S&P Global
Ratings

RatingsDirect®

Credit Trends:

European Refinancing Study--€3.5 Trillion Of Rated Companies' Debt Is Scheduled To Mature By End-2023

February 7, 2019

Key Takeaways

- We expect €3.5 trillion of European financial and nonfinancial corporate debt we rate to mature between 2019 and the end of 2023.
- Financial companies account for 53% (€1.9 trillion) of this debt, and we rate 87% (€3.1 trillion) of the debt in the investment-grade category.
- Issuance of companies' debt that we rate was down more than 15% year on year in 2018, to a seven-year low.

GLOBAL FIXED INCOME RESEARCH

Diane Vazza
New York
(1) 212-438-2760
diane.vazza@spglobal.com

Andrew H South
London
(44) 20-7176-3712
andrew.south@spglobal.com

Evan M Gunter
New York
(1) 212-438-6412
evan.gunter@spglobal.com

RESEARCH CONTRIBUTOR

Abhik P Debnath
Mumbai
Abhik.Debnath@spglobal.com

S&P Global Fixed Income Research expects €3.5 trillion of the European financial and nonfinancial corporate debt that it rates to mature between 2019 and the end of 2023. This represents nearly 40% of the €9.2 trillion maturing globally. Of the European total, about €650 billion is scheduled to mature in 2019, and the overall median remaining term of debt we rate is about five years.

Credit conditions in Europe will likely become more challenging, with this trend already in motion for speculative-grade companies. Although bank lending terms remain loose in aggregate, loan margins are rising for riskier borrowers. As the European Central Bank (ECB) has slowed its asset purchase programs, lenders have reappraised risk pricing, and corporate bond spreads have widened substantially.

Financial companies account for 53% (€1.9 trillion) of European corporate debt maturing until year-end 2023, and 87% (€3.1 trillion) of the debt carries investment-grade ratings, that is, 'BBB-' or higher (see table 1). Nonetheless, the amount of maturing debt at the lowest rating levels remains significant. About €85 billion of debt that we rate 'B-' and lower will mature through 2023, in addition to unrated leveraged loan debt in the region that is not included in the data for this study. Issuers with lower credit quality may have less financial flexibility and may therefore be more susceptible to market volatility.

Signs That Credit Conditions Are Becoming More Difficult

On some measures, conditions for bank lending to European corporates remain benign. The ECB appears committed to maintaining favorable liquidity conditions over the long term, providing full allotment in its short-term and three-month refinancing operations, for example. While banks' borrowings under the ECB's extraordinary targeted longer-term refinancing operations (TLTROs) are set to mature from mid-2020, it's possible that the ECB could develop a new scheme to offer term funding if some banks (for example in Italy) would otherwise struggle to refinance. For now, strong competition among banks is ensuring that lending terms and conditions remain borrower-friendly. Indeed, according to the ECB's regular bank lending survey, credit conditions for corporates have still been on a net loosening trend recently, which supports corporate fundraising and refinancing of existing debt.

However, the end of net purchases under the ECB's quantitative easing program at the end of 2018 coincided with a global repricing of risk in financial markets that has particularly affected speculative-grade issuers. Some aggregate measures of speculative-grade corporate spreads have recently widened at a pace not seen in almost three years.

Turning to the macroeconomic picture, eurozone growth is decelerating, albeit from a 10-year high of 2.5% in 2017. In our most recent forecast update, we reduced our eurozone growth projection for 2019 to 1.6% (see "Economic Research: The ECB's New Normal And How We Might Get There," published on Nov. 29, 2018). We expect stronger relative performance in Spain (2.3%) and The Netherlands (1.9%), while Italy (0.7%) lags significantly behind. However, risks to growth are tilted to the downside. In particular, the eventual outcome of the U.K.'s Brexit process could have a significant bearing on economic prospects, with a "no-deal" scenario likely to be highly disruptive for trade and businesses. As a base case, we expect that U.K. economic growth will be 1.3% in 2019, although this is contingent on a deal being struck with the EU (see our related research, "Countdown To Brexit: No Deal Moving Into Sight," published Oct. 30, 2018). Through 2019 there are further risks related to tensions over the Italian budget and trade relations between the U.S. and the EU.

