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AGENCE FRANCE TRÉSOR

2021 ANNUAL REPORT

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

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EDITORIAL

BY EMMANUEL MOULIN
Director General of the Treasury and Chair of AFT

FRANCE'S ECONOMY IN 2021: the strongest recovery in fifty years

The COVID-19 pandemic continued to leave its mark in 2021, but the year also saw an exceptional recovery in France's GDP, with an increase of 6.8%. France posted its strongest growth since 1969.

The measures introduced to protect the economy in 2020 were maintained in 2021 to cope with further waves of the pandemic. The short-time working scheme preserved jobs, household purchasing power and skills. Businesses were also protected, with government-backed loans totalling €141bn and the solidarity fund of €35bn. VSEs and SMEs that were ordered to close were exempted from paying social security contributions.

France's renewed growth was sustained by, inter alia, the €100bn *France Relance* recovery plan, which received €40bn in funding from the European Union. The recovery plan also aims to step up the country's ecological and industrial transformation. The sum of €72bn was already committed under the plan at the end of 2021. Government consumption accounted for just over one-third of the contribution to the rebound in overall consumption, which in turn accounted for more than half of the total economic growth in 2021. At the same time, the recovery in investment, which was mainly concentrated in the productive private sector, was sustained by 10-year interest rates close to 0%. Investment was also driven by the recovery in businesses' profit margins, which increased by just under 2% to stand at nearly 35%. Household investment also returned to its pre-pandemic level.

All of these measures helped to make the recovery in 2021 exceptional, following the contraction of 7.8% in the activity level posted in 2020. France's very high vaccination rate, with nearly 52 million people vaccinated by the end of 2021, was also a major factor in boosting growth.

Output returned to its pre-pandemic level in the third quarter of 2021. However, bottlenecks in some sectors worldwide led to supply chain difficulties in manufacturing and construction. Furthermore, pressure on energy prices and the prices of some services resulting from the strong global recovery have made a big contribution to a sharp resurgence in inflation starting in mid-2021.

> France's recovery was strong in 2021, with growth of 6.8% and a return to the pre-pandemic output level in the third quarter.

"France's recovery was strong in 2021, with growth of 6.8% and a return to the pre-pandemic output level in the third quarter."

The labour market recovered very quickly and even led to staffing problems in some sectors to a degree not seen in France for twenty years. The employment rate posted a large increase, resulting in the unemployment rate dropping to 7.4% at the end of 2021, its lowest level since 2007.

The European Central Bank (ECB) maintained its very accommodative monetary policy throughout 2021. The ECB continued the pandemic emergency purchase programme (PEPP), which it had initiated in 2020. In the fourth quarter of 2021, the ECB announced an adjustment of the programme to slow down the pace of asset purchases in view of the faster-than-expected improvement of the economic situation. Then, in December 2021, the Governing Council confirmed that the PEPP would end in March 2022 and announced a temporary doubling of the assets purchased under its usual asset purchase programme (APP) to prevent an abrupt transition.

AFT celebrated its twentieth anniversary during this turbulent year. The past two decades testify to the resilience of the Agency's strategy. AFT was able to adapt its action to rapidly changing economic conditions, from the global financial crisis of 2008 to the COVID-19 crisis. Against this complex backdrop and despite a great deal of uncertainty, the strength and effectiveness of our teams have enabled AFT to fulfil its mission of financing government action for the benefit of all our fellow citizens, thanks to France's credit worthiness.

In 2021, the pandemic and the policies implemented to cope with it shaped the government's borrowing requirements and terms

In 2021, the borrowing requirement remained high, as it had in 2020, to deal with the continuing impact of the pandemic with the spread of the Delta and Omicron variants of COVID-19, and to finance the swift rollout of the government's *France Relance* recovery plan. The medium- and long-term debt issuance programme, i.e. the issuance of OATs, was maintained at €260bn, net of buybacks of securities.

As the ECB maintained its very accommodative monetary policy stance in 2021, the programme was carried out under financial conditions that remained exceptional. The average yield on medium- and long-term debt issuance was slightly negative, at -0.05% over the year, after standing at -0.13% in 2020.

The very low yields meant that investors seeking returns increased the average maturity of their investments, which enabled AFT to raise the average maturity of OAT issues to more than twelve years for the first time. Under these conditions, the syndicated launches of two very long-term bonds were successful: the 50-year benchmark OAT 0.50% 25 May 2072, for an initial issuance amount of €7bn in January, followed by the 30-year OAT 0.75% 25 May 2053, for an initial issuance amount of €5bn in July.

2021 also saw the growth of the green sovereign bond market. Some twenty countries are now issuing such bonds and the global amount outstanding doubled to €150bn over the year. France has been a trailblazer since its inaugural issue of the first Green OAT in January 2017 – the OAT 1.75% 25 June 2039. This OAT was issued to meet the growing demand for green investments and was followed in March 2021 by the second Green OAT, the OAT 0.50% 25 June 2044. The initial issuance amount for the second Green OAT was €7bn, which was the same amount as for the launch of the first Green OAT, but the yield was three times lower. This issue and several auctions of Green OATs financed eligible green expenditures in the State budget totalling €15bn in 2021, thereby contributing to the greening of the French economy under the recovery plan. At the same time, AFT implemented a programme to finance the Social Security Debt Repayment Fund (CADES) by issuing €36bn in social bonds.

A WORD

FROM THE AFT CHIEF EXECUTIVE

By Cyril Rousseau

> When facing new challenges in the coming years, both France's citizens and the Agency can count on the tireless work and keen sense of public service of all of the AFT teams.

As AFT celebrated its twentieth anniversary in 2021, it carried out several project to prepare for the future.

It stepped up centralization of cash holdings on the Treasury's single account, working closely with the bodies concerned – the Public Finances Directorate General and the *Banque de France*. This measure reduced the State's future borrowing requirement by more than €4bn. AFT also conducted a successful test of the new line of defence for use in case of an urgent need to raise funds by initiating repurchase agreements. AFT prepared for the programme for redeeming the State's debt related to its COVID-19 response and for the transposition into French law of the new collective action clauses for sovereign bonds issued in the European Union, which will enter into force with the ratification of the treaty reforming the European Stability Mechanism. It also, in particular, added a series of podcasts to a media library used to present and explain its activities to the public at large. At the European level, AFT and its counterparts cooperated with the European Commission to ensure the success of issues intended to finance the EU NextGenerationEU recovery plan.

In the fourth quarter of 2021, the commitment of the ad hoc selection committee (see pages 14 and 15) made it possible to select the primary dealers who will work with AFT from 2022 to 2024, after doing their full part as partners in previous years by advising and assisting the Agency during the pandemic, participating in its transactions and dynamising the government debt market.

When facing new challenges in the coming years, both France's citizens and the Agency can count on the tireless work and keen sense of public service of all of the AFT teams. I would like to thank all of our staff for their continued commitment in 2021 against the backdrop of such trying and uncertain circumstances and the restrictions imposed by the pandemic.

At the end of 2021, AFT
had **49 staff members** (21 women and 28 men;
22 contract employees and 27 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.

TASKS AND FUNCTIONS

TASKS

MANAGING THE STATE'S CASH REQUIREMENTS

AFT manages the State's cash requirements so that it can meet 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 updated constantly; and 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. AFT 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. It often works closely with the 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 (modelling, economics and legal) and communication functions.

FINANCING OPERATIONS
EXECUTED ON BEHALF OF CADES

On 1 October 2017, the staff of France's Social Security Debt Repayment Fund (CADES) and AFT staff 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 of and on behalf of CADES, using its own seconded staff.

Constitutional bylaws and acts promulgated on 7 August 2020 in response to the pandemic and its impact on social security finances resulted in the pushback of the social security debt repayment date from 2024 to 2033.

Following a transfer of €20bn in debt in 2020, €40bn in debt was assumed in 2021. CADES implemented a medium- and long-term borrowing programme worth €39.4bn.A total of 17 issues were successfully launched on international financial markets. The majority of the funds were raised by issuing social bonds, for 10 loans denominated in euros, dollars and sterling, for a total of €36bn, with maturities ranging from 3 to 10 years.

KEY FIGURES:

→ **Since 1996:** CADES has assumed **€320bn** in debt and redeemed **€205bn.**

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
- Promotion of Treasury securities to investors

3. "POST-TRADE AND RISK MONITORING" Unit

- Review and settlement of financial transactions and reporting all data to the Ministry's Budget and Accounting Control Department
- Redemption and coupon payments
- Monitoring of credit, counterparty and settlement risks for all financial transactions; management of margin calls
- Administrative management of the Public Debt Fund

4. "RESEARCH AND STRATEGY" Unit

- Quantitative contribution to the definition and execution of the State's financing strategy
- Monitoring of fixed-income markets and relations with primary dealers' strategists
- Coordination of 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 the Green OATs
- Tracking the allocation of green expenditures and producing the Allocation and Performance Report
- Oversight of the Green OAT Evaluation Council's work
- 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

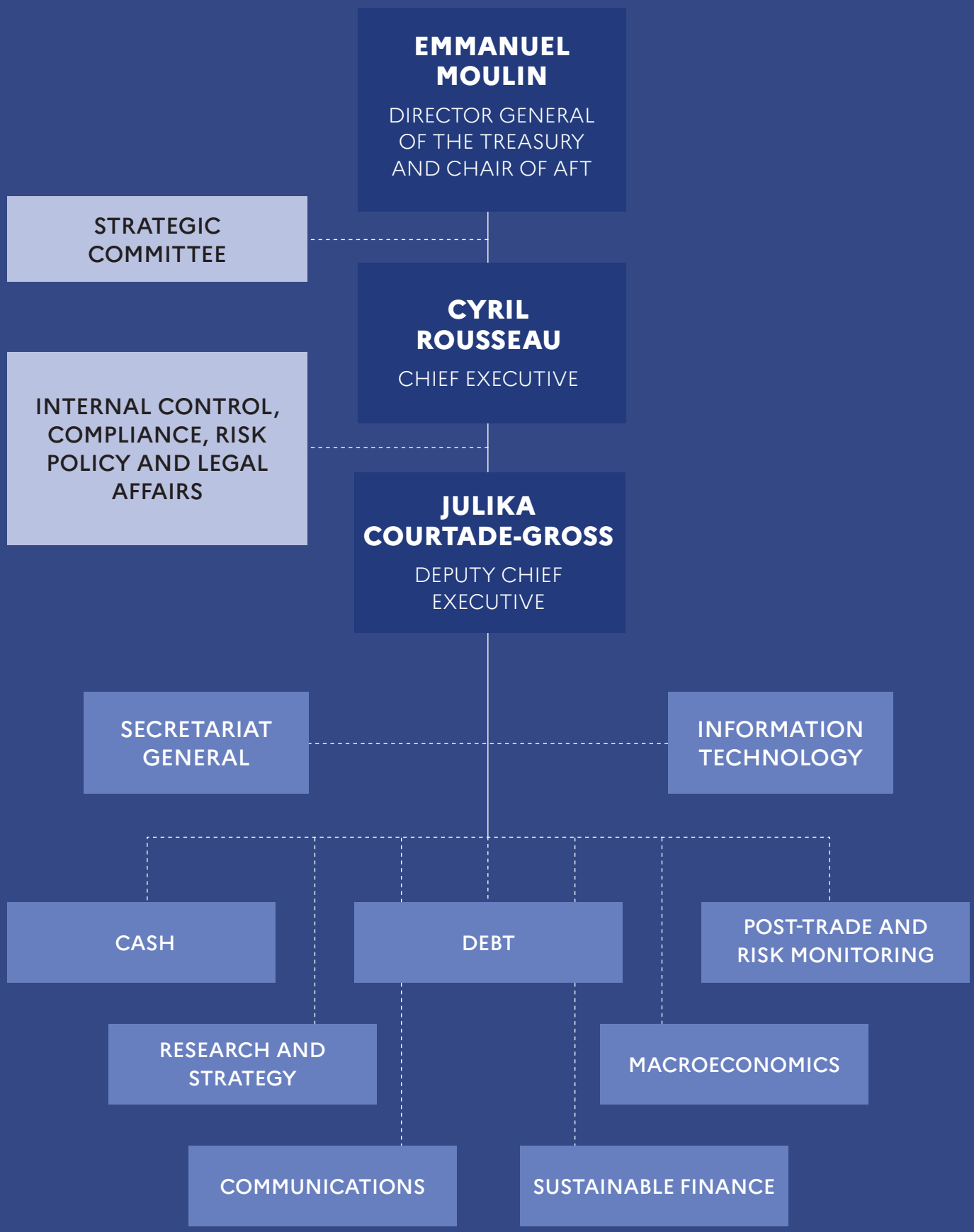
- Administering and operating the information system to provide the information technology tools necessary for AFT's tasks
- Leading projects to implement new software and services
- Monitoring and applying the information system security policy and maintaining information technology resources under 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
- Coordination of the AFT Risk Committee's audit, coordination and secretariat functions
- Management of legal and compliance risks for AFT and CADES transactions
- Management of rules of professional conduct for AFT staff, definition of 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: managing AFT's website and social media and deploying AFT's digital presence


EMMANUEL MOULIN
DIRECTOR GENERAL OF THE TREASURY AND CHAIR OF AFT
STRATEGIC COMMITTEE
CYRIL ROUSSEAU
CHIEF EXECUTIVE
INTERNAL CONTROL, COMPLIANCE, RISK POLICY AND LEGAL AFFAIRS
JULIKA COURTADE-GROSS
DEPUTY CHIEF EXECUTIVE
SECRETARIAT GENERAL
INFORMATION TECHNOLOGY
CASH
DEBT
POST-TRADE AND RISK MONITORING
RESEARCH AND STRATEGY
MACROECONOMICS
COMMUNICATIONS
SUSTAINABLE FINANCE

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. The committee 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

M. Jacques de LAROSIÈRE
Former Governor of the *Banque de France*, former Managing Director of the International Monetary Fund, former Chairman of Eurofi

MEMBRES

Marc-Antoine AUTHEMAN
Former Chair of the Board of Directors of Euroclear

Laurence BOONE
Chief Economist at the OECD

Günther BRÄUNIG
Member of the Board of Directors of KfW

Satu HUBER
Former CEO of Elo Mutual Pension Insurance Company

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)

Hongyan LI
CEO and CIO of the State Administration of Foreign Exchange (SAFE), Central Bank of China

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. The selection for the period from 2019 to 2021 numbered 15. 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.

As at 31 December 2021, the group of primary dealers was made up of 15 institutions from diverse areas of the world, including 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 upholding 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.

BofA SECURITIES · BARCLAYS · BNP PARIBAS · citi · COMMERZBANK · CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK · Deutsche Bank · Goldman Sachs · HSBC · J.P.Morgan · Morgan Stanley · NATIXIS BEYOND BANKING · NOMURA · NatWest · SOCIETE GENERALE Corporate & Investment Banking

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

SELECTION COMMITTEE

The selection process started in September 2021 ended with the renewal of the 15 primary dealers for a three-year term on 13 December 2021. The decision was made by Bruno Le Maire, the Minister for the Economy, Finance and Industrial and Digital Sovereignty, acting on a proposal from the Director General of the Treasury and having heard the opinion of a selection committee.

The Selection Committee met in November to interview the applicant institutions under the chairmanship of Jean-Claude Trichet, Honorary Governor of the *Banque de France* and former President of the ECB.

These banks had applied for a new three-year term from 2022 through 2024. Their term will run until 31 December 2024, in keeping with the provisions of the Primary Dealer Charter.

MEMBERS OF THE SELECTION COMMITTEE

Jean-Claude TRICHET

Honorary Governor of the *Banque de France*, former President of the ECB

Jérôme BASCHER

Senator, Secretary of the Senate Finance Committee and Special Appropriations Rapporteur of the Government Financial Liabilities Mission.

Bénédicte PEYROL

Member of Parliament, Member of the National Assembly Finance, General Economy and Budget Control Committee and Special Appropriations Rapporteur of the Government Financial Liabilities Mission

Jean-Philippe DE SAINT MARTIN

General Inspector of Finance

Nathalie AUFAUVRE

Director General for Financial Stability and Transactions at the Banque de France, representing the Governor of the *Banque de France*

Benoît DE JUVIGNY

Secretary General of the Autorité des marches financiers (AMF – *French Financial Markets Authority*)

Alexandra GIVRY

Director of the Data and Surveillance Directorate of the AMF, representing the Chair of the AMF.

Jean-Claude TRICHET

“ I had the privilege of being the Director of the Treasury when the modernisation and internationalisation of France’s Treasury securities was launched. I greatly appreciated the work of the primary dealers and the outstanding quality of the people representing them. France’s sovereign debt is reputed around the world as a safe asset that is managed with the utmost professionalism by AFT. The depth and liquidity of French debt securities are also remarkable. This explains why the status of primary dealer is so eagerly sought after. These observations were made during our in-depth and very direct discussions with the staff of the institutions applying for selection. All of these concurrent discussions focused on even greater global optimisation of placement of debt securities on the primary market and the high degree of liquidity on the secondary market. In short, we were fortunate to have a series of very high-quality selection hearings that provided a real value added for the future work of primary dealers and optimised management by AFT. ”

Bénédicte PEYROL

“ I relied on primary dealers to gain a better understanding of the sovereign debt market and its expectations during my five years as the Special Rapporteur on the Budget with regard to interest expense on France’s debt to the National Assembly Finance Committee. They were always willing to answer my questions and help me interpret the daily changes in trends at the height of the pandemic, enabling me to provide the best information to the National Assembly Finance Committee. Participating in the Selection Committee rounded off my experience. It has been an opportunity to challenge them about their role and their potential for even better promotion of France’s sovereign debt securities on the markets as well as to be at the cutting edge of market innovations to provide the best advice to AFT on such matters as green bonds or issuing debt in digital currency. ”

Alexandra GIVRY

“ Primary dealers are key players for the smooth operation of the French sovereign debt market. As part of its responsibility for supervising markets, the AMF has to analyse their activity from the perspective of market integrity, as well as assess structural change in the sovereign debt market (electronification, transparency, etc.). The selection hearings let us shed further light on and deepen our understanding of the many issues affecting the markets in very high-quality discussions with their representatives. Ensuring market liquidity is the key expectation for primary dealers, of course, but the discussions also touched upon the impact of regulatory changes and Brexit, and upon the applicants’ expertise in ESG and technological matters. ”

Jérôme BASCHER

“ In my role as the Special Rapporteur of the Senate Finance Committee, the Selection Committee has been a challenging experience enriched by our contrasting viewpoints. Our job is to make the right choice with the other eminent members from among the best bankers so that France continues to raise financing at a time when its government debt has exploded. Technical and ethical rigour, along with a sense of great responsibility have guided us as we made the selection freely and with complete independence.” ”

Jean-Philippe DE SAINT MARTIN

“ The selection procedure showed us the very strong commitment of the banks applying to renew their status as primary dealers, proving how important the French sovereign debt market is for them. Our discussions with them also revealed their intention to capitalise on their relationship with AFT and strive for continuous improvements. Other grounds for satisfaction include the strengthening of their many teams located in Paris after Brexit and their growing focus on ESG, which is bound to boost France’s strategy regarding Green OATs. ”

Nathalie AUFAUVRE

“ The *Banque de France* is in daily contact with primary dealers for the implementation of its asset purchase programme under its monetary policy or for holding auctions of French sovereign debt securities on behalf of AFT. This meant it was particularly interesting to discuss their strategic view on changes in the sovereign debt market with the end of the pandemic and the associated exceptional support measures, and the outlook for higher interest rates and faster technological innovation. The business models presented by the primary dealers are quite different, but I was struck by their common determination to invest heavily in this activity, which is seen as a strategic business, especially on the market for French sovereign debt, which is deemed to be the most liquid in Europe. ”

Benoît DE JUVIGNY

“ The French sovereign debt market stands out for its size and liquidity. That is why taking part in the Selection Committee is so valuable because it is an opportunity for in-depth discussions about the primary dealers’ operations and resources, which is a delicate topic in the new post-Brexit market context. Special attention was paid to new areas, such as the green bond market. ”

2021 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 considers all of their tasks: bidding at auctions, dealing on the secondary market, qualitative aspects of the relationship between the primary dealers and AFT (operational quality, quality of advice, and the closeness and stability of the relationship with AFT).

GENERAL RANKING OF THE TOP 10 INSTITUTIONS

1	BNP PARIBAS
2	CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK
3	J.P.Morgan
4	HSBC
5	SOCIETE GENERALE Corporate & Investment Banking
6	citi
7	Deutsche Bank
8	BARCLAYS
9	BofA SECURITIES
10	NATIXIS BEYOND BANKING

PRIMARY MARKET

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

1	2	3	4	5
BNP PARIBAS	HSBC	CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK	J.P.Morgan	SOCIETE GENERALE Corporate & Investment Banking

6	7	8	9	10
citi	BARCLAYS	BofA SECURITIES	Deutsche Bank	NATIXIS BEYOND BANKING

SECONDARY MARKET

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

1	2	3	4	5
BNP PARIBAS	CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK	J.P.Morgan	Deutsche Bank	citi

6	7	8	9	10
SOCIETE GENERALE Corporate & Investment Banking	HSBC	Morgan Stanley	NOMURA	Goldman Sachs

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

1	2	3	4	5
BNP PARIBAS	SOCIETE GENERALE Corporate & Investment Banking	CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK	NATIXIS	J.P.Morgan

6	7	8	9	10
citi	BARCLAYS	HSBC	Deutsche Bank	BofA SECURITIES

INVESTORS

INVESTOR RELATIONS ARE A PRIORITY

Throughout the year, AFT holds regular meetings with investors (investment managers, portfolio managers, economists, etc.) to maintain and forge long-term relationships both in France and abroad. It uses these meetings to promote government securities.

These meetings provide an opportunity to outline the State's issuance strategy, the technical strengths of its debt management and to promote 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 vital 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 52.2% of French State debt on 31 December 2021 and non-resident investors, including a large share from the euro area, held 47.8%. The investors are 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. The French State's unprecedented borrowing terms in 2021, with a negative weighted average yield on medium- and long-term debt for the second time in its history, standing at –0.05%, reflect investor confidence in France's creditworthiness and the technical quality of its debt.

The pandemic-related restrictions in 2021 disrupted travel, but AFT had opportunities to go to Germany, Italy, the United Kingdom and the Netherlands. Nevertheless, most of its meetings were held remotely with investors in many other countries given the continuing public health crisis. AFT met with some one hundred international investors in all.

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 the 19th survey of primary dealers' customers online between 6 September and 24 September 2021. The survey considered the quality of business relationships and the services primary dealers render to their customers, along with the customers' assessment of how well the French debt market works. In 2021, 197 investors filled in the questionnaire. The respondents represented most of the major asset managers and insurers, along with many government-funded institutions that trade in French debt.

Investors' satisfaction with the functioning of the French government debt market remains very high, both in France and internationally. Across all investors, 98.3% reported 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. The proportions of investors able to assess the liquidity of these securities and rating it as satisfactory stood at 98.9% for OATs, 92.5% for BTFs and 79.5% for inflation-linked bonds. The satisfactory rating for inflation-linked bonds was up 9% over the previous year.

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

The proportion of investors who had already purchased a Green OAT in 2021 (Green OAT 1.75% 25 June 2039 and/or Green OAT 0.50% 25 June 2044) grew substantially, rising by 16% following the launch of the new Green OAT 0.50% 25 June 2044 on 16 March 2021. This proportion rose from 45.8% in 2020 to 61.7% in 2021. Nearly three quarters of the investors polled reported that they had bought these securities because of their green appeal, up from less than two-thirds in the previous year. Of the investors giving an opinion, 93.9% reported that they were "satisfied" with the information published about the Green OAT, as was the case in the previous year.

BANQUE DE FRANCE

All the State's financial flows (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 of the financial movements 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.

The *Banque de France* developed a computer system to perform this task successfully. It was a dedicated and highly secure remote bidding system for Treasury auctions called TELSAT (*Système de Télétransmission des soumissions aux adjudications du Trésor*). Primary dealers used the system to submit their bids and AFT used it to allocate Treasury securities. In 2021, the *Banque de France* developed a new version of the system called MAITRE (*Mécanisme d'Adjudications Informatisé du Trésor*), which replaced the TELSAT system in 2022.

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, page 22). The group meets at least three times a year in Brussels. Its meetings were held online in 2021.

➜ **Sub-Committee website:** https://europa.eu/efc/efc-sub-committee-eu-sovereign-debt-markets_en

➜ **Economic and Financial Committee website:** https://economic-financial-committee.europa.eu/index_en

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:** https://www.oecd.org/daf/fin/public-debt

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 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. Press Release (in English): Public Debt Management Forum Tackles New Instruments and New Investors in Sovereign Markets (imf.org).

➜ **IMF website:** https://www.imf.org/en/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. Press Release (in English) Sovereign Debt Management Forum 2018: "Is There Life After Debt?" (worldbank.org)

➜ **Website** (in English): https://www.worldbank.org/en/home

PUBLIC SECTOR ISSUER FORUM (INTERNATIONAL CAPITAL MARKET ASSOCIATION)

AFT also participates in the Public Sector Issuer Forum, which is organised by the International Capital Market Association. The purpose of the forum's meetings is to discuss issuers' practices and the issues facing their ecosystem.

➜ **Website** (in English): https://www.icmagroup.org/market-practice-and-regulatory-policy/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. Therefore these clauses promote faster and more predictable crisis resolution. Several countries have included CACs in loan agreements and bond contracts since the 1990s.

In 2011, the euro area countries decided to include "double-limb" CACs with dual aggregation thresholds for creditors' votes in sovereign bonds issued with maturities of one year or more issued starting in 2013. Such clauses apply to 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 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 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 one year or more. 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 bonds.

➜ **Webpage on CACs:** https://economic-financial-committee.europa.eu/efc-sub-committee-eu-sovereign-debt-markets/collective-action-clauses-euro-area_en

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). The European Commission raised a total of more than €130bn in medium- and long-term debt in 2021 and it should issue an average of €150bn per year between 2022 and 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 diverse group of European and international investors. The yields paid by the European Commission are similar to those paid by France along most of the yield curve and its securities may attract investors with similar profiles.

Under the circumstances, AFT worked in close collaboration with the European Commission in 2021 either directly or under the Sub-Committee on EU Sovereign Debt Markets (ESDM, see page 20).

The discussions have addressed the creation of a network of partner banks (42 European institutions operating in 12 Member States, including AFT's 15 primary dealers). The discussions also covered procedures for holding auctions. The European Commission has chosen the system developed by the Banque de France for AFT's auctions and the auction schedules are coordinated to prevent overlap.

MANAGEMENT REPORT

2021 KEY FIGURES

€285BN

GROSS ISSUANCE
OF MEDIUM- AND LONG-TERM SECURITIES

-0.05%

WEIGHTED AVERAGE YIELD
OF MEDIUM- AND LONG-TERM FIXED-RATE SECURITIES

8 years
153 days

AVERAGE RESIDUAL MATURITY
OF DEBT AT END-2021

€2,145BN

NEGOTIABLE DEBT
OUTSTANDING AT END-2021

47.8%

NON-RESIDENTS' HOLDINGS OF
NEGOTIABLE DEBT SECURITIES
AT END-2021 AT MARKET VALUE

2021 HIGHLIGHTS

15 JANUARY

Creation of the OAT 0.00% 25 February 2024, a new three-year benchmark bond, and the OAT€i 0.10% 25 July 2031, a new ten-year bond linked to euro area inflation.

19 JANUARY

Syndicated launch of the OAT 0.50% 25 May 2072, with a record-breaking allocation of €7bn. The yield at issue of 0.593% was the lowest ever recorded for the syndicated launch of a 50-year OAT.

25 JANUARY

The amount of eligible green expenditures to be funded by issuance of Green OATs in 2021 was announced at €15bn.

25 FEBRUARY

Publication of the 2020 league table of primary dealers.

16 MARCH

Syndicated launch of a second Green OAT 0.50% 25 June 2044 with an allocation of €7bn, matching the amount raised with the inaugural issue of the first Green OAT.

2 APRIL

Creation of the OAT 0.00% 25 November 2031, a new 10-year benchmark bond.

16 APRIL

Creation of the OAT 0.00% 25 February 2027, a new five-year benchmark bond.

14 APRIL

Creation of the OATi 0.10% 1 March 2032, a new ten-year bond linked to French inflation.

2 JUNE

The €260bn State borrowing programme was maintained as part of the presentation of the 2021 Supplementary Budget Bill.

