

Buyers of long-dated oil bonds beware

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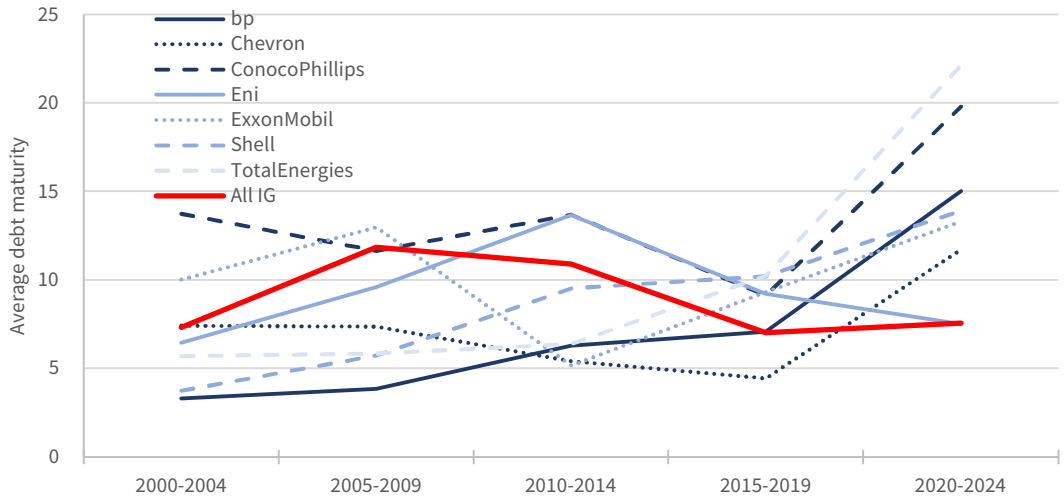
On 2 Apr 2024 TotalEnergies, a French integrated oil company, issued $4.25bn of bonds, with over 70% maturing beyond the key net-zero deadline of 2050,[1] by which date the International Energy Agency (IEA) predicts oil demand to fall by almost half.[2]

As 'Big Oil' continues to invest in exploration,[3] in excess of predicted demand, we analyse the risks for bond investors that are funding this expansion. We look at recent trends in oil issuance and price moves, to see how the market has reacted.

In conclusion:

- Global oil majors have been lengthening the maturity of their senior unsecured debt, against the overall market trend (see Figure 1).
- European oil producers are also issuing hybrid debt; instruments which are subordinated in risk and also can have very long maturities if they are not called. These present negative convexity exposures for investors, as their risk can increase in poor funding environments.
- Analysis of Shell, ConocoPhillips and TotalEnergies debt shows no associated steepening of bond spread curves. If either concerns about the long-term viability of oil, or increasing maturity of debt profiles, become incorporated into market pricing, curve steepening would be expected, which would be negative for long-dated bond holders.

Figure 1. Average maturity of non-hybrid bond issuance. Source: Bloomberg, accessed 18 Apr 2024.



[1] "New Issues: TotalEnergies", Cbonds, 3 Apr 2024.
[2] "IEA warns energy companies against banking on strong oil demand", FT, 24 Oct 2023.
[3] "Big Oil bets big on extended life for fossil fuels", FT, 28 Oct 2023.

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Introduction

As the energy transition continues, it is increasingly clear that several oil & gas producers are anchoring their business investments on unrealistic expectations for future demand. For example Equinor's latest annual report states that its strategic planning assumes a price of $68 for Brent crude in 2050; this compares rather optimistically to the IEA's net zero pathway which forecasts a price of just $28.[4]

The debt market is key to facilitating this expansion activity. An analysis of a broader universe of all carbon-intensive debt concluded that over half will need to be refinanced in the coming years, amid concerns that "*investors may look for higher risk premia to compensate for taking on growing transition risk*".[5]

Separately, Carbon Tracker, an NGO, has identifed $203bn of capex associated with oil and gas projects that are unlikely to be viable under a moderate transition scenario,[6] presenting risks for the investors involved. Our earlier analysis also shows that long-dated oil & gas bond curves seem decoupled from production intentions,[7] raising concerns about the financial returns for such investments.

In this note we investigate bond issuance from oil & gas producers. We examine the maturity profile, to see how borrowers are looking to manage their refinancing, and also explore the use of subordinated debt. We also inspect the shape of debt spread curves, to see if any changes in maturity profile are reflected in recent price moves.