Table 1

European Companies' Debt Maturities

(Bil. €)	2019	2020	2021	2022	2023	Total
Financial companies	382.2	399.6	359.8	396.7	349.3	1,887.7
Investment-grade	378.4	393.5	351.8	385.1	336.2	1,845.1
Speculative-grade	3.9	6.1	8.0	11.6	13.1	42.6
Nonfinancial companies	270.3	343.9	323.5	378.3	329.3	1,645.3
Investment-grade	234.4	285.9	254.1	255.5	201.2	1,231.0
Speculative-grade	36.0	58.0	69.5	122.7	128.1	414.3
Total investment-grade	612.7	679.4	605.9	640.6	537.4	3,076.1
Total speculative-grade	39.8	64.1	77.5	134.3	141.2	457.0
Total	652.6	743.5	683.4	775.0	678.6	3,533.0

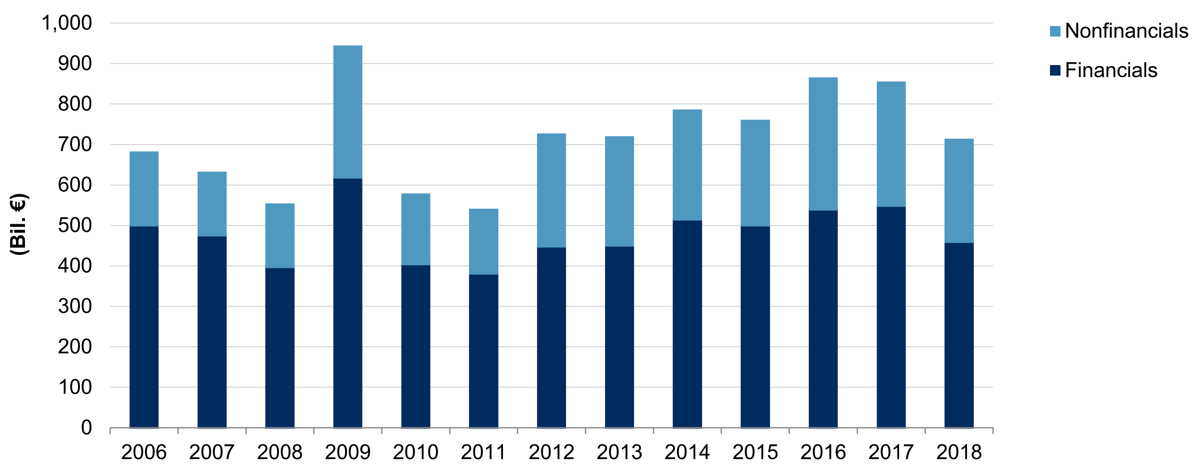
Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

European Corporate Debt Issuance Stalls

In 2018, European companies' debt issuance that we rated totaled €712 billion, down 17% year on year (see chart 1).

Chart 1

European Companies' New Debt Issuance



Only includes debt rated by S&P Global Ratings. Source: S&P Global Fixed Income Research and Thomson Financial.

Among nonfinancial companies, issuance was close to multi-year highs in 2017, but volumes for 2018 were down 17% year on year at €253 billion. Investment-grade companies benefitted from the ECB's corporate bond-buying program, which has recorded nearly €180 billion of net purchases since it began in mid-2016. However, the ECB stopped net purchases under its quantitative easing program at the end of 2018. Spreads generally widened across all credit markets throughout 2018 as the end of QE loomed, with more significant volatility in the fourth quarter.

In 2017, new debt issuance by financial companies, including banks, was at its highest since 2009, but volumes for 2018 were down by 16% on year at €459 billion.

While investment-grade issuance constitutes more than 85% of the outstanding rated debt issuance we cover in this study, annual new issuance of speculative-grade debt had picked up strongly in Europe since 2012, with 2017 volumes reaching a record of €155 billion. However, the issuance slowdown in 2018 was most pronounced for speculative-grade debt.

