

N°380
JANUARY
2022

MONTHLY BULLETIN

AGENCE FRANCE TRÉSOR IS TASKED WITH MANAGING THE GOVERNMENT DEBT AND CASH POSITIONS UNDER THE MOST SECURE CONDITIONS IN THE INTEREST OF THE TAXPAYER.

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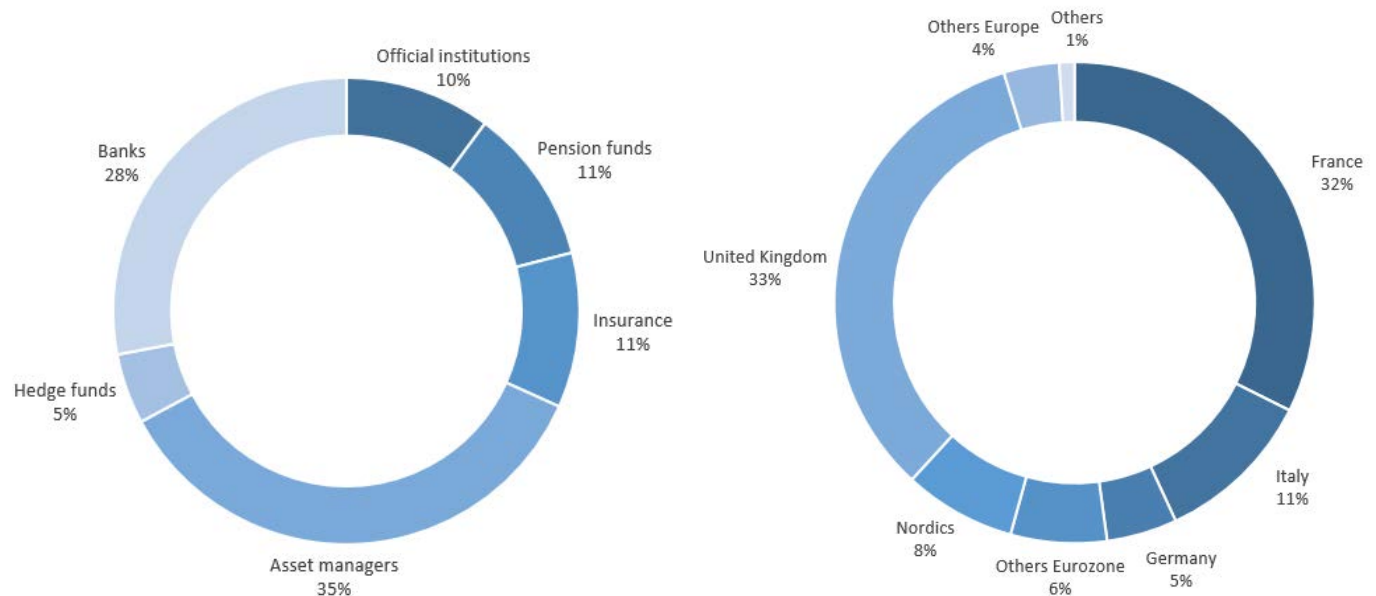
LAUNCH OF THE NEW OAT€i 0.10% 25 JULY 2053 AT A RECORD REAL RATE OF ISSUE

As announced in the indicative State financing programme for 2022, on Tuesday the 25 January, AFT executed its first syndication of the year by launching the OAT€i 0.10% 25 July 2053. This operation thus renewed the longest point on the euro-denominated real yield curve, which had been occupied for six years by the OAT€i 0.10% 25 July 2047 launched on 28 September 2016 at a real rate of -0.262%.

The syndication met with investors' interest, resulting in a very strong total demand for this product category, reaching around €24bn, of which €3bn was served. The real yield at issue was set at -0.926%, which is the lowest real yield ever achieved by a syndicated launch of indexed OATs. The break-even inflation rate underlying this issue is 1.90%.

Close to 200 final investors took part in the transaction, which sets a record level for this type of syndication. Geographically, distribution is almost exclusively in Europe where the allocation reflects an order book from a very diversified and high-quality investor base, both geographically and in terms of counterparty types.

Highly diverse allocation in terms of investor categories and geographical origins for the OAT0.10% 25 July 2053



The lead managers for this operation were BNP Paribas, Citi, Crédit Agricole CIB, J.P.Morgan and Société Générale. All of the primary dealers were in the syndicate.

Each year, AFT issues around 10% of the State's financing program in the form of indexed bonds. This syndicated issue reaffirms France's status as an issuer of long term benchmark inflation-indexed bonds in the euro area. It is also further proof of investors' confidence in the French economy and France's creditworthiness.