Oil & gas duration has been lengthening

Figure 2 (overleaf) shows the average maturity of non-hybrid bond issuance since 2000,[8] for the largest upstream and integrated oil & gas companies. The average Investment Grade (IG) maturity is largely unchanged over this period, having increased between 2005-2014, and then decreasing to 2024.

In contrast, in recent years some oil & gas producers have significantly increased the average maturity of their debt. For example, TotalEnergies has increased its average issuance maturity from 5.7 years to 22.1 years, and bp has increased from 3.3 years to 15.0.

Table 1 (also overleaf) shows the specific deal details for issuances in 2023 and 2024 from this population of companies. Despite the average for the market being 7.6 years, only five of these bonds, totalling $6.1bn, are shorter than ten years. The remaining $16.6bn of bonds are long-dated, with five bonds of 30 years or more.

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[4] "Equinor: A case study on the trouble with greening oil and gas companies", FT, 24 Apr 2024.
[5] "A $3.2 Trillion Refinancing Wall Looms for High-Carbon Issuers", Bloomberg, 20 Mar 2024.
[6] "Navigating Peak Demand", Carbon Tracker, 8 Nov 2023.
[7] Please see "bp and ConocoPhillips: a bond spread curve ball", AFII, 26 Mar 2024 and "Oil & Gas: climate performance and the cost of capital", AFII, 6 Mar 2023.
[8] The USD IG population includes all corporate issuance above $0.5bn in size, with Investment Grade rating and non-hybrid.

Figure 2. Average maturity of non-hybrid bond issuance. Source: Bloomberg, accessed 18 Apr 2024.

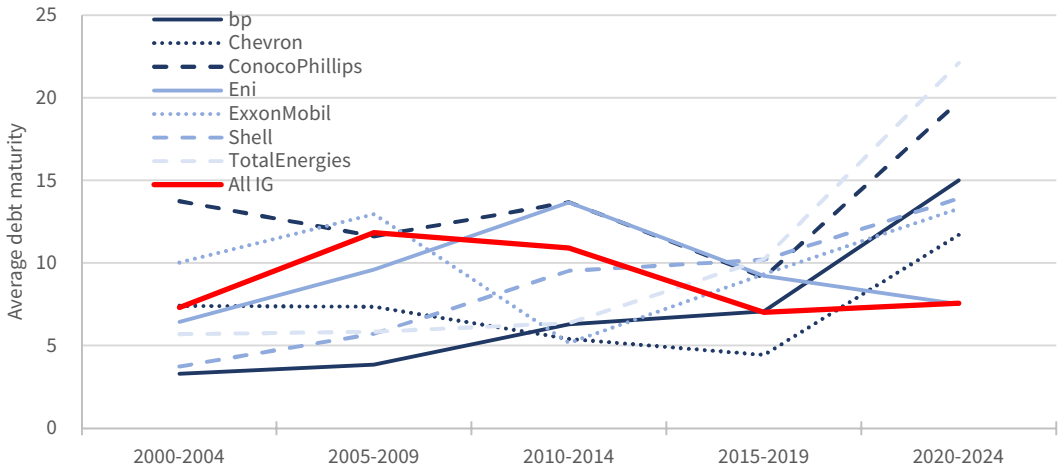


Table 1. Oil & Gas bonds issued in 2023-2024. Source: Bloomberg, accessed 18 Apr 2024.

