



## Iryna Shkura

ORCID ID: 0000-0002-2337-6882

Department of International Economic  
Relations and Economic Theory  
Alfred Nobel University, Dnipro, Ukraine  
i.shkura@duan.edu.ua

## The regional peculiarities of SRI development

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### Abstract

**Aim/purpose** – The aim of the paper is to examine the regional peculiarities of development of socially responsible investment markets based on the main trends in the global socially responsible investment (SRI).

**Design/methodology/approach** – Peculiarities of SRI development are considered in Europe, the USA, Canada, Asia, and Japan. The analysis is based on the data from local SIF surveys: Eurosif, US SIF, JSIF, RIA Canada, RIAA<sup>1</sup> and the Global Sustainable Investment Alliance (GSIA). In addition, the data from scientific articles and World Bank databases are used.

**Findings** – SRI development by regions is differentiated according to their dynamics, structure of participants, SRI-strategies, structure of assets in the portfolios, and the barriers or motives for the SRI development. There is a set of macroeconomic indicators whose influence on SRI has been analysed and it can be concluded that only indicators of openness can be linked with the regional SRI market development.

**Research implications/limitations** – As the European market takes the largest share of the SRI market, the more detailed analysis has been conducted regarding this region. Study of both theoretical and practical aspects of socially responsible investment has shown that there is a lack of a unified global concept of socially responsible investment. Within the paper, socially responsible investment is considered as an investment in tangible and intangible forms focused on creating long-term value taking into account the impact on the environment, social sphere, quality control, and ethical obligations.

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<sup>1</sup> European Sustainable Investment Forum (Eurosif), United States of America Sustainable Investment Forum (US SIF), Japan Sustainable Investment Forum (JSIF), Responsible Investment Association of Canada (RIA Canada), Responsible Investment Association Australasia (RIAA).

**Originality/value/contribution** – The paper extends and develops the existing research into the issue in several ways: the peculiarities of regional SRI development are defined, and a comparative analysis of SRI regional markets is conducted; the hypothesis that SRI markets are driven by other factors than those which drive the conventional investment market has been proposed; it has been shown that the level of SRI market development makes an impact on strategies, participants and structure of assets, and that macroeconomic indicators could be considered as preconditions for SRI development.

**Keywords:** socially responsible investment, regional development, ESG-criteria, responsible investment strategies, institutional and retail investors.

**JEL Classification:** A13, M14, Q01.

## 1. Introduction

An increasing number of investors are trying to combine financial goals with social ones (Global Sustainable Investment Review [GSIA], 2016; MacKenzie Insight, 2018). The inclusion of ESG-criteria<sup>2</sup> in the decision-making process for the formation of asset portfolios is gaining momentum. Socially responsible investment (SRI) has become a major force, entering the mainstream of investment practice (Eurosif, 2003, 2006, 2008, 2010, 2012, 2014, 2016; GSIA, 2016; Louche & Lydenberg, 2006). This is confirmed by the volumes of socially responsible (sustainable and responsible) investments – SRI which take into account the ESG-criteria and the use of responsible strategies, the dynamics of these investments, and the increase in their share in the total amount of assets under management (GSIA, 2016). The key factors influencing this segment of the investment market are global and regional initiatives aimed at both reducing the current level of risk of investment portfolios and achieving the goals of sustainable development in the short and long term with a view to building a secure future for future generations are factors influencing this segment of the investment market.

Each region has its own peculiarities of the development and functioning of the SRI market as well as specific factors that stimulate or restrain the market (Amenc & Le Sourd, 2008; Bengtsson, 2008; Chapple & Moon, 2005; GSIA, 2016; Humphrey & Lee, 2011). Researchers have singled out the following key areas: demographic, economic, financial, institutional and cultural (Scholtens & Sievanen, 2013).

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<sup>2</sup> ESG-criteria – environmental, social and governance (ESG) aspects which are taken into account by responsible investors.

The present paper considers the main regional characteristics of development of the SRI market on the basis of the research of such markets as the one of Europe, the USA, Canada, Australia, New Zealand, Asia (excl. Japan), and Japan studied individually.

The aim of the paper is to examine the regional peculiarities of development of socially responsible investment markets based on the main trends in the sphere of the global SRI.

To attain the aim, the following objectives have been achieved: characterising the scope, dynamic and role of SRI by regions; considering the main actors, their strategies and asset allocation structure for the markets which provide us with these data; analysing the motives and drivers for SRI development by regions; and elaborating how macroeconomic indicators influence SRI.

The paper extends and develops the existing research into the issue in several ways. Firstly, the peculiarities of regional SRI development are defined, and a comparative analysis of SRI regional markets is conducted. Secondly, the hypothesis that SRI markets are driven by other factors than those which drive the conventional investment market has been proposed, which means that SRI gives an opportunity for investors to reach their financial and non-financial goals with minimum risk. Thirdly, it has shown that the level of SRI market development makes an impact on strategies, participants and structure of assets, and that macroeconomic indicators could be considered as preconditions for SRI development.

The structure of the paper is as follows: the theoretical background based on the reports of sustainable investment forums and agencies; research methodology containing the main stages of research and methods used, research findings, and discussion with the appropriate conclusions made. The literature review covers scientific publications from different regional markets, such as the USA, Europe, UK, Canada and Australia, and Asia. The analysis comprehends both institutional and retail assets, covers seven main strategies according to the Eurosif classification, and considers such investment vehicles as equity and bonds.

SRI markets are analysed by regions according to their dynamics, structure of participants, SRI strategies, structure of assets in the portfolios, and the scope of barriers to or motives for the SRI development. Such an approach gives an opportunity to estimate a market size, make comparisons about the market, and ultimately, draw conclusions on the trends in global SRI.

