## SUSTAINABLE FINANCE REPORT

ISSUE #2







Europe and the U.S. represent over 90% of ESG assets under management globally. ESG investment styles in Europe are dominated by exclusions and norms-based screening while in the U.S. ESG integration predominates. To a large extent these styles have been encouraged by voluntary codes, principles and fiduciary duty. However, mandatory legislation is also on the rise as illustrated by divestment bills in California and newly mandated reporting requirements in France. In this article, we explore these trends and ponder how a new Republican administration in the U.S. will affect the fivefold increase in retail and institutional funds incorporating climate change into their investment criteria that has occurred in the U.S. over the past two years.

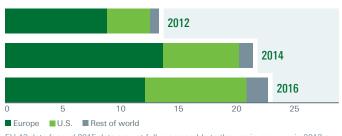
#### **Executive summary**

Investors have become increasingly aware of the importance of such issues as climate change, resource scarcity, labor rights and corporate governance to financial returns. We believe this helps to explain the growth in assets under management (AuM) that are classified as Environmental, Social and Governance (ESG).

In this article, we examine trends in ESG AuM and their various classifications. We then consider how these responsible investment strategies have been influenced by the adoption of voluntary codes and principles by asset owners and managers as well as the increasing scope and pace of mandatory legislation.

The latest data from the Global Sustainable Investment Association (March 2017) shows that ESG investing grew 25% over the past two years to reach USD 22.89 bn. In the U.S., ESG assets at the beginning of 2016 had risen by 33% year-on-year to reach USD 8.72 tn. As a result, ESG AuM in the U.S. now represents over 20% of all assets under professional management, an increase from 11% since the 2012 USSIF survey.

Figure 1: AuM classified as ESG by region (USD tn)



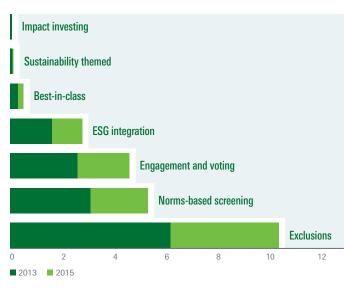
EU-13 data for end 2015 data are not fully comparable to the previous survey in 2013 as Norway is now not included Sources: GSIA (2014); Eurosif 2016; USSIF 2016; RIAA 2016

Compared to other regions, Europe had the slowest growth of ESG assets over the past two years (12%). In Europe, exclusion strategies predominate though sustainability themed and impact investing had the highest growth rate. The highest ESG growth rate occurred in Japan (GSIA March 2017).

From the types of investment styles deployed, we find exclusion screens, norms-based screens and engagement

and voting are the most prevalent in Europe, Figure 2. These styles have been spurred on by voluntary codes and principles such as the U.S. Global Compact and the Principles for Responsible Investment.

Figure 2: European ESG investment styles classified by AuM (EUR tn)\*



\* Note that if a fund combines two or more ESG strategies then they will be accounted for in each strategy, but, only once in the overall figures outlined in Figure 1; Data as of end December 2015.

Source: European SRI Study 2016, Eurosif (November 2016)

The predominance of exclusionary screens in Europe, that is prohibiting certain sectors or companies involved in activities or industries deemed unacceptable or controversial from a fund or plan, has, in part, been encouraged by mandatory legislation prohibiting the investing in companies focused in the manufacturing and production of cluster munitions and anti-personnel mines (CM&APL).

Mandatory legislation in this area exists across a number of countries, including Belgium, Ireland, Italy and New Zealand. According to Eurosif data, voluntary exclusions in investments in CM&APL account for 80% of total exclusions in Europe when measured by AuM. The remaining exclusion screens encompass such sectors as tobacco, nuclear energy, gambling and animal testing.

Past performance may not be indicative of future results.

<sup>&</sup>lt;sup>1</sup> CFP measures are defined as accounting-based performance, market-based performance, operational performance, perceptual performance, growth metrics, risk measures and the performance of ESG portfolios. Portfolio studies comprise of studies on long-short ESG portfolios and in particular studies on ESG mutual funds and indexes.



#### The rising tide of regulation

When it comes to responsible investment, regulation is typically centered around four themes:

- 1 | Corporate and investor disclosure such as the EU nonfinancial disclosure directive
- 2 | Stewardship codes and laws which encourage asset managers to engage with their investees
- 3 | Regulations aimed specifically at requiring asset owners to incorporate sustainability factors into their investment decision-making
- 4 | Regulations to shift capital to green and sustainable assets

#### 1 | Corporate disclosure

Efforts to improve corporate disclosure are spreading around the world with many initiatives such as the International Integrated Reporting Council (IIRC) an example of this trend. In fact 19 countries from the G20 have implemented regulation or guidelines on sustainability reporting, exclusions and ESG integration.

