SRP

France Structured Products Market Performance Analysis

2019/2020

Data & editorial: Nikolay Nikolov and Amélie Labbé

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Foreword

Cher/Chère collègue,

C'est avec grand plaisir que je vous présente l'édition 2019/2020 de notre rapport de performance France, la troisième année consécutive que SRP publie ce document de référence du secteur français des produits structurés.

Chaque année, notre spécialiste du marché français, Nikolay Nikolov, commence son analyse de manière objective, ne tirant aucune conclusion avant d'avoir toutes les données en main. Et chaque année depuis la publication du premier rapport en 2018, nous constatons la robustesse et la compétitivité des produits structurés en France.

Cette année n'a pas fait exception, même avec les circonstances exceptionnelles que nous constatons depuis début 2020 et qui n'ont épargné (presque) aucun secteur économique et financier. L'impact dramatique du Covid-19 sur bon nombre de classes d'actifs a été documenté, analysé et disséqué abondamment dans les médias et autres.

Malgré les obstacles, les produits structurés ont tenu bon.

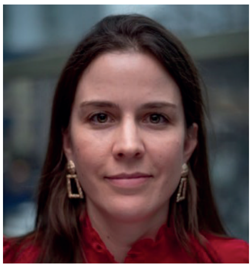
Comme le souligne l'étude, 96% des produits avec une maturité entre avril 2019 et mars 2020 ont généré un rendement positif pour leurs investisseurs et 2.2% seulement ont abouti à une perte. Le rendement moyen observé pendant la période couverte par l'étude (avril 2019 jusqu'à mars 2020) est de 5.83% pa, un gain confortable si l'on prend en considération le niveau des taux d'intérêts en France.

Le message à retenir cette année: les produits structurés ont permis de sortir un rendement régulier amélioré par rapport au segment obligataire avec des payoffs incluant une exposition maitrisée aux actifs les plus risqués (equity notamment). Leur flexibilité inhérente permet à l'investisseur de moduler le degré de risque pris, permettant de s'adapter aux conditions économiques et financières les plus variées.

Nous souhaitons remercier toutes les personnes et organisations qui ont collaboré pour la production de ce rapport.

Un remerciement spécial est apporté à l'AFPDB pour leur soutien dans la promotion du secteur français des produits structurés.

Je vous souhaite une bonne lecture,



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Summary

Structured products are a fully-fledged asset class in the French savings market and one which keeps proving its ability to deliver long-term returns in different market configurations.

As part of its commitment around transparency in the structured products market, SRP carried out an in-house local market research report. The analysis showed that only 2.2% of the products that have matured between April 2019 and March 2020 returned losses, and the average return was six percent pa for capital-at-risk products and three percent pa for capital-protected products. The average over the entire sample was 5.83% pa. These figures are impressive – even more so when compared to the negative long-term French interest rates.

Autocalling products made up 88% of all maturing products in the period, running for an average term of 1.34 years and producing an average annualised return of 6.6%. Nearly two-thirds of all autocallables (64%) recorded average annualised returns above six percent. The upper quartile returned 7.5% per year, whereas the lower quartile returned 5.3% per year.

The drastic drop in risk-free rates on the European markets and the growth for the markets globally in 2019 have further highlighted the appeal of structured products for investors seeking a positive return while staying protected in their exposure to the risky bond market and the unpredictable stock market.

Our analysis shows that, unlike a passive index-based strategy, structured products have delivered steady returns while moderating exposure to excessive fluctuations in volatile markets. This allows investors to know from the start what they can win or lose, and avoid uncertainties in sideways markets. In scenarios where equity markets decline, structured products clearly outperform a direct investment. With smaller losses in some cases and smaller gains in others, structured products can be an advantageous alternative to a direct investment. They are all the more beneficial when markets are unsettled or investors seek to modulate their equity exposure.

To round the picture off, structured products have clearly outperformed fixed income alternatives, delivering steady positive performance superior to the performance of both investment-grade and high-yield exchange-traded funds (ETFs).

The ability to set protection barriers to reduce risk is one of the most important features of structured products. From the 495 outstanding products linked to the Eurostoxx 50, only one product has not returned to the safety zone as of the end of March 2020.

Additionally, only around five percent of the products linked to the four most-used synthetic dividend indices saw their capital protection remain highly sensitive to those indices levels (as of the end of March 2020). This is a remarkable achievement for all French structured product providers in issuing products with solid protection capable to withstand this year's turbulent market environment.

Structured products have delivered an enhanced regular return compared to bond and fixed income strategies. At the same time, structured products' payoffs allow a controlled and low-risk exposure to the riskiest assets (equity in particular). This is why we can conclude that structured products are a credible alternative, allowing to combine capital protection and optimised returns.

Methodology

This report provides an analysis of the performance of structured retail products distributed in France. The first part focuses on the products that matured or expired between the second quarter of 2019 (April 2019) and the first quarter of 2020 (March 2020). For the analysis, we reviewed 1,966 products due to mature or potentially expire early.

In a second part of this study, we analysed how structured products have performed relative to typical passive equity index-based and bond ETF strategies over the last five years.

The third part of the report looks ahead to review the outstanding structured products in France and see how they are placed to face the current challenging markets.

The analysed data is taken from the StructuredRetailProducts.com France database, which covers over 9,200 products, of which 3,519 are live year-to-date.

Data collection and criteria

The performance data has been calculated in-house and is based on the performance of the underlying over the investment period. Additional performance data has been extracted from public sources such as provider websites and submissions from market players.

The calculation of the performance of matured products takes into account the capital return and all interest, fixed or variable, paid during the lifetime of the investment and at maturity.

The value of the coupons itself is derived from the product description of coupon size and frequency.

Limitations

The returns shown do not take into account management fees in the case of a life insurance or investment contract, or custodial fees in the case of an investment in a securities account. In addition, returns exclude entry/arbitration fees in the case of a life insurance or investment contract, as well as the subscription fee in the case of an investment in a securities account and social and tax levies.

The study analyses only the products for which SRP has collected or calculated the performance (90% of the matured products in the database).