6 JULY

Syndicated launch of the OAT 0.75% 25 May 2053 with an allocation of €5bn and a yield of 0.918%.

20 SEPTEMBER

Start of the selection process for primary dealers for the period from 2022 to 2024.

22 SEPTEMBER

AFT announced that the forecast amount of its 2022 borrowing programme under the terms of the 2021 Budget Bill would stand at €260bn.

10 NOVEMBER

Results of the 19th survey of primary dealers' customers conducted by IEM Finance.

26 NOVEMBER

The independent Green OAT Evaluation Council published the fourth Green OAT impact evaluation report on the innovation strategy of the Invest for the Future programme.

7 DECEMBER

Temporary creation of €400m in OATs to replenish the securities reserve created for the Public Debt Fund and to test this mechanism, which can be used to raise cash by means of short-term repurchase agreements if necessary.

8 DECEMBER

AFT announced its indicative borrowing programme for 2022.

13 DECEMBER

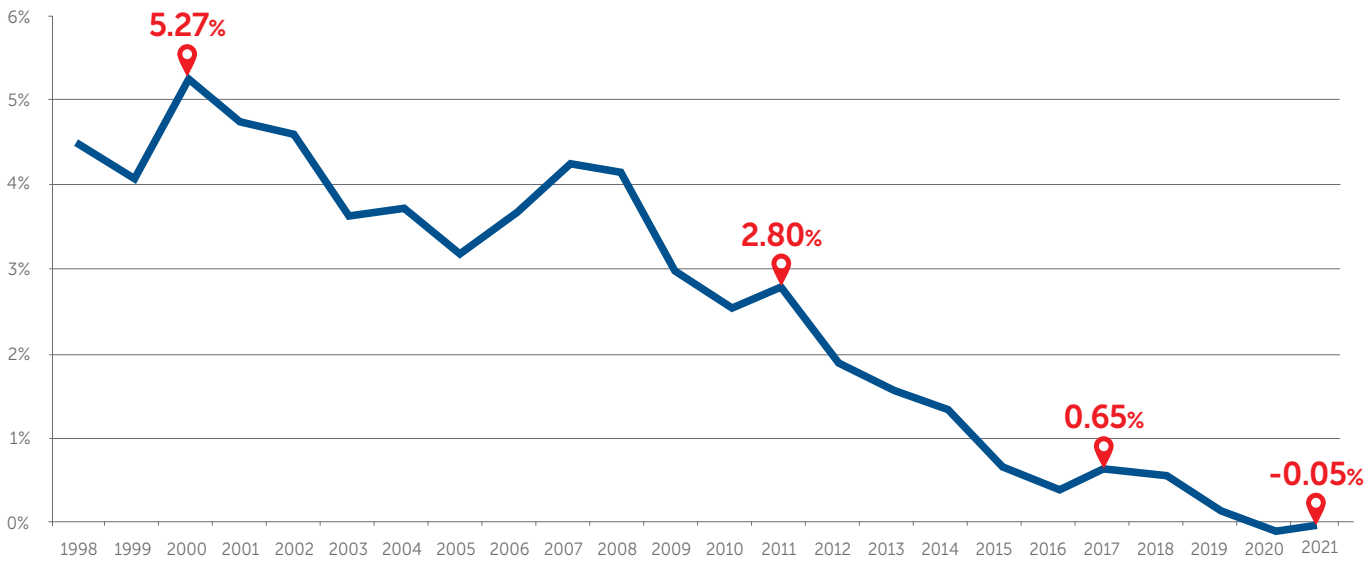
Announcement of the final selection of primary dealers for the 2022-2024 period.

Yields

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

YIELDS FROM 1998 TO 2021
Weighted yield on medium- and long-term debt issues

Source: *AFT*



France continued to enjoy exceptionally low yields on its State debt in 2021.

The gross nominal value of medium- and long-term debt issuance in 2021 stood at €285.1bn, consisting of €261.4bn in fixed-rate bonds (OATs) and €23.6bn in index-linked bonds (OATis and OAT€is).

The average yield on medium- and long-term debt issuance (excluding index-linked bonds) stood at –0.05% in 2021, compared to –0.13% in 2020 and 0.11% in 2019. The average yield for the period from 1998 to 2008 was 4.15%, followed by 1.52% for the period from 2009 to 2018.

ECONOMIC AND FINANCIAL ENVIRONMENT

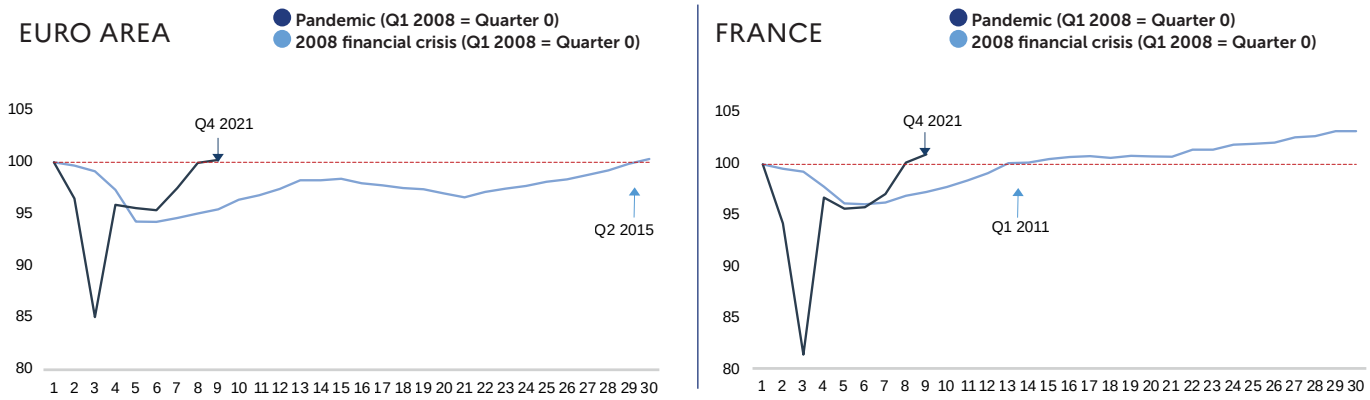
IN 2021, THE FRENCH ECONOMY POSTED ITS STRONGEST RECOVERY SINCE 1969 AND ACTIVITY RETURNED TO ITS PRE-PANDEMIC LEVEL IN THE THIRD QUARTER, ONLY SIX QUARTERS AFTER THE INITIAL SHOCK

A RAPID INITIAL REBOUND, FOLLOWED BY A MORE GRADUAL RECOVERY RESULTING FROM PERSISTENT UNCERTAINTY

With an annual growth rate of 7% in 2021, France's economy gradually consolidated the rapid initial rebound seen in the third quarter of 2020 after the lockdown restrictions were lifted. This recovery was mainly driven by a large boost from domestic demand, as (i) investment more than offset the 9% contraction in 2020 with an increase of 11.5%, (ii) consumption returned to its pre-pandemic level with a rise of nearly 5% and (iii) government consumption expenditure also more than offset its initial decline with growth of 6%.

CHARTS 1 & 2:
QUARTERLY GDP COMPARED TO PRE-PANDEMIC LEVELS

Source: *Eurostat*



In the first half of 2021, the level of economic activity was 95% of the level at the start of 2020. In the third quarter, France's production base gradually matched the 2020 level and exceeded it in the fourth quarter, testifying to its resilience in the face of uncertainty surrounding the pandemic. Investment stimulated demand in early 2021. In the second half of the year, public and private consumption consolidated the recovery, which was more sporadic on the supply side, as the sectors directly affected by the pandemic resumed activity in fits and starts.

Although the reopening of the economy was impeded by the rapid emergence of domestic and global bottlenecks, it was sustained by improved business confidence. The business climate indicators show that the confirmed outlook for reopening the economy in the second quarter was backed up by a sharp improvement in business sentiment across all sectors, despite continuing rises in energy prices, combined with growing supply problems and staffing difficulties.

CHART 3: **FRANCE: BUSINESS SENTIMENT BY SECTOR**

Source: *INSEE*

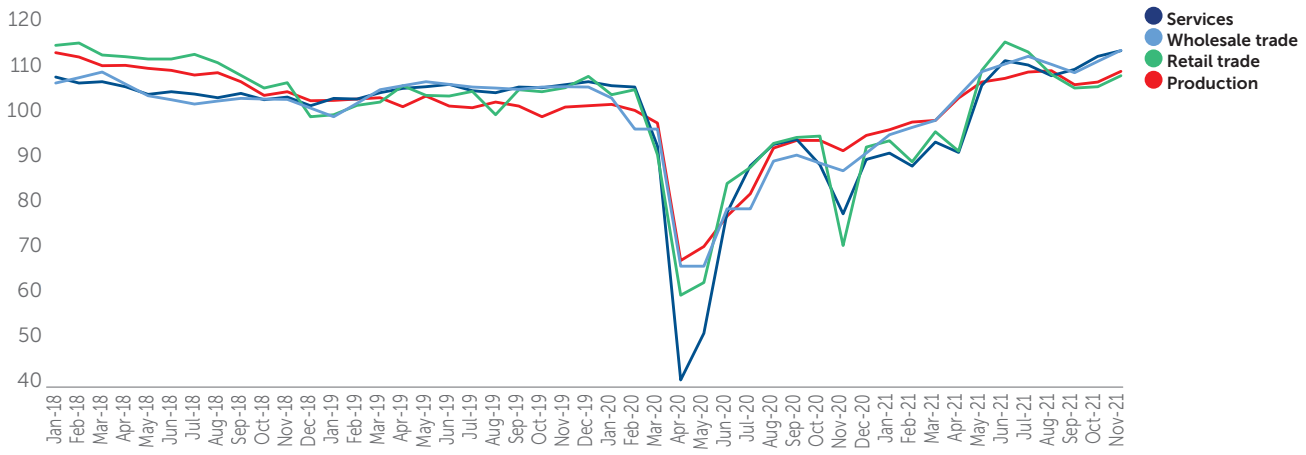
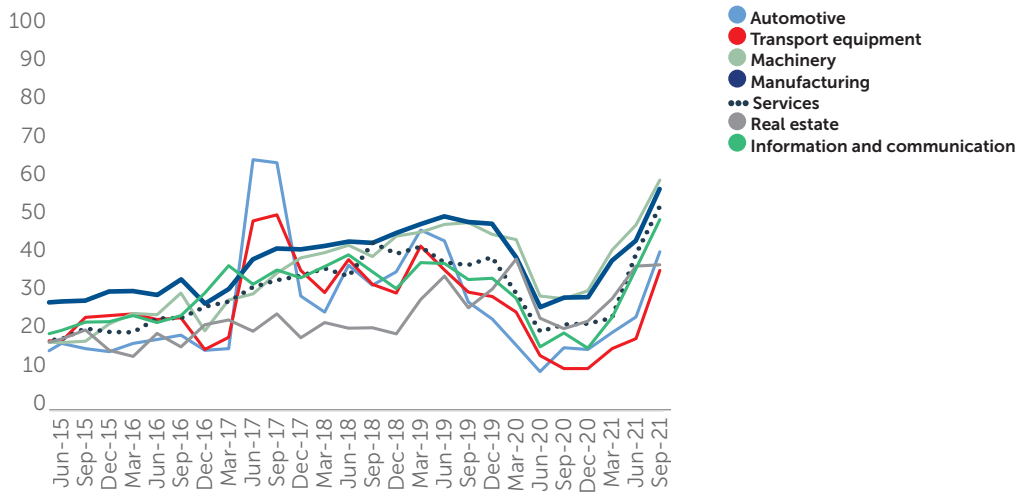


CHART 4: **BUSINESSES FACING STAFFING DIFFICULTIES (PERCENT OF BUSINESSES)**

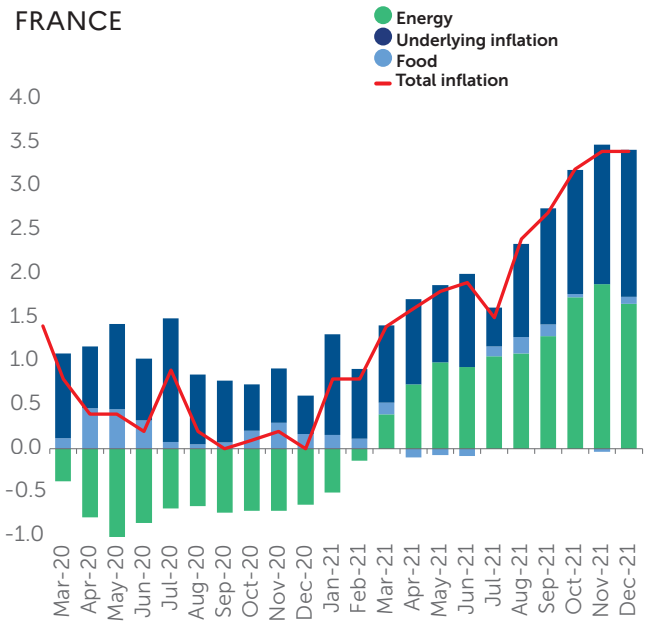
Source: *INSEE*

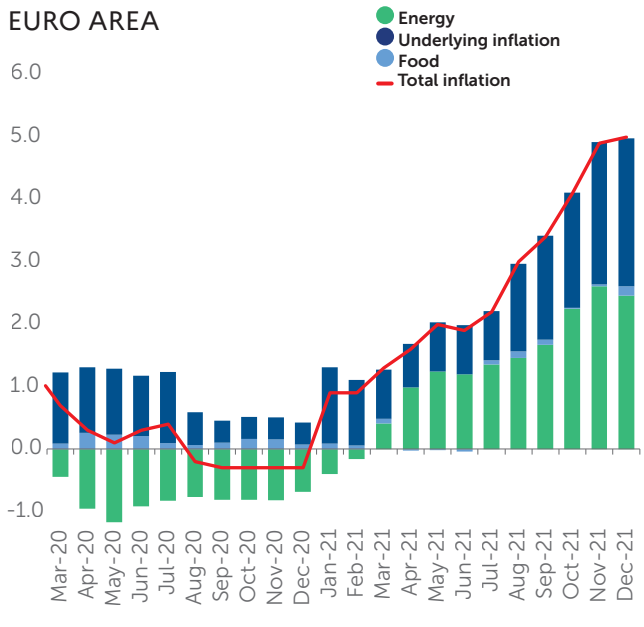


France's consumer price rebound was one of the lowest in Europe, but sustained increases in energy prices in the second half of 2021 drove most of the rise in inflation. The direct effects of inflation accounted for more than half the price rises. In the fourth quarter, it started to impact food prices, and service prices also rose more quickly. And yet, the inflation shock in France was moderate compared to other advanced economies. This can be attributed primarily to the measures introduced to mitigate its impact on consumption.

CHARTS 5 & 6: **INFLATION RATE AND CONTRIBUTIONS**

Source: *Eurostat (HICP)*





The labour market underwent a modest recovery in 2020 and then took off in the private sector in 2021. The recovery started with a spontaneous rebound in temporary jobs, and was later consolidated by job growth in the rest of the service sector. Direct support for businesses, with the short-time working scheme, along with indirect support, sustained the sharp recovery. The pre-pandemic trend in job creation resumed and the labour market suffered no lasting damage as a result.

CHART 7: **JOB CREATION BY SECTOR, ANNUAL CHANGE IN THOUSANDS**

Source: *INSEE (last data point: Q4 2021)*

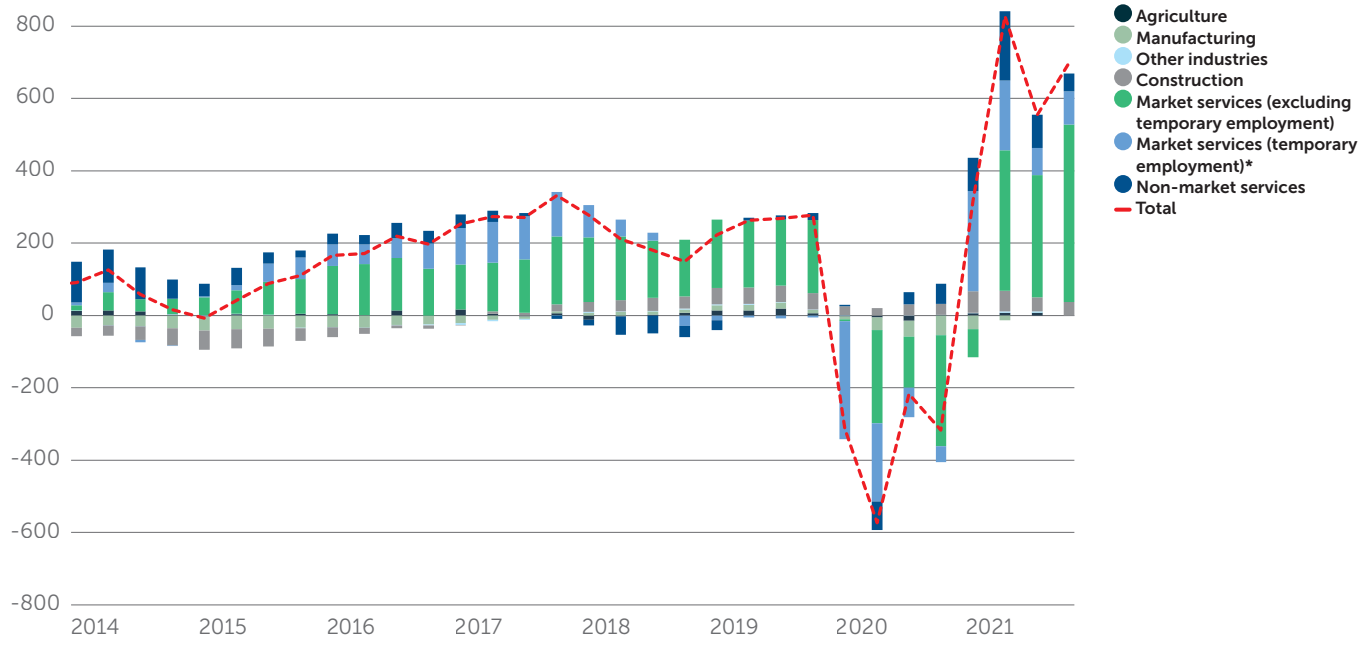
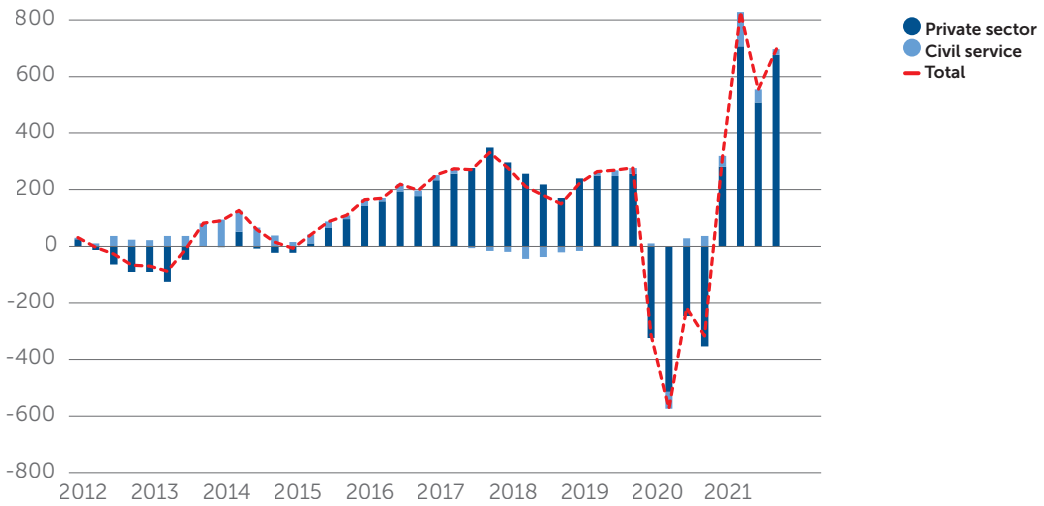


CHART 8: **PRIVATE SECTOR AND PUBLIC SECTOR JOB CREATION, ANNUAL CHANGE IN THOUSANDS**

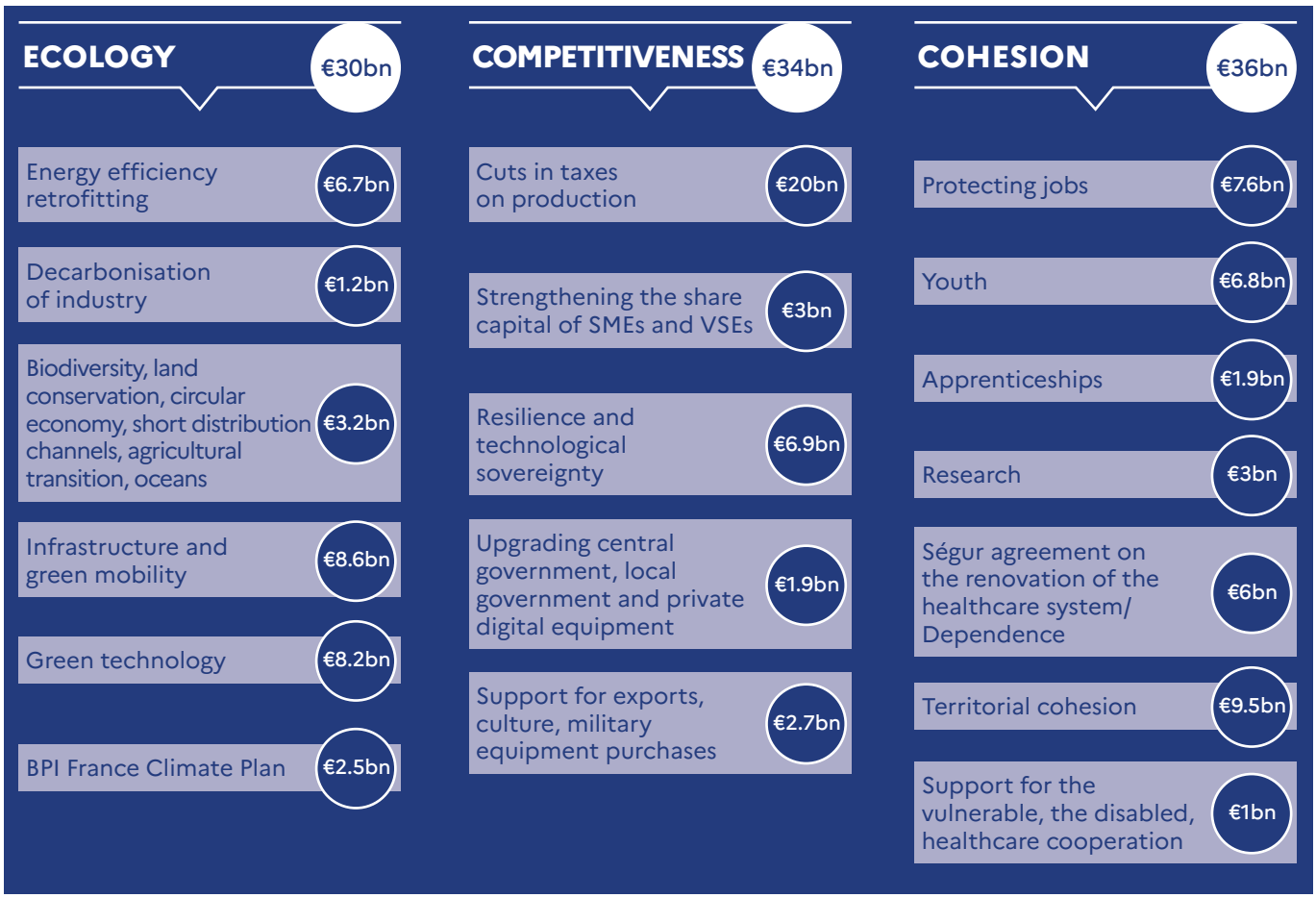
Source: *INSEE (last data point: Q4 2021)*



A RECOVERY WITH LASTING FISCAL POLICY SUPPORT

Short-term fiscal policy support for the recovery in the form of government consumption and investment expenditure increased. Nearly three quarters of the €100bn in funds for the recovery plan had been committed by the end of 2021. Government consumption and investment expenditure was up by 5% and 6% respectively. These increases sustained the recovery in private sector consumption and investment by amplifying the spontaneous positive demand shock, as the largest part of the recovery plan was implemented in 2021. This contribution to the recovery should continue in 2022, as the remaining funds under the plan are committed.

CHART 9: **DISTRIBUTION OF "FRANCE 2030" INVESTMENT**



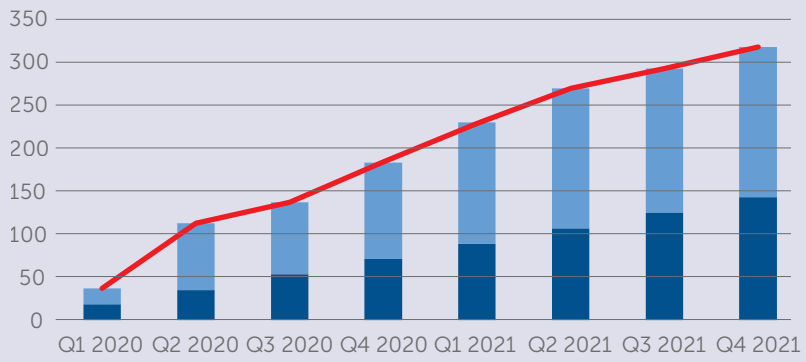
The "France 2030" investment plan announced in October 2021 adds a further €34bn in investment to transform key sectors of the economy through technological innovation. The many measures to support households and businesses preserved growth potential, which should get a further boost in the medium term from the gradual deployment of tools aimed at meeting the challenges facing the French economy in the green transition and at supporting innovation in such sectors as the automotive and aerospace industries.

HOUSEHOLD SAVINGS: FROM UNCERTAINTY TO RECOVERY, HOW WILL PANDEMIC SAVINGS BE USED?

The pandemic triggered an exogenous uncertainty shock to consumption that led to a large jump in the savings rate, since government support measures kept household income steady.

As was the case in 2020, surplus financial savings remained much higher in 2021 than they were under the trend in savings behaviour before the pandemic, even though consumption posted a strong rebound. This leaves the question of how these surplus savings will be used in the future and, more specifically, if they will potentially be used for consumption.

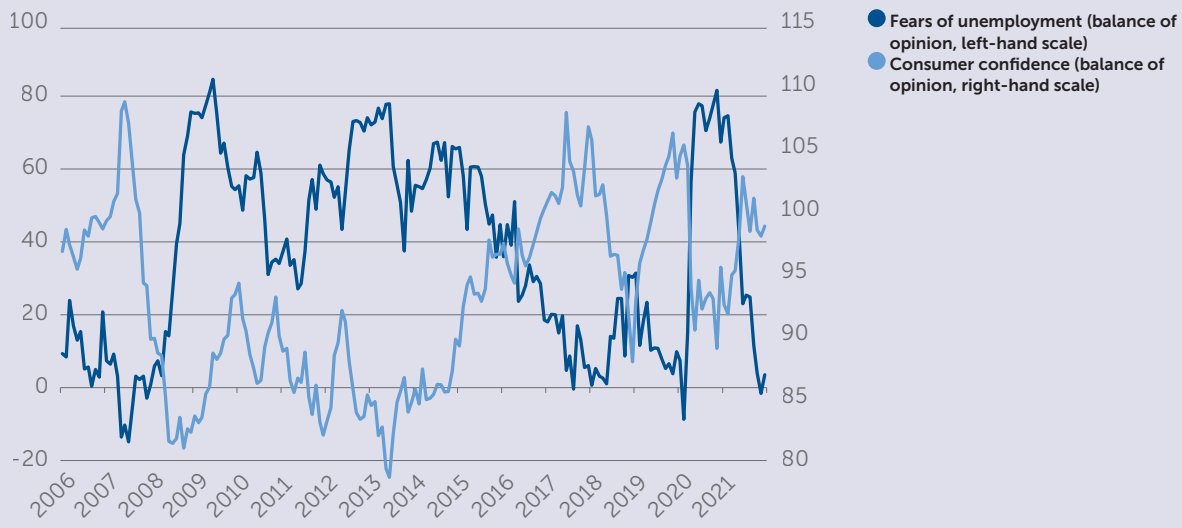
CHART 10: FINANCIAL SAVINGS, PRE-PANDEMIC TREND AND PANDEMIC SURPLUS



* Calculated as the difference between actual financial savings flows and those predicted by extrapolating the pre-pandemic trend, as calculated with reference to the 2019 savings flows.

