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Promoting Socially Responsible Investing To High Net Worth Individuals

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A Project carried out in the internship Private Banking Commercial Assistant, ING Luxembourg

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Abstract

As sustainability considerations gain popularity among individual investors, financial institutions need to expand their Sustainable Finance strategy as to encompass, namely, Socially Responsible Investing (SRI) solutions. At ING Luxembourg, in the Private Banking department, one specific area for sustainability improvement concerns the investment fund offer. This Work Project is dedicated to developing a process in order to give the ING Aria European Bonds sub-fund a SRI focus. The transformed sub-fund must, in addition to provide a sustainable investment alternative to investors, be designed in a competitive way relative to other products in the market and outperform its agreed-upon benchmark.

Keywords:

Sustainable Finance, Socially Responsible Investment, Private Banking, Fixed Income

“We all recognize that sustainability must be the model for Europe’s future development. [...] What is perhaps less widely understood is that finance is an essential lever for achieving our ambitious collective goals. [...] Europe needs a financial system that promotes sustainable economic development rather than boom and bust; sustainable social development rather than inequality and exclusion; and sustainable environmental development rather than damaging the endowments of nature.”

Christian Thimann, Chairman of the High-level Expert Group on Sustainable Finance, Brussels, July 2017

1. Introduction

In December 2016, the European Commission nominated a High-Level Expert Group (HLEG) with the mission to reflect on the topic of sustainable development within European financial markets. This group gathered specialists from different sectors, namely members of the European institutions, ministries of Finance, Economics institutes, academic institutions and many more. In January 2018, the HLEG issued its final report with practical recommendations to increase the sustainable impact of financial markets. Sustainable Finance can be defined as “*the process of taking due account of environmental and social considerations in investment decision-making, leading to increased investments in longer-term and sustainable activities*” (European Commission, 2018). A particularly important concept in this definition is the notion of *long-termism*. The financial system as we know it today has been designed in a way to aim for the highest return on investment over the shortest period of time. Investors are growth-focused, constantly pushing for higher yields and higher revenues. However, an infinite growth system is not achievable in a world with finite resources. Sustainable Finance paved the way for the consideration of long-term value-creation objectives in financial decision-making, in addition to the traditional risk and return objectives.

Socially Responsible Investing (SRI) is one way to apply the practice of Sustainable Finance. Definitions vary in the literature. The Global Sustainable Investment Alliance (GSIA) defines it as “*an investment approach that considers environment, social and governance (ESG) factors in portfolio selection and management*” (GSIA, 2016) and, similarly, The European Sustainable Investment Forum defines it as “*an investment style or financial discipline that combines investors’ financial objectives with their concerns about ESG issues*” (EUROSIF, 2012). The UN adds another dimension to the definition by stating that it “*encompasses investments that aim to meet the needs of the present without compromising the ability of future generations to meet their*

own needs” (UN, 1987). SRI might also take other common denominations such as *green, ethical, triple-bottom-line or impact* investing, reflecting the multiplicity of ideas about it. The GSIA has developed a standard for classification of seven specific types of SRI (definitions in Appendix I): exclusionary and best-in-class screening, norms-based screening, ESG integration, sustainability themed investing, impact investing and corporate engagement/shareholder action.

Intuitively, having a “sustainable behavior” is often associated with taking small day-to-day actions in order to reduce our ecological footprint such as favoring public transportation for travelling, reducing electricity and water consumption or recycling waste. However, what is often overlooked is how individuals can make an impact through their investment choices. The financial sector, by providing and distributing the funding for economic activity, plays a strategic role in the way we are going to tackle future sustainability challenges. Through SRI, individual investors can re-direct their capital towards innovative, ESG-compliant businesses and projects. As this behavior grows in importance, financial institutions need to develop competitive sustainable investment solutions for retail investors. My Work Project, in the context of my internship in the Private Banking (PB) department at ING Luxembourg, was dedicated to improve the department’s product offer so that it encompasses Socially Responsible Investing solutions. More precisely, it was focused on developing a process by which to reposition the ING Aria European Bonds, a fixed income sub-fund offered to clients, in a sustainable way. Not only does the repositioned compartment need to provide a sustainable alternative to investors, it also seeks to beat the agreed-upon benchmark and to have a competitive positioning against other products available in the market. I had the opportunity to be supported and helped throughout my Work Project by the ING Luxembourg SRI working group: a team of Portfolio Managers, Private Bankers, legal and tax specialists.

2. Motivation

2.1 The SRI Trend

First, the choice to work on such a topic departed from the acknowledgement that the SRI trend is now developing at a wide scale in the banking and financial industries. The SRI market worldwide is growing at an unprecedented rate among both institutional and retail investors. The market is now worth almost US\$ 23 trillion, which accounts for almost half of the European assets under management and a third of those in the U.S. (J.P. Morgan Chase & Co., 2018). In terms of distribution, Europe, Australia and Canada are the regions who are leading the way in terms of SRI (GSIA, 2016). The most largely widespread strategies are exclusionary screening and ESG integration. Even though institutional investors still make up for the largest share of the market, the retail demand is now significant, as individual investors are questioning the effects of their investment decisions. In terms of asset allocation, in Europe and Canada the market is dominated by bonds (64.4%) followed by equity (32.6%) and a small share of other assets such as real estate and private equity (GSIA, 2016).

One specific area that requires to be considered a bit more in-depth is the growth is the issuance of ESG-aligned bonds. This particular investment vehicle has seen a surge in interest in the market, with a primary issuance volume of US\$ 156 billion in 2017 (CBI, 2018). The proceeds of climate-aligned bonds are typically invested in activities such as clean energy, low carbon transport, water management or sustainable land use, among others. The International Capital Market Association (ICMA, 2018) developed an influent methodology: the Green Bond Principles (GBPs) and the Social Bond Principles (SBPs). These are a set of guidelines, updated every year, aiming to help with the issuance of green and social bonds by, for instance, providing a list of potential projects that meet the sustainable criteria. Those were a particularly important reference to gain insight about the specificities of sustainable fixed income securities.