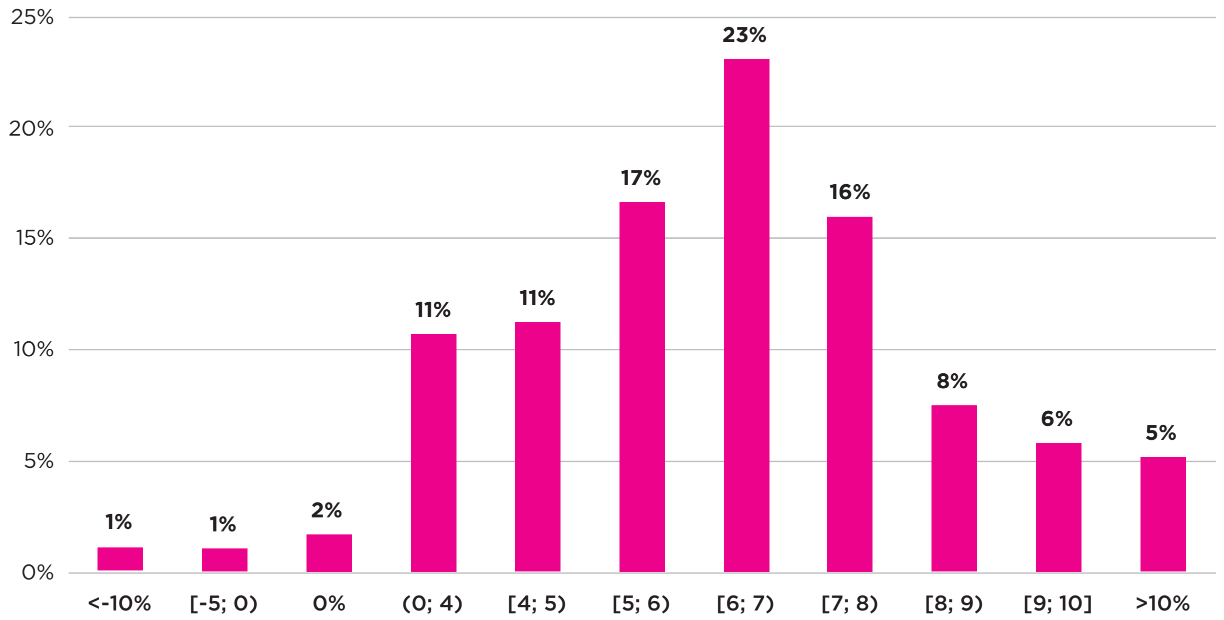
Part 1:
Performance Analysis

1.1 Analysis of matured products (April 2019 to March 2020)

Key points

- Some 96% of all products maturing (or autocalling) between April 2019 and March 2020 generated positive returns for investors, with 2% returning capital only and 2.2% returning a loss.
- The 984 matured products collectively delivered an average annualised return of 5.83% over an average term of 2.5 years.
- Capital-at-risk products produced an average annualised return of 6%.
- Autocalling products made up 88% of all maturing products in the period and ran for an average term of 1.34 years producing an average annualised return of 6.6%.

Histogram of annualised performances - matured and autocalled (April 2019 to March 2020)



The analysis encompasses 984 products that matured or autocalled between April 1 2019 and March 31 2020. Of these, 115 reached their maturity date and 869 expired earlier.

The period was very successful for French investors in structured products as 96% of the products delivered a positive return at the end of the investment term (two years on average), according to SRP data. The upper quartile returned 7.3% per year, whereas the lower quartile returned 4.9% per year. Three quarters of the products returned five percent or more.

Only 2.2% of the analysed products delivered less than the initial capital, while two percent returned just the initial capital at the term of the investment. For those negatively performing products, returns were between -0.75% and -36.8% pa, resulting in an average loss of -14.3% pa.

Some 932 capital-at-risk products matured or autocalled. These products collectively produced an average annualised return of six percent over an average term of 2.17 years.

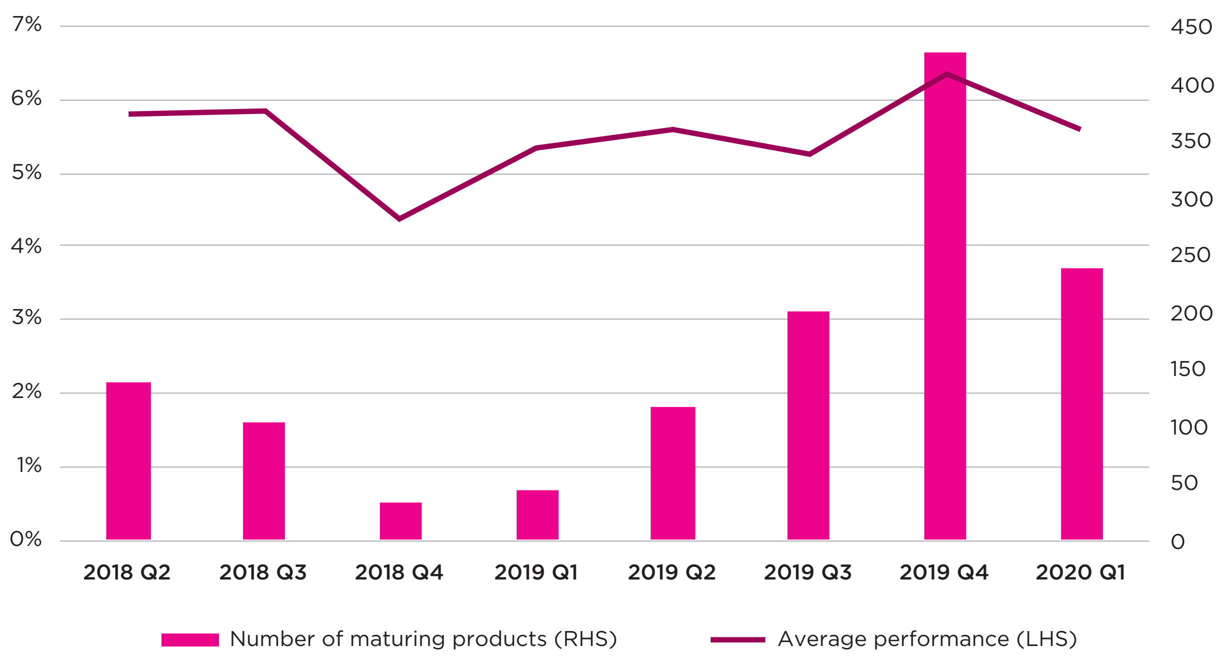
The 52 capital-protected products in the sample delivered an average annualised return of three percent. With this type of products, investors recover 100% of their initial investment at maturity in addition to a potential return (except in case of bankruptcy, default of payment or resolution of the issuer).

Only four capital-protected products returned just the initial investment, while over half of them have increased it with an annualised return above 2.5%.

The 61 fund-wrapped products returned on average an annualised 3.58% for an averaged investment term of six years and two months.

All these figures are remarkable, and show how robust the market has been.

Historical performance of structured products (April 2018 to March 2020)



The equity market boomed in 2019 with indices (to which 70% of the analysed products are linked) delivering a gain between 16% and 26%. The year ended with the biggest gains from stocks since 2013. In the same vein, investors began 2020 in an optimistic frame of mind.

The average return from the top 10 best performing products in the sample stood at 15.3% pa, compared to 13.18% pa in the same period one year prior.

Seven out of the top 10 performers were linked to a single name (Axa, BNP Paribas, Bouygues and Casino Guichard-Perrachon, respectively) and activated the autocall trigger in less than a year.

The sector has nonetheless seen some single name-linked products and worst-of structures, which matured returning losses. Two events contributed to the negative performances in the sample.

The first one was the credit event on Rallye SA in May 2019 when a commercial court placed the retailer under creditor protection. The recovery rate on the credit-linked notes (CLN) linked to Rallye was set at 12.5%, meaning that only 12.5% of the initial investment was to be repaid at maturity. However, the significant impact for the four Rallye-linked CLNs in our sample was mitigated by the coupons that had already been paid to the investor (4.5 to 5% in pro rata), hence reducing the loss to an average annualised -28%.

The share of Rallye was also present as part of a basket in three other CLNs, two of which matured with positive return in April and May 2019. The CLN Galiléo Avril 2019, linked to the credit of 10 shares (Alcatel-Lucent, Avis Budget Car Rental, British Airways, Electricité de France, Havas, Lafarge, Levi Strauss, LVMH, Virgin Media and Rallye), returned the invested capital increased with 59.7% after eight years of investment.

The analysed period ends on a lower note with the stock market crash at the latter part of the quarter resulting from the Covid-19 outbreak.

The few losses incurred by structured products in March 2020 resulted from the breach of active protection barriers by single stock or worst-of structures.