## 2. Literature review

A very large contribution to the theoretical basis of socially responsible investment has been made by such institutions as Eurosif, US SIF, EFAMA<sup>3</sup> and other regional responsible investment organisations. They provide the basic definitions of sustainable and responsible investment, develop approaches to the classification of responsible investment strategies as well as research the main trends in market development.

The overall concept and mechanism of SRI has already been considered within the author's previous articles (Shkura, 2017ab). Thus within this paper the focus is on investigation of regional SRI markets at the regional level.

An analysis of SRI markets (the USA, Europe, Canada and Australia) with the overview of this increasing trend and interest of investors in combining financial and ethical motives can be found in the publications of Renneboog, Horst, & Zhang (2008) and Humphrey & Lee (2011). The Australian market has been investigated from the perspective of investors' characteristics and performance (Haigh & Hazelton, 2004; Tippet, 2001).

It was concluded that SR investors are younger and better educated, which was confirmed by a survey of 109 Australian investors (McLachlan & Gardner, 2004). Significant over- or underperformance of ethical mutual funds was not found (Cummings, 2000), though another survey discovered significant underperformance of the three major Australian ethical mutual funds from 1991 to 1998 (Tippet, 2001). Comparative analyses of conventional and SRI portfolios demonstrated similar structure and as a result closely correlated performance (Haigh & Hazelton, 2004). In addition, the performance of Australian socially responsible funds and their comprehensive analysis has not shown any significant differences between the returns of SRI and conventional funds. However, the application of positive screening reduces the risk of funds significantly in comparison with negative screening application (Humphrey & Lee, 2011).

The investigation of SRI financial performance in France has shown dependence of the analysed period and category of the fund (Amenc & Le Sourd, 2008).

The analysis of performance of European ethical funds in conditions of change in the investor's motives from 'liquidity-risk –return' to 'liquidity-risk –return – sustainability' was made by Cengiz, Braun, & von Nitzsch (2010).

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<sup>3</sup> European Fund and Asset Management Association (EFAMA).

The investigation of performance of SRI portfolio in comparison with conventional portfolio for Europe, Asia, and the USA demonstrated the outperformance of European SR companies in the short term, but Asian and US companies did not perform to their benchmark (Hill, Ainscough, Shank, & Manullang, 2007). It was concluded that the reasons for this lie in cultural differentiation and its impact on SRI.

Concentration on the ethical aspects of SRI by examining consumer sentiments towards ethical business practices in three countries of the European Union demonstrated a very pessimistic mood of Germans with regard to future ethical behaviour of business. This contrasted with the highly optimistic mood of the British on this issue (Tsalikis & Seaton, 2007). Consumer sentiments towards ethical business practices are very important in assessing the readiness to pay for SRI and level of trust in the business from investors.

Moreover, the differences between EU and US approaches to SRI have been emphasised by Louche & Lydenberg (2006). This was explained by key dissimilarities in the role of governments and public concepts of sustainability. Similarly, the case of Spain argues that contextual conditions had an impact on the formation of SRI, highlighting the differences these conditions initiated (Lozano, Albareda, & Balaguer, 2006).

The vast majority of studies cover the USA exclusively. When analysing Europe, the UK is the primary country of the research, which can be explained by that nation's long history of SRI. Other studies compare European SRI drivers as a whole without specifying a particular country. Europe is thus analysed in SRI studies in general, and the vast majority of research focuses only on the UK and a few other key European countries.

The case of Nordic countries was studied by Scholtens & Sievanen (2013) regarding differences in size and composition of SRI in four Nordic countries. The authors interpreted these differences as resulting from key characteristics in the economies, finance, culture, and institutions of these countries. Studies on Eastern European countries are limited. However, studies on Poland's SRI market are more frequent. An overview of basic concepts of SRI, analysis of dynamic, investors, and the structure of the Polish SRI market was demonstrated in the research. The Polish SRI market is at the initial stage of development, the interest of investors is growing, strategies are becoming more diversified. An important landmark in this development was the introduction of the RESPECT socially responsible Index on the Stock Exchange in Warsaw (Czerwonka, 2013; Czerwonka & Wolska, 2013; Remlein, 2017; Rogowski & Ulianiuk, 2011).

Sandberg, Juravle, Hedesstrom, & Hamilton (2009) have argued that cultural differences could be one explanation of the heterogeneity of SRI and that it seems unlikely that these differences will be addressed in the nearest future. The majority of empirical studies mentioned above focus on the USA and the UK, since both countries have the richest SRI traditions along with significant assets disposable for investment.

Chapple & Moon (2005) conducted a study of seven Asian countries (India, Indonesia, Malaysia, the Philippines, South Korea, Singapore, and Thailand) and highlighted that concepts of social responsibility differ from country to country, which could be explained by particular national factors. Louche & Lydenberg (2006) compared SRI in the European Union and the USA and concluded that, in spite of a number of similar concepts for both areas, the implementation varies.

The history of Scandinavian socially responsible investing and preconditions for SRI development were considered by Bengtsson (2008). The author combines findings on Scandinavian SRI with insights from previous research and institutional theory.

### **3. Research methodology**

Peculiarities of SRI development are considered in Europe, the USA, Canada, Asia, and Japan. The analysis is based on the data from local SIF surveys: Eurosif, US SIF, JSIF, RIA Canada, RIAA and the GSIA<sup>4</sup>. Also the data from scientific articles and World Bank databases are used.

As the European market takes the largest share of the SRI market, the more detailed analysis has been conducted regarding this region.