Energy supply challenges related to the climate transition, alongside the strength in energy demand, have contributed to higher inflation in both Europe and China. ECB President Lagarde pointed out recently that climate-related issues, including weaker-than-usual winds, have boosted gas prices as Europe had to resort to gas. China's decarbonisation policies also pushed Chinese coal prices to historic highs.

Modeling Net Zero

Based on expert estimates of what it will take to transition to carbon neutrality, we model the impact of the transition on inflation through the impact of a carbon tax path allowing to reach net zero in four large economies—the US, China, Germany, and Canada—in two steps.

First, we estimate the impact of a carbon tax that rises linearly to \$100/ton (in 2021 dollars by 2030 on prices of oil, natural gas, and coal. This trajectory is very similar to the carbon price required to achieve net zero by 2050 in the Global Climate Change Analysis Model from the Network for Greening the Financial System (NGFS). Second, we estimate the impact of higher oil, natural gas, and coal prices on consumer price inflation based on the contribution of these commodities to consumer prices. We estimate the commodity contribution using the energy intensity of industries' input costs and industry output weights in final personal consumption from input-output tables. We again assume a full pass through of the carbon tax, in this case from commodity prices to consumer prices.

Moderate Inflation Effects

We make four findings. First, we estimate a boost from the carbon tax-driven transition to the average US headline PCE inflation rate in the first three years of the transition of nearly 25bp annually (See chart 1). Second, the estimated boost to average core PCE inflation excluding food and energy in the first three years is smaller at 10bp. Third, the annual boost to headline inflation is larger in China than in the US at 30bp due to its greater reliance on coal. The headline inflation boost is smaller in Canada (15bp), in part because it already has a carbon tax. The boost is the smallest in Germany (just above 5bp) because it also already has a carbon tax, it is relatively energy-efficient, and gas prices are already very high. Fourth, the positive impact on inflation decreases over time given our assumption of a linear increase in the carbon tax (See chart 2). In other words, the inflationary costs of decarbonisation are front loaded. The annual average boosts to consumer inflation over this decade are relatively moderate in the four economies, especially compared to the 2021 upside surprises in inflation. We estimate cumulative boosts to the 2030 price level of 0.5% in Germany, 1.2% in Canada, 1.7% in the US, and 2.0% in China.

Chart 1:

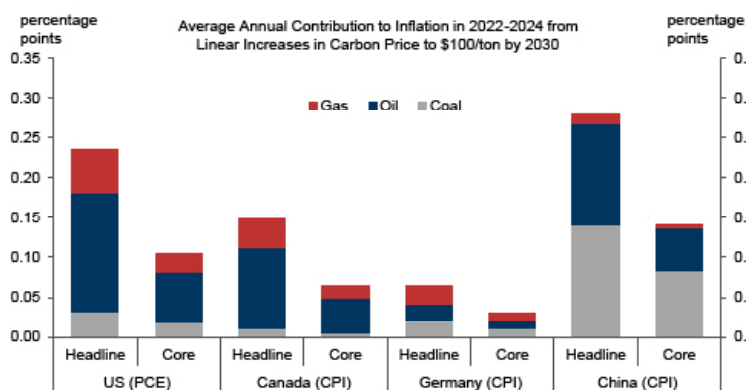
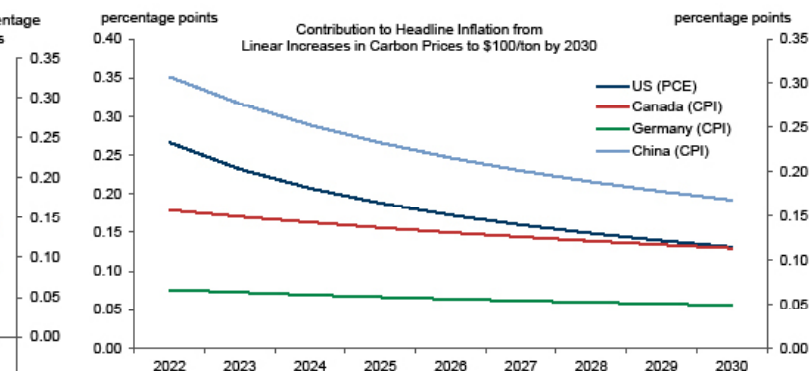


Chart 2:



Two-Sided Risks

The risks around our estimates are two-sided.