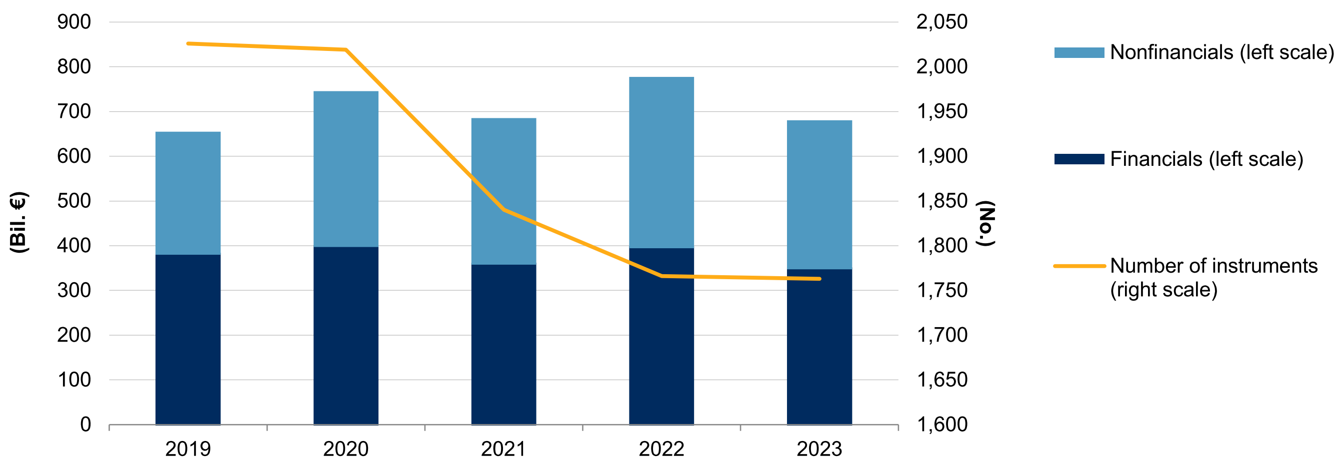
Most Maturing Debt Is Rated Investment-Grade

We expect €3.5 trillion of European financial and nonfinancial corporate debt we rate to mature between 2019 and the end of 2023 (see chart 2). Of this total, €653 billion is due in 2019, €744 billion in 2020, €683 billion in 2021, €775 billion in 2022, and €679 billion in 2023.

Investment-grade debt accounts for 87% of the total (or €3.1 trillion), and financial companies issued about 60% of this (or €1.8 trillion). By contrast, nonfinancial corporate issuers account for more than 90% of the €457 billion of speculative-grade debt that will mature by year-end 2023.

Chart 2

European Companies' Debt Maturities
By sector

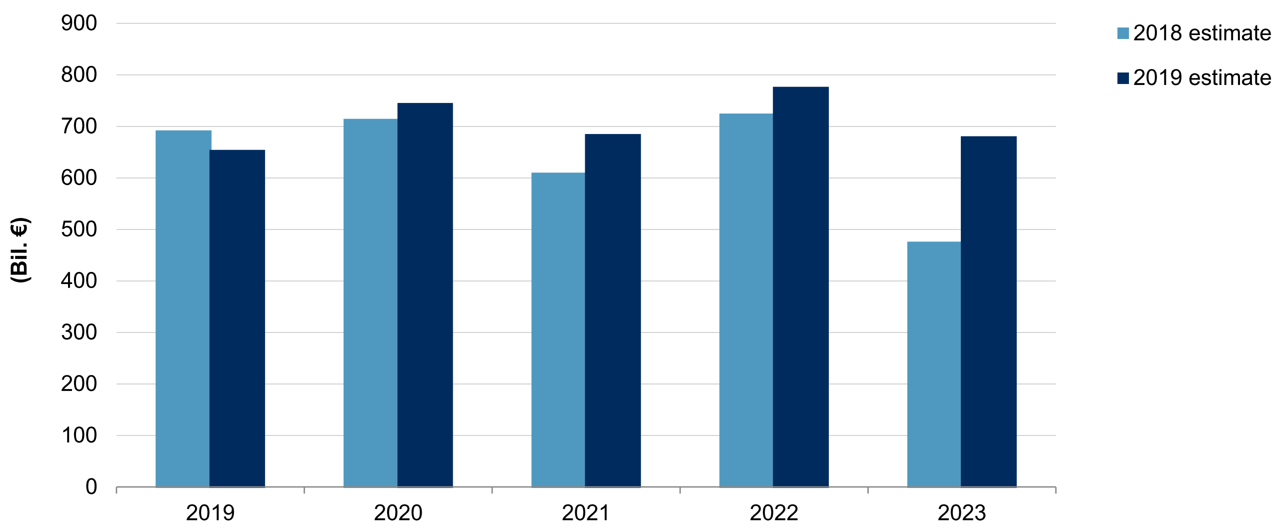


Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

The €3.5 trillion of rated European corporate debt set to mature over the following five years marks a 6% decrease from our study at the beginning of 2018. Within the next five years of scheduled redemptions though, the maturity profile has remained relatively constant. On an absolute basis, the volume of maturities in 2023 has risen more than 40% to €679 billion from €474 billion in our study a year ago (see chart 3).