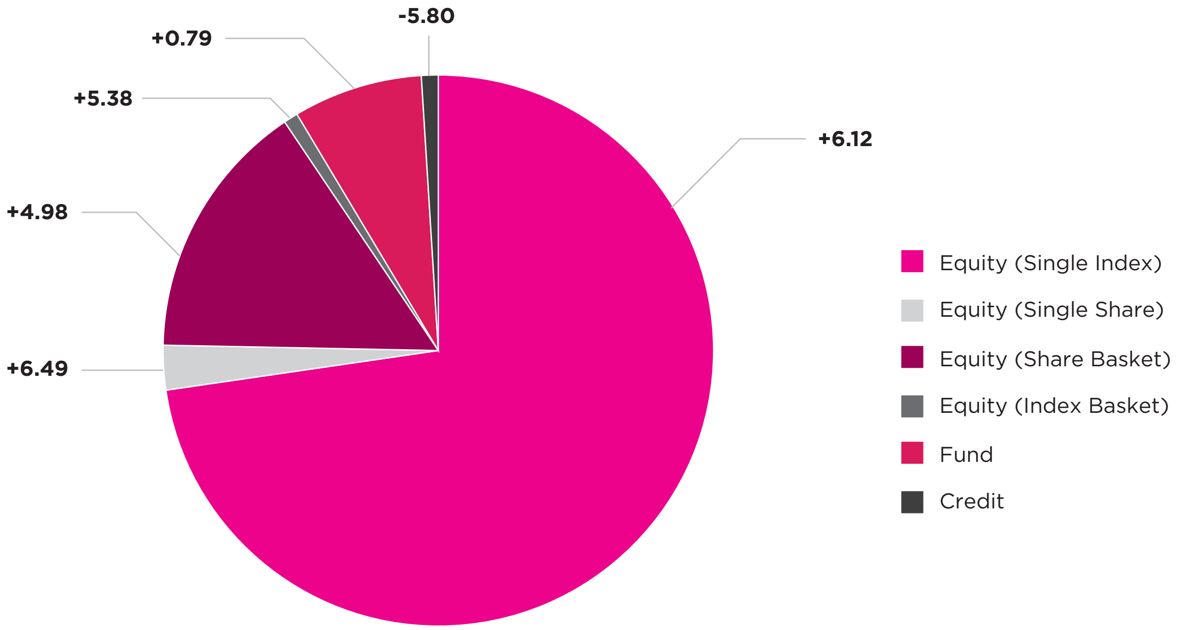
None of the index-linked products in the SRP database breached the protection barrier, hence had not lost capital.

The stock market fall meant that the maturity of many autocalls was deferred until a later date when they will potentially mature with a larger gain. Additionally, it was not bad news for the defensive phoenix structures linked to equity indices, which still paid coupons as downside barriers were not breached.

Asset class

Asset class	Number of products	Market share by volume (%)	Average annualised return (%)
Equity (Single Index)	741	72.68	6.12
Equity (Single Share)	126	2.61	6.49
Equity (Share Basket)	58	15.26	4.98
Equity (Index Basket)	29	0.84	5.38
Fund	16	7.60	0.79
Credit	13	0.99	-5.80
Commodities	1	0.02	2.68
Grand Total	**984**	**100**	**5.83**

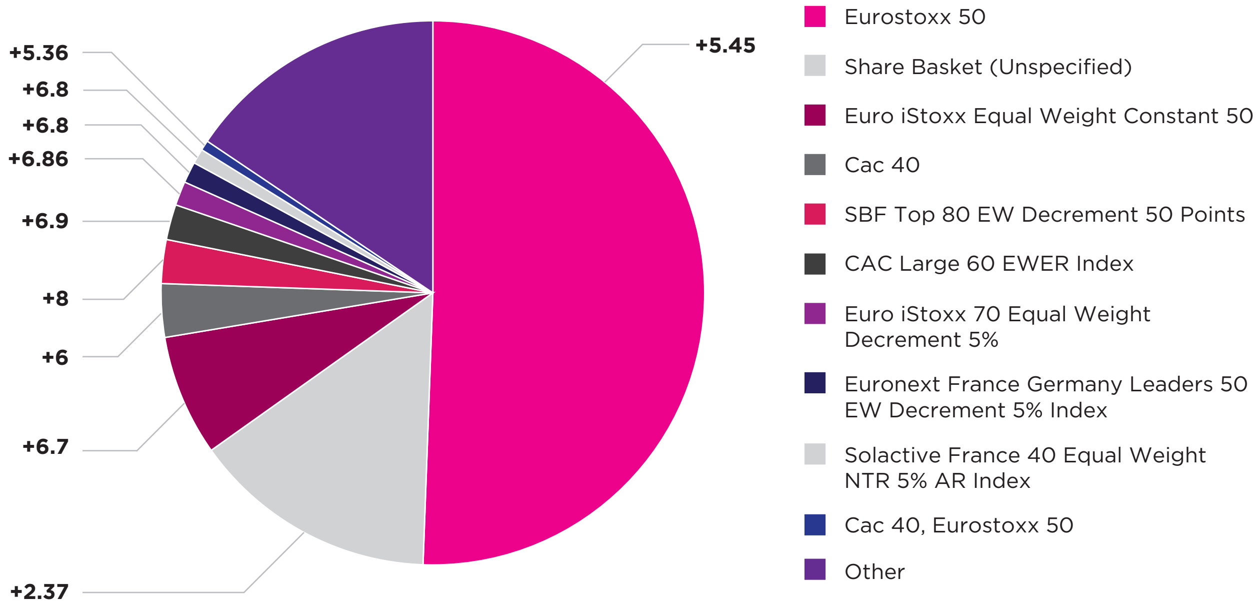
Asset class: Market share by volumes and average annualised return (%)



Underlyings

Underlying	Number of products	Market share by volume (%)	Average annualised return (%)
Eurostoxx 50	381	50.58	5.45
Euro iStoxx Equal Weight Constant 50	112	7.20	6.66
CAC Large 60 EWER Index	42	2.10	6.92
SBF Top 80 EW Decrement 50 Points	32	2.60	8.00
Euronext France Germany Leaders 50 EW Decrement 5% Index	27	1.25	6.80
Solactive France 40 Equal Weight NTR 5% AR Index	26	0.89	6.83
Cac 40, Eurostoxx 50	25	0.60	5.36
Bouygues	22	0.59	7.53
Share Basket (Unspecified)	21	14.60	2.37
Euro iStoxx 70 Equal Weight Decrement 5%	13	1.43	6.86
Engie	12	0.18	8.02
Cac 40	12	3.17	6.06
Total	11	0.14	7.91
S&P Euro 50 Equal Weight Synthetic 5% Price Index	11	0.49	5.11
Eurostoxx Banks	11	0.34	9.20
Other	226	13.85	
Grand Total	**984**	**100**	**5.83**

Most used underlyings: Market share by volumes and average annualised return (%)



The Eurostoxx 50 in isolation was the most prevalent underlying, accounting for 33% of all maturities. Some 356 of these were linked solely to the Eurostoxx 50 and produced an average annualised return of 5.45% over an average term of 1.8 years. The upper quartile returned 6.5% per year, and the lower quartile 4.55% per year.

Cac Boost Recovery, a participation medium-term note (MTN) linked to the Cac 40 matured in February 2020 returning 300% after eight years of investment. The benchmark rose by 77% over the period. The product is an example of the benefits of a longer-term investment duration.