Five factors could contribute to larger inflation effects from the transition than we estimate. First, other less cost-effective mechanisms disincentivizing fossil fuels could substitute for carbon pricing (which seems unlikely in the US for now, at least at the federal level), but at the cost of a somewhat larger inflation impact. Second, the inflation boost would be larger if the transition is delayed. Finally, the inflation boost may also be larger if wages or inflation expectations rise, if fiscal stimulus boosts aggregate demand, or if firm-level adjustment costs to new energy sources further boost inflation.

Two factors could contribute to smaller inflation effects. First, if central banks do not accommodate the carbon tax and consumers reduce their demand for other goods due to tighter financial conditions or the negative income effect, higher energy prices may be compensated by lower prices in other categories. Second, the inflation boost may be smaller if producers and consumers rapidly switch to green alternatives, for instance in response to green subsidies.

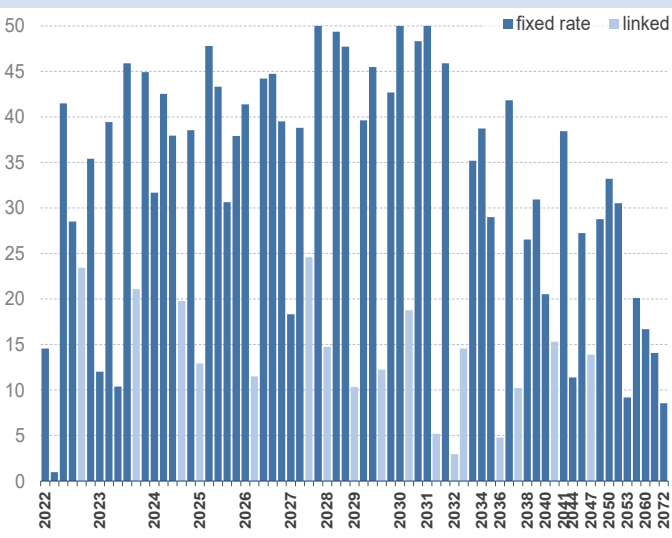
INDICATIVE AUCTION SCHEDULE

		Short-term					Medium-term	Long-term	Index-linked
February 2022	auction date	7	14	21	28	/	17	3	17
	settlement date	9	16	23	2/03	/	21	7	21
March 2022	auction date	7	14	21	28	/	17	3	17
	settlement date	9	16	23	30	/	21	7	21

Source: Agence France Trésor

MEDIUM- AND LONG-TERM NEGOTIABLE GOVERNMENT DEBT AT 31 DECEMBER 2021

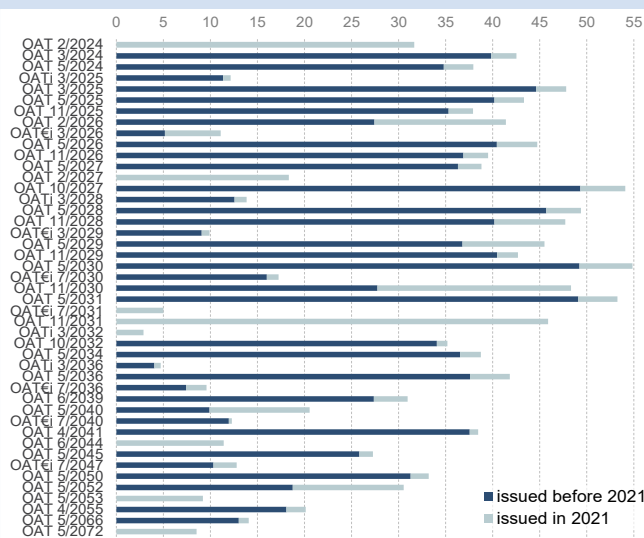
NOMINAL VALUE OF EACH LINE, IN € BILLION



