
2		
 CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK	3	
		4
		J.P.Morgan
5		
 SOCIÉTÉ GÉNÉRALE	6	
	 HSBC	7
		Deutsche Bank 
8		
 BARCLAYS	9	
	Goldman Sachs	10
		BofA SECURITIES 

RANKING OF THE TOP 10 INSTITUTIONS:





PRIMARY MARKET

Ranking of the top 10 institutions for involvement in auctions and buybacks:

- 1  **BNP PARIBAS**
- 2  **HSBC**
- 3  **citi**
- 4  **CRÉDIT AGRICOLE**
CORPORATE & INVESTMENT BANK
- 5 **J.P.Morgan**
- 6  **SOCIÉTÉ GÉNÉRALE**
- 7 **BofA SECURITIES** 
- 8  **BARCLAYS**
- 9 **Morgan Stanley**
- 10 **Goldman Sachs**

SECONDARY MARKET

Ranking of the top 10 institutions for their market-making activity on the secondary market in French Treasury securities:

- 1  **BNP PARIBAS**
- 2  **citi**
- 3  **CRÉDIT AGRICOLE**
CORPORATE & INVESTMENT BANK
- 4 **J.P.Morgan**
- 5 **Deutsche Bank** 
- 6  **SOCIÉTÉ GÉNÉRALE**
- 7  **BARCLAYS**
- 8 **Goldman Sachs**
- 9  **HSBC**
- 10 **Morgan Stanley**

QUALITY OF SERVICES

Ranking of the top 10 institutions for quality of service provided to 'AFT':

- 1  **BNP PARIBAS**
- 2  **SOCIÉTÉ GÉNÉRALE**
- 3  **CRÉDIT AGRICOLE**
CORPORATE & INVESTMENT BANK
- 4 **J.P.Morgan**
- 5  **NATIXIS**
CORPORATE AND INVESTMENT BANKING
- 6  **citi**
- 7  **HSBC**
- 8 **Deutsche Bank** 
- 9  **BARCLAYS**
- 10 **Goldman Sachs**

Investors

INVESTOR RELATIONS ARE A PRIORITY

Throughout the year, AFT holds regular meetings with investors (investment managers, portfolio managers, economists, etc.) to maintain or develop long-term relationships. In 2022, AFT held meetings with nearly 100 investors, in France and abroad.

These meetings are an opportunity for AFT to outline the State's issuance strategy and the technical strengths of its debt management, as well as providing a better understanding of France's and Europe's economic situations, economic and fiscal policies and the structural reforms underway. Investors can use these meetings to give their opinion of France and its debt market, thus providing invaluable feedback for policy-makers. This regular groundwork helps maintain investors' positive image of France. The State debt investor base is diversified both in terms of geography and categories.

French investors held 49.9% of French State debt on 31 December 2022 and non-resident investors, including a large share from the euro area, held 50.1%. Investors include central banks, sovereign wealth funds, asset managers, commercial banks, insurance companies and pension funds. This diversity is an important factor for the security of French debt that optimises the State's borrowing costs in all market situations. After several years marked by historically low interest rates, including the last two years at negative rates, financing conditions started returning to normal in 2022, with a weighted average yield on medium- and long-term debt of 1.43%.

97 INVESTORS
met in France and abroad

17 COUNTRIES
visited worldwide

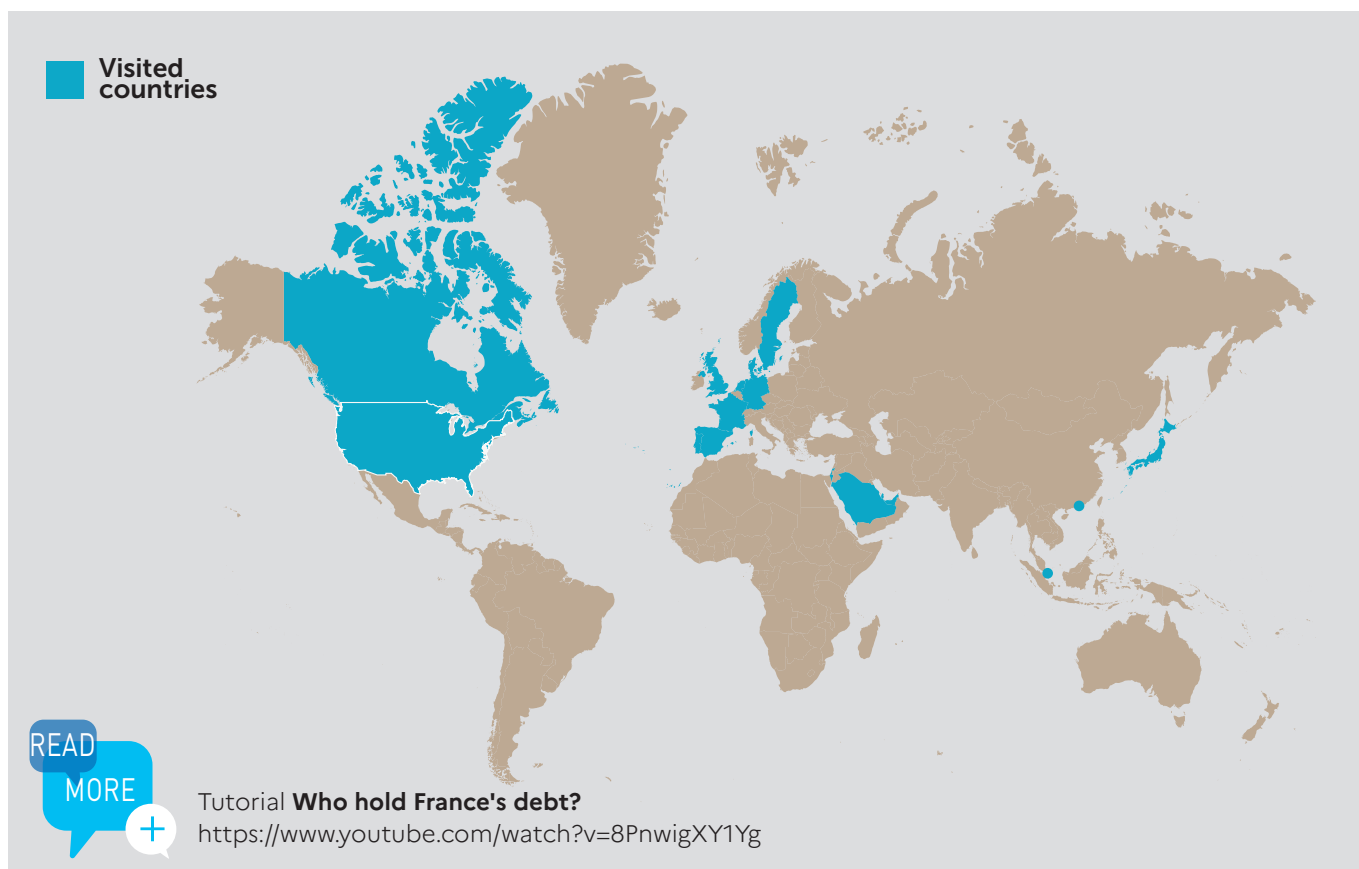
50.1% OF THE DEBT
held by non-resident
investors

**99% OF FRENCH
AND FOREIGN
INVESTORS**
were "very satisfied" or
"satisfied" in 2022¹

AFT'S BUSINESS TRIPS IN 2022

AFT travelled to 19 locations in 17 countries in 2022 to promote French Treasury securities and France's credit: Germany, Saudi Arabia, Canada, China (Hong Kong), Denmark, United Arab Emirates, Spain, United States, France, Israel, Japan, Netherlands, Portugal, Qatar, United Kingdom, Singapore and Sweden.

¹ Source: 2022 survey by Sondage IEM, <https://www.aft.gouv.fr/fr/publications/communiqués-presse/09112022-enquete-iem-finance-svt-vus-par-investisseurs>



SURVEY CONDUCTED BY IEM FINANCE

AFT has conducted an investor survey every year since 2002 to assess their opinion of French debt.

IEM Finance conducted this twentieth online survey of primary dealers' customers from 5 to 23 September 2022. The survey considered the quality of business relations with the primary dealers and the services they render to their customers, along with the customers' assessment of how well the French debt market works. In 2022, 175 investors filled in the questionnaire; these respondents represented most of the major asset managers and insurers, along with many public institutions that trade in French debt.

Investors' satisfaction with the functioning of the French debt market remains very high, both

in France and abroad. Across all investors, 99.3% of them stated that they were "very satisfied" or "satisfied".

The liquidity of OATs, BTFs and inflation-linked bonds is deemed to be "very satisfactory" or "fairly satisfactory" by the vast majority of investors. Among investors able to assess these three types of securities, respectively 96.2%, 90.3% and 72.4% of them rated their liquidity as satisfactory.

In addition to the information provided by AFT, the vast majority of investors (92.7%) continue to state that they are "satisfied" with the information they receive from French public institutions regarding economic policy and public finances.

The proportion of investors who had already purchased a Green fixed-rate OAT in 2022 (Green OAT 1.75% 25 June 2039 and/or Green OAT 0.50% 25 June 2044) continued to grow, up from 61.7% in 2021 to 63.4% in 2022. Nearly three quarters of the investors polled stated that they had bought these securities because of their green appeal. A little over a quarter of the investors polled (26%) also stated that they had purchased the first French inflation-linked sovereign green bond, issued on 25 May 2022. 58.5% of these investors stated they had purchased it both because of its green appeal and because it is inflation-linked. 14.6% purchased it only because of its green appeal and only 26.8% of them because it is inflation-linked.

Banque de France

All the State's flows of funds (expenditure and revenue), along with the Treasury correspondents' flows, are centralised in real time through a single account held with the *Banque de France* and managed by AFT. The single account records all financial transactions executed by more than 4,000 public accountants using nearly 3,000 transaction accounts.

This structure enables the *Banque de France* to provide AFT with a centralised, real-time view of the Treasury's single account so that AFT can make medium- and long-term forecasts of expenditure and financing in order to optimise the State's cash management.

AFT also relies on *Banque de France* staff for the practical organisation of Treasury security auctions and oversight of the settlement process for the securities sold.

Acting as an intermediary between AFT and the primary dealers, the *Banque de France* receives the primary dealers' bids and then compiles an anonymous summary of the orders and presents it to AFT, which uses it to allocate each security.

To carry out this task, the *Banque de France* has developed a dedicated and highly secure system called MAITRE (Mécanisme d'Adjudications Informatisé du Trésor), which replaced the former TELSAT system (système de TELétransmission des Soumissions aux Adjudications du Trésor) in 2022. This new system is used by the primary dealers to submit their bids and by AFT to allocate Treasury securities.

The *Banque de France* provides this service under the terms of separate agreements with AFT and with each primary dealer.



International public debt and cash management working groups

AFT represents France as a member of various public debt and cash management working groups:

SUB-COMMITTEE ON EU SOVEREIGN DEBT MARKETS (EUROPEAN UNION)

The Sub-Committee on *EU sovereign debt markets (ESDM)* is a sub-group of the European Union's Economic and Financial Committee. It is responsible for coordinating issuance policy (timetable and amounts as provided for in the 2012 regulations), preparing common positions for the various Member States on regulatory matters and technical aspects relating to the sovereign debt market. It also ensures

that the information disseminated about the different Member States' debt issues is harmonised. This is the group that developed the collective action clauses (CACs) for euro area sovereign debt in 2012 and that started to revise these legal provisions in 2019 (see box on page 20). The group meets at least three times a year in Brussels.

→ [Website of the Sub-committee \(in English\): https://economic-financial-committee.europa.eu/efc-sub-committee-eu-sovereign-debt-markets_en](https://economic-financial-committee.europa.eu/efc-sub-committee-eu-sovereign-debt-markets_en)

→ [Economic and Financial Committee website \(in French\): https://www.consilium.europa.eu/fr/council-eu/preparatory-bodies/economic-financial-committee](https://www.consilium.europa.eu/fr/council-eu/preparatory-bodies/economic-financial-committee)

WORKING PARTY ON PUBLIC DEBT MANAGEMENT (OECD)

This group provides sovereign debt managers with a forum to discuss their experience and their issuance policies. It publishes standardised statistics and reports comparing

the management approaches adopted in different countries. The group meets twice a year, usually in Paris.

→ [Website \(in French\): https://www.oecd.org/fr/daf/fin/dette-publique](https://www.oecd.org/fr/daf/fin/dette-publique)

PUBLIC DEBT MANAGEMENT FORUM (IMF)

This forum is attended by all public debt managers, as well as representatives of the private sector, international institutions and regulators. The aim of the forum is to discuss current public debt management issues with regard to developments in the economic and regulatory environment. The forum meets once every two

years, alternating venues between Washington and one of the IMF member countries.

Working closely with the World Bank, this group helped to review the Guidelines for Public Debt Management, an initiative undertaken by the G20 in 2013.

→ [IMF website \(in French\): https://www.imf.org/fr/Home](https://www.imf.org/fr/Home)

GOVERNMENT BORROWERS' FORUM

AFT also takes part in the World Bank's Government Borrowers' Forum, an annual event that brings together senior civil servants from countries issuing securities on international capital markets and the treasurers of supranational organisations to share their debt management

experience and discuss their views on issues of common interest on financial markets. Approximately 100 senior debt managers from some 40 countries attend the forum.

The World Bank Treasury provides the secretariat for the forum, which

is hosted by a different country each year.

→ [Website](https://www.banquemonde.org/fr/home) (in French): <https://www.banquemonde.org/fr/home>

PUBLIC SECTOR ISSUER FORUM

AFT also participates in the *Public Sector Issuer Forum*, which is organised by the International Capital Market Association (ICMA).

The purpose of the forum's meetings is to discuss issuers' practices and the issues facing their ecosystem.

→ [Website](https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/Primary-Markets/primary-market-committees/public-sector-issuer-forum) (in English): Public Sector Issuer Forum - ICMA - International Capital Market Association: <https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/Primary-Markets/primary-market-committees/public-sector-issuer-forum>

COLLECTIVE ACTION CLAUSES

Sovereign bonds have specific characteristics and may include collective action clauses (CACs) aimed at making orderly restructuring possible if a qualified majority of creditors accept the State's proposal. CACs are also designed to reduce the power of holdouts, i.e. creditors who reject the restructuring proposal, thereby benefiting faster and more predictable crisis resolution.

In 2011, the euro area countries decided to include "double-limb" CACs with dual aggregation thresholds for creditors' votes in sovereign bonds with maturities of one year or more issued from 2013 onwards. Such clauses apply to treasury bonds (OATs) launched after 1 January 2013, which was when Decree 2012-1517 and the Order of 29 December 2012 on collective action clauses applying to government securities came into force. In the event of restructuring, bondholders vote OAT by OAT, and, when the proposed restructuring procedures are the same for several

OATs, a second vote by the holders of the OATs concerned is held. This is known as "double-limb" aggregation.

In 2018, following the finalisation of a new international standard at the initiative of the ICMA, which was promoted by the G20 and the IMF in 2014, the Eurogroup proposed that the euro area leaders should work towards introducing CACs with a single aggregation threshold for creditors' votes ("single-limb CACs") as part of the euro area's governance reform.

Consequently, this commitment was included in the 2019 draft of the revised European Stability Mechanism Treaty. As was the case in 2012, the Sub-Committee on EU Sovereign Debt Markets developed the new collective action clauses. In the event of restructuring, bond holders vote for all of the OATs concerned by similar restructuring procedures. This is therefore known as "single-limb" aggregation.

These CACs are slated to come into force once the new ESM Treaty is approved and implemented by all Member States. The new CACs will apply to all new euro area bonds with maturities of more than one year issued by euro area Member States. Bonds issued between 1 January 2013 and the entry into force of the future CACs will still be subject to the current system of double-limb CACs, which will also apply to future tap issues of these former bonds.

→ [Website on CACs: *Collective Action Clauses in the Euro area*](https://europa.eu/efc/efc-sub-committee-eu-sovereign-debt-markets/collective-action-clauses-euro-area_fr): https://europa.eu/efc/efc-sub-committee-eu-sovereign-debt-markets/collective-action-clauses-euro-area_fr

Cooperation with the European Commission



Since the end of 2020, the European Commission has become a major issuer of large volumes of debt in the euro area, starting with the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE). The Commission raised nearly €90bn with SURE between October 2020 and May 2021. This was followed by issuance for the European recovery plan NextGenerationEU (NGEU), for which it raised €189bn over the same period. The European Commission thus raised a total of €118bn in medium- and long-term debt in 2022. A similar amount

(€120bn announced) is expected to be issued in 2023. Total borrowing is expected to total €807bn by the end of 2026.

When it launched NGEU, the European Commission opted for a diversified financing model, with a broad range of maturities. Its issuance includes short-term securities and a green bond programme that accounts for 30% of the medium- and long-term debt issued. Its issuance model resembles that of sovereign issuers, with periodic securities auctions, the publication of its issuance schedule

and cooperation with a network of partner banks to place its debt with a wide range of European and international investors.

In this context, AFT continues holding discussions with the European Commission directly or with the EU sovereign debt markets committee (ESDM see page 20).

Annual **report**

Key figures 2022

€286.2^{bn}

**Gross issuance of medium
and long-term securities**



1.43%

**Weighted average yield
of medium- and long-term
fixed-rate securities**

**8 years
184 days**

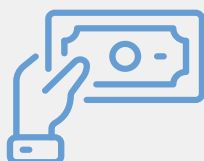
**Average residual maturity
of the debt at 31/12/2022**

€2,278^{bn}



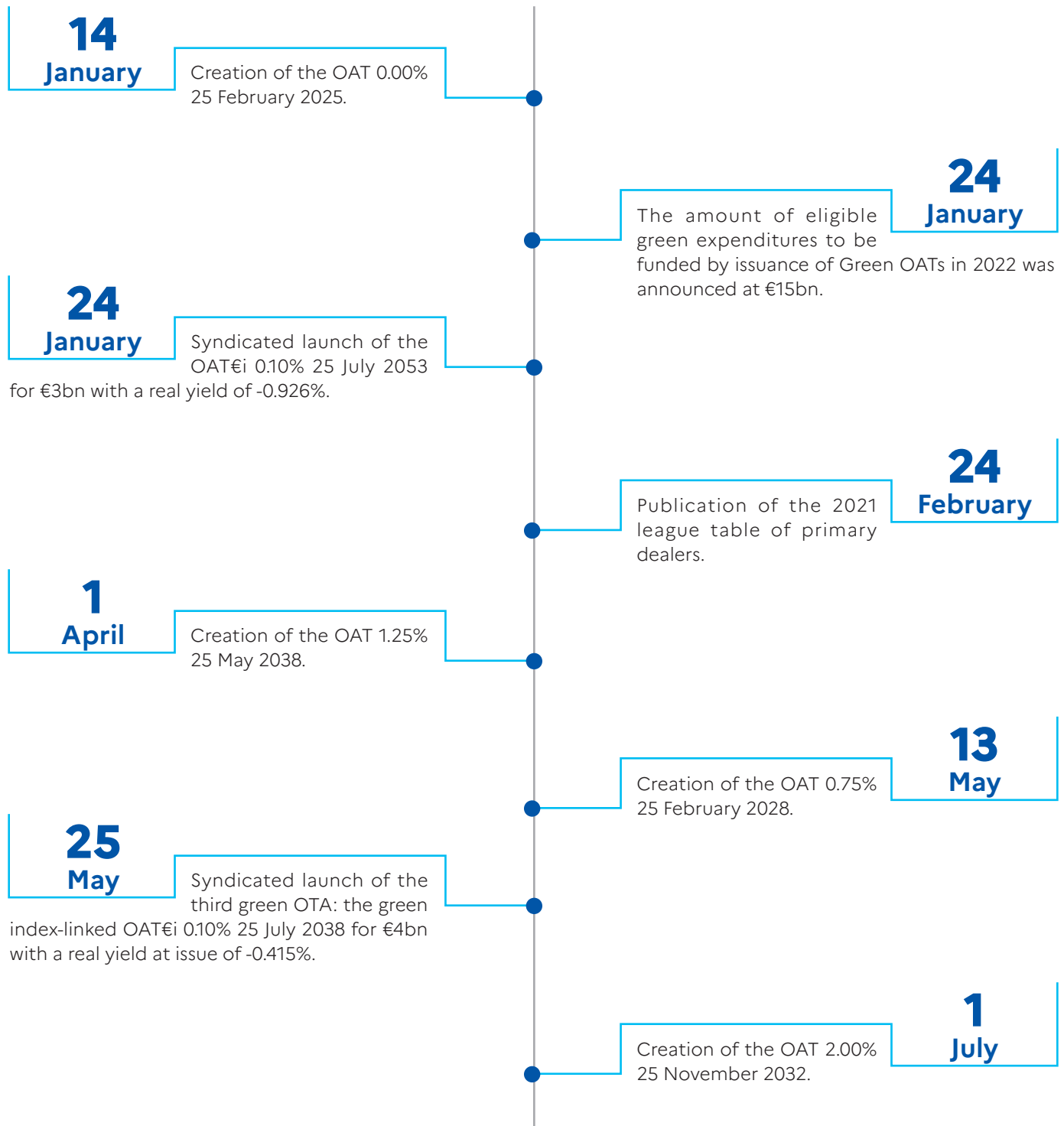
**Negotiable debt
at 31/12/2022**

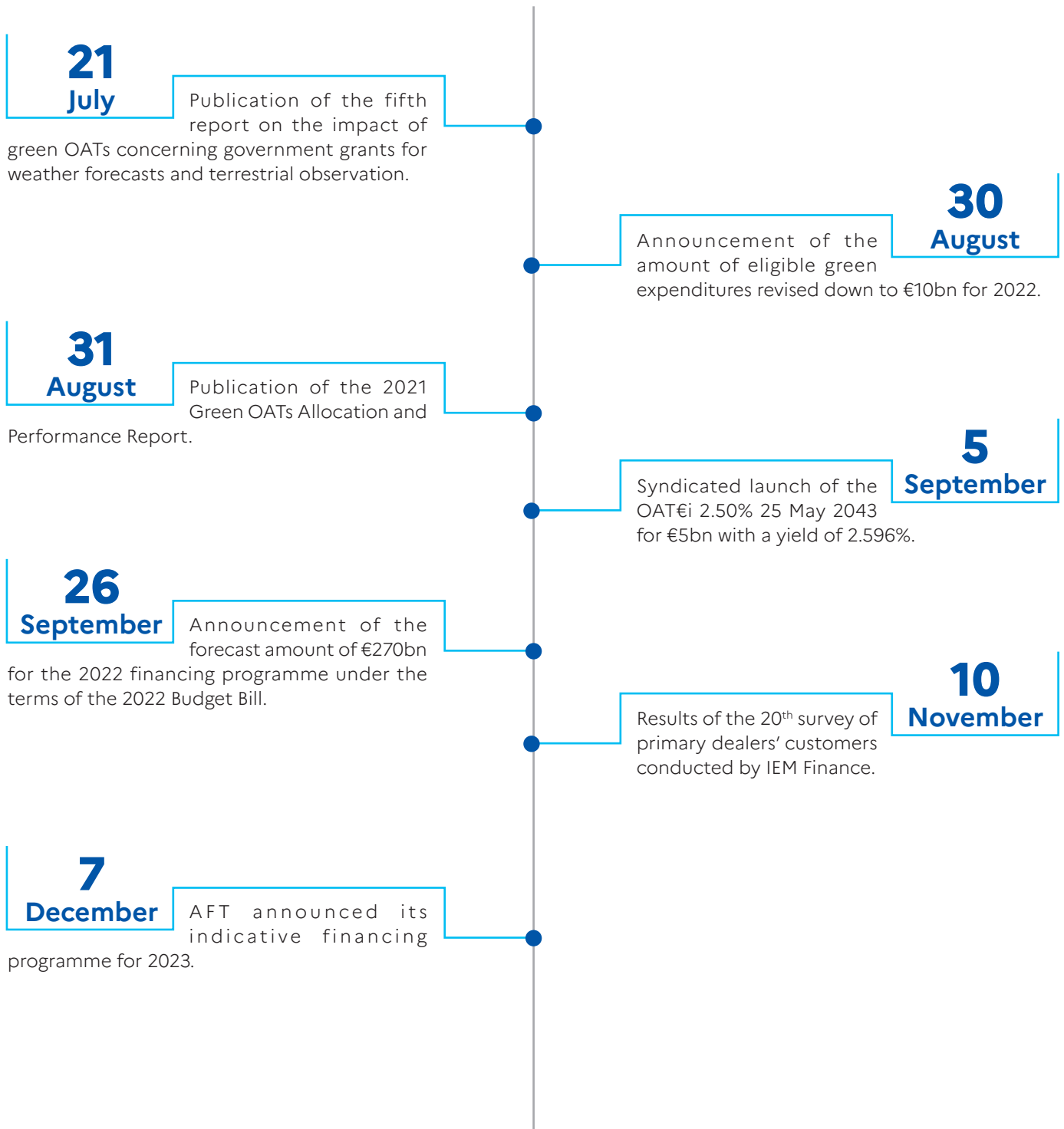
50.1%



**Non-residents' holdings
of negotiable
debt securities at 31/12/2022
at market value**

2022 highlights

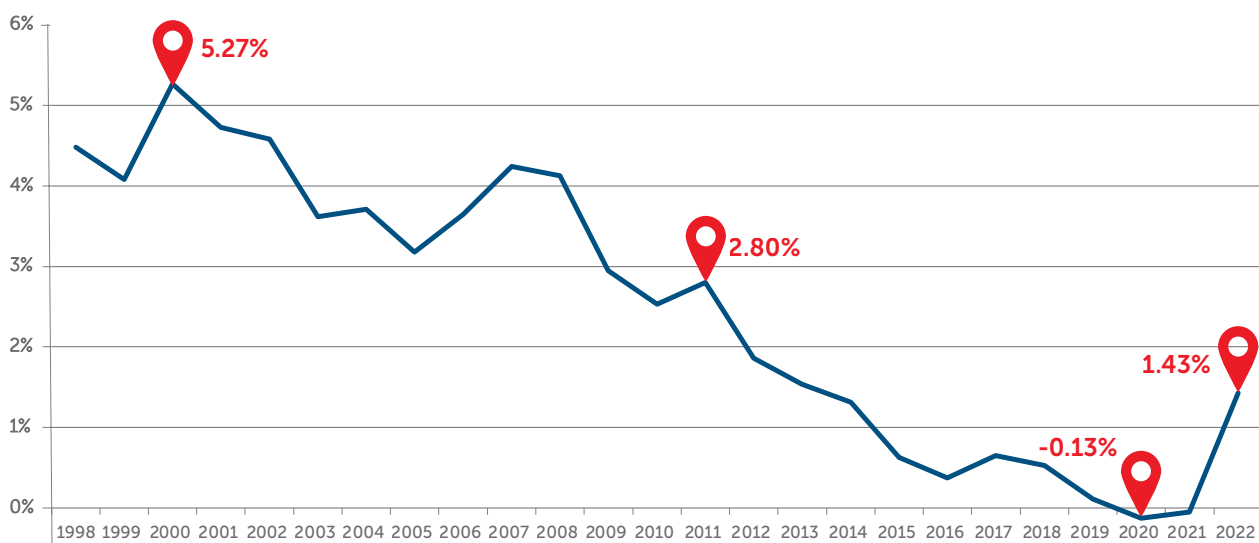




Yields

WEIGHTED AVERAGE YIELD ON MEDIUM- AND LONG-TERM DEBT ISSUES

YIELDS FROM 1998 TO 2022



Source: Agence France Trésor

The financing of the State's debt in 2022 was marked by rapid normalisation of monetary policy, which led to a rapid rise in interest rates.

The gross nominal value of medium- and long-term debt issuance in 2022 stood at €286.2bn, consisting of €260.9bn in fixed-rate bonds (OATs) and €25.4bn in index-linked bonds (OATis and OATéis).

The average yield on medium- and long-term debt issuance (excluding index-linked bonds) stood at 1.43% in 2022, compared to -0.05% in 2021 and -0.13% in 2020. The average of these average yields for the period from 1998 to 2008 was 4.15%, and 1.26% for the period from 2009 to 2020.

Economic and financial environment

In 2022 the French economy proved robust in the face of headwinds

RESILIENT GROWTH IN 2022 AGAINST A BACKDROP OF RUSSIA'S INVASION OF UKRAINE

While the process of post-pandemic recovery continued, the French economy was affected by another pandemic wave (the Omicron wave). One month later, while health restrictions affecting activity were being gradually lifted, the outbreak of war in Ukraine at the end of February 2022 triggered an upsurge in producer prices and retail prices, in a context of growing uncertainty regarding the length and impact of the war. **However, France's lesser energy dependence on Russia combined with measures swiftly taken by the Government to protect**

households' purchasing power and to control the costs of businesses helped the French economy get through this year of uncertainties fairly smoothly.

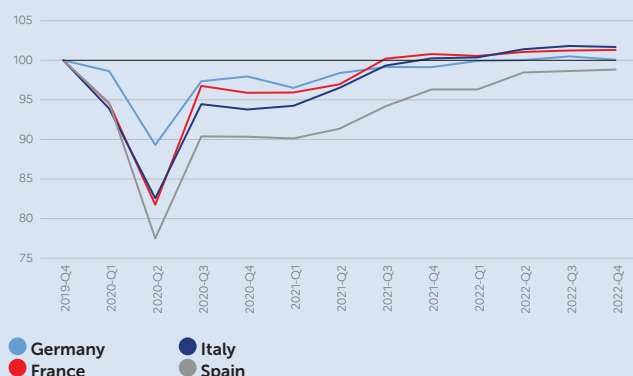
The resilient French economy achieved 2.6% growth in 2022. Growth was primarily driven by boosted domestic demand (2.7 ppt excluding stocks), which saw (i) the continuing momentum of investment, already observed in 2021, which topped its pre-pandemic level of +5.3% at the end of the year, (ii) steady household consumption

in spite of the shock of the war, justified among other things by efforts to save energy, the protection of households' purchasing power (which grew by 0.2% over 2022 as a whole), not forgetting a safety net of savings still higher than the average pre-pandemic level.

Charts 1 & 2: GROWTH IN FRANCE

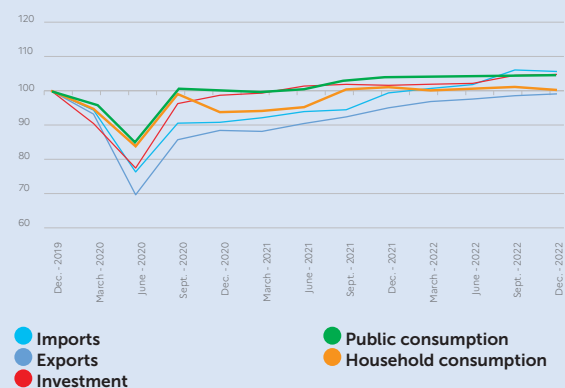
EURO AREA - REAL GDP GROWTH (G.T., AS %, Q4 2019 = 100)

Source: Eurostat



FRANCE - REAL GDP GROWTH AND COMPONENTS OF DEMAND, Q4 2019 = 100

Source: INSEE



THE FRENCH LABOUR MARKET SAW THE CONTINUED MOMENTUM OBSERVED IN 2021

This was sustained both by the recovery in economic activity and by beneficial effects of the *France Relance* plan. Private-sector employment was the main driver of job creations in 2022, which numbered 262,200 (excluding temporary workers) out of a net total of 337,100 net job creations.

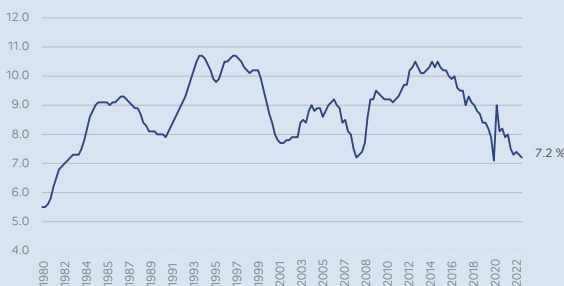
The overall unemployment rate fell to its lowest level since March 2008 (7.2% in the fourth quarter of 2022), in a context of sustained economic activity and further to the implementation of a number of measures, not least the overhaul of the apprenticeship system and the reform of the

unemployment benefits system. **Besides buoyant employment figures, the economically active population also progressed significantly.** The employment and activity rates of the 15-64 year-olds both reached an all-time high.

Charts 3 & 4: **EMPLOYMENT RATE AND APPRENTICESHIP IN FRANCE**

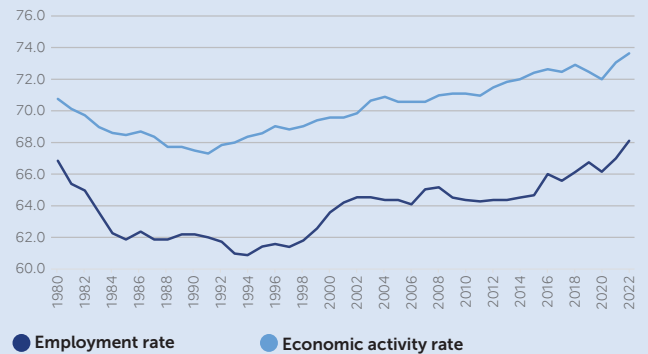
FRANCE - UNEMPLOYMENT RATE (ILO METHODOLOGY, AS A % OF THE ACTIVE POPULATION)

Source: INSEE



ECONOMIC ACTIVITY RATE AND EMPLOYMENT RATE AS A % BETWEEN 1980 AND 2022

Source: INSEE



THE BUSINESS CLIMATE WAS OVERSHADOWED BY UNCERTAINTY

Although the reopening of the economy was impeded by the rapid emergence of domestic and global bottlenecks, it was sustained by improved business confidence in 2021, before the first consequences of the war in Ukraine began to be felt during the course of 2022. As shown by the INSEE's business climate indicators, the morale of entrepreneurs in

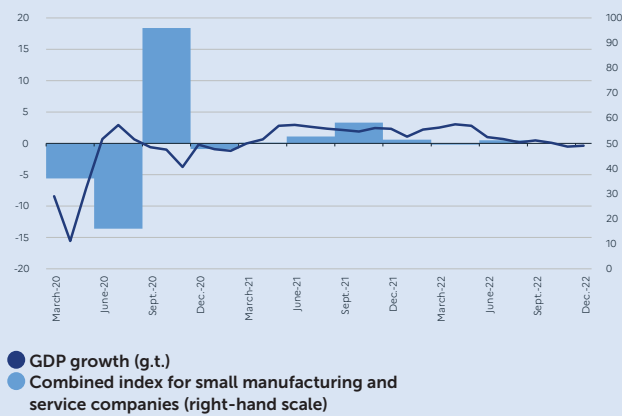
sectors where production depends the most on energy was plagued by uncertainties surrounding the geopolitical situation. Moreover, the proportion of manufacturing companies saying their production is hampered by supply difficulties grew steadily throughout 2022 (close to 40% of companies on average, against 30% one year earlier). This was compounded by recruitment

difficulties, already prevalent in 2021, which worsened on a labour market characterized by its momentum, reflecting the opinion of business leaders on changes in their workforces. However, the business climate evolved at levels relatively close to their long-term average over the year.

