Leveraging the Potential of ESG ETFs for Sustainable Development

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About the UNCTAD Investment and Enterprise Division and IIPSD

The UNCTAD Investment and Enterprise Division is focal point in the United Nations System for investment and enterprise development. As a global centre of excellence, the Division conducts leading-edge research and policy analysis, provides technical assistance to 160 member States and regional groupings, and builds international consensus among the 196 member States of the organization. Its mission is to promote investment and enterprise for sustainable development and prosperity for all.

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Abbreviations

AUM	Assets under management
CDBS	Climate Disclosure Standard Board
CAGR	Compound annual growth rate
CIS	Collective investment scheme
ESG	Environmental, social and governance
EU	European Union
ETFs	Exchange-traded funds
GRI	Global Reporting Initiative
HIPSO	Harmonized Indicators for Private Sector Operations
IIPSD	Institutional Investor Partnership for Sustainable Development
ISAR	Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting
MiFID II	Markets in Financial Instruments Directive II
PRI	Principles for Responsible Investment
SRI	Socially responsible investing
SDGs	Sustainable Development Goals
SSE	Sustainable Stock Exchanges
SASB	Sustainability Accounting Standards Board

Leveraging the Potential of ESG ETFs for Sustainable Development

Introduction

To achieve the United Nations Sustainable Development Goals (SDGs) and finance the investment needed in infrastructure, agriculture, energy, and public services, in developing countries alone, will require at least an extra $2.5 trillion[1] a year, between 2015 and 2030.[2] Mobilizing and channeling finance to these sectors in developing country markets will play an important role in bridging the investment gap. Investment vehicles with an ESG or SDG dimension that mobilize capital at large scale can make a difference. One such vehicle that offers this potential is ESG ETFs — exchange traded funds (ETFs) based on corporate environmental, social and governance (ESG) factors.

There are three reasons why ESG ETFs have the potential to be a suitable investment vehicle for sustainable development. First, ETFs are low-cost, mostly passive financial instruments that trade like a stock and offer investors different ways to focus on specific sectors or even specific countries or country groups. Second, ETFs that consider ESG criteria in their portfolio have been on the rise in the last decade, with an ever-increasing number of ETFs explicitly targeting ESG topics and often selecting their underlying assets according to sustainability benchmarks, such as the UN Global Compact Principles and UN-supported Principles for Responsible Investment (PRI). Third, the largest group of investors in ESG ETFs consists of institutional investors,[3] ranging from heavyweight sovereign wealth funds to niche investment firms. These investors have significant funds at their disposal and are also increasingly convinced that long-term financial performance is correlated with superior ESG performance.[4]

This report aims to (1) provide an overview of the ESG ETF landscape, identify key trends in the growth and distribution of the funds and assess their financial and sustainability performance; (2) examine the main drivers behind the rapid rise of ESG ETFs in recent years, and evaluate the challenges; and (3) discuss possible actions that can be taken by key stakeholders to grow ESG ETFs into a mass market financial vehicle for sustainable development.

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[1] Reference to dollars ($) are to United States of America dollars, unless otherwise indicated.
[2] UNCTAD (2014). *World Investment Report: Investing in the SDGs: An Action Plan.* United Nations.
[3] Even though institutional investors make up the largest group of ESG ETF investors, retail investors – especially in the U.S. – play an increasingly important role (Morningstar, 2018, Passive Sustainable Funds: The Global Landscape).
[4] An increasing share of investors strongly considers ESG criteria because they believe that good sustainability ratings result in superior returns in the long run. (BNP Paribas, 2019, ESG Global Survey).

Exchange-traded Funds (ETFs)

Exchange-traded funds (ETFs) are investment vehicles that pool securities – stocks, bonds, commodities, futures contracts or a combination of these instruments – to replicate the performance of these securities. ETFs usually track the performance of an index.

The unique characteristic of ETFs is that they trade like a stock, allowing investors to buy ETF shares on the market. By buying ETF shares, investors do not directly purchase the underlying assets of the pool of securities but rather get a slice of the entire portfolio of assets in only one transaction, making ETFs an attractive investment vehicle.

The scope of an ETF depends on the securities or the index that the ETF tracks. For instance, ETFs may focus on one specific sector/industry or cover a broad range of industries. ETFs may be physically replicated (i.e., these ETFs hold either all or a representative sample of the underlying assets of a certain index), or may be synthetically replicated (i.e., these ETFs do not hold physical assets as their underlying securities but rather rely on derivatives and swaps). Even though most ETFs can be classified as passively managed instruments, some ETFs have an active element, i.e., portfolio managers do adjust the composition of the portfolio, and are thus considered actively managed instruments.

Source: Adapted from Vanguard and Investopedia.

1. Overview of the ETF universe

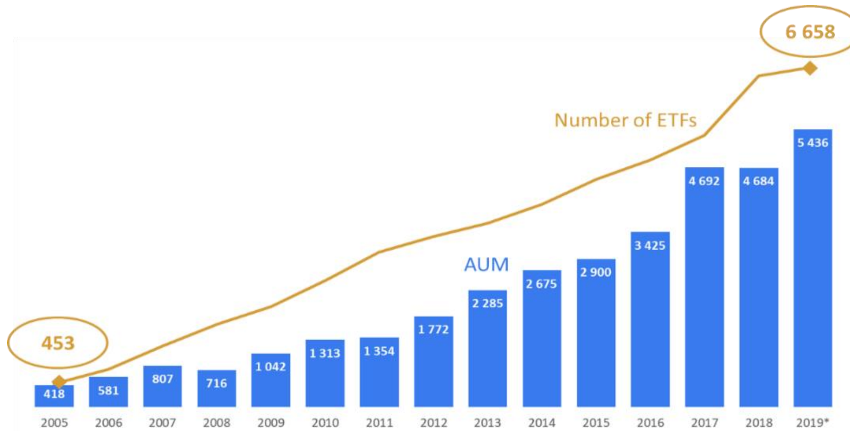
The ETF universe has seen impressive growth in recent years. Both the number of ETFs and the value of assets under management have risen dramatically. According to ETFGI, the number of ETFs worldwide increased from 453 in 2005 to 6,658 in 2019 (figure 1), corresponding to a compound annual growth rate (CAGR) of 19.6 per cent. This trend is likely to continue due to increasing acceptance of ETFs as convenient investment vehicles. In 2018, the number of ETFs jumped from 5,317 (end of 2017) to 6,483 (end of 2018), corresponding to an annual growth rate of almost 22 per cent.

The total value of ETF assets under management (AUM) has also risen steadily by more than tenfold, growing from $418 billion in 2005 to $5,436 billion in 2019 (figure 1). This amount accounts for almost 8 per cent of the capitalization of the world stock market.

Regarding the geographical distribution of ETFs, Europe and North America account for over two thirds of all ETFs, with the U.S. alone accounting for 30 per cent of all ETFs worldwide (figure 2). In terms of AUM, the U.S. has the most developed ETF market, accounting for 71 per cent of global AUM, as of April 2019. Its disproportionate share of AUM may be explained by the fact that in addition to institutional investors, retail investors in the U.S. are also actively investing in ETFs.[5] In contrast, Europe, which accounts for 26 per cent of ETFs worldwide, has a share of 15 per cent of global AUM. This is partly because of Europe's geographically fragmented market, in which numerous offerings track the same index.[6]

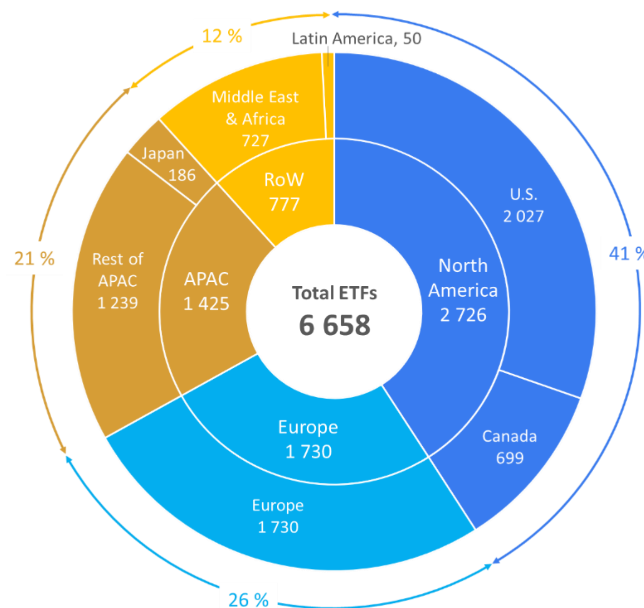
[5] Morningstar, 2018, Passive Sustainable Funds: The Global Landscape.
[6] Morningstar, 2019, A Guided Tour of the European ETF Marketplace.