Source: Agence France Trésor

MEDIUM- AND LONG-TERM: SECURITIES ISSUED DURING THE YEAR AND TOTAL ISSUANCE AT 31 DECEMBER 2021

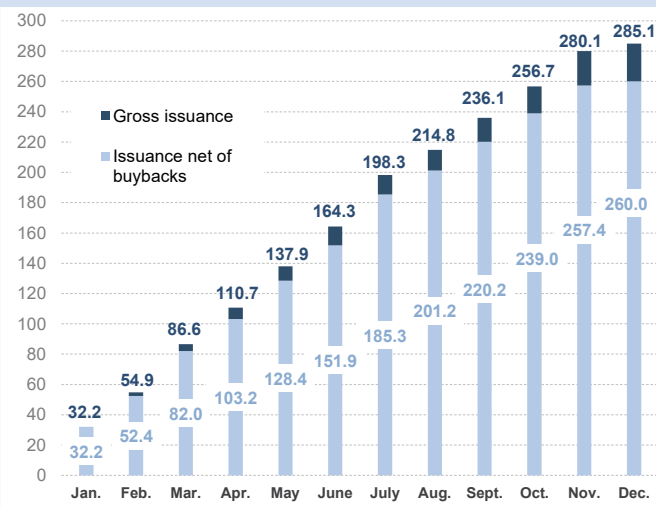
IN € BILLION



Source: Agence France Trésor

ISSUANCE AT 31 DECEMBER 2021

IN € BILLION



Source: Agence France Trésor

MEDIUM- AND LONG-TERM: PROVISIONAL MATURITY SCHEDULE AT 31 DECEMBER 2021

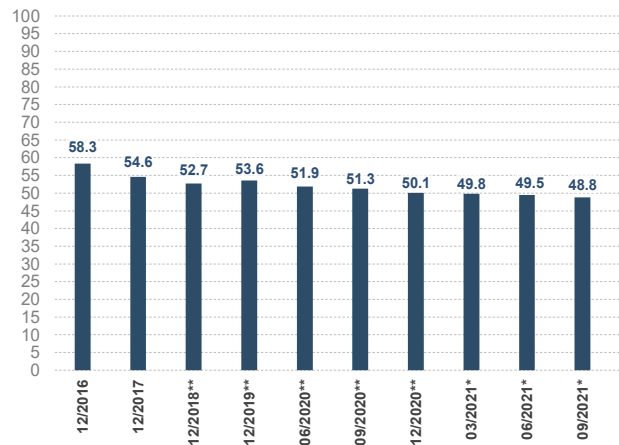
IN € BILLION

Month	Coupon	Redemption
Jan-22		
Feb-22		14.5
Mar-22	0.1	
Apr-22	10.5	42.4
May-22	8.9	28.5
Jun-22	0.6	
Jul-22	2.5	23.5
Aug-22		
Sep-22		
Oct-22	9.1	35.4
Nov-22	1.5	
Dec-22		

Source: Agence France Trésor

NON-RESIDENT HOLDERS OF NEGOTIABLE GOVERNMENT DEBT IN THIRD QUARTER OF 2021

AS A % OF NEGOTIABLE DEBT OUTSTANDING
EXPRESSED IN MARKET VALUE



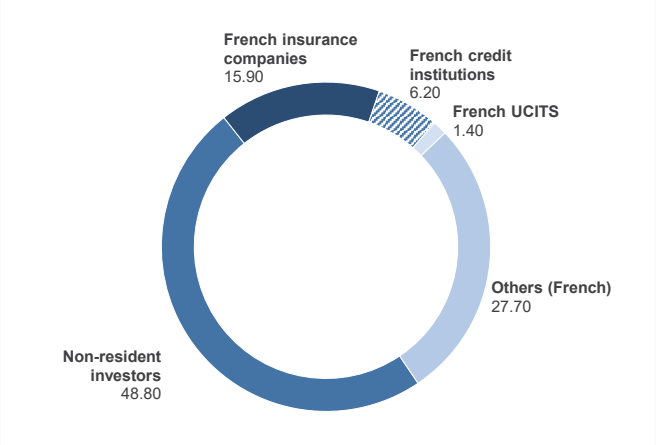
(*) figures quarterly revised

(**) figures annually revised

Source: Banque de France

NEGOTIABLE GOVERNMENT DEBT BY GROUP OF HOLDERS IN THIRD QUARTER OF 2021

STRUCTURE IN % EXPRESSED IN MARKET VALUE



Source: Banque de France

NEGOTIABLE GOVERNMENT DEBT AT 31 DECEMBER 2021

IN EUROS

Total medium- and long-term debt	1,989,742,254,026
Total stripping activity	58,572,980,500
Average maturity	9 years and 20 days
Total short-term debt	155,379,000,000
Average maturity	110 days
Total outstanding	2,145,121,254,026
Average maturity	8 years and 153 days