The study of both theoretical and practical aspects of socially responsible investment has indicated that there is a lack of a globally unified concept of socially responsible investment. This is a decisive feature not only of academic research in this area, but also of the analytical approaches of international organisations and consulting companies. At the same time, there are a number of terms used as synonyms such as ‘responsible investment’, ‘impact investment’, ‘ethical investments’, ‘green investments’, and ‘value-based investments’. Definitions vary not only on different continents, but even in different countries

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<sup>4</sup> European Sustainable Investment Forum (Eurosif), United States of America Sustainable Investment Forum (US SIF), Japan Sustainable Investment Forum (JSIF), Responsible Investment Association of Canada (RIA Canada), Responsible Investment Association Australasia (RIAA), Global Sustainable Investment Alliance (GSIA).

within Europe (Louche & Lydenberg, 2006). The terms ‘socially responsible investment’ and ‘socially responsible investing’ evolve under the influence of the urgent problems of human development. Within this paper, socially responsible investment is considered as investment in tangible and intangible forms focused on creating long-term value taking into account its impact on the environment, social sphere, quality control, and ethical obligations.

The analysis includes both institutional and retail assets, covers seven main strategies according to the Eurosif classification, and considers such investment vehicles as equity and bonds.

From the year 2012 Eurosif introduced the following main SRI-strategies:

1. Sustainability themed investment – investment in themes or assets linked to the development of sustainability.
2. Best-in-Class investment selection – this approach involves the selection or weighting of the best performing or most improved companies or assets as identified by ESG analysis, within a defined investment universe.
3. Exclusion of holdings from investment universe – an approach that excludes specific investments or classes of investment from the investible universe such as companies, sectors, or countries if involved in certain activities based on specific criteria.
4. Norms-based screening – screening of investments according to their compliance with international standards and norms which are defined by international bodies (the United Nations, for example).
5. Integration of ESG factors in financial analysis – this approach covers explicit consideration of ESG factors alongside financial factors in the mainstream analysis of investments.
6. Engagement and voting on sustainability matters – engagement activities and active ownership through voting of shares and engagement with companies on ESG matters.
7. Impact investing – investments made into companies, organisations and funds with the intention to generate social and environmental impact alongside a financial return (Eurosif, 2012).

SRI markets are analysed by regions according to their dynamics, structure of participants, SRI strategies, structure of assets in the portfolios, and the scope of barriers or motives for the SRI development. Such an approach gives an opportunity to estimate a market size, make comparisons about the market, and ultimately, make conclusions on the trends in global SRI.

The analyses of specific factors which drive the SRI market are conducted by the comparison of dynamics of traditional assets and SRI assets in the long-term period with the emphasis on crisis and post-crisis periods. Drivers and motives for the regional SRI markets are also analysed. This kind of qualitative and quantitative assessment gave an opportunity to see the difference between SRI and conventional investment market development.

The methodological approach proposed by Scholtens & Sievanen (2013) concerning the economic domain is applied. Their study is based on the notions and reflections of Blowfield (2005), Gjøølberg (2009ab), and Grossman & Krueger (1995), in turn. The data are derived from the databases of the World Bank.

## 4. Research findings/results

### 4.1. European SRI market

The European SRI market has the predominant position among other regions. Its share accounts for 52.6% of global sustainable investment assets (Eurosif, 2016).

Socially responsible assets in Europe reached 12.04 trillion dollars as of 2016, demonstrating an 11-fold growth in the period from 2005 to 2016 (Table 1).

**Table 1.** Main dynamic indicators of the European SRI market development

Indicators*	2002 EU-8	2005 EU-9	2007 EU-13	2009 EU-14	2011 EU-14	2013 EU-13	2015 EU-13
SRI, billion USD	336	1,033	2665.4	5,000	8,758	11,385.4	12,040
Assets under management, billion USD	6,160	10,773	13,500	12,600	14,300	17,600	21,500
Share of SRI in the AuM, %	5.45%	9.59%	19.74%	39.68%	61.24%	64.69%	56.00%
Assets under management, growth rate, %	–	74.89%	25.31%	–6.67%	13.49%	23.08%	22.16%
SRI growth rate, %	–	207.44%	158.03%	87.59%	75.16%	30.00%	5.75%

\* The scope of the study does not include all EU countries.

Source: Based on: Eurosif (2003, 2006, 2008, 2010, 2012, 2014, 2016).

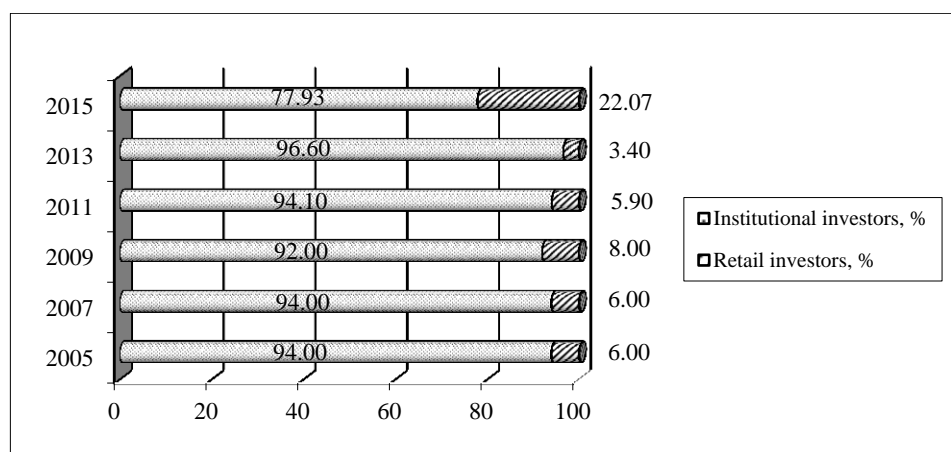
Over the 13-year period (2002-2016), the European SRI market demonstrated 35-fold growth. One of the reasons for such growth is the expansion of the European market (as reflected in Table 1, showing an expansion of studied EU countries from 8 EU-members in 2002 to 13 EU members in 2015). At the same time, total European assets under management (AuM) demonstrated only a 3.5 times increase. During the analysed period, growth rates of the SRI market



were more significant than total AuM with the exception of the period between 2013 and 2015. The fact that total AuM shrank almost by 7% while SRI increased by 87.5% in the crisis period from 2007 to 2009 is very meaningful. It means that during times of crisis investors prefer more reliable, long-term assets invested taking into account the ESG-factors.