Chart 3

European Companies' Debt Maturities
By estimate date

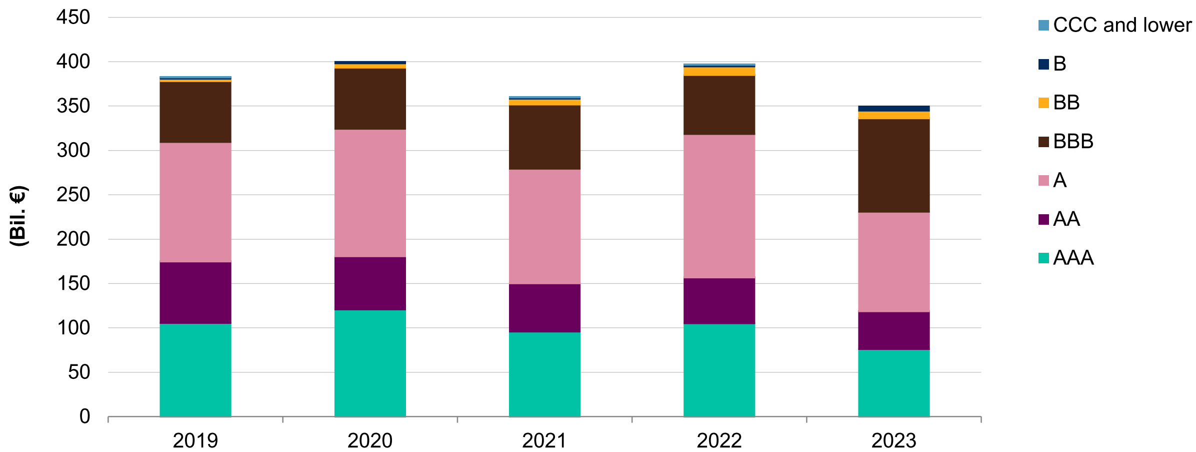


2018 and 2019 estimates as of Jan. 1 for each year. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate on the estimate date. Source: S&P Global Fixed Income Research.

Of the €1.9 trillion in financial corporate debt that matures through 2023, nearly all (98%) is investment grade, with the largest concentration of about €682 billion rated in the 'A' category (see chart 4). While there are only a handful of European financial companies with issuer credit ratings as high as 'AAA', there remain significant volumes of 'AAA' rated debt outstanding. This is because our data include some covered bonds, which we may rate several notches higher than the issuers.

Chart 4

European Financial Companies' Debt Maturities
By rating category



Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

Among Nonfinancials, The Oil And Gas Sector Has Most Debt Maturing By End-2023

European nonfinancial companies have about €1.6 trillion in debt that we rate maturing through 2023. The nonfinancial sectors that account for the largest volumes of maturing debt over that period are oil and gas (€248 billion), consumer products (€219 billion), and telecommunications (€192 billion) (see table 2). The nonfinancial sectors that have the largest proportions of total rated debt maturing in the next five years include capital-intensive industries such as the automotive and metals, mining, and steel sectors, where about 70% of debt matures before year-end 2023.

Table 2

Nonfinancial Companies' Debt Maturities

By sector

(Bil. €)	2019	2020	2021	2022	2023	Total
Aerospace & Defense	5.0	1.4	2.2	1.6	4.9	15.1
Automotive	33.4	48.9	45.8	22.7	18.7	169.5
Capital Goods	14.2	11.4	14.7	14.8	12.9	67.9
Consumer Products	24.9	55.9	46.4	48.9	43.1	219.2
CP & ES	7.2	13.7	14.8	18.7	19.9	74.2
FP & BM	7.7	6.8	8.2	9.3	6.3	38.2

Table 2

Nonfinancial Companies' Debt Maturities (cont.)

By sector

(Bil. €)	2019	2020	2021	2022	2023	Total
Health Care	27.3	33.4	29.1	45.4	37.1	172.3
High Technology	4.9	7.4	6.9	15.0	12.1	46.2
Homebuilders/Real Estate Co.	8.2	7.6	9.6	14.2	8.9	48.5
Media & Entertainment	8.8	11.6	11.8	24.1	25.0	81.2
Metals, Mining & Steel	13.7	12.7	11.2	8.6	5.6	51.8
Oil & Gas	46.4	59.8	42.9	55.2	41.4	245.7
Retail/Restaurants	11.6	4.9	6.7	16.3	10.5	49.9
Telecommunications	28.1	35.9	34.5	48.7	44.6	191.8
Transportation	12.6	13.5	19.0	19.0	19.4	83.5
Utility	16.7	19.1	19.7	15.7	18.9	90.1
Total	270.3	343.9	323.5	378.3	329.3	1,645.3