Early maturing products linked to synthetic dividend indices have increased the average return to 6.84%, an excellent return in a market where interest rates are considerably low.

Products linked to single stocks (mostly the property and the banking sectors) gained traction in 2019 as investors considered market index levels to be high. Seven of the top 10 performers in the analysed period were linked to a single name, notably Axa, BNP Paribas, Bouygues and Casino Guichard-Perrachon.

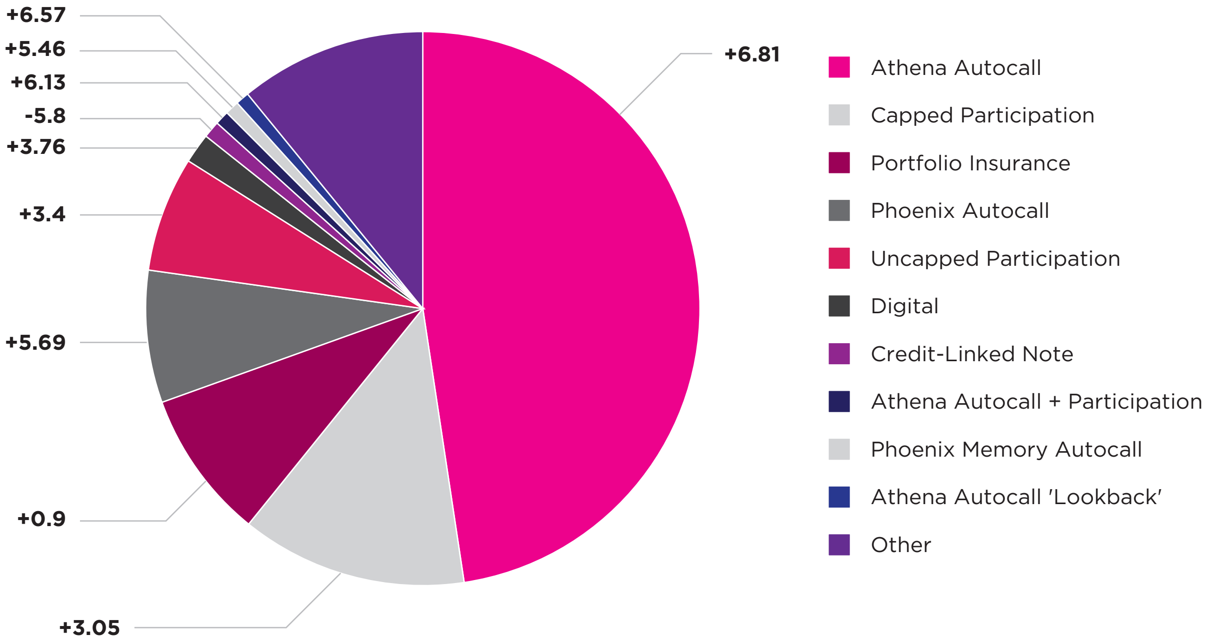
As seen in the table on the next page, autocallable products with conditional protection have been and continue to be the dominant payoff in France. The early redemption feature has significantly improved the average capital return.

Some 41 fully or partially protected products, offering participation in the performance of the underlying with or without cap (capped call, uncapped call), came to maturity, returning below the average of the sample. Higher capital protection rate is, generally, associated with lower participation on the upside.

Payoffs

Payoff	Autocallable	Number of products	Market share by volume (%)	Average annualised return (%)
Athena Autocall	✓	554	47.62	6.81
Phoenix Autocall	✓	165	7.72	5.69
Phoenix Memory Autocall	✓	49	0.82	5.46
Athena Autocall 'Worst of'	✓	29	0.55	6.54
Athena Autocall 'Lookback'	✓	27	0.79	6.57
Phoenix Autocall 'Worst of'	✓	25	0.61	5.41
Portfolio Insurance		15	8.70	0.90
Uncapped Participation		13	6.72	3.40
Credit-Linked Note		13	0.99	-5.80
Reverse Convertible		13	0.77	-2.47
Phoenix Memory Autocall 'Worst of'	✓	12	0.22	5.45
Capped Participation		12	13.20	3.05
Digital		7	1.75	3.76
Athena Autocall + Participation	✓	6	0.82	6.13
Himalaya		5	0.55	-0.56
Other		39	8.20	
Grand Total		**984**	**100**	**5.83**

Market share by volumes and average annualised return (%)

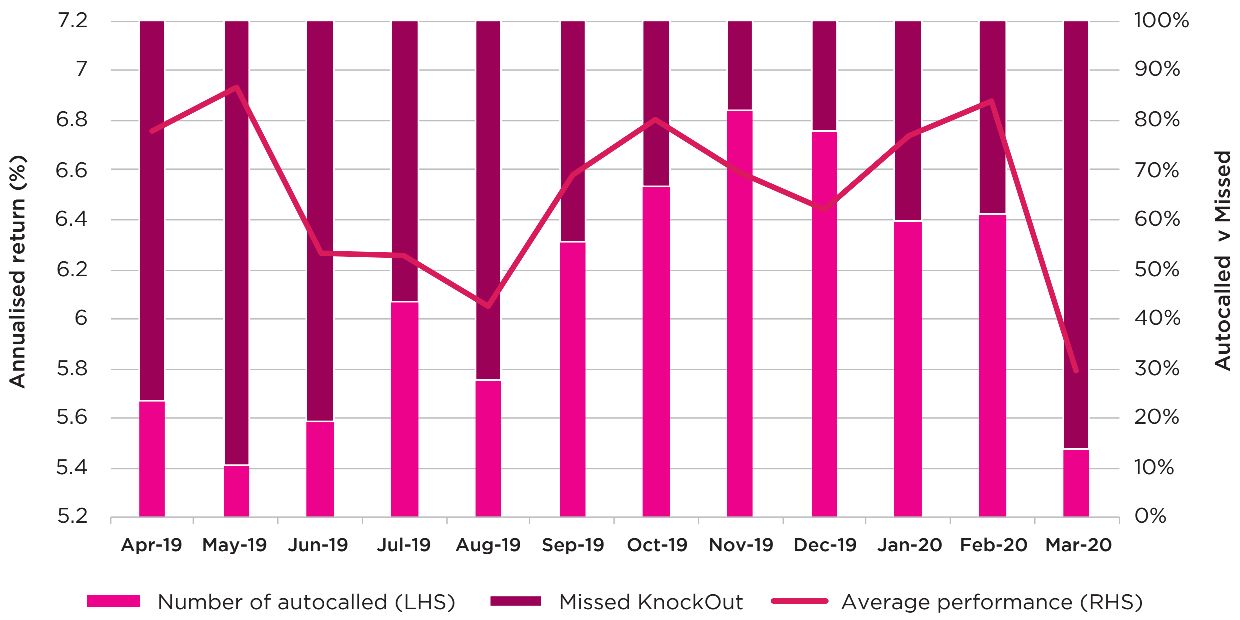


1.2. Autocallables

Key points

- Nearly half (46%) of the 1,844 outstanding products with knock out dates between April 2019 and March 2020 expired earlier. For 28%, this was the first autocall observation date while 9.6% caught up on a second opportunity.
- Early redeemed autocallables returned an average annualised coupon of 6.6% for an average investment term of 1.34 years.
- Just over two-thirds (64%) of all autocallables recorded average annualised returns above 6%. The upper quartile returned 7.5% per year, whereas the lower quartile returned 5.3% per year.