2.2 The Context of Luxembourg

Second, the motivation to work the topic of SRI was fueled by the context of Luxembourg, a country particularly rich in sustainable financial expertise. According to The Global Financial Centers Index, the capital city of Luxembourg holds the 21st place among leading financial centers worldwide, for a fraction of the population of other cities (Yeandle & Wardle, 2018). As per the UN definition, financial centers are “*key locations where the demand for and supply of finance come together, [...] generating a powerful clustering effect*” (UN Environment, 2017). Luxembourg is a true financial hub where multiple banks, asset and fund managers, insurance companies and other institutions (e.g. the European Investment Bank) are established. The density of the financial sector is such that all financial institutions combined have assets that are valued at more than 15 times the country’s GDP (Euromonitor International, 2017). The expertise that Luxembourg have developed in the financial industry is due to its *first-mover strategy* in adopting attractive regulation for investors and assets owners, such as low taxation and banking secrecy rules (Radu, 2014). However, the recent worldwide tightening of regulation, especially the introduction of FATCA/CRS and the Automatic Exchange of Information on tax matters, has threaten the comparative advantage held by the country in comparison to its neighbors.

In order to stay at the forefront of innovation, Luxembourg built on its international recognition and network of financial players to become a pioneer in Sustainable Finance. The country is a founding member of the International Network of Financial Centers for Sustainability, a network that shares strategic areas for action in the field (UN Environment, 2017). The country is the leader in Europe for domiciliation of Responsible Investing funds, is home to two out of three impact investment funds and to 50% of all Global Microfinance Investment Vehicles assets (UNEP FI 2018). Perhaps what makes Luxembourg most of a pioneer is its market infrastructure. It launched, in 2016, the world’s first ever and largest stock exchange entirely dedicated to

sustainable financial instruments: the Luxembourg Green Exchange. It now lists over 200 securities in 17 currencies and close to 50% of the world's green bonds (LGX, 2018). The hub of knowledge and resources on the topic of Socially Responsible Investing clustered in Luxembourg is a non-negligible advantage to exploit in the context of my Work Project.

2.3 The Context of Private Banking

Third, the motivation came precisely from the context of PB at ING Luxembourg, where the client profile is particularly adapted to the promotion of Sustainable Finance. ING Luxembourg is an entity of the global Dutch bank ING Group. As of 2017, it was the fourth leading bank in terms of customer deposits in the country with 15.6 billion EUR, and the eighth leading employer with 825 employees (KPMG, 2018). The bank acts on three main lines of business: Retail Banking, Wholesale Banking and Private Banking. The PB department offers high net worth individuals (HNWIs) and ultra-high net worth individuals (UHNWIs) a wide array of services in addition to the traditional banking services offered by a financial intermediary. Those are divided in three categories, namely (1) *investment solutions* such as investment advice and portfolio management (2) *financing solutions* such as lending facilities and (3) *wealth and planning solutions* such as succession planning, tax and legal advice. The number of clients in PB is much smaller than in other lines of business, but each one has a much larger asset base.

The HNWI has specific characteristics that require a particular attention. This type of client is much more demanding and is seeking for more sophisticated banking services than the classic retail client, for the obvious reason that he has a much larger wealth. HNWIs are long-term investors and are often looking to preserve their family wealth for future generations. They have access to a larger number of investment options, as they are not restrained by short-term liquidity problems or investment policy, but still are very cautious investors in their asset allocation (EUROSIF, 2012). They enjoy monetary freedom that allows them to move funds quickly from

one investment option to another. Some of these clients also have publicly known profiles, as many of them are company executives, entrepreneurs, government officials, professional athletes or well-known wealthy families. From that stems a desire for anonymity and a need for extra care in the handling of sensitive information. The type of HNWI attracted to the banking industry in Luxembourg has shifted together with the structural change in financial regulation. In the past, a large share of clients came from the neighboring European countries mainly for tax optimization whereas, today, the Private Banking clients are more international, wealthy and demanding (Trovato, 2015). Those are looking for a specific expertise and the private banks of Luxembourg need to develop tailored, innovative strategies adapted to the needs of this specific clientele, such as, for instance, SRI focused funds.

3. Methodology

The methodology followed throughout my Work Project is an organized, multiple-step process. First, an analysis of the actual products offered in Private Banking at ING Luxembourg was performed, while noting down the areas for possible sustainable implementation. Internal documentation, factsheets and yearly activity reports served as the basis for information gathering. Second, the strategy of two specific sustainable sub-funds developed by competitors of ING Luxembourg was examined. The rationale behind the choice of the sub-funds laid in (1) the asset class covered by the compartment and (2) the characteristics of the competitor who manages it. I focused on two fixed income sustainable funds, one from corporate issuers and one from government issuers only, managed by a competitor of ING with a notable presence in the Luxembourgish banking sector and which offers private banking services as well.

Third, the specific ING Aria compartment to transform was chosen, in accordance with the general strategy of the PB department and supported by the team of investment specialists. The

data and fund information needed was mainly extracted from the fund's prospectus and Key Investor Information Document (KIID), provided by the Portfolio Management department. Fourth, the methodology applied for the sub-fund transformation focuses on the restriction of the investment universe and is a two-level process, namely the issuer selection and the instrument selection. The issuer selection relies mostly on GSIA Sustainable Investment methods of exclusionary screening and best-in-class screening. Corporate issuers are screened according to the *non-financial indicator* (NFI), which was previously developed by the ING Investment Office in the Netherlands. Sovereign issuers are screened according to the methodology developed by Bertelsmann Stiftung & SDSN's, i.e. the Index Score and Dashboard. As for the instrument selection, it relies on ICMA's Green Bond Principles and Social Bond Principles in order to select the bonds to include in the investment universe. Fifth, the fund's benchmark tracker characteristics were extracted from the iShares database and evaluated in order to prepare for the construction of a model portfolio.

