

This document is intended for professional investors
Written in October 2023

Diversification in bond investing: the fund manager's dilemma



Julien Petit

Fixed Income Portfolio
Manager



M'hamed Fenniri

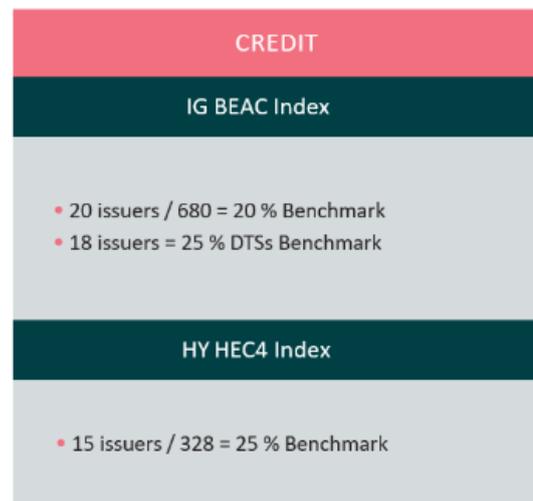
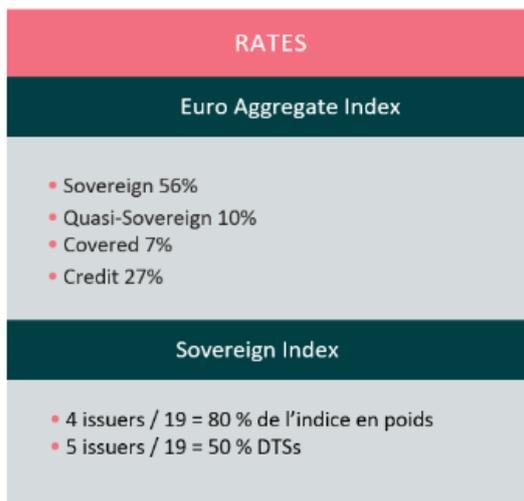
Fixed Income Portfolio
Manager

Diversification and bond portfolio management often go hand in hand. There are two reasons for this: firstly, because the multitude and variety of asset classes underlying the bond market means there is a wide gap between the asset considered to be the safest in the world (Treasury notes) and the debt of financially fragile companies (high-yield bonds). Secondly, because at the “lower” level, i.e. within the indices, these asset classes contain hundreds of different securities.

This observation is more nuanced if we look back at the ultra-accommodative monetary policies of the last ten years, which have profoundly altered the correlation regimes within bond market asset classes. FOMO (Fear Of Missing Out) and “hunt for yield” behaviours have sidelined the traditional regime whereby “non-risky” and “risky” assets have negative to low correlations. During this recent period of managed markets – with the exception of the high-yield debt market, which retained this characteristic – the different segments of the bond market remained highly correlated. The high-yield debt market, where the majority of the yield comes from the credit

spread, has thus escaped this phenomenon of homogeneous performance, which makes diversification difficult (or even ineffective) at the allocation level.

On the more specific point of the indices that represent the different asset classes of the bond market, nuance is also required. There is a high degree of concentration within these indices, as can be seen in the key bond indices illustrated below. So, for an investor looking for a specific allocation in one of the segments of the bond market, it is crucial to seek out active management, otherwise you will find yourself extremely concentrated in certain risks, sectors and issuers.



Source : Bloomberg Indexes Euro Aggregate, Bloomberg Euro Aggregate Corporates (BEAC), Bloomberg Euro Aggregate Treasury, ICE BofA Euro High Yield BB-B contrait (HEC4), data as of 30/08/2023. This information is simplified and schematic examples given for illustration and educational purposes. They are not exhaustive and do not represent specific views, portfolio or management process or investment recommendations.

The need for a policy on diversification in bond management is therefore clearly established. There are two opposing camps when it comes to developing such a policy: on the one hand, there are the advocates of so-called “super active” management, which would only be achieved by highly concentrating portfolios and for which diversification would only serve to mask a lack of conviction. Their main aim is to undermine the credibility of passive management by assimilating a whole part of

the asset management landscape to it. On the other hand, there is another camp that continues to use Markowitz's(1) principles - admittedly, often in a rather uncreative way. In practice, this means piling quantitative constraints on portfolios and managing them in a way that ultimately resembles “basic” risk management.