Source: Agence France Trésor

NEGOTIABLE GOVERNMENT DEBT SINCE 2018 AT 31 DECEMBER 2021

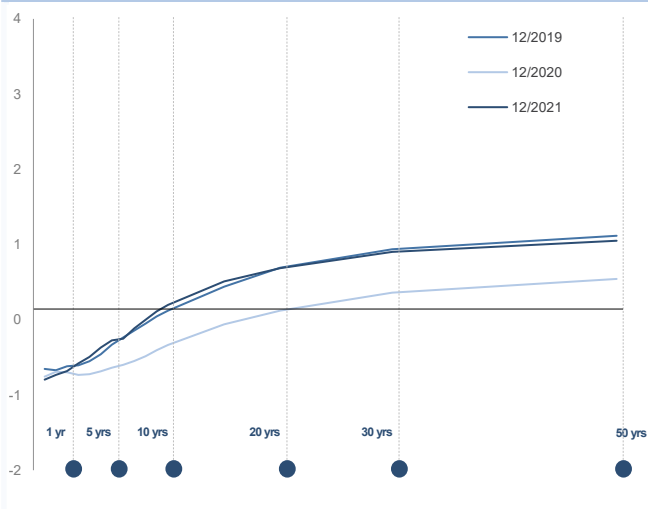
IN € BILLION

	End 2018	End 2019	End 2020	End Nov. 2021	End Dec. 2021
Negotiable government debt outstanding	1,756	1,823	2,001	2,151	2,145
<i>of which index-linked securities</i>	<i>220</i>	<i>226</i>	<i>220</i>	<i>235</i>	<i>236</i>
Medium- and long-term	1,644	1,716	1,839	1,985	1,990
Short-term	113	107	162	166	155
Average maturity of the negotiable debt	7 years	8 years	8 years	8 years	8 years
	336 days	63 days	73 days	160 days	153 days

Source: Agence France Trésor

YIELD CURVE FOR FRENCH GOVERNMENT SECURITIES

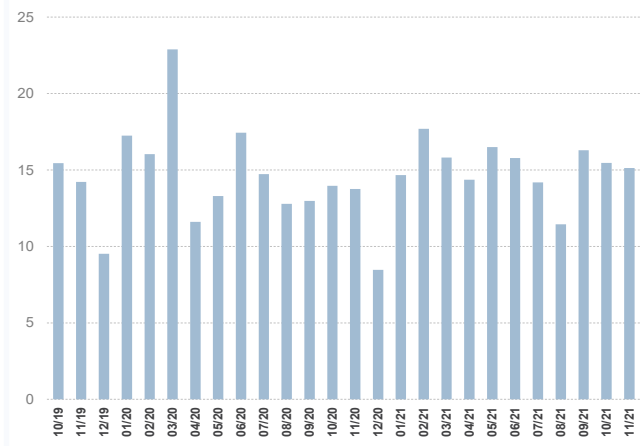
END-OF-MONTH VALUE, %



Source: Bloomberg

AVERAGE DAILY VOLUME OF MEDIUM- AND LONG-TERM TRANSACTIONS

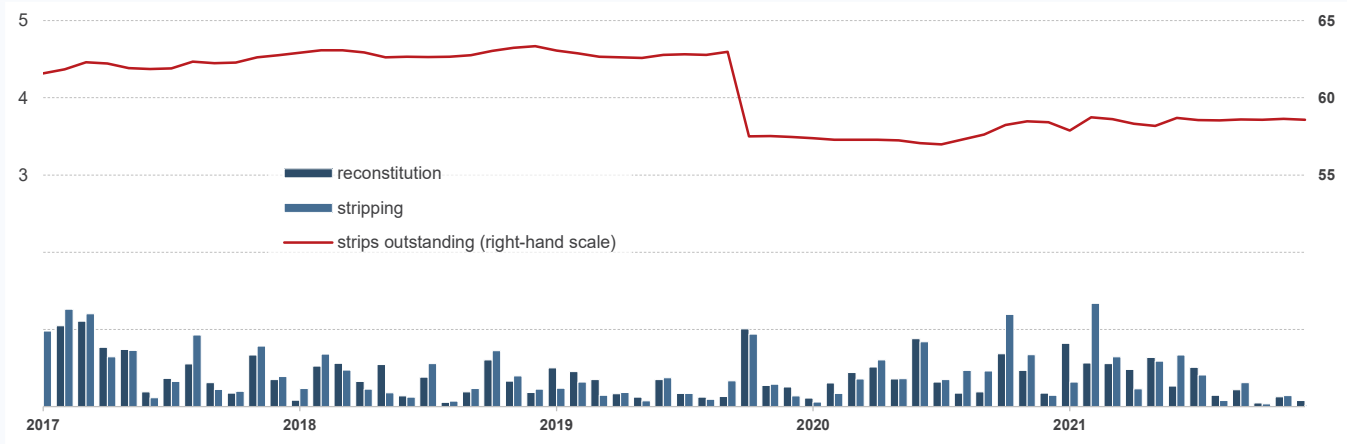
IN € BILLION



Source: reporting by primary dealers in government securities, excluding flows arising from the Eurosystem public sector purchase programme