- In an effort to standardise ESG disclosure, the U.S. Sustainability Accounting Standards Board is developing accounting standards for more than 80 industries across 10 sectors. This is supporting the Securities and Exchange Commission's Regulation S-K, which includes annual financial reports, which requires that certain sustainability-related information be disclosed.
- In the European Union, the Non-Financial Reporting and Diversity Directive became effective at the beginning of 2017. It requires certain public and private companies to

- disclose information on ESG as well as human rights, anti-corruption, bribery and boardroom diversity. To some degree it builds on Germany's Sustainability Code which requires companies to disclose their compliance against 20 ESG criteria on a comply-or-explain basis.
- More powerful still is the French Energy Transition Law, ratified at the beginning of 2016 and effective from the beginning of this year, which has both obligations for companies and investors. From a listed company persepective it requires the disclosure of the financial risks related to climate, mitigation efforts, and consequences of climate on its goods and services.
- The integration of sustainable development into the financial system is also underway via central banks, financial regulators, credit rating agencies and stock exchanges among others.
- The World Federation of Exchanges (WFE) has ESG recommendations and guidance for its members and specifically recommends 34 key indicators that can be incorporated into stock exchange listing disclosures.
- The Global Reporting Initiative (GRI) Sustainability Reporting Guidelines¹ provide a framework to assist listed companies towards greater transparency. The framework, incorporating the G4 Guidelines, sets out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance.
- A good example of sustainability reporting is the King Code in South Africa. This principle based code for corporates has been adopted by the Johannesburg Stock Exchange as a listing requirement. The code is now being adapted for application to retirement funds in addition to corporates.

We expect this process of corporate reporting will be enhanced by the work being conducted by the Financial Stability Board's Task Force on Climate-related Financial Disclosure. One of its aims is to facilitate the voluntary disclosure of reliable, comparable and consistent forward looking climate-related financial data for companies and all parts of the financial sector, including banks. These recommendations will be presented to the G20 under Germany's presidency, with the possibility that these voluntary measures could become mandatory in a few years time.

### 2 | Stewardship and responsible ownership initiatives

The aim of stewardship codes is to promote the sustainable growth of companies through investment and dialogue. For investors, stewardship is more than just voting. Activities may include engagement on topics such as strategy, risk management, capital structure and corporate governance including board compensation and remuneration.

The adoption of stewardship codes has occurred in countries such as the U.K. and Switzerland, but, also further afield in Japan, Taiwan and Brazil. These codes have been driven in large part by institutional investors' fiduciary duty, which is demanding greater shareholder activity and active ownership as part of integrating ESG factors into the investment process.

We are also seeing increasing guidance when it comes to fiduciary duty. We expect this will continue to promote engagement and proxy voting activities. For example, the U.S Department of Labor's ERISA ruling in September 2015. The Employee Retirement Income Security Act (ERISA) overturned their previous 2008 guidance and now permits fiduciaries to consider ESG factors in the investment process.

The EU Shareholders' Rights Directive is also working in the direction of enhancing active engagement activities. This will encourage listed companies within EU member states to strengthen the rights of shareholders as well as shareholder responsibilities with the ultimate aim of enhancing the sustainability of EU companies.

#### 3 | Asset owner regulations

When measured by AuM, 14 of the largest 20 pension funds in the world are now signatories to the UN supported Principles for Responsible Investment (PRI). This is placing an increasing scrutiny on global investors in the area of responsible investing. According to Asset Owners Disclosure Project, 10% of the world's 500 largest investors—including pension funds, insurers and sovereign wealth funds—are measuring carbon in their portfolios.

Activity in terms of carbon or broader ESG reporting has typically been voluntary for asset owners and managers. These include the Montreal Pledge and the Portfolio Decarbonisation Coalition which respectively commit to measuring the carbon footprint of portfolios and then committing to reduce the carbon intensity within portfolios. However, legislation is emerging which is placing increasing demands on asset owners and managers.

In Europe, the European Parliament approved in November 2016 the Institutions for Occupational Retirement Provision directive. This will require European occupational pensions above a certain size to consider ESG and how ESG risks are incorporated into the investment process. This Directive must now be transposed into Member State law by November 2018 at the latest.

The Energy Transition Law in France means that it is the first country in the world to require the mandatory disclosure by institutional investors of how they are managing climate related risks as well as how they are assisting in the energy transition to limit global warming to 2°C. French asset owners are therefore likely to request that all their asset managers, including those that operate outside France, report according to French requirements.