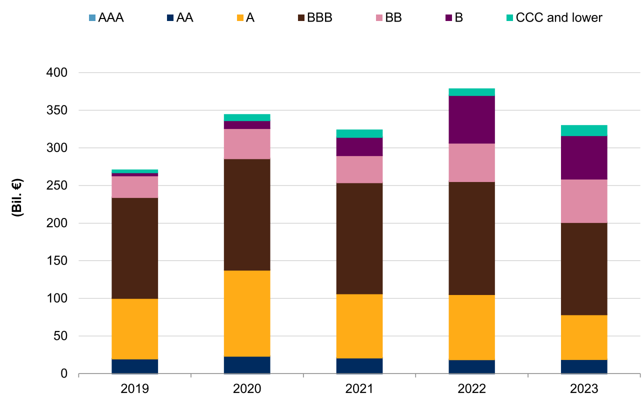
CP & ES--Chemicals, packaging, and environmental services. FP & BM--Forest products and building materials. Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

The 'A' and 'BBB' rating categories account for most of the maturing debt among nonfinancial issuers, with a combined balance of about €1.1 trillion of the €1.6 trillion total (see chart 5).

About 26% of nonfinancial companies' debt that we include in this study, and which matures by end-2023, is in the form of loans or revolving credit facilities, rather than bonds (see chart 6). Nonfinancial companies' loan maturities have an initial peak in 2020 and a median remaining term of 4.3 years. By contrast, these companies' bond maturities are longer, with the first peak in 2022 and a median of 5.1 years.

Chart 5

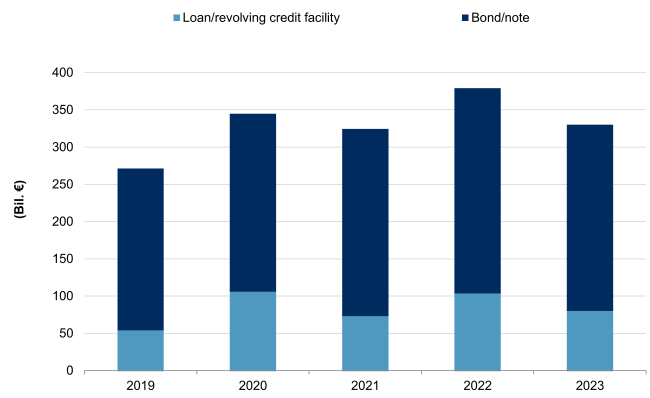
European Nonfinancial Companies' Debt Maturities
By rating category



Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

Chart 6

European Nonfinancial Companies' Debt Maturities
By debt type



Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

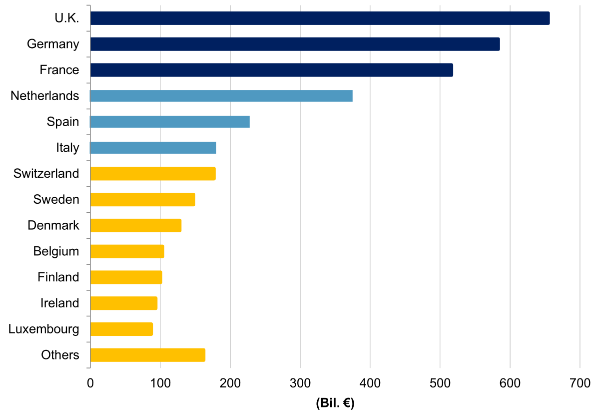
Entities in the U.K., Germany, and France issued half of the approximately €3.5 trillion of debt maturing through year-end 2023. Dutch, Spanish, and Italian entities accounted for an additional 22% of the total (see chart 7).

In the financial sector, issuers in the U.K., Germany, France, The Netherlands, Spain, Denmark, and Sweden accounted for nearly 80% (or €1.5 trillion) of the €1.9 trillion of debt maturing by year-end 2023. Among nonfinancial issuers, companies from the U.K., Germany, France, The Netherlands, Italy, and Spain accounted for €1.2 trillion (73%) of the €1.6 trillion in debt maturing through year-end 2023.

The five financial parent issuers with the most debt maturing through 2023 were Danske Bank A/S, FMS Wertmanagement Anstalt des oeffentlichen Rechts, Cooperatieve Rabobank U.A., Banco Santander S.A., and Barclays PLC. The five nonfinancial parent issuers with the most debt maturing through 2023 were Daimler AG, Anheuser-Busch InBev S.A./N.V., Volkswagen AG, Deutsche Telekom AG, and British American Tobacco PLC.