4. Comparative Analysis of SRI Offer

4.1 ING Luxembourg

In order to detail the current SRI offer at ING Luxembourg, I need to develop a bit further on the investment solutions offered by the bank in Private Banking. The services are split between Investment Advice mandates, where the client seeks recommendations while maintaining control over his final investment decisions, and Discretionary Management mandates, where the client delegates the management of his portfolio according to his objectives and risk profile (see Appendix II for detailed structure of the mandates). The fund universe offered to clients under both types of mandates currently includes a list of third-party ESG funds from several asset classes that clients can include into their portfolio. In the more basic Investment Advice mandate, the PBAS, the client has also access to specific investment themes in the form of "building

blocks”, namely one SRI theme. This theme can be applied to the model portfolio upon request and tilts the portfolio according to certain ESG criteria. The bank’s main product, ING Aria, is a *Société d’investissement à capital variable*¹ (SICAV) managed and distributed by ING Luxembourg and has several sub-funds available to investors. Currently, none of the sub-funds has a specific SRI focus. It is worth noting an important recent development in the rest of the ING Group. Another of the bank’s SICAV, the ING Fund, which is currently managed and distributed to clients in Belgium, launched, in October 2018, two specific equity SRI compartments: ING Sustainable Moderated and ING Sustainable Balanced. The investment strategy of these sub-funds combines the seven GSIA methods as to select securities based on three criteria: return, risk and sustainability.

The approach of ING Luxembourg is based on the fact that, even though the SRI trend is becoming more mainstream, it still has a different meaning to different investors. The department differentiates itself from a mainstream approach by including in the investment universe a selection of more thematic based funds in both equity and fixed income. However, ING Luxembourg does not offer any sustainable compartments of ING Aria. This is the main point of improvement for the bank, on which my Work Project focuses, as both the rest of the ING Group and competitors have already started to market sustainable compartments of their own funds to Private Banking clients.

4.2 Competitors

Next, an analysis of two SRI funds’ investment strategy was conducted. The first fund analyzed, the **Parvest Sustainable Bond Euro Corporate**, was developed by the BGL BNP Paribas, an entity of the French bank BNP Paribas. The entity is one of the most influent foreign banks in Luxembourg, offering Retail, Private Banking and Corporate services. The fund, which is a fixed

¹ French denomination which can be translated to “investment company with variable capital”.

income compartment of the Parvest SICAV, is managed by BNP Paribas Asset Management and is invested in euro-denominated, investment-grade corporate bonds only. The fund's benchmark is the Bloomberg Barclays Euro Aggregate Corporate Index, which is a broad measure of euro-denominated, investment-grade corporate bonds. The investment objective of the compartment is to target *“companies that stand out in their industry, not only because they are attractively valued, but also due to their responsible behavior and contribution to sustainable development”* (BNP Paribas Asset Management, 2016). The issuers in the fund universe are filtered according to several negative and positive investment rules. The bank's in-house ESG Research team developed an indicator, the ESG score, that ranks the issuers into deciles based on their ESG policies. The sub-fund strives to invest in the best performing companies and excludes the three lowest deciles from the investment universe. In terms of social controversies, it avoids investing in bonds from companies who are facing severe social controversies of level 4 or 5, as per the Sustainalytics definition. Finally, issuers who have clearly failed to respect the UN Global Compact Principles or that are active in the sectors of weapons, tobacco, pornography or gambling are systematically omitted from the investment universe. These two last exclusion rules exclude a total of 260 companies worldwide. In sum, the sub-fund employs both the exclusionary and best-in-class screening criteria to restrict their universe of corporate bonds' issuers.

The second fund analyzed, the **Petercam Bonds Government Sustainable**, was developed by the Belgian bank Degroof Petercam, a smaller foreign bank in Luxembourg, offering Private Banking, Asset Servicing and Investment Banking services. This sub-fund is part of a range of four sustainable compartments in both equities and fixed income. The bank's asset management firm – Petercam Institutional Asset Management (PIAM) – has developed a rigorous Responsible Investment strategy for this sub-fund, which invests in euro-denominated government bonds

issued by OECD-member countries only. The investment objective is to offer, through active management, an exposure to sovereign bonds selected on the basis of the sustainability ranking of the issuer. The investment strategy focuses on a best-in-class approach rather than an exclusion approach, in order to target the most sustainable issuers. PIAM has developed an in-house ESG-SRI filter, based on the historical analysis of more than 30 ESG criteria in areas such as politics, democracy, environment, education, health care, economics and wealth distribution of a country (PIAM, 2015). Each criterion is assigned a score ranging from the worst (0) to the best (100), and the overall country score is a weighted average of all the criteria's scores. The universe is not strictly restricted, but the portfolio constructed from it must invest in at least 40% of the top quartile of the ranking and maximum 10% of the bottom quartile (PIAM, 2015). The only issuers who are definitely excluded from the investment universe are countries who are *not free*, namely in which the basic political rights and civil liberties are absent. In sum, a different approach to sustainability is taken with the investment universe of this fund, as the sovereign issuers cannot be filtered the same way as companies. Here, a positive screening based on the ESG-SRI filter is added to a further scaling criterion for portfolio construction.

5. Fund Transformation: ING Aria Sustainable Bonds

As highlighted in the previous sections, it is essential that ING Luxembourg reflects its commitment to long-term development by increasing the ESG level of its existing fund offer. The fast-paced context in which Sustainable Finance is growing has pushed major financial institutions to integrate sustainable considerations into their fund offering. ING Belgium also started to market sustainable equity compartments of the ING Fund. The following sections will detail the transformation process by which the ING Aria European Bonds, currently offered to Private Banking clients, was repositioned and renamed to the ING Aria Sustainable Bonds.