Charts 5 & 6:
BUSINESS CONFIDENCE AND RECRUITMENT DIFFICULTIES

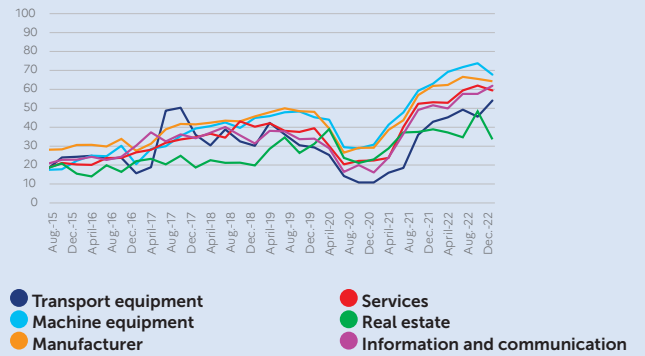
FRANCE: COMPOSITE PMI (MANUFACTURING AND SERVICES) AND REAL GDP GROWTH

Source: Bloomberg



BUSINESSES FACED WITH RECRUITMENT DIFFICULTIES (AS A % OF BUSINESSES)

Source: INSEE (2022 Q4)



CONSUMPTION BENEFITED FROM HOUSEHOLDS' PROTECTED PURCHASING POWER DURING THE YEAR

The worsening pandemic situation and home-working weighed on household consumption at the beginning of the year, more specifically in the accommodation and catering sectors. Although consumption picked up again in the services sector, the continuing rise in inflation affected spending on food and fuel, as well as vehicle purchases, which were further penalized by supply problems; while the levels of spending observed since the beginning of the pandemic remained steady by and large for capital goods. The household saving rate fell slightly in the first part of the year, given the drop in their purchasing power. On the other hand, thanks to the Government's support measures (see box), the recovery in purchasing power in the second half of the year

led to a rise in the household saving rate, which reached 16.9% at the end of the year, significantly higher than its pre-crisis level (15.0% in 2019). At the end of the year, energy

consumption (electricity and gas) fell due to warm temperatures and shifts in behaviour in response to price rises or more generally uncertainties about energy.



THE UPTURN IN FRENCH RETAIL PRICES BROUGHT ON BY THE WAR WAS ONE OF THE MOST MODERATE RISES IN EUROPE

This was primarily due to the country's lesser exposure to energy shocks thanks to its electricity mix, mainly relying on nuclear power, despite uncertainties

around electricity supplies and the Government's important support measures, in particular the freeze on regulated gas prices and the capping of electricity price rises for

households and small businesses.

According to INSEE estimates, the capped energy prices lowered consumption price inflation by approximately 3 percentage points between the second quarter of 2021 and the second quarter of 2022. In the autumn, inflation started spreading from the energy sector to other areas, including food, while the increasing price of services also accelerated.

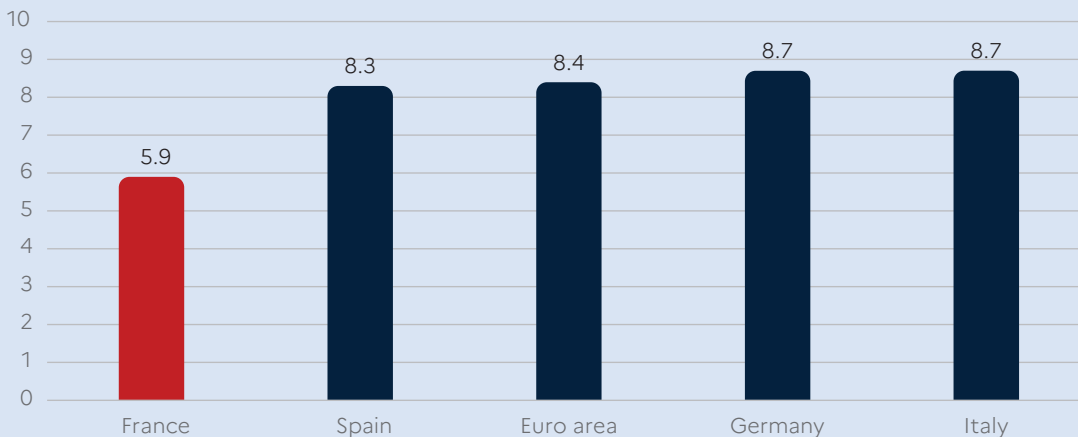
That notwithstanding, the inflation shock in France remained one of the most moderate ones among advanced economies and the lowest one in the euro area, not least thanks to the measures taken by the Government.



Chart 7:
CONSUMER PRICE INFLATION

RATE OF CONSUMER PRICE INFLATION IN 2022 (IPCH, G.A., AS A %)

Source: Eurostat



THE GOVERNMENT HAS TAKEN MEASURES TO LIMIT THE RISK OF ENERGY SUPPLY SHORTAGES

Faced with sharply rising prices since the end of 2021, energy prices in particular, the Government has adopted a series of significant measures aimed at protecting households and businesses against inflation. A number of successive measures were taken to ease the pressure on households and businesses, including a "bouclier tarifaire" (price cap) on electricity and gas, a "fuel discount at the petrol pump" for everyone, replaced by a "fuel allowance" aimed at the lowest-income households needing their vehicle for work, and an "exceptional energy cheque" paid from December 2022 to the 12 million lowest-income households. Special aid for energy-intensive companies was also rolled out, as was an electricity price amortisation mechanism to meet the cost of part of the electricity bills of microbusinesses, SMEs and local

authorities not qualifying for the "bouclier tarifaire". In addition, income transfer and support measures helped preserve the purchasing power of households: a temporary cap on rents, an early revaluation of various welfare benefits, abolition of the television licence fee, an exceptional "back to school" aid and an increase in the index point for civil servants.

Faced with pressure on the energy market, due in particular to the conflict in Ukraine, the Government took measures aimed at reducing total energy consumption by 10% within two years. The plan presented in October 2022 includes a series of measures aimed at public administrations and local authorities, businesses in all sectors of the economy and households. The risk of energy supply shortages during the winter of 2022 were averted

thanks to clement weather, but also thanks to lower consumption and a gradual restoring of the production potential of France's nuclear power plants.

Further to the measures set out in the energy sobriety plan, announced by the Government on 23 June, gas consumption dropped. It fell by 11.2% from 1 August 2022 to the end of December 2022 compared to the same period in 2018 and 2019, according to GRT's gas figures. Such sobriety had no significant effects on economic activity: France adapted quickly and effectively for the new energy deal. The resilience plan introduced by the Government in March 2022 also mitigated the economic shock concerning the rise in energy prices.



FRANCE 2030: A COMMITMENT OF €8.4BN AT THE END OF 2022, FOR 1,752 INNOVATIVE PROJECTS SUPPORTED NATIONWIDE

The investment “France 2030” plan announced in October 2021 aims to finance the recalibrating of the production system in order to boost growth in the medium term.

One year after its launch, France 2030 is being rolled out at a steady pace, with 82 calls for projects or expressions of interest, 48 of which are still open. A total of €8.4bn had already been committed by the end of 2022,

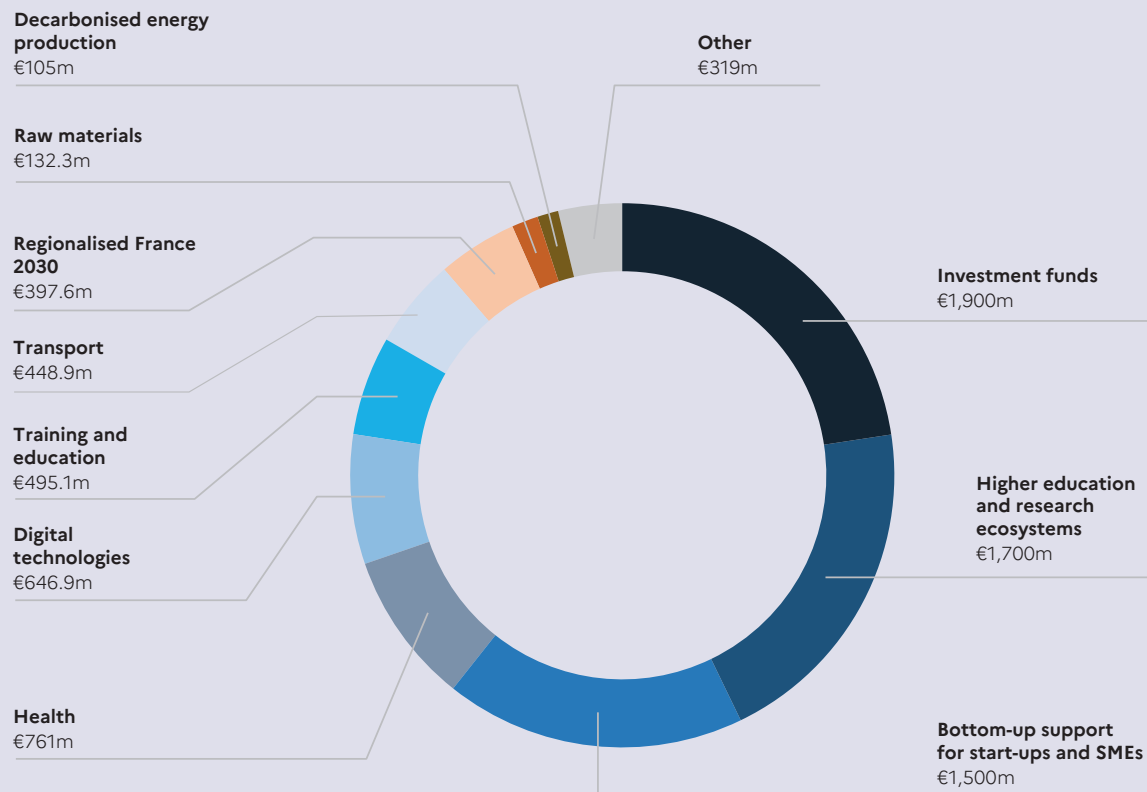
corresponding to 1,752 innovative projects supported nationwide, approximately 60% of which are carried by SMEs. France 2030 also has big ambitions for 2023, with a target of €20bn for supported projects by the end of the year, while maintaining the same level of requirements and selectivity. New targets were set to massively support the creation of technological start-

ups and capitalize on research, in particular the creation of 100 unicorns and 500 *deeptech* start-ups a year by 2030.

While potential growth has been preserved thanks to the various support mechanisms for households and businesses, in the medium term it should benefit from the gradual roll-out of these tools.

Chart 8: ALLOCATION OF FRANCE 2030 FUNDING

OVER €8.4BN INVESTED IN THE TRANSITION OF ALL SECTORS



Source: general Secretariat for investment, in charge of France 2030

MONETARY POLICY

The post-Covid economic recovery, combined with Russia's invasion of Ukraine and its impact on energy prices, resulted in a widespread rise in prices in 2022.



CENTRAL BANKS

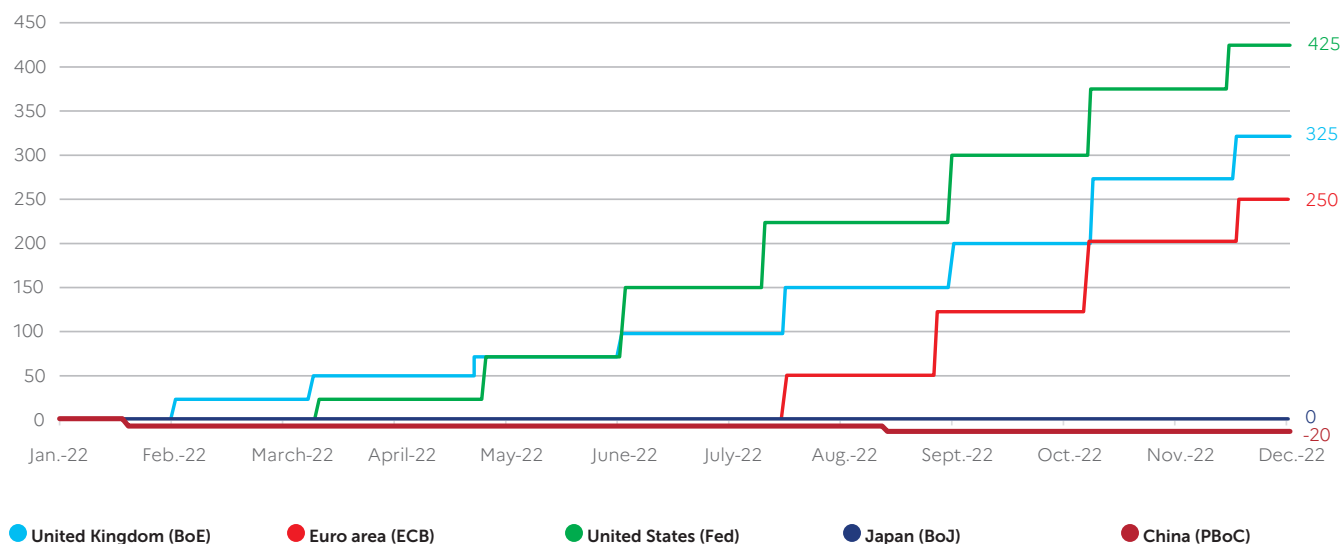
In the United States, the central bank (the Federal Reserve or Fed) manifested its intention to accelerate its process of monetary normalization at the beginning of 2022. The Fed introduced its first increase in bank rates since 2018, +25 basis points, as indicators of economic activity and employment continued to improve, also underlining the implications for the American economy of the Russian invasion

of Ukraine, liable to increase pressure on rising inflation. The pressure subsequently observed on prices led the Fed to raise rates even more in May. Although the Fed's rate increase in May 2022 was the highest in 22 years (+50 basis points), the rate increase in June 2022 was the highest increase on record since 1994 (+75 basis points). Progressively factoring in the risk of an overly aggressive pace of normalisation, not least on

economic activity, the central bank subsequently moderated its rate increases with a more balanced narrative, stating that it could slow down the pace of the increases, in exchange for a higher final rate at the end of the cycle. Since the beginning of 2022, the Fed's cumulative rate increases total 400 basis points, raising the top range of its main rate to 4.5%.

INCREASES IN BANK RATES (CUMULATIVE) BY CENTRAL BANKS SINCE THE BEGINNING OF 2022 (IN BASIS POINTS)

Source: Bloomberg



In the euro area, **the European Central Bank (ECB)** considered in December 2021 that progress in terms of economic recovery towards its medium-term inflation target allowed a gradual easing of the pace of its asset purchases, leading to an interruption of net asset purchases under its Pandemic Emergency Purchase Programme (PEPP) at the end of March 2022. In the absence of forward guidance, abandoned in principle by the main central banks in 2022, the bond markets saw a period of rather marked bullish volatility. Italian yields saw an even more marked episode of volatility, due to investors' perceived resurgence of the risks of

fragmentation in the euro area. After the extraordinary meeting of its Governing Council on 15 June 2022, the ECB responded preventively to this renewed perception of the risk of fragmentation of the euro area, inasmuch as it could impede the transmission of its monetary policy. To that end, it announced more flexibility in the management of its reinvestment programme for assets acquired under the PEPP (the pandemic emergency purchase programme), which ended at the end of March 2022. In parallel, it outlined the finalisation of a new "anti-fragmentation" instrument, announced earlier in June. In July 2022, the ECB introduced the first increase

in its policy rates in eleven years, an increase of 50 basis points, and simultaneously announced its new instrument to protect the transmission of monetary policy (Transmission Protection Instrument - TPI) in order to counter any unwarranted asymmetry of the effects of its monetary policy between different euro area countries. In September 2022, a second increase of +75 basis points was decided (raising the deposit facility rate, at zero until then, to 0.75%), a movement on a scale never observed since the creation of the euro in 1999, whereby its rates became positive again.

JAPAN'S MONETARY POLICY STRATEGY

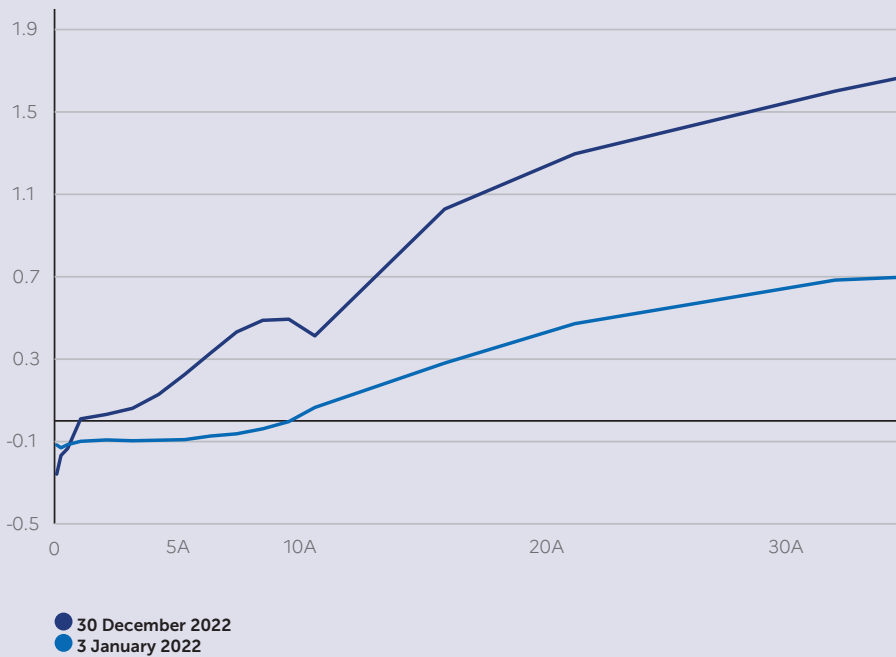
The status quo of rates prevailed for the central bank of Japan (BoJ) in 2022. In September 2016, the BoJ (under the tenure of H. Kuroda) instituted a *Yield Curve Control* policy to maintain near zero the long-term yields of Japanese 10-year treasury bonds. This policy aims to boost the economy by keeping interest rates low, as it targets long-term rates, by keeping the yield of sovereign bonds close to 0%.

Up to December 2022, the yield on Japanese 10-year treasury bonds had ranged from -0.25% to +0.25%. Japan's position, differing from that of the rest of the world, which resulted notably in a sharp depreciation of the yen, led the central bank to announce a yield fluctuation range of zero \pm 50 basis points for 10-year treasury bonds.

According to H. Kuroda, this adjustment aimed to control growing volatility on global financial markets and improve the functioning of the bond market in order to enhance the sustainability of monetary easing. Furthermore, the BoJ announced that this measure was not a rate rise, the adjusted *Yield Curve Control* not signalling an exit strategy. The announcement, made before the end of the BoJ governor's term in office (at the end of March 2023), resulted in a rise in the Japanese sovereign yield curve, more specifically on maturities of between 5 and 10 years.

JAPAN - SOVEREIGN YIELD CURVE (IN %)

Source: Bloomberg



The Bank of England (BoE) was forced to react to the inflationary trend observed across the channel, with a 25 bp rise in its policy rate in February 2022. The monetary policy committee's narrative subsequently shifted gradually towards a potential scenario of stagflation in the United Kingdom. In June, the combined effect of persistent pressure on prices and the depreciation of the pound sterling, a factor liable to further fuel inflation, led the BoE to react more vigorously, with increases of 50 basis points. In September 2022, whereas the BoE had already committed to start deleveraging central bank balance sheets, the budgetary measures announced by Chancellor Kwasi Kwarteng, and more particularly tax cuts totalling £45bn, triggered significant turbulence in the British sovereign debt market and on the foreign exchange market. For the sake of protecting financial stability, on 28 September the Bank of England (BoE) announced an emergency buyback facility for sovereign securities (*gilts*) with a long

maturity, a time-bound mechanism capped at €65bn (and a daily limit of 5 billion). The Bank of England also postponed to the end of October the *gilts* sale transactions required to meet the annual target (which had not been changed) of deleveraging its balance sheet assets and liabilities by €80bn.

The central bank of China (PBoC) endeavoured to fight persistent fragility in the real estate sector and the new waves of Covid-19. The central bank provided support by reducing required reserves and policy rates on several occasions during the year. Furthermore, the support and recovery measures introduced by the government helped mitigate weaknesses observed in the Chinese economy (more particularly regarding the 5.5% growth target set by the political authorities). In April 2022, the PBoC injected just over ¥500bn (\$70bn) of liquidity into capital markets by reducing by 25 basis points the banks' required reserves rate. Furthermore, China

was confronted with a significant episode of volatility on its currency, the yuan, against a backdrop of uncertainties surrounding the actual impact of the real estate sector's collapse on the economy, leading certain market participants to consider that China's economic policy may not be aggressive enough. In August 2022, the People's Bank of China (PBoC) lowered rates on its one and five-year facilities with a view to restoring confidence. In parallel, a support plan totalling ¥200bn (\$30bn) was announced by the Chinese ministries for housing and finance, to guarantee completion of overdue residential construction sites. China intervened directly against the depreciation of the yuan during the summer by raising its daily *fixing* of the yuan/dollar exchange rate, while continuing to reduce Chinese banks' required reserves rate for their foreign currency commitments, thereby releasing \$20bn of additional liquidities.



Financial markets

1 / FINANCIAL MARKETS – RATES

In reaction to monetary policy decisions and in the absence of forward guidance from the main central banks, the bond markets saw a fairly marked period of bullish volatility. From March to June 2022, the French nominal sovereign 10-year yield increased by 156 basis points (1.56 percentage points), and its German equivalent saw a relatively similar rise of 142 basis points (1.42 percentage points). Furthermore, the Italian yield saw an even more marked episode of volatility, due to investors' perceived resurgence of the risk of fragmentation in the euro area: the spread between Italian and German yields reached 241 basis points (2.41 percentage points) in mid-June 2022, on a par with the spread observed at the height of the pandemic crisis in March 2020.

After the extraordinary meeting of its Governing Council on 15 June 2022, the ECB outlined the finalisation of a new "anti-fragmentation" instrument. The announcement led to a widespread retreat of bond yields in the euro area, compounded by a risk aversion movement attributable to the geopolitical context and the consequences of gas supply shortages in Europe on the region's economic activity. After peaking on the eve of announcements following the extraordinary meeting of the ECB's Governing Council, and up to mid-July, the French, German, Spanish and Italian 10-year yields saw a downward trend, respectively -44 bp, -44 bp, -45 bp and -28 bp.

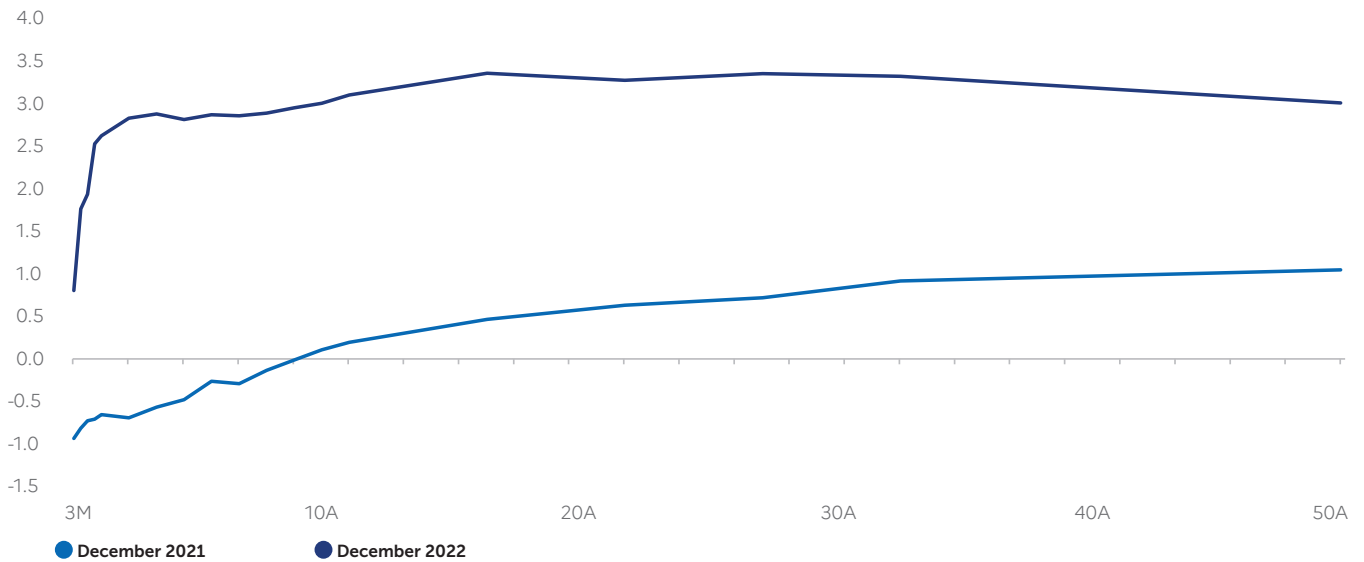
Further to new guidelines on the ECB's monetary policy, European 10-year yields again trended upwards reaching 2.55% in Germany, 3.10% in France, 3.55% in Spain and 4.66% in Italy at the end of the year on 30 December 2022, in a context of low market liquidity that exacerbated rates. The spreads against Germany then reached 55 bp (0.55 percentage points) for France, 101 bp (1.01 percentage point) for Spain and 211 bp (2.11 percentage points) for Italy. In the United States, the trend is similar to that observed in Europe, the 10-year yield rising to 3.87%.

Given the risk of persistent expectations of higher inflation, which would entail a lasting uncoupling from the 2% target, the central banks announced that they intended to continue normalising monetary policy. With a view to fulfilling its twofold commitment to a maximum employment rate and 2% inflation in the long term, the Federal Reserve stated that plans for continuing increases in the target range of policy rates would be appropriate for achieving a sufficiently restrictive bias in monetary policy, with a policy rate in the region of 5%, to bring inflation down to 2% in the long term.



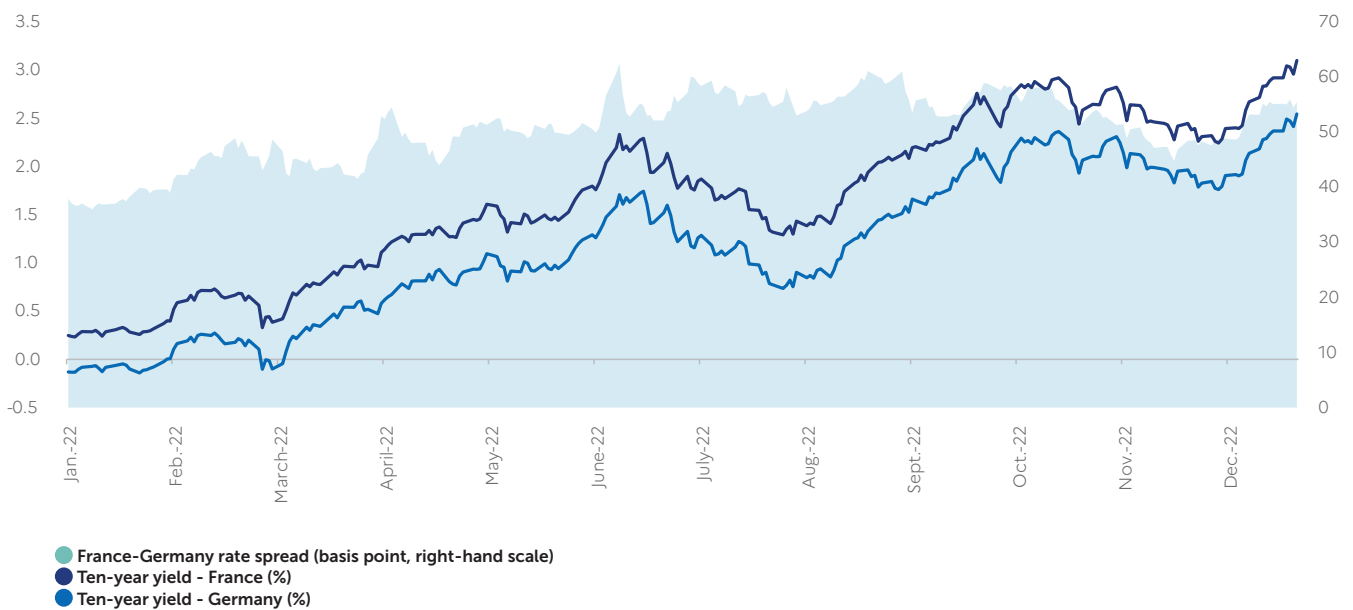
FRANCE: SOVEREIGN YIELDS CURVE

Source: Bloomberg



10-YEAR SOVEREIGN YIELDS IN FRANCE AND GERMANY

Source: Bloomberg



2 / FINANCIAL MARKETS – EQUITIES

Stock market indices around the world were undermined from the beginning of the year by investors' growing conviction that the era of low inflation was over and that global monetary policy should be tightened up at a faster pace. Russia's invasion of Ukraine in February 2022 sparked off a movement of risk aversion and volatility in this market segment, nonetheless on a lesser scale than during the Covid-19 crisis. Differences in the direct exposure to Russia were observed, with European equity indices underperforming in comparison to American and Asian indices.

Furthermore, trends in energy prices, which registered new peaks not seen in years, heightened the market's sentiment that the risks of inflation were increasing and would contribute to a significant reassessment by the markets of inflation prospects in the euro area. In March, due to the war and the health situation in China, prospective indicators began indicating a slowdown in global growth, leading the market to anticipate a less

vigorous reaction from central banks. Unlike what was seen in the bonds segment, volatility was less marked in equities. Analysts issued only limited downward forecasts of long-term profits of businesses in the euro area, while published results by and large remained at a high level.

In parallel, American equities, more specifically in the technological sector, were significantly undermined by a revaluation of effective and expected policy rates. In the absence of forward guidance from the central banks, equities were very sensitive to macroeconomic data streams and their implications for the reaction of the monetary authorities. As rising inflation data continued to take everyone by surprise and the American labour market continued to show signs of tension, the scale of necessary monetary adjustment and the pace thereof were at the centre of investors' concerns, and uncertainty as to the level of the neutral interest rate and the need to raise policy rates above the neutral interest rate.

From autumn 2022, fears of the risk of recession in the United States based on real-estate and industrial data gave rise to a new risk aversion episode: although the central banks gradually included the risk of excessive normalization in their narrative, they remained attached to maintaining price stability and the risk of uncoupling expectations of higher inflation.

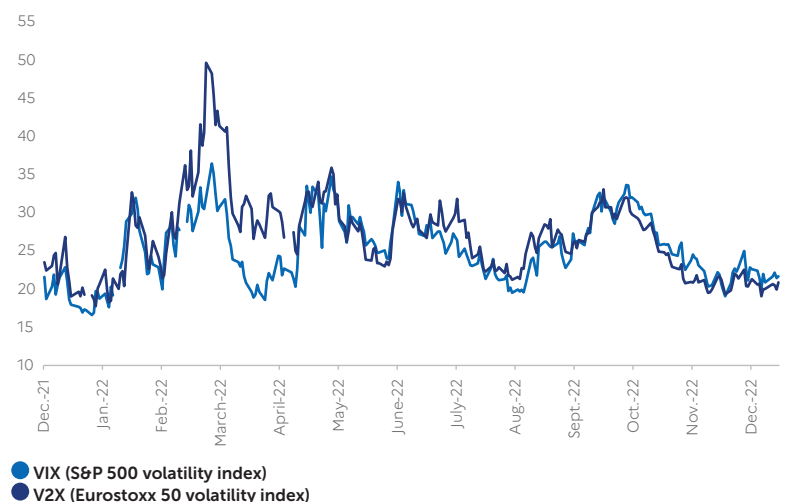
In total, stock market performance at the end of 2022 was negative both in Europe (-11.5% for the CAC 40, -13.8% for the DAX and -13.1% for the Eurostoxx 50) and in the United States (-19.9% for the S&P 500 and -33.0% for the Nasdaq). In China, the Shanghai index registered an annual fall of -15.0%, -15.1% for the Hong Kong index.

STOCK MARKET INDICES AROUND THE WORLD AND ANNUAL PERFORMANCE IN 2022

Source: Bloomberg

CAC 40	-11.5%
DAX	-13.8%
FTSE 100	-0.7%
FTSE MIB (Milan)	-15.2%
IBEX 35 (Madrid)	-6.4%
Eurostoxx 50	-13.1%
Euro area banks	-8.3%
Nikkei	-10.9%
Shanghai	-15.0%
Hong-Kong	-15.1%
Dow Jones	-9.9%
S&P 500	-19.9%
Nasdaq	-33.0%

EQUITIES MARKET VOLATILITY INDICES



3 / FINANCIAL MARKETS – FOREIGN EXCHANGE

The outbreak of war in Ukraine and uncertainties at the beginning of the year as to its scale and length led investors to reduce their exposure to the euro. The community of economists and investors, having initially assumed a scenario whereby European gas supply difficulties would be particularly dire, exacerbated sales pressure on the euro. In parallel, the normalisation of American monetary policy, together with announcements that many rate increases would still be needed, supported the American dollar. At the beginning of summer 2022, the risk of fragmentation in the euro area that had led the ECB to announce an anti-fragmentation mechanism in June put more downward pressure on the single currency, before a reversal of the trend from July 2022, when the ECB implemented the first increase in its policy rates (50 basis points). However, the Eurodollar fell by more than 5% over 2022 as a whole. In Japan, the gap in monetary policy between

the United States (restrictive) and Japan (accommodating) led to a depreciation of the yen similar to the one seen in 2013: -12.2% against the American dollar over 2022 as a whole.