Chart 7

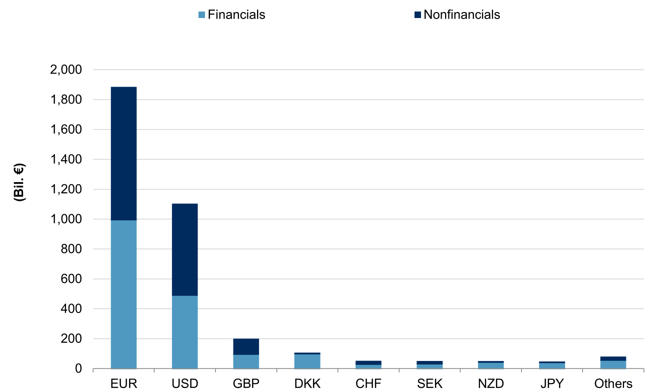
European Companies' Debt Maturities, 2019-2023
By country



Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Countries based on domicile of parent. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

Chart 8

European Companies' Debt Maturities, 2019-2023
By currency and sector

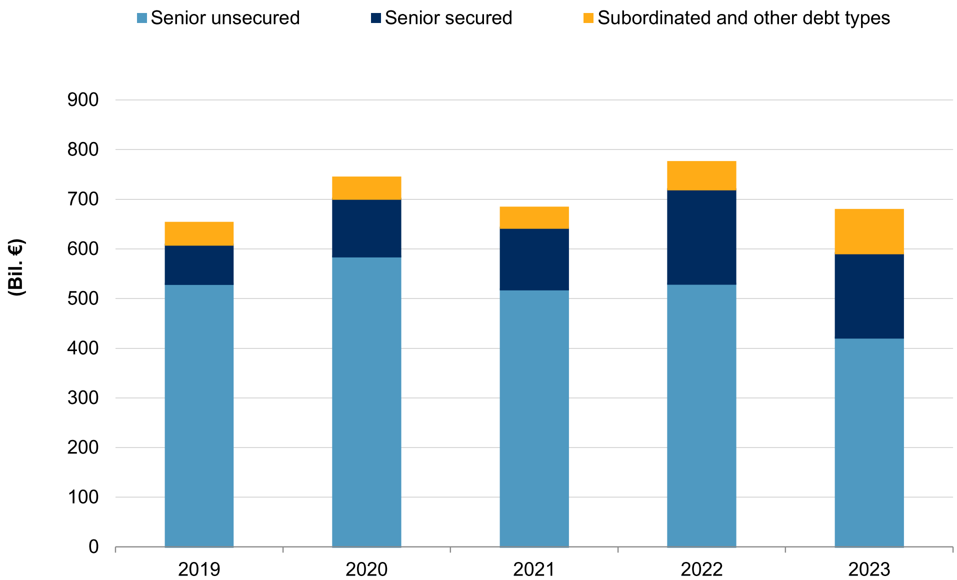


Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

By currency, of the €3.5 trillion in debt scheduled to mature by year-end 2023, approximately €1.9 trillion is denominated in euros, and €1.1 trillion is denominated in U.S. dollars, which, combined, account for 84% of the total (see chart 8). About 73% of the debt maturing through year-end 2023 is senior unsecured debt, 19% is senior secured debt, and the remainder is subordinated debt or other debt types (see chart 9).

Chart 9

European Companies' Debt Maturities
By debt seniority



Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

Related Research

- Global Refinancing Study--Rated Corporate Debt Maturing Through 2023 Nears $11 Trillion, Feb. 5, 2019
- Credit Conditions: Global Conditions Are Tightening As Trade And Economic Worries Mount, Dec. 5, 2018
- Economic Research: The ECB's New Normal And How We Might Get There, Nov. 29, 2018