Historical performance of autocallables (2019 Q2 - 2020 Q1)



Autocalling products made up 88% of all maturing products in the period. They ran for an average term of 1.34 years producing an average annualised return of 6.6%.

The largely positive markets in 2019 allowed the early redemption of many products issued in recent years.

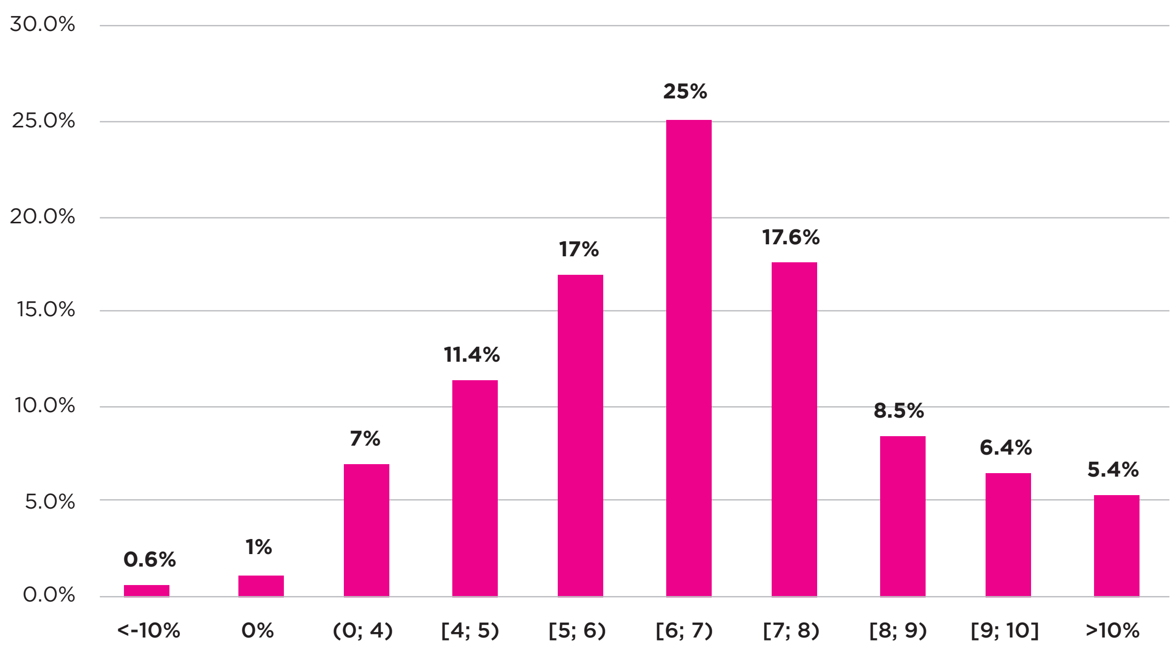
Some 60% of the autocalls materialised on the first observation date, generally after one year of investment. Twenty percent occurred on the second observation, mostly at their second anniversary, following a difficult year 2018 for equities.

Eight percent activated the autocall trigger on their third or their forth call point. Only 13 products in the sample reached their projected maturity.

Just over half (51%) of the index-linked products with active knock-out dates between April 2019 and March 2020 activated their autocall feature and delivered an average annualised coupon of 6.3%. Of these, 321 products were linked to an index with synthetic dividend and served 6.8%. The 339 products linked to a benchmark returned slightly less, ie an annualised 5.7%.

On the flip side, 365 products linked to a decrement index and 211 products linked to a benchmark failed to knock out this time round, with more than half continuing for a third or further year of investment. A third of all index-linked structures, however, will have the next exit opportunity in less than a year: 104 products consider a quarterly autocall observation; 73 products have it twice a year; and 31 are being reviewed on a daily basis.

Histogram of annualised performances - autocallables only (autocalled April 2019 to March 2020)



The table on the next page analyses the impact of the adopted frequency of call observation on the actual investment period. Generally, quarterly, monthly and daily observations of the underlying tend to increase the chances for early redemption. This means that the number of outstanding products is substantially less where the autocall observation is more frequent.

Additionally, more frequent observations tend to lead to a shorter term: only 22% of the products with annual call points were redeemed before the second year, while the rate is 76% for products with daily observation, 70% for monthly observations, and 45% for quarterly observations.

The choice of underlying is naturally correlated to the offered yield. This explains the higher average coupon of products with semi-annual observations compared to products reviewed annually.

Average coupon and callable frequency

Actual investment term	Daily observation		Monthly observation		Quarterly observation	
	Average coupon (%)	Callable frequency	Average coupon (%)	Callable frequency	Average coupon (%)	Callable frequency
< 1 year	9.4	2%	4.6	8%	7.5	6%
1 year	6.4	43%	7.1	38%	7.2	25%
1 to 2 years	6.8	31%	6.6	24%	6.1	14%
2 years	-	-	-	-	5.6	3%
> 2 Years	5.6	1%	8.0	1%	1.8	4%
LIVE	-	23%	-	29%	-	48%
Grand Total	**6.6**	**100%**	**6.6**	**100%**	**6.4**	**100%**

Actual investment term	Semi-annual observation		Annual Observation		Less frequent observation	
	Average coupon (%)	Callable frequency	Average coupon (%)	Callable frequency	Average coupon (%)	Callable frequency
< 1 year	8.5	6%	9.0	1%	-	-
1 year	7.8	23%	6.5	22%	-	-
1 to 2 years	5.8	7%	8.2	-	5.2	6%
2 years	5.0	5%	5.8	14%	5.6	13%
> 2 Years	3.1	4%	4.9	2%	6.1	15%
LIVE	-	54%	-	61%	-	67%
Grand Total	**6.8**	**100%**	**6.3**	**100%**	**5.8**	**100%**

Beyond the 254 income products which expired early during the analysed period, phoenix structures have largely delivered a coupon without activating the autocall trigger.

The ability of defensive phoenix autocallables to distribute a coupon, in case of a limited market fall, has made this category very successful once again. From the analysed 145 income products which failed to knock out, we established that 129 have delivered the applicable coupon(s) during the considered period. Among the exceptions were products linked to the automobile and the banking sectors.

Nearly a quarter of the maturing phoenix structures featured the so-called memory effect or snowball. This means that any due coupon, which would be potentially missed, will be retrieved and paid to the investor.

Here again, although none of the athena structures in the sample has not autocalled in March 2020, it was not all bad news for the defensive phoenix structures linked to equity indices, which still paid coupons as downside barriers were not breached.

Part 2:
Structured products in perspective

Comparison with other investment alternatives

In order to further analyse structured product performances, we deemed it appropriate to consider how other popular investment alternatives have performed over the same period.

To benchmark the performance of structured products against industry standards, we have looked at two popular passive index-based strategies, which represent direct equity holdings. To round the picture off, we also compared the performance of structured products against two bond ETFs, which replicate the performance of bond indices.

The analysis below shows that structured products have delivered an enhanced regular return compared to bond and fixed income strategies, while in the same time a structured product payoff allows a controlled and low risk exposure to the most risky assets (equity in particular).