CHART 11: CONSUMER CONFIDENCE AND FEARS OF UNEMPLOYMENT

Source: *INSEE*

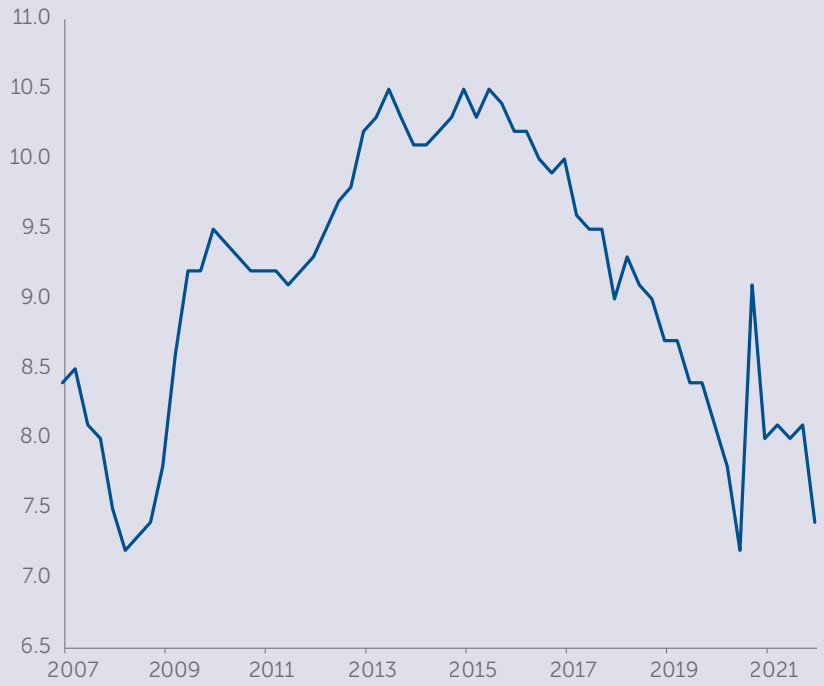


A STRONG RECOVERY IN THE LABOUR MARKET

As the unemployment rate dipped to its lowest level since 2008, standing at 7.4% at the end of 2021, the rapid recovery of employment in the second half of the year also boosted the employment rate and the participation rate beyond their pre-pandemic levels. After the streak of 19 consecutive quarters of net job creation, which was temporarily interrupted by the pandemic, the employment rate reached a twenty-year high of 67.8% at the end of 2021, and the participation rate stood at 73.3%. Consequently, the recovery came with a complete reversal of the balance of labour supply and demand that now favours supply.

CHART 12:
UNEMPLOYMENT RATE IN FRANCE (ILO DEFINITION, % OF LABOUR FORCE)

Source: *INSEE*



> MONETARY POLICY

Massive fiscal support in advanced economies was backed up by the central banks' very accommodative monetary policies through most of 2021. This combination, along with the outlook for fiscal expansion in the United States, played a key role in maintaining very favourable borrowing terms and risk asset prices.

The economic recovery came with growing prospects of higher inflation than in previous business cycles, mostly because of higher energy prices. This development radically altered the outlook for growth and inflation. Under the circumstances, the central banks adapted their messaging, signalling tightening of their policies at the end of 2021, leading to an increase in bond yields and greater volatility on financial markets.

CENTRAL BANKS

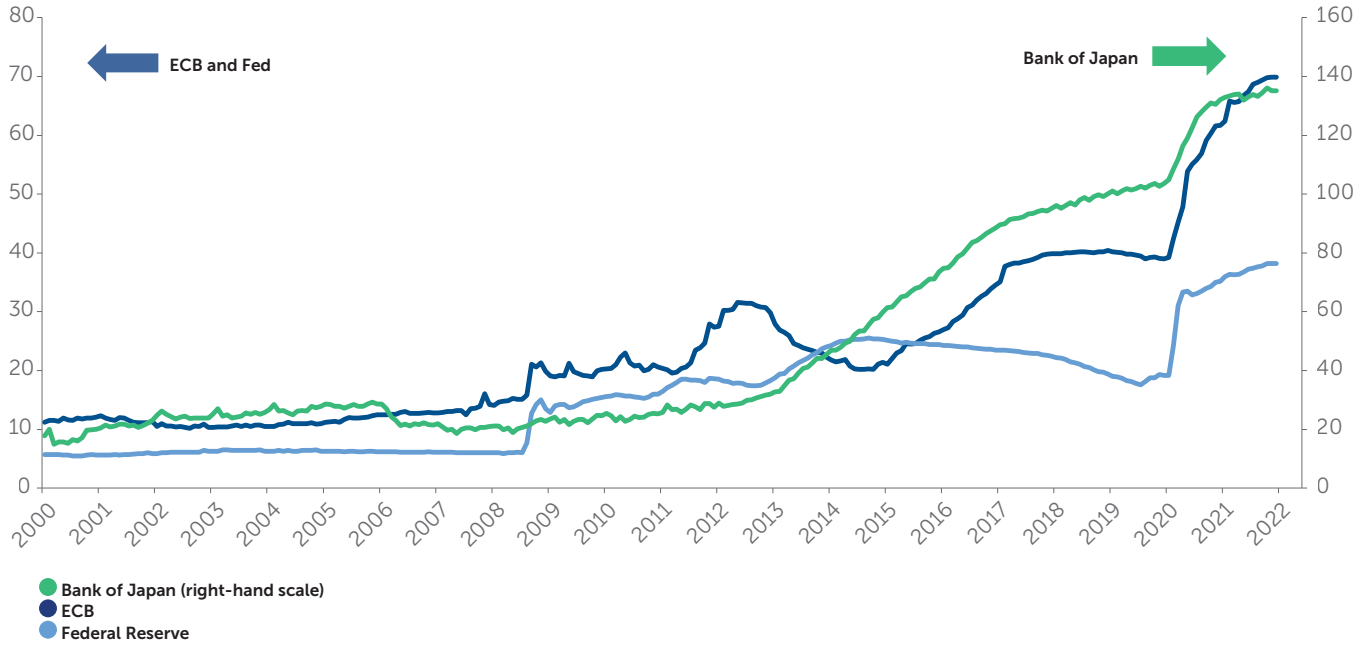
In the United States, the first inklings of the reflationary process were visible at the end of 2020. The process was stepped up in early 2021 with the combination of the increasing likelihood of strong fiscal stimulus perceived at the time (the Biden administration's recovery plans calling for a total of 3,000 billion dollars, with a share for infrastructure investments) and a tight labour market. This led to a steady rise in sovereign yields.

The American central bank (the Federal Reserve, or Fed) responded to higher yields by maintaining a very accommodative policy stance in early 2021, despite strong inflationary pressure and a brighter economic outlook.

The Fed's Open Market Committee (FOMC), which sets monetary policy, gradually shifted its policy rate forecasts in a more restrictive direction in view of rising vaccination rates and improved growth and employment indicators. In September, some FOMC members suggested that the Fed could start normalising its policy sooner than expected, as inflation could no longer be considered transitory, leading to episodes of volatility. Their statements were confirmed by Jerome Powell. In November 2021, he announced the Fed's intention to reduce its asset purchases to 10 billion dollars per month for Treasury securities and to 5 billion dollars per month for mortgage-backed securities.

CENTRAL BANK BALANCE SHEETS AS A % OF GDP

Source: *Bloomberg*



The **European Central Bank** maintained a very accommodative stance in early 2021 because of persistent uncertainty about the short-term economic outlook, especially with regard to the pandemic and the progress on vaccination campaigns.

After contracting in the first quarter of 2021, euro area economies gradually reopened as the health situation improved and vaccination campaigns made good progress. Consequently, the ECB announced in the fourth quarter of 2021 that it was adjusting its pandemic emergency purchase programme, with a modest slowdown in the pace of asset purchases over the next three months and continued flexibility to adjust each month's purchases depending on changes in borrowing terms and the outlook for inflation.

The Governing Council meeting on 9 September 2021 was followed by turmoil on the bond market because of rising energy prices, particularly electricity and gas prices. This led market participants to expect higher interest rates starting in the middle of 2022.

Then, in December 2021, the Governing Council confirmed that the PEPP would end in March 2022 and announced a temporary doubling of the assets purchased under its usual asset purchase programme (APP) to prevent an abrupt transition. At the same time, the ECB signalled that inflation was still deemed to be transitory, expected to be high in the short term, but to ease after that over 2022. This justified the ECB's continued monetary support, which it deemed necessary to stabilise inflation at its 2% target in the medium term.

ECB: MONETARY POLICY STRATEGY REVIEW

In July 2021, the ECB published the conclusions of its third monetary policy strategy review since 1999. The ECB has adopted a symmetric inflation target of 2%, which it states is the best means of maintaining price stability.

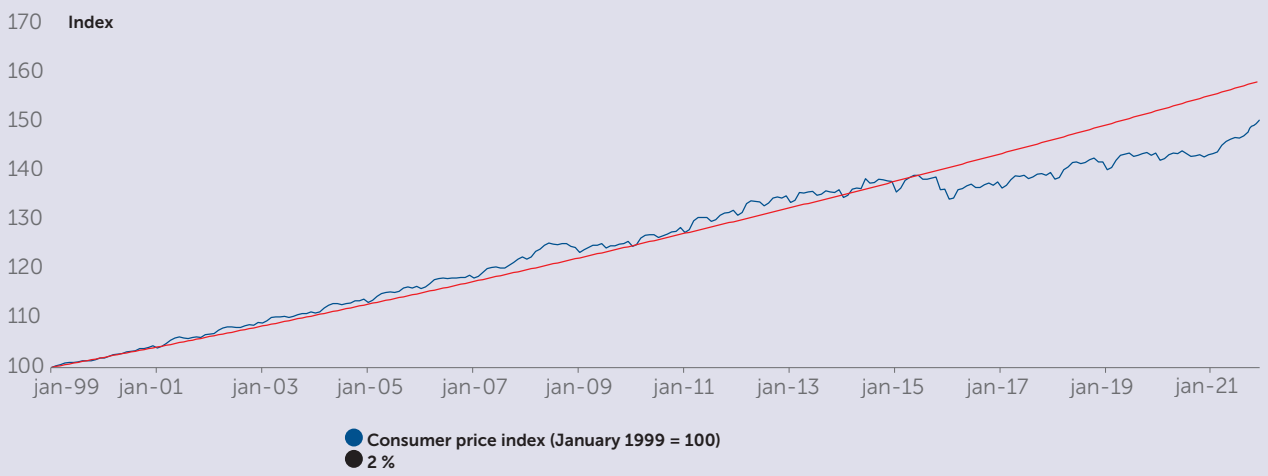
Symmetry in the inflation target means that negative and positive deviations of inflation from the target are now considered to be equally undesirable, whereas only positive deviations had been before. The ECB also explains that, when nominal interest rates are close to their lower bound, monetary policy needs to be particularly aggressive and take a long-term approach to avoid negative deviations from the inflation target taking hold. The ECB also states that this may lead to inflation that is slightly above the target in the interim.

The Governing Council has confirmed that the Harmonised Index of Consumer Prices (HICP) is still the appropriate measurement for evaluating price stability. However, the Council recognises that including the costs of owner-occupied housing in the HICP would better represent the inflation that is relevant for households and that several years will be needed to accomplish this. In the meantime, the Governing Council will use inflation measures that include initial estimates of the cost of owner-occupied housing to supplement its range of broader inflation indicators.

The ECB also deems that "climate change has profound implications for price stability". Therefore, it announced that climate considerations will be further incorporated in its monetary policy framework.

EURO AREA CONSUMER PRICE INDEX COMPARED TO THE 2% TARGET

Source: *Eurostat*



The Bank of Japan (BoJ) maintained its very accommodative monetary policy by means of its yield curve control strategy, with slightly negative short-term yields and long-term yields near zero. Its forward guidance did not change with continuing yield curve control aimed at achieving a 2% inflation target. The Japanese central bank also continued its purchases of private-sector assets, including exchange traded funds (ETFs) and Japanese real estate investment trusts (J-REITs) if necessary. The caps on such assets stood at approximately 12,000 billion yen and 180 billion yen respectively.

The Bank of England (BoE) also maintained a very accommodative stance for most of 2021, before encountering stronger inflationary pressure than expected in its preliminary economic forecasts. Consequently, messaging from members of the central bank's Monetary Policy Committee (MPC) signalled tightening, with the announcement in November of a rate hike, which was actually delayed until December, when the Committee voted eight to one to increase the Bank Rate by 15 basis points to 0.25%.

Nonetheless, the Bank of England continued its purchases of £20bn in corporate bonds issued by solid non-financial companies. In addition, the existing UK government bond purchase programme continued at the same pace, with the same objective of a stock of £875bn in government bonds. The central bank's forward guidance was unchanged: tightening of monetary policy was expected to be necessary over the forecast period in order to achieve the 2% inflation target sustainably in the medium term. All of the Monetary Policy Committee members agreed that monetary tightening during the forecast period would primarily consist of rate hikes, and possibly even the end of the asset purchase programme.

The People's Bank of China (PBoC) faced several factors that slowed economic activity, included reducing the debts of the real-estate sector in the wake of the problems encountered by property developers, particularly Evergrande, and new outbreaks of COVID-19 in some provinces. After steadily affirming its determination to tighten its monetary policy, the PBoC finally settled for a more accommodative stance in response to the initially faltering post-pandemic recovery.

In December, the PBoC took a prudent step towards monetary easing by announcing a 50-basis-point cut in the reserve requirement ratio (RRR) for most banks. This freed up approximately 1,200 billion yuan in liquidity (190 billion dollars), which could be used by the financial system for long-term financing for the real economy. In a similar move, to curb the appreciation of the yuan that started in September 2021, the central bank increased the hedge ratio for Chinese financial institutions' positions in foreign currencies by 2 percentage points to 9%. This change came on top of the modulation of its exchange rate fixing for onshore yuan, meaning yuan traded in the Chinese payment system.

FINANCIAL MARKETS

1 FIXED-INCOME MARKETS

Interest rate movements in 2021 can be roughly broken down into several periods. The year started with a steepening of the yield curve, when long-term yields increase more and/or faster than short-term yields. This was notable for the American and European yield curves and, more specifically, for the long end of the curve, as the "reflation trade" became an investment theme and led to expectations of higher inflation and growth. In addition to the massive fiscal stimulus programme in the United States, the sharp rise in commodity prices increased the pressure for higher long-term nominal yields on bonds in the United States. European long-term yields initially saw a similar, but transitory, movement between January and February, after which they stabilised and even fell slightly as the recovery in Europe was less strong than in the United States. During the first quarter of 2021, the 10-year OAT yield rose by approximately 35 basis points to reach 0% in March.

In the second quarter, American long-term yields fell by approximately 50 basis points to hover between 1.2% and 1.3% in the third quarter. At the same time, the American inflation rate started to exceed the Fed's 2% target and levelled off just above 5% in the third quarter, before resuming its climb for the rest of the year as a result of higher energy prices. Meanwhile, the labour market was still struggling to overcome the effects of the pandemic. The combination of inflation and a slow labour market fuelled fears of a weaker-than-expected recovery in the United States, or even soaring inflation that could produce slower growth under the effect of "stagflation". At the same time, European long-term yields showed a similar pattern, but slightly less pronounced and over a shorter period. Then, the ECB announced that it was cutting back its asset purchases under the pandemic emergency measures.

In the third quarter of 2021, yields were significantly lower in the advanced economies because of renewed risk aversion triggered by the rapid and global spread of the Delta variant, especially in the United States. At the end of 2021, the bond market experienced greater volatility stemming from both:

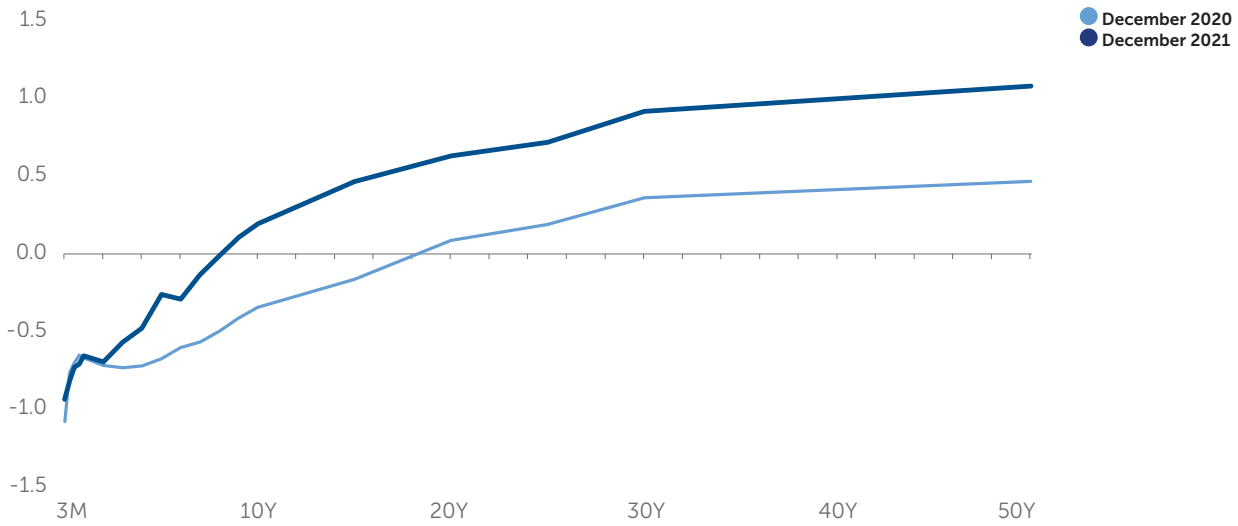
(i) uncertainty about the pandemic caused by the Omicron variant of the COVID-19 virus and the reimposition of restrictions in response to the fifth wave of COVID-19 in Central and Eastern Europe particularly;

(ii) further cyclical and monetary policy decoupling between Europe and the United States, where the Fed changed its view about inflation, which it no longer sees as transitory in a context where labour market signals are difficult to read, whereas the ECB signalled its continued support, depending on future changes in circumstances.

France's 10-year yields climbed by 56 basis points (or 0.56 percentage points) over 2021 as a whole to stand at 0.20% at the end of the year. The German 10-year yield rose by 41 basis points to stand at approximately -0.19%. At the same time, long-term yields in Spain rose by 63 basis points to 1.17% and, in Italy, they rose by 51 basis points to 0.55%.

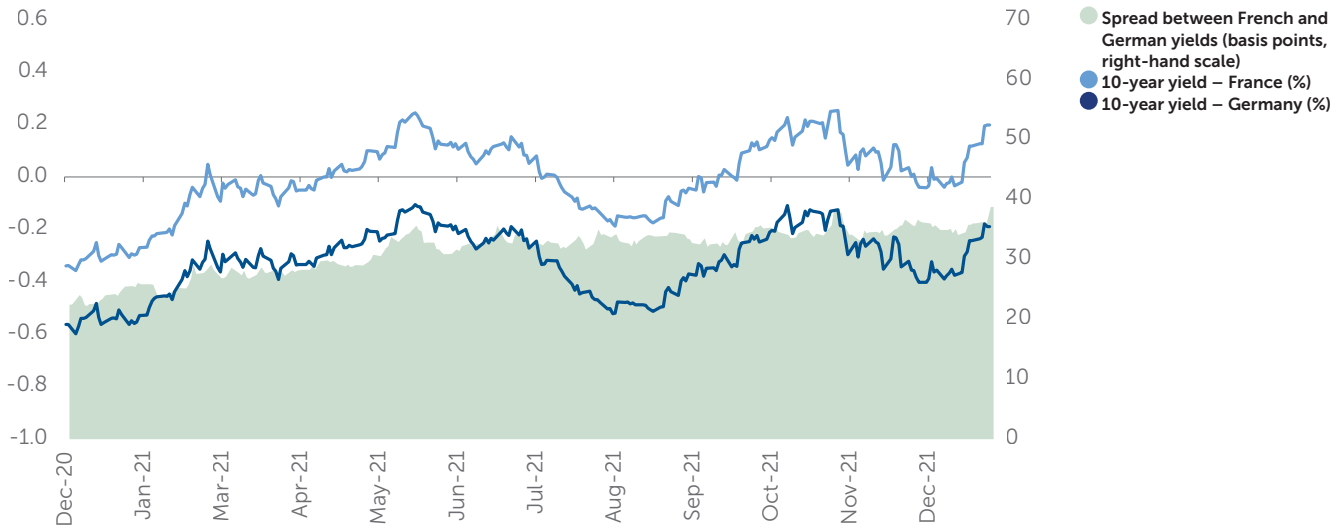
FRANCE: SOVEREIGN YIELD CURVE

Source: *Bloomberg*



10-YEAR SOVEREIGN YIELDS IN FRANCE AND GERMANY (%/YEAR)

Source: *Bloomberg*



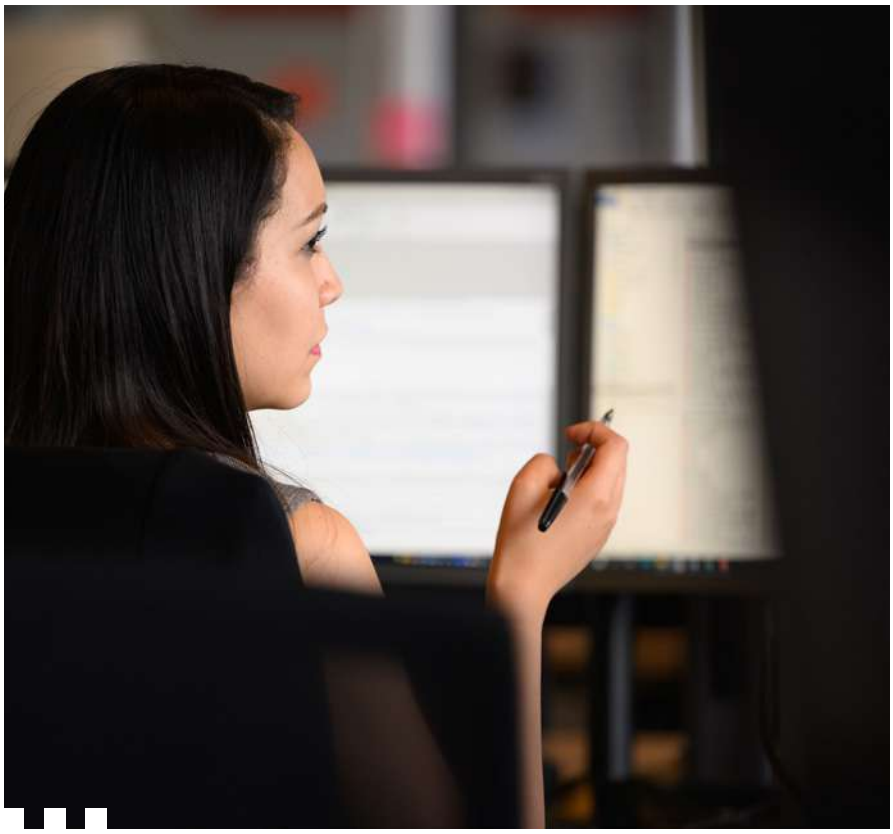
2 FINANCIAL MARKETS - EQUITIES

In early 2021, stock market indices around the world were sustained by the combination of very accommodative monetary policies, expectations of stronger fiscal support, which were ultimately met with disappointment – particularly in the United States – and a bright outlook for corporate profits. The negotiations about the scale of the American recovery plan caused some price swings, but share prices then stalled as reflation accelerated. Reflation can weaken corporate profits, since producer prices may rise faster than consumer prices. This can affect some stocks with prices that are sensitive to bond yield increases, such as technology stocks.

In Europe, delays in the rollout of vaccination programmes weakened the rebound in European shares, compared to the rise in American share prices. Several developments caused investors to have concerns, in particular the persistent effects of the pandemic on the service sector and disruptions in the supply chain in manufacturing. These concerns led to a period of volatility both in Europe and the United States.

In China, the authorities initiated further opening of their capital markets to non-resident investors to support the economic recovery, which came sooner than elsewhere. This move opened up an alternative to assets on advanced markets. However, stock market indices were then hit by the global slowdown of economic activity, which came on top of domestic factors, such as the fragility of China's real estate sector, which had to undergo government-supervised restructuring. Other domestic factors included tighter regulation of several sectors, such as technology. These factors explain the negative performance of the Hong Kong index in 2021, which fell 14.8% over the year as a whole, and the lacklustre performance of the Shanghai index, which gained 3.9%.

At the end of the year, investors' risk appetite was tempered by the less accommodative messaging of the central banks, the outlook for higher inflation – which is bad for asset prices because it pushes up interest rates – and renewed concerns surrounding COVID-19, with the discovery of the new Omicron variant. In this context, volatility was significant, especially for American technology stocks. All in all, stock market performances at the end of 2021 were still better than those seen at the end of 2020. This was true in both Europe, with the CAC 40 up 28%, the DAX up 15% and the Eurostoxx 50 up 20.6%, and in the United States, with the S&P 500 up 28.8% and the Nasdaq up 23.2%.



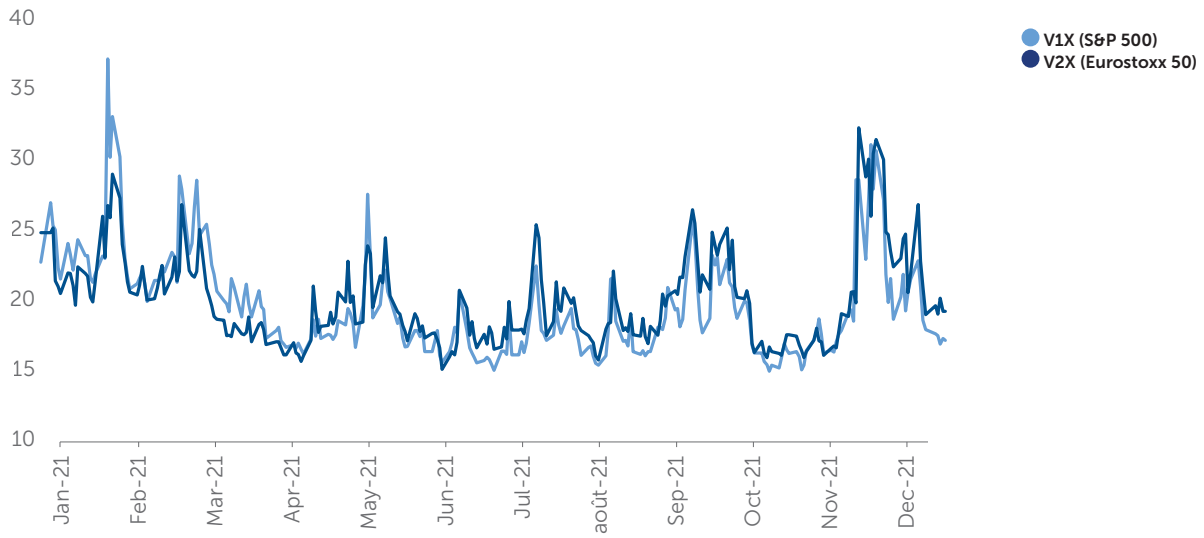
GLOBAL STOCK MARKET INDICES AND ANNUAL PERFORMANCE IN 2021

Source: *Bloomberg*

CAC 40	**+28.0%**
DAX	**+15.7%**
FTSE 100	**+12.4%**
FTSE MIB (Milan)	**+22.5%**
IBEX 35 (Madrid)	**+7.6%**
Eurostoxx 50	**+20.6%**
European banks	**+36.3%**
Nikkei	**+5.6%**
Shanghai	**+3.9%**
Hong Kong	**-14.8%**
Dow Jones	**+20.2%**
S&P 500	**+28.8%**
Nasdaq	**+23.2%**

EQUITIES MARKET VOLATILITY INDICES

Source: *Bloomberg*



3 FINANCIAL MARKET – FOREIGN EXCHANGE

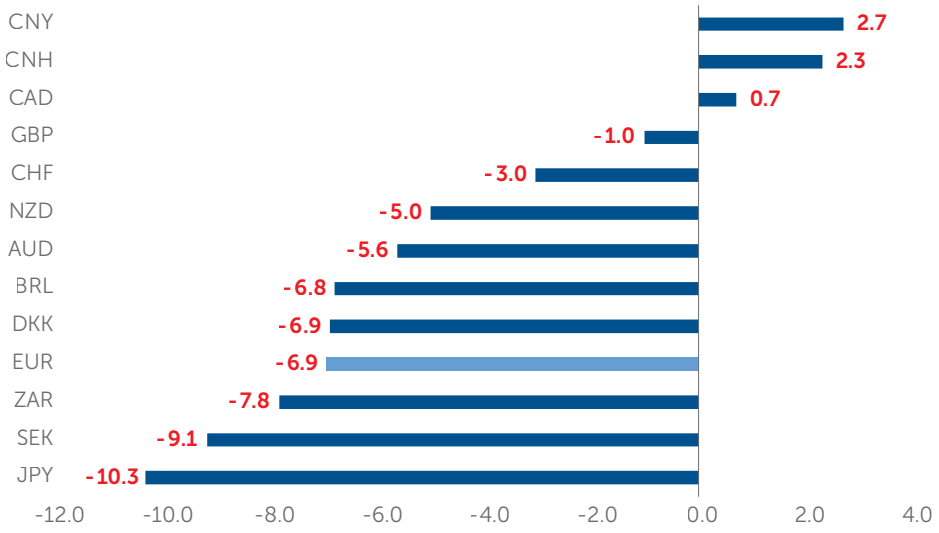
Investors were drawn to buy American dollars by the Federal Reserve's revised monetary policy framework, the prospects for fiscal stimulus and the emergence of the Delta variant. At the same time, the euro depreciated as the ECB maintained a very accommodative monetary policy compared to that of the Fed, which seemed more determined to initiate policy normalisation. In April, the differential between the effective rates in Europe and the United States caused the dollar to slip against the main currencies, and against the euro in particular. In the third quarter, the dollar appreciated against all other currencies on the strength of growing expectations of a resumption of the divergence between a lasting accommodative monetary policy in the euro area, in contrast to policy normalisation in the rest of the world, and especially the United States.