Our role, as leading active managers in the bond market, is to distance ourselves from this sterile (and very marketing-focused) debate, in particular by building a unique

philosophy of bond management and portfolio diversification.

There are several other issues:

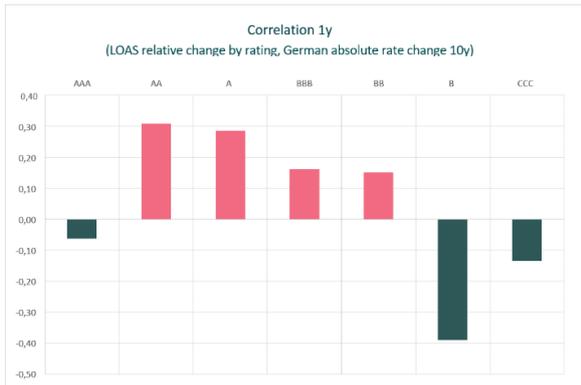
- In portfolio construction, negative views encourage the elimination of asset classes, issuers, sectors, instruments, etc. One consequence is the weakening of effective portfolio diversification. How can this be remedied?
- Additional expertise is therefore needed on the asset classes/issuers used, to diversify our allocations effectively and in an informed manner. This means it is crucial to be able to rely on a comprehensive and integrated platform of macroeconomic, strategy, credit and ESG research;
- What about diversification for certain so-called “risk-free” asset classes, which showed their extreme correlation – in terms of losses – during the European sovereign crisis?
- After a certain degree of granularity, diversification makes little or no contribution.
- In benchmarked management: Over-diversification bears the risk of replicating passive management. How can we maintain correlation with the benchmark while generating outperformance?

To respond to these different issues, we first provide a periodic response to the “fund manager’s dilemma”, which can be formulated as follows: favour conviction-based management and concentration of exposures to extract outperformance, or favour a less aggressive style by diluting market risk and favouring the systematic reduction of “specific” risk.

The answer is first and foremost a choice of management style, based on a historical and prospective study of market systems. By finely analysing the correlations between asset classes in the bond market, as illustrated below, we identify market segments with decorrelated power and/or potential which may be the subject of allocation. At the very start of our investment process, we choose a diversification/concentration framework. This is periodically reassessed.

CORRELATION		L-OAS										YIELD
		LECP TREU	HEC4	BEYH TREU	AAA	AA		BBB	BB	B	CCC	All 3-5y rates
L-OAS	LECP TREU	1.00	0.61	0.45	0.42	0.93	0.97	0.57	0.73	0.10	0.62	0.17
	HEC4	0.61	1.00	0.68	0.12	0.47	0.57	0.44	0.82	0.75	0.68	-0.23
	BEYH TREU	0.45	0.68	1.00	-0.21	0.30	0.38	0.44	0.61	0.29	0.59	-0.16
	AAA	0.42	0.12	-0.21	1.00	0.31	0.34	0.50	0.27	-0.17	0.23	-0.17
	AA	0.93	0.47	0.30	0.31	1.00	0.98	0.36	0.60	0.05	0.34	0.32
	A	0.97	0.57	0.38	0.34	0.98	1.00	0.44	0.67	0.13	0.46	0.28
	BBB	0.57	0.44	0.44	0.50	0.36	0.44	1.00	0.57	-0.07	0.63	-0.03
	BB	0.73	0.82	0.61	0.27	0.60	0.57	0.57	1.00	0.32	0.53	0.05
	B	0.10	0.75	0.29	-0.17	0.05	0.13	-0.07	0.32	1.00	0.38	-0.33
	CCC	0.62	0.68	0.59	0.23	0.34	0.46	0.63	0.53	0.38	1.00	-0.28
YIELD	All 3-5y rates	0.17	-0.23	-0.17	-0.17	0.32	0.28	-0.03	0.05	-0.33	-0.28	1.00

(1) Modern portfolio theory, developed by Harry Markowitz in the 1950s, defines the process of stock selection to create the most efficient portfolio possible, that is, that has the maximum profitability for a minimum level of risk.