2.1. Structured products v direct equity holdings

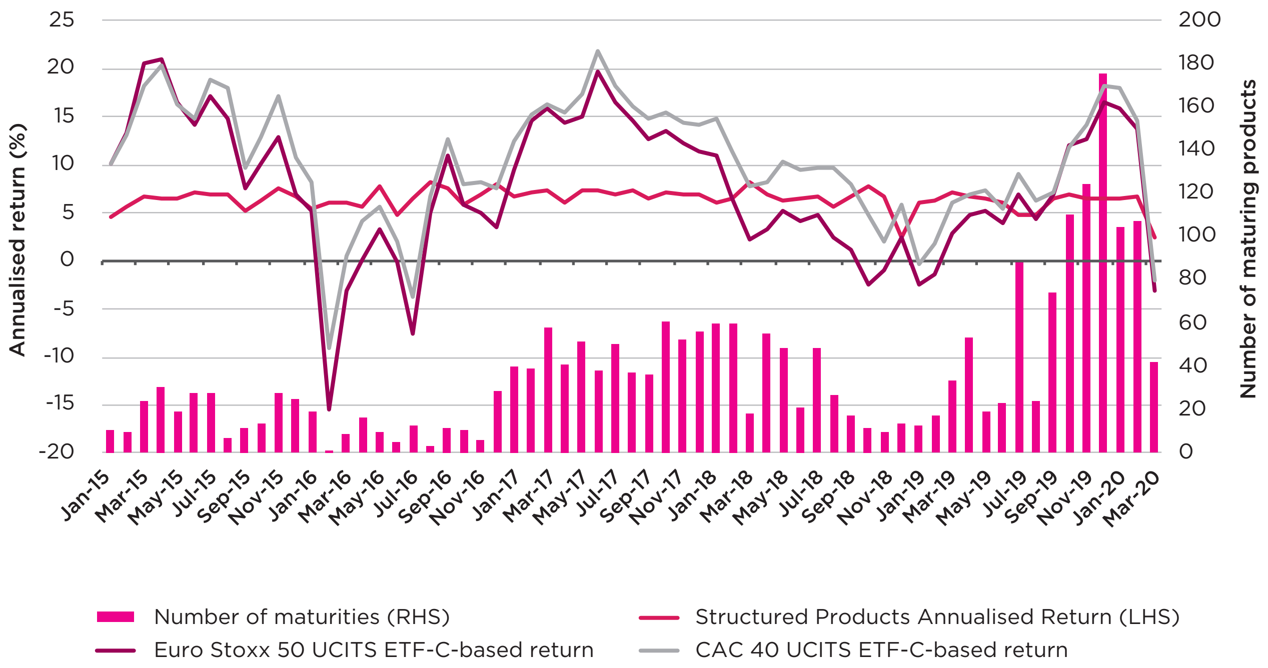
Key points

- **Unlike a passive index-based strategy, structured products deliver steady returns while moderating the exposure to excessive fluctuations in volatile markets. The advantage: investors know from the start what they can win or lose.**
- **Structured products help to avoid uncertainties in sideways market. In scenarios where equity markets decline, structured products clearly outperform a direct investment.**
- **With smaller losses in some cases and smaller gains in others, structured products can be an advantageous alternative to a direct investment. They are all the more beneficial when markets are unsettled or investors seek to modulate their exposure on stocks. The ability to set protection barriers to reduce risk is one of the most important features of structured products.**

We compared 2,300 capital-at-risk products [that have matured or expired early since 2015] to two ETFs, based on the Cac 40 and the Eurostoxx 50, with reinvested dividends.

We calculated the performance of each of the two other investments over the same time period that each structured product runs for allowing us to calculate annualised returns for the structured product and the two comparison investments. This means that each of the structured products in this sample has been benchmarked point-to-point to the two ETFs over their full investment term starting from the initial date to their maturity. The results are presented on a monthly average basis.

Comparison to passive equity index-based strategies



*Source: SRP, Investing.com
**Includes capital-at-risk structured products only (strike date > Jan-2010; maturity date Jan-2015 to Mar-2020)

The chart shows a positive and high correlation between the performance of the equities markets and the number of maturities contributing to the excellent structured products' performance. What is more, we note two cases in which structured products tend to over-perform passive index-based strategies.

The first one stems from structured products' ability to moderate the exposure to excessive fluctuations in volatile markets (eg end of 2015, 2016, end of 2018 and current market turmoil). In scenarios where equity markets decline, the number of early redemptions tends to decrease but structured products still outperform index-based strategies.

Although equity markets have been broadly positive during the last few years, the typical capital protection barriers set at 60% of the initial level were instrumental in preventing losses in many cases. The ability to set protection in this way to reduce risk is one of the most important features of structured products.

The second thing to observe is that some structured products are built to secure yield even during periods of market downfalls, which helps to avoid uncertainties in sideways moving markets. The rationale behind the phoenix payoff is that even if the product has not been called, the investor is still entitled to their predefined coupon. This is particularly important in the case of long-term investment strategies and when the trade levels of indices is relatively high as it has been until recently the case.

The above comparison once again confirms the value of structured products, though a direct comparison is difficult due to the specificities of structured product payoff types (coupon and capital protection). On the one hand, autocallable products have limits on the positive side of returns, but not on the negative. On the other, they do not require any market growth (measured from the initial strike date) to provide their target returns, which means they are more likely to generate a positive return with relatively little volatility. The fact that structured products are also targeted at lower risk retail investors, explains why the focus is placed on providing returns that are aligned with investor targets but also have protection to avoid capital losses. Considering the perspective of an investor looking for equity-like returns at a lower risk, we note that over this time period structured products actually outperformed index-based strategies.

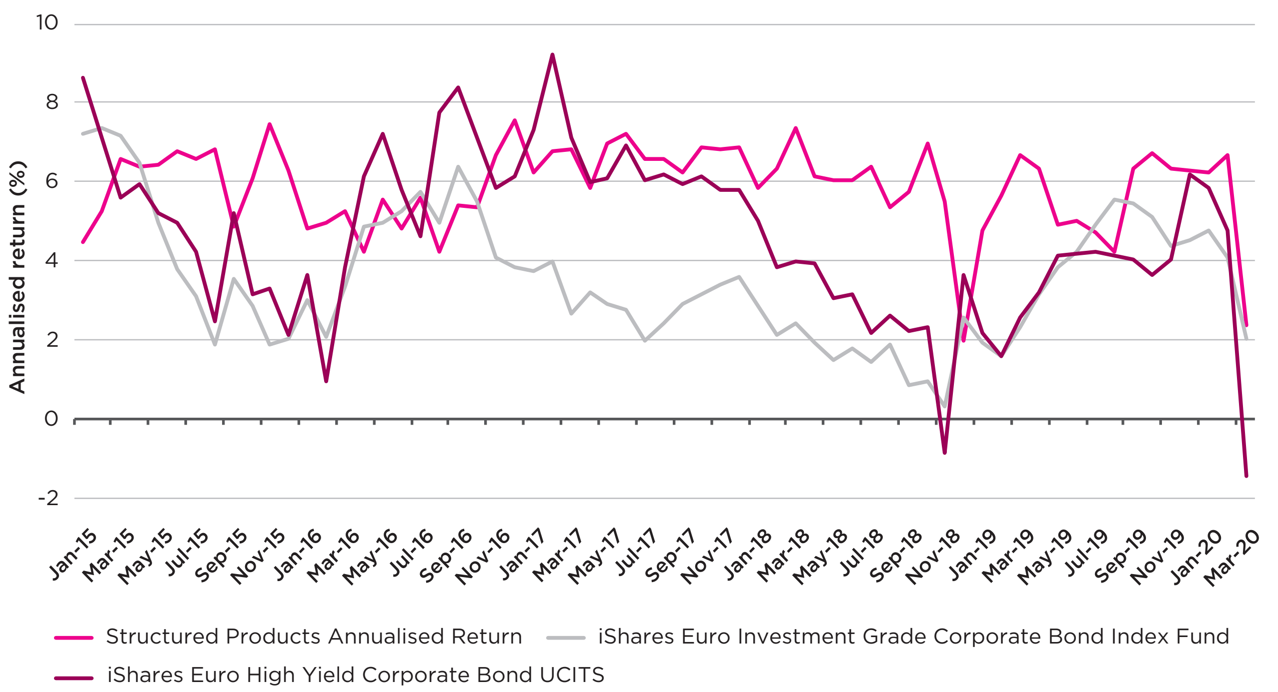
2.2. Structured products v bond strategies