Figure 1. Number of ETFs worldwide and assets undermanagement (AUM), 2005-2019*
(Billions of dollars)



Source: UNCTAD based on ETFGI
Note: *As of April 2019

Figure 2. Regional distribution of ETFs, April 2019 (Number of ETFs)



Source: UNCTAD based on ETFGI

The rapid growth of ETFs has given rise to concerns about its potential impact on financial stability.[7] Chief amongst these relates to the very high trading volumes of ETFs compared to their market value and the risks associated with it. For example, in 2017, while ETFs represented only 12 per cent of the market capitalization of the U.S. stock market, they accounted for 30 per cent of all equity trading in the country. This volume of trade could amplify the risk of a liquidity crunch during a market downturn through market contagion. ETFs' capability to provide additional liquidity "wrappers" for less-liquid

[7] Eva Su (2018), Exchange-Traded Funds (ETFs): Issues for Congress. Congressional Research Services.

assets (such as high-yield debt) exacerbates this risk.[8] Market fragmentation between retail investors, who mostly trade on an 'on-exchange' basis, and institutional investors, who are generally trading "over the counter" at more favourable prices, also stands in the way of ETFs reaching their full potential.[9]

However, various commentators including some security regulatory experts and standard setters consider that ETFs are less likely to lead to financial stability issues. They see the ETF market as showing signs of comparative stability when measured against other segments of the market (open-ended collective investment scheme (CIS)) and the underlying securities themselves. They think that ETFs have distinct structural features, notably the arbitrage mechanism and volatility control mechanisms, which add to their resilience. Some empirical evidence based on several volatility events across different markets in recent years suggests that ETFs have held up well and recovered quickly in such scenarios. While it is true that ETFs offer exposure to less liquid underlying assets (such as corporate bonds), the ETF wrapper actually provides an additional layer of liquidity, owing to the fact that investors are able to adjust their market exposure not only through the primary market, but also through secondary trading of the ETF shares, which does not impact the underlying market. In this regard, the arbitrage mechanism shows signs of strong resilience even in more concentrated markets, including for less liquid underlying assets. Therefore, despite being interconnected to the underlying assets and related instruments, there has not been evidence to indicate that the ETF wrapper itself would trigger a liquidity shock or crisis. In fact, it is viewed as more likely that the reverse would be true, i.e. it is more likely that contagion would stem from the underlying markets than the other way around for the reasons noted above.

2. ESG ETFs: trends and drivers

In general, sustainable investing is an investment approach that considers ESG factors in portfolio selection and management. Sustainable investing has been gaining popularity on a global scale over the last few years. It stresses the increasing relevance of sustainability criteria, often related to the SDGs, such as greenhouse gas emissions, gender equality and clean water,[10] in the investment decisions of institutional and retail investors. There are several products that have grown in response to the demand for sustainable investing. For example, green bonds are currently a popular vehicle for financing sustainable development. The issuance of green bonds to finance sustainable projects in the energy, transport, housing, land use and climate change-related sectors grew to $167 billion in 2018.[11] ESG ETFs have the potential to repeat the growth of green bonds and become another mass market investment vehicle as part of long-term trends towards a more sustainability-oriented global capital market.

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[8] Tanzeel Akhtar, Paul Amery (2017), Global Regulators Take Another Look at ETFs, IPE.

[9] Clearstream (2018), *ETFs: Challenges of fragmentation in a growing market*.

[10] A complete overview of the UN SDGs is available at: https://sustainabledevelopment.un.org/?menu=1300

[11] Climate Bonds Initiative (2018), Green Bonds: The State of the Market 2018.

Methodology

The report defines ESG ETFs in two ways. First, ETFs are considered as ESG ETFs if they are explicitly labeled as such; that is, they bear ESG or related terms in their names. The report does not distinguish between ESG and alternative terms related to sustainable investing, such as SRI (socially responsible investing), sustainable investing and impact investing.[12] Second, an ETF is regarded as an ESG ETF if it is labelled with a specific ESG-related theme, such as clean energy or low carbon,[13] and is constructed as a vehicle to invest in a specific sustainability sector or sectors.

In line with these criteria, the report does *not* consider ETFs as ESG ETFs if they do not use ESG as the main criteria for asset or index selection even if the fund may also take ESG issues into consideration in some way.[14] Moreover, the report does *not* consider ETFs as ESG ETFs if their asset selection strategy is merely founded on value or ethics-based exclusionary screening[15] *not* related to sustainability issues (such as those solely based on religious principles). Meanwhile, the report *does* cover ETFs with exclusionary screening if they seek to pursue SRI or sustainable development-related topics.

2.1 Global trends and drivers

ESG criteria and standards have become more relevant for investors generally, and the ETF universe is no exception. This has contributed to the large jump in the number of ESG ETFs worldwide, from 39 in December 2009 to 221 in June 2019 (figure 3). Their growth has accelerated since 2015, with a net increase of 153 ESG ETFs in less than four years (corresponding to 70 per cent of all ESG ETFs). In Europe, the number of new funds launched annually has reached an all-time high: in 2018, 36 new ESG ETFs[16] were launched, up from 15 in 2017 and 10 in 2016.[17] The worldwide number of ESG ETFs grew by 47.5 per cent in 2018,[18] outpacing the growth rate of total global ETFs (ESG and non-ESG combined) of almost 22 per cent.[19] Moreover, 2018 was the fifth consecutive year that the number of ESG ETFs grew at a higher rate than non-ESG funds.

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[12] For a definition of impact investing, see https://thegiin.org/impact-investing/.

[13] The report acknowledges that even though ETFs might indicate in their name that they adhere to ESG criteria in their selection strategy, there are cases which are more complex: for instance, a themed ESG ETF might focus on firms that have a low carbon footprint while not excluding firms from controversial sectors, such as tobacco and gambling. In these cases, the fund was selected based strictly on the name and prospectus summary of the ETF.

[14] According to Morningstar, these funds would be classified as "ESG Consideration", i.e., funds that take ESG into consideration alongside many other factors but not as the main criterion for asset and index selection (Sustainable Funds USA Landscape, 2018).

[15] Value-based exclusionary screening refers to an asset selection strategy that, for instance, solely follows faith-based criteria or criteria that aim at avoiding "sin stocks" (i.e., stocks from companies from sectors such as tobacco, controversial weapons, and pornography). An example of an ETF that follows religious principles in asset selection is the Invesco MSCI Europe ESG Leaders Catholic Principles UCITS ETF (ISIN: IE00BG0NY640).