Issuer	Ticker	ISIN	Issue Date	Maturity Date	Currency	Size (bn)	Length of bond
ENI SPA	ENIIM	IT0005521171	10-Feb-23	10-Feb-28	EUR	2.00	5.0
BP CAP MARKETS AMERICA	BPLN	US10373QBU31	13-Feb-23	13-Feb-33	USD	2.25	10.0
BP CAP MARKETS AMERICA	BPLN	US10373QBV14	11-May-23	11-Sep-33	USD	1.50	10.3
BP CAPITAL MARKETS BV	BPLN	XS2620585658	12-May-23	12-May-30	EUR	0.75	7.0
BP CAPITAL MARKETS BV	BPLN	XS2620585906	12-May-23	12-May-35	EUR	0.75	12.0
ENI SPA	ENIIM	XS2623957078	19-May-23	19-May-27	EUR	0.75	4.0
ENI SPA	ENIIM	XS2623956773	19-May-23	19-May-33	EUR	1.25	10.0
CONOCOPHILLIPS COMPANY	COP	US20826FBE51	23-May-23	15-May-53	USD	1.10	30.0
BP CAPITAL MARKETS PLC	BPLN	XS2629395612	25-May-23	25-May-38	GBP	0.40	15.0
CONOCOPHILLIPS COMPANY	COP	US20826FBF27	17-Aug-23	15-Sep-33	USD	1.00	10.1
CONOCOPHILLIPS COMPANY	COP	US20826FBG00	17-Aug-23	15-Mar-54	USD	1.00	30.6
CONOCOPHILLIPS COMPANY	COP	US20826FBH82	17-Aug-23	15-Sep-63	USD	0.70	40.1
ENI SPA	ENIIM	XS2637952610	14-Sep-23	14-Sep-30	EUR	1.00	7.0
BP CAP MARKETS AMERICA	BPLN	US10373QBX79	10-Jan-24	10-Apr-29	USD	1.25	5.3
BP CAP MARKETS AMERICA	BPLN	US10373QBW96	10-Jan-24	10-Apr-34	USD	1.00	10.3
ENI SPA	ENIIM	XS2739132897	15-Jan-24	15-Jan-34	EUR	1.00	10.0
TOTALENERGIES CAPITAL SA	TTEFP	US89157XAA90	05-Apr-24	05-Apr-34	USD	1.25	10.0
TOTALENERGIES CAPITAL SA	TTEFP	US89157XAB73	05-Apr-24	05-Apr-54	USD	1.75	30.0
TOTALENERGIES CAPITAL SA	TTEFP	US89157XAC56	05-Apr-24	05-Apr-64	USD	1.25	40.0

As rates have risen in the past five years, so the average maturity of bond issuance has shortened slightly; perhaps reflecting how borrowers do not want to lock in higher yields for longer than they have to.

Issuance from the large oil producers has bucked this trend, with average maturity nearly doubling from 2015-2019 to 2020-2024.[9] This has lengthened investor exposure to oil & gas credit, in a time when the long-term trajectory of their businesses is most in question.

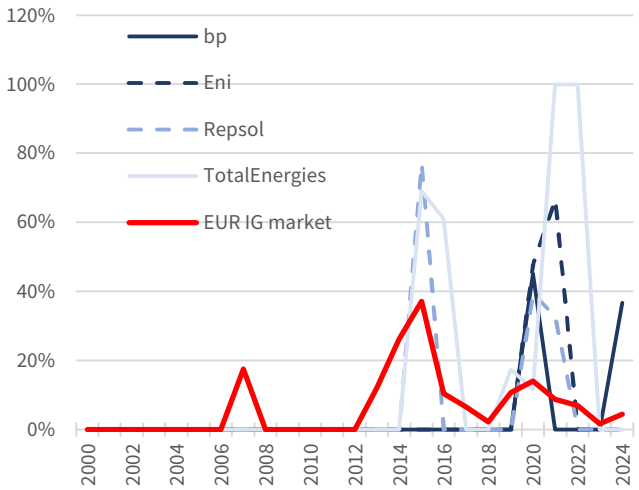
[9] Average maturity changes between the two periods are: TTEFP +116%, COP +117%, BPLN +113%, ENIIM -18%, CVX +164%, RDSALN +36% and XOM +43%.

European oil producers turning to hybrids

Another recent development is the increasing use of hybrid or perpetual debt by European producers.

Hybrid bonds are subordinated instruments that combine elements of debt and equity. They typically have very long or perpetual maturities, although they are generally callable after a given period. Large coupon step-ups often occur if they are not called.[10] Hybrid bonds usually have lower credit ratings than senior unsecured debt, and pay a higher coupon. A key benefit for issuers is that they can be accounted for as equity, and so do not increase balance sheet leverage.

Figure 3. Hybrid issuance as a percentage of total market. Source: Bloomberg, accessed 18 Apr 2024.



Four European oil producers have issued hybrids since 2015: bp, Eni, Repsol and TotalEnergies. Repsol used its hybrid financing to fund an acquisition,[11] and subsequent issuance to repay existing hybrid debt.[12] TotalEnergies also reported using hybrid debt to fund acquisitions,[13] while bp first issued a hybrid bond in order to place less strain on its balance sheet after a significant write-down linked to a shift towards cleaner energy.[14]

Figure 3 shows the size of hybrid issuance compared to total issuance in a given year.[15]

Hybrid bonds have not been as popular among A-rated issuers as for BBB-rated issuers, but nevertheless we have seen some issuance activity since 2012.

The four European oil producers have also been extremely active in hybrid issuance in the last few years, particularly TotalEnergies, for whom 100% of issuance in 2021 and 2022 was in hybrid form.