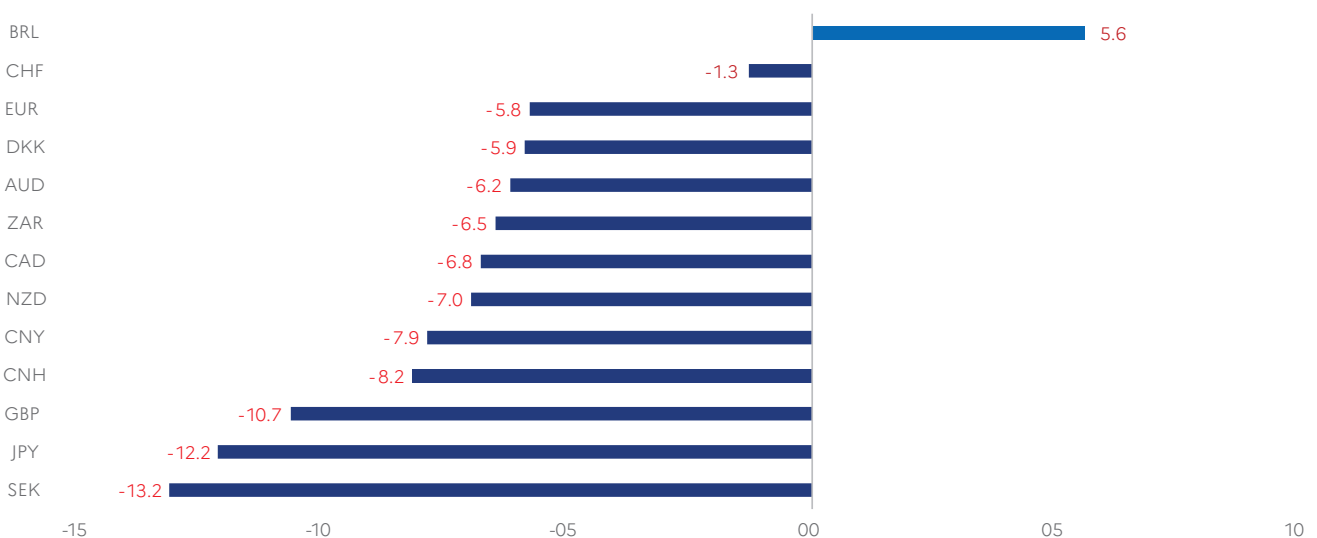
In Asia, the yuan/dollar exchange rate was highly volatile, as the health situation worsened in China, the strict lockdown measures having raised significant risks for economic prospects. Furthermore, the poor health of the Chinese real estate market contributed to downward volatility on exchange rates. The yuan saw an episode of continuous depreciation, leading the Chinese authorities to make more and more verbal and direct interventions with a view to supporting equity markets and putting a brake on the depreciation of the currency. From May 2022, the Chinese central bank (PBoC) announced measures aimed at improving the sentiment in the real-estate market, which led to a

steady upturn of the yuan. However, in spite of proactive policies, fears of a more pronounced economic downturn in China prevailed from the standpoint of investors, which resulted in a resumption of the depreciation of the yuan. At the end of the year, the i) renewal of Xi Jinping's term of office at the head of the Chinese communist party together with ii) encouraging news and rumours regarding health steadied the Chinese currency.

In total, the dollar strengthened against the main currencies over 2022 as a whole, +12.2% against the Japanese currency, +5.8% against the euro and +10.7% against the pound sterling.

EXCHANGE RATES OF THE MAIN CURRENCIES AGAINST THE AMERICAN DOLLAR IN 2022 (AS A %)

Source: Bloomberg



4 / FINANCIAL MARKETS – COMMODITIES

The beginning of 2022 saw the prices of commodities maintained by the post-Covid recovery. Precious metals, gold in particular, benefited from low real rates. In February 2022, Russia's invasion of 'Ukraine led to a sudden upsurge in commodity prices: oil prices fluctuated between \$120 and \$130/bl and briefly topped \$130, while the benchmark gas price in Europe came close to €250/MWh. The tensions caused by the war raised fears of a sudden loss of energy supplies from Russia, one of the leading producers and exporters of gas and oil.

In parallel, the change in the reaction of central bankers in the face of a much higher rate of inflation than their price stability target led to a correction of the price of commodities, in particular the price of gold, which again fell

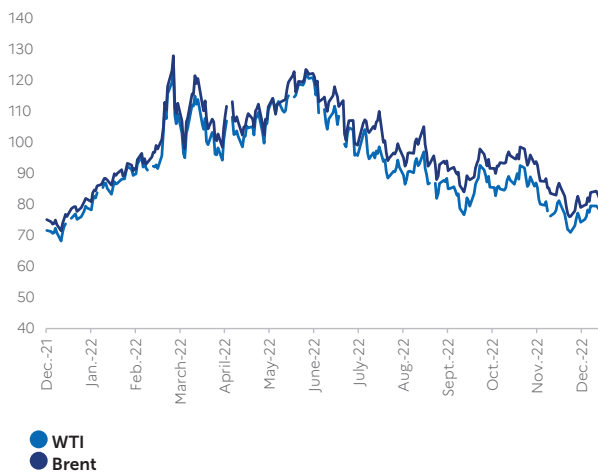
to 1,630 dollars in November 2022, against a backdrop of uncertainty regarding the impact of these decisions on the global economic activity cycle and on the demand for commodities. Furthermore, measures taken by national and European authorities with a view to reducing their dependence on Russian gas, the release of strategic stocks to counteract inflation and OPEC's accelerated oil production helped to ease prices. Finally, a more sombre economic outlook in China, the world's biggest oil importer, contributed to the widespread easing of commodity prices.

As for the gas market, after a retreat of prices due to mitigation measures introduced by European governments, including increasing supplies by sea, Russia's decision to gradually stop virtually all gas ports to

Europe again pushed gas prices up to a record €340/MWh in autumn 2022. Since then, measures introduced to replenish stocks of gas and diversify sources of supply (in particular liquefied natural gas, LNG) helped normalise prices, which are now at their levels prior to the Russian invasion. Lastly, relatively clement temperatures, which resulted in reduced consumption of energy, contributed to this normalisation.

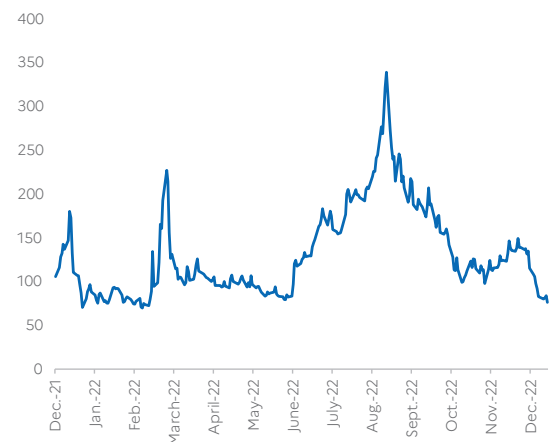
BRENT AND WTI PRICES (IN DOLLARS PER BARREL)

Source: Bloomberg



GAS PRICES IN EUROPE (IN €/ MWH)

Source: Bloomberg



RATING AGENCIES

The succession of health and energy crises and their economic and budgetary consequences have exposed the ratings of European states, including France, to a higher risk of downgrade by the leading agencies. The three main rating agencies have indeed considered that the reconfiguration of global economic prospects, in a context of high debt against a backdrop of an energy crisis due to the war in Ukraine, prompts them to reconsider the ratings of European sovereign issuers. Since January 2021, within the framework of

the European Union's collective response to the pandemic crisis, they had only raised outlooks and/or ratings (Belgium, Spain, Greece, Ireland, Italy and Portugal). This trend was reversed in the summer of 2022: the outlooks for Italy (by S&P and Moody's, before the legislative elections), Austria (by S&P and Fitch) and the United Kingdom (by all three agencies) were in turn lowered.

2022 was marked by a stable rating level for France by Fitch, S&P and Moody's (AA for Fitch

and S&P, Aa2 for Moody's). The outlook associated with the French sovereign rating by Fitch, Moody's and DBRS remained stable, whereas S&P downgraded it in December 2022, by reason of a revision of its growth forecasts.

The leading agencies nonetheless underscored the strengths of the French economy: its diversification, institutional and financial soundness, the resilience of the labour market, and effective measures to fight inflation.



RATING TABLE AS AT 31 DECEMBER 2022¹

	LONG-TERM	SHORT-TERM	OUTLOOK
Moody's	Aa2	/	Stable
Standard & Poor's	AA	A-1+	Negative
Fitch	AA	F1+	Negative
DBRS	AA-high	R-1 (high)	Stable

1. France's sovereign ratings from other agencies were as follows: Creditreform: AA stable outlook; JCRA: AAA stable outlook; KBRA: AA stable outlook; R&J: AAA stable outlook; Scope: AA stable outlook

FRANCE'S SOVEREIGN RATING UPDATES FOR 2023

AGENCY	DATE
Moody's	21 April 2023 – 20 October 2023
Standard & Poor's	2 June 2023 – 1 December 2023
Fitch	28 April 2023 – 27 October 2023
DBRS	24 March 2023 – 22 September 2023



The State's cash management strategy

PERFORMANCE

AFT ensured the financial continuity of the French State, maintaining the day-to-day balance of the State's single account in credit, ensuring proper execution of transactions on the account and producing cash and debt forecasts.

MANAGING THE STATE'S CASH HOLDINGS IS A CORE PART OF AFT'S MISSION

The State's cash holdings are centralised in a single account with the *Banque de France*. The single account records all financial transactions executed by government accountants on roughly 3,000 transaction accounts. It aggregates transactions under the State budget, the transactions of Treasury correspondents, namely other entities that deposit their funds in the Treasury Account (primarily local authorities and government-funded institutions), and AFT's transactions (redemption of bonds at maturity, interest payments, investments, margin calls, etc.).

Whereas the balance of the State's account in the books of *Banque de France* must be in credit every evening, this obligation must be met while also preserving taxpayers' financial interests. Cash

left on deposit in the State's single account with the *Banque de France* bears interest at contractual rates. Up to mid-2014, these rates were essentially lower than the State's investment rates on the interbank market, the benchmark criterion of which was the Eonia¹ rate, and it was in the interests of taxpayers to try and limit available funds on the single account with the *Banque de France* by placing as much cash as possible on the interbank market. Interest rate trends and the abundance of liquidity on the money market since mid-2014 have often meant that more interest is earned on the single account with the *Banque de France* than the interest offered on the Interbank market (even though it was at times negative), as a result of which there was much more cash on the said account at the day's end.

In 2022, interest on the *Banque de France* account was negative for most of the year. When the €STR² became positive again in September, and in order to safeguard transmission of monetary policy, a 0% ceiling on interest paid on the State's accounts was temporarily suspended by an ECB decision in September 2022. The *Banque de France* account thus earned positive interest at the end of 2022, at the €STR rate.

The average daily volume of cash flowing in and out of the account came to €19.7bn in 2022.

¹ Former day-to-day interbank market rate

² Current day-to-day interbank market rate

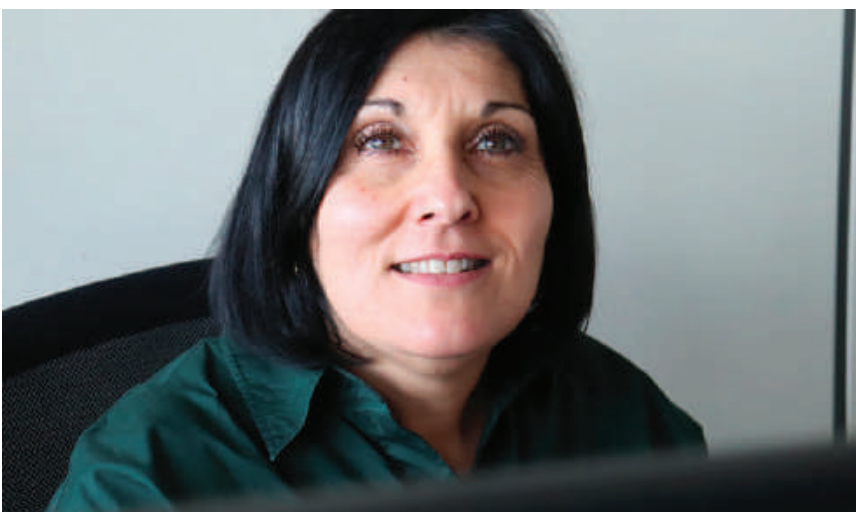
AFT prepared the resumption of proactive cash management against a backdrop of rising interest rates.

AFT's management of cash holdings relies on daily forecasts to assess the amounts needed to cover forthcoming transactions. Temporary cash surpluses may be invested in interbank market transactions, with due consideration of counterparty risk. These transactions take the form of unsecured deposits (with no guarantee) or repurchase agreements involving government securities (guaranteed loans backed by collateral security). The daily invested amount averaged approximately €6.7bn in 2022. With interbank rates back in positive territory and the prospect an end to yield, temporary, on the Treasury's account, AFT prepared itself in 2022 for a significant increase in these transactions in the years to come.

AFT also has a reserve of securities that are usable as collateral for accessing cash on the repo market. This responsive and secure facility enjoys a deep market. It supplements the other short-term cash management instruments, which include Treasury bills and cash lines of credit granted by banks.

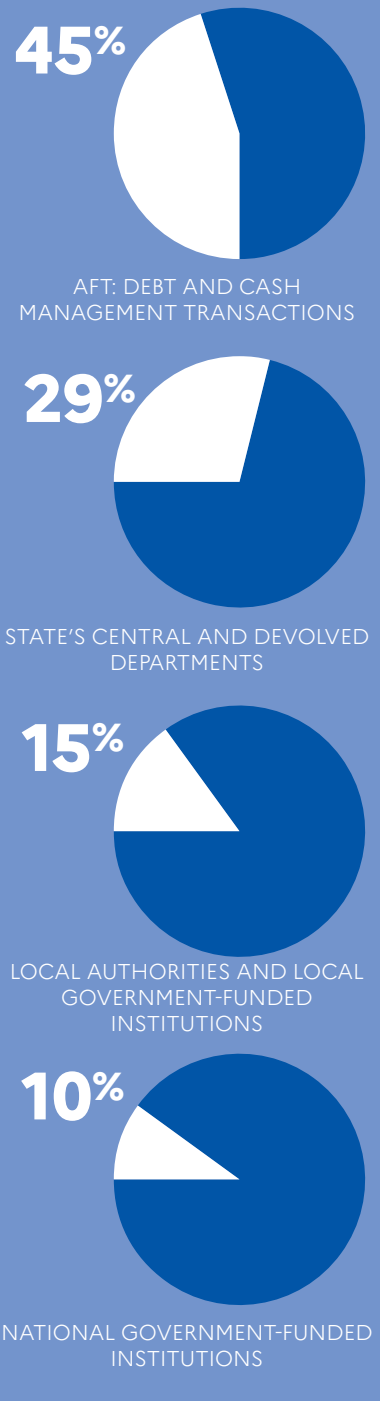
Treasury correspondents' deposits continue to contribute to financing resources.

Entities that are required¹ or authorised to deposit their cash holdings on the Treasury Account are called "Treasury correspondents". Transactions made on Treasury correspondents' accounts have a direct impact on the Treasury Account. AFT oversees daily reporting of advance notifications of cash transactions from Treasury correspondents, which enables it to determine the settlement dates and amounts of transaction flows posted to the Treasury Account as accurately as possible. More specifically, local authorities and government-funded institutions are required to notify AFT of any financial transaction amounting to more than €1m by 4 p.m. on the previous day. In 2022, the percentage of such transactions notified in advance stood at 99.1% for local authorities and government-funded institutions. These results are better than the performance target set out in the Budget Act.



TREASURY ACCOUNT CREDITS AND DEBITS IN VOLUME AFFECTING THE TREASURY ACCOUNT IN 2022

Source: Agence France Trésor



¹ Under the terms of the decree on government budget and accounting management of 7 November 2012, most public sector entities are required to deposit their funds with the Treasury. This requirement applies in particular to local authorities, government-funded institutions and hospitals. The decree came into force on 30 June 2014.

Financing requirements in the face of inflation

AFT MANAGED THE STATE'S CASH HOLDINGS AND EXECUTED A FINANCING PROGRAMME IN A CONTEXT OF HIGH VOLATILITY, HIGH INFLATION AND ACCELERATED NORMALISATION OF MONETARY POLICY.

THE MEDIUM- AND LONG-TERM FINANCING PROGRAMME REMAINED UNCHANGED DESPITE CHANGES IN DEFICIT FORECASTS

The 2022 Initial Budget Act identified borrowing requirements of €297.6bn (compared to €285.2bn in the 2021 Budget Review Act). For any given year, this requirement mainly covers the deficit to be financed and the redemption amount for maturing securities. In August 2022, the measures supporting purchasing power in the face of price rises in the Supplementary Budget Act I (LFR 1) increased the projected deficit.

The rise in expenditure supporting the economy thus increased the financing requirement to €311.0bn in LFR 1. It was then revised downwards to €304.4bn in the second Supplementary Budget Act (December 2022), given better-than-expected collection of the State's receipts. In the outturn, collected tax revenue amounted to €323bn, against €288bn as forecast in the Initial Budget Act.

At these various stages, the medium- and long-term financing programme (MLT, securities maturing in over 2 years) was maintained at €260bn thanks to the leeway offered by Treasury cash holdings at the

Banque de France, raised during the pandemic (2020/2021) and not entirely used. Fixed-rate Treasury bonds (BTFs) outstanding, which should have remained stable, were finally reduced by €6.9bn (€148.5bn outstanding in outturn), due to a smaller deficit outturn than expected, thanks to brisk tax revenue.

The sharp rise in inflation in Europe in 2022 led the European Central Bank to initiate rapid normalisation of its monetary policy (by raising bank rates and gradually ending quantitative easing). In this context, bond market yields trended upward, with periods of high volatility. Yields at issue increased to 1.43% in 2022 after -0.05% in 2021 for non-indexed securities with maturities over one year. Short-term interest rates rose to 0.19% in 2022 after -0.67% in 2021.



RISING INFLATION INCREASES THE DEBT SERVICE, BUT ITS IMPACT ON CASH REQUIREMENTS IS GRADUAL

Index-linked bonds have a redemption value that depends on benchmark inflation observed between issue and redemption. The provision for indexing charges records the index-linking supplements paid to the security's bearer over time (recognised as "index-linking supplements paid" in the State's cash flow statement): it is a budgetary expense that increases the deficit to be financed but does not generate an immediate

cash requirement. Only securities maturing in a given year generate a cash disbursement. In 2022, the index-linking supplement paid at maturity concerned OAT€i 1.1% 25 July 2022 for a total of €2.3bn. For the other securities, the increase in the provision for indexing charges is a transaction having no impact on the cash position, cancelled in the State's cash flow statement on the "other cash requirements" line, for a total of €15.5bn in 2022.

Overall, debt servicing costs stood at €51.5bn in 2022, after €38.5bn (in cash basis accounting).

AMORTISATION OF THE COVID DEBT

The additional debt incurred in the Covid crisis, estimated at €165bn, is scheduled to be amortised between 2022 and 2042. Redemption of this debt is managed through the Public Debt Fund (CDP), which accordingly contributes to State borrowing. The CDP's allocation is calculated every year on the basis of the estimated net surplus tax revenue between the base year and 2020, and adjusted by the year's expected growth. In 2022, it totalled €1.9bn.

STATE CASH FLOWS 2022

<i>IN €BN</i>	LFI 2022 (INITIAL BUDGET ACT)	LFR 1 (16 AUGUST 2022)	LFR 2 (1 DECEMBER 2022)	OUTTURN 2022
Borrowing requirements				
Redemption of medium- and long-term debt	144.4	145.8	145.8	145.7
Of which medium- and long-term debt redemption (par value)	140.8	140.8	140.8	140.8
Of which index-linking supplements paid at maturity' (index-linked securities)	3.6	5.0	5.0	5.0
SNCF Réseau – redemptions	3.0	3.0	3.0	3.0
Deficit to be financed	153.8	178.4	171.0	151.4
Other cash requirements	-3.6	-15.4	-15.4	-20.2
TOTAL	297.6	311.8	304.4	280.0
Source of funds				
Issuance of medium- and long-term debt, net of buybacks	260.0	260.0	260.0	260.0
Funds allocated to the Public Debt Fund to reduce debt	1.9	1.9	1.9	1.9
Net change in outstanding short-term government securities	0.0	0.0	0.0	-6.9
Change in correspondents' deposits	0.0	0.0	3.0	1.1
Change in cash available in the Treasury's account	32.2	52.2	50.5	35.2
Other cash sources	3.5	-2.3	-11.0	-11.3
TOTAL	297.6	311.8	304.4	280.0

The State's debt management strategy

PRINCIPLES

AFT is tasked with raising sufficient funds on the markets to finance the State under optimum conditions of security while keeping the debt service cost for taxpayers down to a minimum. AFT bases its financing policy on the consistency and transparency of its issuance and announces the issuance schedule on a yearly basis. It regularly taps every segment of France's debt curve and ensures that the market is as deep and liquid as possible to keep issuance costs to a minimum.

NET MEDIUM- AND LONG-TERM ISSUES CAME TO €260BN IN 2022

This amount was the result of:

- €286.2bn of medium- and long-term borrowing, including €25.4bn of securities indexed on French inflation (OAT_i and OAT_{€i}) and in the euro area (OAT_{€i}),
- less €26.2bn in buybacks of securities set to be redeemed in 2023.

In 2022, average yields at issue were rising in the wake of the ECB's monetary tightening decisions, in a context marked by returning inflation: 1.43% (after 0.05% in 2021) on average for medium- and long-term issues excluding index-linked securities (see table on page 49).

The consistency and transparency of auctions remained central to the State's financing strategy in fixed-income markets, where volatility was exacerbated by much faster monetary tightening than expected at the end of 2021 in all the major currency areas.

AFT published its indicative financing programme on 8 December 2021, setting the main guidelines for 2022. In accordance with the auction schedule:

- Long-term OATs, meaning bonds with a residual maturity of more than eight and a half years, were issued on the first Thursday of each month,
- Medium-term OATs, with a residual maturity of between two and eight and a half years, and index-linked bonds were issued on the third Thursday of the month.
- Except in December, when only one auction was held.



FINANCING CONDITIONS

Figures as at 31 December 2022

Source: Agence France Trésor, as at 31 December 2022

WEIGHTED AVERAGE YIELDS		1998-2008 AVERAGE	AVERAGE 2009-2019	2020	2021	2022
SHORT-TERM	All BTFs	3.15%	-0.03%	-0.56%	-0.67%	0.19%
	Of which 3-month BTFs	3.10%	-0.06%	-0.57%	-0.68%	-0.02%
MEDIUM AND LONG TERM	Fixed-rate issues with maturities of more than one year (excluding index-linked securities)	4.15%	1.39%	-0.13%	-0.05%	1.43%
	of which 10-year fixed-rate issues (excluding index-linked securities)	4.44%	1.85%	-0.12%	0.00%	1.50%
TOTAL ISSUES		3.73%	0.71%	-0.30%	-0.28%	1.04%

WEIGHTED AVERAGE YIELDS		Q1 2022	Q2 2022	Q3 2022	Q4 2022
SHORT-TERM	All BTFs	-0.66%	-0.41%	0.32%	1.61%
	Of which 3-month BTFs	-0.68%	-0.58%	0.09%	1.26%
MEDIUM AND LONG TERM	Fixed-rate issues with maturities of more than one year (excluding index-linked securities)	0.35%	1.41%	1.85%	2.56%
	of which 10-year fixed-rate issues (excluding index-linked securities)	0.43%	1.46%	1.87%	2.67%
TOTAL ISSUES		0.01%	0.88%	1.34%	2.26%

AFT CONTINUED ITS FLEXIBLE ISSUANCE POLICY IN 2022 TO BEST MEET CHANGING MARKET DEMAND.

The State's financing requirement in 2022 ultimately stood at €280.0bn, which was €5.2bn less than in 2021 (€285.2bn). The State's financing requirement for 2022, passed in the Initial Budget Act (LFI) totalled €297.6bn; it was subsequently increased in the Supplementary Budget Act in July to €311.8bn, before being lowered to €304.4bn in the second Supplementary

Budget Act in early December. Two main determining factors shaped the 2022 financing requirement: (i) the deficit to be financed, which came to €151.4bn in the outturn, an improvement of €19.3bn compared with 2021 and (ii) the redemptions of medium- and long-term government securities totalling €145.7bn (€27.4bn up on 2021). Regarding the deficit, support for economic agents in a

context of spiralling energy prices after the Russian offensive in Ukraine contributed to an increase in the financing requirement, offsetting the positive effects of the reduction in the economy's financing requirements following the end of the support mechanisms to contend with the pandemic.

2022 was marked by a sharp rise in interest rates, unprecedented in scale in the euro area, in the order of 2.9 percentage points for French 10-year maturity securities, after a slight increase that began in 2021 (10 times less in order of magnitude). Yields on French debt with 10-year maturities, which stood at 0.2% at the end of 2021, rose to 3.1% at the end of December 2022, while being highly volatile during the year. This volatility was seen throughout the year, with an initial peak in mid-June at roughly 2.40%, and a second at the end of October at 3.1%, a level seen again at the end of December. In a context of war in Ukraine, rising energy prices fuelled inflationary pressures, triggering monetary tightening decisions by the main central bank, including the ECB. Yield on the Eurosystem's marginal deposit facility rose from -0.5% in the first half of 2022 to 2.0% by 31 December 2022. In a general movement of interest rate spreads in the euro area, French 10-year yields over the year diverged from Germany's, from slightly less

than 40 basis points to slightly more than 50 basis points over the year, returning to the levels seen before implementation of the ECB's buyback programmes in 2015.

Lastly, AFT continued to support investor demand for longer-dated securities, while at the same time continuing its work to maintain very good liquidity for all of its securities. Many different means were used for this purpose.

→ As it does every year, AFT systematically heeded primary dealers' recommendations before holding auctions to ensure that the selection of securities to be issued was tailored to meet final investor demand.

→ To ensure uniform liquidity in every segment of the yield curve for government bonds, AFT continued to tap "off-the-run" issues in 2022, in addition to tapping benchmark bonds. The aggregate amount of such issuance was €80.2bn, or

30.7% of gross issuance, excluding index-linked bonds.

→ The optional December auction was held to enhance the regularity with which Treasury issues are tapped in the course of the year. This meant that AFT held 34 auctions of medium- and long-term fixed-rate bonds and index-linked bonds in 2022.

→ Lastly, AFT bought back €26.2bn in short-term securities to smooth out debt redemption curve over several years. This enabled AFT to offer investors a liquid market for securities maturing in 2023.

EIGHT NEW FIXED-RATE BENCHMARK OATs WERE CREATED IN THE NOMINAL SEGMENT, THREE OF WHICH BEING SYNDICATED, IN ACCORDANCE WITH THE INDICATIVE STATE FINANCING PROGRAMME.

In the medium-term segment, AFT issued a new 3-year benchmark bond in January, the OAT 0.00% 25 February 2025, and in May a new 5-year benchmark bond, the OAT 0.75% 25 February 2028.

In the long-term segment, AFT created two new 10-year benchmarks with respective maturities, the OAT 0.00% 25 May 2032 (launched in January) and the OAT 2.00%

25 November 2032 (launched in July), as well as a new 15-year benchmark bond, the OAT 1.25% 25 May 2038, launched in April.

Three syndicated bonds were created, namely the new 30-year benchmark bond indexed on European inflation, the OAT€i 0.10% 25 July 2053 launched in January, the first green bond indexed on European inflation, the green OAT€i

0.10% 25 July 2038 launched in May, and the new 20-year benchmark bond, OAT 2.50% 25 May 2043, in September. The green OAT€i 0.10% 25 July 2038 has some unique features, being the first bond that is both green and inflation-linked, and met with high market demand when it was launched.

GROSS ISSUANCE BY AFT IN 2022

In €bn

Source: Agence France Trésor

	JAN. 2022	FEB. 2022	MARCH 2022	APRIL 2022	MAY 2022	JUNE 2022	JULY 2022	AUGUST 2022	SEP. 2022	OCT. 2022	NOV. 2022	DEC. 2022	TOTAL 2022	TOTAL 2021
2 Y	5.2	4.7	-	3.6	4.2	3.0	3.7	-	-	3.8	-	-	28.2	31.7
3-4 Y	-	-	3.4	-	4.2	-	-	2.2	-	2.9	-	-	12.8	14.8
5 Y	5.2	5.9	5.0	4.5	5.8	4.5	4.6	3.8	7.2	5.8	4.1	-	56.2	40.0
6-8 Y	2.8	3.2	4.1	2.9	-	6.9	4.8	-	2.8	-	3.9	-	31.4	26.5
10 Y	5.9	6.7	7.7	6.4	6.3	6.1	7.0	4.1	10.3	5.9	5.1	2.8	74.4	79.6
15 Y + 20 Y	1.8	2.8	2.4	3.5	2.3	2.6	2.3	1.9	7.2	-	2.6	1.9	31.3	32.9
30 Y + 50 Y	3.3	2.0	2.3	1.6	2.5	1.8	5.4	-	-	4.1	2.3	1.3	26.6	36.0
i/€i	5.2	1.9	1.9	1.6	5.5	1.9	1.9	1.0	1.4	1.6	1.5	-	25.4	23.6
GROSS ISSUANCE	29.3	27.1	26.9	24.1	30.7	26.7	29.7	13.0	28.9	24.1	19.5	6.1	286.2	285.1

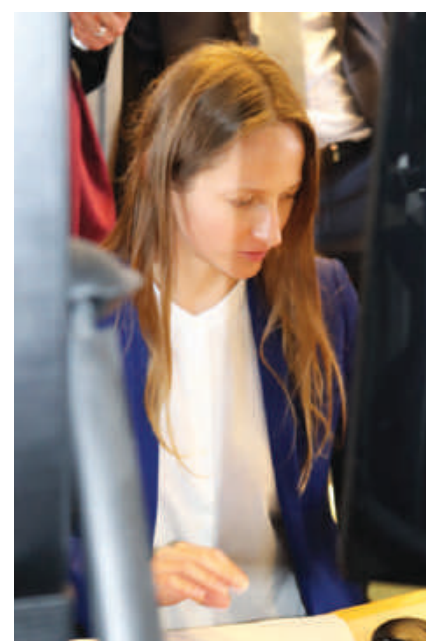
DEMAND FOR BTFS REMAINED VERY STRONG, EVEN THOUGH THE OUTSTANDING AMOUNTS DECREASED FOR THE SECOND YEAR RUNNING.

At the end of 2022, the outstanding amount of short-term securities (BTfs) reached €148.5bn, compared to €155.4bn at the end of 2021, making 6.5% of total negotiable debt compared with 7.2% in the previous year. The outstanding amount of BTfs thus continued to decrease, after being used at the beginning of the pandemic in 2020 to meet the unprecedented increase in the State's financing requirements.

As a general rule, three benchmark securities (3-month, 6-month and

1-year maturities) were sold at weekly BTF auctions and met with sustained demand. Marginal use was made of the ability to tap off-the-run securities to ensure liquidity for BTfs of all maturities and meet investor demand transmitted by primary dealers.

BTF auctions produced an average yield of 0.19% over the year as a whole, a higher yield than in 2021 (-0.67%), in a context of rising bank rates in the euro area.



AVERAGE RESIDUAL MATURITY OF FRENCH DEBT SETS A NEW RECORD

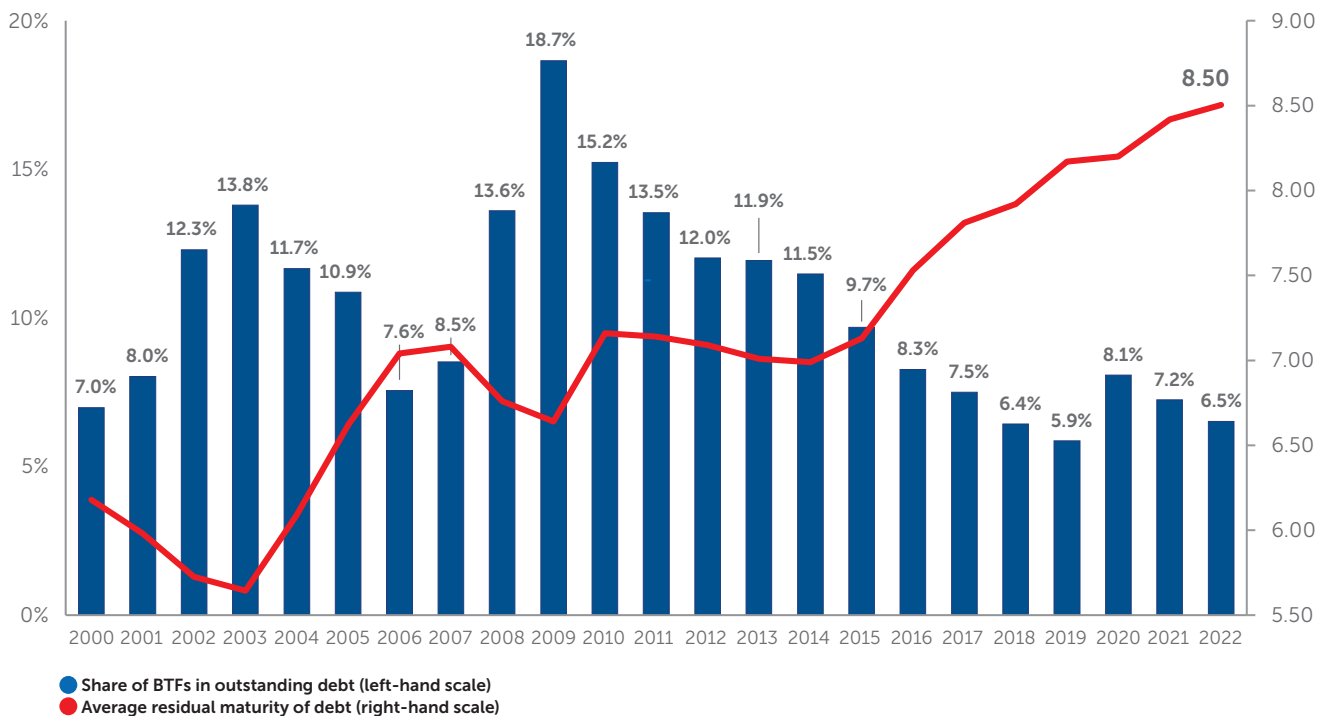
The average residual maturity of French sovereign debt stood at 8.4 years at the end of 2022, compared with 8.5 years at the end of 2021, the highest figure recorded since the creation of AFT. The average residual maturity was sustained by the large increase in the average maturity of issuance other than BTFs (9.1 years, stable between the end of December 2022 and the end of December 2021), in step with demand, while the outstanding amount of BTFs decreased.

Maintaining a long average residual maturity for France's debt makes debt service expense more resilient to increasing interest rates and eliminates refinancing risk.