To measure the performance of structured products against fixed income alternatives, we selected one high yield and one investment grade corporate bond ETF. As with the previous comparison, we calculate the return based on the price of each of the two bond funds over the same time period that each structured product runs.

The average maturity of all structured products in the sample, and respectively the tenor of the replicated investment in the fixed-income ETFs, is two years. This is because the simulated return from the latter depends on an entry and exit dates defined by the strike and maturity dates of each structured product. It's worth mentioning that over half of the products ran for an actual one-year maturity.

Prior to the creation of the ETFs, we used the historical data of their respective benchmark indices as a proxy - Bloomberg Barclays Euro Corporate Bond Index and Markit iBoxx Liquid High Yield Total Return Index.

Comparison to high yield and investment grade corporate bond strategies



* Source: SRP, Investing.com
** Includes capital-at-risk and capital-protected structured products (strike date > Jan-2010; maturity date Jan-2015 to Mar-2020)
*** Bloomberg Barclays Euro Corporate Bond Index and Markit iBoxx Liquid High Yield Total Return Index historical data is used as a proxy prior to the creation of the funds

As we can see from the chart, in the past five years, structured products have delivered more stable and broadly higher returns compared to an investment in a fixed income ETF with the same duration. In fact, since 2015, an investment in the bond ETFs would have outperformed structured products only in 2016, and at the end of 2018.

In the first case, oil-exposed high yield utility ETFs tended to outperform in 2016 after slowing Chinese economy and falling crude oil prices in the second half of 2015.

In the second case, rising interest rates in 2018 meant fixed income did not have a great year. However, equity markets suffered as well, particularly after October as a pessimistic reaction from US president Trump's trade war with China, the slowdown in global economic growth and concerns that the Federal Reserve was raising interest rates too quickly. The equity market dive marked a hiatus in the flow of autocalling products and impacted the average return.

In 2019, interest rates plunged due to concerns about the trade war and the general health of the global economy. Here again, the fixed income ETFs' price appreciation was a much more important factor than the yield served

In March 2020, the Covid-19 pandemic market crash slashed the returns of both structured product and bond ETFs. The high yield bond ETF was the most impacted with simulated returns potentially resulting in a loss of capital had it been exited at that moment.

In the table below, we compared the average annualised return from structured products that have matured in the last five years to the annualised return of the equity index-based and bond ETF strategies over the last 10 years, since the 10-year period covers the lifecycle of the analysed structured products sample (Strike date > Jan-2010) better.

	Annualised return
Structured Products* (average annualised return)	6.1
Euro Stoxx 50 UCITS ETF DR - EUR (C)	2.6
CAC 40 UCITS ETF DR - EUR (C)	4.3
iShares Euro Investment Grade Corporate Bond Index Fund / Bloomberg Barclays Euro Corporate Bond Index	3.4
iShares Euro High Yield Corporate Bond UCITS /Markit iBoxx Liquid High Yield Total Return Index	4.3

*Strike date > Jan-2010; Maturity date Jan-2015 to Mar-2020
**Performance ETFs for 10 years (Jan-2010 to Mar-2020)
* Source: SRP, Investing.com

Considering the perspective of an investor looking for equity-like return at lower risk, we note that over this time period structured products clearly over-performed both equity index-based and bond strategies.

Part 3:
Looking ahead

Maturities going forward and barrier risks

This part of the study looks ahead to review existing structured products in France to see how they are placed to face the current challenging markets.

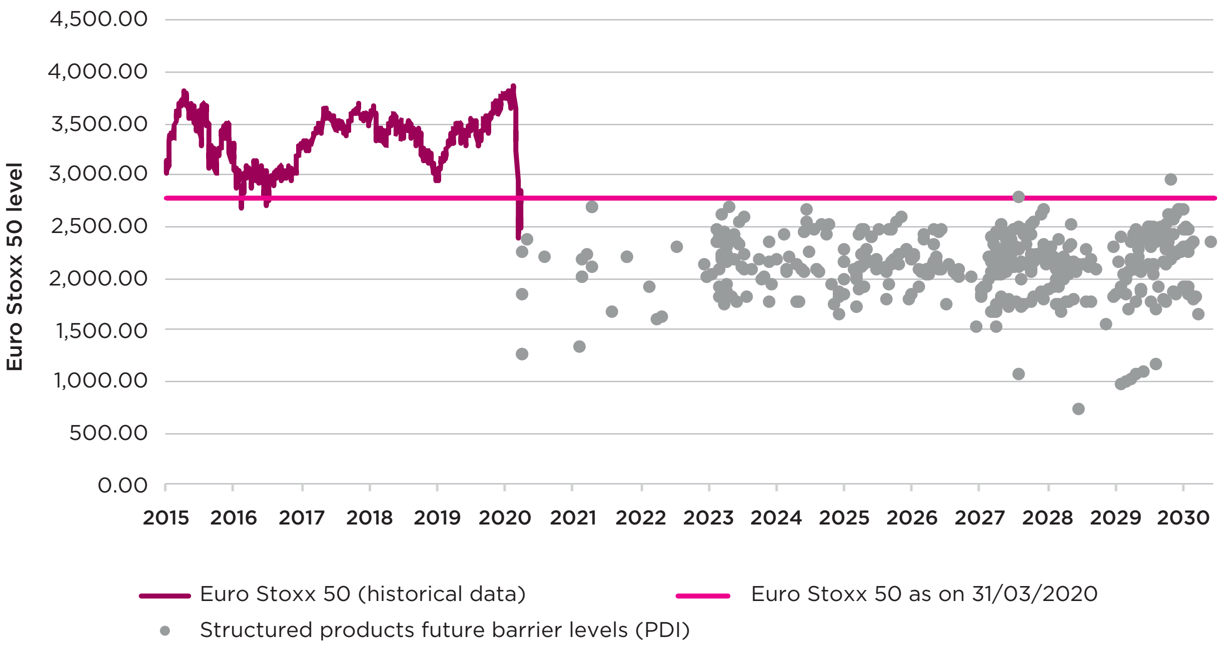
The SRP France database lists 5,667 capital-at-risk products issued in France with a final maturity date after 1 April 2020. Of those, 2,155 autocalls had already successfully called early providing investors with full return of capital and a positive annualised average return of 6.85%. This leaves 3,519 outstanding products of which 3,144 are autocallable.