The choice to transform this specific sub-fund stems from strategic, optimality and cost considerations. Among the fixed income spectrum at ING Luxembourg, the ING Aria European Bonds compartment was the one with the lowest cash inflow levels, thus generating the lowest revenues for the bank. The graph in Appendix III was plotted by taking the historical weekly prices of the sub-fund and of the relative benchmark over the period of 2015-2018. In the last three years, the sub-fund has generally slightly underperformed the benchmark, mostly due to the heavy fixed charges of the fund. From a strategic point of view, the sustainable transformation acts as a way to revitalize this specific sub-fund and, to a certain extent, the entire fixed income range. Moreover, ING Luxembourg is a small entity compared to the Belgian or Dutch entities of the ING Group, thereby has more limited means and resources. As the Belgian entity has already worked on the transformation of a sustainable equity sub-fund, the duplication of this process in the Luxembourgish entity did not seem optimal. Indeed, the possibility of a future consolidation between Belgium and Luxembourg seemed likely. Finally, the monetary cost of this repositioning for the client is nonexistent, as the annual management fee on the fund remains the same. The cost for the bank of repositioning a fixed income sub-fund is much lower than for an equity sub-fund. As aforementioned, the sustainable bond market is starting to be well-established. The possibility to work on the baseline of the already-existing academic research methodologies and the wide scope of ESG bond labels seemed like an attractive option. The amount of data and research available made the fund transformation process easier and more credible.

5.1 Investment Objective

The ING Aria Sustainable Bonds sub-fund re-directs the investment flows towards securities whose issuers comply with generally recognized ESG criteria. It invests in three types of financial instruments, namely green, social and sustainable bonds. The previous sub-fund was invested only in bonds issued from Sovereigns, Supranationals and Agencies (SSAs), whereas the

repositioned sub-fund is now an aggregate fund, investing in both SSAs and corporate bonds. The main reason for this change comes from the lack of SSAs issuing sustainable securities in the market. The construction of a viable portfolio from this very restrained universe did not seem like an optimal option. Furthermore, as the market for sustainable securities is still emerging, and thus quite difficult to predict, a diversified investment universe from the issuer side is privileged.

The benchmark for the sub-fund, which was previously the JP Morgan EMU Sovereign Bond Index (JNEU1R10), a representative index for European government bonds, changes to the Bloomberg Barclays Euro Aggregate Bond Index (LBEATREU). It is interesting to look at how these two benchmarks performed over the recent past to highlight the differences between them. The graph in Appendix IV was plotted by taking the historical weekly prices and trailing 1-year volatility of the two benchmarks over the period of 2015-2018. As expected, the LBEATREU has a higher average return and volatility over the observed period, denoting how corporate bonds are slightly more risky than government bonds. The volatility of that same index has converged over the last year towards the JNEU1R10 one, showing how both prices have behaved quite similarly despite the additional risk bore by the LBEATREU. This new benchmark is more accurately reflecting the ability of the sub-fund to invest in bonds issued by both public and private issuers.

The investment objective of the repositioned sub-fund is to seek to outperform the aggregate benchmark by considering ESG criteria in portfolio selection and management. It invests in investment-grade, euro-denominated bonds for which the proceeds are used towards generating a positive environmental or social impact. The outperformance of the sub-fund over the benchmark, also known as *alpha*, comes from both the sustainable optimization of the investment universe and the skills of the portfolio manager in picking the most attractive bonds.

The investment process that follows is a two-level approach: the issuer selection and the instrument selection. First, at the issuer level, two sets of screening criteria are used, depending on the type of issuer screened. For corporate issuers, the *non-financial indicator* (NFI) is applied and for sovereign issuers, the SDG score. Every issuer from the universe is thoroughly screened to ensure it meets the minimum predefined standards. Second, at the instrument level, the appropriate type of instrument is selected from the issuers in the universe, with a preference for green, social and sustainable bonds, when available.

5.2 Investment Process: Issuer Selection

5.2.1 Corporate Screening

The issuer selection is the first pillar of the investment process and needs to be further detailed to better understand the intuition behind the strategy. First, the **corporate screening process** starts with a negative screening, by which companies engaged in controversial business activities are excluded from the investment universe. Here, the methodology developed by the ING Investment Office in the Netherlands is followed. Issuers engaged in the following lines of business are screened out: controversial weapons, alcohol, fur, gambling, nuclear energy, coal, pornography, tobacco and oil sands (exclusion threshold in Appendix V). For instance, the Belgian Anheuser-Busch InBev and the American Exxon Mobil Corporation are screened out for earning most of their revenues from, namely, the production of alcoholic beverages and the exploration of oil sands. In addition, further issuers are excluded for being involved in scandals or known for having undesirable recurring behavior in the following areas: international labor issues, corruption, human rights, environmental offenses, social laws and codes. For instance, the Swiss Novartis is excluded for being involved in multiple scandals around ethics and corruption.

Next, the positive screening focuses on outlining the best performing companies in terms of sustainability. The ING Investment Office in The Netherlands has worked on developing the *non-*

financial indicator (NFI), a specific score drawn from evaluating around 130 environmental, social and governance criteria from the Sustainalytics database, one of the major suppliers of ESG data. The NFI provides an objective picture of the risk and reputation profile of a company, relatively to its competitors in the relevant sector. A corporate issuer can have a global score in the following ranges: best 10 percent (++), best 30 percent (+), best 50 percent (=) and below average (-). The issuers from the latter score category are systematically excluded from the universe, which restricts it to around 1 850 corporate issuers. It is relevant to mention that a low NFI score does not mean that a company acts in a socially irresponsible manner but that, compared to its competitors in a particular industry, it lags behind in terms of its policies and actions regarding ESG issues. When constructing the model portfolio, issuers with high NFI scores will be privileged, when possible.