**SHARE OF BTFs IN OUTSTANDING STATE DEBT
AVERAGE RESIDUAL MATURITY OF DEBT**

Source: Agence France Trésor

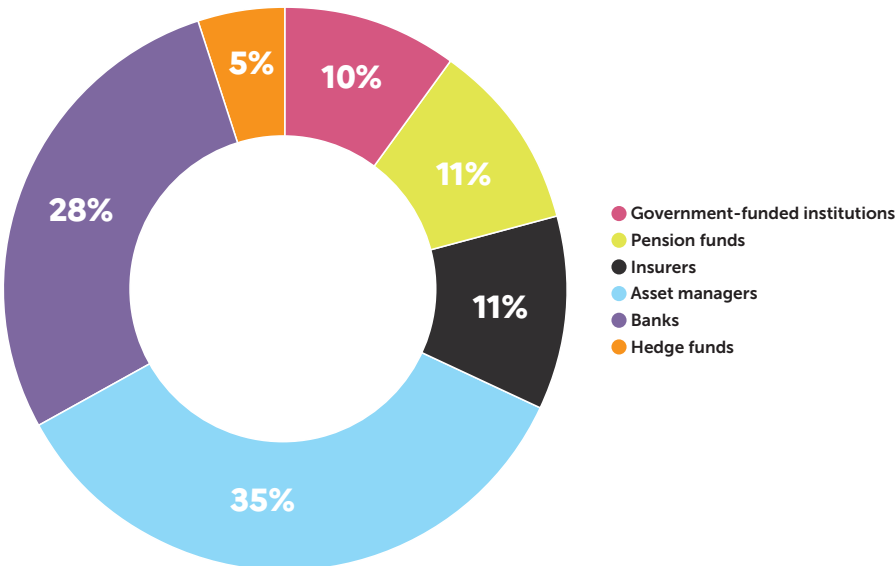
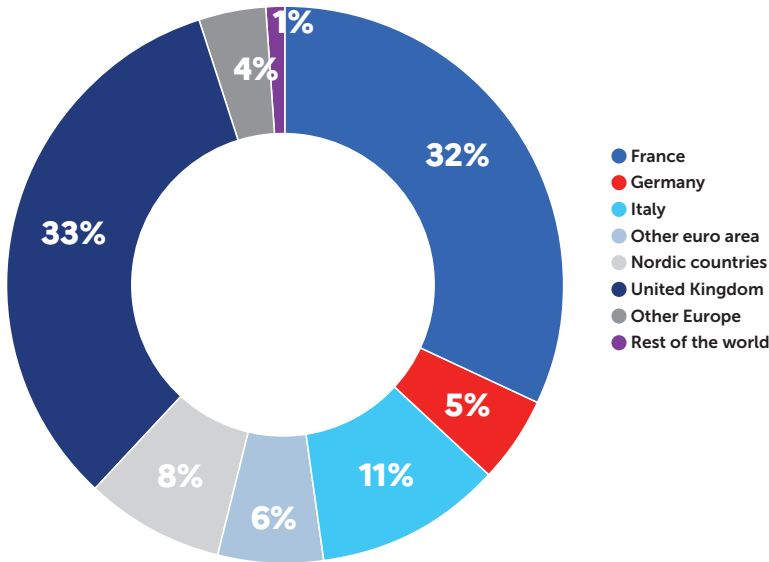


Syndication

LAUNCH OF A NEW 30-YEAR OAT€i

On 24 January 2022, AFT issued the OAT€i 0.10% 25 July 2053 by syndication. When the book-building process was completed, total demand stood at €24bn, with €3bn allocated.

The bond was issued with a real yield of -0.926%, the lowest real yield at issue ever recorded by AFT at any syndicated launch of an indexed bond.



LEAD BOOK RUNNERS

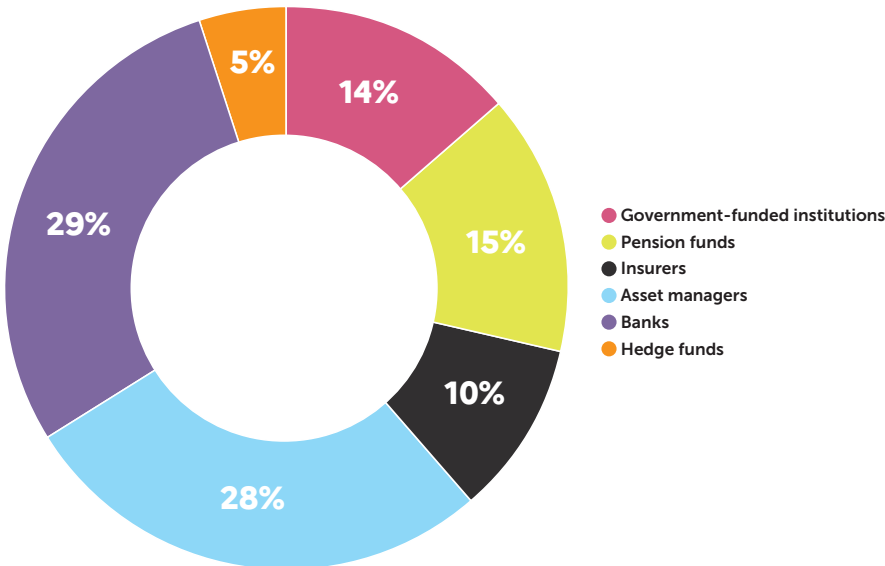
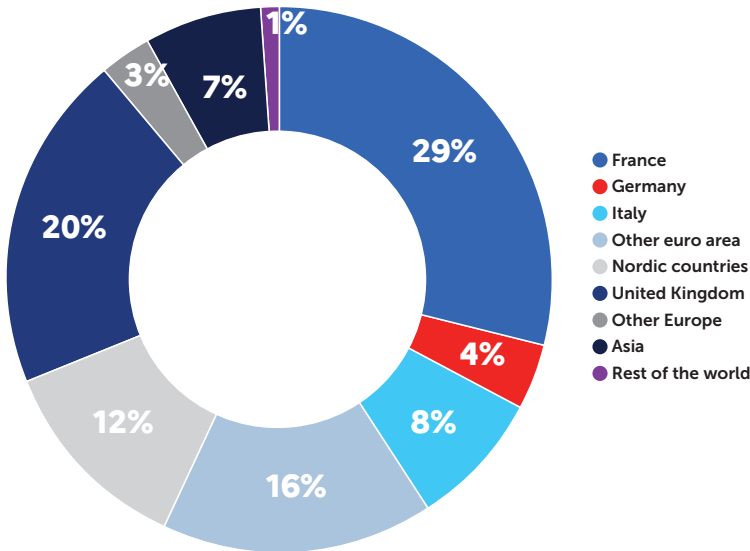


The allocation reflected the diversified investor base in Europe and the quality of French debt. More than 200 end investors subscribed the issue.

LAUNCH OF A GREEN OAT INDEXED ON EUROPEAN INFLATION

On 23 May 2022, AFT issued its third green OAT by syndication, and the first green inflation-indexed OAT, the OAT 0.10% 25 July 2038. When the book-building process was

completed, total demand stood at €27bn, with €4bn allocated. This bond was issued at a real yield of -0.415%.



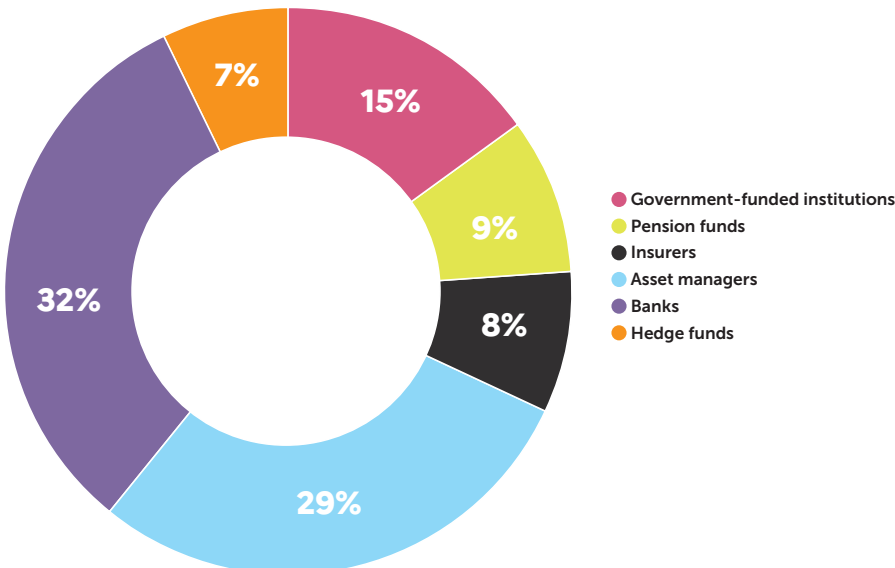
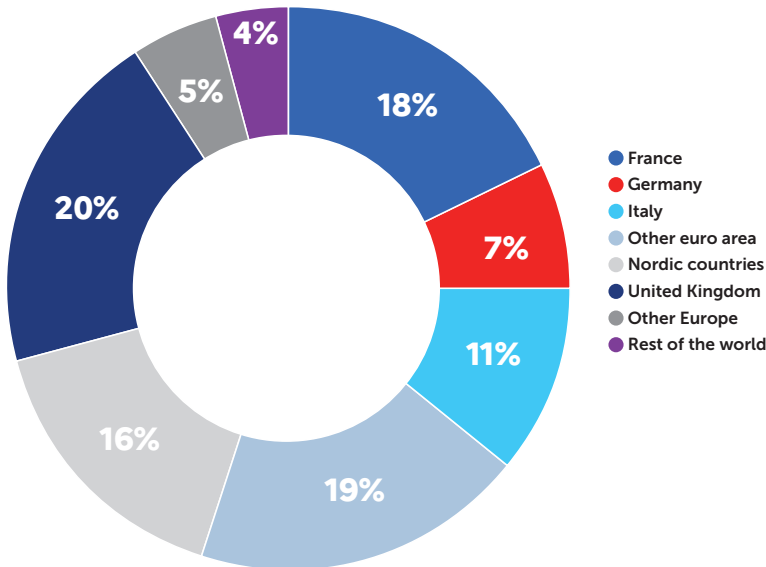
LEAD BOOK RUNNERS



The allocation reflected the highly diversified geographical investor base and the quality of this new bond; nearly 230 investors subscribed the issue.

LAUNCH OF A NEW 20-YEAR BENCHMARK OAT

On 5 September 2022, AFT issued the OAT 2.50% 25 May 2043 by syndication. When the book-building process was completed, total demand stood at €32bn, with €5bn allocated. This bond was issued at a yield of 2.596%.



LEAD BOOK RUNNERS



The allocation reflects a highly diversified investor base and the quality of this bond; more than 200 end investors subscribed the issue.

GREEN OATs

CREATION OF A GREEN BOND INDEXED ON INFLATION

In 2017, France became the first sovereign borrower to issue a benchmark green bond, the OAT 1.75% 25 June 2039. It stepped up its commitment to sustainable finance by issuing a second green bond in 2021, the OAT 0.5% 25 June 2044. In 2022, AFT made a further contribution to sustainable finance with the first sovereign green inflation-indexed bond (here, inflation in the euro area), the OAT€i 0.10% 25 July 2038. It was issued by syndication for an initial outstanding amount of €4bn on 25 May 2022 (see page 54), followed up by a tap issue auction in September, increasing its outstanding par value to €4.5bn at the end of 2022. Eligible green expenditures matched to this new bond in 2022 account for a higher amount, namely €4.9bn, because the index-linking supplements received on these issues is also allocated to the financing of green expenditures. An appendix to the green OAT framework document¹ published on the occasion of this innovation clarified the scope of funds matched to eligible green expenditure, in relation to public accounting categories.

The green OAT 2044 was also reissued in 2022, in February and July. Its outstanding increased by €5.1bn over one year, rising to €16.5bn by the end of 2022. France issued green bonds for a total of €9.6bn in 2022 (see box below), taking the outstanding total to €52.0bn at the end of the

year. France has thus confirmed its position as a leading global issuer on this market. This reflects its leading role in meeting the ambitions of the Paris Climate Agreement of December 2015.

Each year, the funds raised by Green OAT issues are used to finance a set of green projects under the State budget to mitigate climate change and anticipate the associated risks, preserve biodiversity and fight pollution. Each year, the various ministries identify the expenditures in their budgets that match these objectives. These expenditures are submitted to the Green OAT Evaluation Council (see page 58) for its opinion, and then they are submitted for validation by an interministerial steering committee working under the aegis of the Prime Minister. The Greenfin certification created by the Ministry for Ecological Transition to attest to the green credentials of investment funds is used as a benchmark in this selection process.

For accounting purposes, raised funds are treated in the same way as funds from a conventional OAT and managed in compliance with the general budget rule. The allocation and performance reports, drawn up every year on the basis of the Budget Review Bill, are used to verify the nominal equivalence between this source of funds and the uses matched to it. In August 2022, the

fifth allocation and performance reports was published, presenting the expenditures matching the 2021 green debt issues. According to the same timetable, the report on the funds raised in 2022 will be published in the summer of 2023. Furthermore, in July 2022 the fifth environmental evaluation report on eligible expenditures for Green OATs was published, focusing on satellite observation of the Earth and on weather forecasts (see page 58). The Council's work is now focused on the financing of renewable energies. These evaluations contribute to effective steering of public policy and constitute one of the contributions of green OATs.



¹ https://www.aft.gouv.fr/files/medias-aft/3_Dette/3.2_OATMLT/3.2.2_OATVerte/OAT_2021_FINAL_WEB_ENG.pdf

AN ADJUSTMENT OF ELIGIBLE GREEN EXPENDITURES DURING THE FINANCIAL YEAR

Based on the 2022 budget, the forecast amount of €15bn of eligible expenditures had been announced at the beginning of the year, unchanged compared with 2021. Approximately one third of these expenditures included State expenditures earmarked for the

operation of renewable energies. And yet, in the first half of 2022 this activity became fully cost-effective in itself, due to the sharp rise in energy prices resulting from events in Ukraine. That being the case, there was no longer any need for the State to subsidize it, a fact that was

ratified in July by a deliberation of the Energy Regulatory Commission. In that context, green expenditures identified for the year were revised downwards to €10bn¹.

ALLOCATION OF THE FUNDS RAISED BY GREEN OATS IN 2022

An annual report details the allocation of funds raised by Green OATs and the performance of the funded programmes. A sixth report will be published in the third quarter of 2023 (available on the AFT website). The report details all the expenditure funded by issuance in 2022, which totalled €10.bn. This issuance covered the €15bn in eligible green expenditures identified by the interministerial working party, as announced at the beginning of the year but adjusted to €10bn in August to allow for the reduction in renewable energy subsidies resulting from changes in prices on this market.

As is the case each year, the 2022 Allocation and Performance Report included independent third-party audits that verified the expenditures and their green credentials. Based on the procedures performed, KPMG examines the allocation of funds and specifically the proper implementation of the Green OAT framework document. In addition, the Moody's ESG rating agency was approached for an opinion on the green credentials of the expenditures matched to 2022 issues.

Some of the eligible green expenditures from 2021, amounting to €3.4bn, had not been funded by issuance in that year. In accordance with generally accepted best practices and the provisions of the Green OAT framework document, these expenditures were carried forward and included in the 2022 eligible green expenditures. The bulk of the €6.6bn issued in 2022 was used to finance eligible green expenditures incurred in the same year. Disbursements in 2022 in this respect totalled approximately €10.1bn; the remainder yet to be allocated (roughly €3.5bn) will be included in the eligible expenditures for 2023.

The €10bn allocated for 2022 were divided between the various eligible programmes in proportion to the volumes of expenditure they represented. As was the case in previous years, expenditure on climate change mitigation accounted for the largest share at 67%, followed by expenditure on climate change adaptation at 17%. Biodiversity expenditure accounted for approximately 12% of the total and the fight against pollution

accounted for 4%. The breakdown of allocations by economic sector shows that construction accounted for 33% of expenditures and energy 15%, whereas the latter accounted for 35% in 2021. This sharp decrease reflects the lack of subsidies for renewable energies in 2022, in a context of changing market prices favouring producers (see the box above).

The presentation of the allocation of funds comes with a performance evaluation of the programmes concerned in general terms. It is primarily based on data from budget documents, with supplementary environmental data, when they are available. Finally, the report also focuses on the various expenditure items funded sector by sector, highlighting their relevance to the objectives set out in the Green OAT framework document², which are in turn aligned with several of the UN's Sustainable Development Goals. The report also focuses on the degree of alignment of eligible green expenditure with the EU taxonomy for sustainable activities.

¹ <https://www.aft.gouv.fr/en/publications/communiqués-presse/30-august-2022-green-oats-revision-amount-green-eligible>

² <https://www.aft.gouv.fr/files/archives/attachments/25562.pdf>

PUBLICATION OF A STUDY ON WEATHER FORECASTS AND EARTH OBSERVATION SATELLITES

In addition to the Allocation and Performance Report, expenditure matched to Green OATs is evaluated for its environmental impact, in accordance with the commitments France made when the first Green OAT was issued. This evaluation work is carried out through successive analyses of different programmes. The objective is to evaluate each expenditure item at least once before the green OATs reach maturity. The impact studies are overseen by an independent evaluation council, which defines the methodology and monitors the evaluation process.

The council members are qualified individuals of international standing. The Chair is Manuel Pulgar-Vidal, Peru's former Minister for the Environment, Chair of the COP 20 and Director of WW Climate and Energy. Its members include: Mats Andersson, Vice Chair of the

Global Challenges Foundation and former CEO of AP4, Sweden's fourth national pension fund; Nathalie Girouard, Head of the Environmental Performance and Information Division of the Environment Directorate at the OECD, Karin Kemper, formerly Senior Director for the Environment and Natural Resources Global Practice at the World Bank, Mike Holland; Rana Roy, independent consultant; Thomas Sterner, Professor of Environmental Economics at the University of Goteborg; and Eric Usher, Head of the Secretariat of the United Nations Environment Programme Finance Initiative. The council also includes two observers: Sean Kidney, co-founder and CEO of the Climate Bond Initiative, and Nicholas Pfaff, Senior Director, deputy CEO at the International Capital Markets Association.

The Council met four times using video conferencing in March, July, September and November 2021. Its work led to the publication in July 2022 of a report highlighting the favourable environmental effects of Météo France forecasts and satellite observation of the Earth. The study, overseen by the council, was carried out by an independent firm Citizing. It focuses on the State's funding of two national organisations, Météo France and the National Centre for Space Studies (CNES), as well as French contributions to three European organisations: the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) and the European Centre for Medium-Range Weather Forecasts (ECMWF).





TOPICS COVERED BY THE EVALUATION COUNCIL'S REPORTS

- Energy transition tax credit (2018)
- French Waterways (2019)
- French National Forestry Commission (2020)
- Invest for the Future Programme (2021)
- Meteorology and terrestrial observation (2022)
- Renewable energies (work in progress)

The report is based on a review of existing literature, supplemented by interviews with the funded organisations and with experts. It puts into perspective multiple effects on different scales, and echoes any quantification attempts that have been made. Among other things, the study shows how optimised farming

treatments reduce greenhouse gas emissions, as well as environmental pollution, eutrophication in particular. In a similar way, satellite observation of the Earth supports civil protection in the prevention and control of forest fires, there again with benefits in terms of climate change mitigation, pollution control and protection of biodiversity.

It is also worth mentioning other uses of satellite imagery, useful for adaptation to climate change, such as monitoring coastal erosion and rising sea level, or even highlighting urban heat islands, which can be used to manage cities and make them more sustainable.

Internal control, and risk management

A BROAD CONTROL FRAMEWORK

AFT must meet stringent control criteria. The agency is legally required to answer parliamentary questions, especially concerning the groundwork for budget acts. AFT is also subject to a number of audits, including by the Government Audit Office (two audits per year for accounting matters and one for the Budget Outturn Report).

These controls also include action by specialised audit firms to validate the quality and probity of accounting information, to issue opinions on the monitoring of prudential measures or to conduct the annual internal audit.

AFT has also elected to comply with the obligations stipulated in the Order of 3 November 2014 on the internal control of businesses in the banking sector, inasmuch as they apply to the agency. All these measures mean that AFT has permanent mechanisms for assessing and controlling all the risks generated by market and cash management transactions.

TASKS OF THE AFT INTERNAL CONTROL, COMPLIANCE, RISK POLICY AND LEGAL AFFAIRS UNIT

AFT has an Internal Control, Compliance, Risk Policy and Legal Affairs Unit that is independent from its operating functions. This unit oversees AFT's internal control system, organises permanent monitoring of its activities and legal commitments, and manages the risks associated with financial transactions and the selection of counterparties. The unit coordinates the various external control and audit tasks in these areas.

The scope of this control and risk monitoring function has widened because of the diversity of AFT's transactions, the payment circuits used and the growing number of international counterparties.

The unit also drafts recommendations on risk management policy approved by AFT General Management and the Directorate General of the Treasury, along with any other measures that enhance risk monitoring. The unit is also responsible for managing legal and compliance risks, ensuring the validity of AFT's contracts, monitoring regulatory developments, managing the rules of professional conduct for employees and managing the confidentiality policy.

Together with the line functions, the unit regularly updates AFT's general activity framework, which sets management, organisation and control standards for managing identified risks, which is approved by the Director General of the Treasury. The unit is also responsible for maintaining AFT's business continuity plan, and for adapting ministerial instructions on crisis management to AFT's structure.

Lastly, it provides coordination and secretariat services for the AFT Risk Committee, which was inaugurated in 2019 based on the provisions of the Order of 3 November 2014, as adapted to the structure of AFT. The purpose of the committee is to enhance the formalisation of some of the work and decisions regarding risk management and internal control, but it also brings in experts from outside AFT for their views on these matters and priorities for future action. Its members include senior managers from the Treasury, the Ministry's Budget and Accounting Control Department and external persons with the requisite expertise. The committee meets once a year.



PERFORMANCE INDICATORS

In accordance with the legislative framework, AFT submits an annual audit report to Parliament on financial risk management and the prudential procedures implemented for activities concerning management of the State's negotiable debt and cash holdings.

In recent years, AFT has relied on the expertise of a specialised external audit firm to conduct the audit. The audit assesses the adequacy of AFT's procedures with regard to its activities and the associated risks by considering five angles with reference to current regulatory provisions applying to financial institutions:

- Organisation of internal control:
- Accounting organisation
- Risk measuring systems and results
- Risk supervision and management systems
- Documentation and reporting system and IT risk management

The assessment gives ratings ranging from one to four:

- **One:** the existing mechanism satisfactorily covers identified risks generated by AFT's transactions
- **Two:** the existing mechanism needs to be extended to cover identified risks
- **Three:** the existing mechanism has substantial shortcomings requiring immediate corrective action to cover the identified risks
- **Four:** the existing mechanism does not cover the identified risks generated by AFT's transactions.

This external assessment is one component of the first performance indicator presented to Parliament during the budget preparation process. It considers the **quality of AFT's control system** (see page 116).

It is supplemented by data on the number of incidents or violations of the general framework for AFT's activities. This data allows for qualitative and quantitative tracking of various incidents, which are broken down into the following categories:

- Violation of accreditation and delegation rules
- Violation of risk exposure limits
- Violation of transaction procedures.

It is an internal quality measurement of AFT's organisation and compliance with requirements.

Management report - Internal control and risk management

	UNIT	2020 ACTUAL	2021 ACTUAL	2022 ACTUAL	2023 TARGET
Incidents of violations of the general activity framework	Number	0	0	0	0
External rating of the internal control function: Transaction and internal procedures supervision system	Rating between 1 and 4	1	1	1	1
External rating of the internal control function: Accounting organisation and information processing	Rating between 1 and 4	1	1	1	1
External rating of the internal control function: Risk and result measurement systems	Rating between 1 and 4	1	1	1	1
External rating of the internal control function: Risk supervision and management system	Rating between 1 and 4	1	1	1	1
External rating of the internal control function: Documentation and reporting system	Rating between 1 and 4	1	1	1	1

AFT submits a performance indicator to Parliament that measures **the number of execution incidents occurring in AFT's debt transactions** to ensure rapid detection of problems or incidents that could disrupt the proper execution of debt and cash management transactions (see page 116).

This indicator relies on the day-to-day record of these transaction execution incidents, divided into three categories, depending on whether or not they have an impact on the Treasury Account.

	UNIT	2020 ACTUAL	2021 ACTUAL	2022 ACTUAL	2023 TARGET
Incidents that decreased the balance at the <i>Banque de France</i>	Number	2	1	1	0
Incidents that increased the balance at the <i>Banque de France</i>	Number	5	6	8	0
Other incidents with no impact on the balance at the <i>Banque de France</i>	Number	76	64	71	0

These operating incidents may have affected the smooth execution of transactions, but none of the recorded incidents led to any threat to the State's financial continuity.

Incidents that affect the Treasury Account are rare and short-lived: as a general rule, they consist of a one-day delay in a receipt or disbursement on the account.

"Other incidents" that have no impact on the Treasury Account balance are the most frequent. These are mainly one-off minor technical incidents occurring in the internal or external information systems and the internal and external communications networks used to manage operations. They sometimes lead to delays in processing flows of funds or market transactions. They can generally be corrected on the same day, without impacting due fulfilment of the transactions.

The incident record, which relies on the comprehensiveness of controls and the granularity of the risk indicators used, is part of a continuous improvement approach with regard to the operational quality of internal and external operations.

Post-trade management and transaction risk monitoring

The Post-Trade and Risk Monitoring Unit's activities focus on State debt redemption and interest payments, processing AFT's cash and hedging transactions, and risk management and monitoring for all financial market transactions. The unit also manages the Government Debt Fund and administers its market transactions.

The Post-Trade Operations Unit is France's auctioneer for emissions trading on the European platform for greenhouse gas emissions allowance trading. In this capacity it supervises the auctions and proper execution of transactions. It tracks carbon allowance transactions and prices on the market each month.

The Unit also represents AFT within the securities industry trade association (AFTI Groupe Marchés Obligataires et Collatéral) and takes part in European projects and initiatives relating to market



infrastructure in close cooperation with the *Banque de France* and the European Central Bank.

It tracks final settlement yields on the secondary market for government securities on a regular basis, since this yield is a component in the liquidity of the debt.

In 2022, the Post-Trade Operations Unit processed and executed more

than 1,350 market transactions, including nearly 550 cash management transactions, 293 short-term financing transactions, 400 medium- and long-term financing transactions, and 15 hedging transactions with forward financial instruments on behalf of other State bodies.

POST-TRADE ACTIVITIES ARE ORGANISED AROUND FIVE MAIN TASKS:


- **1 - State debt redemption and interest payments**, as well as processing all market transactions, including financial risk hedging for the State;
- **2 - Market risk management and monitoring:** the Post-Trade Operations Unit, working with the Internal Control Unit and Senior Management, regularly tracks the main market risks that AFT monitors: credit risk, exposure concentration, commitment risk, settlement

risk and counterparty risk. It also monitors compliance with limits. The unit constantly reviews risk-monitoring techniques to keep pace with changes in the financial environment and AFT's evolving needs;

- **3 - Management of margin calls:** all forward trades, derivatives and repurchase agreements are governed by bilateral contracts that establish mechanisms to mitigate AFT's exposure to counterparty risk in the

performance of its tasks. The Post-Trade Operations Unit handles the margin calls for all these transactions to reduce AFT's residual counterparty risk exposure;

- **4 - Administrative management of the Public Debt Fund (CDP).**
- **5 - Overseeing carbon quota auctions for France** as part of the European Union's greenhouse gas emissions trading system (EU-ETS).



2022

Key Figures

2022 key figures

- P 66 I - FINANCIAL STATEMENTS
- P 69 II - NOTES TO THE FINANCIAL STATEMENTS
- P 69 II.1 - OVERVIEW
- P 70 II.2 - HIGHLIGHTS OF 2022
- P 70 II.3 - ACCOUNTING PRINCIPLES AND METHODS
- P 75 II.4 - NOTES

AFT'S FINANCIAL STATEMENTS

ON THE MANAGEMENT OF NEGOTIABLE DEBT SECURITIES AND CASH, HEDGING THE STATE'S FINANCIAL RISKS AND MANAGING THE DEBTS TRANSFERRED TO THE STATE

> POSITION AT 31 DECEMBER 2022

I - FINANCIAL STATEMENTS

ASSET BASE

ASSETS	NOTE	AMOUNTS (IN €M)		
		31/12/2022	31/12/2021	CHANGE
CURRENT ASSETS (EXCLUDING CASH)	1			
Prepaid expenses on financial debts	1.2	26,148.01	8,011.14	18,136.87
Discounts on OATs		26,148.01	8,011.14	18,136.87
Discounts on BTANs		-	-	-
Deferred expenses on financial debt		198.47	187.29	11.18
OAT issuance expense		198.47	187.29	11.18
Other claims	1.7	-	0.03	-0.03
Margin calls provided for repurchase agreements		-	-	-
Accrued interest		-	-	-
Margin calls provided for forward financial instruments		-	-	-
Accrued interest		-	0.03	-0.03
CASH MANAGEMENT	2			
Bank funds		93.67	-48.33	142.00
Accrued interest on the State's account with the Banque de France		93.67	-48.33	142.00
Other cash items	2.2	4,900.80	1,100.00	3,800.80
Unsecured loans on the interbank market		4,900.00	1,100.00	3,800.00
Accrued interest		0.80	-	0.80
Repurchase agreements		-	-	-
Accrued interest		-	-	-
Investment securities	2.1	-	-	-
Securities purchases		-	-	-
Prepaid interest		-	-	-
ACCRUALS AND DEFERRED EXPENSES	3			
Deferred income – off-balance sheet commitments		-	-	-
Interest payable on interest rate swaps for macro-hedging	3.2	-	-	-
Interest payable on interest rate swaps for micro-hedging	3.3	-	-	-

2022 KEY FIGURES - Financial review

LIABILITIES	NOTE	AMOUNTS (IN €M)		
		31/12/2022	31/12/2021	CHANGE
FINANCIAL DEBT	1			
Negotiable securities		2,292,873.61	2,161,397.99	131,475.62
Treasury Bonds (OATs)	1.1	2,144,994.37	2,005,695.55	139,298.82
Par values		2,081,070.70	1,961,825.64	119,245.06
Capitalised interest		-	-	-
Index-linking supplements		48,290.09	27,931.45	20,358.64
Accrued coupons at issue		297.18	247.41	49.77
Accrued interest		15,336.40	15,691.06	-354.66
Discount Treasury bills (BTFs)	1.3	147,879.23	155,702.44	-7,823.21
Par values		148,463.00	155,379.00	-6,916.00
Prepaid interest		-583.77	323.44	-907.21
Other loans	1.6	30,392.88	23,275.28	7,117.60
SNCF loans assumed via the CDP		29,928.84	22,908.70	7,020.14
Accrued interest		464.04	366.58	97.46
NON-FINANCIAL DEBTS	1			-
Prepaid income on financial debts	1.2	104,321.99	111,280.80	-6,958.81
Issue premiums on OATs		104,321.99	111,280.80	-6,958.81
Other debts	1.7	68.75	85.23	-16.48
Margin calls received on repurchase agreements		-	-	-
Accrued interest		-	-	-
Margin calls received on forward financial instruments		68.36	85.23	-16.88
Accrued interest		0.09	-	0.09
Accounts payable		0.30	0.30	0.00
CASH MANAGEMENT	2			
Other cash items	2.2	-	-	-
Unsecured loans		-	-	-
Accrued interest		-	-	-
Repurchase agreements		-	-	-
Accrued interest		-	-	-
ACCRUALS AND DEFERRED EXPENSES	3			
Payables – off-balance sheet liabilities		-	-	-
Interest payable on interest rate swaps for macro-hedging	3.2	-	-	-
Interest payable on interest rate swaps for micro-hedging	3.3	-	-	-

INCOME STATEMENT

TABLE OF NET EXPENSES	NOTE	AMOUNTS (IN €M)		
		31/12/2022	31/12/2021	CHANGE
FINANCIAL DEBT				
Negotiable securities				
Interest	4.1	-32,637.33	-32,850.81	213.48
Interest expense on OATs		-33,046.72	-33,884.25	837.53
Net interest income on BTFs		409.39	1,033.45	-624.06
Amortisation of premiums and discounts	4.1	11,529.93	11,753.64	-223.71
Amortisation expense for discounts on securities issued		-1,707.31	-961.67	-745.64
Amortisation income from premiums on securities issued		13,237.24	12,715.31	521.93
Index-linking of OATs	4.1	-22,997.00	-8,044.93	-14,952.07
Net index-linking expense		-22,997.00	-8,044.93	-14,952.07
Buybacks or swaps		-75.26	-322.10	246.84
Net expense		-75.26	-322.10	246.84
Commissions and fees related to debt management	4.2	-14.90	-14.20	-0.70
Net expense		-14.90	-14.20	-0.70
Net financial expense on financial debts		-44,194.57	-29,478.39	-14,716.17
OTHER FINANCIAL DEBTS				
Loans and forward financial instruments assumed for third parties				
SNCF loans assumed via the CDP		-1,002.37	-766.76	-235.61
Interest expense on borrowing		-1,003.10	-770.58	-232.52
Interest expense on forward financial instruments		-	-	-
Interest income on forward financial instruments		0.73	3.83	-3.10
Expense related to the revaluation of contracts in foreign currencies		-	-	-
Income related to the revaluation of contracts in foreign currencies		-	-	-
Net financial expense on other financial debts		-1,002.37	-807.03	-235.61
Net financial income				-
FORWARD FINANCIAL INSTRUMENTS				
Interest expense on forward financial instruments		-	-4.05	4.05
Other <i>net</i> expense or <i>net</i> income on forward financial instruments		0.03	0.19	-0.16
Interest income on forward financial instruments		-	24.27	-24.27
Net interest income on forward financial instruments		0.03	20.41	-20.38
CASH MANAGEMENT				
Interest expense		-171.26	-566.01	394.75
Net interest expense on bank liquidity	4.3	-150.87	-534.66	383.79
Interest expense on unsecured lending and borrowing on the interbank market		-20.40	-31.16	10.76
Interest expense on unsecured lending and borrowing – other euro area States		-	-	-
Interest expense on unsecured lending and borrowing – supranational agencies		-	-0.19	0.19
Interest expense on margin calls for repurchase agreements		-	-	-
Net interest expense on repurchase agreements		-	-	-
Interest expense on securities purchases		-	-	-
Interest income		18.59	-0.02	18.61
Net interest income on bank liquidity	4.3	-	-	-
Interest income on unsecured lending and borrowing on the interbank market		18.46	-0.02	18.48
Interest income on unsecured lending and borrowing – other euro area States		0.13	-	0.13
Interest income on margin calls for repurchase agreements		-	-	-
Net interest income from repurchase agreements		-	-	-
Interest income on securities purchases		-	-	-
Net financial expense on cash management transactions		-152.67	-566.03	413.36
NET EXPENSE		-45,349.58	-30,790.78	-14,558.80

FINANCIAL CONTRACTS AND COMMITMENTS

COMMITMENTS UNDER THE TERMS OF CLEARLY SPECIFIED AGREEMENTS	NOTE	AMOUNTS (IN €M)	
		31/12/2022	31/12/2021
FORWARD FINANCIAL INSTRUMENTS	3		
Interest-rate swaps			
Macro-hedging	3.2	-	-
Micro-hedging	3.3	-	-
Forward currency contracts	3.4	992.88	1,201.01
Oil swaps*	3.5	295.54	51.60
OTHER LIABILITIES			
Cash lines of credit	2.3	6,000.00	6,000.00
SNCF Réseau loans assumed via the CDP	1.6	-	10,000.00

* The transactions arising from oil swaps are carried out by the Finance Ministry Accounts Department on behalf of the Armed Forces Fuel Department. They are recorded as off-balance sheet transactions (see Note 3.5).