In the first half of 2021, the exchange rate of the yuan against the dollar was very volatile, with a depreciation followed by an appreciation that led the Chinese central bank to intervene on the market to rebalance its currency. This pattern occurred again at the end of the third quarter of 2021, largely as a result of non-resident capital inflows attracted by the investment alternative offered by Chinese financial assets. Under the circumstances, the People's Bank of China cut its Reserve Requirement Rate by 50 basis points in July and again in December. Both times the cuts were made to free up liquidity in the domestic banking and financial systems. At the same time, the hedge ratio for foreign currency positions was increased by 2 percentage points.

The dollar was up overall against the leading currencies over the year as a whole in 2021, gaining 10.3% against the yen, 6.9% against the euro and 1.0% against sterling.

EXCHANGE RATES OF THE LEADING CURRENCIES AGAINST THE DOLLAR IN 2021 (%)

Source: *Bloomberg*

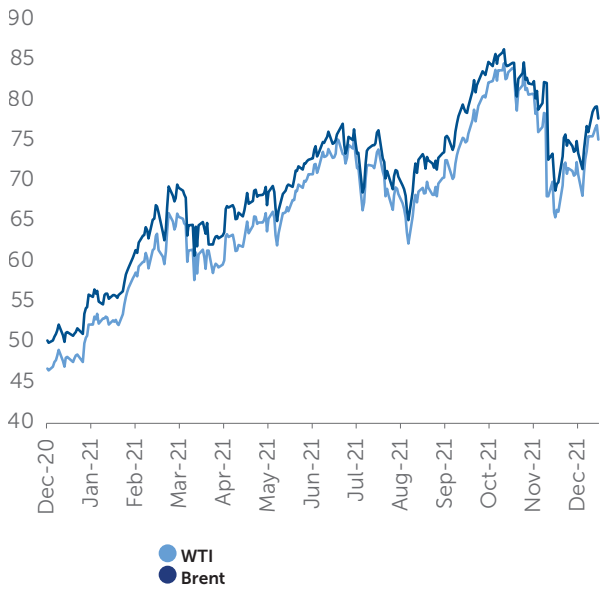


4 FINANCIAL MARKETS – COMMODITIES

Oil prices hit historic lows in 2020 due to the unprecedented slump in global demand. In 2021, they bounced back with a 55% rise for Brent over the year as a whole to $76.90/bbl at 31 December 2021 and a 60% rise for WTI to $74.50/bl. The excess supply caused by demand that was constrained by uncertainty as to how long lockdown measures were going to last in the leading economies started to diminish as a result of the automatic recovery of demand, combined with the cuts in production by the OPEC+ countries. Vaccination campaigns and the outlook for fiscal stimulus in the United States then triggered a renewed rise in oil prices. In the fourth quarter of 2021, the price of oil hit a three-year high on the strength of the global recovery, which was stronger than expected, the cautious strategy of OPEC+ to increase its production quotas, and the first inklings of rising gas prices. When natural gas prices started going up in September, some electricity generation and heating plants switched to petroleum products and coal. This jump in demand, at a time when the global oil balance is in deficit, triggered a series of purchases to prepare for the winter. In China, the government ordered public energy companies to stock up for the winter, regardless of the cost, which drove up prices. At the end of the year OPEC+ declared that its monthly production increases in 400,000-barrel increments per day were sufficient to stabilise the market.

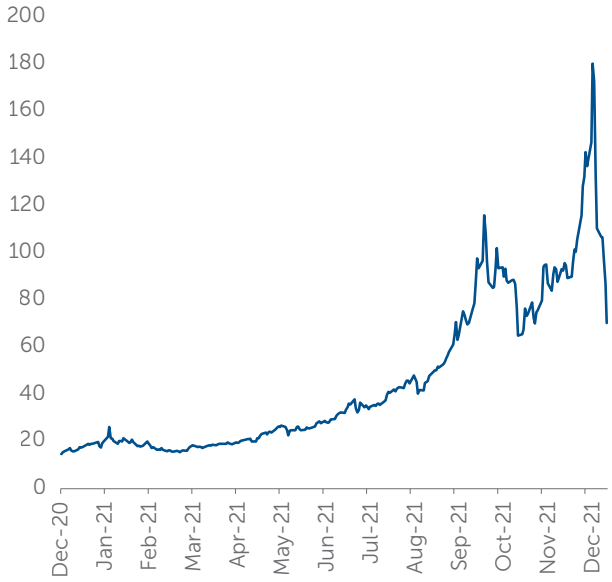
BRENT AND WTI PRICES (DOLLARS PER BARREL)

Source: *Bloomberg*



GAS PRICES IN EUROPE (EUROS PER MWH)

Source: *Bloomberg*



RATING AGENCIES

In 2021, France's Fitch, S&P, Moody's and DBRS ratings were stable (AA for Fitch and Standard & Poor's, Aa2 for Moody's and AA high for DBRS). The outlook for France's sovereign ratings by S&P, Moody's and DBRS remains stable, whereas Fitch maintained its negative outlook.

RATING TABLE AS AT 31 DECEMBER 2021[1]

	LONG-TERM	SHORT-TERM	OUTLOOK
Moody's	Aa2	/	Stable
Standard & Poor's	AA	A-1+	Stable
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 IN 2022

AGENCY	DATE
Moody's	3 June 2022 - 2 December 2022
Standard & Poor's	18 February 2022 - 1 July 2022 - 2 December 2022
Fitch	18 February 2022 - 5 August 2022 - 4 November 2022
DBRS	1 April 2022 - 30 September 2022

THE STATE'S CASH MANAGEMENT STRATEGY

PERFORMANCE

AFT ensured the financial continuity of the French State as the COVID-19 crisis persisted. The day-to-day balance on the State's single account remained in credit and the transactions made through the account were completed properly. For this purpose, AFT produces successive 12-month cash and debt forecasts.

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

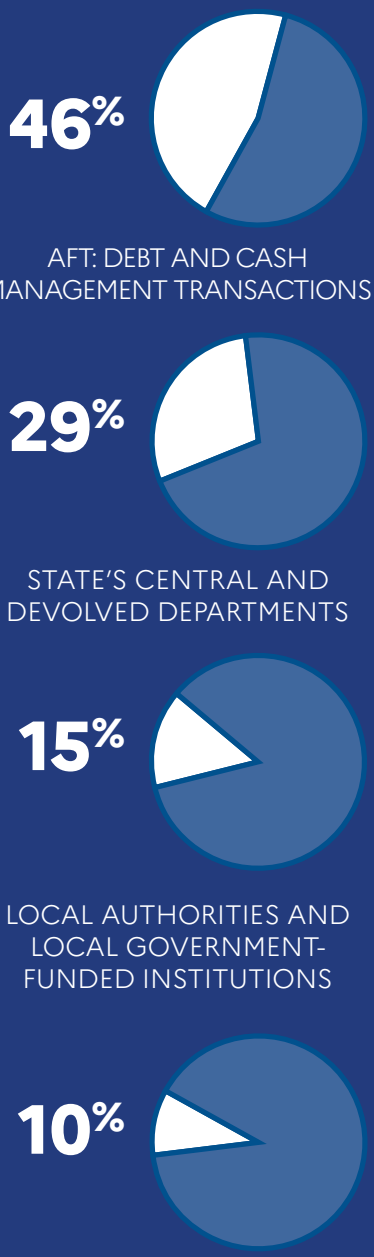
The State's cash holdings are centralised in a single account with the *Banque de France*. The single account records all of the financial transactions made by more than 4,000 government accountants on nearly 3,000 transaction accounts. It aggregates transactions under the State budget, the transactions of Treasury correspondents, meaning 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.).

AFT ensures that the State's cash position is always adequate to settle the financial transactions posted to the Treasury Account under the most secure conditions. For this purpose, AFT monitors the execution of revenue and expenditure flows on the Treasury Account with the *Banque de France* in real time. The average daily volume of cash flowing in and out of the account came to €19bn in 2021.

Cash management continued as the pandemic persisted.

A justified resurgence of concerns in the first half of the year led to prospects of an increase in expenditure and a decrease in revenue, which would mean more borrowing on the market to finance the fiscal deficit. AFT periodically adjusted its forecasts of flows on the Treasury Account. It participated in framing two Supplementary Budget Acts, since it is AFT's responsibility to compile the State's cash flow statement, which balances the sources and applications of funds, and debt service. It is also tasked with translating Parliament's decisions into cash flows, with the help of the administrations concerned.

TREASURY ACCOUNT
CREDITS AND DEBITS IN 2021



Source: *AFT*

The pandemic continued to affect proactive cash management.

AFT's management of cash holdings relies on daily forecasts to assess the amounts needed to cover upcoming transactions. AFT provides proactive management of the State's cash resources to ensure sound stewardship of public monies. Temporary cash surpluses may be invested in interbank market transactions, with due consideration of counterparty risk. These transactions take the form of unsecured deposits or repurchase agreements involving government securities. The daily amount invested averaged approximately €6bn over the year.

In December, AFT was able to test its reserve of securities that are useable 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 are Treasury bills and cash lines of credit granted by banks. The increased borrowing requirements in the second quarter of 2020 demonstrated the utility of diversified funding sources for the State. Repos, or repurchase agreements, are transactions by which cash is borrowed in exchange for an equivalent amount of securities provided as collateral. These are one of the main tools for short-term borrowing on the money market. The lender has the option of reselling the securities received as collateral, and the securities can also be used as collateral for central bank refinancing. The test of this tool in December 2021 was successful.

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 4pm on the previous day. In 2021, the percentage of such transactions notified in advance stood at 99.3% for local authorities and government-funded institutions. These results are slightly better than the performance target set out in the Budget Act.

The obligation to deposit funds on the Treasury Account was extended in 2021 to include some entities that had previously been exempted for historical reasons. Order 2020-1496 and Implementing Decree 2021-29 of 14 January 2021 make it possible to pool the funds of new public and private entities providing public services in the Treasury Account, thereby contributing to financing resources.

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 A SECOND YEAR OF CRISIS

AFT managed the State's cash holdings and implemented a borrowing programme on a scale similar to that of 2020, with the benefit of renewed support from the central bank and persistently favourable borrowing terms.

BORROWING PROGRAMME NEAR HISTORICAL RECORDS

The 2021 Initial Budget Act identified borrowing requirements of €293bn, compared to €310bn in the 2020 Budget Review Act. As is the case every year, the requirement mainly covers the deficit to be financed and redemption of maturing securities. The borrowing requirement ultimately stood at €285.2bn in the 2021 Budget Review Bill, since the deficit was smaller than expected as the pandemic was less disruptive than forecast.

The medium- and long-term borrowing programme net of buybacks was maintained at €260bn in all of the financial legislation. The BTF issuance programme was supposed to raise an additional €19.5bn, for a total outstanding of €181bn. Instead outstanding BTFs were reduced by €6.2bn, for a total outstanding of €155bn as a result of a smaller-than-expected deficit.

CENTRAL BANK SUPPORT

The market was able to absorb this level of issuance thanks to the resolute support of the ECB. The large-scale support from the ECB under the pandemic emergency purchase programme (PEPP) reached €1,850bn at the end of December 2020 and was maintained in 2021. This support maintained favourable financial conditions for sovereign borrowers facing increased borrowing requirements due to the pandemic.

In addition, France's creditworthiness gave it access to investors for whom security and liquidity are crucial. The medium- and long-term borrowing programme was equivalent to 10.6% of GDP in 2021, compared to 11.8% in 2020, 8.2% in 2019 and 9.4% in 2010, the previous high point.

ADAPTING THE PROCEDURES FOR IMPLEMENTING THE BORROWING PROGRAMME

The average amount of long-term securities issued at auctions remained at the 2020 level of approximately €11bn. The amount for medium-term securities was stable at around €10bn. The optional August auctions were held in 2021 and raised €16.5bn. AFT also conducted syndicated launches of three bonds for a total of €19bn.

In keeping with its issuance policy, AFT also increased the average maturity of its issuance to meet the demand from investors seeking returns in a low-yield environment. The average maturity increased from 8.1 years in 2012 to 11.5 years in 2020 and then to 12.4 years in 2021.

Buybacks totalled €25.1bn in 2021, which smoothed out redemptions in 2022 and 2023.

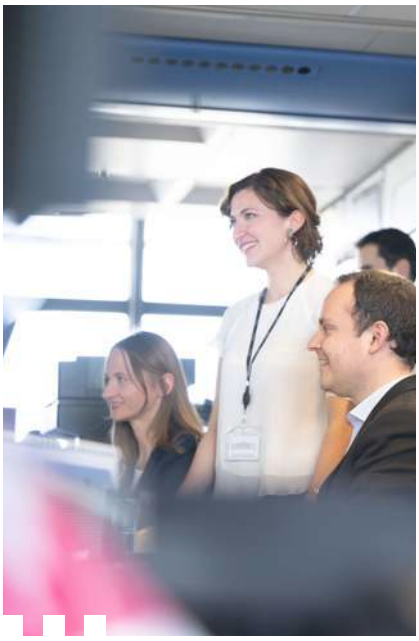
BENEFITS OF CENTRALISING GOVERNMENT CASH HOLDINGS

The increase in Treasury correspondents' deposits on the Treasury Account (primarily from local authorities and government-funded institutions) also contributed to increasing financing resources, but the State cannot know the amount of these resources in advance since these entities manage their cash holdings autonomously. The Government reinforced this policy in 2021. This longstanding policy contributed nearly €19bn in financing resources in 2021.

STATE CASH FLOWS

IN €BN	LFI 2021 (LOI DE FINANCES INITIALE)	SUPPLEMENTARY BUDGET ACT 1 (19 JULY 2021)	SUPPLEMENTARY BUDGET ACT 2 (1 DECEMBER 2021)	OUTTURN 2021
Borrowing requirements				
Redemption of medium- and long-term debt	118.3	118.3	118.3	118.3
Of which medium- and long-term debt redemption (par value)	117.5	117.5	117.5	117.5
Of which index-linking supplements paid at maturity	0.8	0.8	0.8	0.8
Redemption of other debts	0.0	0.0	0.0	0.0
SNCF Réseau – redemptions	1.3	1.3	1.3	1.3
Deficit to be financed	173.3	220.1	205.1	170.7
Other cash requirements	0.1	-1.4	-3.7	-5.1
TOTAL	293.0	338.3	321.0	285.2
Funding sources				
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	0.0	0.0	0.0	0.0
Net change in outstanding short-term government securities	19.5	19.5	5.0	-6.2
Change in correspondents' deposits	7.0	3.9	8.9	18.7
Change in cash available in the Treasury's account	0.0	48.4	33.3	-4.4
Other cash sources	6.5	6.5	13.8	17.2
TOTAL	293.0	338.3	321.0	285.2

THE STATE'S DEBT MANAGEMENT STRATEGY



PRINCIPLES

AFT is tasked with raising sufficient funds on the markets to finance the State while keeping the debt service cost for taxpayers down to a minimum under optimum conditions of security. 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 ISSUANCE CAME TO €260BN IN 2021

This amount was the result of:

- €285.1bn of medium- and long-term borrowing, including €23.6bn of securities linked to French and euro area inflation (OATi and OAT€i)
- less €25.1bn in buybacks of securities set to be redeemed in 2022 (€19.6bn) and in 2023 (€5.5bn)

The average yields at issue were negative for second year in a row in 2021, averaging -0.05% (compared to -0.13% in 2020) for medium- and long-term securities, excluding index-linked bonds *(see table on page 52)*.

REGULAR AND TRANSPARENT AUCTIONS REMAINED CENTRAL TO THE STATE FINANCING STRATEGY

AFT published its indicative financing programme on 9 December 2020, setting the main guidelines for 2021.

In accordance with the auction schedule:

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

FINANCING CONDITIONS

FIGURES AS AT 31 DECEMBER 2021

Source: *AFT, as at 31 December 2021*

WEIGHTED AVERAGE YIELDS		1998–2008 AVERAGE	2009–2018 AVERAGE	2019	2020	2021
SHORT TERM	**All BTFs**	**3.15%**	**0.02%**	**-0.58%**	**-0.56%**	**-0.67%**
	Of which 3-month BTFs	3.10%	0.01%	-0.57%	-0.57%	-0.68%
MEDIUM AND LONG TERM	**Fixed-rate issues with maturities of more than one year (excluding index-linked securities)**	**4.15%**	**1.52%**	**0.11%**	**-0.13%**	**-0.05%**
	of which 10-year fixed-rate issues (excluding index-linked securities)	4.44%	2.01%	0.23%	-0.12%	-0.00%
TOTAL ISSUES		3.73%	0.80%	-0.12%	-0.30%	-0.28%

WEIGHTED AVERAGE YIELDS		Q1 2021	Q2 2021	Q3 2021	Q4 2021
SHORT TERM	**All BTFs**	**-0.62%**	**-0.63%**	**-0.66%**	**-0.76%**
	Of which 3-month BTFs	-0.62%	-0.64%	-0.66%	-0.81%
MEDIUM AND LONG TERM	**Fixed-rate issues with maturities of more than one year (excluding index-linked securities)**	**-0.08%**	**-0.00%**	**-0.11%**	**-0.00%**
	of which 10-year fixed-rate issues (excluding index-linked securities)	-0.21%	0.10%	-0.04%	-0.16%
TOTAL ISSUES		-0.27%	-0.25%	-0.31%	-0.31%

AFT CONTINUED ITS FLEXIBLE ISSUANCE POLICY IN 2021 TO BEST MEET CHANGING MARKET DEMAND

The State's borrowing requirement in 2021 ultimately stood at €285.2bn, which was €24.3bn less than in 2020, when it stood at €309.5bn. However, the borrowing requirement was still large because of continued government support for the economy to cope with further waves of the pandemic. The State borrowing requirement in the 2021 Initial Budget Act stood at €293.0bn. The Supplementary Budget Act I raised it to €338.3bn in July and the Supplementary Budget Act II reduced it to €321.0bn in early December. Two main determining factors shaped the 2021 borrowing requirement: (i) the deficit to be financed, which came to €170.7bn in the outturn – €7.4bn less compared to the 2020 deficit – and (ii) the redemptions of medium- and long-term government securities, which came to €118.3bn – €17.8bn less than in 2020.

Yields on French sovereign debt started to rise in 2021, reaching close to 0.2% at the end of December for 10-year maturities, up from the near-record low of -0.3% at the end of 2020. The rise in French sovereign yields came in two stages. The 10-year yield peaked in the second quarter, in May, before easing back in the wake of a new wave of the pandemic. It then peaked a second time in the fourth quarter, as rising inflation in the euro area led to expectations of faster tightening of monetary policy, despite the spread of a new variant of COVID-19.

Volatility on sovereign bond markets was kept under control particularly as a result of the ECB's asset purchase programmes, despite new waves of the pandemic and rising inflation in the euro area in the second half of 2021. French sovereign yields diverged from Germany's over the year. The 10-year yield differential between France and Germany went from slightly more than 20 basis points to slightly less than 40 basis points. These are similar to the differentials seen in 2019, with the exception of the tension caused by the COVID-19 pandemic in the first half of 2020.

Under the circumstances, AFT continued to meet investors' demand for longer-dated securities in a low-yield environment, where the average yield at issue on 10-year bonds over the year stood at 0%, and continued 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 consulted systematically with primary dealers before holding auctions so 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 2021, in addition to tapping benchmark bonds. The aggregate amount of such issuance was €82.2bn, or 31.4% of gross issuance, excluding index-linked bonds.
- The two optional August auctions and optional December auction were all 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 2021.
- Lastly, AFT bought back €25.1bn in short-term securities to smooth out debt redemption over several years. This enabled AFT to provide a liquid market for securities maturing in 2022 and 2023.

SIX NEW FIXED-RATE BENCHMARK OATs WERE CREATED IN ACCORDANCE WITH THE INDICATIVE STATE FINANCING PROGRAMME

With negative yields persisting, AFT decided to extend the maturity of its two-year benchmark bond, as it has done since 2015. The new maturity is set at 25 February 2024. AFT also issued a new five-year OAT, maturing on 25 February 2027.

These two new OATs carried negative yields when they were first issued and have zero coupons.

AFT created a new 10-year benchmark bond maturing on 25 November 2031 with a zero coupon and a yield at issue that was only slightly positive at 0.003%. In keeping with the indicative financing programme, AFT issued a new 50-year benchmark bond with a syndicated launch in January. This bond was the OAT 0.50% 25 May 2072 (see page 56).

The State then added a second green maturity on the fixed-rate OAT yield curve in March with the syndicated launch of the Green OAT 0.50% 25 June 2044 (see page 57).

AFT also issued a new 30-year bond with a syndicated launch in early July, the OAT 25 May 2053, which has a 0.75% coupon rate (see page 58).

DEMAND FOR LONG-TERM BONDS REMAINED STRONG IN 2021, CONTINUING THE TREND FOR LONGER AVERAGE MATURITY

In 2021, yields were at historic lows, and even negative for residual maturities up to 10 years in December, after starting the year with yields under 0% on maturities up to 15 years. Investors continued to invest substantial funds in longer-dated securities offering more attractive returns, as they did in a similar environment in 2020.

This meant that the average maturity at issue of medium- and long-term OATs, which reflects final investor demand on the market for Treasury securities, increased in 2021 to 12.4 years, compared to 11.5 years in 2020. Issues with maturities of more than eight and a half years accounted for nearly 60% of the AFT issuance programme, excluding index-linked securities.

AFT CONFIRMED ITS STATUS AS A LEADING ISSUER OF VERY LONG-DATED BONDS IN THE EURO AREA WITH THE CREATION OF TWO NEW 30-YEAR AND 50-YEAR BENCHMARK BONDS

Issuance at the longest end of the French yield curve (30 years or more) stood at €36bn in 2021, up slightly from €33.4bn in 2020, and confirmed the trend that started in 2019, when issuance of such bonds stood at €30.6bn, compared to €13.4bn in 2018. These maturities accounted for 14% of gross medium- and long-term issuance in 2021.

In addition to tapping existing issues, on 19 January 2021, AFT created a new 50-year bond, the OAT 0.50% 25 May 2072, a new 23-year bond, and, on 6 July 2021, it launched a new 30-year bond, the OAT 0.75% 25 May 2053. The new bonds fill out the very long end of the yield curve and provide investors with the liquidity they want for these maturities.

GROSS ISSUANCE BY AFT IN 2021

IN €BN

Source: *AFT*

	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL 2021	TOTAL 2020
2 Y	3.7	4.3	6.0	3.0	5.7		5.2				3.6		31.7	16.1
3-4 Y						3.1		2.7	3.1	5.8			14.8	18.1
5 Y	4.0	2.7	3.9	4.3	4.3	3.2	3.3	2.6	5.9		5.8		40.0	48.8
6-8 Y	2.2	3.0	1.8	3.7	3.1	3.9	4.5	2.5		1.7			26.5	33.6
10 Y	5.0	6.2	6.3	8.8	6.8	7.9	8.5	5.3	6.3	7.9	8.0	2.7	79.6	82.3
15 Y	3.9	3.1	9.3		1.8	2.3	5.2	2.2	2.1		2.1	0.9	32.9	37.0
30 Y + 50 Y	10.9	1.8	2.4	2.0	1.7	3.6	5.0		1.9	3.1	2.2	1.4	36.0	33.4
i/€i	2.4	1.7	2.0	2.3	3.7	2.4	2.1	1.2	1.9	2.2	1.8		23.6	20.1
TOTAL GROSS ISSUANCE	32.2	22.7	31.8	24.1	27.2	26.4	34.0	16.5	21.2	20.7	23.3	5.0	285.1	289.5

DEMAND FOR BTFS REMAINED VERY FIRM, EVEN THOUGH THE AMOUNTS OUTSTANDING DECREASED

At the end of 2021, the outstanding amount of short-term securities (BTFs) stood at €155.4bn, compared to €161.6bn at the end of 2020. BTFs accounted for 7.2% of total negotiable debt in 2021, versus 8.1% in 2020. BTFs were used at the beginning of the COVID-19 crisis in 2020 to meet the unprecedented increase in the State borrowing requirement, before financial conditions stabilised and made it possible for the medium- and long-term issuance programme to take over the task.

As a general rule, three benchmark securities (3-month, 6-month and 1-year maturities) were sold at weekly BTF auctions and they encountered strong demand. Minor 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.

Given the ECB's negative interest rate policy, with the deposit facility rate at -0.50%, BTF auctions produced an average yield of -0.67% over the year as a whole. These yields were very similar to those seen since 2018 and even lower than in 2020 (-0.56%). More specifically, very strong demand for high-quality collateral enabled AFT to auction its BTF securities all through 2021 at yields lower than the ECB's deposit facility rate.

AVERAGE RESIDUAL MATURITY OF FRENCH DEBT SETS A NEW RECORD

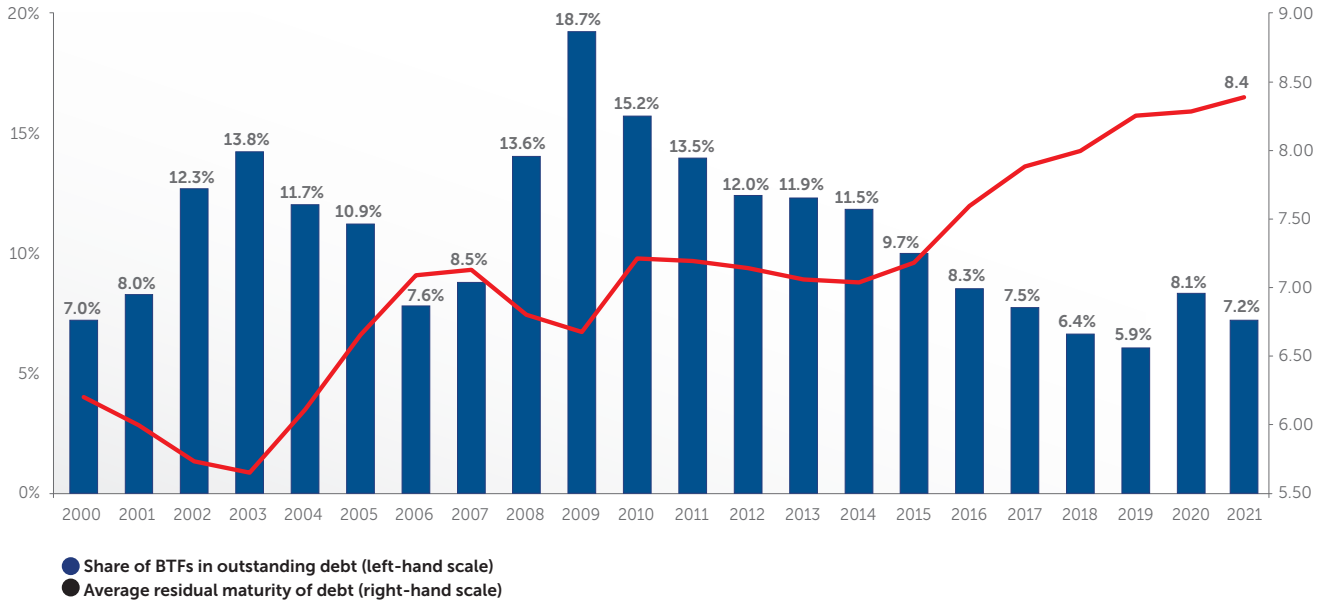
The average residual maturity of French sovereign debt stood at 8.4 years at the end of 2021, as it did at the end of 2020 and 2019. It was the highest figure recorded since the creation of AFT. The average residual maturity was sustained by the large increase in the average maturity of issuance other than BTFs, which rose to 12.4 years in 2021, compared to 11.5 years in 2020. The increase stemmed from investor demand and the smaller share of outstanding BTFs in total negotiable debt outstanding.