Hybrid debt instruments expose investors to greater risks. Firstly the claims are subordinated, so will rank behind senior unsecured debt following a credit event. Secondly, while in strong market conditions the bonds are typically called by issuers at the first opportunities (usually 5-10 years), in poor market conditions the bonds can be extended to very long and even perpetual maturities.

Oil producers' have increased their use of this product in the past few years, paying more to issue debt which will not dilute their credit ratings. This presents negative convexity risk for investors, meaning their exposure is increased in poor market environments.

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[10] For details of a Sustainability-Linked Perpetual please see "STT GDC issues a Sustainability-Linked Perpetual", AFII, 23 Jan 2024.
[11] "Repsol sells 2 billion euro hybrid bond to help fund Talisman deal", Reuters, 18 Mar 2015.
[12] "Repsol sells €1.5bn of hybrid bonds as risk appetite returns", FT, 2 Jun 2020.
[13] "Total Has Successfully Issued Hybrid Bonds To Finance Its Development Strategy in Renewables", TotalEnergies, 19 Jan 2021.
[14] "BP raises nearly $12 billion in first hybrid bonds issue", Reuters, 18 Jun 2020.
[15] For the EUR market we have used only Investment Grade rated hybrids (as all the four oil issuers' bonds are), and above a minimum size of $0.5bn issued in EUR.

Oil & gas bond curves

Given the lengthening maturity of debt, it is reasonable to analyse the shape of oil & gas bond curves, and specifically how they have shifted recently.

In general, when considering the extended tenor of these long-dated oil bonds, it is worth noting the dates are beyond key global climate commitment deadlines, at which point oil demand is predicted significantly to decline.

Our earlier analysis has concluded that the shape of oil & gas bond curves does not appear related to forward production intentions, and therefore there is a risk longer-dated bonds do not reflect the transition risk of moving to a lower oil demand environment.[16]

When considering how oil & gas curves have adjusted, we need issuers with a long history of issuance and debt that is sufficiently long-dated. 2050 is a key date in the climate transition, at which point the IEA calculates oil demand will fall by 2% each year under its Announced Pledges Scenario or over 5% per year in the Net Zero Emissions scenario.[17]

To analyse recent moves in bond curves, we identify the companies whose long-dated bonds have existed long enough to analyse their moves, combined with their most recent issuances.

Shell USD bond curve moves

Within the selected population, Shell's first USD long-dated bond was RDSALN $6.375% 38s issued in Dec 2008. It issued subsequent 30-year USD bonds in 2010/2012/2013/2015/2016/2019/2020 and 2021, but as Figure 2 shows, long-dated bonds have formed an increasing percentage of its issuance over the period in question.

Figure 5. RDSALN 6.375% 38s historic spreads. Source: Bloomberg, accessed 2 May 2024.

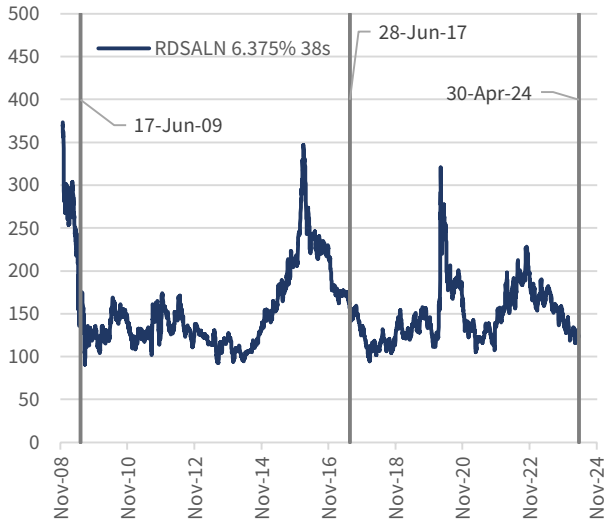


Figure 4. RDSALN USD bond spreads. Source: Bloomberg, accessed 2 May 2024.