II – NOTES TO THE FINANCIAL STATEMENTS

II.1 - OVERVIEW

AFT was created by the Order of 8 February 2001 as a department with national scope reporting to the Directorate General of the Treasury. Its mission is to manage the State's debt and cash holdings under optimum security conditions and at the lowest long-term cost for taxpayers.

Since 2006, AFT has also been responsible for hedging certain financial risks on behalf of other ministries or other departments of the Ministry for the Economy, Finance and Industrial and Digital Sovereignty.

Therefore, in addition to managing the government's debt and cash positions, it also carries out ancillary industrial and commercial transactions.

Budget transactions relating to AFT's management tasks are recorded in two trading accounts:

→ Budget transactions arising from management of the State's debt

and cash holdings are recorded in Trading Account 903 "State Debt and Cash Management", which was opened under the terms of Article 22 of Constitutional Bylaw 2001-692 on Budget Acts of 1 August 2001;

→ Budget transactions relating to hedging the State's financial risks, other than those recorded in Trading Account 903, are recorded in Trading Account 910 "Hedging the State's Financial Risks", which was opened under the terms of Article 54 of the 2006 Budget Act 2005-1719 of 30 December 2005.

This means that all of the transactions conducted by AFT are recorded in the State's accounts and finalised in the State's general account.

AFT's financial statements are derived directly from the State's general account. They present the balance sheet and income

statement items relating to AFT's transactions:

- The balance sheet items from the State's general account for transactions relating to the management of the State's negotiable debt and debt transferred to the State (SNCF and SNCF Réseau) and the State's cash holdings;
- The income statement items that show the impact of AFT's transactions on debt servicing (interest, index-linking supplements, amortisation of premiums and discounts, and costs of loan commissions and issues);
- The balance sheet and income statement items from derivatives management accounts (margin calls);
- As well as a summary of off-balance sheet commitments relating to hedging the State's financial risks.

However, the financial statements presented here do not include transactions on Treasury correspondents' accounts, or transactions

II.2 - HIGHLIGHTS OF 2022

The sharp rise in inflation in Europe in 2022 led the European Central Bank to initiate rapid normalisation of its monetary policy (by raising bank rates and gradually ending quantitative easing), which led to bond market yields trending upwards, with periods of high volatility. In this context of rising inflation and yields during 2022, AFT executed its financing programme for a total to be financed of €260bn, in accordance with the Initial Budget Act, at a weighted average yield of 1.43% for all issues with maturities of over one year (excluding indexed securities) and a weighted average yield of 0.19% for BTF issues (under

relating to non-negotiable debt, even though these transactions are part of Trading Account 903 in budgetary terms.

one year).

In accordance with its indicative financing programme published in December 2021, AFT created eight new securities in 2022. It created six new benchmark fixed-rate bonds with maturities of 3, 5 and 10 years (two bonds), 15 years and 20 years, as well as two new indexed bonds: a bond indexed on European inflation with a 30-year maturity, and the first inflation-linked green bond with a maturity of 15 years. Index-linked issues accounted for 9.8% of the issue programme net of buybacks, in line with the target of approximately 10%.

The financial statements do not include the effects in profit or loss of SNCF Réseau's transferred debt as at 1st January 2022.

Three bonds were created by syndication, namely the two aforementioned inflation-linked bonds and a new benchmark 20-year bond.

Another highlight worth mentioning for 2022 is the assumption of the second tranche of SNCF Réseau's debt at the value date of 1st January 2022, for a total of €10bn.

II.3 - ACCOUNTING PRINCIPLES AND METHODS

1 - ACCOUNTING PRINCIPLES

The accounting principles used for these financial statements are outlined below.

The **lawfulness** principle states that the accounts comply with the rules and procedures in force.

The **probity** principle states that the rules and procedures in force have been applied to present a true and fair view of the situation and the materiality of the recorded events.

The **true and fair view** principle states that the information provided is sufficient in all material aspects and gives the reader satisfactory knowledge. This principle means

that supplementary information must be provided in the notes to the financial statements when the application of an accounting rule is not adequate to provide a true and fair view.

The **accrual** principle states that expense and income must be attached to an accounting period and must be reported in that period only.

The **going concern** principle states that the State will continue to conduct its activities for the foreseeable future.

The **consistency principle ensures the consistency of accounting**

information over successive periods.

This is necessary for comparing periods. Changes to accounting policies and methods should only be made if they help give a truer and fairer presentation of the financial statements. Any change that has a material impact on the results should be explained in the notes to the financial statements (see the provisions of Standard 14 – "Changes in accounting methods, changes in accounting estimates and adjustments").

The **full disclosure** principle states that the financial statements must be intelligible, material and accurate.

2 - ACCOUNTING STANDARDS

The accounting standards are set out in the State Accounting Standards Manual (RNCE) that was adopted by the Order of 21 May 2004, and is updated on a regular basis.

Standard 10 – “Cash items” and standard 11 – “Financial debts and forward financial instruments” are more particularly relevant to AFT’s transactions.

The latest amendment to these standards was introduced by the Order of 23 September 2015, published in the Official Journal on 25 September 2015, which implemented the relevant Notices 2015-06 and 2015-07 with immediate effect.

These standards apply to balance sheet items and the expense and income arising from the transactions are covered by Standard 2 “Expense” and Standard 4 – “Operating income, trading income and financial income”.

3 - RECOGNITION AND MEASUREMENT PROCEDURES

3.1 - Rules and methods applying to balance sheet items

3.1.1 - Cash management

Assets and liabilities are first recognised at their acquisition cost, excluding ancillary charges. Various ancillary assets and liabilities are attached to each asset and liability item.

Cash position: The cash position refers to all assets that are by nature immediately convertible to cash at their par value. The cash position is recognised in the financial statements for the accounting period in which the corresponding assets are acquired:

- Transfers received and automatic credits and debits are recognised when they are posted to the bank account;
- Transfers sent and in transit are recognised when the transfer order is issued.

The cash position may generate positive and/or negative returns, but accrued interest is recognised for the net amount, which may be negative, and attached to the relevant asset.

The cash position in foreign currencies is converted to euros at the end of the accounting period on the basis of the period’s latest spot exchange rate. Currency translation adjustments are recognised in the income statement for the period.

Investment securities are the financial instruments defined in the Monetary and Financial Code (Articles L.211-1 and L.211-2). They are recognised during the accounting period when they were acquired, and ancillary acquisition costs are recognised as an expense. At the end of the accounting period, the difference between the book value (represented by the market value) and the cost may show unrealised capital gains or losses. Unrealised capital losses are recognised as impairment of assets and they are not offset against unrealised capital gains.

In the case of securities with prepaid interest, the difference between the purchase price and the par value of the securities corresponds to the financial income recognised in the income statement. Securities may generate positive and/or negative returns, and the net amount of accrued interest, which may be negative or positive, is attached to the relevant asset.

Other cash items are securities that can be realised in the very short term with no risk of a change in value, such as:

- Claims arising from repurchase agreements in State securities or equivalents or from unsecured lending and borrowing;
- Debts arising from reverse repurchase agreements in State securities or equivalents or from unsecured lending and borrowing;
- Debts arising from the use of cash lines of credit.

These claims and debts are recognised when the funds are transferred for the transferred amount. Claims and debts arising from unsecured lending and borrowing are recognised for the nominal amount deposited. Liabilities arising from cash lines of credit are recognised for the proportion of the authorised amounts actually drawn. Any drawing on a cash line of credit will have an off-balance sheet impact on the financial commitment received.



3.1.2 - Financial and non-financial debts

3.1.2.1 - Negotiable debt securities

Financial debts are recognised in the accounts if they meet both of the following conditions:

- they constitute a definite debt;
- they can be reliably measured.

Financial debts are recognised in the financial statements for the period in which the securities were issued or the loans were contracted and the corresponding funds were received or taken over on behalf of third parties.

The debts are recognised at their redemption value, which generally corresponds to their par value.

Negotiable government securities include the various instruments listed below.

Capitalisation OATs: The counterpart to the annual interest payments is recognised as part of the financial debt payable at the end of the accounting period.

Index-linked securities (OATi and OAT€i, linked to the consumer price index):

they are recognised at their redemption value, which corresponds to their index-linked par value at the time of issue, at the end of each accounting period and at maturity. If the par value of an index-linked security is guaranteed to be the redemption value, the liability recognised cannot be less than 100% of the par value.

The index-linking supplement at the time of issue of index-linked securities is recognised as either a gain corresponding to the portion of the index-linking supplement

collected by the State, or as a loss corresponding to the proportion of the index-linking supplement paid by the State. This supplement is recognised in a separate liability account from the par value. The index-linking supplements calculated over the life of the securities are recognised as financial expenses if the index rises or as financial income if the index falls.

AFT issues medium- and long-term securities only in the form of OATs, OATis and OAT€is.

Fixed-rate discount Treasury bills (BTFs): The difference between the issue price and the par value is recognised as a financial expense in the income statement. Securities may generate positive or negative yields, and the net amount of accrued interest, which may be negative or positive, is recognised as a liability.

Securities with annual coupons (OATs): Accrued interest is recognised in the income statement at the end of the accounting period.

3.1.2.2 - Premiums, discounts, related expenses and accrued interest at the time of issue

Premiums and discounts: the premium or discount at issue is the difference recognised on the day of issue between the issue price and the par value (possibly indexed) of State securities. The main premiums and discounts primarily stem from the technique of associating new issues with existing ones. When this technique is used, new issues are attached to existing loans, and the price of the new tranches is adjusted to suit market conditions.

Premiums are recognised as prepaid income under non-financial debt on the liability side of the balance

sheet, and discounts are recognised as prepaid expenses under current assets on the asset side of the balance sheet. Premiums and discounts are recognised in the income statement at the end of the accounting period using the actuarial valuation method over the life of the security. Premiums and discounts that have not been amortised must be recognised in the income statement on the redemption date. Extraordinary premium and discount payments are recognised for securities buybacks, using the "first-in-first-out" method.

Issuance expense: This expense includes commissions paid to financial intermediaries (syndication commissions on syndicated bonds).

They are initially recognised as prepaid expenses on the asset side of the balance sheet. They are amortised in the income statement using the straight-line method over the life of the relevant issues. Straight-line amortisation is used because it does not produce significantly different values in the income statement from those that would have been obtained using the actuarial valuation method.

Accrued interest at issue: If the issue date of a security is different from the coupon date of the tranche, the subscriber pays the interest accruing between the annual coupon payment date and the date of issue. The interest accruing between the coupon payment date and the issue date is paid and recognised as an account payable on the liability side of the balance sheet.

3.1.2.3 - Securities buybacks

When a security buyback occurs, the difference between the buyback value and the par value, which may be index-linked, including the unamortised portion of the premium or discount on the buyback date, is recognised as a financial expense or financial income in the income statement.

3.1.2.4 - Debt assumed for third parties

Debts assumed for third parties are recorded on the balance sheet as the counterpart to a financial expense equal to the redemption value of the loan, plus ancillary items where appropriate, such as accrued interest on the date the debt was assumed.

3.1.2.5 - Borrowings in foreign currencies

Borrowing is recognised at the par value on the date the funds are received using the exchange rate of that day. At the end of the accounting period, the par value of the borrowing is recognised using the exchange rate of that day and currency translation adjustments are recognised as an unrealised gain or loss in the income statement. Accrued interest in foreign currencies is recognised at the current exchange rate and recorded in the income statement at the end of the accounting period. Accrued interest at maturity is recognised in the income statement at the exchange rate on the payment date. To date, all negotiable and transferred debts presented in the financial statements for Agence France Trésor transactions are denominated in euros.

3.1.2.6 - Adjustments in 2022

No adjustments were recognised in 2022.

3.1.3 - Forward financial instruments

Forward financial instruments are contracts under which one of the counterparties undertakes vis-à-vis the second to deliver or take delivery of an underlying asset, or to pay or receive a price differential on or before a given expiry date. The notional amounts of the contracts, regardless of whether they are to be paid at maturity, are not recognised in the balance sheet, but the relevant information is reported in a note to the financial statements. The accounting treatment depends on whether the transaction is classified as a hedging contract.

3.1.3.1 - Hedging transactions

A hedging transaction consists in matching an asset or liability and a hedging instrument to mitigate the risk of an adverse impact on the State's future income or financial flows. Recognition of a forward financial instrument used in a hedging operation is symmetrical to the hedged asset or liability on the balance sheet and in the income statement.

Realised and unrealised income and expense, along with the cash settlements, are recognised in the income statement symmetrically to the recognition of income and expense on the hedged asset or liability. Changes in the value of hedging instruments are not recognised on the balance sheet, unless partial or full recognition of the changes ensures symmetrical recognition of the hedged asset or liability. The different hedging strategies are listed below.

Macro-hedging swaps: The State implements this management strategy over the entire life of financial debt to reduce the average interest expense in the long run, in exchange for an average increase in the short-term variability of this expense.

Forward currency purchases and oil hedging contracts: AFT hedges foreign currencies and oil on behalf of other departments of the Ministry for the Economy, Finance and Industrial and Digital Sovereignty or other ministries. These transactions are classified as hedging transactions in the State's general account and the impact of the hedging is recognised symmetrically in the income statement for the hedged asset or liability.

As AFT does not manage the hedged assets and liabilities, the impact of the forward financial instruments is not recorded in its own financial statements. Only contracts with external counterparties and their market value, along with the transactions made during the accounting period and their result, are reported in the notes to the financial statements.

3.1.3.2 - Transactions that cannot be classified as hedging transactions

When a transaction cannot be shown to be a hedging transaction, it is recognised as an *isolated open position*. Changes in the value of the relevant forward financial instrument are recognised in the balance sheet as a counterpart to an item under net financial expense in the income statement.

3.1.3.3 – Margin calls paid and/or received on forward financial instruments

Margin calls are made to secure repurchase agreements and forward financial instrument transactions to hedge against counterparty risk. A margin call is paid or received, depending on whether the value of the instrument rises or falls. Margin calls are recognised as claims or debts since the State or the counterparty must repay them. They are recognised for the amount corresponding to the change in the value of the instruments, up to a limit set by contract. These sums bear interest.

3.2 - Rules and methods applying to income statement items

3.2.1 - Period recognition criterion for financial expenses and income

3.2.1.1 – Expenses

Financial expense is generated by financial debt, forward financial instruments and cash.

In the case of *interest* recognised as a financial expense, the prorated interest accruing to the third party is recognised in the period.

Losses recorded as financial expense are recognised when they are realised, except in the case of losses on forward financial instruments used for hedging, which are recorded when the income on the hedged liability or asset is recognised, starting on the expiry date of the contract.

For discounts recorded as financial expense, the portion of the *discount* for the period is calculated using the actuarial valuation method and recognised.

3.2.1.2 – Income

Financial income is earned on financial debt, forward financial instruments and cash. It does not include currency translation gains from transactions other than those related to the State's financing and cash management.

The income from such gains is recognised in the period when it accrues to the State, provided that the income for the period or the income from the transaction can be measured accurately.

For financial *income* in the form of interest, the *prorated* interest accruing to the State during the period is recognised.

Currency translation gains arising from financial debts and forward financial instruments denominated in foreign currencies are recognised:

- When the gains are realised, in the case of financial debt, cash and forward financial instrument transactions that are not classified as hedging transactions;
- When the expense on the hedged liability or asset is recognised, starting on the expiry date of the contract, in the case of gains on forward financial instruments used for hedging.

The *amortised portion of premiums* calculated for the period using the actuarial valuation method is recognised.



II.4 - NOTES

1 - FINANCIAL AND NON-FINANCIAL DEBTS

1.1 - Change in medium- and long-term negotiable financial debt

At 31 December 2022, financial debt stood at €2,144,994.37m, compared to €2,005,695.55m in 2021, an increase of €139,298.82m.

CHANGES IN MEDIUM- AND LONG-TERM NEGOTIABLE DEBT SECURITIES IN 2022 (in €m)	OAT			TOTAL LONG- TERM SECURITIES
	FIXED-RATE OATS	VARIABLE-RATE OATS	TOTAL	
Long- and medium-term negotiable debt securities at 31 December 2021	1,768,183.23	237,512.32	2,005,695.55	2,005,695.55
of which par value	1,753,395.50	208,430.14	1,961,825.64	1,961,825.64
of which index-linking supplements, interest, accrued coupons and similar debt	14,787.73	29,082.18	43,869.91	43,869.91
Change in par value ⁽¹⁾	113,735.06	5,510.00	119,245.06	119,245.06
Increases	260,867.00	25,363.00	286,230.00	286,230.00
of which auctions	255,867.00	18,363.00	274,230.00	274,230.00
of which syndications	5,000.00	7,000.00	12,000.00	12,000.00
Reductions	147,131.94	19,853.00	166,984.94	166,984.94
of which redemptions	120,901.94	19,853.00	140,754.94	140,754.94
of which buybacks	26,230.00	-	26,230.00	26,230.00
Change in accrued interest and similar debt ⁽²⁾	-337.01	20,390.78	20,053.76	20,053.76
Increases	14,450.71	26,519.45	40,970.17	40,970.17
of which index-linking supplements	-	25,336.59	25,336.59	25,336.59
of which accrued and capitalised interest	14,164.72	1,171.67	15,336.40	15,336.40
of which accrued coupons	285.99	11.19	297.18	297.18
Reductions	14,787.73	6,128.67	20,916.40	20,916.40
of which index-linking supplements	-	4,977.94	4,977.94	4,977.94
of which index-linking supplements	14,547.45	1,143.61	15,691.06	15,691.06
of which accrued coupons	240.28	7.13	247.41	247.41
Change in long- and medium-term negotiable debt securities ^{(1) + (2)}	113,398.05	25,900.78	139,298.82	139,298.82
Long- and medium-term negotiable debt securities at 31 December 2022	1,881,581.27	263,413.10	2,144,994.37	2,144,994.37
of which par value	1,867,130.56	213,940.14	2,081,070.70	2,081,070.70
of which index-linking supplements, interest, accrued coupons and similar debt	14,450.71	49,472.96	63,923.67	63,923.67

1.2 - Premiums and discounts on OATs

Premiums are recorded as liabilities on the balance sheet and discounts as assets in the form of prepaid income or expenses to be amortised over the life of the security.

AMORTISATION OF PREMIUMS AND DISCOUNTS ON OATS (in €m)					
	Items from "prepaid income"	Balance au 31/12/2021 ⁽¹⁾	Issue premiums ⁽²⁾	Amortisation of issue premiums ⁽³⁾	Balance at 31/12/2022 ^{(1) + (2) - (3)}
PREMIUMS	fixed-rate OATs	96,059	2,194	10,837	87,416
	variable-rate OATs	15,222	4,085	2,400	16,906
	Total premiums	111,281	6,278	13,237	104,322
DISCOUNTS	fixed-rate OATs	7,706	19,656	1,640	25,723
	variable-rate OATs	305	188	68	425
	Total discounts	8,011	19,844	1,707	26,148

1.3 - Short-term negotiable debt securities

Fixed-rate Treasury bills (BTFs) are the instruments used for short-term borrowing.

At 31 December 2022, BTFs amounted to €148,463m, down by over 4% (-€6,916m) on 2021.

CHANGE IN THE PAR VALUE OF SHORT-TERM NEGOTIABLE DEBT SECURITIES IN 2022 (in €m)	
Short-term negotiable debt securities at 31 December 2021	155,379.00
Increases	311,582.00
- of which auctions	311,582.00
Reductions	318,498.00
- of which buybacks	-
- of which redemptions	318,498.00
Change in par value	-6,916.00
Short-term negotiable debt securities at 31 December 2022	148,463.00



1.4 - Maturity structure of negotiable debt securities

MARKET VALUE OF NEGOTIABLE DEBT SECURITIES AT 31 DECEMBER 2022 (in €m)		BREAKDOWN BY MATURITY			
		LESS THAN 1 YEAR	1 TO 2 YEARS	2 TO 5 YEARS	MORE THAN 5 YEARS
Long- and medium-term negotiable debt securities	2,081,070.70	144,511.20	168,612.00	552,266.93	1,215,680.58
- fixed-rate OATs	1,867,130.56	126,463.20	150,693.00	504,902.93	1,085,071.44
- variable-rate OATs	213,940.14	18,048.00	17,919.00	47,364.00	130,609.14
Short-term negotiable debt securities	148,463.00	148,463.00	-	-	-
BTFs	148,463.00	148,463.00	-	-	-
Total negotiable debt securities	2,229,533.70	292,974.20	168,612.00	552,266.93	1,215,680.58

1.5 - Market value of negotiable debt securities

MARKET VALUE OF NEGOTIABLE DEBT SECURITIES AT 31 DECEMBER 2022 (in €m)			
SECURITIES	VALUE EXCLUDING ACCRUED INTEREST	ACCRUED INTEREST	TOTAL VALUE
OATs	1,964,832	15,544	1,980,376
BTFs	147,508	-	147,508
Total	2,112,340	15,544	2,127,884

As negotiable debt securities are listed, they are valued on the basis of the last prices noted during the accounting period. The market prices used for valuation are the end-of-day prices as published by financial information sources (source Reuters).

At 31 December 2022, the market value of the negotiable debt, including accrued interest, stood at €2,127,884m, sharply down by €334,449m compared with the end of 2021. The market value of the debt fell whereas 'its par value

rose by €112,329m, due to the fall in value of the securities in circulation following the rise in yields as part of the normalisation ECB's of monetary policy (successive rises in rates from July 2022 totalling 250 basis points).

1.6 - Debt assumed for third parties**SNCF-SAAD**

The 2007 Supplementary Budget Act authorised the assumption of the SNCF's debt in the special debt account (SAAD), through contracts with the Public Debt Fund (CDP). This debt comprised euro-denominated loans (€6,346m) and

foreign-currency loans (€1,515m) hedged with forward financial instruments.

Only one loan assumed for a third party remained outstanding at 31 December 2022 for the amount of €907.07m.

The balance of the outstanding positions at 31 December 2022 corresponds to the debts presented below:

SNCF SAAD BORROWINGS ASSUMED THROUGH THE CDP AT 31 DECEMBER 2022 (in €m)				
MATURITY DATES	AMOUNTS	AMOUNTS BY MATURITY		ACCRUED INTEREST
		LESS THAN 1 YEAR	1 TO 5 YEARS	
11 August 2023	907.07	907.07	-	31.31
Total	907.07			31.31

SNCF Réseau

Article 229 of the 2020 Budget Act 2019-1479 of 28 December 2019 stipulates that:

I. - The CDP shall be authorised to contract any euro-denominated lending or borrowing with SNCF Réseau up to the limit of €25bn in principal to be reimbursed, including the specified index-linking supplements in the case of borrowing linked to inflation.

II. - The State shall be authorised as of 1 January 2020 to assume the rights and obligations relating to the loans contracted with the CDP by SNCF Réseau up to the limit of €25bn in principal to be reimbursed, including the specified index-linking supplements in the case of borrowing linked to inflation.

III. - The transactions carried out under the provisions of II of this article shall be recorded directly in the SNCF Réseau balance carried forward and shall not give rise to the collection of any taxes or duties of any nature whatsoever. "

The assumption of the debt is to be implemented using similar technical procedures to the ones used in 2007 for the assumption of the SNCF-SAAD debt. These procedures involve contracting matching

loans for €25bn with identical characteristics between the CDP and SNCF Réseau. The novation of one of the loan contracts, in accordance with the Order of 30 December 2019 enacting the assumption of the SNCF Réseau debt by the State, substitutes the State for SNCF Réseau as the debtor to the CDP. As a result, the State meets the principal and interest payments each year under the terms of the loan contract between itself and the CDP, and the latter does the same with regard to SNCF Réseau.

The second portion of assumption of the debt is provided for in Article 167 of Budget Act 2021-1900 of 30 December 2021 for 2022, which stipulates that:

I. - The CDP shall be authorised to contract any euro-denominated lending or borrowing with SNCF Réseau up to the limit of €10bn in principal to be reimbursed, including the specified index-linking supplements in the case of borrowing linked to inflation.

II. - The State shall be authorised as of 1 January 2022 to assume the rights and obligations relating to the loans contracted with the CDP by SNCF Réseau up to the limit of €10bn in principal to be reimbursed,

including the specified index-linking supplements in the case of borrowing linked to inflation.

III. - The transactions carried out under the provisions of II of this article shall be recorded directly in the SNCF Réseau balance carried forward and shall not give rise to the collection of any taxes or duties of any nature whatsoever. "

This next step in assumption of the debt is being implemented according to similar technical procedures as those chosen for the first portion of assumption of SNCF Réseau's debt in 2020. These procedures involve contracting matching loans for €10bn with identical characteristics between the CDP and SNCF Réseau. The novation of one of the loan contracts, in accordance with the Order of 30 December 2021 enacting the assumption of the SNCF Réseau debt by the State, substitutes the State for SNCF Réseau as the debtor to the CDP. As a result, the State meets the principal and interest payments each year under the terms of the loan contract between itself and the CDP, and the latter does the same with regard to SNCF Réseau.

Total debt at 31 December 2022 is presented below:

SNCF SAAD BORROWINGS ASSUMED THROUGH THE CDP AT 31 DECEMBER 2022 (in €m)				
NOTIONAL AMOUNTS	AMOUNTS BY MATURITY			ACCRUED INTEREST
	LESS THAN 1 YEAR	1 TO 5 YEARS	MORE THAN 5 YEARS	
29,021.77	2,117.90	6,887.57	20,016.30	432.73
Total financial debts				29,454.50

1.7 – Margin calls

The net amount of deposits received as a result of margin calls stood at

€68.35m at 31 December 2022.

2 - CASH MANAGEMENT

2.1 - Investment securities

This item stood at zero on 31 December 2022.

In 2022, the State purchased €1m of commercial paper with equivalent simple interest yield from CADES, as part of a test.

2.2 - Other cash items

The bulk of these items comprises short-term investments made to optimise cash management, including deposits on the interbank market. These investments consist of very-short-term loans.

On 31 December 2022, €4.9bn of deposits on the interbank market had not yet been returned.

2.3 - Cash lines of credit

AFT has lines of credit with primary dealers worth a total of €6bn that it may use for the purpose of securing the balance on the Treasury's single account with the *Banque de France*. These lines of credit are annual and renewable by tacit agreement.



3 - FORWARD FINANCIAL INSTRUMENTS

3.1 - Market value of forward financial instruments

FORWARD FINANCIAL INSTRUMENTS NEGOTIATED BY AGENCE FRANCE TRÉSOR				
Forward financial instruments (in €m)	Remaining term		Total	
	- 7 years	+ 7 years	Par value	Market value
Forward currency contracts				
OTC transactions ⁽¹⁾	993		993	68
Interest-rate swaps				
Specific hedging ⁽²⁾	0		0	0
Forward commodity contracts				
Oil swaps ⁽³⁾	335		335	3
TOTAL	1,328	0	1,328	71

(1) Hedging by forward currency purchases.
 (2) Contracts negotiated as part of the State's management of debt maturity.
 (3) Hedging oil supplies for the Military Fuel Unit (SEA).

The flows of funds for two oil swaps that expired on 31 December 2022 for €39.3m were paid on 6 January 2023.

3.2 - Proactive debt and cash management (macro-hedging)

Since September 2002, the programme to reduce the average life of debt through interest-rate swaps has been suspended due to market conditions, in particular low long-term interest rates.

The last swaps, for a total of €1bn, were repaid during 2021. Therefore, this item showed a zero balance on 31 December 2022.

3.3 - Micro-hedging interest rate swaps

These amounts relate to interest-rate swaps for the assumed SNCF or other debt.

There were no new transactions in 2022. Therefore, this item showed a zero balance on 31 December.

3.4 - Foreign exchange hedging

This item relates to forward exchange transactions consisting of purchases or sales of foreign currencies at exchange rates that are fixed from the outset and where

the period between the trade date and the settlement date is longer than the usual two days.

AFT makes such transactions on behalf of other State departments and they do not have any impact

on these financial statements. In 2022, forward purchases of foreign currencies for euros settled for a total value of €788.29m against a total of \$927.38m.

The table below shows the amounts of foreign exchange transactions outstanding at the end of the accounting period:

CLOSING DATES	EUROS payable to Primary Dealers in exchange for foreign currency receivables (in millions)	US DOLLARS receivable from Primary Dealers and payable to final beneficiaries (in millions)	CHF receivable from Primary Dealers and payable to final beneficiaries (in millions)	Spot market value in €m	UNREALISED EXCHANGE GAINS OR LOSSES in €m
31/12/2021	1,201.01	1,436.23	-	1,268.02	67.01
31/12/2022	992.88	1,104.48	37.60	1,072.96	80.08

3.5 - Oil swaps

Oil swap contracts are recognised as off-balance sheet items by the department requesting the hedge and the financial transfers are carried out by the Finance Ministry Accounts Department. Therefore, they have no impact on these financial statements and are reported for information only.

AFT hedges oil supplies for the Military Fuel Unit (SEA) at the Ministry of Defence. This concerns commodity price swaps. These swap contracts hedge against oil price fluctuations by swapping a price fixed in the contract for a variable price corresponding to the average market price observed over one month.

Three new oil swaps totalling €283.24m were negotiated in 2022.

4 - FINANCIAL EXPENSE AND INCOME

4.1 - Financial expense on negotiable debt securities

Three elements make up the financing cost of the State's negotiable debt securities: interest payments, amortisation of issue discounts and premiums, and index-linking supplements.

- a) Interest is prepaid at the time of issue for BTFs, or paid on the annual coupon dates for OATs.

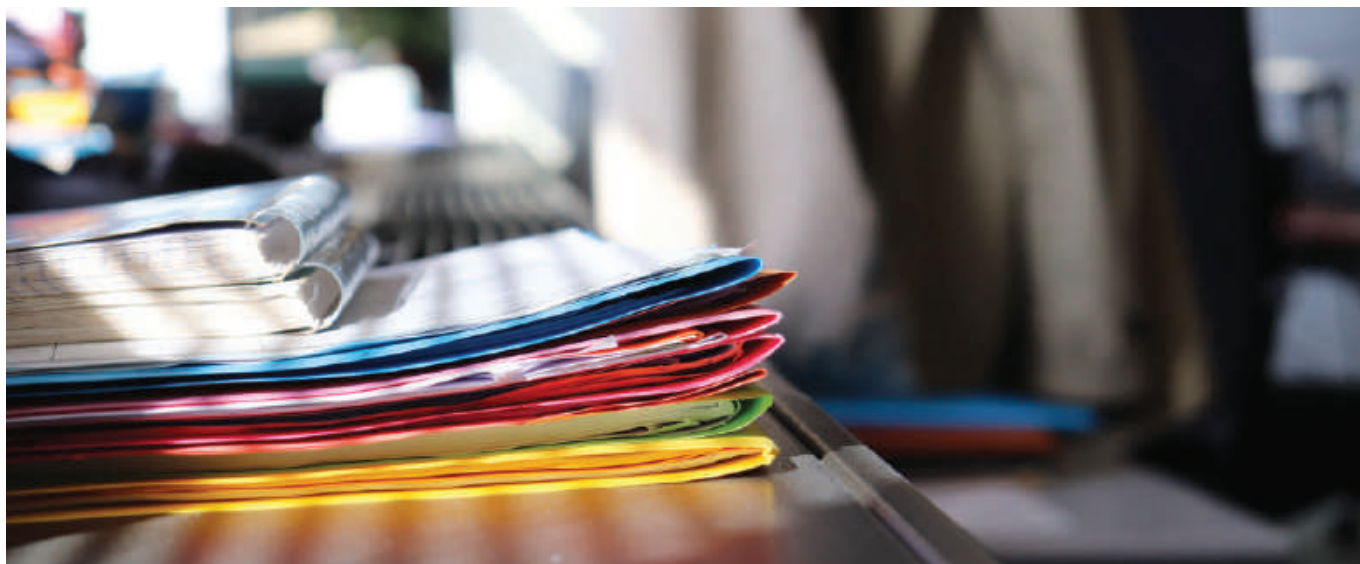
The interest expense on negotiable securities totalled €32,637.33m in 2022. It was €213.48m less than in 2021. The variation stems primarily from falling coupon yields on medium- and long-term bonds issued in recent years.

- b) The issue discount or premium, which is the difference between the issue price and the par value, results from the difference between the coupon yield of the bond and the yield demanded at the time of issue. Amortisation of the premium or discount is recognised in the income statement over the life of the bond. The total financial expense

(amortisation and coupon payments) corresponds to the yield demanded at the time of issue (see 3.1.2.2 – Accounting principles and methods).

Amortisation of premiums and discounts resulted in net financial income of €11,529.93m in 2022. This income was down €223.71m on 2021 but still a high figure. This results from the large issue premiums in recent years, which increased the stock of premiums to be amortised.

- c) The index-linking income or expense corresponds to the variation in the principal amount to be redeemed, which depends on changes in an index. The two indices used for government bonds are the French consumer price index excluding tobacco and the same index in the euro area. (NB: Index linking means that the yields at issue of such bonds are lower than those of other bonds. Index-linked yields are "real" yields that do not include the inflation premium of nominal yields.)



Net index-linking expenses amounted to €22,997.00m in 2022. They were up €14,952.07m on 2021 because of high inflation in France and the euro area in 2022.

4.2 - Commissions and fees related to debt management

This item records syndication commission paid to the primary dealers that are members of syndicates. This commission is amortised over the life of syndicated bonds. This item also includes fees charged by Euroclear, which is the depositary for the securities issued by the State, and communication expenses directly related to debt management.