**Investors.** Institutional investors occupied a predominant share of the European market, but the presence of retail investors was increasing (there was a rapid increase from 3.4% to 22% over the period from 2014 to 2016). In comparison, in the period 2005-2013, it can be noted that the market was dominated by institutional investors (94-96.6%) – Figure 1.

**Figure 1.** SRI asset structure by type of investors (2005-2015)



Source: Based on: Eurosif (2003, 2006, 2008, 2010, 2012, 2014, 2016).

**SRI asset allocation.** Equity dominated in the structure of SRI assets until 2007. This situation was historically conditioned: SRI was made through equity securities. But in 2007, when the share of bonds amounted to 39%, the situation began to change, which signalled rising prospects for the use of debt instruments in the SRI (Table 2).

**Table 2.** European SRI asset allocation, % of AuM

SRI Assets	2007	2009	2011	2013	2015
Equity	50	33	33	50	30
Bonds	39	53	51	40.1	64
Other	11	14	16	9.1	6

Source: Based on: Eurosif (2008, 2010, 2012, 2014, 2016).

The proportions of shares and bonds in the structure of SRI assets are country-specific and tend to change over time. Thus, after 2009, bonds (53% on average in Europe) began to dominate in the structure of assets. And in some countries, e.g. in Austria and Italy in 2012, the share of bonds amounted to more than 80%, although by 2010 equity had taken the biggest share of the market.

Changes in the proportions of financial instruments were conditioned by the investment policy of pension funds of continental Europe, which increased the volume of bonds in their portfolios. Additionally, relevant is the fact that fund managers developed a new methodology that allowed the use of the SRI approach to corporate, state and supranational bonds.

In 2013, the proportion of shares and bonds in the structure of European SRI assets was 50% of equity and 40% of bonds respectively. (Eurosif, 2014).

By the end of 2015, the structure of the SRI was redistributed in favour of bonds ('green bonds'), which took up a share of 64% leaving 30% of the portfolio for equity, reflecting the concern of European society about environmental problems.

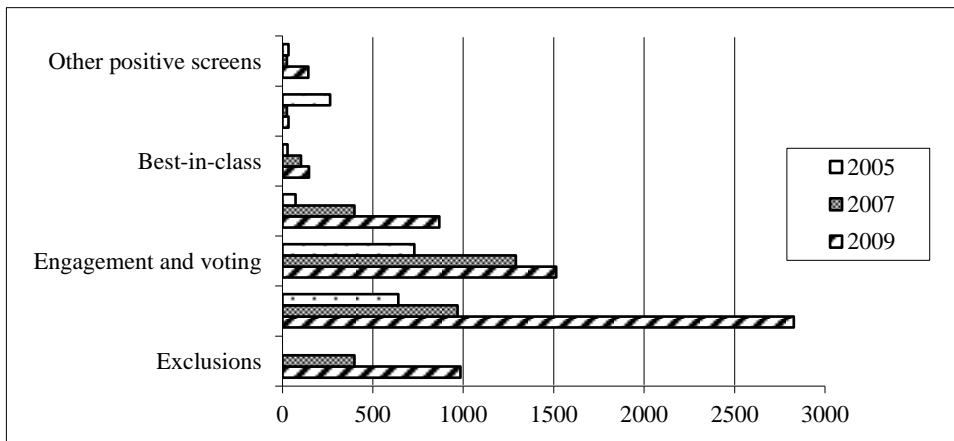
Fiduciary duties are considered as the main driver of the market, through which a large number of fund managers began to take into account the ESG-criteria.

**Strategies in general and by nations.** Research on the strategies used in the SRI market is important because of the possibility of analysing the evolution of the market.

At the beginning of the analysed period (2003-2006), the strategies of engagement and integration were predominant on the European markets, while also a significant emphasis was placed on screening for weapons (in part of the broad SRI) (Figure 2). The application of certain strategies was determined to a great extent by the practice of the market leaders, for example, in continental Europe by Fonds de Réserve pour les Retraites (FRR) in France (Eurosif, 2006) or market entry of the Italian institutional investor (Eurosif, 2008). It was also conditioned by cultural differences. The engagement strategy should be considered in a broad context due to different forms of influence of shareholders and owners on their companies' activities. Part of the Core SRI was dominated by the ethical exclusion strategy. The undisputed leader here is the Netherlands, though this strategy is also widely used by retail and institutional investors in the UK. However, it should be noted that a rather frequent occurrence is the simultaneous application of several strategies by financial managers in order to achieve investment goals. The most commonly used combinations are integration and en-

agement, simple negative screening and engagement, core SRI and engagement (Eurosif, 2006). Since 2011, the analytical approaches have changed to some extent: the data have begun to be given not in the context of core and broad SRI, but in general by strategies. In 2011-2013, the most common strategies by volume of assets under management were exclusion, integration and norms-based screening. Exclusion and norms-based screening were also the most dynamic strategies in 2011, and investment impact (owing to the Netherlands and Switzerland), exclusions and engagement strategies were the most dynamic ones in 2013.