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

SHARE OF BTFS IN DEBT OUTSTANDING

AVERAGE RESIDUAL MATURITY OF DEBT

Source: *AFT*



NEW 50-YEAR BENCHMARK OAT

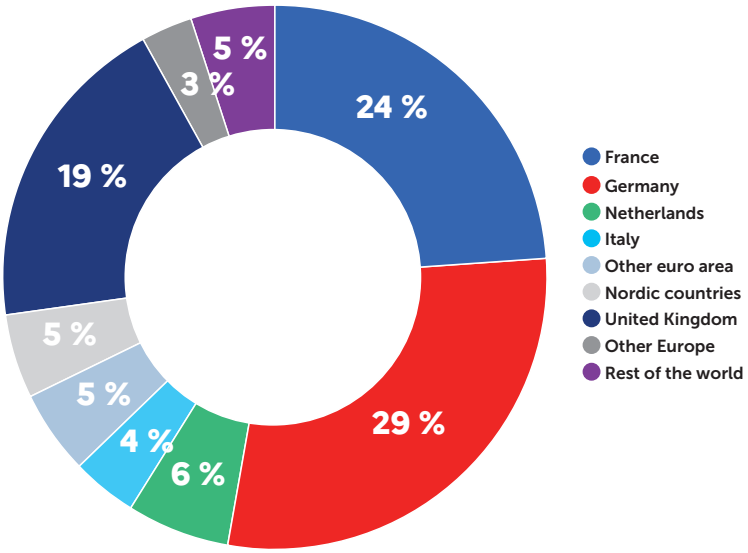
On 19 January 2021, AFT conducted the syndicated launch of the OAT 0.50% 25 May 2072. When the book-building process was completed, total demand stood at €75bn, with €7bn allocated.

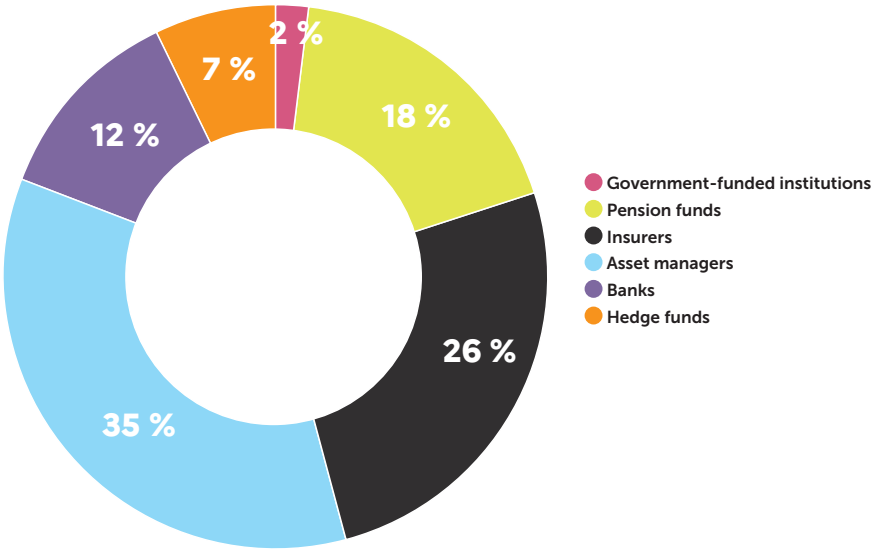
The bond was issued with a real yield of 0.593%, which was the lowest real yield at issue ever recorded by AFT at any syndicated launch of a 50-year bond.

LEAD BOOK RUNNERS

BNP PARIBAS
Deutsche Bank
HSBC
J.P.Morgan
SOCIETE GENERALE
Corporate & Investment Banking

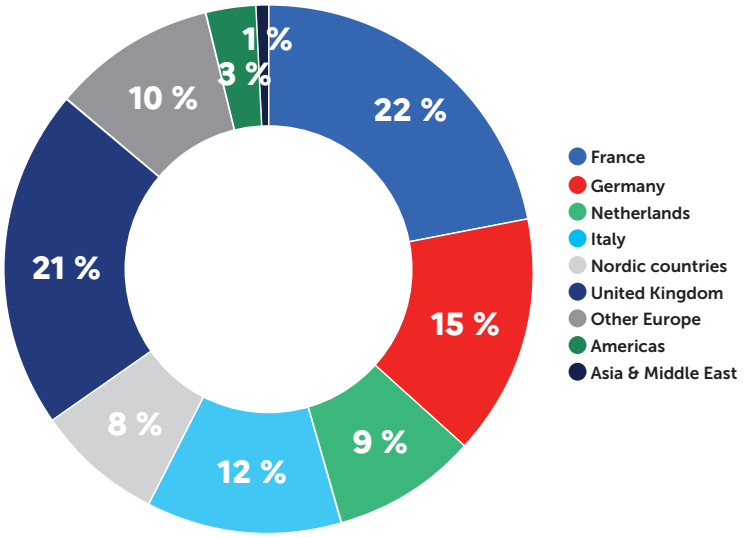
The allocation reflected the attraction of very long-dated bonds for a variety of investors in the environment of very low yields in early 2021. More than 430 end investors subscribed the issue.

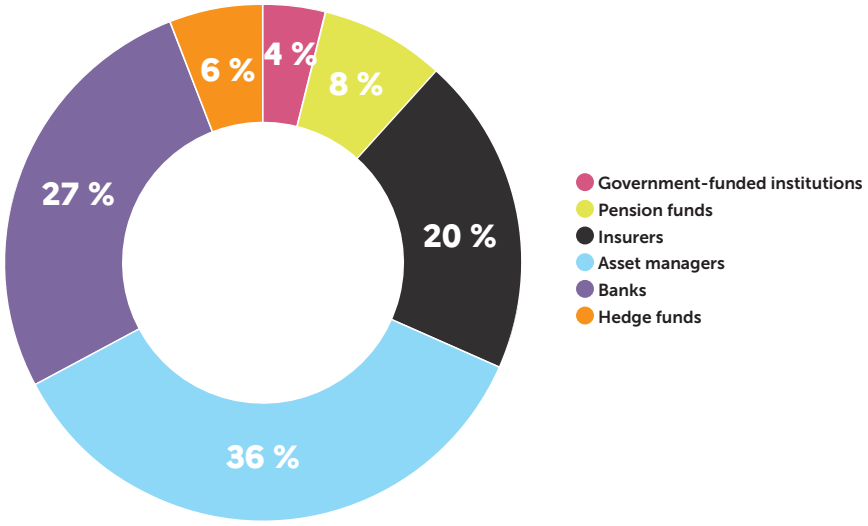




LAUNCH OF A SECOND GREEN OAT

AFT issued its second Green OAT, the Green OAT 0.50% 25 June 2044, with a syndicated launch on 16 March 2021. When the book-building process was completed, total demand stood at €35bn, with €7bn allocated. The real yield at issue was 0.526%, which is much lower than the yield at issue of the first Green OAT (1.741%) and stable compared to the real yield at issue at the previous syndicated launch of 20-year OAT in May 2020 (0.525%).





LEAD BOOK RUNNERS

BNP PARIBAS

citi

CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK

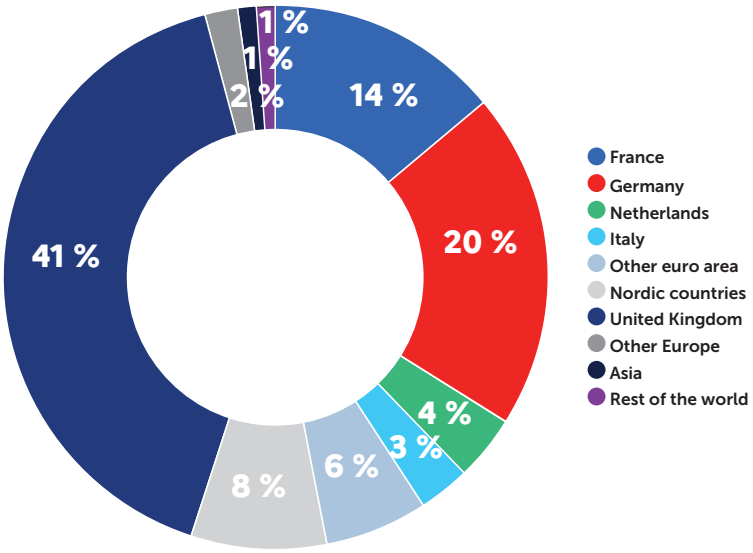
HSBC

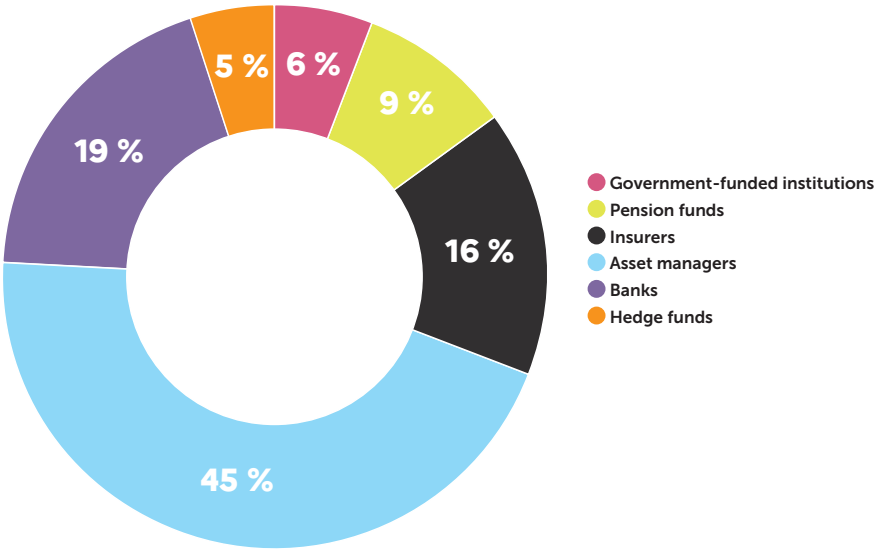
J.P.Morgan

The allocation reflects the diversity of investors seeking green bonds and their growing interest in these issues. More than 300 end investors subscribed the issue.

NEW 30-YEAR BENCHMARK OAT

On 6 July 2021, AFT conducted the syndicated launch of the OAT 0.75% 25 May 2053. When the book-building process was completed, total demand stood at €30bn, with €5bn allocated. The bond was issued with a real yield of 0.918%.





LEAD BOOK RUNNERS

BARCLAYS
BNP PARIBAS
BofA SECURITIES
CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK
NOMURA

The allocation illustrated the diversity and quality of the investor base for this bond. Some 200 end investors subscribed this issue.

GREEN OATs

CREATION OF A NEW GREEN MATURITY ON THE YIELD CURVE

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 March 2021, the OAT 0.5% 25 June 2044. The initial issuance of €7bn (see page 57), was followed up by a tap issue auction in June and another in September, bringing the outstanding amount up to €11.4bn at the end of 2021. The Green OAT 2039 was also tapped in February and November 2021. Its outstanding amount stood at €30.9bn at the end of 2021, an increase of €3.5bn in one year. These transactions met the very high and persistent demand for France's Green OATs, despite the arrival of new sovereign and supranational issuers on the green bond market. With a total of €42.3bn in green bonds outstanding at the end of 2021, France has confirmed its position as a world leader for green bond issuance.

Both Green OATs are matched to the same set of eligible green expenditures, the issuance of the new bond was made possible by the substantial increase in such expenditures, rising from €8bn in previous years to €15bn in 2021. Part of this increase came from the incorporation of government expenditure to promote renewables into the general budget. Such expenditure had previously been funded by earmarked taxes and thus was not eligible green expenditures that can be funded by Green OAT borrowing. The systematic identification of all environmentally-friendly government expenditure as part of the first green budgeting exercise also revealed some eligible green expenditures that had been omitted from those matched to Green OATs.

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 contribute to these objectives. These expenditures are submitted to the Green OAT Evaluation Council (see page 61) 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 the Ecological Transition to attest to the green credentials of investment funds is used as a benchmark in this selection process.

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, the amount issued cannot exceed the amount of eligible green expenditures. Therefore, the amounts appropriated under the State budget constitute a cap on Green OAT issuance in any given year. The allocation reports are used to verify the nominal equivalence between this source of funds and the uses matched to it during the budget year.

The expenditure financed by the Green OAT is tracked to ensure it is green, in keeping with the commitments France made when the bond was first issued. The fourth Allocation and Performance Report was published in July 2021. This report presents the expenditure financed by issuance in 2020. According to the same timetable, the report on the funds raised in 2021 will be published in the third quarter of 2022 (see below). In November 2021, the fourth environmental evaluation report on eligible expenditures for Green OATs was published (see page 62). This report dealt with some of the innovations included in the Invest for the Future Programme (PIA). These evaluations contribute to effective steering of public policy and constitute one of the contributions that the Green OAT makes to France's climate action.

RELEASE OF THE GREEN OAT ALLOCATION AND PERFORMANCE REPORT FOR 2021

An annual report details the allocation of the funds raised by the Green OAT and the performance of the programmes funded. A fifth report will be published in the third quarter of 2022 and can be consulted on the AFT website. The report details all the expenditure funded by issuance in 2021, which totalled €15bn. This issuance covered the €15bn in eligible green expenditures identified beforehand and announced at the beginning of the year.

As is the case each year, the 2021 Allocation and Performance Report included independent third-party audits that verified the expenditures and their green credentials. Based on the procedures performed, KPMG was able to provide limited assurance about the allocation of funds and specifically the proper implementation of the Green OAT framework document. In addition, Moody's ESG renewed its highest rating, "reasonable" assurance, about the green credentials of the expenditures matched to issuance in 2021.

Some of the eligible green expenditures from 2020, amounting to €3 billion, had not been funded by issuance in that year. In accordance with generally applicable best practices and the provisions of the Green OAT framework document, these expenditures were carried forward and included in the 2021 eligible green expenditures. However, the bulk of the €12bn issued in 2021 was used to finance eligible green expenditures incurred in the same year.

The €15bn allocated in 2021 were divided between the different 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 77%, followed by expenditure on climate change adaptation at 12%. Biodiversity expenditure accounted for approximately 7% of the total and the fight against pollution accounted for 4%. The allocation by economic sector shows that energy accounted for 37% of the expenditures, whereas it represented a much smaller share in previous years, standing at 4% in 2020. This change stems from the inclusion of renewable energy subsidies in the eligible green expenditures.

The presentation of the allocation of funds comes with a performance evaluation of the programmes concerned in very general terms. The evaluation is primarily based on data from budget documents, with supplementary environmental data, when they are available.

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 document[1], which are in turn aligned with several of the UN's Sustainable Development Goals.

THE GREEN OAT EVALUATION COUNCIL EXAMINED THE INVEST FOR THE FUTURE PROGRAMME (PIA)

In addition to the Allocation and Performance Report, expenditure funded by the 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 2039 maturity of the OAT. 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 and the WWF Global Climate and Energy Practice Leader. The other members are: Mats Andersson, Vice Chair of the Global Challenges Foundation and former CEO of AP4, Sweden's

1 https://www.aft.gouv.fr/files/medias aft/3_Dette/2_Framework_FR_cadre%20OAT%20Verte%20130117.p1

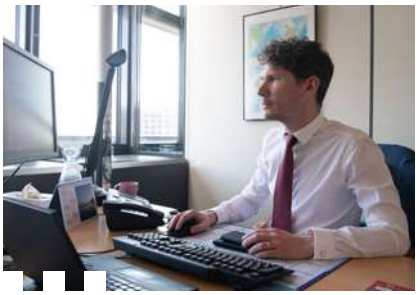
fourth national pension fund; Nathalie Girouard, Head of the Environmental Performance and Information Division of the Environment Directorate at the OECD; Karin Kemper, Senior Director for the Environment and Natural Resources Global Practice at the World Bank; Mike Holland, independent consultant, 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, Market Practice and Regulatory Policy at the International Capital Markets Association.

The Council met four times using video conferencing in March, June, September and November 2021. Following its 2018 report on the energy transition tax credit (CITE), its 2019 report on the French Waterways Office (VNF) and its 2020 report on the National Forestry Commission (ONF), the Council focused on two sets of innovative projects financed under the Invest for the Future Programme (PIA) and run by the Environment and Energy Management Agency (ADEME): energy transition demonstrators and projects for the development of the vehicles of the future. This work resulted in the publication of the fourth Green OAT Environmental Evaluation Report at the end of November 2021, with contributions from the Sustainable Development Agency (CGDD). The council solicited the expertise of two independent reviewers, Virginie Boutueil (Ecole des Ponts ParisTech) and Patrick Criqui (CNRS) to ensure that the report complied with academic best practices.

The report is based on a survey that ADEME conducted with project leaders, along with four case studies. It highlights the diversity of the projects financed and concludes that these programmes have a favourable impact on the environment and climate. ADEME's objectives are in line with those of the major national strategies regarding greenhouse gas emissions, pollution and biodiversity, and with the objectives of the European frameworks, in that 79% of the projects examined involve activities covered by the European Taxonomy for climate objectives. As regards other environmental objectives, it seems that 50% of the projects improve air quality and 25% improve water quality. The energy transition demonstrators include 26% who report having a favourable impact for biodiversity. The four case studies show the decisive impact of the Invest for the Future Programme on effective project implementation and the genuinely innovative character of each project. The report makes actionable recommendations for future impact studies, which are a prime illustration of one of the key contributions made by Green OATs – the promotion of good practices for steering environmental policies.

1 https://www.aft.gouv.fr/files/medias-aft/3_Dette/3.2_OATMLT/3.2.2_OATVerte/Invest%20for%20the%20Future%20-%20FULL_Impact%20evaluation%20report.pdf

INTERNAL CONTROL AND RISK MANAGEMENT



A BROAD CONTROL FRAMEWORK

AFT must comply with 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 annual internal audits.

AFT has elected to comply with the obligations stipulated in the Order of 3 November 2014 on the internal control of businesses in the banking sector that can be applied 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 for the approval of AFT General Management and that of 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 and which is approved by the Director General of the Treasury. The unit is also responsible for maintaining AFT's business continuity plan.

In addition, 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. The committee 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

The legislation governing AFT requires it to submit an annual audit report to Parliament on financial risk management and the prudential procedures implemented.

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

- Transaction and internal procedures supervision system
- Accounting organisation and information processing
- Risk and result measurement systems
- Risk supervision and management systems
- Documentation and reporting system

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 97).

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:

- Violations of powers of signature
- Violations of risk limits
- Violations of transaction procedures

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

	UNIT	2019 ACTUAL	2020 ACTUAL	2021 ACTUAL	2022 APP TARGET 2022
Incidents or 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 (see page 97) that measures the number of execution incidents occurring in AFT's transactions to ensure rapid detection of problems or incidents that could disrupt the proper execution of debt and cash management transactions.

This indicator relies on the day-to-day record of execution incidents.

	UNIT	2019 ACTUAL	2020 ACTUAL	2021 ACTUAL	2022 APP TARGET 2022
Incidents that decreased the balance at the *Banque de France*	Number	2	2	1	0
Incidents that increased the balance at the *Banque de France*	Number	12	5	6	0
Other incidents with no impact on the balance at the *Banque de France*	Number	63	76	64	0

These operating incidents may have affected the smooth execution of transactions, but none of the incidents recorded led to any threat to the State's financial continuity. The number of incidents was lower in 2021.

"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 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 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 and takes part in European projects and initiatives relating to market infrastructure in close cooperation with the Banque de France and the ECB.

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 2021, the Post-Trade Operations Unit processed and executed more than 1,300 market transactions, including nearly 600 cash management transactions, 250 short-term borrowing transactions, more than 400 medium- and long-term borrowing transactions, and approximately 10 hedging transactions with forward financial instruments on behalf of other State bodies. It also made preparations for the second phase of the assumption of the SNCF debt on 1 January 2022.*

POST-TRADE ACTIVITIES ARE ORGANISED AROUND FOUR MAIN TASKS:

- **1 - State debt redemption and interest payments,** as well as processing all AFT transactions initiated by the Cash Unit and the Debt Unit (back-office).
- **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 on a daily basis. 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 of these transactions to reduce AFT's residual counterparty risk exposure.
- **4 - Administrative management of the Public Debt Fund** (CDP).

**On 1 January 2022, AFT assumed €10bn of SNCF debt, which corresponds to the second phase of assuming the debt under the commitments that the Prime Minister undertook in March 2019, which were then transposed into the 2022 Budget Act. The arrangement relies on matching loans made through the Public Debt Fund (CDP), as was the case for the first phase when €25bn was assumed in 2020. Two matching loan contracts were signed between SNCF Réseau and the CDP, with financial terms (maturities, interest rates, calculation bases, etc.) that mirror each other exactly. Then, in the second phase, the State took SNCF Réseau's place as the CDP's debtor under the terms of a novation arrangement, thereby relieving SNCF Réseau of the corresponding debt. The relations between the SNCF and its debtors have not changed. Each repayment made by the SNCF will give rise to a payment from the State to the CDP and then a payment from the CDP to the SNCF until the debt is fully repaid in August 2119. The SNCF had 400 loan contracts with its creditors, including loans in ten different currencies, hedged by financial derivatives. These were aggregated into 112 synthetic loans assumed by AFT.*

2021 KEY FIGURES

FINANCIAL REVIEW
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

> FOR THE PERIOD ENDING 31 DECEMBER 2021

I - FINANCIAL STATEMENTS

BALANCE SHEET ITEMS

ASSETS	NOTES	AMOUNTS (IN €M)		
		31 DECEMBER 2021	31 DECEMBER 2020	*CHANGE*
CURRENT ASSETS (EXCLUDING CASH)	1			
Prepaid expenses on financial debts	**1.2**	**8,011.14**	**7,044.32**	***966.82***
Discounts on OATs		8,011.14	7,044.32	***966.82***
Expenses on financial debt		**187.29**	**159.42**	***27.87***
OAT issuance expense		187.29	159.42	***27.87***
Other claims	**1.7**	**0.03**	**0.94**	***-0.91***
Margin calls provided for repurchase agreements		-	-	-
Accrued interest		-	-	-
Margin calls provided for forward financial instruments		-	-	-
Accrued interest		0.03	0.94	***-0.91***
CASH MANAGEMENT	2			
Bank funds		**-48.33**	**-49.89**	***1.56***
Accrued interest on the State's account with the Banque de France		-48.33	-49.89	***1.56***
Other cash items	**2.2**	**1,100.00**	**-**	***1,100.00***
Unsecured loans on the interbank market		1,100.00	-	***1,100.00***
Accrued interest		-	-	-
Repurchase agreements		-	-	-
Accrued interest		-	-	-
Investment securities	**2.1**	**-**	**-**	**-**
Securities purchases		-	-	-
Prepaid interest		-	-	-
ACCRUALS AND DEFERRED EXPENSES	3			
Deferred income – off-balance sheet commitments		**-**	**5.37**	***-5.37***
Interest payable on interest rate swaps for macro-hedging	3.2	-	5.37	***-5.37***
Interest payable on interest rate swaps for micro-hedging	3.3	-	-	-

LIABILITIES	NOTES	AMOUNTS (IN €M)		
		31 DECEMBER 2021	31 DECEMBER 2020	*CHANGE*
FINANCIAL DEBT	1			
Treasury Bonds (OATs)		**2,161,397.99**	**2,017,579.24**	**143,818.75**
Par values	**1.1**	**2,005,695.55**	**1,855,648.57**	**150,046.98**
Capitalised interest		1,961,825.64	1,819,300.64	**142,525.00**
Index-linking supplements		-	-	**-**
Accrued coupons at issue		27,931.45	20,077.39	**7,854.06**
Accrued interest		247.41	374.13	**-126.72**
Discount Treasury bills (BTFs)		15,691.06	15,896.41	**-205.35**
Par values	**1.3**	**155,702.44**	**161,930.66**	**-6,228.22**
Prepaid interest		155,379.00	161,608.00	**-6,229.00**
Other loans		323.44	322.66	**0.78**
SNCF loans assumed via the CDP	**1.6**	**23,275.28**	**24,549.07**	**-1,273.79**
Accrued interest		22,908.70	24,179.96	**-1,271.26**
Intérêts courus		366.58	369.11	**-2.53**
NON-FINANCIAL DEBTS	1			**-**
Prepaid income on financial debts	**1.2**	**111,280.80**	**105,218.55**	**6,062.25**
Issue premiums on OATs		111,280.80	105,218.55	**6,062.25**
Other debts	**1.7**	**85.53**	**30.08**	**55.45**
Margin calls received on repurchase agreements		-	-	**-**
Accrued interest		-	-	**-**
Margin calls received on forward financial instruments		85.23	29.76	**55.47**
Accrued interest		-	-	**-**
Accounts payable		0.30	0.32	**-0.02**
CASH MANAGEMENT	2			
Other cash items	**2.2**	**-**	**0.39**	**-0.39**
Unsecured loans		-	-	**-**
Accrued interest		-	0.39	**-0.39**
Repurchase agreements		-	-	**-**
Accrued interest		-	-	**-**
ACCRUALS AND DEFERRED EXPENSES	3			
Payables – off-balance sheet liabilities			**0.94**	**-0.94**
Interest payable on interest rate swaps for macro-hedging	3.2	-	0.94	**-0.94**
Interest payable on interest rate swaps for micro-hedging	3.3	-	-	**-**

INCOME STATEMENT

TABLE OF NET EXPENSES	NOTES	AMOUNTS (IN €M) 31 DECEMBER 2021	31 DECEMBER 2020	CHANGE
FINANCIAL DEBT				
Negotiable debt securities				
Interest	**4.1**	**-32,850.81**	**-33,822.34**	**971.53**
Interest expense on OATs		-33,884.25	-34,653.94	769.69
Net interest income on BTFs		1,033.45	831.60	201.85
Amortisation of premiums and discounts	**4.1**	**11,753.64**	**9,757.34**	**1,996.30**
Amortisation expense for discounts on securities issued		-961.67	-1,140.68	179.01
Amortisation income from premiums on securities issued		12,715.31	10,898.01	1,817.30
Index-linking of OATs	**4.1**	**-8,044.93**	**781.64**	**-8,826.57**
Net index-linking expense		-8,044.93	781.64	-8,826.57
Buybacks or swaps		-322.10	-549.57	227.47
Net expense		-322.10	-549.57	227.47
Commissions and fees related to debt management	**4.2**	**-14.20**	**-12.78**	**-1.42**
Net expense		-14.20	-12.78	-1.42
Net financial expense on financial debts		**-29,478.39**	**-23,845.71**	**-5,632.68**
OTHER FINANCIAL DEBTS				
Loans and forward financial instruments assumed for third parties				
SNCF loans assumed via the CDP		**-766.76**	**-807.03**	**40.27**
Interest expense on borrowing		-770.58	-829.08	58.50
Interest expense on forward financial instruments		-	-	-
Interest income on forward financial instruments		3.83	22.05	-18.22
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		**-766.76**	**-807.03**	**40.27**
FORWARD FINANCIAL INSTRUMENTS				
Interest expense on forward financial instruments		-4.05	-3.88	-0.17
Other net expense or net income on forward financial instruments		0.19	1.14	-0.95
Interest income on forward financial instruments		24.27	28.50	-4.23
Net financial income on forward financial instruments		**20.41**	**25.76**	**-5.35**
CASH MANAGEMENT				
Interest expense		**-566.01**	**-558.31**	**-7.70**
Net interest expense on bank liquidity	4.3	-534.66	-520.30	-14.36
Interest expense on unsecured lending and borrowing on the interbank market		-31.16	-31.93	0.77
Interest expense on unsecured lending and borrowing – other euro area States		-	-0.05	0.05
Interest expense on unsecured lending and borrowing – supranational agencies		-0.19	-3.56	3.37
Interest expense on margin calls for repurchase agreements		-	-	-
Net interest expense on repurchase agreements		-	-	-
Interest expense on securities purchases		-	-2.46	2.46
Interest income		**-0.02**	**-**	**-0.02**
Net interest income on bank liquidity	4.3	-	-	-
Interest income on unsecured lending and borrowing on the interbank market		-0.02	-	-0.02
Interest income on unsecured lending and borrowing – other euro area States		-	-	-
Interest income on margin calls for repurchase agreements		-	-	-
Net interest on repurchase agreements		-	-	-
Interest income on securities purchases		-	-	-
Net financial expense on cash management transactions		**-566.03**	**-558.31**	**-7.72**
NET EXPENSE		-30,790.78	-25,185.30	-5,605.49

OFF-BALANCE SHEET ITEMS

COMMITMENTS UNDER THE TERMS OF CLEARLY SPECIFIED AGREEMENTS	NOTES	AMOUNTS (IN €M)	
		31 DECEMBER 2021	31 DECEMBER 2020
FORWARD FINANCIAL INSTRUMENTS	3		
Interest-rate swaps			
Macro-hedging	3.2	-	1,000.00
Micro-hedging	3.3	-	-
Forward currency contracts	3.4	1,201.01	2,209.45
Oil swaps*	3.5	*51.60*	*121.53*
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 the Recovery.