4.3 - Interest income and expense on the current account with the Banque de France

The State holds a single account with the *Banque de France*, which breaks down into different transaction accounts. This single account is not presented in the financial statements' assets. The *Banque de France* pays the State interest on this current account's daily balance.

The European Central Bank's Decision (EU) 2019/670 and Guideline (EU) 2019/671 of 9 April 2019, which came into force on 1 October 2019, defined the following procedures for the remuneration of government entities' deposits with national central banks:

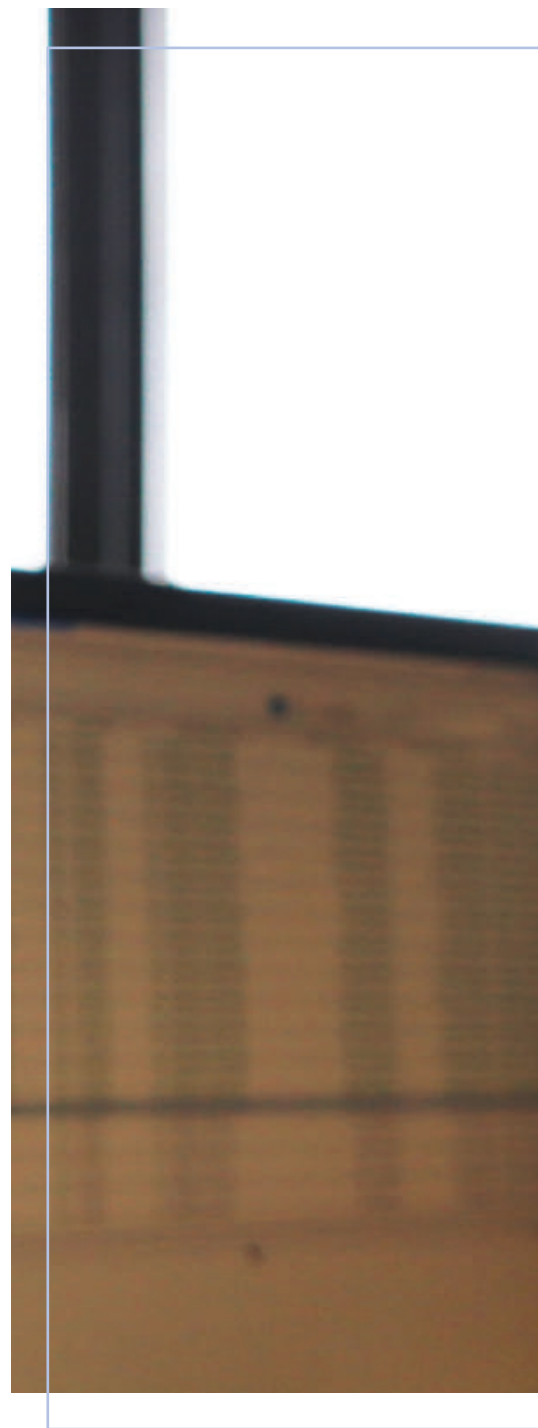
a) Below a jointly defined threshold not exceeding 0.04% of GDP, the remuneration rate for overnight deposits is the uncollateralised euro overnight index average (€STR - euro short-term rate - since 3 January 2022)

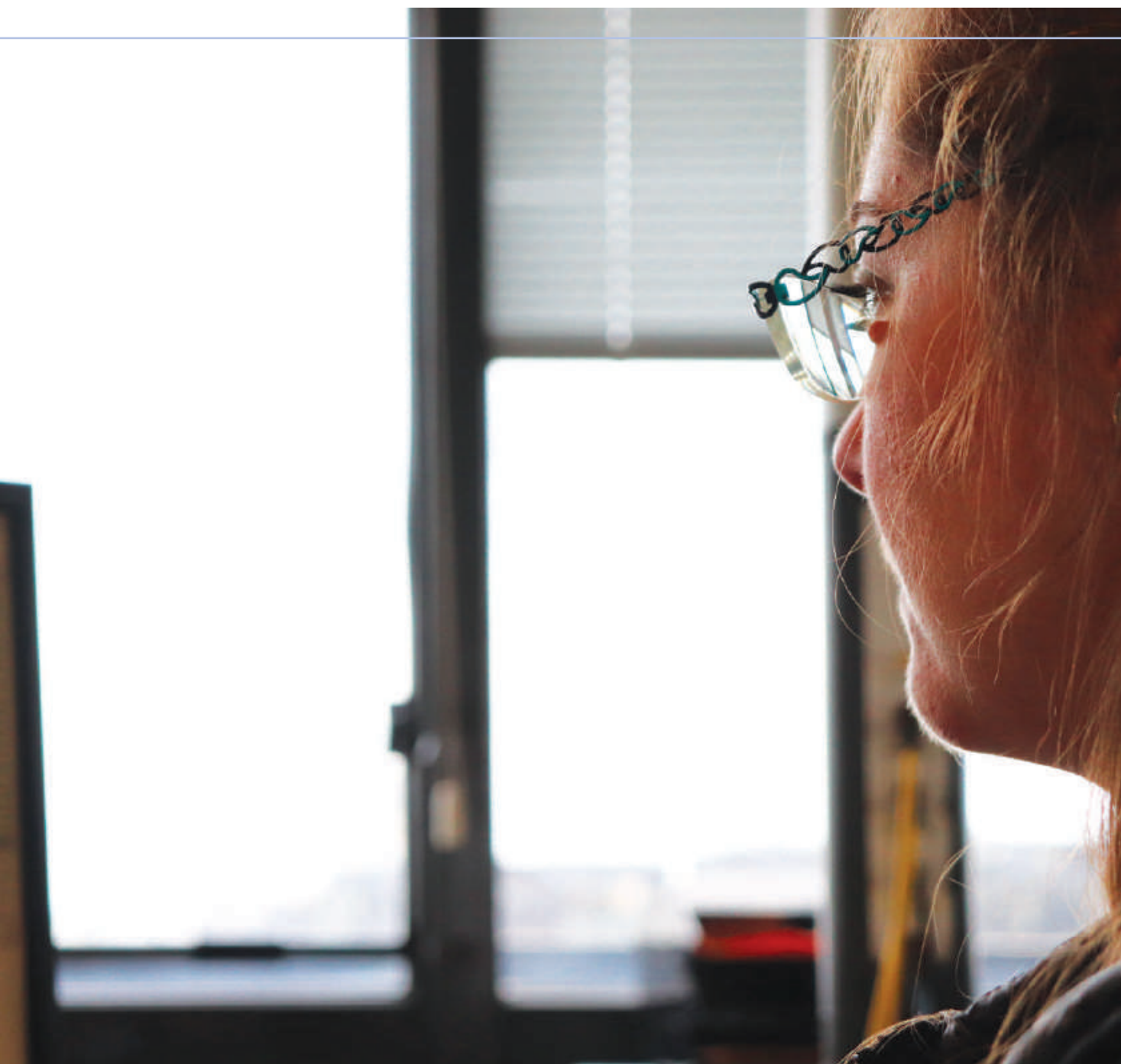
b) Deposits of more than the aforementioned threshold are remunerated at the lower of the uncollateralised overnight index average, the deposit facility rate and 0%.

As this relates to the State's single account with the *Banque de France*, the threshold referred to in point a) was set at €872.3m for 2022.

From 14 September 2022 to 30 April 2023, the ECB's Governing Council decided to temporarily suspend the 0% interest-rate cap on interest paid on government deposits in order to maintain efficient transmission of monetary policy and promote the smooth operation of markets. Accordingly, interest on the single account deposits was paid at the €STR rate throughout 2022.

The net expense relating to interest on the *Banque de France* account totalled €150.87m in 2022, including €93.67m of accrued interest yet to be received at 31 December 2022.





Statistical report

NEGOTIABLE STATE DEBT

NEGOTIABLE STATE DEBT

Source: Agence France Trésor

NEGOTIABLE STATE DEBT							
Outstanding and residual maturity							
Amounts at year-end	2003	2004	2005	2006	2007	2008	
Outstanding debt (in €m)	787,741	832,859	877,350	876,590	920,724	1,016,645	
Medium-term issuance (BTANs & OATs)	679,044	735,787	782,027	810,343	842,268	878,364	
- of which index-linked securities ⁽¹⁾	46,589	71,089	90,352	110,485	131,848	152,411	
Short-term issuance (BTFs)	108,697	97,072	95,323	66,247	78,456	138,281	
Outstanding interest rate swaps (in €m)	61,225	61,225	51,875	44,412	41,562	28,362	
Residual maturity (before swaps)	5 years 297 days	6 years 79 days	6 years 267 days	7 years 45 days	7 years 51 days	6 years 292 days	
Residual maturity (after swaps)	5 years 235 days	6 years 34 days	6 years 228 days	7 years 16 days	7 years 29 days	6 years 276 days	

Amounts at year-end	2009	2010	2011	2012	2013	2014	2015
Outstanding debt (in €m)	1,147,985	1,228,971	1,312,980	1,386,154	1,457,220	1,527,562	1,576,372
Medium-term issuance (BTANs & OATs)	933,865	1,041,833	1,135,184	1,219,554	1,283,377	1,352,277	1,423,699
- of which index-linked securities ⁽¹⁾	147,831	159,433	165,914	173,030	173,660	189,258	190,390
Short-term issuance (BTFs)	214,120	187,138	177,796	166,600	173,843	175,285	152,673
Outstanding interest rate swaps (in €m)	20,362	15,562	12,500	10,450	6,900	5,800	5,800
Residual maturity (before swaps)	6 years 246 days	7 years 68 days	7 years 57 days	7 years 37 days	7 years 5 days	6 years 363 days	7 years 47 days
Residual maturity (after swaps)	6 years 233 days	7 years 60 days	7 years 52 days	7 years 34 days	7 years 2 days	6 years 362 days	7 years 47 days

Amounts at year-end	2016	2017	2018	2019	2020	2021	2022
Outstanding debt (in €m)	1,620,597	1,686,112	1,756,400	1,822,805	2,001,014	2,145,121	2,277,811
Medium-term issuance (BTANs & OATs)	1,486,672	1,559,639	1,643,500	1,715,872	1,839,406	1,989,742	2,129,348
- of which index-linked securities ⁽¹⁾	199,528	201,742	219,584	226,396	220,054	236,362	262,230
Short-term issuance (BTFs)	133,925	126,473	112,900	106,933	161,608	155,379	148,463
Outstanding interest rate swaps (in €m)	1,000	1,000	1,000	1,000	1,000	0	0
Residual maturity (before swaps)	7 years 195 days	7 years 296 days	7 years 336 days	8 years 63 days	8 years 73 days	8 years 153 days	8 years 184 days
Residual maturity (after swaps)	7 years 195 days	7 years 296 days	7 years 336 days	8 years 63 days	8 years 73 days	8 years 153 days	8 years 184 days

(1) For these securities, the outstanding debt on a given date equals the par value multiplied by the index-linking coefficient for that date; at end-2022, the index-linking commitment stood at €48.3bn.

NON-RESIDENT HOLDINGS

Source: Banque de France

IN % AT YEAR-END	2003	2004	2005	2006	2007	2008
Total securities	48.0%	52.7%	56.5%	59.0%	61.3%	64.1%
<i>Medium-and long-term issuance (BTANs & OATs)</i>	46.8%	51.3%	54.9%	58.2%	61.1%	63.5%
<i>Short-term issuance (BTFs)</i>	56.7%	64.4%	71.5%	68.7%	63.4%	68.2%

IN % AT YEAR-END	2009	2010	2011	2012	2013	2014	2015
Total securities	67.8%	67.0%	64.0%	61.9%	63.5%	63.6%	61.9%
<i>Medium-and long-term issuance (BTANs & OATs)</i>	66.2%	64.2%	61.8%	60.7%	61.5%	61.5%	60.0%
<i>Short-term issuance (BTFs)</i>	75.3%	83.9%	79.6%	72.0%	79.9%	82.1%	82.8%

IN % AT YEAR-END	2016	2017	2018	2019	2020	2021	2022
Total securities	58.3%	54.6%	52.7%	53.6%	50.1%	47.8%	50.1%
<i>Medium-and long-term issuance (BTANs & OATs)</i>	56.3%	52.2%	50.3%	51.8%	48.8%	46.1%	48.0%
<i>Short-term issuance (BTFs)</i>	88.6%	90.4%	91.5%	87.1%	68.1%	73.9%	78.4%



DEBT SERVICE FIGURES

NEGOTIABLE DEBT OUTSTANDING

Par value: **€2,229.5bn** at end-2022 (up by €112.3bn compared with end-2021)

Par value with index-linking supplement: **€2,277.8bn** at end-2022 (up by €132.7bn compared with end-2021), including:

- > **€2,129.3bn** in medium- and long-term debt (OATs)
- > **€148.5bn** in short-term debt (BTFs)

RENEWAL OF MEDIUM- AND LONG-TERM DEBT

Renewal in 2022 of **8.5%** of the debt outstanding at end-2021
 (€167bn redeemed or bought back out of the €1.912bn outstanding at end-2021)

AVERAGE RESIDUAL MATURITY

8 years and 184 days at end-2022

SWAPS

€0bn outstanding at end-2022
 the swaps programme was still suspended

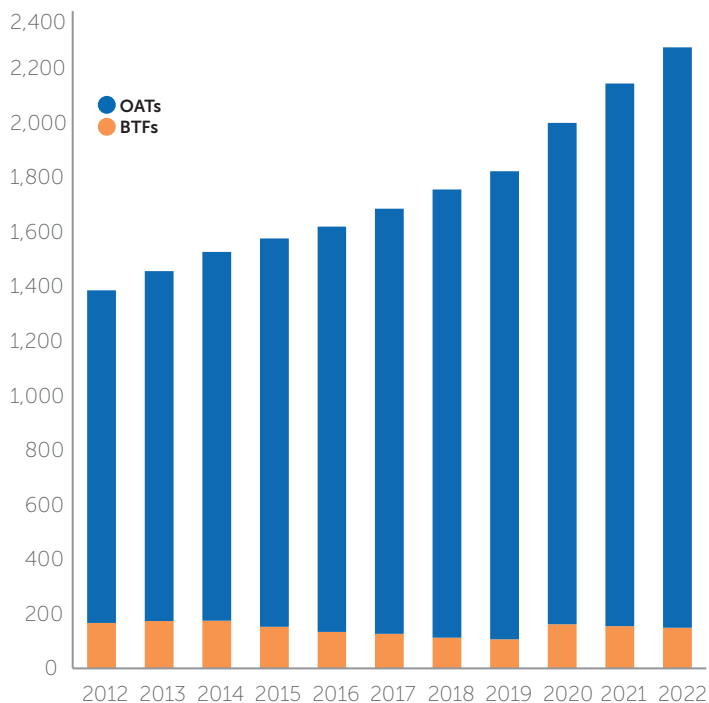
NON-RESIDENT HOLDINGS

50.1% at end-2022

BTFS AND OATS OUTSTANDING

Outstanding in €bn at year-end

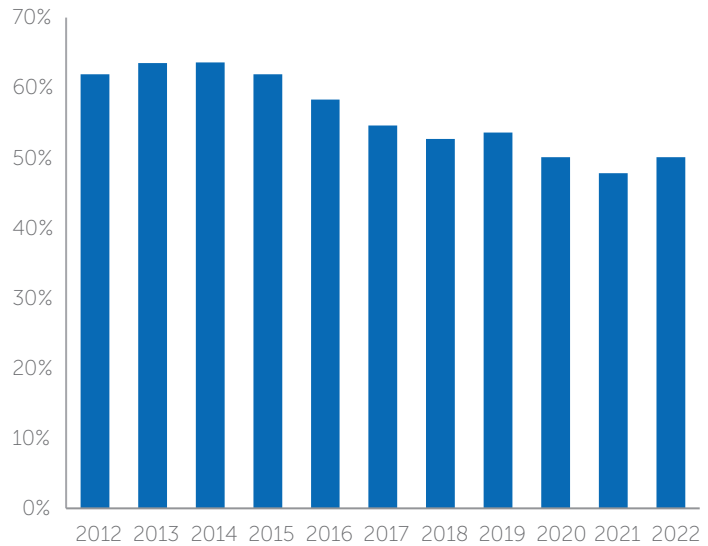
Source: Agence France Trésor



NON-RESIDENT HOLDINGS OF NEGOTIABLE DEBT SECURITIES

In % at year-end

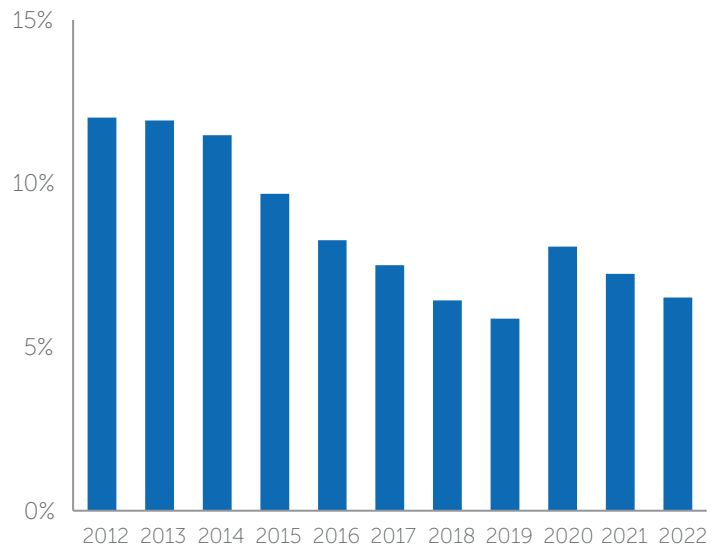
Source: Banque de France



BTFS AS A SHARE OF OUTSTANDING NEGOTIABLE STATE DEBT

In % at year-end

Source: Agence France Trésor



> MEDIUM- AND LONG-TERM DEBT

MEDIUM- AND LONG-TERM DEBT FIGURES

REDEMPTIONS IN 2022

Fixed-rate securities: **€120.9bn** in redemptions (par value)

Index-linked securities: **€19.9bn + €5.0bn** in index-linking supplements

ISSUANCE IN 2022

34 auctions in 2022

3 syndicated issues (for the inaugural issuance of the new OAT€i 0.10% 25 July 2053, OAT€i 0.10% 25 July 2038 and OAT 2.50% 25 May 2043)

Fixed-rate securities: **€260.9bn** (par value)

Index-linked securities: **€25.4bn** (par value)

Average bid-to-cover ratio*: **2.25**

*Ratio of Bid amount to amount auctioned before non-competitive tenders

BUYBACKS IN 2022

€26.2bn (par value)

NEW BONDS ISSUED IN 2022

2 NEW FIXED-RATE MEDIUM-TERM OATS

2 years OAT 0.00% 25 February 2025

5 years OAT 0.75% 25 February 2028

FOUR NEW FIXED-RATE LONG-TERM OATS

10 years OAT 0.00% 25 May 2032

10 years OAT 2.00% 25 November 2032

15 years OAT 1.25% 25 May 2038

20 years OAT 2.50% 25 May 2043

TWO NEW INDEX-LINKED OATS

Euro area OAT€i 0.10% 25 July 2038 (green)

Euro area OAT€i 0.10% 25 July 2053

AVERAGE YIELD AT ISSUE OF FIXED-RATE SECURITIES

	AGGREGATE	10 YEAR MATURITIES
2022	1.43%	1.50%
2021	-0.05%	0.00%
2020	-0.13%	-0.12%
2019	0.11%	0.23%
2018	0.53%	0.81%
2017	0.65%	0.83%
2016	0.37%	0.48%
2009-2015 average	1.95%	2.57%
1998-2008 average	4.15%	4.44%

2022 KEY FIGURES - Statistical report

Source: Agence France Trésor

OUTSTANDING AMOUNTS AND FLOWS OF MEDIUM- AND LONG-TERM DEBT			
IN €M	PAR VALUE		
	FIXED-RATE SECURITIES	INDEX-LINKED SECURITIES	TOTAL
Outstanding at end-2021⁽¹⁾	1,753,395	208,430	1,961,826
Issuance	260,867	25,363	286,230
- auctions	255,867	18,363	274,230
- syndicated issues	5,000	7,000	12,000
Buybacks ⁽²⁾	26,230	-	26,230
- over the counter	26,230	-	26,230
- reverse auctions	-	-	-
Issuance net of buybacks	234,637	25,363	260,000
Redemptions	120,902	19,853	140,755
Net flows	113,735	5,510	119,245
Outstanding at end-2022⁽¹⁾	1,867,130	213,940	2,081,071

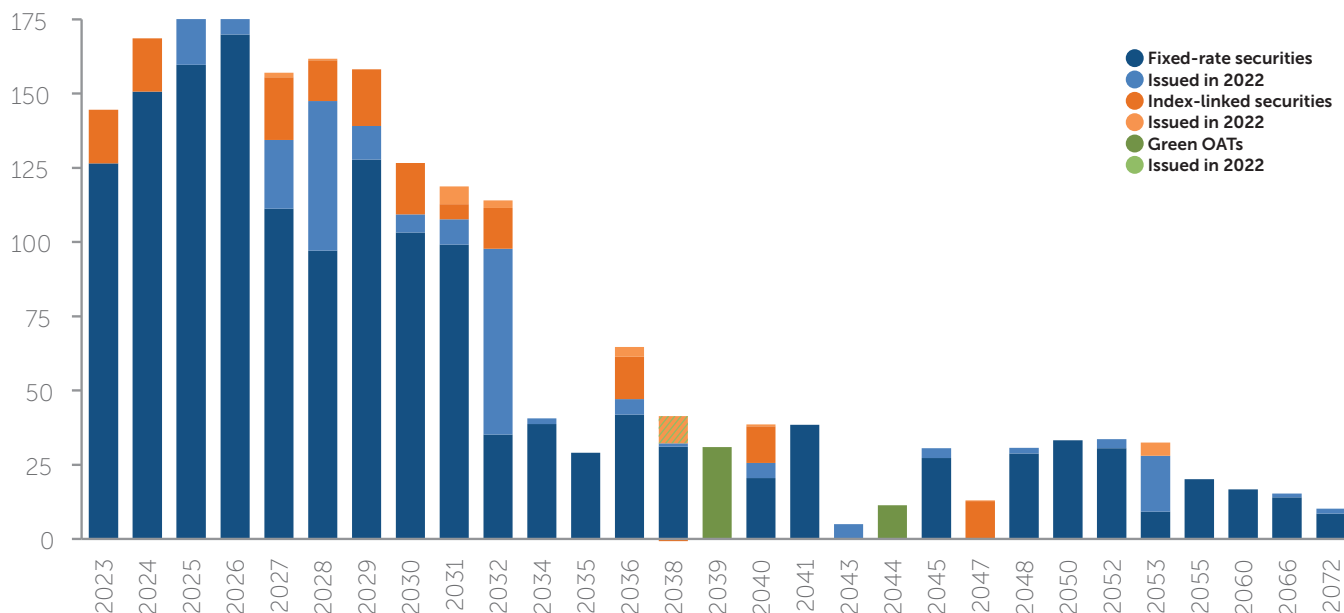
(1) Outstanding amounts in par value issued, not including index-linking supplements, unlike the outstanding amounts shown in other tables

(2) Excluding buybacks of securities maturing during the year, which are recognised as redemptions

BREAKDOWN OF MEDIUM- AND LONG-TERM DEBT AT 31/12/2022

Par value, in €bn

Source: Agence France Trésor



LONG-TERM YIELDS

In %

Source: US Treasury Department, Banque de France, Agence France Trésor

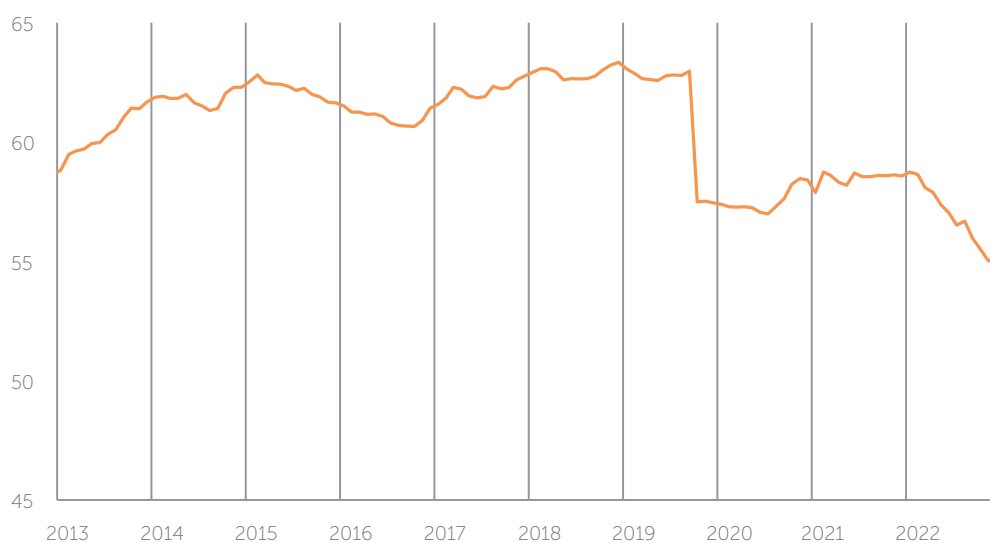
● United States - 10-year yield
● TEC 10-year index
● Yield at issue of 10-year OATs



STRIPS OUTSTANDING

In €bn

Source: Euroclear



2022 KEY FIGURES - Statistical report

MEDIUM- AND LONG-TERM SECURITIES TRADING IN 2022				
IN €M	OUTSTANDING	ISSUANCE	BUYBACKS	OUTSTANDING
	End-2021	2022	2022	End-2022
OAT 0.00% 25/02/2023	12,027	–	2,018	10,009
OAT 0.00% 25/03/2023	39,462	–	14,411	25,051
OAT 8.50% 25/04/2023	10,396	–	754	9,642
OAT 1.75% 25/05/2023	45,891	–	9,047	36,844
OAT 0.00% 25/02/2025	–	28,192	–	28,192
OATi 0.10% 01/03/2025	12,138	655	–	12,793
OAT 0.50% 25/05/2025	43,331	2,199	–	45,530
OAT 0.00% 25/02/2026	41,396	4,194	–	45,590
OAT€i 0.10% 01/03/2026	11,085	815	–	11,900
OAT 0.50% 25/05/2026	44,743	6,370	–	51,113
OAT 0.00% 25/02/2027	18,332	23,114	–	41,446
OAT€i 1.85% 25/07/2027	21,160	1,511	–	22,671
OAT 0.75% 25/02/2028	–	33,065	–	33,065
OATi 0.10% 01/03/2028	13,848	460	–	14,308
OAT 0.75% 25/05/2028	49,380	8,057	–	57,437
OAT 0.75% 25/11/2028	47,717	9,226	–	56,943
OAT 0.50% 25/05/2029	45,491	8,489	–	53,980
OAT 0.00% 25/11/2029	42,700	2,775	–	45,475
OAT 2.50% 25/05/2030	54,855	2,894	–	57,749
OAT 0.00% 25/11/2030	48,310	3,296	–	51,606
OAT 1.50% 25/05/2031	53,267	5,720	–	58,987
OAT€i 0.10% 25/07/2031	5,001	5,985	–	10,986
OAT 0.00% 25/11/2031	45,896	2,844	–	48,740
OATi 0.10% 01/03/2032	2,886	1,880	–	4,766
OAT 0.00% 25/05/2032	–	35,865	–	35,865
OAT€i 3.15% 25/07/2032	10,816	711	–	11,527
OAT 2.00% 25/11/2032	–	26,683	–	26,683
OAT 1.25% 25/05/2034	38,746	1,867	–	40,613
OATi 0.10% 01/03/2036	4,710	1,967	–	6,677
OAT 1.25% 25/05/2036	41,823	5,228	–	47,051
OAT€i 0.10% 25/07/2036	9,573	1,407	–	10,980
OAT 1.25% 25/05/2038	–	5,710	–	5,710
OAT€i 0.10% 25/07/2038	–	4,549	–	4,549
OAT 0.50% 25/05/2040	20,536	5,124	–	25,660
OAT€i 1.80% 25/07/2040	12,280	649	–	12,929
OAT 2.50% 25/05/2043	–	5,000	–	5,000
OAT 0.50% 25/06/2044	11,402	5,096	–	16,498
OAT 3.25% 25/05/2045	27,260	3,297	–	30,557
OAT€i 0.10% 25/07/2047	12,799	228	–	13,027
OAT 2.00% 25/05/2048	28,759	1,885	–	30,644
OAT 0.75% 25/05/2052	30,529	3,093	–	33,622
OAT 0.75% 25/05/2053	9,199	18,781	–	27,980
OAT€i 0.10% 25/07/2053	–	4,546	–	4,546
OAT 1.75% 25/05/2066	14,075	1,188	–	15,263
OAT 0.50% 25/05/2072	8,537	1,615	–	10,152
AGGREGATE		286,230	26,230	
Non-index-linked securities		260,867	26,230	
Index-linked securities		25,363	0	

Source: Agence France Trésor

> STATE FINANCING

FINANCING REQUIREMENT

€280.0bn in 2022 including

- > €145.7bn in redemptions of OATs (including index-linking supplements)
- > €151.5bn in deficit financing (excluding future expense)

SOURCE OF FUNDS

€260.0bn in OAT issuance in 2022 (net of buybacks)

+€20.0bn in other funding sources in 2022 including:

- > €1.1bn increase in Treasury correspondents' deposits (excluding Invest for the Future accounts)
- > €35.2bn by reduction in outstandings (positive contribution to funding sources)
- > €1.9bn of resources allocated to the Public Debt Fund to reduce debt
- > less €11.3bn in other funding sources (mainly issue discounts)
- > less €6.9bn by reduction in BTFs outstanding (negative contribution to funding sources)

STATE CASH FLOWS

Source: Agence France Trésor: DGFIP

STATE CASH FLOWS						
In €bn	2006	2007	2008	2009	2010	2011
Financing requirement	113.6	102.5	160.3	246.4	196.8	185.6
Redemption of medium- and long-term debt	77.6	69.0	97.6	110.1	82.9	94.9
- par value	77.6	69.0	97.6	107.7	82.2	93.0
- index-linking supplements paid at maturity	-	-	-	2.5	0.8	1.8
Redemption of other debts	2.8	0.6	10.3	1.6	4.1	0.6
SNCF Réseau – redemptions						
Deficit to be financed	39.0	42.1	56.3	138.0	110.1	90.7
Other cash requirements	-5.8	-9.3	-3.9	-3.4	-0.4	-0.6
Source of funds	113.6	102.5	160.3	246.4	196.8	185.6
Medium- and long-term issuance net of buybacks	104.1	97.6	128.5	165.0	188.0	184.0
Funds allocated to the CDP to reduce debt	7.8	-	-	-	-	-
Change in outstanding short-term State securities	-29.1	12.2	59.8	75.8	-27.0	-9.3
Change in correspondents' deposits	5.1	2.6	-1.6	0.8	6.0	13.4
Change in cash position ⁽¹⁾	25.9	-8.1	-25.3	-0.5	22.1	-3.9
Other net cash sources	-0.2	-1.8	-1.2	5.3	7.7	1.5

2022 KEY FIGURES - Statistical report

In €bn	2012	2013	2014	2015	2016	2017
Financing requirement	187.0	185.5	179.1	189.1	194.1	183.1
Redemption of medium- and long-term debt	97.9	106.7	103.8	116.4	124.9	115.2
- <i>par value</i>	95.3	103.8	103.8	114.1	124.5	112.8
- <i>index-linking supplements paid at maturity</i>	2.7	2.8	-	2.3	0.4	2.4
Redemption of other debts	1.3	6.1	0.2	0.1	-	-
SNCF Réseau – redemptions						
Deficit to be financed	87.2	74.9	73.6	70.5	69.1	67.7
Other cash requirements	0.6	-2.2	1.5	2.0	0.1	0.3
Source of funds	187.0	185.5	179.1	189.1	194.1	183.1
Medium- and long-term issuance net of buybacks	178.0	168.8	172.0	187.0	187.0	185.0
Funds allocated to the CDP to reduce debt	-	-	1.5	0.8	-	-
Change in outstanding short-term State securities	-11.2	7.2	1.4	-22.6	-18.7	-7.5
Change in correspondents' deposits	13.4	-4.2	-1.3	6.7	1.6	4.7
Change in cash position ⁽¹⁾	-2.0	7.9	-1.4	-5.2	4.6	-9.2
Other net cash sources	8.9	5.7	6.9	22.4	19.7	10.0

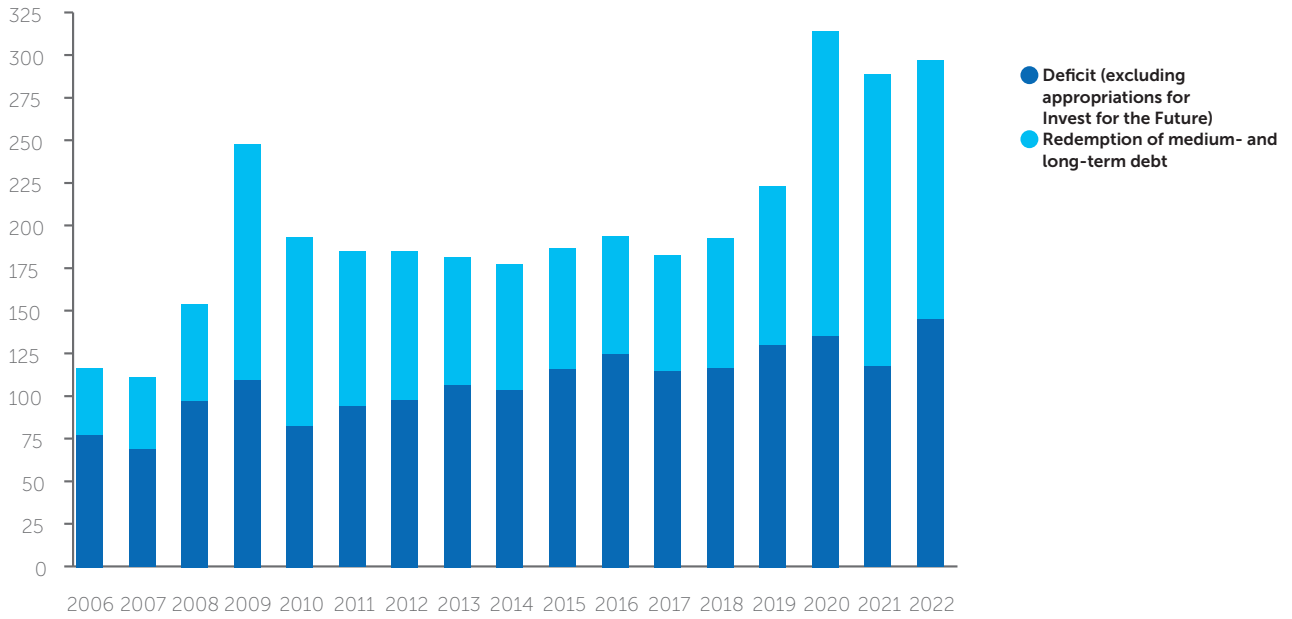
In €bn	2018	2019	2020	2021	2022
Financing requirement	192.0	220.5	309.5	285.2	280.0
Redemption of medium- and long-term debt	116.6	130.2	136.1	118.3	145.7
- <i>par value</i>	115.9	128.9	130.5	117.5	140.8
- <i>index-linking supplements paid at maturity</i>	0.7	1.3	5.6	0.8	5.0
Redemption of other debts	-	-	0.5	-	-
SNCF Réseau – redemptions			1.7	1.3	3.0
Deficit to be financed	76.1	92.7	178.1	170.7	151.4
Other cash requirements	-0.7	-2.4	-6.9	-5.1	-20.2
Source of funds	192.0	220.5	309.5	285.2	280.0
Medium- and long-term issuance net of buybacks	195.0	200.0	260.0	260.0	260.0
Funds allocated to the CDP to reduce debt	-	-	-	-	1.9
Change in outstanding short-term State securities	-13.6	-6.0	54.7	-6.2	-6.9
Change in correspondents' deposits	9.9	11.5	27.8	18.7	1.1
Change in cash position ⁽¹⁾	-11.1	-5.7	-63.4	-4.4	35.2
Other net cash sources	11.8	20.6	30.4	17.2	-11.3

(1) including short-term investments; a positive sign indicates a decrease in the stock.