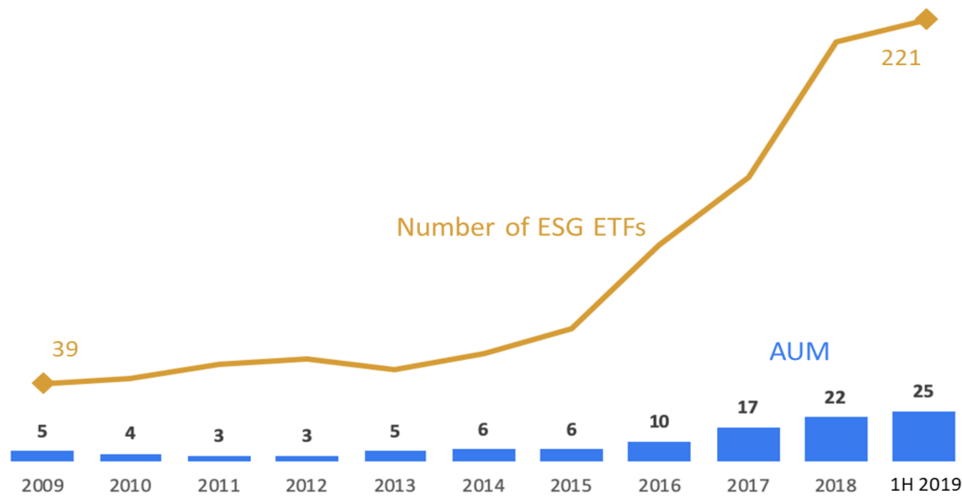
[16] While most of the growth in the number of sustainable funds has come from new launches, some existing funds have added sustainable elements to existing portfolios. For example, Ossiam added ESG screens to its US Minimum Variance ETF (Morningstar, 2018, Passive Sustainable Funds: The Global Landscape).

[17] Morningstar, 2018, Passive Sustainable Funds: The Global Landscape, p.7

[18] UNCTAD calculation. Underlying data retrieved from ETFGI database.

[19] UNCTAD calculation. Underlying data retrieved from ETFGI database.

Figure 3. Number of ESG ETFs worldwide and assets under management (AUM), 2009-2019[1]
(Billions of dollars)



Source: UNCTAD based on ETFGI, TrackInsight.
Note: [1] As of 30 June 2019

Similarly, the AUM of ESG ETFs have grown significantly (figure 3). From 2015 to June 2019, AUM quadrupled, growing from 6 billion USD to 25 billion. This can be mainly explained by large positive net inflows (net investment)[20] during those years — a trend that has held since 2014 (figure 4)[21] and is especially dominant in Europe.[22] Net flows also reached a record high of $10.1 billion in the first half of 2019 (figure 4)[23].

There are two drivers for the "explosion" in the number of ESG ETFs and the increase in their AUM. First, various countries have enacted 'smarter' regulations that aim to foster more sustainable investment practices[24] Second, many investors — especially women and young investors[25] — increasingly view the adherence of investment vehicles to sustainability criteria as a must-have rather than a nice-to-have.[26]

The rising trend in ESG ETFs has also been supported by several other factors.[27] First, an increasingly broad investor base has started focusing on a wider range of long-term risks, giving rise to increased awareness around sustainable investing. Second, there is growing evidence showing there is no systematic performance penalty for sustainable investing. Third, the improved availability of ESG data and technological improvements over the past decade has contributed to enhanced transparency in

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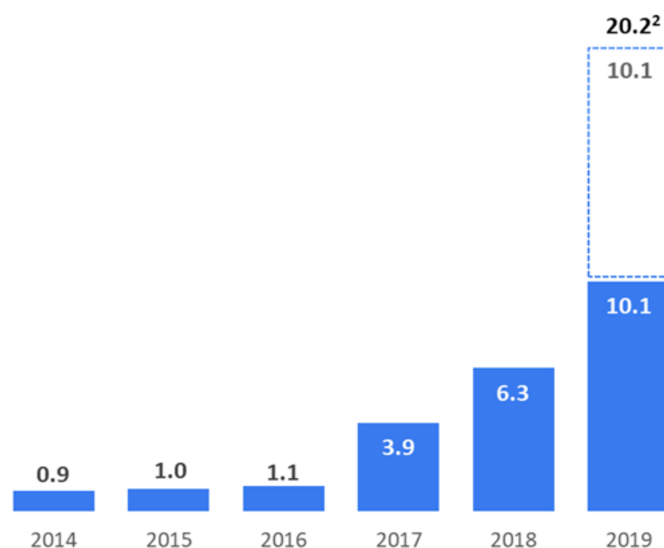
[20] ETF flow is the net of all cash inflows and outflows in and out of an ETF. Net inflows create excess cash for managers to invest, which theoretically creates demand for an ETF.
[21] Morningstar, 2018, Passive Sustainable Funds: The Global Landscape
[22] European ESG ETFs have continually attracted the largest share of net flows. According to Lyxor, inflows into ESG ETFs in Europe were USD 4.5 bn (EUR 4 bn) in 2018. (Lyxor, ETF Report 2018).
[23] This refers to year to date (YTD) cumulative net flows from 1 January 2019 until 17 July 2019 as captured by TrackInsight.
[24] BNP Paribas, 2019, The ESG Global Survey
[25] Morningstar, 2018, Passive Sustainable Funds: The Global Landscape
[26] BNP Paribas, 2019, The ESG Global Survey
[27] Morningstar, 2018, Passive Sustainable Funds: The Global Landscape.

the market. Finally, this trend has been supported by index and fund providers responding to the rising level of demand for sustainable investing and passive investing. There are currently thousands of ESG or SDG themed indices, available on over 40 stock exchanges, including several in developing countries.[28]

Figure 4. Net inflows of ESG ETFs worldwide, 2014-2019[1] (Billions of dollars)



Source: UNCTAD based on TrackInsight.
Note: [1]As of June 2019; [2]The number is a simple extrapolation based on the net inflows in the first half of 2019.

2.2 Regional trends and drivers

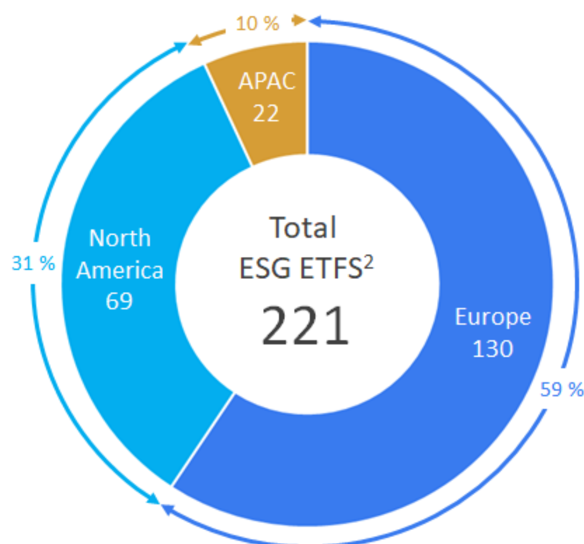
Regarding the geographic distribution of ESG ETFs, Europe accounts for 59 per cent of all funds (figure 5). The AUM of ESG ETFs are heavily concentrated in Europe and the U.S., which account for 56 per cent and 41 per cent of total AUM, respectively, as of 17 July 2019.[29]

Europe has been the main driver of ESG ETF growth. This can be explained by an increasing number of investors — both institutional and private — who increasingly prioritize sustainability themes in their investment strategy.[30] European institutional investors, particularly Scandinavian public pension funds, sovereign wealth funds and insurance funds, increasingly pursue an investment strategy that is in line with their sustainability mandates.[31] Also, several European countries, such as France and the Netherlands, have tightened their financial regulations following the introduction of the European Union (EU)'s Markets in Financial Instruments Directive II (MiFID II) in January 2018,[32] and new EU-wide rules[33] in May 2018. These rules impose greater disclosure requirements related to sustainable

[28] According to Sustainable Stock Exchange (SSE) database.
[29] UNCTAD calculation. Data accessed from TrackInsight database on 17 July 2019.
[30] Invesco MSCI ESG Universal Screened UCITS ETFs, June 2019.
[31] Morningstar, 2018, Passive Sustainable Funds: The Global Landscape.
[32] MiFID II came into force in January 2018 and aims to improve transparency through stricter reporting requirements. (Morningstar, 2018, A Guided Tour of the European Marketplace).
[33] The European Commission's Action Plan on sustainable finance introduced 5 new regulatory measures intended to "clarify investors' roles and responsibilities, establish a common taxonomy and reporting standards

investments and sustainability risks, as well as mandatory climate-related reporting that has facilitated greater transparency and forced many investors to pay closer attention to sustainability topics in their investment decisions.