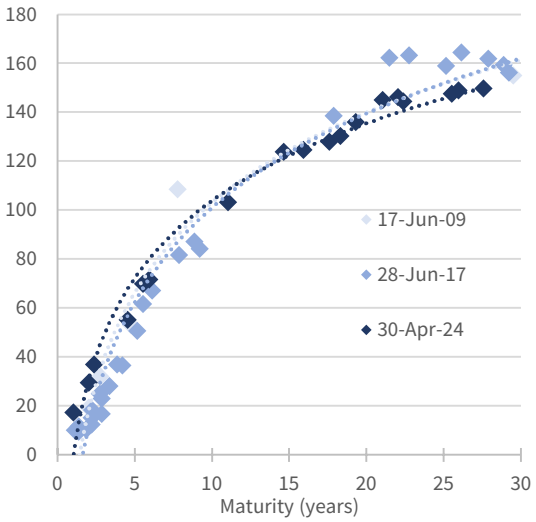


Figure 5 and Figure 4 show historic spreads for Shell USD bonds. Looking at the full history of spreads in Figure 5 allows three dates to be found of similar absolute spread levels, which can be used to compare the bond curve. In Figure 4, on these three dates, the Shell bond curve has been

[16] For earlier work please see "bp and ConocoPhillips: a bond spread curve ball", AFII, 26 Mar 2024 and "Oil & Gas: climate performance and the cost of capital", AFII, 6 Mar 2023.
[17] "The Oil and Gas Industry in Net Zero Transitions", International Energy Agency, 2023.

at very similar levels, i.e. as long-dated bonds roll down, new bonds are issued at a similar premium. We conclude there has been limited spread steepening, despite the average maturity of issuance increasing from 3.7 years in 2000-2004 to 13.9 years in 2020-2024.

ConocoPhillips USD bond curve moves

ConocoPhillips also began issuing long-dated bonds early, with an average length of 13.7 years in 2000-2004. This has accelerated in the past few years to an average length of 19.8 years, with a $2.7bn three-tranche deal issued in August 2023 combining $1bn 10y, $1bn 31y and $0.7bn 40y debt.[18]

Figure 7. COP 6.5% 39s historic spreads. Source: Bloomberg, accessed 2 May 2024.

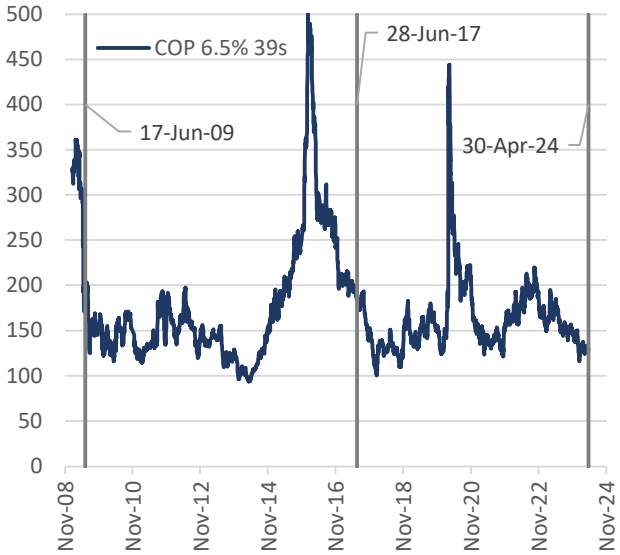
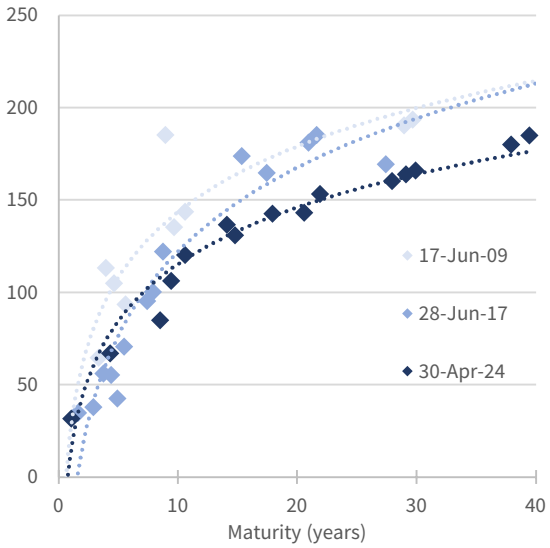


Figure 6. COP USD bond spreads. Source: Bloomberg, accessed 2 May 2024.