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 cash holdings
- The income statement items that show the impact of AFT's transactions on debt service
- 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 relating to non-negotiable debt, even though these transactions are part of Trading Account 903 in budgetary terms.

II.2 - HIGHLIGHTS OF 2021

In addition to the extraordinary borrowing measures relating to the COVID-19 pandemic, 2021 witnessed an increase in consumer price indexes in France and worldwide. Against this backdrop and in spite of uncertainty due to rising inflation, AFT was able to rely on borrowing terms which remained very favourable all year long. With a total financing programme of €260bn, in line with the Initial Budget Act, the weighted average yield of all issues with maturities of more than one year (excluding index-linked securities) remained negative in 2021, standing at –0.05%. For the year as a whole, the yield on BTF issuance was –0.67%.

For this outturn, AFT created five new fixed-rate benchmark securities with three-year, five-year, 10-year, 30-year and 50-year maturities. It also created a second 23-year green bond and issued almost €15bn on all green OATs, which represented the cap for eligible green expenditures for 2021. The 50-year and 30-year bonds, and the green OAT were launched by syndication. Lastly, AFT created two new 10-year indexed-linked bonds (one indexed on European inflation and the other on French inflation). Index-linked issues accounted for 9.1% of its net programme, up on 2020 and aligned with a target of around 10% driven by increased demand due to growing inflation expectations.

As part of the regulatory reform of benchmark indexes and, in particular, the planned discontinuation of EONIA on 3 January 2022, AFT executed riders to the agreements on transactions carried out on forward markets and to their Credit Support Annexes with its relevant banking counterparties. These riders took effect on 1 December 2021.

Execution of these riders, which ratified the transition from EONIA flat (without an additional margin) to €STR flat (without a margin) to calculate the monthly collateral remuneration, led to AFT paying a total of €65,233 in cash settlements.

II.3 - ACCOUNTING PRINCIPLES AND METHODS

1 - ACCOUNTING PRINCIPLES

The key accounting principles underpinning the State accounting standards and 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 events recorded.

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 continuity of accounting methods and 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 last amended by the Order of 24 July 2018, as amended.

Standard 10 – "Cash items" and Standard 11 – "Financial debts and forward financial instruments" are of particular relevance for 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 last spot exchange rates of the period. 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 and for the amount transferred. 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 impact on the financial commitment received in the off-balance sheet.

3.1.2 - Financial and non-financial debts

3.1.2.1 - Negotiable debt securities

The government's financial debts are recognised in the accounts:

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

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) 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 the 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.

Since the last BTAN was redeemed in July 2017, AFT has issued 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: New issues of fungible securities are attached to the existing securities and the price of the new tranches is adjusted to suit market conditions. The difference between the issue price and the par value is a premium or a discount that reduces or increases the State's financial expense.

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 (underwriting commissions on OAT auctions for retail investors, 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 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 as of the buyback date, is recognised as financial expense or 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, as appropriate, ancillary items, 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.

3.1.2.6 – Adjustments in 2021

An adjustment was recognised during 2021 as a correction for a previous accounting period. This had no effect on the State's net position in 2021.

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 are not recognised on the balance sheet, regardless of whether they are to be paid at maturity. However, they are 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 of 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 variability of this expense in the short term.

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 the Recovery 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.

Since AFT does not manage the hedged assets and liabilities, the impact of the forward financial instruments is not recorded in its own financial statements. The notes to the financial statements report only contracts with external counterparties and their market value, along with the transactions conducted during the accounting period and their result.

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 on 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 - Recognition criterion

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.

Loses 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.

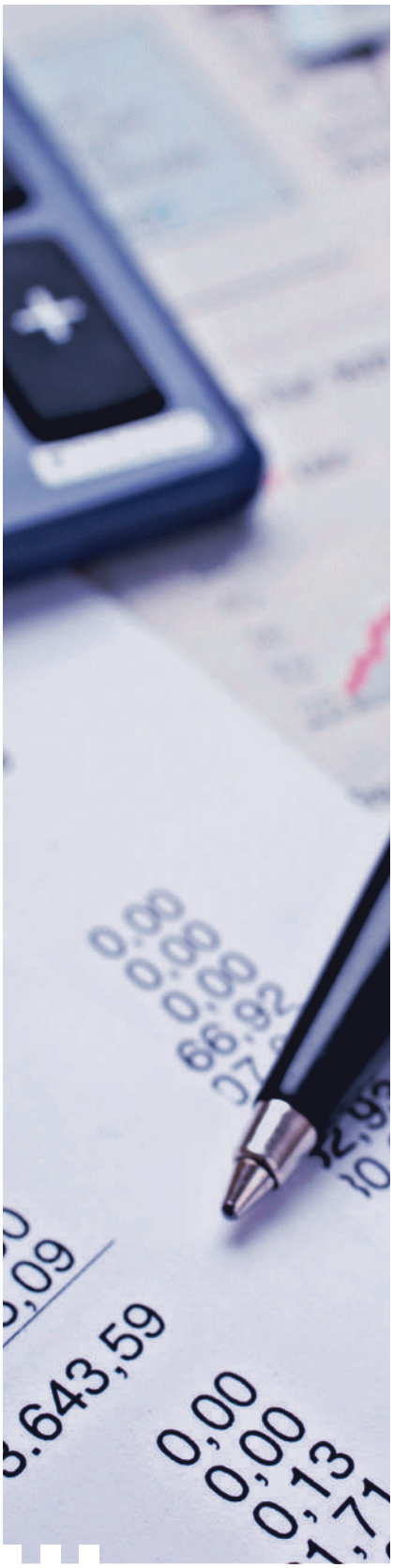
The income from such gains is recognised in the period when it accrues to the State, provided that the income for the period or the income from the transaction can be measured accurately.

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 2021, financial debt stood at €2,005,695.55m, compared to €1,855,648.57m in 2020, marking an increase of €150,046.98m.

CHANGES IN MEDIUM- AND LONG-TERM NEGOTIABLE DEBT SECURITIES IN 2021 (in €m)	OAT		TOTAL LONG-TERM SECURITIES
	FIXED-RATE OATs	VARIABLE-RATE OATs	
Long- and medium-term negotiable debt securities at 31 December 2020	**1,634,539.11**	***221,109.46***	***1,855,648.57***
- of which par value	1,619,368.50	199,932.14	*1,819,300.64*
- of which index-linking supplements, interest, accrued coupons and similar debt	15,170.61	21,177.32	*36,347.93*
Change in par value[1]	**134,027.00**	***8,498.00***	***142,525.00***
Increases	**261,444.00**	**23,619.00**	**285,063.00**
- of which auctions	242,444.00	23,619.00	*266,063.00*
- of which syndicated	19,000.00	-	*19,000.00*
Reductions	**127,417.00**	**15,121.00**	**142,538.00**
- of which redemptions	102,354.00	15,121.00	*117,475.00*
- of which buybacks	25,063.00	-	*25,063.00*
Change in accrued interest and similar debt[2]	**-382.88**	***7,904.86***	***7,521.98***
Increases	**14,787.73**	**9,847.62**	**24,635.35**
- of which index-linking supplements	-	8,696.89	*8,696.89*
- of which accrued and capitalised interest	14,547.45	1,143.61	*15,691.06*
- of which accrued coupons	240.28	7.13	*247.41*
Reductions	**15,170.61**	**1,942.77**	**17,113.37**
- of which index-linking supplements	-	842.84	*842.84*
- of which accrued and capitalised interest	14,803.79	1,092.61	*15,896.41*
- of which accrued coupons	366.81	7.31	*374.13*
Change in long- and medium-term negotiable debt securities (1)+(2)	**133,644.12**	***16,402.86***	***150,046.98***
Long- and medium-term negotiable debt securities at 31 December 2021	**1,768,183.23**	**237,512.32**	***2,005,695.55***
- of which par value	1,753,395.50	208,430.14	*1,961,825.64*
- of which index-linking supplements, interest, accrued coupons and similar debt	14,787.73	29,082.18	*43,869.91*

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)					
PREMIUMS	Items from "prepaid income"	At 31 December 2020 (1)+(2)-(3)	Issue premiums[2]	Amortisation of issue premiums[3]	At 31 December 2021 (1)+(2)-(3)
	- fixed-rate OATs	92,113	14,619	10,673	96,059
	- variable-rate OATs	13,105	4,158	2,042	15,222
	Total premiums	**105,218**	**18,778**	**12,715**	**111,281**
DISCOUNTS	Items from "prepaid expenses"	At 31 December 2020 (1)+(2)-(3)	Issue discounts[2]	Amortisation expense for discounts[3]	At 31 December 2021 (1)+(2)-(3)
	- fixed-rate OATs	6,659	1,928	882	7,706
	- variable-rate OATs	385	-	80	305
	Total discounts	**7,044**	**1,928**	**962**	**8,011**

1.3 - Short-term negotiable debt securities

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

At 31 December 2021, BTFs represented debt of €155,379m, down by almost 4% or €6,229m compared to 2020.

CHANGE IN THE PAR VALUE OF SHORT-TERM NEGOTIABLE DEBT SECURITIES IN 2020 (in €m)	
Short-term negotiable debt securities at 31 December 2020	**161,608**
Increases	**319,602**
- of which auctions	319,602
Reductions	**325,831**
- of which buybacks	-
- of which redemptions	325,831
Change in par value	**-6,229**
Short-term negotiable debt securities at 31 December 2021	**155,379**

1.4 - Maturity structure of negotiable debt securities

MARKET VALUE OF NEGOTIABLE DEBT SECURITIES AT 31 DECEMBER 2021 (in €m)		BREAKDOWN BY MATURITY			
		LESS THAN 1 YEAR IN €M	1 TO 2 YEARS IN €M	2 TO 5 YEARS IN €M	MORE THAN 5 YEARS IN €M
Long- and medium-term negotiable debt securities	**1,961,825.64**	**140,754.94**	**170,741.20**	**521,423.93**	**1,128,905.58**
- fixed-rate OATs	1,753,395.50	120,901.94	152,693.20	480,281.93	999,518.44
- variable-rate OATs	208,430.14	19,853.00	18,048.00	41,142.00	129,387.14
Short-term negotiable debt securities	**155,379.00**	**155,379.00**	**-**	**-**	**-**
BTFs	155,379.00	155,379.00	-	-	-
Total negotiable debt securities	**2,117,204.64**	**296,133.94**	**170,741.20**	**521,423.93**	**1,128,905.58**

1.5 - Market value of negotiable debt securities

MARKET VALUE OF NEGOTIABLE DEBT SECURITIES AT 31 DECEMBER 2021 (in €m)			
SECURITIES	VALUE EXCLUDING ACCRUED INTEREST	ACCRUED INTEREST	TOTAL VALUE
OATs	2,290,713,303,813	15,938,720,543	**2,306,652,024,356**
BTFs	155,681,020,305	0	**155,681,020,305**
Total	**2,446,394,324,118**	**15,938,720,543**	**2,462,333,044,661**

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 the valuation are the end-of-day prices as published by financial information sources (source: Reuters).

At 31 December 2021, the market value of the negotiable debt, including accrued interest, stood at €2,462,333m, up €51,012m compared to the end of 2020. This increase is lower than that of the outstanding debt at par value during 2021 (+€144.1bn). This was due to a fall in the value of outstanding securities following the rise in yields. For example, the 10-year yield increased from -0.338% on 31 December 2020 to +0.198% on 31 December 2021.

1.6 - Debts 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 2021 for the amount of €907.07m.

The balance of the outstanding positions at 31 December 2021 corresponds to the debts presented below:

SNCF BORROWINGS AND FORWARD FINANCIAL INSTRUMENTS ASSUMED THROUGH THE CDP AT 31 DECEMBER 2021 (in €m)					
BONDS OR FORWARD FINANCIAL INSTRUMENTS	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 technical procedures that are analogous 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 it and the CDP, and the latter does the same with regard to *SNCF Réseau*.

The statement of debt at 31 December 2021 can be found below:

SNCF BORROWINGS AND FORWARD FINANCIAL INSTRUMENTS ASSUMED THROUGH THE CDP AT 31 DECEMBER 2021 (in €m)

INDEX-LINKED AMOUNTS	AMOUNTS BY MATURITY			ACCRUED INTEREST
	LESS THAN 1 YEAR	1 TO 5 YEARS	MORE THAN 5 YEARS	
22 001,63	2,089.79	5,983.10	13,928.74	335.27
Total financial debt				**22,336.90**

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 it and the CDP, and the latter does the same with regard to *SNCF Réseau*.

Off-balance sheet commitments made at 31 December 2021 include €10bn for this debt assumption.

1.7 – Margin calls

The net amount of deposits received as a result of margin calls stood at €85.23m at 31 December 2021.

2 - CASH MANAGEMENT

2.1 - Investment securities

This item stood at zero on 31 December 2021. In the course of the year, this item corresponded primarily to commercial paper that the State bought from ACOSS.

In 2021, the State did not purchase any interest-bearing commercial paper.

2.2 - Other cash items

The bulk of these items are short-term investments made to optimise cash management, including deposits on the interbank market. These investments consist of very-short-term lending. On 31 December 2021, €1.1bn 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*.

3 - FORWARD FINANCIAL INSTRUMENTS

3.1 - Breakdown of off-balance sheet outstanding amounts on forward financial instruments and information on market value at 31 December 2021

MARKET VALUE OF FORWARD FINANCIAL INSTRUMENTS (in €m)				
FORWARD FINANCIAL INSTRUMENTS	REMAINING TERM		TOTAL	
	-7 YEARS	+7 YEARS	PAR VALUE	MARKET VALUE
Forward currency contracts				
OTC transactions[1]	1,201		1,201	56
Interest-rate swaps				
Specific hedging[2]	0		0	0
Forward commodity contracts				
Oil swaps[3]	122		122	29
Total	**1,323**	**0**	**1,323**	**85**

(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).

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 amount of €1bn, were repaid during 2021. Therefore, this item showed a zero balance on 31 December 2021.

3.3 - Micro-hedging interest rate swaps

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

There were no new transactions in 2021. Therefore, this item showed a zero balance on 31 December 2021.

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 conducts such transactions on behalf of others and they do not have any impact on these financial statements.

In 2021, forward purchases of foreign currencies for euros settled for a total value of €1,184.68m against a total of $1,308.97m and CHF35m.

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 GAIN OR LOSS in €m
31 December 2020	2,209.45	2,578.58	35.00	2,134.02	-75.43
31 December 2021	1,201.01	1,436.23	-	1,268.02	67.01

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 mentioned for informational purposes only.

AFT hedges oil supplies for the Military Fuel Unit (SEA) at the Ministry of Defence.

Since 2012, commodity swaps have been used for hedging, instead of the call options previously used. The swap contracts used as a hedge against oil price fluctuations exchange a fixed price set out in the contract against a variable price corresponding to the average market price over one month.

No swaps were negotiated during 2021.

4 - FINANCIAL EXPENSE AND INCOME

4.1 - Financial expense on negotiable debt securities

Three elements make up the financial 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 total interest expense on negotiable securities stood at €32,850.81m in 2021. It was €971.53m less than in 2020. 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, is the result of the difference in 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 €11,753.64m in 2021. This marks an increase of €1,996.30m on the 2020 figure. The increase results in part 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 euro area consumer price index.

(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 expense came to €8,044.93m in 2021, representing an increase of €8,826.57m as inflation picked up again.

4.2 - Commission 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 interest expense on the current account with the *Banque de France*

The State holds a single account with the *Banque de France*, which is broken down into different operating accounts. The *Banque de France* pays the State interest on the daily balance on the current account.

The European Central Bank's Decision (EU) 2019/670 and Guideline (EU) 2019/671 of 9 April 2019 defined the following procedures for the remuneration of general government entities' deposits with national central banks:

a) Below a jointly defined threshold not exceeding 0.04% of GDP, the rate of remuneration for overnight deposits is the uncollateralised euro overnight index average (EONIA, then €STR as from 3 January 2022)

b) Deposits of more than the above-mentioned 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 €784m for 2021.

The net expense relating to interest on the *Banque de France* account stood at €534.66m in 2021.

II.5 - EVENTS SINCE CLOSING

For 2022, the procedures for the remuneration of the State's single account with the Banque de France were the same as those set out in 4.3 subject to two adjustments:

- As from 3 January 2022, the €STR replaced EONIA as the uncollateralised overnight index average
- As from 1 January 2022, the threshold mentioned in point a) of 4.3 was set at €872.3m for 2022

It was also decided to track repayment of the additional State debt in 2020 and 2021 which was the result of the COVID-19 pandemic. The 2021 Initial Budget Act caters for the dual objective of isolating the debt originating from the COVID-19 crisis in 2020 and 2021 for accounting purposes and posting a trajectory for paying down this debt over twenty years between 2022 and 2042.

Repayment will be funded by the proceeds of growth constituted of a proportion of the increase in tax revenue. This proportion will be allocated to the Public Debt Fund (CDP) and used every year to repay the commensurate amount of government debt up to the amount corresponding to the debt attributable to the COVID-19 pandemic in 2020 and 2021. This amount is estimated at €165bn in capital.

On 3 January 2022, an agreement was executed in this respect between the State and the CDP concerning the conditions for repayment of the State's COVID-19 related debt.

STATISTICAL REPORT

NEGOTIABLE STATE DEBT

NON-RESIDENT HOLDINGS

Source: *Banque de France*

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

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

NEGOTIABLE STATE DEBT

Source: *AFT, Banque de France*

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

NEGOTIABLE STATE DEBT

Source: *AFT, Banque de France*

NEGOTIABLE STATE DEBT						
Outstanding, residual maturity and non-resident holdings						
Amounts at year-end	2016	2017	2018	2019	2020	2021
Outstanding debt (in €m)	**1,620,597**	**1,686,112**	**1,756,400**	**1,822,805**	**2,001,014**	**2,145,121**
Medium-and long-term issuance (BTANs & OATs)	1,486,672	1,559,639	1,643,500	1,715,872	1,839,406	1,989,742
- of which index-linked securities[1]	199,528	201,742	219,584	226,396	220,054	236,362
Short-term issuance (BTFs)	133,925	126,473	112,900	106,933	161,608	155,379
Outstanding interest rate swaps (in €m)	1,000	1,000	1,000	1,000	1,000	0
Residual maturity (before swaps)	7 years	7 years	7 years	8 years	8 years	8 years
	195 days	296 days	336 days	63 days	73 days	153 days
Residual maturity (after swaps)	7 years	7 years	7 years	8 years	8 years	8 years
	195 days	296 days	336 days	63 days	73 days	153 days
Détention par les non-résidents (%)	**58.3%**	**54.6%**	**52.7%**	**53.6%**	**50.1%**	**47.8%**

(1) For these securities, the outstanding debt on a given date is equal to the par value multiplied by the index-linking coefficient for that date; at end-2021, the index-linking commitment stood at €27.9bn.

DEBT SERVICE FIGURES

NEGOTIABLE DEBT OUTSTANDING

Par value: **€2,117.2bn** at end-2021 (up by €136.3bn compared with end-2020):

Par value with index-linking supplement: €2,145.1bn at end-2021 (up by €144.1bn compared with end-2020) including:

- **€1,989.7bn** in medium- and long-term debt (OATs)
- **€155.4bn** in short-term debt (BTFs)

RENEWAL OF MEDIUM- AND LONG-TERM DEBT

Renewal in 2021 of **7.8%** of the debt outstanding at end-2020

(**€143bn** redeemed or bought back out of the €1,819bn outstanding at end-2020)

AVERAGE RESIDUAL MATURITY

8 years and 153 days at end-2021

SWAPS

€0bn outstanding at end-2021;

the swaps programme was still suspended.

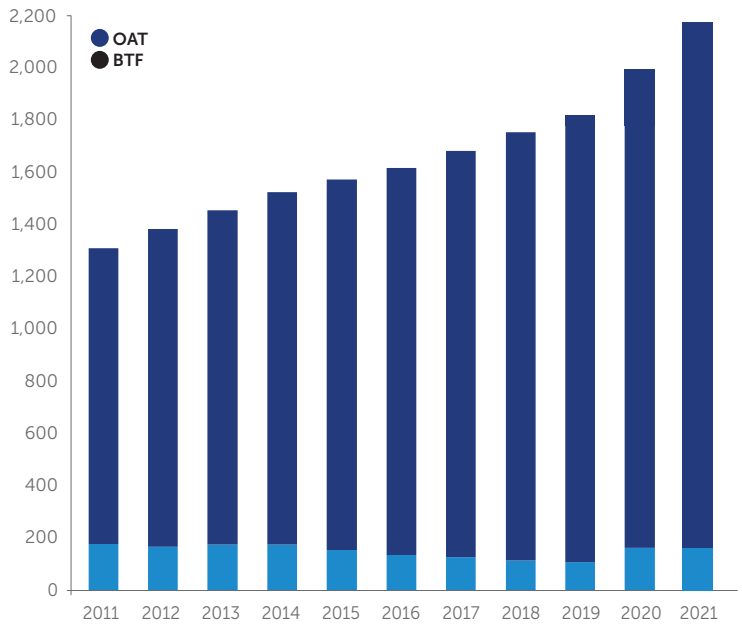
NON-RESIDENT HOLDINGS

47.8% at end-2021

BTFs AND OATs OUTSTANDING

Outstanding in €bn at year-end

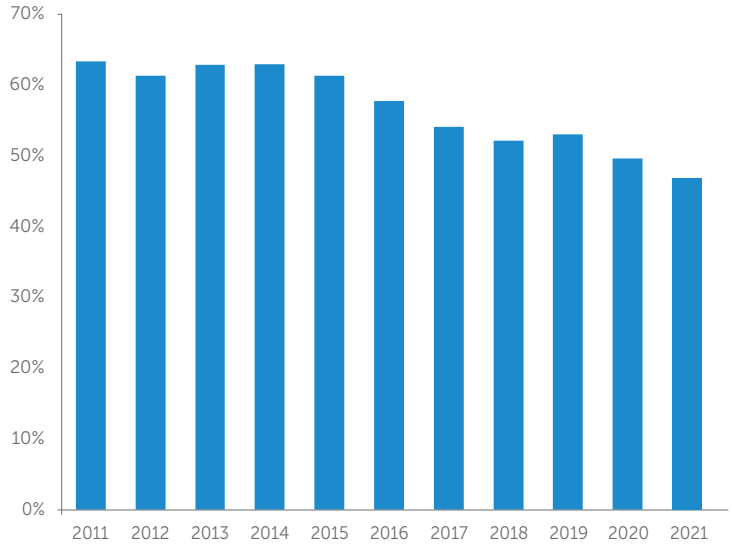
Source: *AFT*



NON-RESIDENT HOLDINGS OF NEGOTIABLE DEBT SECURITIES

In % at year-end

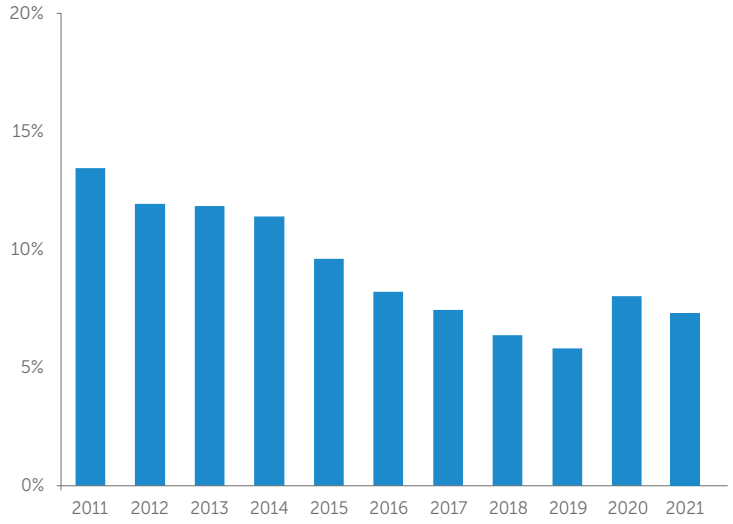
Source: *Banque de France*



BTFs AS A SHARE OF OUTSTANDING NEGOTIABLE STATE DEBT

Residual maturity in years and share in % at year-end

Source: *AFT*



> MEDIUM- AND LONG-TERM DEBT

MEDIUM- AND LONG-TERM DEBT FIGURES

REDEMPTIONS IN 2021

Fixed-rate securities: **€102.4bn** in redemptions (par value)

Index-linked securities: **€15.1bn + €0.8bn** in index-linking supplements

ISSUANCE IN 2021

34 auctions in 2021

Three syndicated issues (for the inaugural issuance of the new OAT 0.50% 25 May 2072, Green OAT 0.50% 25 June 2044 and OATi 0.75% 25 March 2053)

Fixed-rate securities: **€261.4bn** (par value)

Index-linked securities: **€23.6bn** (par value)

Average bid-to-cover ratio*: **2.28**

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

BUYBACKS IN 2021

€25.1bn (par value)

NEW BONDS ISSUED IN 2021	
TWO NEW FIXED-RATE MEDIUM-TERM OATS	
2 years	OAT 0.00% 25 February 2024
5 years	OAT 0.00% 25 February 2027
FOUR NEW FIXED-RATE LONG-TERM OAT	
10 years	OAT 0.00% 25 November 2031
20 years	Green OAT 0.50% 25 June 2044
30 years	OAT 0.75% 25 May 2053
50 years	OAT 0.75% 25 May 2072
TWO NEW INDEX-LINKED OATS	
Euro area	OAT€i 0.10% 25 July 2031
France	OAT 0.10% 1 March 2032

AVERAGE YIELD AT ISSUE OF FIXED-RATE SECURITIES		
	AGGREGATE	10-YEAR MATURITIES
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%

OUTSTANDING AMOUNTS AND FLOWS OF MEDIUM- AND LONG-TERM DEBT			
IN €M	PAR VALUE		
	FIXED-RATE SECURITIES	INDEX-LINKED SECURITIES	TOTAL
Outstanding at end-2020[1]	**1,619,368**	**199,932**	**1,819,301**
Issuance	261,444	23,619	285,063
- auctions	*242,444*	*23,619*	*266,063*
- syndicated issues	*19,000*	–	*19,000*
Buybacks[2]	25,063	–	25,063
- over the counter	*25,063*	–	*25,063*
- reverse auctions	–	–	–
Issuance net of buybacks	**236,381**	**23,619**	**260,000**
Redemptions	102,354	15,121	117,475
Net flows	**134,027**	**8,498**	**142,525**
Outstanding at end-2021[1]	**1,753,395**	**208,430**	**1,961,826**