Source: Ostrum Asset Management, data as of 30/08/2023. This information is simplified, and schematic examples given for illustration and educational purposes. They are not exhaustive and do not represent views, a portfolio or a management process or investment recommendations.

Once this choice has been made, we use multi-dimensional portfolio construction to implement it.

The choice of fund manager is made on a strategy-by-strategy basis, taking into account the performance prospects and objectives of the portfolio concerned, the characteristics of the types of process (focus on allocation or stock selection) and the eligible asset classes. Obviously, a High Yield bond strategy will naturally seek greater concentration than a pure Investment Grade strategy, for example. A 'Long/Short' strategy will, by its very nature, have less market risk, but could be subject to greater diversification in terms of themes and possible styles (Event Driven, Arbitrage, Directional, Carry trade, Curves, Normalisation, etc.).

Next comes the allocation stage. We construct model and actual portfolios, allocating risk budgets by diversifying bond “assets” or “themes” within each strategy. This is why our fund managers often use “non-benchmark” or “non-core” assets, with the aim of reducing risk and optimising performance.

We then apply our philosophy on a finer scale and a step which consists in fundamental research and financial analysis. This enables us to lock in the effective level of portfolio diversification. So, within the sectors/securities in which we invest, we

study the level of business risk caused by the activity of the bond issuers in the portfolio.

We measure this risk at portfolio level and study the effective correlation of our investments from this angle. For example, the issue of exposure to semiconductor shortages has been a focus of attention in terms of diversification. We are also thinking about the impact of artificial intelligence on our choice of sectors/securities and how this issue should be taken into account in our “business risk” diversification work.

The last stage of our process consists in analysing technical market factors and finalising stock selection and allocation based on criteria such as secondary and primary flows, positioning, valuation and performance. These indicators and factors must also be approached through a diversification prism. For example, if a portfolio is overexposed to market segments with excessive primary financing requirements, this may jeopardise its long-term performance. The same applies to positioning – market segments that are heavily or “over” invested can only perform marginally and offer significant potential for underperformance. Investments should therefore be diversified from this perspective.

In essence, managing a bond portfolio involves balancing the expression of strong convictions with a view to generating performance and sufficient resilience to

ensure that this performance is sustainable and stable. To achieve this, diversification must be integrated into all aspects of management, from idea generation to portfolio construction and stock selection. In addition to seeking “decorrelated” strategies, we provide diversification through strategies in which the fund manager has sufficient expertise to include controlled risk/return combinations. Diversification needs to be approached from different angles – asset classes, sectors, themes and styles – and

then refined by analysing the underlying risks involved, particularly in credit asset classes.

Diversification in bond management is therefore not incompatible with a search for pure performance, but rather focuses on the quality and resilience of that performance.

Finally, to Warren Buffet's famous quote, “Diversification is protection for ignorance.. .”, we could have added “... and protection for 'unknowns”.

Additional notes

This material has been provided for information purposes only to investment service providers or other Professional Clients, Qualified or Institutional Investors and, when required by local regulation, only at their written request. This material must not be used with Retail Investors.

To obtain a summary of investor rights in the official language of your jurisdiction, please consult the legal documentation section of the website (im.natixis.com/intl/intl-fund-documents)

In the E.U.: Provided by Natixis Investment Managers International or one of its branch offices listed below. Natixis Investment Managers International is a portfolio management company authorized by the Autorité des Marchés Financiers (French Financial Markets Authority - AMF) under no. GP 90-009, and a public limited company (société anonyme) registered in the Paris Trade and Companies Register under no. 329 450 738. Registered office: 43 avenue Pierre Mendès France, 75013 Paris. Germany: Natixis Investment Managers International, Zweigniederlassung Deutschland (Registration number: HRB 129507): Senckenberganlage 21, 60325 Frankfurt am Main. Italy: Natixis Investment Managers International Succursale Italiana, Registered office: Via San Clemente 1, 20122 Milan, Italy. Netherlands: Natixis Investment Managers International, Nederlands (Registration number 000050438298). Registered office: Stadsplateau 7, 3521AZ Utrecht, the Netherlands. Spain: Natixis Investment Managers International S.A., Sucursal en España, Serrano n°90, 6th Floor, 28006 Madrid, Spain. Sweden: Natixis Investment Managers International, Nordics Filial (Registration number 516412-8372- Swedish Companies Registration Office). Registered office: Covendrum Stockholm City AB, Kungsgatan 9, 111 43 Stockholm, Box 2376, 103 18 Stockholm, Sweden. Or,