TOTAL STRIPPING AND RECONSTITUTION

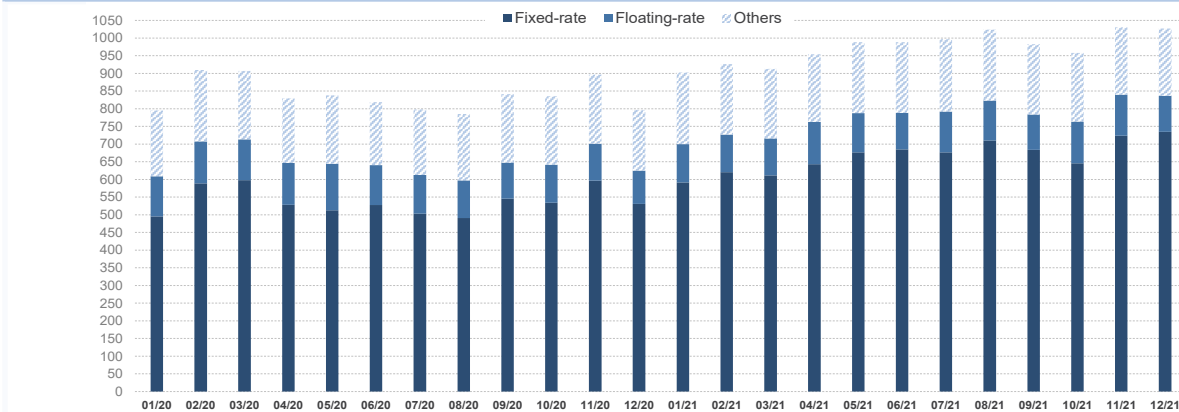
IN € BILLION



Source: Euroclear

PRIMARY DEALERS, CUMULATED REPO OUTSTANDING AT END OF MONTH

IN € BILLION



Source: reporting by primary dealers in government securities

SHORT-TERM DEBT AT 30 DECEMBER 2021

ISIN 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

MEDIUM- AND LONG-TERM DEBT (MATURING 2022-2024) AT 31 DECEMBER 2021

ISIN Code	Bond	Outstanding(€)	Ind. Coeff.	Face value(€)	Stripped(€)	CAC*
Maturity 2022		144,322,325,560				
FR0013398583	OAT 0.00% 25 February 2022	14,541,000,000			0	x
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	x
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	
Maturity 2023		173,788,600,703				
FR0013479102	OAT 0.00% 25 February 2023	12,027,000,000			0	x
FR0013283686	OAT 0.00% 25 March 2023	39,461,500,000			0	x
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	x
FR0010585901	OATi 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	
Maturity 2024		170,488,477,680				
FR0014001N46	OAT 0.00% 25 February 2024	31,676,000,000			0	x
FR0013344751	OAT 0.00% 25 March 2024	42,533,000,000			0	x
FR0011619436	OAT 2.25% 25 May 2024	37,948,000,000			0	x
FR0011427848	OAT€i 0.25% 25 July 2024	19,795,477,680 (1)	1.10472	17,919,000,000	0	x
FR0011962398	OAT 1.75% 25 November 2024	38,536,000,000			42,000,000	x

(1) face value x indexation coefficient (face value if coefficient < 1)