Figure 5. ESG ETFs by region[1], June 2019 (Number of ETFs and per cent)



Source: UNCTAD calculation based on TrackInsight data.
Note: [1] Defined by country of domicile; [2] Five faith-based ETFs with an ESG component are not included in this overview; [3] SRI refers to "Socially Responsible Investment"

Despite being the world's largest financial marketplace, the US ESG ETF market lags behind Europe. This largely reflects the slower integration of ESG and sustainable development considerations into investment decision making by US institutional investors compared with their European counterparts. However, both AUM and net inflows have been increasing faster in the US in recent years,[34] driven largely by US retail investors who believe that sustainability-related financial instruments such as ESG ETFs can have a big positive impact.[35] This spike in demand has resulted in a new wave of 52 ESG ETFs launched during the past three years, corresponding to three quarters of all ESG ETFs currently available in the U.S.[36]

Despite the rapid growth of ESG ETFs in Europe and the US, the value of AUM of ESG ETFs in Europe and the US corresponds to only 0.2 per cent and 0.03 per cent of their respective stock market capitalization, and 1.15 per cent and 0.31 per cent of their respective AUM of ETFs. This shows that their share in the ETF and capital markets is still at an early stage.

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to help minimize greenwashing, and investigate how products can achieve 'green' certification. Under the proposal, all financial entities that manage investments on behalf of their clients or beneficiaries will have to inform the European Commission of how their activities are impacting the planet and local environment." (The European Commission, Press Release on 7 March 2019; BNP Paribas, 2019, ESG Global Survey).

[34] Net flows into U.S. based ESG ETFs were more than $1 billion in 2018 alone. This means that ESG ETFs in the U.S. doubled their 2017 net flows, setting a record for the past decade. (Morningstar, 2018, Sustainable Funds U.S. Landscape Report).

[35] Morningstar, 2018, Sustainable Funds U.S. Landscape Report.

[36] UNCTAD calculation based on TrackInsight data and data from Morningstar (Sustainable Funds U.S. Landscape Report, 2018).

2.3 Features of the ESG ETF market

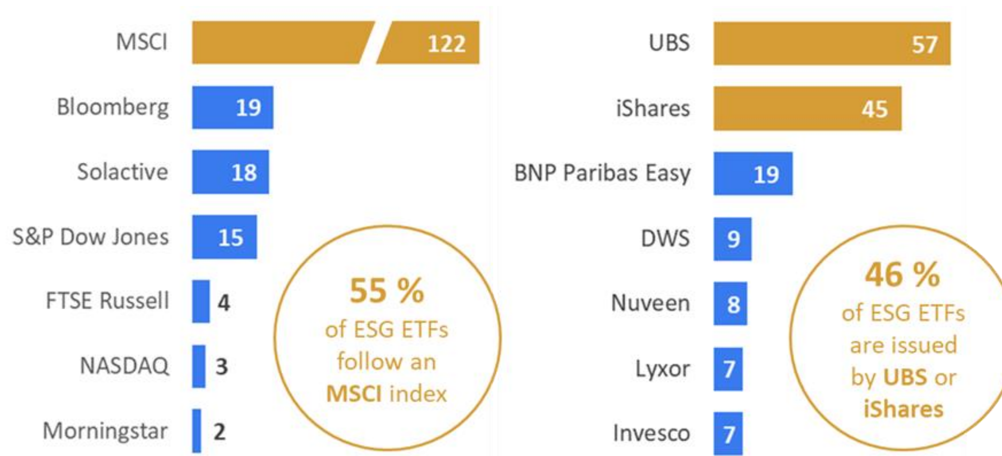
Costs

Even though ESG ETFs — mostly passive — are cheaper than most actively managed funds, ESG ETFs are usually priced higher than their non-ESG counterparts.[37] This situation remains a hurdle because many investors remain concerned about a 'systematic' penalty, either a higher price premium or lower expected performance, associated with sustainability-focused investment vehicles,[38] despite their willingness to consider sustainability-related criteria more favorably.

Market leaders and concentration

When looking at the provider landscape, a few big players lead the ESG ETF market — a picture that is true across index providers and ETF providers. Regarding index providers, MSCI is the leading provider with 122 ESG ETFs that track an MSCI sustainability index, corresponding to 55 per cent of ESG ETFs worldwide (figure 6). Regarding ETF providers, UBS and iShares capture 46 per cent[39] of ESG ETFs with 57 and 45 ESG ETFs respectively (figure 6).

Figure 6. Number of ESG ETFs by the top 7 index providers and ETF providers, June 2019



Source: UNCTAD's calculation based on TrackInsight data.

These two features of the ESG ETF market— cost and provider concentration — are not rare for an early stage financial market and will likely be adjusted as the ESG ETF market continues to grow and new competitors enter the market. In fact, there have been some changes in the market, with new providers entering with the launch of ESG ETFs at lower fees than their large, established peers.[40] Also, some ETF providers in Europe have started to partner with smaller, cheaper index providers; other ETF providers even consider self-indexing to increasingly make use of the price lever to attract more investor demand.[41] With expanded market size, increased competition and technological changes, the

[37] Morningstar, 2018, Sustainable Funds U.S. Landscape Report
[38] Morningstar, 2018, Passive Sustainable Funds – The Global Landscape.
[39] UNCTAD calculations based on TrackInsight data as of 24 June 2019.
[40] Morningstar, 2018, Passive Sustainable Funds – The Global Landscape.
[41] Morningstar, 2019, A Guided Tour of the European ETF Marketplace

trend of falling fees is likely to continue until ESG ETFs are broadly priced at the same level as their non-ESG counterparts in the next few years.

3. ESG integration strategies - how "sustainable" are they?

3.1 ESG integration strategies

Based on the mechanism by which the underlying assets of an ETF are chosen (figure 7) ESG ETFs are grouped into four strategies in this paper (number of funds in each category in parenthesis): general integration strategy (88), best-in-class strategy (69), ESG theme strategy (49), and exclusionary screening (15) (if they clearly seek to pursue sustainable development-related topics).[42]

- **General integration strategy** refers to ETFs that incorporate ESG material factors into investment selection and decision-making processes to mitigate risks or enhance returns. ETFs that bear ESG in their names usually fall into this category, and they cover a broad range of ESG criteria. General Integration ETFs can use exclusionary screening in addition to the application of broad ESG criteria.[43] This strategy involves the majority of ESG ETFs in the sample.
- **Best-in-class or positive screening strategy** involves selecting best performing companies or leaders in a specific industry (such as banking and insurance) or across a number of industries in terms of sustainability performance. ESG ETFs that follow such a strategy usually contain, in their names, sustainability-related terms such as SRI, sustainable investing or impact investing, which go beyond the conventional ESG criteria. Due to the variety of best-in-class approaches, the category is further divided into three subgroups: SRI,[44] Impact,[45] and Leaders.[46] This strategy involves the second largest number of ESG ETFs in the sample.
- **ESG theme strategy** includes ETFs that only focus on one concrete sustainability theme (for example gender equality or low carbon). ESG ETFs are also classified in this group if they specifically focus on only one ESG pillar (environment, social or governance), or they track a 'quasi sector', such as renewable energy or water infrastructure.