Appendix 1: Detailed Data Tables

Table 3

European Companies' Debt Maturities

By rating grade, maturity year, sector, and country

	Investment-grade					Speculative-grade				
(Bil. €)	**2019**	**2020**	**2021**	**2022**	**2023**	**2019**	**2020**	**2021**	**2022**	**2023**
Financials	378	394	352	385	336	4	6	8	12	13
Belgium	11	10	9	12	8	0	0	0	0	0
Denmark	18	26	27	23	20	0	0	0	0	0
France	47	50	45	58	64	0	0	0	0	1
Germany	78	68	54	32	33	0	1	0	0	0
Ireland	2	2	2	2	5	0	0	0	0	0
Italy	21	14	10	16	13	2	3	2	2	5
Luxembourg	0	1	1	1	1	0	1	1	1	2
Netherlands	57	52	48	56	43	0	0	0	0	0
Norway	11	8	11	9	9	0	0	0	0	0
Spain	24	24	23	37	34	0	0	0	0	0
Sweden	22	26	27	21	14	0	0	0	2	0
Switzerland	22	29	13	18	22	0	0	0	0	1
U.K.	51	59	65	72	53	1	0	4	5	4
Others	15	26	16	29	16	1	0	1	0	0
Nonfinancials	234	286	254	256	201	36	58	69	123	128
Belgium	2	16	17	9	8	0	0	1	0	0
Denmark	3	2	4	2	0	0	1	0	1	2
France	46	47	37	43	33	4	5	8	12	16
Germany	48	68	62	50	37	8	6	11	18	10
Ireland	7	16	6	17	7	2	3	3	9	9
Italy	11	9	9	20	16	3	5	3	5	10
Luxembourg	4	3	6	5	5	0	4	10	19	22
Netherlands	16	9	19	12	10	3	7	7	15	20
Norway	3	7	4	2	3	0	0	0	0	0
Spain	12	23	12	12	11	0	1	2	3	6
Sweden	7	6	5	5	2	0	1	3	4	3
Switzerland	13	9	17	14	10	1	1	2	1	3
U.K.	47	52	43	55	50	10	14	17	30	21
Others	15	18	13	9	10	3	9	4	5	5
Total	613	679	606	641	537	40	64	78	134	141

Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate on close of business on Jan. 1, 2019. Countries based on domicile of parent. Source: S&P Global Fixed Income Research.

Table 4

European Companies' Debt Maturities

By rating grade, maturity year, and detailed sector

	Investment-grade					Speculative-grade				
(Bil. €)	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Financials	378	394	352	385	336	4	6	8	12	13
Financial Institutions	373	386	348	378	328	4	6	8	11	13
Insurance	5	7	3	7	8	0	1	0	0	0
Nonfinancials	234	286	254	256	201	36	58	69	123	128
Aerospace & Defense	4	1	1	1	4	1	0	1	1	1
Automotive	32	44	40	15	15	1	5	6	8	4
Capital Goods	12	8	11	11	8	2	4	4	4	5
Consumer Products	25	51	41	42	29	0	5	6	7	14
CP & ES	7	6	8	10	5	0	8	7	9	15
FP & BM	6	7	7	8	4	1	0	1	2	2
Health Care	21	29	24	31	24	7	5	5	14	13
High Technology	2	3	3	7	3	3	4	4	8	9
Homebuilders/Real Estate Co.	8	7	9	13	8	0	0	1	1	1
Media & Entertainment	7	7	7	5	11	2	5	5	19	14
Metals, Mining & Steel	12	12	9	6	4	2	1	2	3	2
Oil & Gas	45	52	35	49	33	2	8	8	7	8
Retail/Restaurants	4	2	4	7	3	7	3	3	10	8
Telecommunications	23	26	22	24	19	6	10	12	25	25
Transportation	12	13	16	15	15	0	0	3	4	5
Utility	15	18	18	14	17	1	1	2	2	2
Total	613	679	606	641	537	40	64	78	134	141

CP & ES--Chemicals, packaging, and environmental services. FP & BM--Forest products and building materials. Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

Table 5

European Companies' Debt Maturities, 2019-2023

By rating grade, detailed sector, and country

(Bil. €)	Belgium	France	Germany	Italy	Netherlands	Spain	Sweden	Switzerland	U.K.	Others	Total
Investment-grade	102	469	529	137	322	214	135	168	547	453	3,076
All IG Financials	50	264	264	73	256	143	110	105	301	281	1,845
Financial Institutions	50	261	258	73	252	143	110	96	293	278	1,813
Insurance	0	2	6	0	3	0	0	9	8	4	32
All IG Nonfinancials	52	206	265	64	66	70	25	63	247	171	1,231

Table 5

European Companies' Debt Maturities, 2019-2023 (cont.)