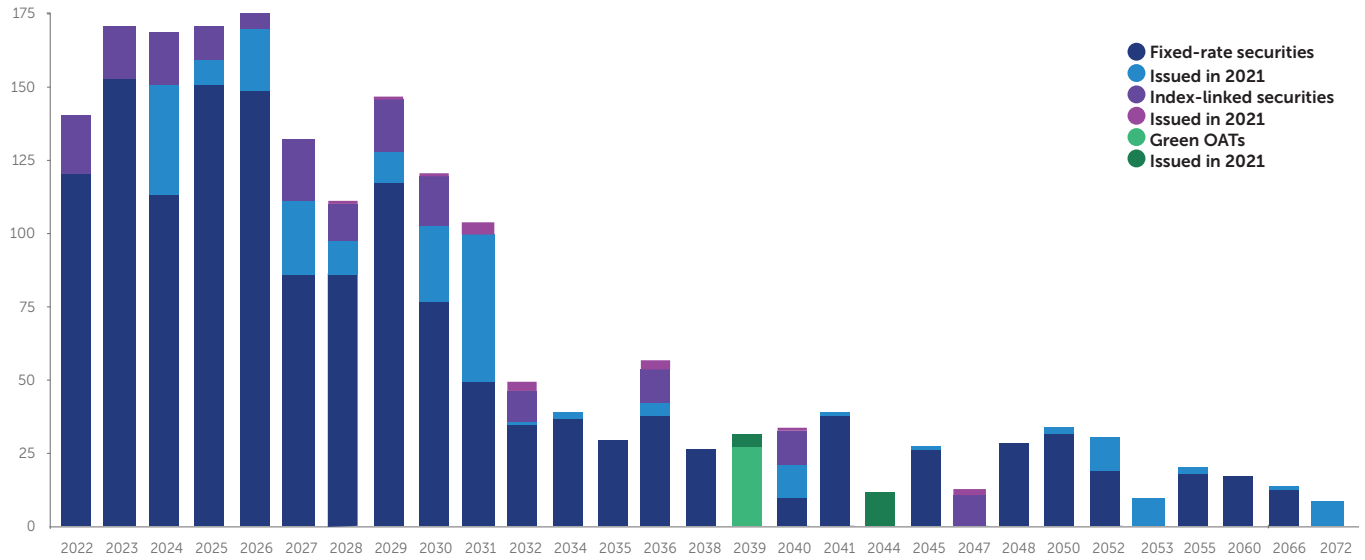
Source : Agence France Trésor

(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 DECEMBER 2021

Par value, in €bn

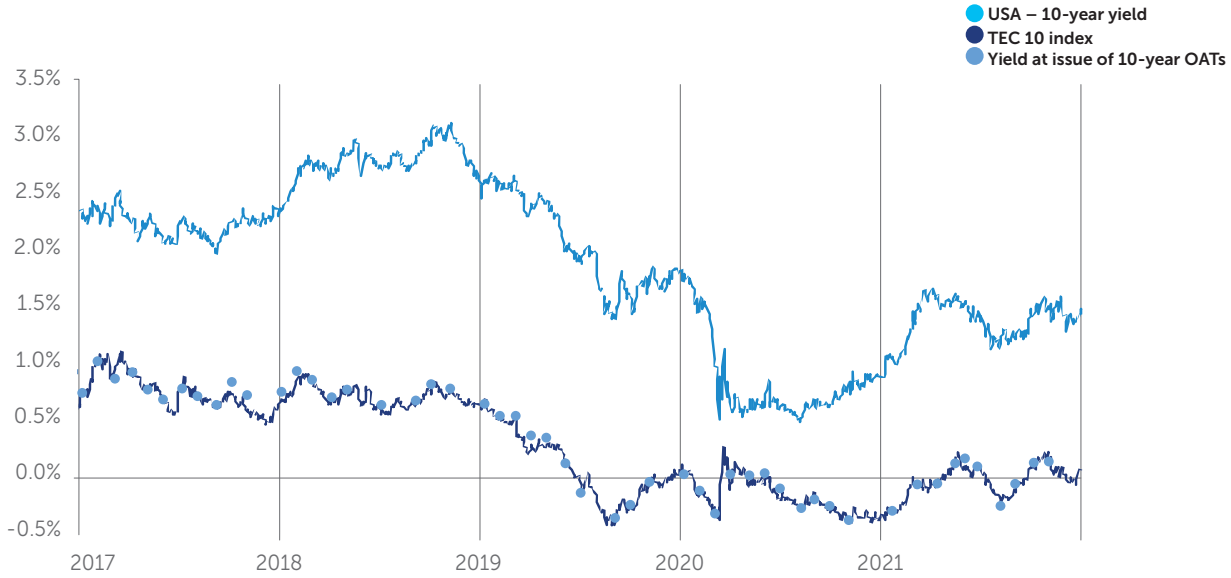
Source: *AFT*



LONG-TERM YIELDS

In %

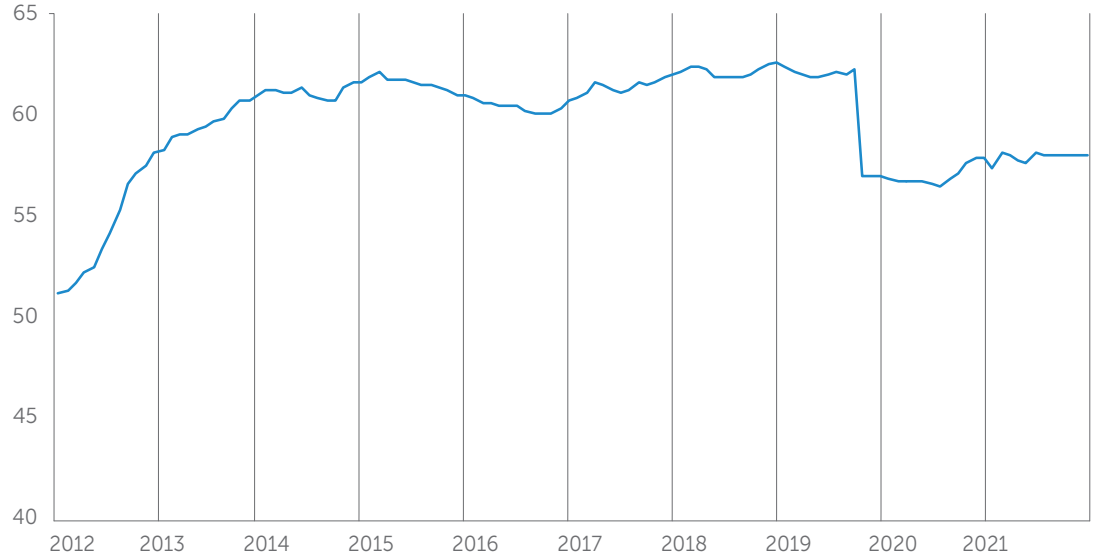
Source: *US Treasury Department, Banque de France, AFT*



STRIPS OUTSTANDING

In €bn

Source: *Euroclear*



DETAILS OF MEDIUM- AND LONG-TERM SECURITIES TRADING IN 2021				
IN €M	OUTSTANDING (€) END-2020	ISSUANCE 2021	BUYBACKS 2021	OUTSTANDING (€) END-2021
OAT 0.00% 25.2.2022	26,720	–	12,179	14,541
OAT 8.25% 25.4.2022	1,244	–	283	961
OAT 3.00% 25.4.2022	45,642	–	4,164	41,478
OAT 0.00% 25.5.2022	30,738	–	2,236	28,502
OAT2.25% 25.10.2022	36,157	–	737	35,420
OAT 0.00% 25.2.2023	16,070	–	4,043	12,027
OAT 0.00% 25.3.2023	39,815	–	354	39,462
OAT 8.5% 25.4.2023	10,606	–	211	10,396
OAT 1.75% 25.5.2023	46,748	–	857	45,891
OAT 0.00% 25.2.2024	–	31,676	–	31,676
OAT 0.00% 25.3.2024	39,839	2,694	–	42,533
OAT 2.25% 25.5.2024	34,810	3,138	–	37,948
OAT 0.1% 1.3.2025	11,351	787	–	12,138
OAT 0.00% 25.3.205	44,618	3,196	–	47,814
OAT 0.5% 25.5.2025	40,197	3,134	–	43,331
OAT 1% 25.11.2025	35,311	2,611	–	37,922
OAT 0.0% 25.2.2026	27,435	13,961	–	41,396
OAT 0.1% 1.3.2026	5,151	5,934	–	11,085
OAT 0.5% 25.5.2026	40,437	4,306	–	44,743
OAT 0.25% 25.11.2026	36,875	2,652	–	39,527
OAT 0.0% 25.2.2027	–	18,332	–	18,332
OAT 1% 25.5.2027	36,296	2,518	–	38,814
OAT 2.75% 25.10.2027	49,314	4,785	–	54,099
OATi 0.1% 1.3.2028	12,552	1,296	–	13,848
OAT 0.75% 25.5.2028	45,707	3,673	–	49,380
OAT 0.75% 25.11.2028	40,192	7,525	–	47,717
OAT€i 0.1% 1.3.2029	9,069	828	–	9,897
OAT 0.5% 25.5.2029	36,778	8,713	–	45,491
OAT 0.00% 25.11.2029	40,465	2,235	–	42,700
OAT 2.5% 25.5.2030	49,233	5,622	–	54,855
OAT€i 0.7% 25.7.2030	16,004	1,228	–	17,232
OAT 0.00% 25.11.2030	27,761	20,549	–	48,310
OAT 1.5% 25.5.2031	49,107	4,160	–	53,267
OAT€i 0.1% 25.7.2031	–	5,001	–	5,001
OAT 0.00% 25.11.2031	–	45,896	–	45,896
OAT 0.1% 1.3.2032	–	2,886	–	2,886
OAT 5.75% 25.10.2032	34,059	1,133	–	35,192
OAT 1.25% 25.5.2034	36,541	2,205	–	38,746
OAT 0.1% 1.3.2036	4,042	668	–	4,710
OAT 1.25% 25.5.2036	37,601	4,222	–	41,823
OAT€i 0.1% 25.7.2036	7,389	2,184	–	9,573
OAT 1.75% 25.6.2039	27,375	3,566	–	30,941
OAT 0.5% 25.5.2040	9,905	10,631	–	20,536
OAT€i 1.8% 25.7.2040	11,947	333	–	12,280
OAT 4.5% 25.4.2041	37,558	888	–	38,446
OAT 0.5% 25.6.2044	–	11,402	–	11,402
OAT 3.25% 25.5.2045	25,824	1,436	–	27,260
OAT€i 0.1% 25.7.2047	10,325	2,474	–	12,799
OAT 1.5% 25.5.2050	31,274	1,921	–	33,195
OAT 0.75% 25.5.2052	18,736	11,793	–	30,529
OAT 0.75% 25.5.2053	–	9,199	–	9,199
OAT 4% 25.4.2055	18,061	2,057	–	20,118
OAT 1.75% 25.5.2066	12,997	1,078	–	14,075
OAT 0.5% 25.5.2072	–	8,537	–	8,537
AGGREGATE		285,063	25,063	
non-index-linked securities		261,444	25,063	
index-linked securities		23,619	0	

Source: *AFT*

> STATE BORROWING

BORROWING REQUIREMENT

€285.2bn in 2021 including:

- **€118.3bn** in redemptions of OATs (including index-linking supplements)
- **€170.7bn** in deficit financing (excluding future expense)

FUNDING SOURCES

€260.0bn in OAT issuance in 2021 (net of buybacks)

+€25.2bn in other funding sources in 2021 including:

- **€18.7bn** increase in Treasury correspondents' deposits (excluding appropriations for the Invest for the Future programme)
- **€17.2bn** in other funding sources (mainly issue premiums net of discounts)
- **Less €6.2bn** by reduction in BTFs outstanding (negative contribution to funding sources)
- **Less €4.4bn** from an increase in the cash position (negative contribution to funding sources)

STATE CASH FLOWS

Source: *AFT, DGFiP*

STATE CASH FLOWS								
in €bn	2006	2007	2008	2009	2010	2011	2012	2013
Borrowing requirement	**113.6**	**102.5**	**160.3**	**246.4**	**196.8**	**185.6**	**187.0**	**185.5**
Redemption of medium- and long-term debt	77.6	69.0	97.6	110.1	82.9	94.9	97.9	106.7
- par value	77.6	69.0	97.6	107.7	82.2	93.0	95.3	103.8
- index-linking supplements paid at maturity	–	–	–	2.5	0.8	1.8	2.7	2.8
Redemption of other debts	2.8	0.6	10.3	1.6	4.1	0.6	1.3	6.1
SNCF Réseau – redemptions								
Deficit to be financed	39.0	42.1	56.3	138.0	110.1	90.7	87.2	74.9
Other cash requirements	-5.8	-9.3	-3.9	-3.4	-0.4	-0.6	0.6	-2.2
Funding sources	**113.6**	**102.5**	**160.3**	**246.4**	**196.8**	**185.6**	**187.0**	**185.5**
Medium- and long-term issuance net of buybacks	104.1	97.6	128.5	165.0	188.0	184.0	178.0	168.8
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	-11.2	7.2
Change in correspondents' deposits	5.1	2.6	-1.6	0.8	6.0	13.4	13.4	-4.2
Change in cash position[1]	25.9	-8.1	-25.3	-0.5	22.1	-3.9	-2.0	7.9
Other net cash sources	**-0.2**	**-1.8**	**-1.2**	**5.3**	**7.7**	**1.5**	**8.9**	**5.7**

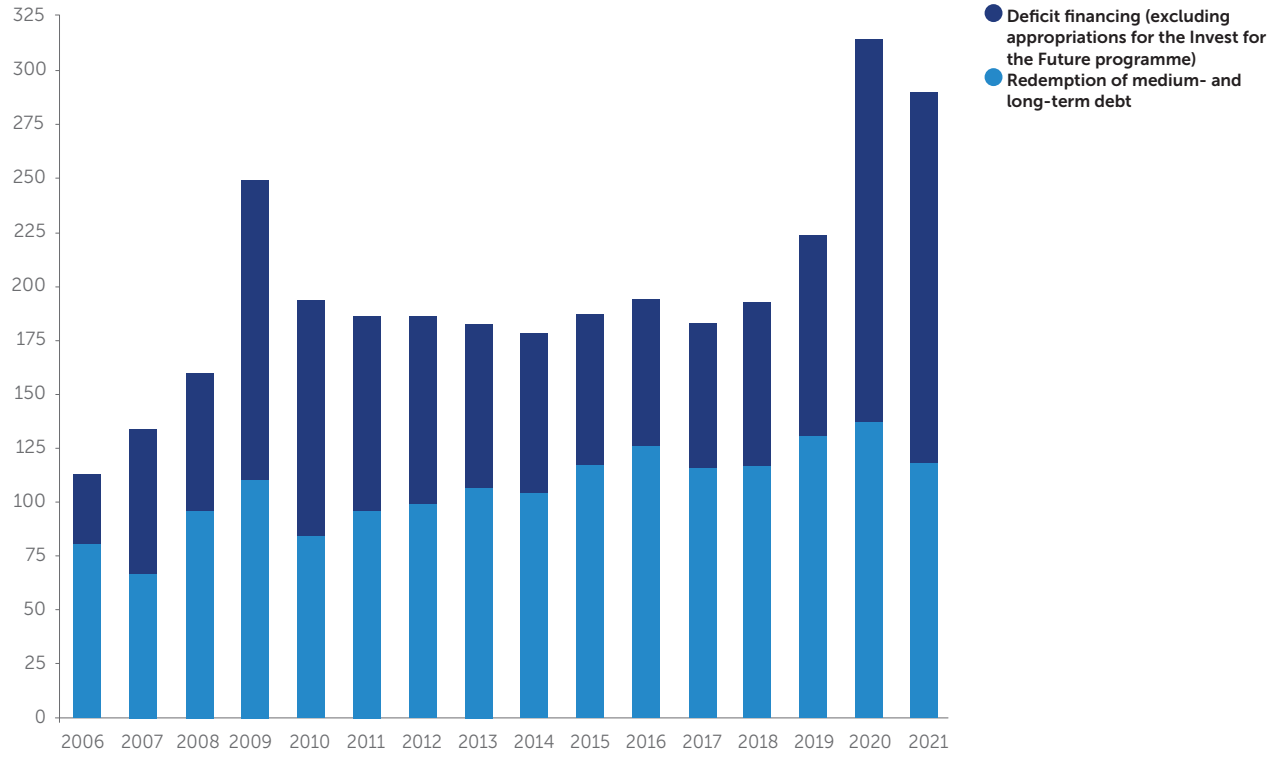
in €bn	2014	2015	2016	2017	2018	2019	2020	2021
Borrowing requirement	**179.1**	**189.1**	**194.1**	**183.1**	**192.0**	**220.5**	**309.5**	**285.2**
Redemption of medium- and long-term debt	103.8	116.4	124.9	115.2	116.6	130.2	136.1	118.3
- *par value*	103.8	114.1	124.5	112.8	115.9	128.9	130.5	117.5
- *index-linking supplements paid at maturity*	–	2.3	0.4	2.4	0.7	1.3	5.6	0.8
Redemption of other debts	0.2	0.1	–	–	–	–	0.5	–
SNCF Réseau – redemptions							1.7	1.3
Deficit to be financed	73.6	70.5	69.1	67.7	76.1	92.7	178.1	170.7
Other cash requirements	1.5	2.0	0.1	0.3	-0.7	-2.4	-6.9	-5.1
Funding sources	**179.1**	**189.1**	**194.1**	**183.1**	**192.0**	**220.5**	**309.5**	**285.2**
Medium- and long-term issuance net of buybacks	172.0	187.0	187.0	185.0	195.0	200.0	260.0	260.0
Funds allocated to the CDP to reduce debt	1.5	0.8	–	–	–	–	–	–
Change in outstanding short-term State securities	1.4	-22.6	-18.7	-7.5	-13.6	-6.0	54.7	-6.2
Change in correspondents' deposits	-1.3	6.7	1.6	4.7	9.9	11.5	27.8	18.7
Change in cash position[1]	-1.4	-5.2	4.6	-9.2	-11.1	-5.7	-63.4	-4.4
Other net cash sources	**6.9**	**22.4**	**19.7**	**10.0**	**11.8**	**20.6**	**30.4**	**17.2**

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

STATE BORROWING REQUIREMENT

In €bn

Source: *AFT, DGFiP*



DEBT SERVICE FIGURES

CASH BASIS ACCOUNTING

€37.8bn in net cost charged to the "cost of State debt service and cash management" programme in 2021, including:

- **€36.2bn** for negotiable State debt
- **€1.7bn** increase compared to the Initial Budget Act (€36.1bn)
- **€2bn** increase compared to the 2020 outturn (€35.8bn)

ACCRUAL BASIS ACCOUNTING

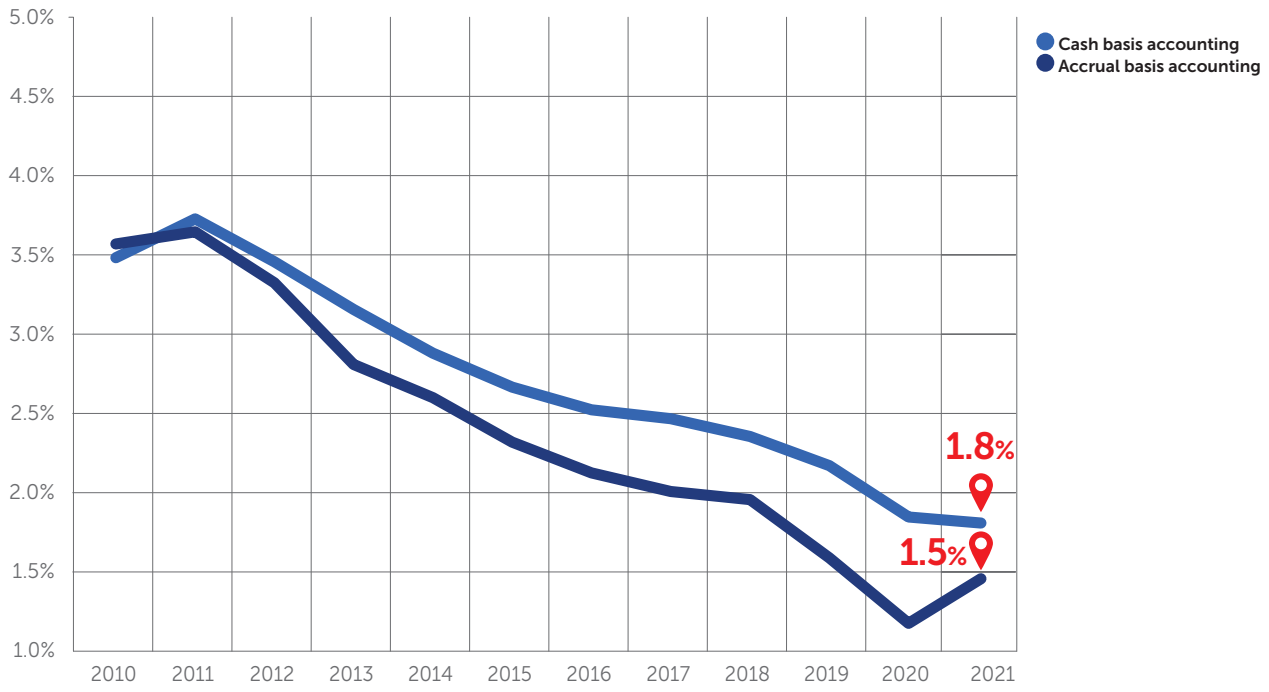
Net expense of **€29.1bn** in 2021 for negotiable State debt alone (excluding cash and assumed debt), including:

- **€33.9bn** for accrued interest on OATs
- **€8.0bn** for index-linking expenses
- **-€11.8bn** for issue premiums and discounts (reduction in debt service costs)
- **-€1.0bn** 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: *AFT*



COST OF STATE DEBT SERVICE AND CASH MANAGEMENT – CASH BASIS ACCOUNTING											
in €m	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Negotiable debt – net expense[1]	**45,502**	**45,182**	**43,778**	**42,193**	**41,094**	**40,301**	**40,541**	**40,378**	**38,998**	**34,230**	**36,204**
OATs and BTANs – net interest payments	39,924	41,339	41,849	41,118	40,896	41,041	39,087	37,753	*36,898*	*34,729*	*34,216*
- interest paid	*42,897*	*43,958*	*43,735*	*43,339*	*42,702*	*42,195*	*40,291*	*38,764*	*37,978*	*35,666*	*34,856*
- accrued interest received at issue (–)	*2,973*	*2,620*	*1,887*	*2,221*	*1,806*	*1,154*	*1,205*	*1,011*	*1,080*	*937*	*639*
OATs and BTANs – index-linking expense	3,967	3,638	1,772	932	499	13	2,309	3,348	*2,764*	*458*	*3,022*
BTFs – interest paid	1,611	206	158	142	-301	-753	-855	-723	*-664*	*-957*	*-1,034*
Other expenses and income											
Debt assumed – net expense	265	231	180	83	81	80	80	79	*79*	*480*	*769*
Non-negotiable debt	1	1	1	0	0	0	0	0	*0*	*0*	
Invest for the Future *- interest on funds*	408	645	667	688	751	754	750	752	*752*	*754*	*751*
Cash management – net expense	66	234	242	181	204	282	297	316	*409*	*706*	*729*
- Expenses	*365*	*309*	*253*	*205*	*205*	*282*	*297*	*316*	*409*	*706*	*729*
- Income	*300*	*75*	*11*	*24*	*1*	*0*	*0*	*0*	*0*	*0*	*0*
Other	14	9	17	14	6	30	31	16	*18*	*32*	*43*
Total expense for debt and cash management	**46,256**	**46,303**	**44,886**	**43,159**	**42,136**	**41,447**	**41,697**	**41,541**	**40,256**	**36,202**	**38,496**
Interest-rate swaps – net gain	322	307	208	134	145	145	25	25	*26*	*25*	*26*
- Income	*619*	*488*	*290*	*185*	*155*	*155*	28	29	*30*	*29*	*31*
- Expenses	*297*	*181*	*82*	*51*	*10*	*10*	4	4	*4*	*4*	*5*

Source: *AFT, DGFiP*

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

COST OF NEGOTIABLE STATE DEBT – ACCRUAL BASIS ACCOUNTING					
in €m	2011	2012	2013	2014	2015
Negotiable debt – net expense[1]	**44,529**	**43,588**	**39,207**	**38,305**	**36,126**
OATs and BTANs – interest and similar expenses	38,507	39,411	37,993	37,450	36,135
- accrued interest	*40,285*	*41,690*	*41,016*	*40,667*	*40,687*
- amortisation of issue discounts (+)	*1,372*	*1,491*	*1,400*	*1,530*	*1,621*
- amortisation of issue premiums (–)	*3,149*	*3,771*	*4,423*	*4,747*	*6,173*
OATs and BTANs – index-linking expense[2]	4,412	3,618	1,106	648	170
BTFs – accrued interest	1,610	559	109	208	-179

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

Source: *AFT, DGFiP*

(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-2021:
€155.3bn

€6.2bn decrease in 2021

BTF ISSUANCE

49 auctions in 2021

€6.4bn issued per auction on average

Average bid-to-cover ratio* in 2021: **3.64**

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

EUROPEAN CENTRAL BANK REFINANCING RATE

End-2020: **0,00 %**

End-2021: **0,00 %**

AVERAGE YIELD AT ISSUE		
	AGGREGATE	3-MONTH MATURITIES
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%
2016	-0.53%	-0.54%
2009–2015 average	0.28%	0.24%
1998–2008 average	3.15%	3.10%

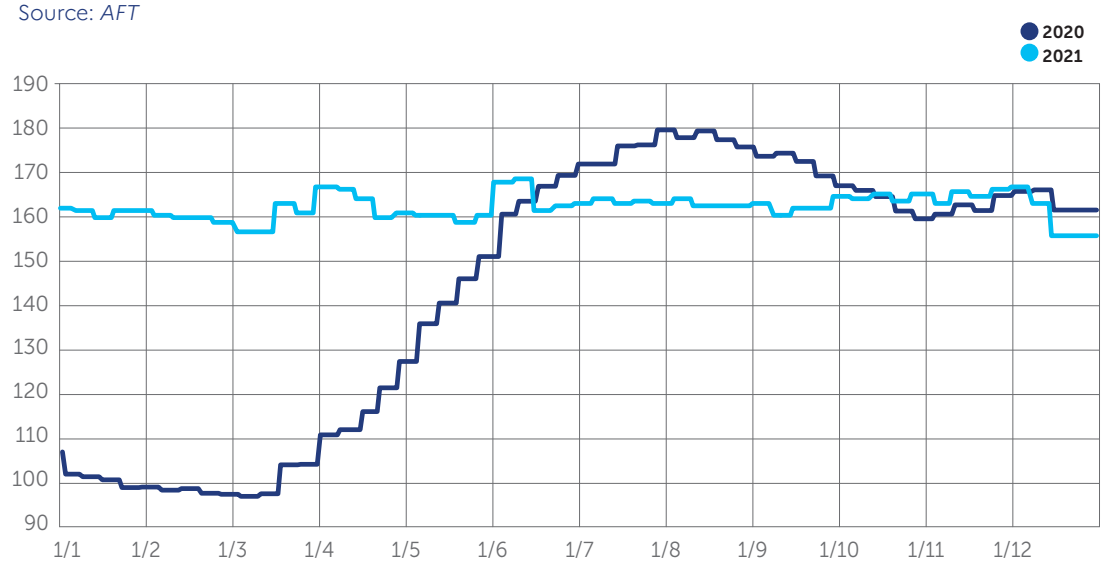
BTFS OUTSTANDING AND BTF FLOWS	
in €m	
Outstanding at end-2020	**161,608**
Issuance in 2021	**319,602**
<2-month BTFs	-
3-month BTFs	143,710
4-to-5-month BTFs	1,331
6-month BTFs	83,978
7-to-11-month BTFs	4,147
12-month BTFs	86,436
Redemptions in 2021	**325,831**
<2-month BTFs	-
3-month BTFs	140,505
4-to-5-month BTFs	1,331
6-month BTFs	85,411
7-to-11-month BTFs	7,513
12-month BTFs	91,071
Outstanding at end-2021	**155,379**

Source: *AFT*

BTFs OUTSTANDING

In €bn

Source: *AFT*



YIELDS

In %

Source: *Banque de France, AFT*

Yield at issue of 3-month BTFs (monthly average)
Yield on 3-month Treasury bills
ECB refinancing rate

> OVER-THE-COUNTER BUYBACKS OF OATs

in €m

By month	Amount bought back*
January 2021	0
February 2021	2,500
March 2021	2,087
April 2021	2,913
May 2021	2,047
June 2021	2,896
July 2021	557
August 2021	675
September 2021	2,210
October 2021	1,879
November 2021	4,916
December 2021	2,383