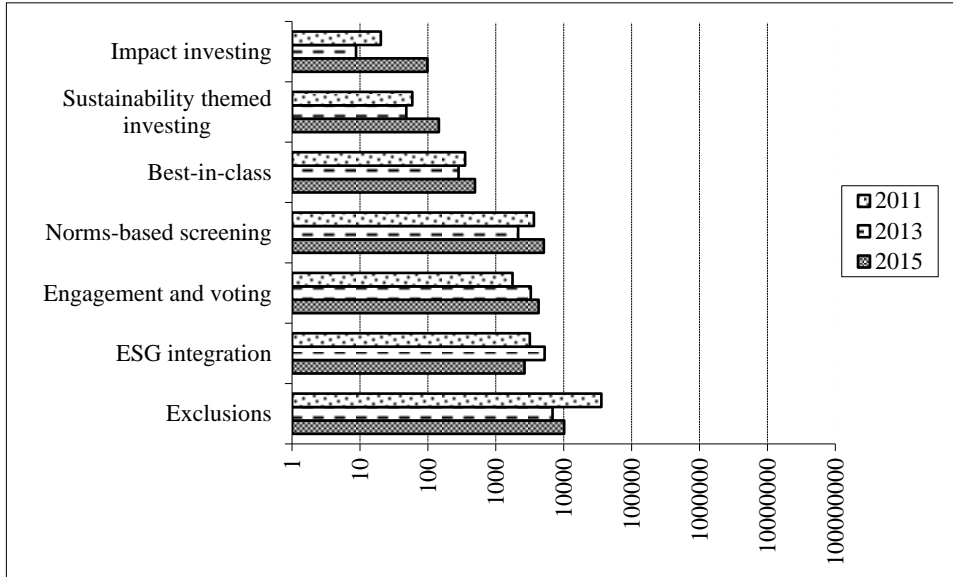
**Figure 2.** European SRI asset allocation by strategies (2005-2009, billion USD)



Source: Based on: Eurosif (2006, 2008, 2010).

Such market leaders as the Netherlands and the United Kingdom most frequently applied exclusion and engagement strategies respectively.

As to the strategies used in recent times (GSIA, 2016), we note that according to the volume of the placed SRI assets, the uncontested leaders were exclusion strategies (11.06 trillion USD), screening (5.55 trillion USD), a method of corporate engagement and shareholder action (4.5 trillion USD) (Figure 3). The success and wide application of these strategies were due to their straightforwardness and the simplicity of the core concept behind them. Asset managers were simply refraining from investing in industries which did not match ESG criteria (Zhelyazkova, 2015).

**Figure 3.** European SRI asset allocation by strategies (2011-2015, trillion USD)

Source: Based on Eurosif (2012, 2014, 2016).

The most dynamic strategies in 2015 were impact investment and investment in sustainability, which fully reflected the emphasis on sustainable development and the signing of the Paris Agreement. Investments in sustainable development were represented by renewable energy, energy efficiency, sustainable transport, construction, agriculture / land use, forests, water and waste management. The major share in the structure of this category of investments was occupied by construction (23.72%), renewable energy (19.68%) and water management (13.3%).

Strategies with high volumes of attracted assets differ in their moderate dynamics, in contrast to strategies with small volumes. Research has shown that, with the development of the market, responsible investment strategies evolve: simpler strategies are used at the initial levels (negative screening (exclusion), for example), and with the development of the market more complex strategies – norms-based screening, engagement and voting – are applied. In addition, a combination of strategies is increasingly used with the appearance of new approaches that reflect trends and problem areas in the development of society (Eurosif, 2003, 2006, 2008, 2010, 2012, 2014, 2016; Muzychenko, 2015).

**Motives and drivers for the European SRI market.** Starting from 2003, the role of pension funds driving SRI market growth has been noted. In the research of the SRI market studies since 2003, the differentiation of aspects of SRI

in European countries has been highlighted with the emphasis made on social aspects in countries like Spain, Italy, France, on environmental aspects in the Netherlands, Germany, and on ethics in the UK. At the same time, corporate governance has significantly influenced all countries without exception (Eurosif, 2003).

The transparency factor in socially responsible companies is an essential motive for the development of the market. Stakeholders have broad access to reports from responsible companies, SRI indexes, ratings, etc.

One of the most important drivers of the European SRI market is the creation of legal conditions at the state level (including the regulation of shareholders' activities) (Eurosif, 2003, 2006, 2008, 2010, 2012, 2014, 2016; Rogowski & Ulianiuk, 2011).

With the development of the SRI market (the end of the 20<sup>th</sup> to the beginning of the 21<sup>st</sup> century), as a response to the growing demand from institutional and individual investors, regulatory requirements for transparency and information disclosure appeared as well as elements of self-regulation emerged (for example, with UK and Netherlands insurers). This situation influenced the creation SRI guidelines affecting listed companies, fund managers and trade unions.

Among the key legislative aspects of the development of the European SRI market, the following are worth noting: the disclosure regulation in the United Kingdom (2000), Belgium (2001), France (2001), Italy and 7 other European countries (2008), the creation of the UN initiative of Global Compact (2000), the development of the CSR<sup>5</sup> strategy in Europe (2001), the issuing of SRI disclosure guidelines by Association of British Insurers (2001), the regulation of the reporting of private pension funds in Germany (2002), the creation of a Code of Conduct, which imposes obligations of social responsibility on Dutch insurers (2002), and mandatory corporate reporting on ESG factors in Denmark since 2008.

Between 2003 and 2006, the market drivers included demand from investors and an increase in proposals from financial institutions (interest in ESG aspects), business regulation, pension regulation and fiduciary duties, market entry of institutional investors and institutions in the field of investments (Fonds de Réserve pour les Retraites, France and the Environment Agency (UK), Great Britain) as well as information and research initiatives<sup>6</sup>.

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<sup>5</sup> CSR – corporate social responsibility.