The vast majority of the above products are linked to a single equity index and this study will focus on that universe. From the 1,980 autocallables linked to a single index, 27% are linked to the Eurostoxx 50 and 53% are dependent on synthetic indices.

Most structured products offer soft protection, meaning that while their mark-to-market value is highly correlated with the performance of the reference asset, the invested capital is protected at maturity so long as the underlying does not depreciate to more than a predefined barrier level. In general, capital-at-risk structured products in France are protected by a single European barrier, which is reviewed at maturity. This means that if the underlying is above this level at maturity then investor's capital will be repaid in full, and potentially with a coupon if markets have recovered.

From the 495 live products linked to the Eurostoxx 50, only one product has not returned to the safety zone as of the end of March.

Maturity barrier as a risk measure



*Source: SRP, Investing.com
Only strikes prior to 1 April 2020

The chart shows that all future protection barrier levels, as indicated by the grey dots, are safely below the current level of the benchmark as shown by the horizontal orange line. The blue line shows the evolution of the index in the last five years and highlights the recent falls.

This means that even if the benchmark does not recover from its current levels for a long period and stays around its current levels, none of the live Eurostoxx 50-linked products will lose capital for their investors.

The protection barrier level indicating the only product potentially in danger is at a Eurostoxx 50 level of 2,941 and as can be seen from this chart it is years down the line, in November 2029.

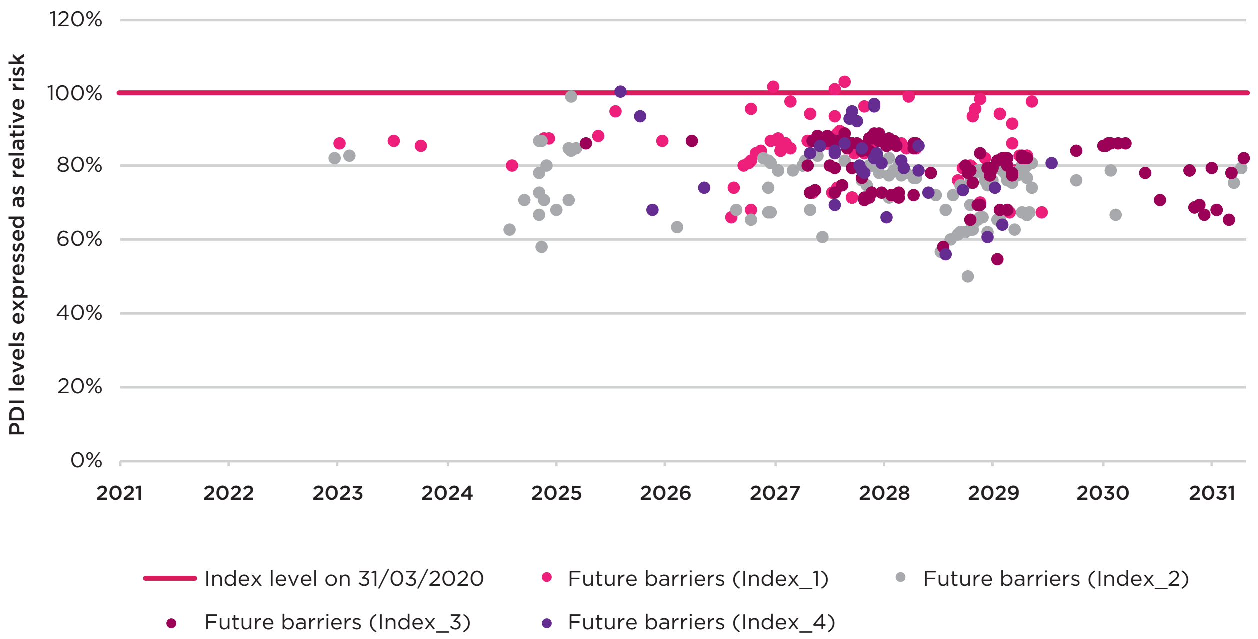
The next thing to observe from the chart is that 95% of the future active maturities are situated after January 2023. The average barrier level for the products maturing before that date is almost 25% below the index current level.

Additionally we note that 55 products have a negative or step-down autocall barrier which increases their chances to expire long before the maturity date. If not redeemed early, 113 products linked to the benchmark consider their next call point in less than a year (including 41 products with daily observation).

As already mentioned above in this report, synthetic indices have been delivering positive returns to investors over the last five years, and even increased the coupon by one percent relative to products linked to a benchmark.

From the 1,700 products linked to a synthetic index, 635 had already successfully called early delivering an average annualised coupon of over seven percent for a 1.3-year average holding period. At the time of writing this report, the SRP database lists 1,063 live structures linked to 46 indices with a decrement.

Maturity barrier as a risk measure (Top 4 synthetic dividend indices)



*Source: SRP, Boursorama.com
Only include strikes prior to 1 April 2020

Most of these indices keep a very strong correlation with the benchmarks and withhold a fixed rate dividend. Given the current lack of visibility on the dividend that a company will be able to distribute in the future years, the pre-defined fixed dividend allows to significantly improve the payoff. The equal weighting of the constituent shares of these indices is supposed to gradually compensate the difference between the real dividends reinvested in the index and the withheld decrement (yet, this may not be the case in some years).

Four synthetic indices account for 37% of the products in force in this category. These indices also represent 27% of the outstanding capital-at-risk products linked to an equity index (with final maturity date beyond 1 April 2020.

The chart above looks at the future protection barriers of the products linked to the four most-used synthetic indices in France. The idea is to illustrate how far barriers stand from being breached by these indices' levels measured on 31 March 2020.

The blue line in the chart represents the level of each of the four most used synthetic indices as of 31 March 2020. The dots correspond to the future protection barriers (PDI) expressed as a percentage from this level: the further below the blue line the dots are, the better protected the products have been.

The first observation is that virtually all future protection barrier levels, as indicated by the dots, are below the current level of the analysed indices as shown by the horizontal blue line. We also note that 84% of the barriers could absorb at least 10% additional fall as of the time of writing. This means that even if the indices do not recover from their current levels for a long period and stay around their current levels, virtually no product will experience a capital loss.

Only around five percent of the products have their capital protection remain highly sensitive to the current levels of the indices. However, the first one of these maturities occurs in 2027, seven years from now.

The next thing to observe from the chart is that no product is immediately at risk of further short-term variations since the first observation barrier is not active until 2023 - even more so as 98% of the future active maturities will happen from January 2025 onwards. In fact, 84% of the maturities are concentrated between 2027 and 2029, giving time enough for the early redemption of the products to take place or to allow the capital protection to actuate at maturity, thus minimising the risk of loss.

Additionally, we note that 50 products have a negative or step-down autocall barrier, which increases their chances of expiring before the maturity date. If not redeemed early on any of the dates, more than half of the products linked to an optimised index will consider their next call point in less than a year. One-fifth of products has a quarterly autocall observation, while one in seven checks for the autocall twice a year. Nine percent of products are reviewed on a daily basis from the first year of investment onwards.

As far as the barrier level is concerned, athena autocallables expose investors to slightly more risk than their phoenix counterparts (21% of the barriers in athena products were set higher than 60% of the initial level compared to 17% in the case of the regular income products).

The share of barriers spanning the range between 50-60% was higher in the phoenix group (80% compared to 73% in the case of athena autocallables). In conclusion, well done to the France structured product providers who managed the remarkable achievement of issuing products with solid protection capable to withstand this year's turbulent market environment.

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