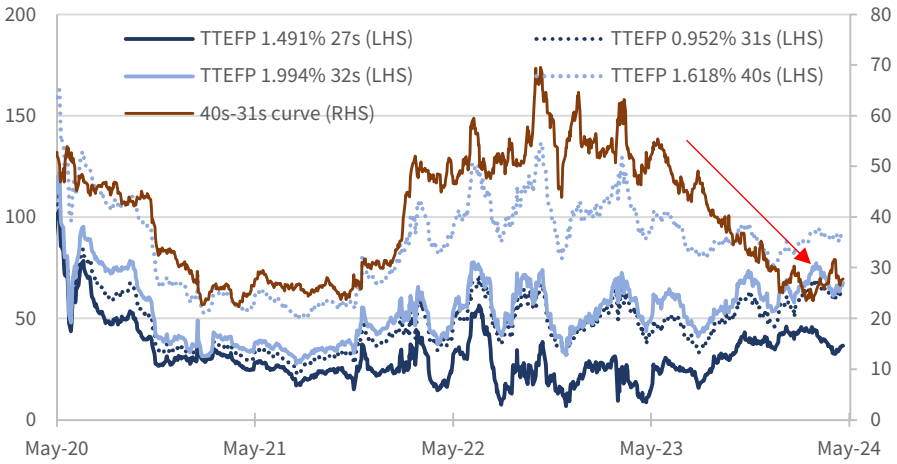


As Figure 7 shows, COP spreads have tightened compared to Shell's spreads in this period, and Figure 6 illustrates that this is accompanied by a curve flattening, with long-dated bonds outperforming. The new long-dated 40yr bonds are tighter that 20yr bonds were in 2017.

Total EUR bond curve shape

TotalEnergies first issued 20 year debt only in May 2020, in EUR and USD, but we will use this to analyse the EUR market. We can compare the performance of this bond (TTEFP 1.618% 40s ISIN XS2176569312) to a

Figure 8. Total historic EUR spreads. Source: Bloomberg, accessed 1 May 2024.



[18] For more details please see "ConocoPhillips crossing oil sands exclusion thresholds", AFII, 16 Aug 2023.

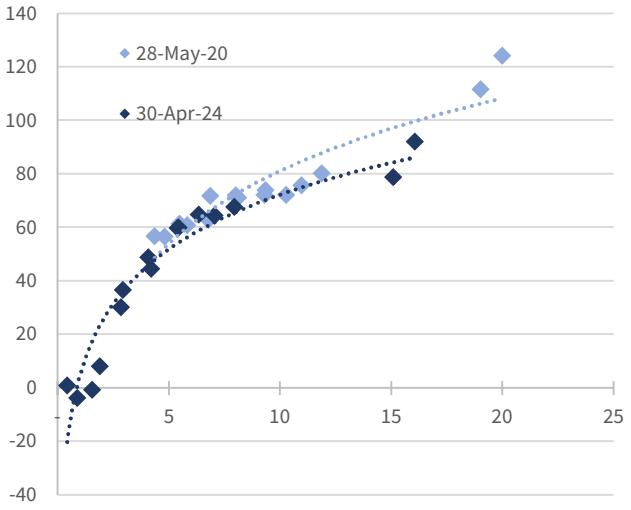
shorter bond issued on the same day (TTEFP 0.952% 31s ISIN XS2176605306) as shown in Figure 8.

Since issuance the bonds have tightened, but the 20yr bond has outperformed, driving a flattening of the curve from 52bps to 27bps.

Figure 9 shows the full EUR bond curve at two points in time, since the pandemic volatility.

The upward slowing shape of the curve would be expected to drive further curve steepening as time passes, due to the roll-down, but this shows that in fact a flattening has occurred.

Figure 9. TotalEnergies EUR bond spreads. Source: Bloomberg, accessed 2 May 2024.



Summary

It is challenging to conduct a comprehensive analysis of bond spread curves, given most of the longer-dated bonds are recently issued. Nevertheless, case study analysis offers some insights.

Shell and ConocoPhillips have always issued some long-dated bonds in USD, and curves are unchanged in steepeness when comparing to historic points of similar absolute market levels.

TotalEnergies, an issuer with the most significant recent changes in debt profile, has in fact seen a slight flattening of its EUR curve in the past four years.

These observations show that the trend for longer-dated bonds is not yet reflected in market pricing.

Conclusions

Oil demand is predicted to peak within this decade,[19] and yet several oil producers are still actively investing to develop reserves in excess of expected customer demand.

Against this backdrop, the larger producers are coming to fixed income markets to borrow for both increasingly long maturities, and in subordinated hybrid instruments. For investors, this increases exposure to this sector beyond climate target dates, and has the potential to increase risk through perpetual instruments if the funding environment for oil producers deteriorates.

As both long-term risk grows, and supply of long-dated debt increases, we would expect the market to price spread curves steeper. However, our case study analysis shows little movement in curves either recently or over a longer historic period. **This presents a risk for investors, if either factor becomes more integrated into market pricing.**

[19] "World Energy Outlook 2023", IEA, Oct 2023.

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