<sup>6</sup> EU regulation and authorisation of Chemicals (REACH) Directive; Morgan Stanley 'Socially Responsible Investment, CSR and Regulation: An EU Roadmap'; UN EPFI 'A legal framework for the integration of environmental, social and governance issues into institutional investment' (Eurosif, 2006).

In 2006-2007, according to the Eurosif studies, a number of factors were identified as the main market drivers for the following 3 years including the demand from institutional investors as a tool for reducing risks (mainly climatic ones), legislative initiatives and external pressure from the public (media, NGOs, unions). And the actions of major European institutional investors and corporations served as confirmation of the above trends. A number of 'green' initiatives and institutional investors' projects were launched, and the number of PRI<sup>7</sup> signatories increased (the share of European companies accounted for 37% in terms of the number and 65% in terms of assets) (Eurosif, 2008).

In addition, the processes of integrating the ESG-criteria into fundamental financial analysis have intensified, which has shown the practical orientation of these issues with the help of well-known institutions such as Goldman Sachs and the CFA Institute (Eurosif, 2008). The study of integration of the ESG criteria continued in the period from 2008 to 2010. In 2009, Novethic, the leading French Center for Corporate Responsibility and Responsible Investment Research, introduced the SRI label which awarded mutual funds that took into account the ESG criteria for investing (Eurosif, 2010). A number of measurement systems and social standards for the environmental impact of the activities of companies and/or social funds were gradually developed and implemented: in 2009 Impact Reporting and Investment Standards (IRIS), which is an initiative of the Global Impact Investing Network (GIIN) in the United Kingdom (Eurosif, 2014); the Global Impact Investing Ratings System (GIIRS)<sup>8</sup>; the European Commission's 2014 standard to promote receiving social funding through the Social Entrepreneurship Funds (EuSEFs) and its Programme for Employment and Social Innovation ('EaSI') (Eurosif, 2012, p. 24). A significant event on the European SRI market was the launch of the Social Stock Exchange (SSX) in the UK in June 2013 with 12 companies seeking help in finding financing for socially-promising investments in health, education, and sustainable transport, clean energy and renewable energy, waste processing, water supply, etc. The stock exchange has been operating through a NEX<sup>9</sup> partner, and in November 2017 there were already 50 companies that met the stock market criteria. The IPO<sup>10</sup> and SPO<sup>11</sup> have been made on the stock exchange. Such initiatives have already spread around the world: Canada, Asia (Kennedy, 2017).

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<sup>7</sup> PRI – principles for responsible investment – the world's leading proponent of responsible investment (United Nations initiative).

<sup>8</sup> GIIRS is a ranking and analytical approach, analogue of the Morningstar investment rankings and Capital IQ financial analytics.

<sup>9</sup> NEX (NEXGY), a U.K. regulated exchange.

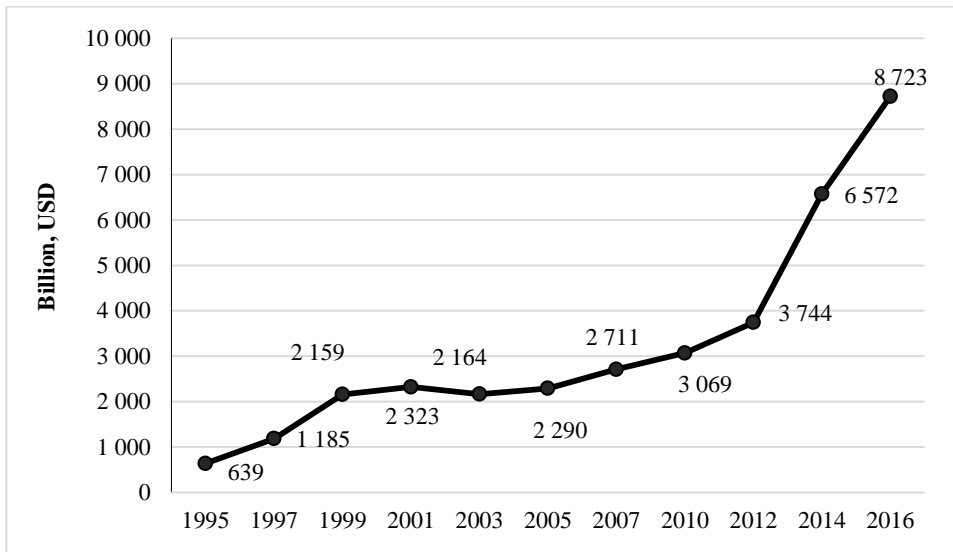
<sup>10</sup> IPO – initial public offering.

<sup>11</sup> SPO – secondary public offering.

## 4.2. SRI market in the USA

The US SRI market share is 38.1%, so it is the second largest market based on global financial assets. As of 1st January 2016, the volume of SRI in the USA reached the level of 8.72 trillion dollars, having demonstrated an increase of 33% in comparison with 2014 and an almost 14-fold increase in comparison with 1995 (Social Investment Forum Foundation, 2010) – Figure 4.

**Figure 4.** Dynamics of U.S. SRI (billion USD)



Source: Based on: US SIF Foundation (2012-2016).

And the market for financial assets managed by professional managers grew by 260%, although it slowed down somewhat during the financial crisis, while the SRI market grew. This trend contributed to increased investment in the existing products, the emergence of new products, and the spread of SRI strategies by professional managers. Between 2007 and 2010, the volume of traditional assets under professional management grew by less than 1%, while SRI assets grew by more than 13% (the same trend as in Europe). In 2010 nearly every eighth dollar under management was invested by means of using a strategy of responsible investment (12.2 percent of 25.2 trillion USD in total assets under management tracked by Thomson Reuters Nelson 2010 USSIF). In the US, these trends intensified in 2014-2016: almost every sixth dollar and fifth dollar respectively was invested taking into account the ESG criteria.