STATE FINANCING REQUIREMENT

In €bn

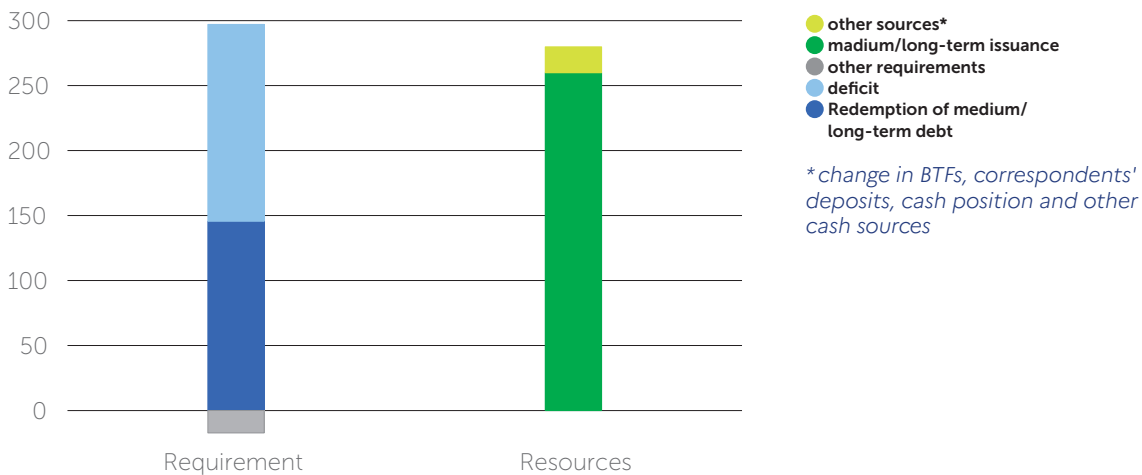
Source: Agence France Trésor, DGFIP



STATE FINANCING REQUIREMENT AND SOURCES OF FUNDS IN 2022

In €bn

Source: Agence France Trésor, DGFIP



* change in BTFs, correspondents' deposits, cash position and other cash sources

DEBT SERVICE FIGURES

CASH BASIS ACCOUNTING

€50.7bn in net cost charged to the “cost of State debt service and cash management” programme in 2022, including:

- > €49.4bn for negotiable State debt
- > €12.1bn increase compared to the Initial Budget Act (€38.7bn)
- > €12.9bn increase compared to the 2021 outturn (€37.8bn)

ACCRUAL BASIS ACCOUNTING

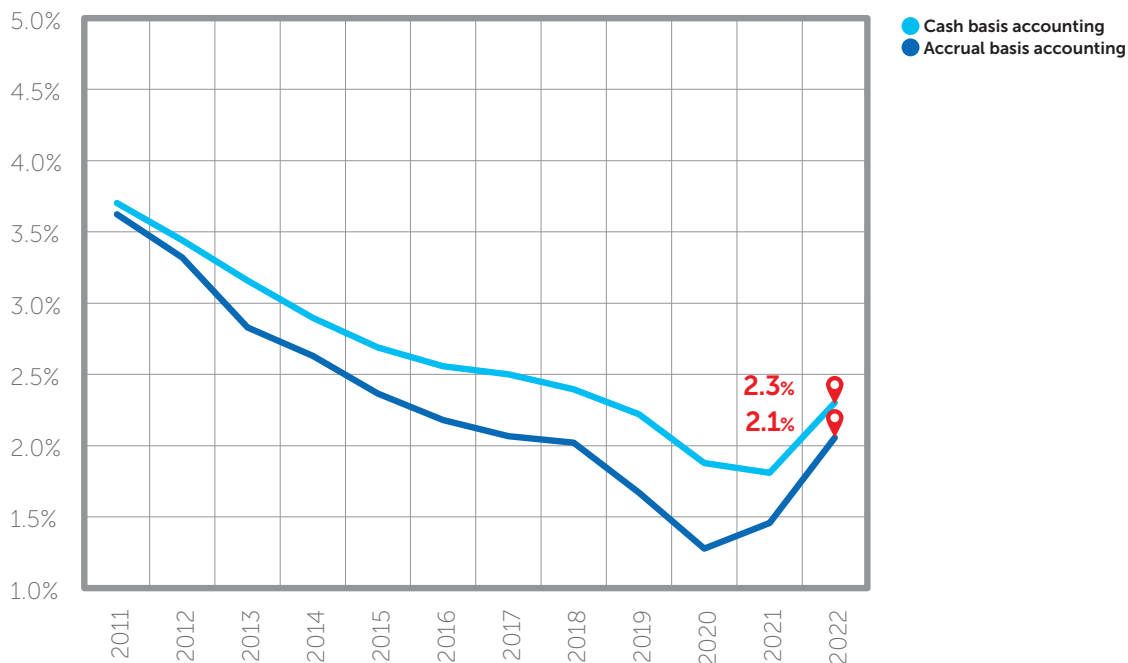
Net expense of €44.1bn in 2022 for negotiable State debt alone (excluding cash and assumed debt), including:

- > €33.0bn for accrued interest on OATs
- > €23.0bn for index-linking expenses on the principal of indexed securities
- > -€11.5bn for issue premiums and discounts (expense reduction)
- > -€0.4 bn for interest on BTFs

COST OF NEGOTIABLE DEBT SERVICE (OATS AND BTFs)

Implied yield (cost for the year as a % of the outstanding debt at the beginning of the year)

Source: Agence France Trésor



2022 KEY FIGURES - Statistical report

COST OF STATE DEBT SERVICE AND CASH MANAGEMENT – CASH BASIS ACCOUNTING										
<i>in €m</i>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Negotiable debt – net expense⁽¹⁾	37,611	38,253	38,944	39,184	39,596	43,796	36,895	39,801	45,502	45,182
OATs and BTANs – net interest payments	34,685	35,068	35,545	34,856	34,435	34,785	35,128	36,505	39,924	41,339
- interest paid	36,452	37,037	37,428	36,706	36,504	36,855	37,923	39,330	42,897	43,958
- accrued interest received at issue (-)	1,767	1,969	1,883	1,849	2,069	2,070	2,795	2,825	2,973	2,620
OATs AND BTANs – index-linking expense	487	1,072	1,352	2,107	1,756	4,615	84	2,267	3,967	3,638
BTF – interest paid	2,439	2,113	2,047	2,220	3,405	4,396	1,682	1,029	1,611	206
Other expenses and income										
Debt assumed – net expense	2	2	2	20	16	626	504	412	265	231
Non-negotiable debt	89	21	6	5	4	14	2	1	1	1
Invest for the Future – interest on funds	-	-	-	-	-	-	-	165	408	645
Cash management – net expense	-166	-206	-116	-275	-80	14	204	104	66	234
- Expenses	613	318	398	404	586	751	540	248	365	309
- Income	779	525	514	679	666	736	336	144	300	75
Other	39	43	45	7	16	13	20	20	14	9
Total expense for debt and cash management	37,574	38,113	38,881	38,941	39,550	44,464	37,625	40,503	46,256	46,303
Interest-rate swaps – gains	236	294	479	519	273	156	140	386	322	307
- Income	2,337	2,137	2,154	2,091	1,939	1,912	1,210	800	619	488
- Expenses	2,101	1,843	1,675	1,572	1,666	1,757	1,070	414	297	181

2022 KEY FIGURES - Statistical report

COST OF STATE DEBT SERVICE AND CASH MANAGEMENT – CASH BASIS ACCOUNTING (CONTINUED)										
<i>in €m</i>	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Negotiable debt – net expense⁽¹⁾	43,778	42,193	41,094	40,301	40,541	40,378	38,998	34,230	36,204	49,379
OATs and BTANs – net interest payments	41,849	41,118	40,896	41,041	39,087	37,753	36,898	34,729	34,216	33,352
- interest paid	43,735	43,339	42,702	42,195	40,291	38,764	37,978	35,666	34,856	34,451
- accrued interest received at issue (-)	1,887	2,221	1,806	1,154	1,205	1,011	1,080	937	639	1,100
OATs AND BTANs – index-linking expense	1,772	932	499	13	2,309	3,348	2,764	458	3,022	15,530
BTF – interest paid	158	142	-301	-753	-855	-723	-664	-957	-1,034	498
Other expenses and income										
Debt assumed – net expense	180	83	81	80	80	79	79	480	769	905
Non-negotiable debt	1	0	0	0	0	0	0	0	0	0
Invest for the Future – interest on funds	667	688	751	754	750	752	752	754	751	752
Cash management – net expense	242	181	204	282	297	316	409	706	729	476
- Expenses	253	205	205	282	297	316	409	706	729	673
- Income	11	24	1	0	0	0	0	0	0	197
Other	17	14	6	30	31	16	18	32	43	26
Total expense for debt and cash management	44,886	43,159	42,136	41,447	41,697	41,541	40,256	36,202	38,496	51,538
Interest-rate swaps – gains	208	134	145	145	25	25	26	25	26	0
- Income	290	185	155	155	28	29	30	29	31	0
- Expenses	82	51	10	10	4	4	4	4	5	0

2022 KEY FIGURES - Statistical report

Sources: Agence France Trésor, DGFIP

COST OF NEGOTIABLE STATE DEBT – ACCRUAL BASIS ACCOUNTING						
in €m	2003	2004	2005	2006	2007	2008
Negotiable debt – net expense⁽¹⁾	37,995	38,447	38,541	37,721	40,244	43,523
OATs and BTANs – interest and similar expenses	34,871	35,066	34,874	34,157	34,380	35,252
- accrued interest	34,984	35,380	35,394	34,369	34,395	34,944
- amortisation of issue discounts (+)	1,088	1,034	912	1,057	1,182	1,417
- amortisation of issue premiums (-)	1,201	1,348	1,432	1,269	1,198	1,109
OATs AND BTANs – index-linking expense ⁽²⁾	642	1,168	1,695	1,320	2,705	4,094
BTFs - accrued interest	2,482	2,213	1,972	2,244	3,159	4,176

in €m	2009	2010	2011	2012	2013	2014	2015
Negotiable debt – net expense⁽¹⁾	37,855	40,762	44,529	43,588	39,207	38,305	36,126
OATs and BTANs – interest and similar expenses	35,831	37,006	38,507	39,411	37,993	37,450	36,135
- accrued interest	35,736	38,176	40,285	41,690	41,016	40,667	40,687
- amortisation of issue discounts (+)	1,457	1,234	1,372	1,491	1,400	1,530	1,621
- amortisation of issue premiums (-)	1,362	2,404	3,149	3,771	4,423	4,747	6,173
OATs AND BTANs – index-linking expense ⁽²⁾	-338	2,642	4,412	3,618	1,106	648	170
BTFs - accrued interest	2,362	1,114	1,610	559	109	208	-179

in €m	2016	2017	2018	2019	2020	2021	2022
Negotiable debt – net expense⁽¹⁾	34,365	33,499	34,062	29,350	23,283	29,143	44,104
OATs and BTANs – interest and similar expenses	34,038	31,834	30,387	28,206	24,897	22,131	21,517
- accrued interest	40,222	38,612	37,670	36,219	34,654	33,884	33,047
- amortisation of issue discounts (+)	1,474	1,389	1,288	1,274	1,141	962	1,707
- amortisation of issue premiums (-)	7,658	8,166	8,571	9,288	10,898	12,715	13,237
OATs AND BTANs – index-linking expense ⁽²⁾	955	2,535	4,441	1,788	-782	8,045	22,997
BTFs - accrued interest	-628	-871	-765	-643	-832	-1,033	-409

(1) Excluding fees and commissions; excluding gains/losses on buybacks

(2) The decrease in prices means that a gain was recorded in 2020 (counted negatively as a reduction in expenses).

> SHORT-TERM DEBT

SHORT-TERM DEBT FIGURES

BTFS OUTSTANDING

Outstanding at end-2022: **€148.5bn**

€6.9bn decrease in 2022

BTF ISSUANCE

51 auctions in 2022

€6.1bn issued per auction on average

Average bid-to-cover ratio* in 2022: **3.14**

*Bid amount to amount auctioned before non-competitive tenders

EUROPEAN CENTRAL BANK REFINANCING RATE

End-2021 **0.00%**

End-2022 **2.50%**

AVERAGE YIELD AT ISSUE		
	AGGREGATE	3-MONTH MATURITIES
2022	0.19%	-0.02%
2021	-0.67%	-0.68%
2020	-0.56%	-0.57%
2019	-0.58%	-0.57%
2018	-0.60%	-0.60%
2017	-0.62%	-0.63%
2010-2016 average	0.11%	0.07%
1998-2009 average	2.94%	2.89%

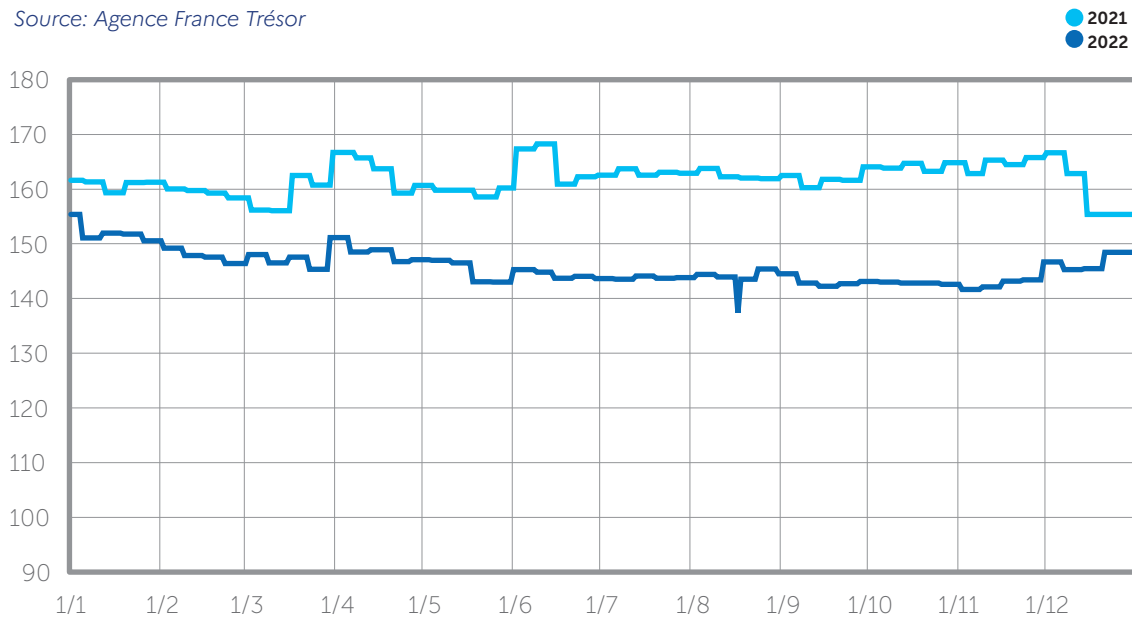
BTFS OUTSTANDING AND BTF FLOWS	
in €m	
Outstanding at end-2021	155,379
Issuance in 2021	311,582
<2-month BTFs	2,497
3-month BTFs	153,913
4-to-5 month BTFs	597
6-month BTFs	75,238
7-to-11 month BTFs	6,834
12-month BTFs	72,503
Redemptions in 2022	318,498
<2-month BTFs	2,497
3-month BTFs	153,248
4-to-5 month BTFs	597
6-month BTFs	79,267
7-to-11 month BTFs	2,714
12-month BTFs	80,175
Outstanding at end-2022	148,463

Source: Agence France Trésor

BTFS OUTSTANDING

In €bn

Source: Agence France Trésor



YIELDS

In %

Source: Banque de France, Agence France Trésor



> OVER-THE-COUNTER BUYBACKS OF OATS

in €m

By month	Amount bought back*
January 2022	908
February 2022	350
March 2022	1,875
April 2022	235
May 2022	100
June 2022	2,560
July 2022	397
August 2022	5,850
September 2022	7,250
October 2022	575
November 2022	6,000
December 2022	130

* Excluding securities maturing in 2022

in €m

By bond	Amount bought back*
OAT 0% 25 February 2023	2,018
OAT 0% 25 March 2023	14,411
OAT 8.5% 25 April 2023	754
OAT 1.75% 25 May 2023	9,047

* Excluding securities maturing in 2022

Total buybacks	26,230
Maturing 2023	26,230
Maturing 2024	0
Fixed-rate securities	26,230
Index-linked securities	0



> BREAKDOWN OF NEGOTIABLE STATE DEBT AT 31 DECEMBER 2022

SHORT-TERM DEBT		
CODE	MATURITY	OUTSTANDING (€)
FR0127034694	BTF 4 January 2023	15,137,000,000
FR0127316984	BTF 11 January 2023	7,436,000,000
FR0127462804	BTF 18 January 2023	5,856,000,000
FR0127034702	BTF 25 January 2023	5,965,000,000
FR0127462812	BTF 1 February 2023	5,851,000,000
FR0127316992	BTF 8 February 2023	5,960,000,000
FR0127462820	BTF 15 February 2023	6,296,000,000
FR0127034710	BTF 22 February 2023	6,905,000,000
FR0127462838	BTF 1 March 2023	7,474,000,000
FR0127317008	BTF 8 March 2023	6,938,000,000
FR0127462846	BTF 15 March 2023	4,894,000,000
FR0127034728	BTF 22 March 2023	5,544,000,000
FR0127462861	BTF 5 April 2023	5,653,000,000
FR0127176370	BTF 19 April 2023	5,589,000,000
FR0127462879	BTF 4 May 2023	5,546,000,000
FR0127176388	BTF 17 May 2023	4,721,000,000
FR0127176396	BTF 14 June 2023	5,983,000,000
FR0127317016	BTF 12 July 2023	6,536,000,000
FR0127317024	BTF 9 August 2023	7,425,000,000
FR0127317032	BTF 6 September 2023	5,798,000,000
FR0127462895	BTF 4 October 2023	6,570,000,000
FR0127462903	BTF 1 November 2023	6,485,000,000
FR0127462911	BTF 29 November 2023	3,901,000,000
Total BTFs	Outstanding	148,463,000,000
	Residual maturity (days)	108

2022 KEY FIGURES - Statistical report

MEDIUM AND LONG-TERM DEBT (MATURING 2023–2028)						
ISIN CODE	TITLE	OUTSTANDING (€)	INDEX COEFF.	PAR VALUE OUTSTANDING (€)	STRIPPED BONDS (€)	CAC*
Maturing 2023		148,890,182,143				
FR0013479102	OAT 0.00% 25 February 2023	10,009,000,000			0	x
FR0013283686	OAT 0.00% 25 March 2023	25,050,500,000			0	x
FR0000571085	OAT 8.50% 25 April 2023	9,641,695,903			4,988,738,300	
FR0011486067	OAT 1.75% 25 May 2023	36,844,000,000			0	x
FR0010585901	OATi 2.10% 25 July 2023	22 426 986 240 ⁽¹⁾	1.24263	18,048,000,000	0	
FR0010466938	OAT 4.25% 25 October 2023	44,918,000,000			473,985,000	
Maturing 2024		172,627,289,520				
FR0014001N46	OAT 0.00% 25 February 2024	31,676,000,000			0	x
FR0013344751	OAT 0.00% 25 March 2024	42,533,000,000			0	x
FR0011619436	OAT 2.25% 25 May 2024	37,948,000,000			0	x
FR0011427848	OAT€i 0.25% 25 July 2024	21,934,289,520 ⁽¹⁾	1.22408	17,919,000,000	0	x
FR0011962398	OAT 1.75% 25 November 2024	38,536,000,000			42,000,000	x
Maturing 2025		204,602,047,498				
FR0014007TY9	OAT 0.00% 25 February 2025	28,192,000,000			0	x
FR0012558310	OATi 0.10% 1 March 2025	14,490,119,380 ⁽¹⁾	1.13266	12,793,000,000	0	x
FR0013415627	OAT 0.00% 25 March 2025	47,814,000,000			0	x
FR0012517027	OAT 0.50% 25 May 2025	45,530,000,000			0	x
FR0000571150	OAT 6.00% 25 October 2025	30,653,928,118			2,778,264,400	
FR0012938116	OAT 1.00% 25 November 2025	37,922,000,000			0	x

(1) Par value x indexation coefficient (par value if coefficient is less than 1)

2022 KEY FIGURES - Statistical report

MEDIUM AND LONG-TERM DEBT (MATURING 2026–2033)						
ISIN CODE	TITLE	OUTSTANDING (€)	INDEX COEFF.	PAR VALUE OUTSTANDING (€)	STRIPPED BONDS (€)	CAC*
Maturing 2026		194,098,079,000				
FR0013508470	OAT 0.00% 25 February 2026	45,590,000,000			0	x
FR0013519253	OAT€i 0.10% 1 March 2026	13,666,079,000 ⁽¹⁾	1.14841	11,900,000,000	0	x
FR0010916924	OAT 3.50% 25 April 2026	44,202,000,000			0	
FR0013131877	OAT 0.50% 25 May 2026	51,113,000,000			0	x
FR0013200813	OAT 0.25% 25 November 2026	39,527,000,000			0	x
Maturing 2027		163,562,421,940				
FR0014003513	OAT 0.00% 25 February 2027	41,446,000,000			0	x
FR0013250560	OAT 1.00% 25 May 2027	38,814,000,000			0	x
FR0011008705	OAT€i 1.85% 25 July 2027	29,203,421,940 ⁽¹⁾	1.28814	22,671,000,000	0	
FR0011317783	OAT 2.75% 25 October 2027	54,099,000,000			0	
Maturing 2028		163,657,239,311				
FR001400AIN5	OAT 0.75% 25 February 2028	33,065,000,000			0	x
FR0013238268	OATi 0.10% 1 March 2028	16,179,057,160 ⁽¹⁾	1.13077	14,308,000,000	0	x
FR0000571226	OAT zero coupon 28 March 2028	33,182,151 ⁽²⁾		46,232,603	–	
FR0013286192	OAT 0.75% 25 May 2028	57,437,000,000			0	x
FR0013341682	OAT 0.75% 25 November 2028	56,943,000,000			0	x
Maturing 2029		163,563,890,990				
FR0013410552	OAT€i 0.10% 1 March 2029	11,478,243,690 ⁽¹⁾	1.15977	9,897,000,000	0	x
FR0000571218	OAT 5.50% 25 April 2029	39,618,880,458			1,859,746,100	
FR0013407236	OAT 0.50% 25 May 2029	53,980,000,000			0	x
FR0000186413	OATi 3.40% 25 July 2029	13,011,766,842 ⁽¹⁾	1.41661	9,185,144,000	0	
FR0013451507	OAT 0.00% 25 November 2029	45,475,000,000			0	x
Maturing 2030		130,177,287,200				
FR0011883966	OAT 2.50% 25 May 2030	57,749,000,000			0	x
FR0011982776	OAT€i 0.70% 25 July 2030	20,822,287,200 ⁽¹⁾	1.20835	17,232,000,000	0	x
FR0013516549	OAT 0.00% 25 November 2030	51,606,000,000			0	x
Maturing 2031		120,362,987,340				
FR0012993103	OAT 1.50% 25 May 2031	58,987,000,000			52,900,000	x
FR0014001N38	OAT€i 0.10% 25 July 2031	12,635,987,340 ⁽¹⁾	1.15019	10,986,000,000	0	x
FR0014002WK3	OAT 0.00% 25 November 2031	48,740,000,000			0	x
Maturing 2032		120,092,908,290				
FR0014003N51	OATi 0.10% 1 March 2032	5,179,545,820 ⁽¹⁾	1.08677	4,766,000,000	0	x
FR0014007L00	OAT 0.00% 25 May 2032	35,865,000,000			0	x
FR0000188799	OAT€i 3.15% 25 July 2032	17,173,039,870 ⁽¹⁾	1.48981	11,527,000,000	0	
FR0000187635	OAT 5.75% 25 October 2032	35,192,322,600			10,185,857,400	
FR001400BKZ3	OAT 2.00% 25 November 2032	26,683,000,000			0	x

(1) Par value x indexation coefficient (par value if coefficient is less than 1)

(2) Present value at 28/03/2022; not available for subscription

2022 KEY FIGURES - Statistical report

MEDIUM AND LONG-TERM DEBT (MATURING IN 2034 AND LATER)						
ISIN CODE	TITLE	OUTSTANDING (€)	INDEX COEFF.	PAR VALUE OUTSTANDING (€)	STRIPPED BONDS (€)	CAC*
Maturing in 2034 and later		547,713,411,090				
FR0013313582	OAT 1.25% 25 May 2034	40,613,000,000			0	x
FR0010070060	OAT 4.75% 25 April 2035	29,004,000,000			2,069,837,000	
FR0013524014	OATi 0.10% 1 March 2036	7,235,531,050 ⁽¹⁾	1.08365	6,677,000,000	0	x
FR0013154044	OAT 1.25% 25 May 2036	47,051,000,000			0	x
FR0013327491	OAT€i 0.10% 25 July 2036	13,013,386,200 ⁽¹⁾	1.18519	10,980,000,000	0	x
FR0014009062	OAT 1.25% 25 May 2038	5,710,000,000			0	x
FR001400AQH0	OAT€i 0.10% 25 July 2038	5,137,276,680 ⁽¹⁾	1.12932	4,549,000,000	0	x
FR0010371401	OAT 4.00% 25 October 2038	26,534,000,000			4,614,641,400	
FR0013234333	OAT 1.75% 25 June 2039	30,941,000,000			0	x
FR0013515806	OAT 0.50% 25 May 2040	25,660,000,000			0	x
FR0010447367	OAT€i 1.80% 25 July 2040	17,842,537,160 ⁽¹⁾	1.38004	12,929,000,000	0	
FR0010773192	OAT 4.50% 25 April 2041	38,446,000,000			4,139,899,000	
FR001400CMX2	OAT 2.50% 25 May 2043	5,000,000,000			0	x
FR0014002JM6	OAT 0.50% 25 June 2044	16,498,000,000			0	x
FR0011461037	OAT 3.25% 25 May 2045	30,557,000,000			776,510,000	x
FR0013209871	OAT€i 0.10% 25 July 2047	15,666,791,280 ⁽¹⁾	1.20264	13,027,000,000	0	x
FR0013257524	OAT 2.00% 25 May 2048	30,644,000,000			640,300,000	x
FR0013404969	OAT 1.50% 25 May 2050	33,195,000,000			206,900,000	x
FR0013480613	OAT 0.75% 25 May 2052	33,622,000,000			699,100,000	x
FR0014004J31	OAT 0.75% 25 May 2053	27,980,000,000			183,000,000	x
FR0014008181	OAT€i 0.10% 25 July 2053	5,133,888,720 ⁽¹⁾	1.12932	4,546,000,000	0	x
FR0010171975	OAT 4.00% 25 April 2055	20,118,000,000			11,139,318,000	
FR0010870956	OAT 4.00% 25 April 2060	16,696,000,000			8,877,704,100	
FR0013154028	OAT 1.75% 25 May 2066	15,263,000,000			1,176,700,000	x
FR0014001NN8	OAT 0.50% 25 May 2072	10,152,000,000			92,200,000	x
TOTAL MEDIUM AND LONG-TERM DEBT		Outstanding (present value)	2,129,347,744,322			
		Outstanding (par value)	2,081,070,703,682			
		Stripped bonds outstanding (par value)	54,997,600,700			
		Strippable bonds outstanding (par value)	2,081,024,471,079			
		Residual maturity (days)	3,312	9 years and 27 days		
Total debt		Outstanding (present value)	2,277,810,744,322			
		Outstanding (par value)	2,229,533,703,682			
		Residual maturity (days)	3,104	8 years and 184 days		

(1) Par value x indexation coefficient (par value if coefficient is less than 1)





Fact **sheets**

Issuance techniques

The principal method of issuing French government securities since 1985 has been the bid price system (known as the Dutch method in France). Nowadays, issuance through bank syndicates is used only in special circumstances.

BID PRICE AUCTIONS

Participants compete in the auction on an equal footing through a transparent system of open bidding according to a planned issuance programme. The bid price system consists of supplying securities at the bid price or the effective bid rate as opposed to the marginal price or rate. This type of auction is known as an "auction with several prices and sealed prices". The highest bids are served first, followed by lower bids and so on, up to AFT's target amount. Participants pay different prices that are equal to their different bid prices.

PROCEDURES:

- Auction announcements: For BTF auctions, AFT announces one business day prior to the auction the upper and lower limits on the amounts it intends to issue of each security designated in the quarterly calendar for BTF issues. For OAT auctions, AFT announces four days prior to auction the securities concerned and an upper and lower limit.
- The running of auctions: Bids from participants (primary dealers) may be sent to the *Banque de France* up to auction time (10:50am for auctions of medium- and long-term OATs, 11:50am for auctions of inflation-indexed securities and 14:50pm for auctions of BTFs). The *Banque de France* delivers the bids to AFT, withholding the names of the bidders. AFT then determines the amount bid. AFT serves all of the bids over the price limit in OAT auctions or all of the bids under the yield limit in BTF auctions. It may proportionately reduce bids at the price limit or yield limit.
- Publication of prices: Auction results are immediately announced to the bidders, displayed on the specialised agencies' screens and posted to the AFT website. These disclosures report the quantities requested, the quantities served, the marginal price for each security (or marginal rate for BTFs) and the weighted average rate for the various auctioned securities.

SYNDICATED ISSUES

Bought deals, which are another issuance technique, are usually conducted by syndication. This is a specific commitment between a syndicate of banks and the issuer to buy securities for an agreed price.

This technique is used to issue innovative securities or securities on less deep market segments, particularly on the long end of the yield curve.

SYNDICATED BOND ISSUES SINCE 2010

- **6 September 2022:**
Syndicated issue of the OAT 2.50% 25 May 2043
- **25 May 2022:**
Syndicated issue of the green OAT€i 0.10% 25 July 2038
- **25 January 2022:**
Syndicated issue of the OAT€i 0.10% 25 July 2053
- **6 July 2021:**
Syndicated issue of the OAT 0.75% 25 May 2053
- **16 March 2021:**
Syndicated issue of the OAT 0.50% 25 June 2044 (green OAT)
- **19 January 2021:**
Syndicated issue of the OAT 0.50% 25 May 2072
- **8 July 2020:**
Syndicated issue of the OATi 0.10% 1st March 2036
- **27 May 2020:**
Syndicated issue of the OAT 0.50% 25 May 2040
- **28 January 2020:**
Syndicated issue of the OAT 0.75% 25 May 2052
- **19 February 2019:**
Syndicated issue of the OAT 1.50% 25 May 2050
- **26 June 2018:**
Syndicated tap issue of the OAT 1.75% 25 June 2039 (green OAT)
- **28 March 2018:**
Syndicated issue of the OAT€i 0.10% 25 July 2036
- **16 May 2017:**
Syndicated issue of the OAT 1.75% 25 May 2048
- **24 January 2017:**
Syndicated issue of the OAT 1.75% 25 June 2039 (green OAT)
- **28 September 2016:**
Syndicated issue of the OAT€i 0.10% 25 July 2047
- **12 April 2016:**
Syndicated issue of the OAT 1.25% 25 May 2036 and of the OAT 1.75% 25 May 2066
- **11 June 2014:**
Syndicated issue of the OAT€i 0.70% 25 July 2030
- **26 March 2013:**
Syndicated issue of the OAT 3.25% 25 May 2045
- **9 February 2011:**
Syndicated issue of the OAT€i 1.85% 25 July 2027
- **10 March 2010:**
Syndicated issue of the OAT 4.00% 25 April 2060

Proactive debt management

AFT can intervene on the secondary markets in several ways

BUYBACKS

AFT can carry out over-the-counter (OTC) buybacks and reverse auctions to pre-finance future issuance programmes, thereby spreading the amounts to be issued over time

more evenly. AFT factors in market conditions when doing so: buying back securities on the market depends on their liquidity and price. AFT publishes a monthly report on

the amounts of each security bought back during the month.

In 2022, AFT bought back €26.2bn in securities maturing in 2023.

SECURITIES SWAPS

The goal is to replace the oldest securities, which are often the least liquid, with securities with stronger market demand. Such swaps are conducted via auctions or syndicated deals by offering newly

issued securities in exchange for older securities that are then retired.

The last swap was held on 4 December 2008. It entailed swapping OAT 4.00% 25 October 2038 for OATs

5.75% 25 October 2032. A total of €1.367bn in OATs 2038 were issued and €1.129bn in OATs 2032 were bought back.

INTEREST-RATE SWAPS

AFT has managed the average residual maturity of debt since 2001. This maturity has been fairly long as a natural result of the requirement that each issue be liquid, of growing demand from investors for very long maturities and of refinancing risk management. When the yield curve is clearly normal, with higher yields on the longer maturities and lower but more volatile yields on the shorter ones, reducing average maturity should help reduce the

cost of servicing the debt in the long run, all else being equal. On the other hand, this cost will be more variable.