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

MEDIUM- AND LONG-TERM DEBT (MATURING IN 2025 AND BEYOND) AT 31 DECEMBER 2021

ISIN Code	Bond	Outstanding(€)	Ind. Coeff.	Face value(€)	Stripped(€)	CAC*
Maturity 2025		172,652,753,318				
FR0012558310	OATi 0.10% 1 March 2025	12,931,825,200 (1)	1.06540	12,138,000,000	0	x
FR0013415627	OAT 0.00% 25 March 2025	47,814,000,000			0	x
FR0012517027	OAT 0.50% 25 May 2025	43,331,000,000			0	x
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	x
Maturity 2026		181,356,826,550				
FR0013508470	OAT 0.00% 25 February 2026	41,396,000,000			0	x
FR0013519253	OAT€i 0.10% 1 March 2026	11,488,826,550 (1)	1.03643	11,085,000,000	0	x
FR0010916924	OAT 3.50% 25 April 2026	44,202,000,000			0	
FR0013131877	OAT 0.50% 25 May 2026	44,743,000,000			0	x
FR0013200813	OAT 0.25% 25 November 2026	39,527,000,000			0	x
Maturity 2027		135,844,346,400				
FR0014003513	OAT 0.00% 25 February 2027	18,332,000,000			0	x
FR0013250560	OAT 1.00% 25 May 2027	38,814,000,000			0	x
FR0011008705	OAT€i 1.85% 25 July 2027	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	
Maturity 2028		111,857,545,897				
FR0013238268	OATi 0.10% 1 March 2028	14,729,148,240 (1)	1.06363	13,848,000,000	0	x
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	x
FR0013341682	OAT 0.75% 25 November 2028	47,717,000,000			0	x
Maturity 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	x
FR0000571218	OAT 5.50% 25 April 2029	39,618,880,458			2,281,946,100	
FR0013407236	OAT 0.50% 25 May 2029	45,491,000,000			0	x
FR0000186413	OATi 3.40% 25 July 2029	12,239,204,380 (1)	1.33250	9,185,144,000	0	
FR0013451507	OAT 0.00% 25 November 2029	42,700,000,000			0	x
Maturity 2030		121,957,012,960				
FR0011883966	OAT 2.50% 25 May 2030	54,855,000,000			0	x
FR0011982776	OAT€i 0.70% 25 July 2030	18,792,012,960 (1)	1.09053	17,232,000,000	0	x
FR0013516549	OAT 0.00% 25 November 2030	48,310,000,000			0	x
Maturity 2031		104,354,238,040				
FR0012993103	OAT 1.50% 25 May 2031	53,267,000,000			58,900,000	x
FR0014001N38	OAT€i 0.10% 25 July 2031	5,191,238,040 (1)	1.03804	5,001,000,000	0	x
FR0014002WK3	OAT 0.00% 25 November 2031	45,896,000,000			0	x
Maturity in 2032 and beyond		522,711,951,150				
FR0014003N51	OATi 0.10% 1 March 2032	2,950,184,640 (1)	1.02224	2,886,000,000	0	x
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	
FR0013313582	OAT 1.25% 25 May 2034	38,746,000,000			0	x
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	x
FR0013154044	OAT 1.25% 25 May 2036	41,823,000,000			100,000	x
FR0013327491	OAT€i 0.10% 25 July 2036	10,239,567,990 (1)	1.06963	9,573,000,000	0	x
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	x
FR0013515806	OAT 0.50% 25 May 2040	20,536,000,000			0	x
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	x
FR0011461037	OAT 3.25% 25 May 2045	27,260,000,000			706,510,000	x
FR0013209871	OAT€i 0.10% 25 July 2047	13,891,778,620 (1)	1.08538	12,799,000,000	0	x
FR0013257524	OAT 2.00% 25 May 2048	28,759,000,000			586,300,000	x
FR0013404969	OAT 1.50% 25 May 2050	33,195,000,000			191,900,000	x
FR0013480613	OAT 0.75% 25 May 2052	30,529,000,000			678,100,000	x
FR0014004J31	OAT 0.75% 25 May 2053	9,199,000,000			10,000,000	x
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	x
FR0014001NN8	OAT 0.50% 25 May 2072	8,537,000,000			30,400,000	x

[1] Face value x indexation coefficient (face value if coefficient < 1)

[2] Revised on 28 March 2021; not open to subscription

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



AGENCE
FRANCE TRÉSOR

MOST RECENT ECONOMIC INDICATORS

Industrial output, year-on-year	-0.2%	Nov. 2021
Household consumption*, year-on-year	-5.9%	Dec. 2021
Unemployment rate (ILO)	8.1%	Q3-2021
Consumer prices, year-on-year		
• all items	2.8%	Dec. 2021
• all items excluding tobacco	2.8%	Dec. 2021
Trade balance, fob-fob, sa (€bn)	-€9.7bn	Nov. 2021
" "	-€7.7bn	Oct. 2021
Current account balance, sa (€bn)	-€3.6bn	Nov. 2021
" "	-€2.5bn	Oct. 2021
10-year constant maturity rate (TEC10)	0.32%	31 Jan. 2022
3-month interest rate (Euribor)	-0.55%	31 Jan. 2022
EUR / USD	1.12	31 Jan. 2022
EUR / JPY	129.03	31 Jan. 2022