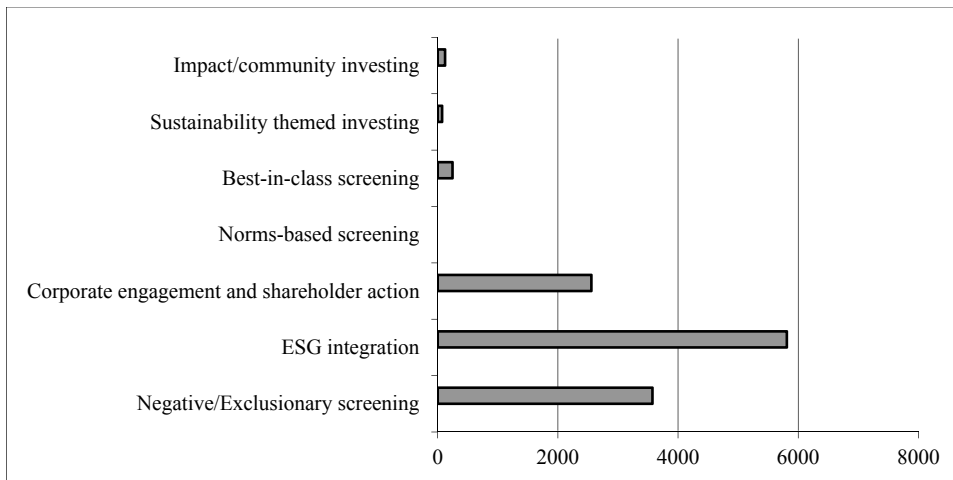
As in Europe, the overwhelming share of the market belongs to institutional investors (93%). In general, SRI assets are managed by 477 institutional investors, 300 money managers and 1043 community investing institutions (US SIF Foundation, 2016). Institutional investors play a leading role on the market, but retail investors demonstrate interest in sustainable investing, considering it as more stable, long-term investment, which could be customised to their goals and retirement plans (US SIF Foundation, 2018).

It should be emphasised that educational institutions participate in SRI, among which Harvard University is a leader. It was the first to sign the UN Principles on Responsible Investment PRI and has the largest asset fund. Among the key selection criteria for investment are avoidance of conflict risk (terrorism, repressive regimes) and the tobacco industry, and compliance with general ESG criteria (US SIF Foundation, 2014).

At present, ESG integration dominates in the United States (5.8 trillion USD) and demonstrates growth of 22.6% in comparison with 2014. The negative screening strategy takes the second place (3.6 trillion USD), while corporate engagement and shareholder action is also popular with SRI actors (2.6 trillion USD) (GSIA, 2016).

The most dynamic strategy is sustainability themed investing despite the fact that this strategy accounted for the smallest volumes of SRI assets invested (GSIA, 2016) – Figure 5.

**Figure 5.** SRI strategies in the U.S. (2016, billion USD)



Source: Based on: GSIA (2016).



In the United States, the role of personal values is underlined, drawing attention to the social and responsible aspects of investment, the concepts of fairness and justice in this process, access to capital and accumulation of wealth, exclusionary and qualitative screening, and activism concerning corporate management (Louche & Lydenberg, 2006).

In the United States, exclusionary screening forms a sufficient part of the SRI process. It could be explained by the willingness of the SRI actors in the United States to continue to stress their exclusionary screens, which reflects the strong personal concerns of retail investors and those of small institutions in the US that society has yet to deal with major problems related to entire industries.

**US SRI market: major drivers and motives.** Analysing investment growth drivers based on the ESG criteria, it is necessary to note the emergence of new investment products integrating environmental, social and managerial factors in the process of investment decision-making by asset managers, which is the consequence of signing on to the principles of responsible investment (PRI). More than 1000 companies with a total asset of more than 30 billion USD have become PRI signatories. Moreover, there has been a ‘destruction of stereotypes’ about the typical companies involved in responsible investment as these principles have become more widely used (US SIF Foundation, 2012).

The growth of the market is due to increased demand for investment, taking into account the ESG-criteria from both institutional and individual investors. As a result, money managers have increasingly integrated ESG factors into investment analysis and portfolios. According to these companies, such a strategy was driven by the demand of investors in 85% of cases.

**Climate change** has a significant impact on asset management both on the part of money managers and institutional investors. Shareholders significantly influence restrictions on exploitation of mineral resources through encouraging the signing of relevant commitments or strategic action plans for emission reductions.

**Avoiding conflict risks** is also one of the most important drivers of the responsible investment market, which means excluding from the portfolios equity originating from countries with repressive regimes or sponsoring terrorism.

Drivers-innovators (first mentioned by market participants) include the criteria for **transparency** and **anti-corruption**, as well as **gender equality**.

The rapid growth of 89% in community investing was due to a twofold increase in the assets of credit unions in 2016 compared to 2014.

Changes in labour law and retirement provision legislation stimulate the further development of the SRI sector in the United States (Federal Register, 2015).

In general, a comparative analysis conducted by Louche & Lydenberg (2006) allows us to conclude that, in the United States, the SRI movement is still more largely driven by and serving individuals and smaller institutions than by government in contrast to the situation in Europe.