In addition, **exclusion screening** based on responsible or sustainable development-related criteria (rather than merely value or ethics-based exclusionary screening not related to sustainability issues) is also considered to be a strategy for ESG integration. The "exclusion" strategy can deliberately exclude assets of certain companies or industries that do not meet minimum standards of business practice based on international norms, such as the UN Guiding Principles for Business and Human

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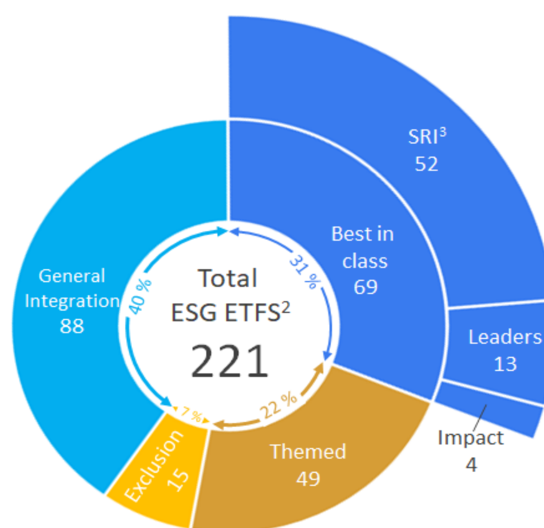
[42] Using the TrackInsight database, a sample of 223 ESG ETFs was created. From this dataset, ESG ETFs that only used faith-based criteria in the asset selection process were excluded, leaving 221 ESG ETFs as of 24 June 2019.
[43] Morningstar, 2018, Sustainable Funds – The Global Landscape
[44] Whereas regular ESG investing considers sustainability as an additional, rather nice-to-have criterion, SRI follows a stricter, principles-based asset selection process.
[45] Impact investing is about fostering change by helping organizations accomplish specific goals that are beneficial to society or the environment – sometimes even regardless of whether (financial) success is guaranteed.
[46] ETFs in this category mostly track indices that select the top 50 or 25 per cent of companies that perform particularly well in specific ESG dimensions.

Rights, the UN Global Compact Principles and the OECD Guidelines for Multinational Enterprises.[47] Although such a strategy usually only excludes one or two narrowly defined segments that are deemed as unsustainable and is thus not comparable to the above-mentioned strategies in terms of sustainability (as discussed in the next section), they constitute worthy efforts to incorporate sustainable development consideration in investment decision.

Figure 7. ESG ETFs by strategies (Number of ETFs and per cent)



Source: UNCTAD calculation based on TrackInsight data
Note: SRI refers to "Socially Responsible Investment"

3.2 How 'sustainable' are ESG ETFs?

By using the sustainability rating scale provided by Conser,[48] this section analyzes the sustainability of ESG ETFs as a group and by strategy. Based on the rating, the joint ESG group (*ESG All*) has a mean sustainability score of 7.5, while non-ESG ETFs (*non-ESG*) have a score of 4.8 (figure 8). This

[47] An example of such an ETF is the BNP Paribas Easy MSCI Europe ex CW UCITS ETF (C, EUR) that excludes companies which engage in manufacturing and distribution of controversial weapons, such as landmines and cluster bombs, but follows the remaining companies of parent index, MSCI World.

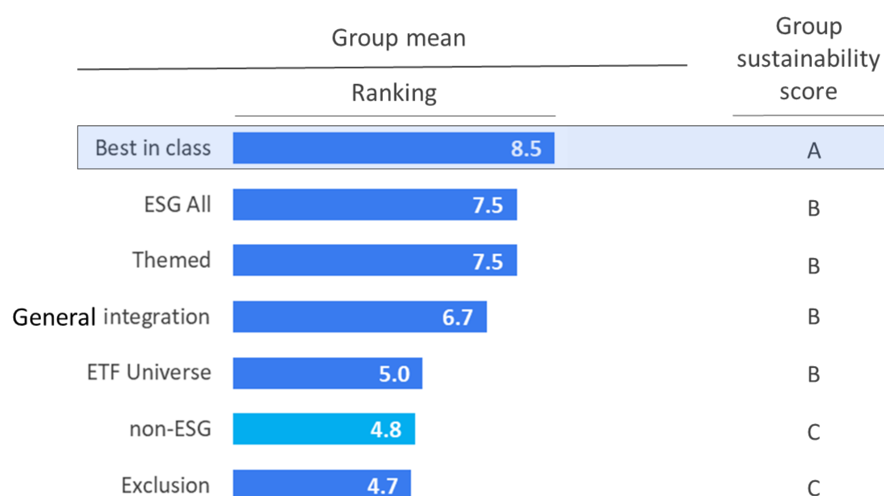
[48] Conser's methodology provides a holistic picture of sustainability risks of an investment by conducting a meta-analysis of quantitative and qualitative ESG data based on "collective intelligence", reflecting implicit evaluations of major rating agencies and best sustainable asset managers and thus allowing to define an "average" ESG consensus. Conser uses an incremental sustainability score, i.e., a granular scale with 10 levels: A+, A, A-, B+, B, B-, C+, C, C-, and D. For our analysis, we numerized the incremental sustainability scores by equating each of these scores to a number between 1 to 10, e.g., 10 for A+, 6 for B, and 1 for D, enabling us to determine average scores and distribution of the ETF groups. Finally, based on the average score, each ETF group is given a sustainability rating from A to D (the last column of figure 7), with A corresponding to a score of 8-10, B corresponding to 5-8, C corresponding to 5-2, and D corresponding to 1-2. As of June 2019, stainability ratings are available for a subset of ETFs in the database – 126 ESG ETFs and 1 602 non-ESG ETFs, and our calculation is based on their sustainability rating.

corresponds to a group sustainability score of B for *ESG All* and C for *non-ESG.* Likewise, *ESG All* outperforms their *non-ESG* peers with regards to the median score.

When breaking down *ESG All* into its 4 strategy subgroups, the result is very similar – with one exception: *Exclusion*. The ESG subgroups *General Integration*, *Best in Class*, and *ESG Theme* all have higher mean scores than their non-ESG peers (figure 8). These 3 subgroups also have higher median scores than the non-ESG ones. Unsurprisingly, *Best in Class* receives a group sustainability score of A.

The simple *Exclusion* subgroup is the only group which scores lower than *non-ESG*, having a mean score of 4.7 and median score of 4. This is attributed to two factors: first, these ETFs only exclude a few but not all sectors that are deemed unsustainable by the UN Global Compact Principles; second, the number of ETFs in this group is very small with only nine ETFs that have received a Conser sustainability rating – probably even too small to draw a meaningful conclusion from the dataset. Therefore, the result of the Exclusion group is perhaps an outlier, having no impact on the general conclusion that ESG ETFs are on average more sustainable than non-ESG ETFs.