** Excluding securities maturing in 2021.*

in €m

By bond	Amount bought back*
OAT 0.00% 25 February 2022	12,179
OAT 3% 25 April 2022	4,164
OAT 8.25% 25 Avril 2022	283
OAT 0.00% 25 May 2022	2,236
OAT 2.25% 25 October 2022	737
OAT 0.00% 25 February 2023	4,043
OAT 0.00% 25 March 2023	354
OAT 8.5% 25 April 2023	211
OAT 1.75% 25 May 2023	857

** Excluding securities maturing in 2021.*

Total buybacks	25 063
Maturing 2021	19,599
Maturing 2021	5,464
Fixed-rate securities	25,063
Index-linked securities	0

> BREAKDOWN OF NEGOTIABLE STATE DEBT AT 31 DECEMBER 2021

SHORT-TERM DEBT		
CODE	MATURITY	OUTSTANDING (€)
FR0126893520	BTF 5 January 2022	9,811,000,000
FR0126893538	BTF 12 January 2022	5,589,000,000
FR0126893603	BTF 19 January 2022	6,550,000,000
FR0126461823	BTF 26 January 2022	7,193,000,000
FR0126893611	BTF 2 February 2022	6,903,000,000
FR0126893546	BTF 9 February 2022	7,771,000,000
FR0126893629	BTF 16 February 2022	6,898,000,000
FR0126461831	BTF 23 February 2022	7,126,000,000
FR0126893637	BTF 2 March 2022	5,293,000,000
FR0126893595	BTF 9 March 2022	8,201,000,000
FR0126893645	BTF 16 March 2022	2,348,000,000
FR0126461849	BTF 23 March 2022	8,522,000,000
FR0126893660	BTF 6 April 2022	8,215,000,000
FR0126750787	BTF 21 April 2022	8,328,000,000
FR0126893678	BTF 4 May 2022	5,786,000,000
FR0126750795	BTF 18 May 2022	9,057,000,000
FR0126750803	BTF 15 June 2022	6,988,000,000
FR0126893561	BTF 13 July 2022	6,455,000,000
FR0126893579	BTF 10 August 2022	6,390,000,000
FR0126893587	BTF 7 September 2022	7,122,000,000
FR0126893694	BTF 5 October 2022	6,551,000,000
FR0126893702	BTF 2 November 2022	6,031,000,000
FR0126893710	BTF 30 November 2022	2,251,000,000
TOTAL BTFs	**Outstanding (€)** **Residual maturity (days)**	**155,379,000,000** **110**

MEDIUM AND LONG-TERM DEBT (MATURING 2021–2028)						
CODE	TITLE	ENCOURS (€)	INDEX COEFF.	PAR VALUE OUTSTANDING (€)	STRIPPED BONDS (€)	CAC*
Maturing 2022		**144,322,325,560**				
FR0013398583	OAT 0.00% 25 February 2022	14,541,000,000			0	×
FR0000571044	OAT 8.25% 25 April 2022	960,939,990			0	
FR0011196856	OAT 3.00% 25 April 2022	41,478,000,000			118,509,300	
FR0013219177	OAT 0.00% 25 May 2022	28,502,000,000			0	×
FR0010899765	OAT€i 1.10% 25 July 2022	23,420,385,570(1)	1.17969	19,853,000,000	0	
FR0011337880	OAT 2.25% 25 October 2022	35,420,000,000			0	
Maturing 2023		**173,788,600,703**				
FR0013479102	OAT 0.00% 25 February 2023	12,027,000,000			0	×
FR0013283686	OAT 0.00% 25 March 2023	39,461,500,000			0	×
FR0000571085	OAT 8.50% 25 April 2023	10,395,695,903			5,331,365,200	
FR0011486067	OAT 1.75% 25 May 2023	45,891,000,000			0	×
FR0010585901	OAT 2.10% 25 July 2023	21,095,404,800(1)	1.16885	18,048,000,000	0	
FR0010466938	OAT 4.25% 25 October 2023	44,918,000,000			451,985,000	
Maturing 2024		**170,488,477,680**				
FR0014001N46	OAT 0.00% 25 February 2024	31,676,000,000			0	×
FR0013344751	OAT 0.00% 25 March 2024	42,533,000,000			0	×
FR0011619436	OAT 2.25% 25 May 2024	37,948,000,000			0	×
FR0011427848	OAT€i 0.25% 25 July 2024	19,795,477,680(1)	1.10472	17,919,000,000	0	×
FR0011962398	OAT 1.75% 25 November 2024	38,536,000,000			42,000,000	×
Maturing 2025		**172,652,753,318**				
FR0012558310	OAT 0.10% 1 March 2025	12,931,825,200	1.06540	12,138,000,000	0	×
FR0013415627	OAT 0.00% 25 March 2025	47,814,000,000			0	×
FR0012517027	OAT 0.50% 25 May 2025	43,331,000,000			0	×
FR0000571150	OAT 6.00% 25 October 2025	30,653,928,118			2,813,064,400	
FR0012938116	OAT 1.00% 25 November 2025	37,922,000,000			0	×
Maturing 2026		**181,356,826,550**				
FR0013508470	OAT 0.00% 25 February 2026	41,396,000,000			0	×
FR0013519253	OAT€i 0.10% 1 March 2026	11,488,826,550(1)	1.03643	11,085,000,000	0	×
FR0010916924	OAT 3.50% 25 April 2026	44,202,000,000			0	
FR0013131877	OAT 0.50% 25 May 2026	44,743,000,000			0	×
FR0013200813	OAT 0.25% 25 November 2026	39,527,000,000			0	×
Maturing 2027		**135,844,346,400**				
FR0014003513	OAT 0.00% 25 February 2027	18,332,000,000			0	×
FR0013250560	OAT 1.00% 25 May 2027	38,814,000,000			0	×
FR0011008705	OAT€i 1.85% 25 July 2027	24,599,346,400(1)	1.16254	21,160,000,000	0	
FR0011317783	OAT 2.75% 25 October 2027	54,099,000,000			61,743,600	
Maturing 2028		**111,857,545,897**				
FR0013238268	OAT 0.10% 1 March 2028	14,729,148,240(1)	1.06363	13,848,000,000	0	×
FR0000571226	OAT zero coupon 28 March 2028	31,397,657(2)		46,232,603	–	
FR0013286192	OAT 0.75% 25 May 2028	49,380,000,000			0	×
FR0013341682	OAT 0.75% 25 November 2028	47,717,000,000			0	×

(1) Par value × indexation coefficient (par value if coefficient is less than 1)
(2) Present value at 28 March 2021; not available for subscription

MEDIUM AND LONG-TERM DEBT (MATURING IN 2029 AND LATER)						
CODE	TITLE	ENCOURS (€)	INDEX COEFF.	PAR VALUE OUTSTANDING (€)	STRIPPED BONDS (€)	CAC*
Maturing 2029		**150,408,175,768**				
FR0013410552	OAT€i 0.10% 1 March 2029	10,359,090,930[1]	1.04669	9,897,000,000	0	×
FR0000571218	OAT 0.50% 25 April 2029	39,618,880,458			2,281,946,100	
FR0013407236	OAT 0.50% 25 May 2029	45,491,000,000			0	×
FR0000186413	OATi 3.40% 25 July 2029	12239204380[1]	1.33250	9,185,144,000	0	
FR0013451507	OAT 0.00% 25 November 2029	42,700,000,000			0	×
Maturing 2030		**121,957,012,960**				
FR0011883966	OAT 2.50% 25 May 2030	54,855,000,000			0	×
FR0011982776	OAT€i 0.70% 25 July 2030	18,792,012,960[1]	1.09053	17,232,000,000	0	×
FR0013516549	OAT 0.00% 25 November 2030	48,310,000,000			0	×
Maturing 2031		**104,354,238,040**				
FR0012993103	OAT 1.50% 25 May 2031	53,267,000,000			58,900,000	×
FR0014001N38	OAT€i 0.10% 25 July 2031	5,191,238,040[1]	1.03804	5,001,000,000	0	×
FR0014002WK3	OAT 0.00% 25 November 2030	45,896,000,000			0	×
FR0012993103	OAT 1.50% 25 May 2031	49,107,000,000			51,900,000	×
Maturing 2032		**48,036,514,920**				
FR0014003N51	OATi 0.10% 1 March 2032	2,950,184,640[1]	1.02224	2,886,000,000	0	×
FR0000188799	OAT€i 3.15% 25 July 2032	14,542,652,800[1]	1.34455	10,816,000,000	0	
FR0000187635	OAT 5.75% 25 October 2032	35,192,322,600			10,590,157,400	
Maturing 2034 and later		**393,575,296,880**				
FR0013313582	OAT 1.25% 25 May 2034	38,746,000,000			0	×
FR0010070060	OAT 4.75% 25 April 2035	29,004,000,000			3,321,737,000	
FR0013524014	OATi 0.10% 1 March 2036	4,800,950,100[1]	1.01931	4,710,000,000	0	×
FR0013154044	OAT 1.25% 25 May 2036	41,823,000,000			100,000	×
FR0013327491	OAT€i 0.10% 25 July 2036	10,239,567,990[1]	1.06963	9,573,000,000	0	×
FR0010371401	OAT 4.00% 25 October 2038	26,534,000,000			4,659,641,400	
FR0013234333	OAT 1.75% 25 June 2039	30,941,000,000			0	×
FR0013515806	OAT 0.50% 25 May 2040	20,536,000,000			0	×
FR0010447367	OAT€i 1.80% 25 July 2040	15,294,494,400[1]	1.24548	12,280,000,000	0	
FR0010773192	OAT 4.50% 25 April 2041	38,446,000,000			5,469,099,000	
FR0014002JM6	OAT 0.50% 25 June 2044	11,402,000,000			0	×
FR0011461037	OAT 3.25% 25 May 2045	27,260,000,000			706,510,000	×
FR0013209871	OAT€i 0.10% 25 July 2047	13,891,778,620[1]	1.08538	12,799,000,000	0	×
FR0013257524	OAT 2.00% 25 May 2048	28,759,000,000			586,300,000	×
FR0013404969	OAT 1.50% 25 May 2050	33,195,000,000			191,900,000	×
FR0013480613	OAT 0.75% 25 May 2052	30,529,000,000			678,100,000	×
FR0014004J31	OAT 0.75% 25 May 2053	9,199,000,000			10,000,000	×
FR0010171975	OAT 4.00% 25 April 2055	20,118,000,000			11,124,918,000	
FR0010870956	OAT 4.00% 25 April 2060	16,696,000,000			8,833,404,100	
FR0013154028	OAT 1.75% 25 May 2066	14,075,000,000			1,211,200,000	×
FR0014001NN8	OAT 50% 25 May 2072	8,537,000,000			30,400,000	×

TOTAL MEDIUM AND LONG-TERM DEBT	**Outstanding (present value)**	**1,989,742,254,026**	
	Outstanding (par value)	1,961,825,643,672	
	Stripped bonds outstanding (par value)	58,572,980,500	
	Residual maturity (days)	3,305	9 years and 20 days
Total debt	Outstanding (present value)	2,145,121,254,026	
	Outstanding (par value)	2,117,204,643,672	
	Residual maturity (days)	3,073	8 years and 153 days

(1) Par value × 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 securities auctioned.

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 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% 1 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 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 2021, AFT bought back €25.1bn in securities maturing in 2022 and 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 OATs 4% 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

Since 2001, AFT has managed the average residual maturity of debt. This maturity has been fairly long as a natural result of the requirement that each issue be liquid, growing demand from investors for very long maturities and 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 debt service 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 one economic cycle or longer, 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-2021, 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 20–24 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 BTF, a half-year BTF and a one-year BTF are normally issued each week. On 31 December 2021, total outstanding BTFs stood at €155.4bn.

To ensure the fungibility of new and existing issues, the maturities of new bills are aligned on those of previously issued bills. In 2021, 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 BTF 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 BTF auctions has been at T+2 to bring primary market settlement dates into line with secondary market settlement dates.

TRADING

BTF 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, have been issued as OATs, as have long-term securities (those with maturities of eight years or longer in 2020).

OATs are now the only form of medium-term and long-term State borrowing. They were formerly used solely for long-term borrowing between 1985 and 2012. OATs are fungible securities with maturities at issue of 2 to 50 years. They are 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 every other way 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 either the 1st 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 2021) 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 2021) 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. the following Monday.

TO FIND OUT MORE:
AFT tutorial:
How does the State finance itself?
https://bit.ly/3Qv4nkg (in French)

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).

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. Such 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 2021, the par value of outstanding OATi issues totalled €60.8bn and OAT€i issues stood at €147.6bn.

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. It is established at the time of issue and remains fixed to maturity. The coupon is paid annually and calculated as follows: real coupon yield × par value × 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 the month M–3 and the CPI for the 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 and publishes the daily inflation benchmarks and indexation coefficients on its website.

OAT redemption is based on the following formula: par value × 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 1 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 full faith and credit of the State. Retail investors can purchase fixed-rate OATs with maturities ranging from 2 to 50 years. These bonds have annual coupons and are redeemable at maturity. Retail investors may also buy index-linked OATs.

Anyone can access the OAT market. OATs offer private individuals numerous 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 exchange traded at any time for the market price. 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 ensure the market, overseen by Euronext, remains liquid.
- 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 have 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 may choose 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 is applied against 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 establishes 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 and traded on the basis of a discount rate expressed as an annual percentage calculated on the basis of 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 coupon payments and bond principal redemption payments, creating the same number of zero-coupon bonds. This technique makes it possible to 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.

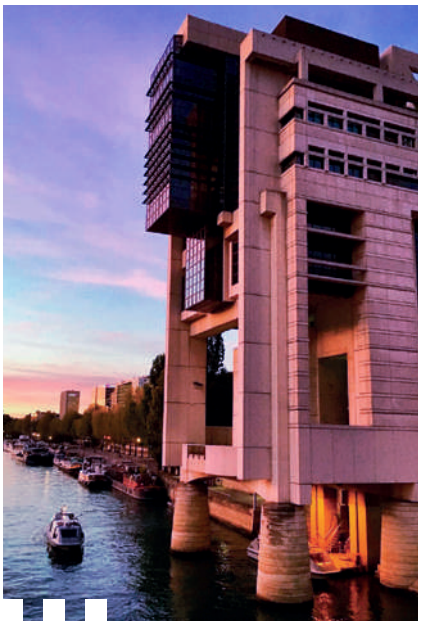
On 31 December 2021, outstanding fixed-rate OAT strips totalled approximately €58.6bn, equivalent to 2.8% of outstanding fixed-rate strippable bonds.

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. Coupons stripped from different OATs are fungible if they have the same maturity.

Like all euro area bonds, the 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 necessary 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 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. Some entities also deposit some or all of their cash with the Treasury under the terms of agreements. This is the case for the European Union, which deposits some of its funds with the French Treasury. All of 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 limit its reliance on market financing.

PROMOTING CENTRALISATION OF PUBLIC SECTOR CASH HOLDINGS

Centralisation prevents situations where some entities post a borrowing 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 INTEREST

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 this purpose, AFT constantly updates its forecasts of cash flows 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 each Treasury correspondent. It relies on a dedicated information system 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 surplus. These investments may take the form of loans or securities repurchase agreements. AFT offers 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 (in French)

ISSUE PREMIUMS AND DISCOUNTS

Securities issuance gives 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 adjust 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 at maturity. In this case, a cash inflow corresponding to an "issue premium" is recognised. In the opposite case, an "issue discount" occurs and the State receives less than the par value of the security at the time of issue. 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%). 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 one hand, yields vary and, on the other, the residual maturity of the off-the-run security is shorter than the original maturity.

The downward trend in yields up to 2021 means that the State has recorded more issue premiums than issue discounts in recent years. A growing segment of the French yield curve for new issues shows negative yields, which automatically generate issue premiums. The yields at issue for off-the-run securities are most often lower than the original coupon yields on average.

The State's financial accounts record the premiums and discounts on the balance sheet. They are shown as revenue or expenditure in the State cash flow statement.

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 State's financial accounts and Maastricht accounts amortise issue premiums and discounts 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 issuance, regardless of the amount of the actual coupon payments.

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 should make it possible to spot problems and incidents that could disrupt debt and cash management transactions as early 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.

As part of drafting the Budget Act and the performance indicators submitted to Parliament, AFT states its goal as "achieving a constant quality of risk management that minimises the occurrence of 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 sub-indicator lists the number of incidents or breaches of AFT's internal rules under its general activity framework (authorisations, risk limits, transaction control).
- Five other sub-indicators are assessed by an external auditor (KPMG for 2021) based on a verification of the adequacy of AFT's procedures, given its activities and related risks. The Order of 3 November 2014 relating to internal control in the banking sector has been the benchmark for the provisions applying to AFT since 2015.

INDICATORS TRACKING DEBT AND CASH MANAGEMENT TRANSACTION EXECUTION INCIDENTS

- First sub-indicator: the number of incidents that decrease the balance of the Treasury Account with the *Banque de France*.
- Second sub-indicator: the number of incidents that increase the balance of the Treasury Account with the *Banque de France*.
- Third sub-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 non-compliance with internal operating procedures.

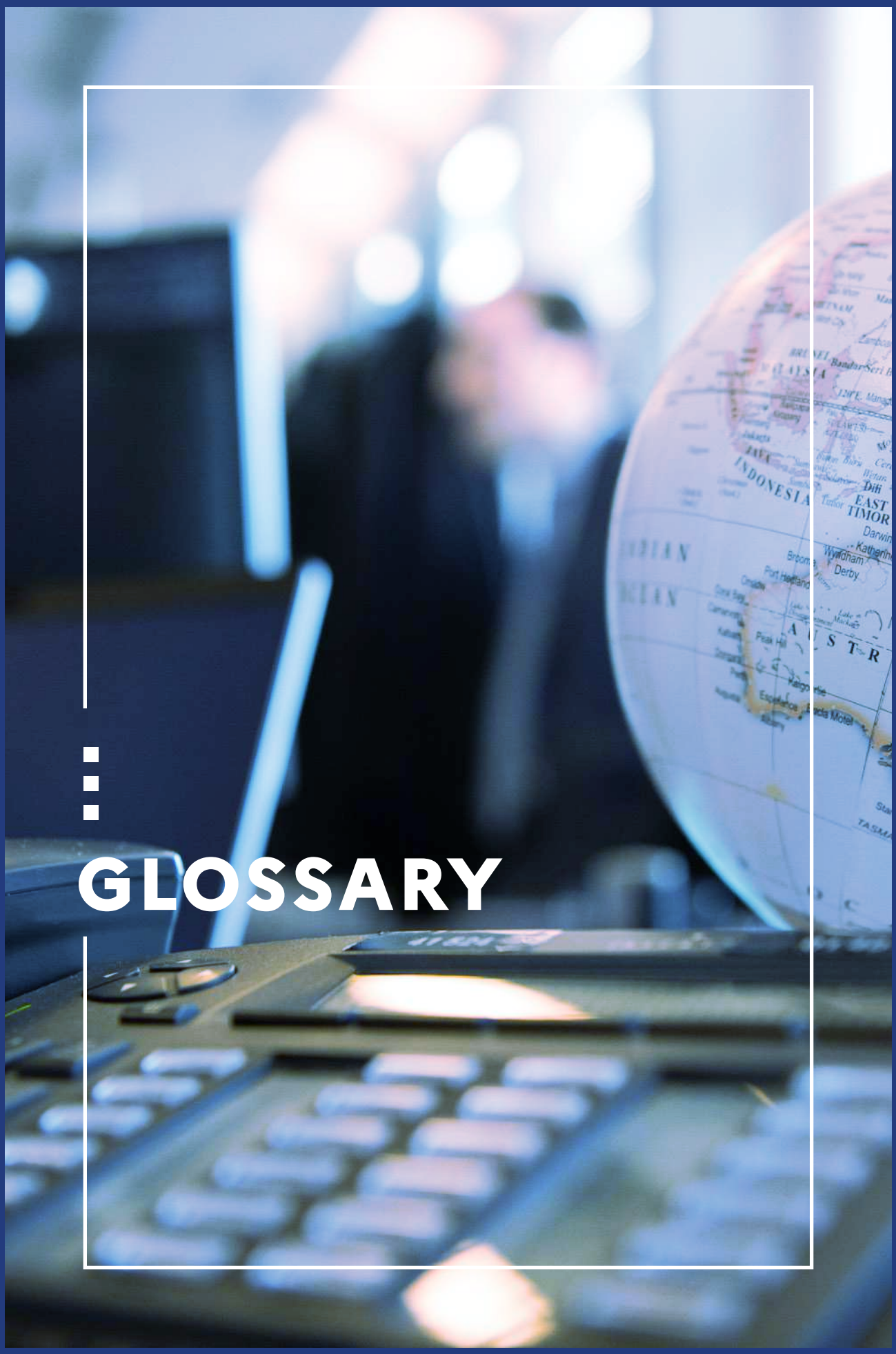
INFORMATION SYSTEM SECURITY POLICY

AFT's information system is the mainstay of its operational activity. Consequently, it must provide staff with a high level of security with regard to:

- Timely availability of information
- Data integrity, by preventing any deterioration of the data entered in the long term
- The level of confidentiality appropriate to the information being handled

Regular audits by the French Government Audit Office or external audit firms necessarily include an audit of the information system. This part of the audit 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 individual access privileges.

Cyber threats create an additional specific need for a more technical audit. These audits are performed by the staff of the Senior Defence and Security Official (SHFDS) of the Finance Ministry or by the National Information System Security Agency (ANSSI). The purpose of the audits is to verify the hardware and software configuration to ensure that they meet state-of-the-art security standards.



GLOSSARY

ADJUDICATION

Depuis 1985, la technique de l'adjudication « au prix demandé » constitue la voie privilégiée d'émission des valeurs du Trésor. Effectuée de manière transparente et dans le cadre d'un calendrier prévisionnel, elle assure les conditions d'une parfaite concurrence entre les souscripteurs. L'adjudication « au prix demandé » consiste à servir les titres au prix ou au taux effectif de soumission, par opposition au prix ou au taux marginal. L'autre modalité d'émission de dette est la syndication.

AUCTION

The principal method of issuing French government securities since 1985 has been the "bid price system". 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. The other debt issuance method 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 bonds and the yield on index-linked bonds. It represents the market participants' inflation expectations. Other factors besides inflation expectations affect the relative prices of index-linked bonds and 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.

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 allow for 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 contain "double-limb" CACs. Those to be created as from adoption of the revised European Stability Mechanism Treaty, slated for 2022, 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. the interest on the securities owned. For equities, this concerns paying dividends or stock splits, for example. 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

Delivery consists of handing over a security to the buyer following a financial transaction or trade.

DEPOSITORY

A financial institution authorised as a bank where bearers deposit their securities. The depository must know at any time who owns what, the status of securities (unrestricted, loaned, borrowed or pledged), and where the securities are held. Since the move to paperless transactions, depositories for securities 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.

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 central government's short-term debt (webpage: https://www.aft.gouv/en/btf-characteristics). For the fungible nature of a bond, refer to the definition of a "fungible Treasury bond".

FUNGIBILITY

For the fungible nature of a bond, refer to 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.

They are usually issued by auction. New issues are generally associated with existing OAT issues. This enables the State to issue new bonds at a price in line with the latest market prices but identical in every other way 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 borrowing.

Almost seventy OATs have been issued and they 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).

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 "lead book runners".

LEGAL TENDER

Currency is legal tender if it can be used in exchange for goods or services, or to pay taxes and duties in a certain 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.

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 the market situation.

MATURITY

Date of redemption established 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/oateurois-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 are bonds that have a fixed rate of interest, in contrast to index-linked bonds.

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 issues new securities. It is the market for capital increases and bond issues. Compared to the secondary market, which sells "second-hand" securities, the primary market sells only "new" ones. Debt issuance takes place on the primary market either through auctions or syndication.

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.

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: 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.

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 buybacks of its own bonds to extinguish them take place on the secondary market.

SECURITY

A financial instrument held for investment purposes. In France, securities are issued in electronic form. 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, refer to the definition of a "fungible Treasury bond".

SETTLEMENT

For financial trades and transactions, settlement consists of a payment by the buyer or subscriber to the seller for the securities acquired and delivery of the securities by the seller.

STRIPPING

Stripping is a technique that divides 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.

SWAP

An interest rate swap is based on the comparison of a variable interest rate and a fixed interest rate. At maturity, the counterparties exchange the difference in interest amounts, without any exchange of principal for a fixed duration. They are particularly suitable for 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.

SYNDICATE

It is involved as part of debt issuance by syndication. A group of banks that organise and oversee a large bond issue. It comprises lead book runners.

SYNDICATED ISSUE

Together with auctions, this is the other debt issuance method. A syndicated issue is where a bank or a syndicate of banks buys all the securities to be placed with the public from the issuer. This is the preferred placement method for corporate issuers. This was also true for the State up 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 by extrapolating the annual yields to maturity of the two OATs with maturities closest to N.

TRADE

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

TRANSACTION

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

TREASURY SECURITY

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

VARIABLE

Said of an interest rate that is not constant throughout 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.

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, slopes upward because of the risk premium (i.e. long-term yields are higher than short-term yields).

LISTE DES ABRÉVIATIONS

€STR
€STR Euro short-term rate – benchmark interbank interest rate calculated by the European Central Bank

ACOSS
Central agency for social security bodies

AFT
Agence France Trésor

AFTI
French Association of Securities Professionals

ANSSI
National Information System Security Agency of France

APP
Asset Purchase Programme

APP
Annual performance project

BoE
Bank of England

BoJ
Bank of Japan

BTAN
Fixed-rate French Treasury note with interest paid annually

BTF
Fixed-rate French Treasury bill

CAC
Collective action clause

CAC 40
French stock market index for the 40 largest French listed companies

CADES
Social Security Debt Repayment Fund

CDP
Public Debt Fund

CGI
General Tax Code

CITE
Energy Transition Tax Credit

CLS
CLS Group (originally Continuous Linked Settlement)

CPI
Consumer price index

DAX
Deutscher AktienindeX – German stock market index

DCM
Ministerial Accounts Department

DGFiP
Public Finances Directorate General

ECB
European Central Bank

EIB
European Investment Bank

EIG
Economic Interest Group

EONIA
Euro overnight index average

ESDM
Economic Financial Committee's Sub-Committee on European Union Sovereign Debt Markets

ESM
European Stability Mechanism

ETF
Exchange Traded Fund

Fed
Federal Reserve

FTSE
Financial Times Stock Exchange – British stock market index

GDP
Gross Domestic Product

GIC
Government of Singapore Investment Corporation – sovereign wealth fund

HICP
Harmonised Index of Consumer Prices

IBEX (Madrid)
Spanish stock market index

ICMA
International Capital Market Association

IMF
International Monetary Fund

INRAE
France's national institute of agriculture, food and environment research

INSEE
National Statistics and Economic Research Institute

IOER
Interest on excess reserves – Fed policy rate

IR
Income tax

JO
Official Journal

KfW
Kreditanstalt für Wiederaufbau – German Development Bank

LFI
Initial Budget Act

LFR
Supplementary Budget Act

LOLF
Constitutional Bylaw on Budget Acts

MAITRE
Treasury's computerised auction mechanism

MLF
Medium-term lending facility

NCBs
Non-competitive bids

NGEU
NextGenerationEU – European recovery programme

NPISH
Non-profit institution serving households

OAT
Fungible Treasury bond

OECD
Organisation for Economic Co-operation and Development

OPEC
Organization of the Petroleum Exporting Countries

PBoC
The People's Bank of China – Central Bank of China

PEPP
Pandemic Emergency Purchase Programme

QE
Quantitative Easing

RNCE
State Accounting Standards Manual

SAAD
Special debt account

SAFE
State Administration of Foreign Exchange

SCBCM
Ministerial Budget and Accounting Control Unit

SCN
Department with national scope

SEA
Military Fuel Unit

SHFDS
Senior defence and security official from France's Finance Ministry

SMEs
Small and medium-sized enterprises

SNCF
Société nationale des chemins de fer français

SURE
Support to mitigate Unemployment Risks in an Emergency – A temporary European Union instrument

SVT
Primary dealer

TEC
Constant maturity rate

TEEC
Energy and Ecological Transition for the Climate

TELSAT
Electronic bidding system for French Treasury auctions

TFEU
Treaty on the Functioning of the European Union

TLTRO
Targeted longer-term refinancing operation

UN
United Nations

UNEP
United Nations Environmental Programme

VIX
Volatility Index

VNF
France's Waterways Office

V2X
European market volatility based on the EURO STOXX 50 INDEX

WPDM
Working Party on Debt Management – annual meeting of OECD countries

WTI
West Texas Intermediate – price benchmark for the oil market

WWF
World Wildlife Fund

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