Provided by Natixis Investment Managers S.A. or one of its branch offices listed below. Natixis Investment Managers S.A. is a Luxembourg management company that is authorized by the Commission de Surveillance du Secteur Financier and is incorporated under Luxembourg laws and registered under n. B 115843. Registered office of Natixis Investment Managers S.A.: 2, rue Jean Monnet, L-2180 Luxembourg, Grand Duchy of Luxembourg. Belgium: Natixis Investment Managers S.A., Belgian Branch, Gare Maritime, Rue Picard 7, Bte 100, 1000 Bruxelles, Belgium.

In Switzerland: Provided for information purposes only by Natixis Investment Managers, Switzerland Sàrl, Rue du Vieux Collège 10, 1204 Geneva, Switzerland or its representative office in Zurich, Schweizergasse 6, 8001 Zürich.

In the British Isles: Provided by Natixis Investment Managers UK Limited which is authorised and regulated by the UK Financial Conduct Authority (register no. 190258) - registered office: Natixis Investment Managers UK Limited, One Carter Lane, London, EC4V 5ER. When permitted, the distribution of this material is intended to be made to persons as described as follows: in the United Kingdom: this material is intended to be communicated to and/or directed at investment professionals and professional investors only; in Ireland: this material is intended to be communicated to and/or directed at professional investors only; in Guernsey: this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Guernsey Financial Services Commission; in Jersey: this material is intended to be communicated to and/or directed at professional investors only; in the Isle of Man: this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Isle of Man Financial Services Authority or insurers authorised under section 8 of the Insurance Act 2008.

In the DIFC: Provided in and from the DIFC financial district by Natixis Investment Managers Middle East (DIFC Branch) which is regulated by the DFSA. Related financial products or services are only available to persons who have sufficient financial experience and understanding to participate in financial markets within the DIFC, and qualify as Professional Clients or Market Counterparties as defined by the DFSA. No other Person should act upon this material. Registered office: Unit L10-02, Level 10, ICD Brookfield Place, DIFC, PO Box 506752, Dubai, United Arab Emirates

In Japan: Provided by Natixis Investment Managers Japan Co., Ltd. Registration No.: Director-General of the Kanto Local Financial Bureau (kinsho) No.425. Content of Business: The Company conducts investment management business, investment advisory and agency business and Type II Financial Instruments Business as a Financial Instruments Business Operator.

In Taiwan: Provided by Natixis Investment Managers Securities Investment Consulting (Taipei) Co., Ltd., a Securities Investment Consulting Enterprise regulated by the Financial Supervisory Commission of the R.O.C. Registered address: 34F., No. 68, Sec. 5, Zhongxiao East Road, Xinyi Dist., Taipei City 11065, Taiwan (R.O.C.), license number 2020 FSC SICE No. 025, Tel. +886 2 8789 2788.

In Singapore: Provided by Natixis Investment Managers Singapore Limited (NIM Singapore) having office at 5 Shenton Way, #22-05/06, UIC Building, Singapore 068808 (Company Registration No. 199801044D) to distributors and qualified investors for information purpose only. NIM Singapore is regulated by the Monetary Authority of Singapore under a Capital Markets Services Licence to conduct fund management activities and is an exempt financial adviser. Mirova Division (Business Name Registration No.: 53431077W) and Ostrum Division (Business Name Registration No.: 53463468X) are part of NIM Singapore and are not separate legal entities. This advertisement or publication has not been reviewed by the Monetary Authority of Singapore.

In Hong Kong: Provided by Natixis Investment Managers Hong Kong Limited to professional investors for information purpose only.

In Australia: Provided by Natixis Investment Managers Australia Pty Limited (ABN 60 088 786 289) (AFSL No. 246830) and is intended for the general information of financial advisers and wholesale clients only .