In the Netherlands, the pension fund code requires pension funds to define a responsible investment strategy and disclose it publicly. In addition, the Dutch central bank is also examining how asset owners and managers integrate climate risk into their investment decisions.

There is also a good chance of further European proposals in these area. For example, the new EU Director General for capital markets union has, at the beginning of this year, established an expert group to start work on recommendations in this area.

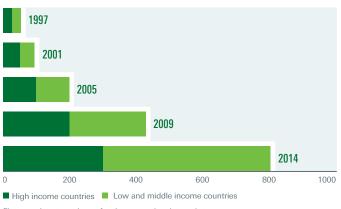
In Australia, the Standard on Superannuation Governance Policy requires members of the Financial Services Council to develop a an investment policy stating how ESG issues are addressed, including a risk management policy.

## 4 | Green and sustainable investment regulations

Although small in terms of overall AuM, sustainability themed investing has traditionally been one of the fastest growing ESG investment styles in terms of AuM. Typically sustainability themed funds are related to energy efficiency and renewable energy as to a large degree fund development in this area has been driven by climate legislation. From a regulatory perspective, the past 20 years has witnessed the increasing scope of climate change mitigation and adaption legislation. Indeed according to the 2015 Global Climate

Legislation Study the number of laws passed globally relating to climate change has doubled in every five year period since 1997, Figure 3. It is also noteworthy that the past few years has seen a levelling off in the number of countries introducing new legislation, perhaps indicating a greater focus on implementation of climate legislation.

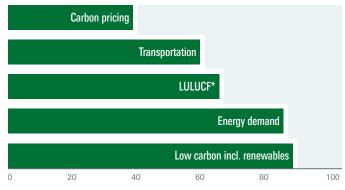
Figure 3: Number of laws passed relating to climate change mitigation and adaption across 99 countries



Figures relate to end year for the respective data points Source: The 2015 Global Climate Legislation Study (May 2015)

From a thematic standpoint, Figure 4 shows the number of countries that have passed laws focused on a specific theme or sector. We find low carbon and energy efficiency measures have typically been the main focus of climate legislation around the world.

Figure 4: Number of countries that have passed laws as they relate to sector and theme



\* Land use, land use change and forestry Source: The 2015 Global Climate Legislation Study (May 2015) The importance of climate legislation is also captured in the recent USSIF survey which shows that U.S. climate change focused funds have grown fivefold to reach USD 1.42 tn AuM between the beginning of 2014 and 2016. As a result, climate change is the most significant environmental factor in the U.S. when measured in terms of assets. Part of this reflects the increasing proliferation of fossil fuel restrictions and/or outright divestment policies. The fossil fuel divestment campaign in the U.S. has been given added impetus by state level legislation in the U.S. For example, in October 2015, California state legislature ratified legislation that instructs public pension funds in the state to divest holdings in companies that generate at least half of their revenue from coal mining by July 2017.

With many U.S. states adopting targets to source an increasing share of their energy mix with renewables, this divestment trend may still continue despite the uncertainties thrown up by the new President-elect and the Federal government's future commitment to reduce emissions. Indeed we expect international agreements such as the Paris climate deal and the UN Sustainable Development Goals (SDGs) will continue to spur the ongoing growth in sustainability themed funds such as delivering clean energy to households across sub-Sahara Africa.

#### Conclusion

A quiet revolution has been underway in the responsible investment arena for over a decade. Its imprint is seen in the growth in various ESG investment styles. In many instances these have been driven by voluntary codes and principles. However, in recent years ESG legislation is becoming more widespread and impactful.

Good examples of this include the coal divestment bills in California, France's new energy transition law, the rise of stewardship codes around the world not to mention more legislation in the pipeline. These trends demonstrate the increasing forcefulness of ESG investing from a regulatory perspective.

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#### References

Eurosif, European SRI study 2016 (November 2016)

Global Reporting Initiative, G4 Sustainability Reporting Guidelines (August 2015)

Global Sustainable Investment Alliance, 2014 Global Sustainable Investment Review (February 2015)

Global Sustainable Investment Alliance, 2017. Global Sustainable Investment Review (March 2017)

LSE, Grantham Institute, The 2015 Global Climate Legislation Study, (May 2015)

Principles for Responsible Investment, MSCI, Global guide to responsible investment regulation (September 2016)

Responsible Investment Association Australasia, Responsible Investment Benchmark Report 2016 (July 2016)

USSIF, 2016 Report on Sustainable, Responsible and Impact Investing Trends (November 2016)

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PORTFOLIOS

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