Figure 8. Average group sustainability scores for ETFs (mean scores), 2019

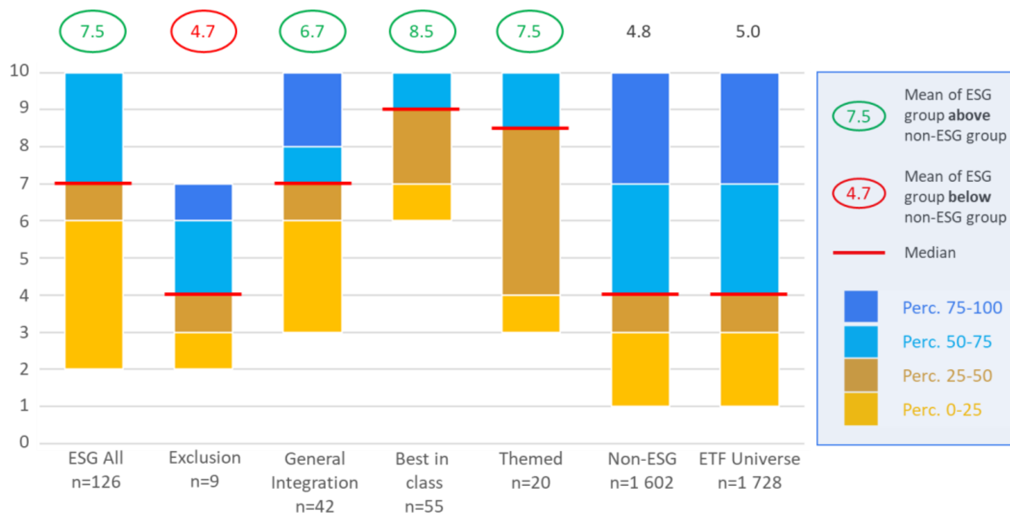


Source: UNCTAD calculation based on Conser and TrackInsight data as of 24 June 2019. In total, 126 ESG ETF and 1,602 non-ESG ETFs, for which data were available, were covered.

Regarding the distribution of sustainability scores, *ESG All* and *non-ESG* have a wide range of numerized incremental scores from 1 to 10 but ETFs in *ESG All* have a higher median sustainability score than their non-ESG peers (figure 9). Half of the ETFs in *ESG All* have the two top final sustainability ratings A and A+. There are no ESG ETFs that have a final sustainability rating of D. In contrast, ETFs in *non-ESG* mostly have a final sustainability rating of B (31 per cent), C (37 per cent), and D (16 per cent).

Despite concerns about "ESG washing", the above findings show that ESG ETFs on average have higher sustainability ratings than their non-ESG peers. This conclusion holds true for the joint ESG group (ESG All) and most of the ESG subgroups by strategy. However, this conclusion does not rule out the fact that even non-ESG ETFs can score higher in terms of sustainability than some of their ESG counterparts since the sustainability ratings are given on a case-by-case basis.

Figure 9. Distribution of sustainability scores by group, 2019*

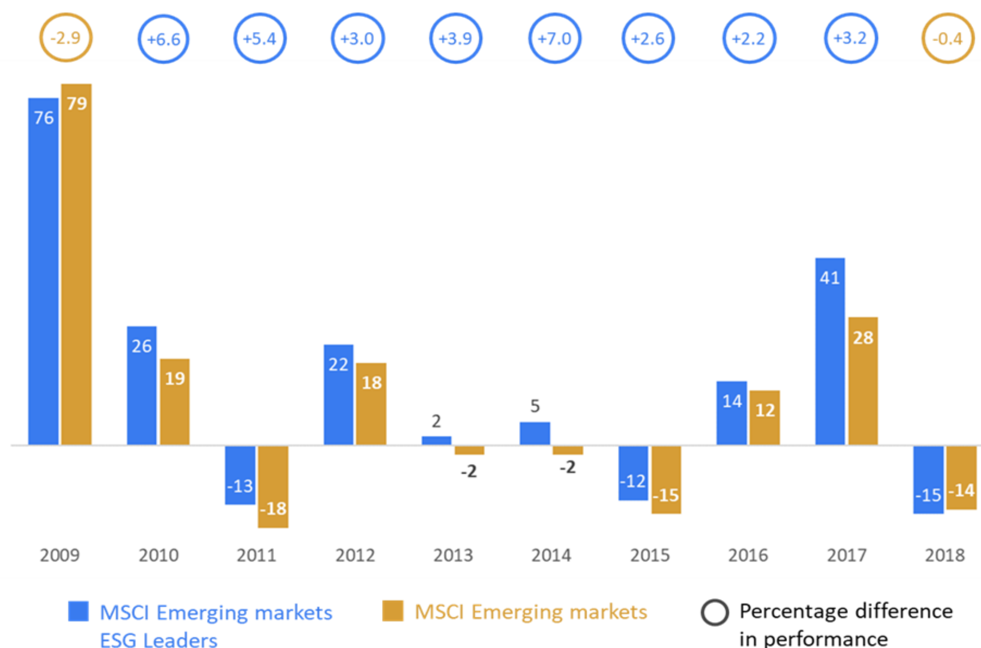


Source: UNCTAD calculation based on Conser and TrackInsight data
Note: *As of 24 June 2019

3.3 How ESG ETFs perform financially?

A growing number of investors believes that ESG factors will increasingly affect investment performance, and that ESG ETFs can outperform their peers in terms of financial returns. Data coming from ESG index providers have shown that this is possible. For example, the MSCI emerging markets ESG Leaders index has outperformed its conventional benchmark in eight out of ten years (figure 10).

Figure 10. Financial performance: ESG index versus conventional index, 2009–2018
(Calendar-year returns and relative performance, Per cent)



Source: UNCTAD (2019). *World Investment Report: Special Economic Zones.* United Nations.

The results of an analysis of the performance of the 221 ESG ETFs also reveal the absence of a systematic performance penalty as a result of sustainable investing. In fact, ESG ETFs on average perform *better* than their non-ESG counterparts with respect to 1-year net returns,[49] as of 24 June 2019 (table 1).

Table 1. Performance of ETFs (net return and net excess return[1]), 2019 (Per cent)

	Average net return	Average net excess return
ESG (n=213)	3.9	-0.06
Non-ESG (n=4 034)	1.6	-0.15

Source: UNCTAD calculation based on TrackInsight data
Note: (1) based on data as of 24 June 2019; (2) Net excess return measures to what extent a fund has out- or underperformed its benchmark index. (Vanguard, 2019, available at: https://www.vanguard.com/jumppage/international/web/pdfs/INTUTE.pdf).

4. Triple challenges

Despite the impressive growth rates over the last couple of years, the share of ESG ETFs in the whole ETF universe, in terms of number and AUM, remains small at 3.2 per cent and less than 0.5 per cent respectively.[50] Before ESG ETFs can fully graduate from a niche market to an appealing mass market and achieve their full potential as a tool for sustainable investing, three challenges need to be addressed.

4.1 Lack of standards and high-quality data

One fundamental challenge is the lack of common standards and framework for ESG and impact reporting and evaluation — a challenge shared by the whole sustainable investment industry. This challenge gives rise to three issues. First, inconsistent data coverage across asset classes requires investors to combine various data sources in a long and laborious process. Second, ESG ratings between different providers can conflict with each other, due to a lack of commonly accepted standards, indicators and criteria. This lack of consistency and conformity for credible comparisons across datasets unnecessarily complicates and even prolongs the sustainability evaluation process of investors. Third, current databases mostly reveal data gaps that prevent investors from conducting in-depth scenario analysis and force many of them to compile and compute data themselves.[51]

Moreover, since the quality of ESG data pretty much determines the quality of indices and financial products based on them, it is not surprising that only a small number of the thousands of ESG indices are good enough to be used to develop ESG ETFs, and the quality of ESG ETFs remains a concern for many investors, which include concerns about "ESG washing" and technical quality of ESG ETFs themselves (e.g. with respect to the representatives of the sample and possible tracking errors).

[49] 1-year net returns were used because data over longer time horizons are not available since almost have of ESG ETFs worldwide were issued in the last two years.
[50] UNCTAD's calculation based on TrackInsight and other data sources.
[51] BNP Paribas, 2019, ESG Global Survey.

The increasing availability of sustainability data, ratings and rankings has supported the development of ESG indices and the proliferation ESG ETF products. However, a lack of consistency, coherence and transparency in terms of ESG reporting metrics, standards, and ratings create challenges and costs for investors and other stakeholders when interpreting and comparing data.