In New Zealand: This document is intended for the general information of New Zealand wholesale investors only and does not constitute financial advice. This is not a regulated offer for the purposes of the Financial Markets Conduct Act 2013 (FMCA) and is only available to New Zealand investors who have certified that they meet the requirements in the FMCA for wholesale investors. Natixis Investment Managers Australia Pty Limited is not a registered financial service provider in New Zealand.

In Colombia: Provided by Natixis Investment Managers International Oficina de Representación (Colombia) to professional clients for informational purposes only as permitted under Decree 2555 of 2010. Any products, services or investments referred to herein are rendered exclusively outside of Colombia. This material does not constitute a public offering in Colombia and is addressed to less than 100 specifically identified investors.

In Latin America: Provided by Natixis Investment Managers International.

In Uruguay: Provided by Natixis Investment Managers Uruguay S.A., a duly registered investment advisor, authorised and supervised by the Central Bank of Uruguay. Office: San Lucar 1491, Montevideo, Uruguay, CP 11500. The sale or offer of any units of a fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627.

In Mexico: Provided by Natixis IM Mexico, S. de R.L. de C.V., which is not a regulated financial entity, securities intermediary, or an investment manager in terms of the Mexican Securities Market Law (Ley del Mercado de Valores) and is not registered with the Comisión Nacional Bancaria y de Valores (CNBV) or any other Mexican authority. Any products, services or investments referred to herein that require authorization or license are rendered exclusively outside of Mexico. While shares of certain ETFs may be listed in the Sistema Internacional de Cotizaciones (SIC), such listing does not represent a public offering of securities in Mexico, and therefore the accuracy of this information has not been confirmed by the CNBV. Natixis Investment Managers is an entity organized under the laws of France and is not authorized by or registered with the CNBV or any other Mexican authority. Any reference contained herein to "Investment Managers" is made to Natixis Investment Managers and/or any of its investment management subsidiaries, which are also not authorized by or registered with the CNBV or any other Mexican authority.

In Brazil: Provided to a specific identified investment professional for information purposes only by Natixis Investment Managers International. This communication cannot be distributed other than to the identified addressee. Further, this communication should not be construed as a public offer of any securities or any related financial instruments. Natixis Investment Managers International is a portfolio management company authorized by the Autorité des Marchés Financiers (French Financial Markets Authority - AMF) under no. GP 90-009, and a public limited company (société anonyme) registered in the Paris Trade and Companies Register under no. 329 450 738. Registered office: 43 avenue Pierre Mendès France, 75013 Paris.

The above referenced entities are business development units of Natixis Investment Managers, the holding company of a diverse line-up of specialised investment management and distribution entities worldwide. The investment management subsidiaries of Natixis Investment Managers conduct any regulated activities only in and from the jurisdictions in which they are licensed or authorized. Their services and the products they manage are not available to all investors in all jurisdictions. It is the responsibility of each investment service provider to ensure that the offering or sale of fund shares or third party investment services to its clients complies with the relevant national law.

The provision of this material and/or reference to specific securities, sectors, or markets within this material does not constitute investment advice, or a recommendation or an offer to buy or to sell any security, or an offer of any regulated financial activity. Investors should consider the investment objectives, risks and expenses of any investment carefully before investing. The analyses, opinions, and certain of the investment themes and processes referenced herein represent the views of the portfolio manager(s) as of the date indicated. These, as well as the portfolio holdings and characteristics shown, are subject to change. There can be no assurance that developments will transpire as may be forecasted in this material. The analyses and opinions expressed by external third parties are independent and does not necessarily reflect those of Natixis Investment Managers. Past performance information presented is not indicative of future performance.

Although Natixis Investment Managers believes the information provided in this material to be reliable, including that from third party sources, it does not guarantee the accuracy, adequacy, or completeness of such information. This material may not be distributed, published, or reproduced, in whole or in part.

All amounts shown are expressed in USD unless otherwise indicated.

Natixis Investment Managers may decide to terminate its marketing arrangements for this product in accordance with the relevant legislation.



www.ostrum.com



An affiliate of:  NATIXIS
INVESTMENT MANAGERS