5.2.2 Sovereign Screening

Second, the **sovereign screening process** had to be slightly adapted, due to the fundamental difference in the type of information available for these issuers. As countries are not dedicated to one specific sector of the economy, the original negative screening process could not be conducted. In addition, the Sustainalytics ESG data was unavailable at the country level. Instead, a screening based on the Sustainable Development Goals (SDGs) was conducted. The 2030 SDGs are a set of goals addressing global challenges such as poverty, peace, justice and climate change, that were adopted in 2015 by 193 UN Members States. In order to provide an up-to-date assessment of each country's progress towards achieving these goals, the Bertelsmann Stiftung and the Sustainable Development Solutions Network (2018) released the SDG Index and Dashboards. The SDG Index score can be interpreted as the percentage of achievement across the 17 SDGs for a country. It is calculated using the same methodology for each country, generating a score that can be compared and assessed. The negative screening investment rule for the sub-

fund is to avoid issuers with a SDG score lower or equal to 50. From this step, a total of 20 out of the 157 sovereign issuers are excluded from the universe, mostly countries from Africa and the Middle East. As for the SDG Dashboard trend, it uses historical data to estimate how fast a country is progressing towards the SDGs. It calculates the linear annual growth rate needed to achieve a goal by 2030, compared with the average growth rate over the most recent period (usually 2010-2015). The trend is illustrated with a 5-arrow system (depicted in Appendix VI). The positive screening investment rule is to prefer sovereign issuers with a SDG trend that is *moderately increasing, on track* or *maintaining achievement*. Again, when constructing the model portfolio, issuers with one of these SDG trends will be privileged, when possible. Finally, to be part of the investment universe, issuers must be free of international sanctions and have ratified the most widely accepted UN backed conventions. The corporate and sovereign screenings are dynamic processes that need to be periodically reviewed to ensure that the issuers are still within the rules applicable and that the sub-fund maintains its sustainable commitment.

5.3 Investment Process: Instrument Selection

The instrument selection is the second pillar of the investment process. The repositioned sub-fund invests in green, social and/or sustainable bonds from the screened issuers (definitions in Appendix VII). The choice of the bonds to include is made according to ICMA's Green Bond Principles (GBPs) and Social Bond Principles (SBPs). The framework on which to select a bond or not is the *use-of-proceeds*. The securities selected must be bonds for which 100% of the proceeds are dedicated to either a green project, a social project or a mix of both, as defined in the GBPs and SBPs. As an example, the Luxembourgish entity Alpha Trains SA issued, in 2015, a 15-year maturity green bond for which the proceeds will be used entirely to refinance debt regarding a fleet of Electric Multiple Unit vehicles (Sustainalytics, 2016). The bonds selected were not restricted in terms of the size of the initial emission amount or in terms of maturity.

Filtering of the selection was made using Bloomberg tags “Green Bond”, “Social Bond” and “Sustainable Bond”. However, in order to alleviate the constraint on the investment universe and when a lack of choice appears, *pure play* bonds might be included (i.e. bonds for which the proceeds have a general goal, but that are issued by ESG screened issuers).

6. Model Portfolio Construction: ING Aria Sustainable Bond

From the restricted investment universe, a model portfolio was constructed by replicating the composition of the benchmark on the following characteristics: key performance metrics, sector allocation, maturity and credit quality (details in Appendix VIII). In order to obtain the detailed composition of the benchmark, a tracker’s raw data was extracted: the iShares Euro Aggregate Bond ETF (IEAG). This ETF directly tracks the Bloomberg Barclays Euro Aggregate Bond Index. The following performance metrics were calculated using the weighted averages of all of the bonds’ metrics in the index. The IEAG index has an average yield-to-maturity (YTM) of 0.84%, an average coupon of 2.42%, an average adjusted duration of 6.57 years and an average convexity of 0.84. The index has an asset-swap spread (ASW) of 39.36 bps, which is a measure of the credit risk of the index, or the difference between the YTM and the Libor rate. In terms of sector allocation, the index is invested mostly in government bonds (70.5%), Financials (16.1%) and other negligible sectors such as Utilities (2.4%) and Consumer Discretionary (2.1%). As expected, the average YTM (0.61%) and the average ASW (15.28 bps) of the government bonds in the index is notably lower than that of corporate bonds of all sectors due to their lower overall risk. Regarding maturity, the index is invested relatively equally across shorter and longer maturities with weights between 17% and 22%. As for credit quality, around 97% of the bonds included in the index are from the investment grade category, with a Standard & Poor’s rating of BBB and above. The ING Aria Sustainable Bond seeks to replicate the aspects of the benchmark

with ESG compliant fixed income securities. However, portfolio construction also depends on a bond price appreciation potential, market circumstances and the portfolio manager's opinion.

7. Limitations

The main limitation of the Work Project lays in data barriers regarding the newly constructed ING Aria Sustainable Bond model portfolio. Indeed, most of the green, social and sustainable securities included in the universe were issued in the recent past, some even in the last year. Conducting a strong quantitative analysis of the past performance of these bonds and comparing them with regular instruments has proven to be difficult. However, one important study from Barclays Research found that Sustainable Investing did not hinder bond returns in a well-diversified portfolio. Their research successfully proved that tilting a portfolio towards certain ESG factors did not impede returns, but, on the contrary, resulted in a small performance gain (Barclays, 2016). Moreover, a Fidelity study also looked into the influence of the ESG rating on bond metrics such as the cash bond spread, yield and volatility. The results are showing that bonds with better ESG standards are generally associated with a lower credit spread, a higher dividend yield and a lower equity implied volatility (Fidelity, 2018).