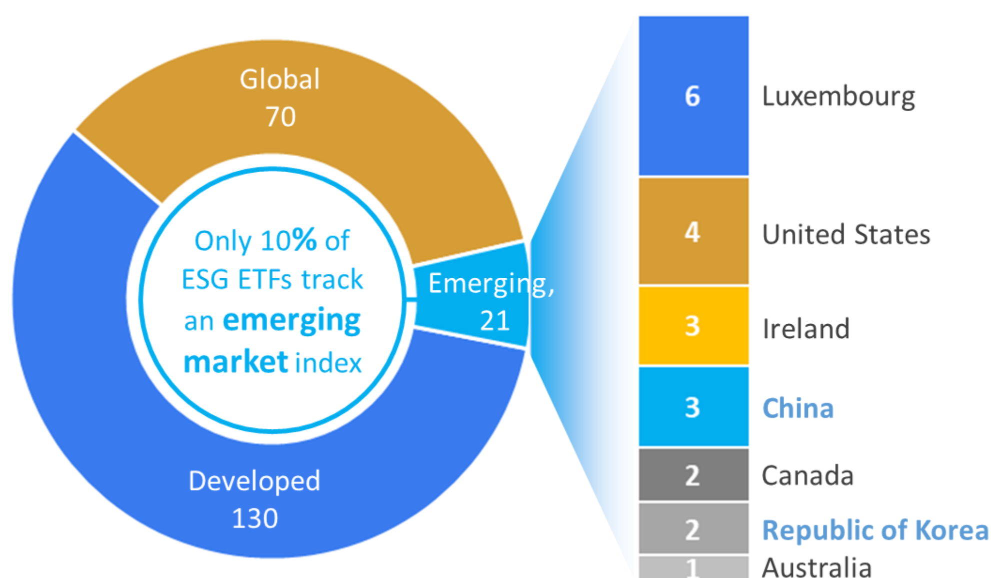
4.2 Regional imbalance

Although developing countries account for 20 per cent of the capitalization of global stock markets,[52] and the number of ETFs in developing countries account for almost 30 per cent of the ETF universe (see section 2), ESG ETFs are almost completely absent in the developing world, except for APAC.

As discussed earlier, only 10 per cent of ESG ETFs are domiciled in developing country markets (all in APAC specifically), and only 21 ESG ETFs track an emerging market index, corresponding to 10 per cent of all ESG ETFs (figure 11).[53] Out of these 21 ESG ETFs that track emerging market indices, only 5 are domiciled in emerging markets (3 in China and 2 in the Republic of Korea), whereas the remaining 16 are all based in developed countries.[54]

Nevertheless, the Chinese fund market has witnessed a boom in ESG-related products in recent years. There are currently 106 ESG-related funds, including mutual funds, closed-end funds and other types of funds in the market. However, ETFs in China have been slow to embrace ESG. Out of 218 ETFs (with assets of over $30 billion) traded in the market, only 3 of them are ESG ETFs (with assets of $0.3 billion).[55] [56]

Figure 11. Number of ESG ETFs by market index exposure, and by domicile, June 2019



Source: UNCTAD calculation based on TrackInsight data

[52] Calculations based on the World Bank data as of end of 2018.
[53] UNCTAD calculation based on TrackInsight data.
[54] Based on TrackInsight ETF database, as of June 2019.
[55] This situation may change as the financial regulatory agencies, industry associations and stock exchanges in China are pushing for sustainable financial products. For example, the Shanghai Stock Exchange has released 43 green indices tracking sustainable development and environmental protection.
[56] Based on data of Windin (http://www.windin.com/windin2/Index.htm).

Note: Total ESG ETFs (221), left hand donut chart "ESG ETFs by market index exposure", right hand bar "ESG ETFs by domicile"

Given that developed countries in general offer a better regulated market environment as well as easy access to international investors, and also because the market penetration of ESG ETFs in both Europe and the US is still at an early stage, developed markets will continue to dominate the world ESG ETF market in the foreseeable future and remain the key drivers of market growth.

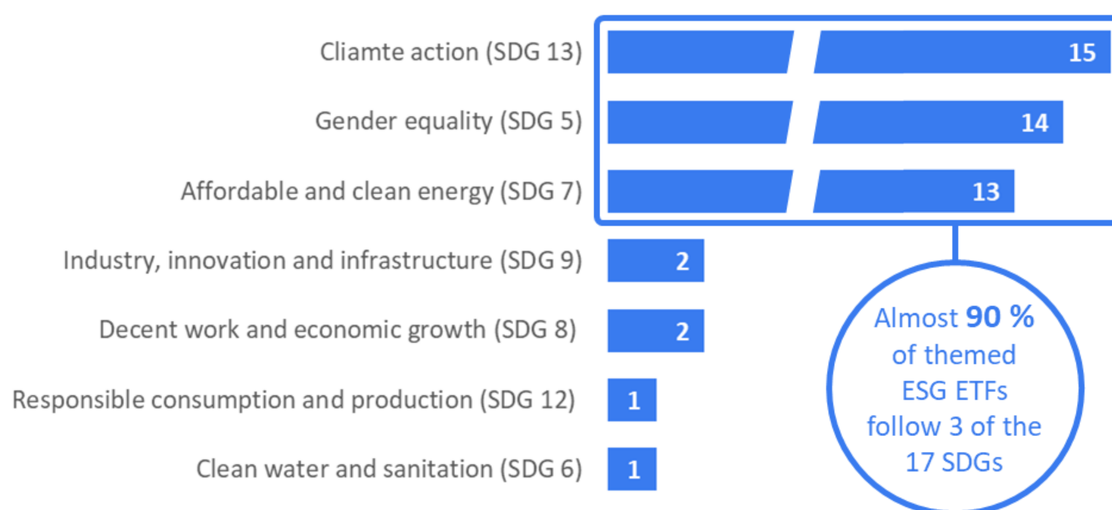
However, the absence of ESG ETFs in developing economies should raise concerns because it not only limits the potential of ESG ETFs in advancing sustainable development but also neglects an important market opportunity. Until the end of 2018, the capitalization of the stock markets in developing and transition economies was nearly $14 trillion. This means that a 10 per cent market penetration by ESG ETFs in these markets will translate into more than $1 trillion of investment in ESG/SDG related areas, even without adding developing country bond markets into the equation. These opportunities should not be missed, in particular given the huge financing gap of SDGs in the developing world.

The almost complete absence of ESG ETFs in developing countries can be attributed to several factors. Not least among these are weak institutional capacities and expertise, scarcity of ESG-related data, lack of investor demand and underdeveloped capital markets.

4.3 SDG coverage

Besides the responsible investment dimension, ESG ETFs can also be adapted for SDG-oriented investment. Currently, all ESG ETFs adopting a thematic strategy target specific SDGs (figure 12). Out of a total of 49 thematic ESG ETFs (representing some 20 per cent of all ESG ETFs), 42 of them have an investment focus on *Climate Action* (SDG 13), *Gender Equality* (SDG 5), and *Affordable and Clean Energy* (SDG 7).

Figure 12. Ranking of SDGs by number of themed ESG ETFs, 2019



Source: UNCTAD calculation based on TrackInsight data

The SDG6 (*Clean Water and Sanitation)*, SDG8 (*Decent Work and Economic Growth)*, SDG 9 (*Industry, Innovation, and Infrastructure)* and SDG 12 (*Responsible Consumption and Production)* are covered by just six ESG ETFs tracking respective indices.

Meanwhile, the other 10 SDGs, most of which are also investable, are not covered by ESG ETFs at all (figure 13). Among these SDGs are themes such as *No Poverty* (SDG 1), *Zero Hunger* (SDG 2), *Good Health and Well Being* (SDG 3) and *Quality Education* (4), which are highly relevant for many investors. It is feasible to construct indices around these themes and develop ESG ETFs to track them.