The aim of reducing the average residual maturity of debt is to strike a balance between lower interest expense and greater variability of this expense. Such a reduction should be implemented gradually over at least one economic cycle, since interest rates vary according to economic conditions.

In October 2021, the last transactions under AFT's interest-rate *swaps* programme reached maturity. The cumulative gains from the *swaps* programme came to €4.34bn.

At end-2022, this strategy was still suspended. The interest-rate swaps programme may nevertheless be revived if warranted by market conditions.

BTFS

Fixed-rate discount Treasury bills (BTFS) are similar to short-term Treasury bonds. They have an initial maturity of up to one year

MARKET OVERVIEW

The maturity of BTFS is expressed in weeks. The most frequently issued maturities are 13, 26 and 52 weeks. Bills with maturities of 20–28 weeks may be issued as half-year bills and bills with maturities of 48–52 weeks may be issued as one-year bills.

BTFS have a par value of €1 and are issued every week by auction according to a quarterly schedule

that AFT publishes in advance. This schedule specifies the maturities of the bills that will be auctioned during the quarter. Unscheduled issuance of certain BTFS with shorter than standard maturities may take place to meet the State's cash requirements. A quarterly BTFS, a half-year BTFS and a one-year BTFS are normally issued each week.

On 31 December 2022, outstanding BTFS totalled €148bn.

To ensure the fungibility of new and existing issues, the maturities of new bills are aligned on those of previously issued bills. In 2022, the market featured around 25 different BTFS at any time.

AUCTIONS

Every Friday at 11am, AFT announces the BTFS that will be auctioned the following Monday. The announcement includes the amounts to be auctioned with an upper and lower limit for each auctioned BTFS to ensure that there is sufficient flexibility to meet demand.

Bids of at least €1m are expressed as a money-market straight-line yield to three decimal places, with ticks of 0.5 basis points, and as the exact number of days out of 360 (ACT/360). BTFS are discounted Treasury bills. The *pro-rated* discount is applied to the par value of the bill when the

bill is issued. Therefore, no coupon payments are made.

As of Monday 6 October 2014, settlement of BTFS auctions has been at T+2 to bring primary market settlement dates into line with secondary market settlement dates.

TRADING

BTFS purchases on the secondary market are governed by the same rules that govern primary market purchases. Trades are based on a

money-market straight-line yield to three decimal places, with ticks of 0.5 basis points, and the exact number of days out of 360 (ACT/360). Since

2 April 2012, the settlement date for BTFS on the secondary market is T+2, instead of T+1 as before.

OATS

OATs are fungible medium- and long-term Treasury bonds with maturities of 2 to 50 years.

For the sake of simplicity, as of 1 January 2013, new benchmark medium-term securities (those with two-year and five-year maturities), formerly issued as BTANs (fixed-rate Treasury bills with annual interest), have been issued as OATs, as have long-term securities.

OATs are now the only form of medium- and long-term State financing. They were formerly used solely for long-term financing between 1985 and 2012. OATs are fungible securities with maturities at issue of 2 to 50 years, usually issued by auction. New issues are generally associated with existing issues. This enables the State to issue new bonds at a price in line with the latest market prices but identical in all other respects to the initial issue. As a result, the State avoids issuing too many bonds with different characteristics and ensures the liquidity of those already issued.

OATs have a par value of €1. The value of the accrued coupon is calculated on the basis of the exact number of days over the exact number of days (ACT/ACT). The maturity dates and coupon dates of OATs are the 1st, 24th or 25th of the month. OAT trades are settled by national and international central securities depositories.

OAT AUCTIONS

On the Friday preceding an auction, AFT announces the bonds to be auctioned on the following Thursday and the upper and lower limits of the total amount to be auctioned. Auctions of long-term OATs (maturities of eight and a half years

or more in 2022) are held on the first Thursday of the month at 10:50am, while auctions of medium-term OATs (maturities of two to eight and a half years in 2022) are held on the third Thursday of the month at 10:50am. Bids of at least €1m are

expressed on the basis of price as a percentage of par value net of accrued interest to two decimal places. Since 6 October 2014, OAT auctions have been settled at T+2, i.e. usually the Monday after the auction.



TO FIND OUT MORE:

AFT tutorial:

How does the State finance itself? <https://bit.ly/3Qv4nkg>



Index-linked OATs

The State issued the first OAT linked to the French consumer price index (OATi) on 15 September 1998. This innovation was followed in October 2001 by the very first issue of an OAT linked to the euro-area consumer price index excluding tobacco (OAT€i), and a third OAT was issued in May 2022, the very first green OAT€i.

Since then, AFT has issued index-linked securities on a regular and transparent basis, thus creating two real yield curves, one linked to French inflation and the other to euro area inflation. securities account for around 10% of AFT's annual issuance programme.

Since 2004, OATi and OAT€i auctions are held on a regular basis on the same day as auctions for medium-term OATs, but during a separate session held at 11:50am. OATis and OAT€is are designed for all types of investors looking to protect the purchasing power of their investments, improve their asset-liability management or diversify their investment portfolio. They are intended for resident or non-resident institutional investors, such as insurance companies, pension and social welfare funds, asset managers and banks, as well as retail investors.

On 31 December 2022, the par value of outstanding OATi issues amounted to €65.8bn and OAT€i issues stood at €148.2bn.

OATi GENERAL CHARACTERISTICS

These bonds have a par value of €1 and the real coupon yield is calculated as a fixed percentage of the index-linked principal at the time of issue and remains fixed to maturity. The coupon is paid annually and calculated as follows: $\text{real coupon yield} \times \text{par value} \times \text{indexation coefficient}$. The indexation coefficient is equal to the daily inflation benchmark of the day divided by the base benchmark. The daily benchmark is calculated

by linear interpolation between the consumer price index excluding tobacco (CPI) for month M-3 and the CPI for month M-2, and the base benchmark is the daily benchmark used to calculate changes in the price index. The benchmark index used is the consumer price index excluding tobacco for all resident households in France, which is published by INSEE (France's national institute of statistics and economic studies) each month.

AFT calculates the daily inflation benchmarks and indexation coefficients and publishes them on its website.

OAT redemption is based on the following formula: $\text{par value} \times \text{indexation coefficient}$.

If the daily inflation index at maturity is lower than the base benchmark, redemption at par is guaranteed.

OAT€i GENERAL CHARACTERISTICS

OAT€is are identical to OATis apart from the benchmark index, which is the Harmonised Index of Consumer

Prices (HICP) excluding tobacco for the euro area. This index is published by Eurostat on a monthly basis.

* The dated date for an OAT is the starting date for calculating the first coupon for the said OAT, i.e. the coupon date immediately prior to the first date of issue for the OAT in question. For example, an OAT issued for the first time on 15 April of year Y, with a coupon date of 25 May Y, will have a dated date of 25 May of year Y-1.

The OAT market for retail investors

AFT, in partnership with Euronext and the primary dealers, has established a secondary market where retail investors can easily buy and sell OATs, which are bonds issued by the French Republic that are backed by the credit and signature of the State. Retail investors can purchase fixed-rate OATs with maturities ranging from 2 to 50 years, and receive interest or a coupon every year from these OATs, which are redeemable in one go at maturity. Retail investors may also buy index-linked OATs.

Anyone can access the OAT market. OATs offer private individuals a variety of advantages, including a regular income, protection against inflation, a source of capital to supplement their pension or finance a project in the future, or a means of diversifying their assets.

AN ORGANISED SECONDARY MARKET

Like any other negotiable security, OATs can be traded at the market price at any time. The government took steps to modernise the OAT market in 2005 to ensure that it meets retail investors' needs. The retail OAT market is managed by Euronext. It operates under the securities regulations in force

and complies with transparency and disclosure rules. This market provides:

→ Liquidity: OATs are highly liquid. Financial institutions acting as market makers have undertaken to facilitate transactions. This market is overseen by Euronext;

→ Acceptance of orders: Orders can be placed through traditional or online financial intermediaries.

TAX TREATMENT OF OATS

Article 28 of Act 2017-1837 of 30 December 2017 (2018 Budget Act) altered the rules of taxation for capital gains and investment income. Since 1 January 2018, capital gains and investment income has automatically been subject to personal income tax at a flat rate of 12.8%, under the terms of Article 200 A(1) of the General Tax Code (CGI), plus social security contributions at an aggregate rate of 17.2%. Nevertheless, the taxpayer can opt to have these gains and income taxed at the rate corresponding to their

personal income tax bracket. This irrevocable choice must be made when declaring aggregate income, in accordance with the provisions of Article 200 A(2) of the General Tax Code.

In respect of investment income, interest on OATs and government bonds received by individuals who are residents of France for tax purposes is liable to a flat-rate tax or progressive income tax in the year following its receipt after being subject, in the year of receipt, to a non-discharging withholding

tax ("advance payment") of 12.8% (plus social contributions totalling 17.2% on investment income). This mandatory withholding tax is charged to the personal income tax liability for the year in which it was made. If the amount withheld is greater than the tax liability, the difference is reimbursed in accordance with the provisions of Article 125 A(V)(1) of the General Tax Code.

OAT strips

MARKET ORGANISATION

The market for OAT strips enjoys the same liquidity and security as the market for other French Treasury securities. Stripping and unstripping are managed by an economic interest group comprising Euroclear France and primary dealers. This group lays down the rules for trading such bonds. AFT participates in the group in an advisory capacity.

The primary dealers that trade on this market act as market makers. OAT strips are listed on the Euronext Paris exchange. They are

traded on the basis of a discount rate expressed as an annual percentage over 365 or 366 days (ACT/ACT). The price is rounded up to the fourth decimal place as a percentage of the par value.

Bond stripping separates interest payments from bond principal redemption payments, creating the same number of zero-coupon bonds. Using this technique, one can trade the bond principal and the related interest payments separately.

France was the first sovereign issuer in Europe to authorise stripping of its bonds in 1991 and has become a benchmark for this type of product in the euro area.

On 31 December 2022, outstanding fixed-rate OAT strips amounted to approximately €55bn, equivalent to 2.6% of outstanding fixed-rate strippable bonds.

FUNGIBILITY RULES

At the end of 2009, AFT introduced new rules for stripping and unstripping fixed-rate OATs in response to market demand. The new rules introduced a new type of bond that makes no distinction between principal and interest: a "fungible zero-coupon bond".

Stripped OATs are then divided into a number of these bonds with the same par value (€0.01) but different maturities, modelled on cash flows attached to the original OAT. All bonds with the same maturity are fungible. They may also be unstripped to reconstitute the original bond or a synthetic bond composed of

bonds from different OAT issues. Interest certificates from different OATs are interchangeable (fungible) if they have the same maturity.

Like all euro area bonds, bonds issued after 1 January 2013 include collective action clauses (CACs), which means that they are not fungible with bonds issued prior to that date.



AFT's management of cash flows

All of the State's cash flows (expenditure and revenue), along with those of Treasury correspondents (primarily local and regional authorities and government-funded institutions), are centralised in a single account with the *Banque de France*. AFT is responsible for the day-to-day management of this account.

ENSURING THE STATE'S FINANCIAL CONTINUITY IN ACCORDANCE WITH FRANCE'S EUROPEAN COMMITMENTS

AFT is responsible for managing the government's cash holdings. This means ensuring that the government has the financial resources needed to meet its commitments at all times, regardless of the circumstances.

Article 123 of the Treaty on the Functioning of the European Union (TFEU) prohibits the *Banque de France*, which holds the State's account, from granting the State overdrafts. This means that the Treasury Account must show a credit balance at the end of each day.

CASH MANAGEMENT THAT MEETS THE HIGHEST INTERNATIONAL STANDARDS

France has gradually introduced a pooling arrangement called "centralisation" to optimise public cash management. This involves channelling most public financial flows through the single Treasury Account. Centralisation of public cash holdings is a best practice recommended by international institutions, including the World Bank and the IMF.

In addition to the State, the vast majority of French public sector entities, including local authorities, local and national government-funded institutions, and hospitals, are required to deposit their cash holdings with the Treasury. Other entities also deposit some or all of their cash with the Treasury

under the terms of agreements, the European Union in particular, which deposits some of its funds with the French Treasury. All the entities that deposit their cash with the Treasury are called "Treasury correspondents".

Treasury correspondents' deposits are a cash resource for the State. They enable the State to reduce its reliance on market financing.

PROMOTING CENTRALISATION OF PUBLIC-SECTOR CASH HOLDINGS

Centralisation prevents situations where some entities post a financing requirement while others post a cash surplus, thereby reducing recourse to market financing by government departments. This has a favourable impact on the yields France obtains on the market and reduces the State's reliance on market financing. It provides absolute security for Treasury correspondents' deposits.

USING CASH HOLDINGS IN THE TAXPAYERS' BEST INTERESTS

AFT optimises the cost of cash holdings for taxpayers by ensuring that an appropriate cash balance, including a safety cushion, is on hand to meet expected expenditures.

For that purpose, AFT constantly updates its cash flow forecasts for the next 12 months. At the end of each day, it also forecasts the cash flows for the next day. All day long, AFT monitors expenditure and revenue in real time.

Centralisation of public cash holdings enables AFT to oversee both the State's financial flows and those arising from the financial activities of Treasury correspondents. It relies on a dedicated information system for that purpose that identifies each flow.

The cash management strategy, aimed at ensuring optimum security for the settlement of the State's financial commitments and those of the Treasury correspondents, generally results in a surplus on the Treasury Account. AFT invests this cash on the interbank market every day to reduce the cost of the cash surplus. These investments may take the form of loans or securities repurchase agreements. AFT may offer investments to its counterparties several times a day, depending on market demand.

TO FIND OUT MORE:

AFT tutorial:

What is the State's cash management strategy?
<https://bit.ly/2T0NaE8>



Issue premiums and discounts

Issues of securities give rise to issue premiums and discounts when there is a difference between the coupon yield and the yield demanded by the market at the time of issue.

Premiums and discounts compensate for the difference between the coupon payments and the market yield at the time of issue over the life of the security.

If the coupon yield is greater than the market yield at the time of issue, the price subscribers pay at the time of issue is greater than the "par" value they will receive when the security is redeemed. In such cases, a cash inflow called an "issue premium" is recognised. Otherwise, an "issue discount" applies and the State receives less than the par value of the security. Issue premiums and discounts affect both new issues and issues of off-the-run securities.

In the case of new issues, the differential between the market yield and the coupon yield is determined by two factors. Firstly, the coupon yields of new non-index linked securities are rounded to the nearest quarter of a percentage point (increments of 0.25%; and one twentieth of a percentage point for index-linked securities, i.e. 0.05%). Generally, this means that the coupon yield is different from the

market yield. Secondly, the coupon yield is always positive or zero. This means that negative yields at the time of issue automatically result in an issue premium.

The difference in the case of off-the-run issues stems from the fact that the market yield at the time of issue rarely matches the original coupon yield, which was set when the security was created and applies for its entire life. On the one hand, yields vary, and on the other, the residual maturity of the off-the-run security is shorter than its original maturity. For instance, when issuance consists in re-tapping a bond at the coupon rate of 2.50%, the market yield may lower (in this example à 2%) or higher (in this example 3%). In that case, the price received by the State for a new bond with a par value of €100 will be respectively €125 or €83.40, i.e. a €25 premium or a €16.60 discount. In any case, the yield paid to the purchaser will be 2.50%.

The downward trend in yields up to 2021 meant that the State recorded more issue premiums than issue discounts for many years. By

contrast, in 2022, in a context of sharp interest-rate rises, average yields on off-the-run securities were more often higher than their coupon yields, resulting in recognition of discounts (€19.8bn) far in excess of premiums (€6.3bn) for 2022 as a whole.

The debt service recognised in budgetary cash-basis accounting shows only the coupon payments made (issue premiums and discounts have no impact). On the other hand, the premiums and discounts are recognised in State's financial accounts and Maastricht accounts. They are amortised over the entire term to maturity of the securities in question. This means that the effective financial expense recognised under both accounting systems corresponds to the market yield at the time of issue, regardless of the amount of the actual coupon payments.

Premiums and discounts are cash receipts or expenses in the State's funds flow statement.

AFT's supervisory duties

Goal: maintain risk management quality standards and minimise incidents.

AFT's internal audit and risk management system must comply with market standards with regard to negotiable debt, cash and derivatives management transactions as well as trades on behalf of third parties. The system in place should be able to detect problems and incidents that could disrupt debt and cash management transactions as soon as possible, mitigate them and assess their impact. The scope of the system has also been broadened due to the diversity of AFT's transactions, the payment circuits it uses and the growing number of international counterparties.

In the draft Budget Act and performance indicators submitted to Parliament, AFT states its goal as "achieving a constant quality of risk management that minimises incidents".

Several sets of indicators have been developed to assess whether or not this goal is achieved.

QUALITY INDICATORS RELATING TO AFT'S AUDIT SYSTEM

- The first quality indicator lists the number of incidents or breaches of AFT's internal rules stated in its general activity framework (authorisations, risk limits, transaction controls).
- Five other quality indicators are assessed by an external auditor (KPMG for 2022) based on verifying that AFT's procedures are consistent with its activities and related risks. The Order of 3 November 2014 on internal control in the banking sector has been the benchmark for the rules governing AFT since 2015.

DEBT AND CASH MANAGEMENT TRANSACTION EXECUTION INCIDENTS

- First such indicator: the number of incidents that decrease the balance of the Treasury Account with the *Banque de France*.
- Second such indicator: the number of incidents that increase the balance of the Treasury Account with the *Banque de France*.
- Third such indicator: the number of incidents with no impact on the *Banque de France* account balance arising from information systems and communication networks used to manage transactions, or other types of incidents, such as possible non-observance of internal operating procedures.



Information system security policy

AFT's information system is the mainstay of its operating activities. As such it must provide staff with a high level of security with regard to:

- Timely availability of information;
- Data integrity, by preventing any corruption of the data entered over the long term;
- A level of confidentiality consistent with the information being processed.

Regular audits by the French Government Audit Office or external audit firms necessarily include an audit of the information system. This part of the such audits ensures that the system access policies are compliant with the general framework for AFT's operation regarding the segregation of activities and the procedures for granting and rescinding staff access privileges.

Cyber threats require a more technical audit. These audits are conducted by the staff of the Senior Defence and Security Official (SHFDS) of the Finance Economy and Finance Ministries or by the National Information System Security Agency (ANSSI). They verify hardware and software configuration to ensure that they meet regulations and best security practices.





Glossary

AUCTION

The “bid price” auctioning system has been the preferred technique for issuing French Treasury securities since 1985. Participants compete in the auction on an equal footing through a transparent system of open bidding according to a planned issuance programme. The “bid price” system consists in supplying securities at the bid price or the effective bid rate, as opposed to the marginal price or rate. The other issuance system is syndication.

BOND

A bond is a recognition of debt. The State, some public sector entities and major corporations issue bonds. The borrower promises to make annual interest payments until the bond matures.

BREAKEVEN INFLATION RATE

The breakeven inflation rate is the difference between the yield of fixed-rate (non-indexed) bonds and the yield on index-linked bonds. It represents the market participants’ inflation expectations. Factors other than inflation expectations affect the values of index-linked bonds in relation to fixed-rate bonds, including liquidity or the mismatch between supply and demand of index-linked bonds compared to fixed-rate bonds, since not many issuers offer index-linked bonds. Fixed-rate bond yields also incorporate an inflation risk premium, in contrast to index-linked bonds. Lastly, an inflation risk premium is included in the yield of fixed-rate bonds, unlike index-linked bonds.

BUYBACK

AFT can carry out over-the-counter (OTC) buybacks and reverse auctions to pre-finance future issuance programmes, thereby spreading the amounts to be issued over time more evenly. AFT factors in market conditions when doing so: buying back securities on the market depends on their liquidity and price. AFT publishes a monthly report on the amounts of each security bought back during the month.

COLLECTION

Occurs when a creditor is paid back the sum borrowed. Collection notice: request for payment of a receivable.

COLLECTIVE ACTION CLAUSE (CAC)

With bonds, collective action clauses ensure orderly and predictable debt restructuring with the agreement of a qualified majority of creditors:

- By bondholders voting bond by bond and, when the restructuring methods are the same for a number of bonds, by means of a second vote by the holders of the relevant bonds: this is known as “double-limb” aggregation;

- By a direct vote by holders for all the relevant bonds subject to similar restructuring methods: this is known as “single-limb” aggregation.

OATs created prior to 1 January 2013 do not include CACs, whereas those created after this date include “double-limb” CACs. OATs to be created as from adoption of the Treaty instituting the European Stability Mechanism Treaty will include “single limb” CACs.

CORPORATE ACTIONS

This term covers all actions carried out during a security’s lifetime. For bonds, this mainly concerns coupon payments, i.e. receiving interest on the securities owned. For equities, this concerns paying dividends or stock splits. Both bonds and equities may be exchanged for another type of security.

COUPON

In the past, a coupon was a piece of paper that would be detached from the security in return for payment of interest accrued or a dividend, or during another transaction (to prove that the bearer had traded in the coupon). Now that securities are paperless, the coupon refers to bond interest or share dividends. Coupon payment: payment of interest or dividend.

DEBT

Any sum of money borrowed by an individual or legal entity (debtor) that must be paid back to another individual or legal entity (creditor). Until the debt matures, the debtor will pay the creditor interest (a coupon) at an agreed rate (yield) every year on an agreed date.

DEBT AMORTISATION

Payment of amounts due when a security reaches maturity. Synonym: redemption (for the debtor); collection (for the creditor).

DELIVERY

For financial transactions or trades, delivery consists in the seller handing over a security to the buyer or subscriber.

DEPOSITORY

A financial institution (bank) where bearers deposit their securities. The depository must know at all times who owns what, the status of securities (unrestricted, loaned, borrowed or pledged), and where the securities are held. Since the move to paperless transactions, security deposits have been digitised; they are secure and backed up on a regular basis. Handling electronic securities is immeasurably faster, more flexible and cheaper than handling paper securities.

FUNGIBILITY (or interchangeability)

For the fungible nature of a bond, see the definition of a “fungible Treasury bond”.

FUNGIBLE TREASURY BOND (OAT)

OATs are fungible medium- and long-term Treasury bonds with maturities of 2 to 50 years.

The fungibility technique consists in associating new OAT issues with existing ones. This enables the State to issue new bonds at a price in line with the latest market prices but identical in all other respects to the initial issue. As a result, the State avoids issuing too many bonds with different characteristics and ensures the liquidity of those already issued. OATs are the only form of medium-term and long-term State financing.

OATs are designated by their yield and maturity date (e.g.: “OAT 0.00% 25 May 2032” or “OAT 0.50% 25 May 2072”). Their characteristics and issuance history are set out in the security fact sheets published on AFT’s website (<https://www.aft.gouv.fr/index.php/en/encours-detaille-oat>).

FIXED-RATE DISCOUNT TREASURY BILL (BTF)

Fixed-rate discount Treasury bills (BTFs) are similar to short-term Treasury bonds. They have an initial maturity of up to one year. All the BTFs represent the government’s short-term debt (webpage: <https://www.aft.gouv.fr/en/btf-characteristics>). For the fungible nature of a bond, see the definition of a “fungible Treasury bond”.

GREEN OAT

On 24 January 2017, AFT launched its first sovereign green bond, the Green OAT 1.75% 25 June 2039, with an issue amount of €7 billion. As the first government in the world to issue a benchmark green bond, France confirmed its role as a driving force for achieving the ambitious goals of the Paris Climate Agreement of December 2015.

France's Green OATs will fund central government budget expenditure and expenditure under the Invest for the Future programme to fight climate change, adapt to climate change, preserve biodiversity and fight pollution.

The funds raised are reported in the accounts in the same way as funds from a conventional OAT and managed in compliance with the general budget rule. However, they are matched to an equivalent amount of eligible green expenditures and the aggregate of such expenditure in a given year sets the limit for Green OAT issuance. (Webpage: <https://www.aft.gouv.fr/en/green-oat#presentation>).

LEAD BOOK RUNNER

When a syndicated bond is being issued, the banks that prepare the bond, collect orders, allocate the bond based on supply and demand and set the price are known as the "lead book runners".

LEGAL TENDER

A currency is legal tender if it can be used in exchange for goods or services, or to pay taxes and duties in a given geographic area. The euro is legal tender in the 19 euro area countries and in Kosovo and Montenegro.

LIQUIDITY

A financial instrument or market is said to be liquid when buy and sell transactions can be carried out without triggering excessive variations in price compared with the last transaction price.

LOAN

Sum of money lent by a creditor temporarily to a debtor. Synonyms: borrowings, credit; receivable, asset (for the lender); debt, liability (for the borrower).

MARKET-MAKER

Market makers are spot market operators who supply a price whenever they are contacted, regardless of market conditions.

MATURITY

Date of redemption set when a loan agreement is signed. Synonym: redemption date.

OATi and OAT€i

Bond indexed to French inflation (excluding tobacco) (OATi: webpage: <https://www.aft.gouv.fr/en/oatis-characteristics>) or European inflation (OAT€i: webpage: <https://www.aft.gouv.fr/index.php/en/oteurois-characteristics>).

OPTION

A call option gives the holder the right to buy an asset at a fixed price at a point in the future up to a certain date. A put option gives the holder the right to sell the same asset under the same conditions. Tradable options are contracts that can be exchanged on regulated markets.

PAR VALUE

Face value of a security. A company's share capital is X million euros divided into N shares with a par value of X/N euros. A bond has a par value of N euros: all French Treasury securities have a par value of one euro. Par bonds have a fixed rate of interest, in contrast to "index-linked" bonds.

PRINCIPAL

Value of a bond less the coupon amounts. For bond debt, the amount paid by the debtor to the creditor when the bond matures.

PRICE

Sum of money equivalent to the market value of a good or service. The price is set by the interplay of supply and demand. Bond prices vary inversely to bond yields.

PRIMARY MARKET

The primary market is where new securities are issued and subscribed by investors; it is the market for capital increases and bond issues. Compared to the secondary market, which sells "second-hand" financial securities, the primary market sells only "new" ones. It is on this market that debt issuance takes place, either through auctions or by syndication.

RATING

Assessment by agencies specialising in rating the soundness of corporate financial statements and financial instruments issued by economic agents. *Rating agency*: a firm specialising in corporate credit ratings, i.e. in awarding scores based on the state of a company's accounts or the financial instruments issued by an economic agent.

RISK

Risk is the possibility, which is never zero, of losing all or part of an asset or its equivalent monetary value. Risk is at the very heart of financial activity: evaluating, spreading, assuming, diversifying and hedging risk are all tasks involved in the settlement of financial transactions. The price of a bond

indicates the degree of risk incurred by the buyer. Counterparty risk is the risk that the buyer will not pay for what they have purchased, that the seller will not deliver what they have sold, that the borrower will not repay their loan or that the lender will not supply the loan funds they have promised (and for which they have taken guarantees). Also called default risk, issuer risk or risk of non-payment.

SECONDARY MARKET

The secondary market is the market for securities already in circulation (created on the primary market). By ensuring investments remain liquid, the secondary market guarantees the quality of the primary market and the valuation of securities. Primary and secondary markets are therefore highly complementary. State buys back its own bonds on the secondary market to extinguish them.

SECURITY

A financial instrument held for investment purposes. In France, securities are issued in electronic form nowadays. Securities issued by the State are governed, inter alia, by Articles L.213-21-1 to L.213-31 of the Monetary and Financial Code. For the fungible nature of a bond, see the definition of a "fungible Treasury bond".

SETTLEMENT

For financial trades and transactions, settlement consists in a buyer or subscriber paying the seller for acquired securities and the seller delivering the said securities.

SWAP

An interest rate swap is based on the comparison of a variable interest rate and a fixed interest rate between counterparties who swap interest-rate margins without exchanging principal over a specified period. They are particularly suited to hedging long-term risk in business. The market for swaps has seen considerable growth and the banks play a key role in market-making. Corporate treasurers like the flexibility of swaps, which enable them to choose the duration, benchmark variable interest rate and the notional value. A swap between a bank and a company can be settled at any time by calculating the present value of the future fixed-rate flows at the market rate and comparing this to the initial notional value. Swaps are also used on a regular basis to hedge the interest rate risk on variable or fixed interest rate assets.

Glossary

STRIPPING

Stripping is a technique that splits a bond into as many securities as there are coupon and redemption payments. The stripped bonds created in this way are sold and listed separately as zero-coupon bonds. There is specific demand for this type of instrument, called a *strip*, on the French debt market.

SYNDICATE

It intervenes as part of debt issuance by syndication. A group of banks that organises and oversees a large-scale bond issue. It comprises lead book runners.

SYNDICATED ISSUE

Together with auctions, this is the other debt issuance method. A syndicated issue is where the issuer sells some or all of the securities to be placed with the public to a bank or a syndicate of banks. This is the preferred placement method for corporate issuers. This was also true for the State until 1985.

TEC

The daily CNO-TEC N index, with a constant maturity of N years (N is between 1 and 30), represents the yield to maturity of a fictitious OAT with a maturity equal to N. The yield to maturity is obtained through straight-line interpolation of the annual yields to maturity of the two OATs with maturities closest to maturity N.

TRADE

A stock market transaction involving the exchange of a certain quantity of a given security at an agreed price between two parties, each represented by a financial intermediary (investment company). The trade is time- and date-stamped on Euronext then sent for clearing then settlement and delivery. Synonyms: transaction, exchange, market.

TRANSACTION

A stock market transaction involving the exchange of a certain quantity of a given security at an agreed price between two parties, each represented by a financial intermediary (investment company). Synonyms: transaction, exchange, market.

TREASURY SECURITY

French Treasury securities are issued by the State to finance its debt. There are several types of French Treasury securities: fixed-rate discount Treasury bills (BTFs) issued with a maturity of less than one year and fungible Treasury bonds (OATs) issued with maturities of between 2 and 50 years.

YIELD

Percentage used to calculate the bond coupon, expressed as a percentage. The yield is established when the bond is issued. It can be fixed or variable. If excessive, it is deemed "usurious". Interest (payment): sum paid annually to a bondholder by the issuer up to maturity.

YIELD CURVE

The yield curve illustrates the relationship between yields and their maturities. The curve generally, but not always, rises because of the risk premium (i.e. long-term yields are higher than short-term yields).

VARIABLE

Said of an interest rate that is not constant for the duration of a contract, but which changes depending on outside factors, such as market rates (Euribor, €STR) or statistical indices.

VOLATILITY (BOND PRICES)

Bond price volatility stems mainly from the interest-rate risk that affects fixed-rate bonds. The price of a bond varies inversely to the market interest rate. Sensitivity is even greater when the coupon rate and the market interest rate are low.

List of abbreviations

AFT Agence France Trésor	Fed (ENGLISH) <i>Federal Reserve of the United States (central bank)</i>	PBoC (ENGLISH) <i>The People's Bank of China - Central bank of China</i>
AFTI French Association of Securities Professionals	FMI International Monetary Fund	PEPP (ENGLISH) <i>Pandemic Emergency Purchase Programme</i>
ANSSI National Information System Security Agency of France	FTSE (ENGLISH) <i>Financial Times Stock Exchange - British stock market index</i>	PIB (GDP in ENGLISH) Gross Domestic Product
BCE (ECB in ENGLISH) European Central Bank	GIC (ENGLISH) <i>Government of Singapore Investment Corporation - Singaporean sovereign wealth fund</i>	PME (SMEs in ENGLISH) Small and medium-sized enterprises
BEI (EIB in ENGLISH) European Investment Bank	GIE Economic interest grouping	RNCE State Accounting Standards Manual
BERD (EBRD in ENGLISH) European Bank for Reconstruction and Development	IBEX (SPANISH) <i>Índice Bursátil Español - Spanish stock market index</i>	SAAD Special debt account
BoE (ENGLISH) <i>Bank of England - Central bank of the United Kingdom</i>	ICMA (ENGLISH) <i>International Capital Market Association</i>	SAFE (ENGLISH) <i>State Administration of Foreign Exchange - Agency managing Chinese foreign exchange reserves</i>
BoJ (ENGLISH) <i>Bank of Japan - Central bank of Japan</i>	INSEE National Statistics and Economic Research Institute	SCN Department with national scope
BTAN Fixed-rate French Treasury note with interest paid annually	IPC Consumer Price Index	SEA Military Fuel Unit
BTF Fixed-rate French Treasury bill	IPCH Harmonised Consumer Price Index	SHFDS Senior defence and security official from France's Finance and Economic ministries
CAC Collective action clause	IR Income tax	SNCF <i>Société nationale des chemins de fer français</i>
CAC 40 Automated quotation. French stock market index for the 40 largest French listed companies	JO Official Journal	SURE (ENGLISH) <i>Support to mitigate Unemployment Risks in an Emergency - A temporary European Union instrument</i>
CADES Social Security Debt Repayment Fund	KfW (GERMAN) <i>Kreditanstalt für Wiederaufbau - German Development Bank</i>	SVT Primary dealer
CDP Public Debt Fund	LFI Initial Budget Act (Loi de Finance initiale)	TEC Constant maturity rate
CGI General Tax Code	LFR Supplementary Budget Act	TELSAT Electronic bidding system for French Treasury auctions
CLS (ENGLISH) <i>Continuous Linked Settlement</i>	MAITRE Treasury's computerised auction mechanism	TFUE Treaty on the Functioning of the European Union
DAX (GERMAN) <i>Deutscher Aktienindex - German stock market index</i>	MES European Stability Mechanism	VIX (ENGLISH) <i>Volatility Index</i>
DCM Ministerial Accounts Department	NGEU (ENGLISH) <i>NextGenerationEU - European recovery programme</i>	V2X European market volatility based on the EURO STOXX 50 INDEX
DGFIP Public Finances Directorate General	OAT Fungible Treasury bond	WTI (ENGLISH) <i>West Texas Intermediate - price benchmark for the oil market</i>
ESDM (ENGLISH) <i>Economic and Financial Committee (Subcommittee on EU Sovereign Debt Markets)</i>	OECD Organisation for Economic Co-operation and Development	WWF (ENGLISH) <i>World Wildlife Fund</i>
€STR (ENGLISH) <i>Euro short-term rate - benchmark interbank interest rate calculated by the European Central Bank</i>	ONC Non-competitive offers	
	ONU United Nations Organization	

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Agence France Trésor Annual Report
August 2023

Editor-in-Chief: Cyril Rousseau

Content and design: Agence France Trésor

Design / Production: LATITUDE Nantes -
www.agence-latitude.fr - 0026/23

Photo credits: Agence France Trésor, Patrick Bagein – Minefi,
Adobe Stock®

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