One other important limitation relates to the confidentiality of information treated. Indeed, it is not possible to disclose the precise composition of the ING Aria Sustainable Bonds model portfolio built from the sustainable investment universe for strategic commercial reasons coming from ING Luxembourg. However, the portfolio construction in itself was not the main point of focus of the Work Project, as this task is conducted entirely by the portfolio managers.

8. Conclusion and Further Developments

The growing enthusiasm for the consideration of sustainability in investment decisions is a clear opportunity for financial institutions to broaden their product offering. The goal of the current Work Project was to promote Socially Responsible Investing to HNWI by transforming the ING

Aria European Bonds into a product that is sustainable, well-positioned against comparable sub-funds in the market and that is in line with its financial performance target. The goal has been achieved in a sense that the repositioned sub-fund will contribute to align ING Luxembourg's fixed income investment offer with sustainability goals. Moreover, the technique used to restraint the investment universe and the benchmark chosen are comparable to those of the two competitive sub-funds analyzed, which results in a positioning of the ING Aria Sustainable Bonds that is comparable to that of sustainable sub-funds marketed by competitors. However, even though the performance target has been set (i.e. to beat the LBEATREU Index benchmark), any kind of measurement or analysis it is not feasible for the moment, due to lack of information. Nevertheless, the ING Luxembourg SRI working group is confident that the sub-fund should perform well in the future, given the solid foundation of the investment universe's ESG-optimization and the abilities of the portfolio management team.

To further develop, it would be beneficial for ING Luxembourg to look into the process of getting the ING Aria Sustainable Bonds labeled, for instance through the Luxembourgish labelling agency LuxFlag. Not only would this give the new sub-fund more visibility, it would also act as a way to legitimate the ESG approach and to reassure clients about the validity of the SRI method applied. To further broaden the Sustainable Finance strategy of the bank, it would also be interesting for ING Luxembourg to collaborate with ING Belgium in order to distribute their new equity sub-funds, as this would widen the assets classes covered by the SRI strategy. Finally, as the market grows, some attention should be directed to developing a measure of the *greenness* of a client's portfolio, for instance based on in-house metrics.

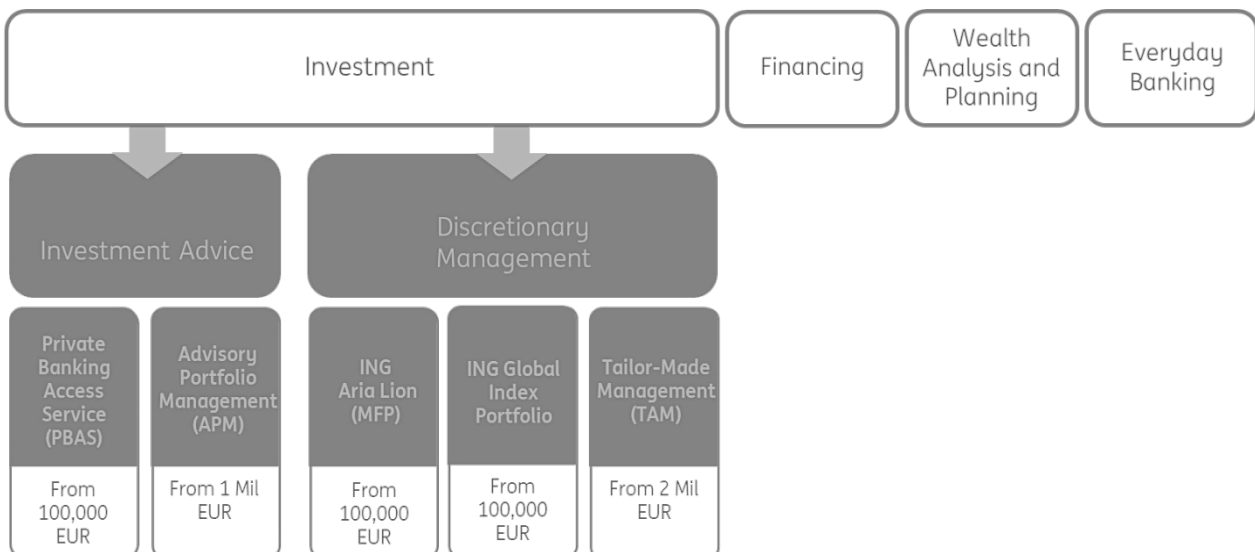
9. Appendix

I – GSIA Classification for Sustainable Investment Methods

Method	Definition
Negative/Exclusionary screening	The exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria.
Positive/Best-in-class screening	Investment in sectors, companies or projects selected for positive ESG performance relative to industry peers.
Norms-based screening	Screening of investment against minimum standards of business practice based on international norms.
ESG integration	The systematic and explicit inclusion by investment managers of ESG factors into financial analysis.
Sustainability-themed investing	Investment in themes or assets specifically related to sustainability (for example clean energy, green technology or sustainable agriculture).
Impact/Community investing	Targeted investments, typically made in private markets, aimed at solving social or environmental problems, and including community investing, where capital is specifically directed to traditionally underserved individuals or communities, as well as financing that is provided to businesses with a clear social or environmental purpose.
Corporate engagement/ Shareholder action	The use of shareholder power to influence corporate behavior, including through direct corporate engagement, filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines.