Figure 13. SDG coverage by ESG ETFs, June 2019

Source: UNCTAD.

5. The way forward

In order to fully realize the potential of ESG ETFs as an investment vehicle to promote sustainable development, the three challenges — lack of standards and high-quality data, severe regional imbalance and limited SGD coverage – need to be effectively addressed. Concerted efforts in the following areas are critical.

5.1 Improve the overall sustainability of the ETF universe

As part of the ETF universe, ESG ETFs are not exempted from the systemic risks, structural vulnerabilities and sustainability challenges faced by other ETFs, and ESG ETFs can prosper only if the whole ETF market enjoys a healthy and stable growth. In this context, it is critical for regulators, ETF providers, intermediaries and investors to work together to address the potential systemic risks, such as those related to potential liquidity mismatch, high-risk underlying assets, issuer concentration and market fragmentation, which could disrupt not only the ETF market but also the whole financial market.

Likewise, the growth of the ESG ETF market also depends on and benefits from continuous improvement in the sustainability of the whole ETF universe. Therefore, ESG integration should not

be limited to ESG ETFs. Instead, all market players, in particular index and ETF providers, should strive to make all ETFs meet minimum standards of ESG compliance in the long run.

UNCAD, through its *Institutional Investor Partnership for Sustainable Development* (*IIPSD*), will continue to work with all stakeholders to monitor ETF sustainability, in particular ESG ETFs, with a view towards integrating sustainability into the capital market.

5.2 Enhance consistency and coherence

A number of public and private initiatives have been developed to bring more coherence to corporate sustainability reporting and ratings. Such initiatives include, among others, UN Sustainable Stock Exchanges (SSE), UNCTAD Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR), World Federation of Exchanges' Sustainability Working Group, the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), Harmonized Indicators for Private Sector Operations (HIPSO) and the Climate Disclosure Standard Board (CDBS).

Most of these initiatives are driven separately by either public or private sector institutions; a truly global platform has yet to emerge to address the issue. It will be very helpful if such a platform can bring all the key players (public as well as private) together to agree on a core set of metrics for impact evaluation and reporting.

Meanwhile, regulators at the national level also need to get involved in the consolidation of standards and criteria that, so far, remain market driven. Their active participation in international consultations is necessary to make progress in the area.

5.3 Jumpstart ESG ETFs in emerging markets

Given the dominance of developed country ESG ETF markets, ESG ETFs with a developing country component but domiciled in developed countries will remain the main route to channel investment into developing economies. Efforts should continue to be made by stakeholders in this direction.

However, "wait and see" should not be the strategy for developing economies. The growth of the global green bond market has shown that developing countries can also lead in certain areas of sustainable financing and policy matters.

Building on their successful experiences in growing the green bond market, developing countries, first and foremost, need to put in place a viable regulatory framework and an enabling ecosystem in order to jumpstart and grow the ESG ETF market. This includes:

- rules and guidelines to establish industry standards and governance requirements with an aim to bring transparency, predictability and credibility to the market. The quality of ETFs and irregular transactions in some cases[57] have raised concerns among investors and regulators. A solid regulatory framework and well-defined industry standards will make investors feel more confident about investing in ESG ETFs. The EU's experience in sustainable investment regulations can be helpful for developing economies (see annex);
- supply side measures to increase the pool of products available for investment. In this respect, developing countries can, for example, provide financial and fiscal incentives for the development of ESG indices and ESG ETFs, require or encourage and facilitate high-quality corporate sustainability reporting, support market intermediaries to expand their provision of

[57] One example is using ETFs as a tool to evade regulations on reducing holdings in listed companies.

data and professional services, establish specialized segments for ESG ETFs and other sustainable development oriented financial products in stock exchanges, and partner with international organizations such as UNCTAD and private sector experts to provide capacity building and training on indices and product development, sustainability ratings, and standards development;
- demand side measures to help mobilize more investment in ESG ETFs. Examples include: reducing barriers or offering incentives to institutional investors such as banks and insurance companies for investment in ESG ETFs, opening the market to qualified retail investors on certain conditions, opening the market to international investors and improving investor treatment and protection.

For countries with relatively small domestic capital markets, a regional market, led by regional financial centers, may be an option, in which regional ESG ETFs can be launched to address liquidity issues.

5.4 Increase the SDG coverage of ETFs

SDGs, in particular those that are poorly covered (such as SDG 12) or not covered at all (such as SDG 1) should be covered by ESG ETFs. Index providers and fund managers can work with the UN and other key stakeholders in determining the contents of the index or the ETF and assessing their sustainability and impact. The *Institutional Investor Partnership for Sustainable Development* (*IIPSD*) of UNCTAD is committed to working with all stakeholders in this respect, in particular to provide technical assistance to developing country regulatory authorities, stock exchanges and private stakeholders.

New indices that track investable SDGs need to be developed. For smaller ETF providers, there are also two ways to help fill this gap, such as pairing up with niche index providers and self-indexing.[58] As niche providers target a specific clientele, they are more likely to be among the first players to try out new indices that, for instance, cover SDG 1. However, the development of these indices and investment vehicles requires time and substantial upfront and ongoing investment. Nonetheless, providers who break into the untapped SDG marketspace would be able to leverage unserved demand and differentiate themselves in an increasingly competitive market.

Meanwhile, new indices tracking innovative SDG-related financial products, such as green bonds, SDG bonds and social bonds, should also be encouraged and explored so that innovative ESG ETFs can be developed with them as the underlying assets. It shows that all sustainable investment vehicles are complementary to each other, and a holistic approach is required from the policy perspective.

[58] In the European marketplace, several ETF providers of ESG ETFs already consider self-indexing as a cost-effective way of tracking the performance of certain securities. (Lyxor, ETF Report 2018).

Annex. Recent EU Regulations on ESG

The EU has proposed three regulations as part of its *Sustainable Finance Action Plan*, introduced in May 2018 with the aim of promoting investments in sustainable development.[59]

- The first regulation is concerned with stricter disclosure requirements for both providers and investors. On the provider side, ESG risks must be outlined for all products — including ESG ETFs. On the investor side, ESG risks must be integrated into and outlined in their investment decisions. This ruling mainly applies to institutional investors that provide advisory services on financial investments to their clients.
- The second regulation is concerned with the taxonomy of how ESG is defined. With this ruling, the EU aims to introduce a technically robust classification system by defining *environmentally sustainable* economic activities and a common set of metrics that allow improved disclosure on climate-related information. The EU has also defined clear obligations for providers if they decide to label products as *environmentally sustainable*. These measures are meant to support the EU green bond standard and Low Carbon indices.
- The third regulation is concerned with benchmarks — mainly indices in the case of ESG ETFs. Existing indices usually cover three strategies: Negative Screening (for example, excluding coal), Best in Class, and Transition Leaders. The EU, however, aims to extend the scope of the current ESG benchmark universe by defining two carbon-specific benchmarks: Low Carbon Benchmarks and Positive Carbon Impact Benchmarks. The latter is still to be developed while the former already exists in the European market.

The EU has introduced these regulatory measures for three reasons: (i) the EU intends to eliminate greenwashing[60] and increase awareness around the importance of sustainability; (ii) the EU intends to establish a "common language", allowing investors to act in a more transparent market with clear guidelines and standards; (iii) the EU intends to cover as many relevant stakeholders as possible from small investment funds to large insurance companies, to steer their investment efforts effectively and thereby promote sustainable investment in the long run.

[59] Lyxor, 2018, ETFs: A New Route to Sustainable Investing.

[60] "Unsubstantiated or misleading claims about sustainability characteristics and benefits of an investment product." Source: European Commission, 2019, Press Release on 7 March 2019.