

RESPONSIBLE INVESTING AND PORTFOLIO RISK & RETURN PROFILE: A CHANGE OF PARADIGM

As one of our founding pillars, responsible investing is at the core of Amundi's identity. We have been thriving to support the development of responsible investing across financial markets by:

- Continuously generating innovative products and strategies across asset classes in order to transform theory into practice;
- Participating to market initiatives to collectively shape responsible investment standards; and
- Contributing to the academic debate to objectively challenge ourselves on current methodologies and traditional approaches.

So far, responsible investing has been mostly about convictions, as there was mixed academic evidence supporting a relationship between risk, reward and ESG¹-induced investing.

Academics had actually found that best-in-class ESG stocks and/or worst-in-class ESG stocks could be remunerated. But the results for these academic studies have been plagued by the fact that (i) the observation period (often based on a long-term, twenty to thirty years horizon) could not have been probing insofar as (ii) the existence of robust extra-financial data only dates back to the early 2010s.

By targeting a period during which we believe that ESG could effectively be materialized by using our proprietary ESG scores and Environmental, Social, and Governance sub-component scores, Amundi has found significant results highlighting the impact of ESG investing on returns.



"Our research confirms that ESG integration generates a tangible impact on equity performance in Europe and North America. By favoring a best-in-class ESG approach, investors are able to benefit from an investment strategy that improves the long-term performance of the portfolios".

Vincent Mortier, Group Deputy CIO

INVESTORS MOBILIZING AROUND ESG ISSUES ARE IMPACTING ESG STOCK PRICES

With rising awareness around ESG issues worldwide, institutional investors have started to massively look into responsible investment. The latter has grown substantially in Europe and in North America in the past 5 years.

When an alpha strategy is massively implemented, it becomes a beta strategy.

In Europe, the massive mobilization of institutional investors regarding ESG investing has impacted demand mechanisms, with a subsequent effect on prices, thereby also triggering a performance premium.

Starting with extensive media coverage around the much anticipated COP21, responsible investment came at center stage with the adoption of the Paris Agreement and the United Nations 17 Sustainable Development Goals in 2015. Increased scrutiny on ESG-related issues and the advent of major controversies heightened pressure for corporates, as scandals impacted share prices. These events were a wakeup call for the financial community: the One Planet Summit in 2017 triggered the mobilization of key actors of the financial community such as sovereign wealth funds and, more recently, central banks. As ESG is an issue that can no longer be over-

looked, regulators are joining the conversation: the European Union is working on a sustainable investing framework to provide a harmonized approach toward responsible investing in Europe; in the UK, the Department for Work and Pensions has proposed far-reaching changes in the pension schemes investments, whereby pension funds must provide insights on how they account for financially material ESG considerations; and the list goes on.

It is hence clear that investors' behaviors on financial markets have made responsible investing material in the Eurozone and in North America, although ESG improves diversification only in the Eurozone at this stage. This means that forward looking, institutional investor's mobilization is crucial for responsible investing, and this trend is expected to continue.



"Investors mobilization has been key in making ESG material into stock prices, by directly affecting demand and indirectly affecting supply mechanisms. With the growing momentum around responsible investment, this trend is expected to grow stronger."

Thierry Roncalli, Head of Quantitative Research

KEY FINDINGS

The study focused on the period 2010-2017 and used Amundi's proprietary ESG scores and Environmental, Social and Governance (E,S and G) sub-components to screen portfolios. The analysis was conducted for passive, active and multi-factor portfolios for Europe and North America, among others.

both active 2013 only En outperforma	and passive Eur vironmental-focus	a responsible investor ropean and North Ar sed passive investors in of Governance-focuse egative.	nerican portfolio n the Eurozone w	s. Between 2010- ould have enjoyed
the Eurozon Governance) pillar domina	e and North Ame and ESG score in ating. In North A	investing was general rica. In the Eurozone, a ntegration displayed po merica, ESG investing ough the Environmenta	all pillars (Environ ositive returns, wit during the 2014	mental, Social and the Governance -2017 period also
stock prices dependent o	integrate ESG-rela on the geographic	erformance generation at difference information at difference region studied, the Estate period studied.	ferent levels. Thes	e mechanisms are
Overall, in No	orth America betw	een 2014-2017		
(i) ESG-por	tfolios' excess retu	ırn increased with the I	ESG score;	
(ii) only best-in-class stocks were remunerated for Environmental-focused portfolios,				
_		cial-focused portfolios;		
(iii) and only	worst-in-class sto	ocks were penalized for	Governance-focu	s portfolios.
(i) both bes for ESG - portfolio	-and Governance- s;	vere remunerated and vere remunerated and vere remunerated follows, and the were remunerated for the were remaining for the were remunerated for the were remaining for the w	d only since 2016 f	or Social-focused
Figure 1 - Ove	rview of performar	nce generation mechanis	sms per region and	observation period
	All gradients	Both Best-ranked & Worst-ranked	Only Best-ranked	Only Worst-ranked
	The excess return increases with the extra-financial ranking	The best-in-class stocks are remunerated and the worst-in-class stocks are penalized	Only the best- in-class stocks are remunerated	Only the worst- in-class stocks are penalized
North America	ESG		E S	G
Eurozone		ESG G S	Е	
			Е	
North America & Eurozone				

KEY FINDINGS

Diversification profile		
4	ESG-induced performance improvements must be implemented carefully: there is a tipping point beyond which ESG score improvements reduce the investment universe and hence, can negatively impact diversification and performance. When improving the ESG score of a portfolio, the investment universe is reduced which can lead to a reduction of the diversification if the constraint is too strong.	
5	Responsible investing has become a beta strategy in Eurozone (as ESG is a risk factor), but remains an alpha strategy in North America (as ESG is not a risk factor). Introducing ESG as a factor into a multi-factor approach of portfolio construction adds value by improving the diversification in the Eurozone, but not in North America.	

Risk profile	
6	ESG screening does not necessarily improve drawdown management. ESG screening did not significantly reduce the maximum drawdown of portfolios for both the 2010-2013 and 2014-2017 periods.
7	To seize the benefits of ESG investing for the portfolio profile, passive investors need to accept additional, yet controlled, tracking error compared with capitalization-weighted benchmarks. Beyond accepting additional - yet controlled - tracking error, combining ESG with passive investment may imply the need to design ESG-based Strategic Asset Allocation.





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