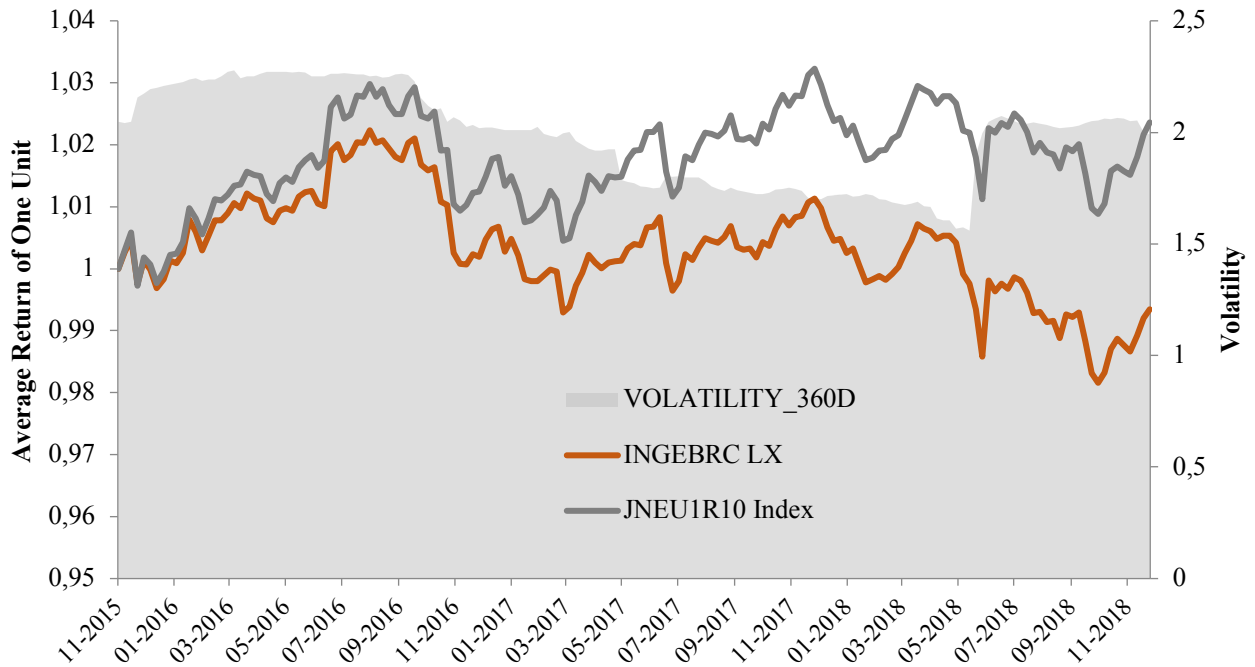
Source: GSIA, 2016

II – Investment Solutions in Private Banking at ING Luxembourg



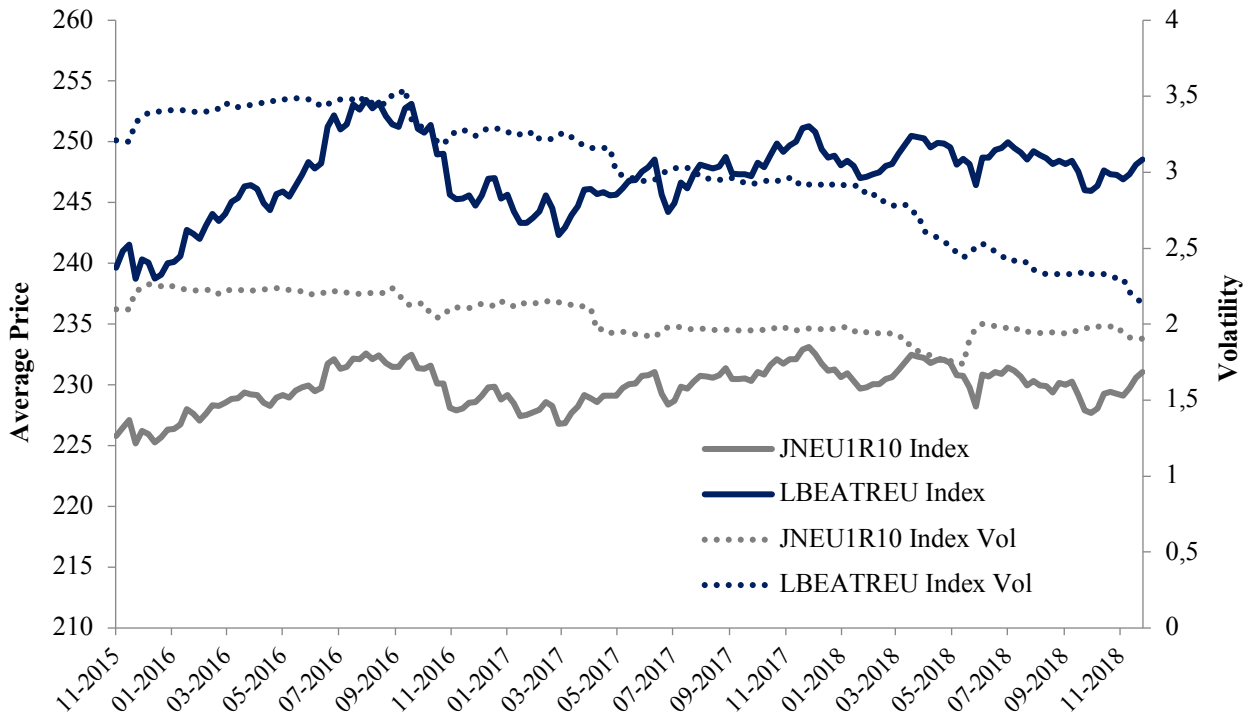
Source: Internal documentation ING Luxembourg, 2018