* manufactured products

Sources: Insee, Minefi, Banque de France

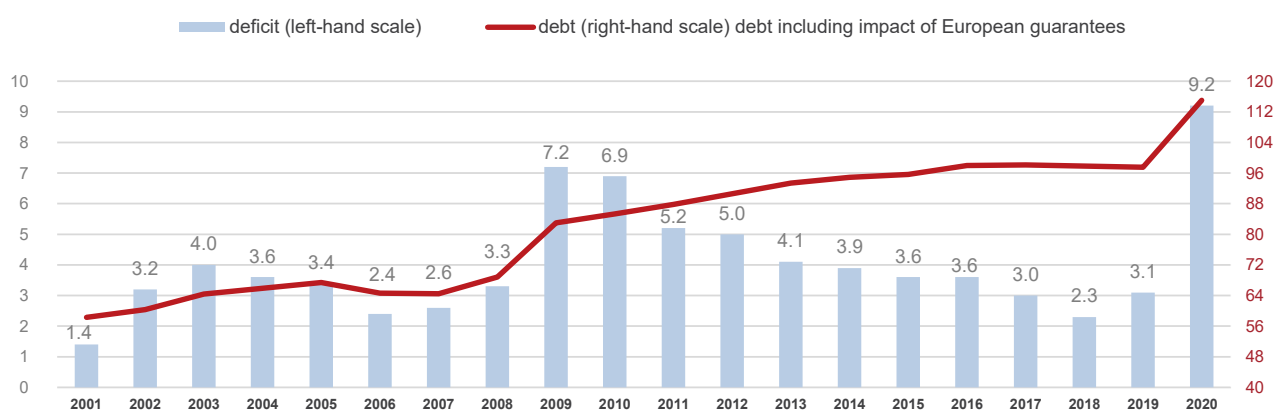
MONTHLY GOVERNMENT BUDGET POSITION

	IN € BILLION				
	2019	2020	end of November level		
	2019	2020	2019	2020	2021
General budget balance	-96.91	-172.68	-109.72	-171.38	-175.13
Revenue	301.07	282.69	256.39	238.95	272.13
Expenditure	397.98	455.37	366.11	410.33	447.26
Balance of special Treasury accounts	4.06	-5.42	-4.21	-5.46	-5.89
General budget outturn	-92.69	-178.10	-113.93	-176.85	-181.02

Source: Ministry of the Economy, Finance and the Recovery

PUBLIC FINANCES: DEFICIT AND DEBT

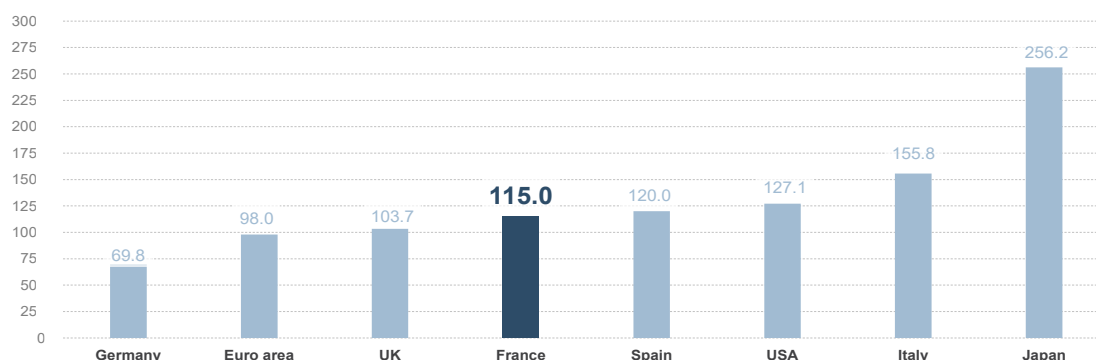
AS % OF GDP




Source: Insee

GENERAL GOVERNMENT DEBT IN 2020


AS % OF GDP



Sources: Eurostat, IMF, Insee

FEBRUARY 2022 

4 Industrial production: December index	8 Balance of payments in December	8 Foreign trade by value in December	15 Net international reserves in January	18 Consumer prices: January index (final)	23 Monthly business survey (goods-producing industries) in February
23 Consumer confidence survey: February survey	23 Inflation (HICP): January index	25 Quarterly national accounts: final results Q4-2021	25 Industrial producer and import price: January index	25 Consumer prices: February index (preliminary results)	25 Household consumption expenditure on goods in January

MARCH 2022 

4 Industrial production: January index	14 Balance of payments in January	14 Foreign trade by value in January	15 Net international reserves in February	15 Consumer prices: February index (final)	17 Inflation (HICP): February index
24 Monthly business survey (goods-producing industries) in March	29 Consumer confidence survey: March survey	31 Consumer prices: March index (preliminary results)	31 Household consumption expenditure on goods in February	31 Industrial producer and import price: February index	31 Debt of the general government according to Maastricht - Q1 2022

Sources: Insee, Eurostat

Publication director: Cyril Rousseau
 Editor: Agence France Trésor
 Available in English, French, and also in Japanese, Russian, Spanish, Arabic, Chinese on request

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