By rating grade, detailed sector, and country

(Bil. €)	Belgium	France	Germany	Italy	Netherlands	Spain	Sweden	Switzerland	U.K.	Others	Total
Aerospace & Defense	0	1	0	0	4	0	0	0	6	0	12
Automotive	0	5	129	0	3	0	7	0	1	0	145
Capital Goods	0	3	13	0	5	3	4	7	2	13	49
Consumer Products	49	23	3	0	4	1	3	16	81	6	187
CP & ES	1	7	16	0	9	0	0	2	1	1	35
FP & BM	0	6	7	1	0	0	0	12	1	6	32
Health Care	0	14	38	0	7	0	1	21	15	33	129
High Technology	0	4	7	0	5	0	0	1	1	0	18
Homebuilders/Real Estate Co.	0	20	9	0	1	4	3	0	1	9	45
Media & Entertainment	0	11	1	0	1	3	0	0	19	1	36
Metals, Mining & Steel	0	0	0	0	0	0	0	0	11	32	42
Oil & Gas	0	48	9	33	2	22	2	0	59	39	213
Retail/Restaurants	0	13	3	1	1	0	0	0	2	0	19
Telecommunications	1	18	21	0	4	24	4	3	28	11	113
Transportation	0	16	9	13	13	4	0	1	3	13	71
Utility	1	16	2	18	8	10	1	0	18	9	83
Speculative-grade	2	47	54	41	52	13	12	9	107	119	457
All SG Financials	0	1	1	14	0	1	2	1	15	7	43
Financial Institutions	0	1	1	14	0	1	2	1	15	7	42
Insurance	0	0	0	0	0	0	0	0	0	0	1
All SG Nonfinancials	1	46	53	27	52	13	10	8	93	112	414
Aerospace & Defense	0	0	1	2	0	0	0	0	0	0	3
Automotive	0	3	2	0	13	2	0	0	4	1	25
Capital Goods	0	3	8	0	2	0	1	0	2	2	19
Consumer Products	1	9	2	1	9	2	0	0	6	3	32
CP & ES	0	2	3	0	2	0	1	1	1	29	39
FP & BM	0	2	0	0	0	0	0	0	1	2	6
Health Care	0	5	9	0	2	3	0	0	5	19	44
High Technology	0	3	0	0	3	0	6	0	6	11	28
Homebuilders/Real Estate Co.	0	0	1	0	0	0	0	0	1	1	3
Media & Entertainment	0	4	6	1	2	3	0	0	24	5	45

Table 5

European Companies' Debt Maturities, 2019-2023 (cont.)

By rating grade, detailed sector, and country

(Bil. €)	Belgium	France	Germany	Italy	Netherlands	Spain	Sweden	Switzerland	U.K.	Others	Total
Metals, Mining & Steel	0	0	0	0	1	1	0	0	4	3	9
Oil & Gas	0	5	1	5	1	0	1	4	9	7	32
Retail/Restaurants	0	7	4	0	2	1	0	1	13	2	30
Telecommunications	0	1	16	17	11	2	0	0	15	17	79
Transportation	0	1	0	1	2	0	0	1	0	5	12
Utility	0	1	0	0	1	0	0	0	2	4	7
Total	103	516	583	179	374	227	148	177	655	572	3,533

CP & ES--Chemicals, packaging, and environmental services. FP & BM--Forest products and building materials. Countries based on domicile of parent. Data as of Jan. 1, 2019. Includes bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Debt denominated in other currencies is converted to euros at the exchange rate at close of business on Jan. 1, 2019. Source: S&P Global Fixed Income Research.

Appendix 2: Data Approach

In this article, we investigate the potential refinancing needs of European financial and nonfinancial companies by analyzing the scheduled maturities of debt rated by S&P Global Ratings.

We include the rated debt of all European companies and their foreign subsidiaries. This report covers debt from companies incorporated in Austria, Belgium, the British Virgin Islands, Bulgaria, the Channel Islands, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, the Isle of Man, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Montenegro, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the U.K.

We count debt regardless of the currency or market in which the debt was issued. For the data on maturing debt, we converted any debt that was not denominated in euros into euro-equivalent figures based on the end-of-day exchange rates on Jan. 1, 2019 (except for chart 3, where data from previous studies was converted at the exchange rates on the respective estimation dates). For the data on debt issuance, we converted any debt not denominated in euros into euro-equivalent figures based on exchange rates on the day of issuance. Unless otherwise noted, we did not include debt issued by non-European companies through European-based subsidiaries or in European markets.

The issue types include loans, revolving credit facilities, bank notes, bonds, debentures, convertible bonds, covered bonds, intermediate notes, medium-term notes, index-linked notes, equipment pass-through certificates, and preferred stock. In the case of revolving credit facilities, the amount usually represents the original facility limit, not necessarily the amount that has been drawn. We derive debt amounts based on the face value of the instrument. We exclude individual issues that we do not currently rate at the instrument level (for example, unrated bonds or leveraged loans), as well as instruments from issuers that were rated 'D' or 'SD' (selective default) as of Jan. 1, 2019.

We aggregate the data by issue-level credit rating. We also aggregate sector-specific data according to the subsector of the issuer. We define the financial sector as all banks, brokers, insurance companies, asset managers, mortgage companies, and other financial institutions. We classify debt issued by the financial arms of nonfinancial companies according to the sector of the corporate parent.

This report does not constitute a rating action.