III – Performance of ING Aria European Bonds versus JNEU1R10 Index



Source: Historical weakly data (2015-2018) extracted from Bloomberg

IV – Performance of JNEU1R10 Index versus LBEATREU Index



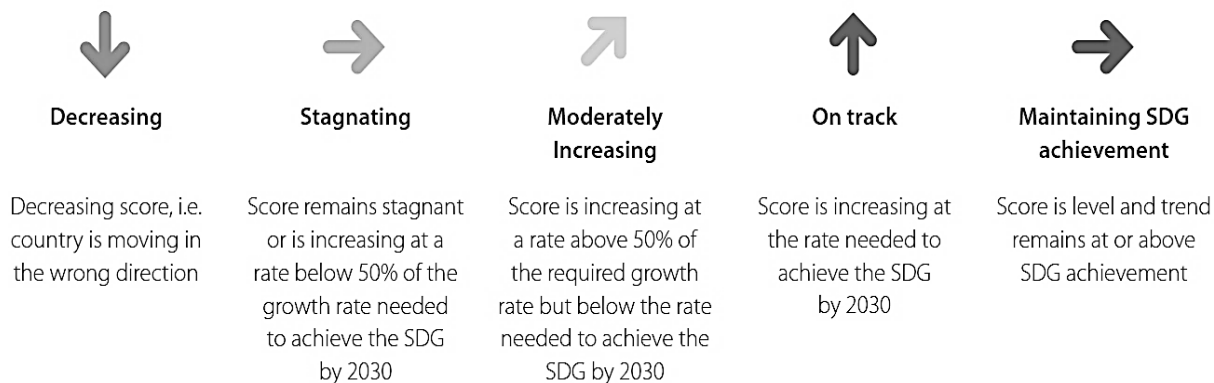
Source: Historical weakly data (2015-2018) extracted from Bloomberg

V – Corporate Screening Exclusion Threshold

Category	Threshold
Controversial weapons	<ul style="list-style-type: none"> ▪ No threshold for exclusion.
Alcohol	<ul style="list-style-type: none"> ▪ 5% revenues from the production of alcoholic beverages; ▪ 10% revenues from alcoholic beverages.
Fur	<ul style="list-style-type: none"> ▪ 5% revenues from the production of animal fur or processing of fur (products); ▪ 10% revenues from the sale of products in which fur is processed.
Gambling	<ul style="list-style-type: none"> ▪ 5% revenues from the production of gambling systems (e.g. slot machines, roulette tables or software) or revenues from gambling (casinos, lotteries, online gambling); ▪ 10% revenues from the distribution of gambling products.
Nuclear energy	<ul style="list-style-type: none"> ▪ 5% revenues from the production of nuclear energy (uranium production or nuclear power); ▪ 10% revenues from the construction of nuclear power plants; ▪ 10% revenues supplying key components (reactor vessels) to the nuclear energy sector.
Coal	<ul style="list-style-type: none"> ▪ 5% revenues from the production of coal (operating coal mines); ▪ 5% revenues of coal-fired electricity generation. Except for those companies that are undergoing a transition to a more sustainable electricity production scheme.
Pornography	<ul style="list-style-type: none"> ▪ 5% revenues from the production of pornographic materials (publishers of pornographic magazines, producers of pornographic movies and websites); ▪ 10% revenues from the distribution of pornographic materials (cable companies and specialized magazine stores).
Tobacco	<ul style="list-style-type: none"> ▪ 5% revenues from the production of tobacco products; ▪ 10% revenues of tobacco products (tobacco shops); ▪ 10% revenues of specialized support services for the tobacco industry (media and marketing services).
Oil sands	<ul style="list-style-type: none"> ▪ 5% revenues from mining or exploration of oil sands.
Weapons	<ul style="list-style-type: none"> ▪ 5% revenues from the production or maintenance of weapons (systems); ▪ 5% revenues from the production or maintenance of components designed specifically for weapons (or weapon systems) (for example, military electronics).

Source: Internal documentation ING Group, 2018

VI – The 5-Arrow System for SDG Trends



Source: Bertelsmann Stiftung & SDSN, 2018

VII – ICMA Bond Classification

Bond Type	Use of Proceeds
Green Bond	Any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance projects with clear environmental benefits and which are aligned with the four core components of the BGP. Eligible green projects include renewable energy, energy efficiency, pollution prevention and control, eco-efficient and/or circular economy adapted products, production technologies and processes, green buildings, terrestrial and aquatic biodiversity conservation, clean transportation, etc.
Social Bond	Any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance projects that directly aim to address or mitigate a specific social issue and/or seek to achieve positive social outcomes, especially but not exclusively for a target population(s). Social project categories include providing and/or promoting: affordable basic infrastructure, access to essential services, affordable housing, employment generation, food security, or socioeconomic advancement and empowerment.
Sustainability Bond	Any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance a combination of green and social projects and which are aligned with the four core components of the GBP and/or SBP.

Source: ICMA, 2018

VIII – IEAG Index Detailed Exposure

Key Metrics

Average YTM	0,84%
Average Coupon	2,42%
Average Adj. Dur.	6,57
Average Convexity	0,84
Average ASW	39,36

Sector	Weight	YTM	Dur.	ASW
Materials	1,0%	1,07	4,98	74,97
Consumer Discretionary	2,1%	1,19	4,82	91,7
Consumer Staples	1,6%	1,05	5,56	68,18
Financials	16,1%	0,95	4,42	68,7
Health Care	1,1%	1,18	5,68	79,74
Industrials	1,8%	1,11	5,7	70,04
Energy	1,0%	1,49	5,04	113,47
Technology	0,5%	1,01	5,76	59,2
Communications	1,9%	1,33	5,19	95,49
Utilities	2,4%	1,28	5,53	90,59
Government	70,5%	0,61	7,04	15,28
	100,0%			

Cr. Quality	Weight	YTM
AAA	23%	0,21
AA	31%	0,46
A	11%	0,9
BBB	32%	1,62
BB	0%	4,33
NR	1%	0,08
	98%	

Maturity	Weight	YTM
1-3Y	22%	0,1
3-5Y	21%	0,6
5-7Y	17%	1
7-10Y	17%	1,5
10Y+	22%	2,3
	100%	

Source: Own calculations based on IEAG Index Factsheet Data from iShares

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