### **4.3. Development of SRI market in Canada**

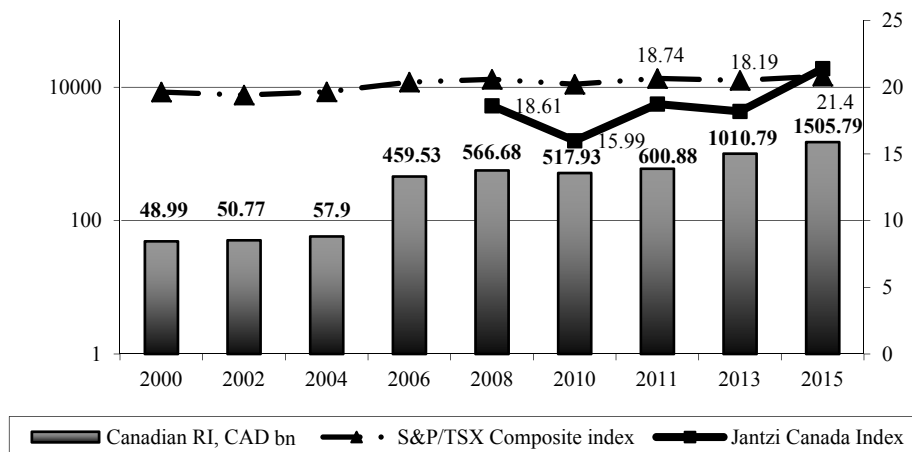
The Canadian SRI market share accounts for 4.7%, so it is the third largest market based on global financial assets after the European and US markets. The Canadian SRI market has demonstrated a 30-fold rise over the last 15 years. Since that time markets have improved, with S&P/TSX Composite Index<sup>12</sup> increased by 1.7 times. To compare dynamics of the responsible assets and traditional indices, the trend could be considered as well: the Jantzi Social Index<sup>13</sup> and S&P/TSX Composite Index (Figure 6). The most dynamic growth on the SRI market was observed in 2006 (693.7%). There was a decline in SRI volumes in the post-crisis period (-8.6%). The Canadian SRI market demonstrated a 1.5 times growth during the period from 2104 to 2016 (Canadian RI trends report 2016), while the growth rate was higher than on the above considered EU and U.S. markets. This is quite a typical situation when the data base is smaller as in the case of Canada rather than in the case of larger markets (both the EU and U.S. markets). At present, the share of responsible investing in Canada accounts for 38% of total assets under management which is higher than two and four years ago (31% and 20%, respectively).

SRI assets of retail investors under management grew from 7.5 billion USD to 8.7 billion USD from March 2016 to March 2017 (Mackenzie Insight, 2018).

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<sup>12</sup> The S&P/TSX Composite is the headline index for the Canadian equity market.

<sup>13</sup> The Jantzi Social Index (JSI) is a socially screened, market capitalisation-weighted common stock index modelled on the S&P/TSX 60 consisting of 50 Canadian companies that pass a broad set of ESG criteria (<https://www.sustainalytics.com/jantzi-social-index/>).

**Figure 6.** Canadian SRI volumes and main market indices

Source: Based on Responsible Investment Association (2014-2018).

**Assets allocation.** Analysing asset allocation, it is notable that equity has the dominant position with 43% of the total, bonds take the second place with 33%, while real estate takes the third with 11% of the total assets (as of 2015) (Canadian RI trends report, 2016).

**Investors.** Pension funds represent the main share of SRI assets in Canada with a significant growth (30-fold during the period between 2000 and 2013). In 2015, pension funds' assets made up 75% of the SRI industry's growth, increasing by 374 billion USD (Responsible Investment Association, 2015). It could be explained by the leading role of the Canadian system of public management of public pensions which is large and well-respected. These institutions represent some of the largest investment managers in Canada, as well as some of the largest institutional investors in the world. Many of these institutions have been early adopters of responsible investment policies and leaders in responsible investment throughout the world. Ten Canadian pension funds that practice responsible investing account for the majority of Canadian RI assets, representing 81.2% of the total (Responsible Investment Association, 2015).

The next group of SRI investors is **investment management firms**. They play an important role in management of assets held by Canadian institutional and individual investors. Investment management firms invest on behalf of a wide range of their clients, e.g. mutual funds, insurance companies, high net worth individuals, endowments and foundations, corporations, pension funds, trust funds, sub-advised funds of different kinds, and others. They consider integrat-

ing ESG factors into the investment decision-making as a tool for ESG risk management.

The third group of investors on the SRI market is **retail investors**. They are the historical foundation of SRI in Canada and remain a strong and growing force in the market. Retail investors are individuals who typically wish to align their investments with their values. In the Canadian market, there are two basic vehicles for socially responsible investing – mutual funds and retail venture capital funds. Individual investors' SRI assets represent the most dynamic segment by SRI market actors: growing by up to 91% between 2014 to 2016.

**Strategies.** By 2015, the shareholder engagement had been the most applicable strategy, but now ESG integration takes the leading position among SRI investors (1.46 trillion USD AUM, as of 2016). The third most prominent strategy in Canada is norm-based screening<sup>14</sup> (Responsible Investment Association, 2016). Such a distribution could be explained by the predominant application of the strategies through the SRI market leader – pension funds. Based on the RIA Canada survey, application of SRI strategies depends on the type of actor: pension funds are largely using multiple RI strategies, while investment management firms are employing primarily an engagement or ESG integration strategy. Investment management firms are, however, allocating a greater proportion of their assets to sustainability-themed investments (Responsible Investment Association, 2015).

**SRI drivers of growth.** Experts identify the following key drivers of growth (market drivers): increased attention from investment managers to the ESG-criteria and principles of responsible investing; an increase in awareness of the opportunities and risks of investments that take into account the ESG criteria for long-term investment; an increase in assets of pension funds by 45%; consideration of the ESG factors when millennial investors make investment decisions.

As top motivations for investment managers and asset owners in choosing responsible investment, the following aspects are named: long-term risk minimisation; return improvement in return over time; and fulfilment of fiduciary duty (Responsible Investment Association, 2014-2018).

It is likely that the Ontario's Pension Benefits Act will continue to stimulate SRI through compulsory reporting requirements concerning compliance with the ESG criteria. This is bound to influence pension funds, the dominant actors on the Canadian SRI market, in their formulation of pension plans.

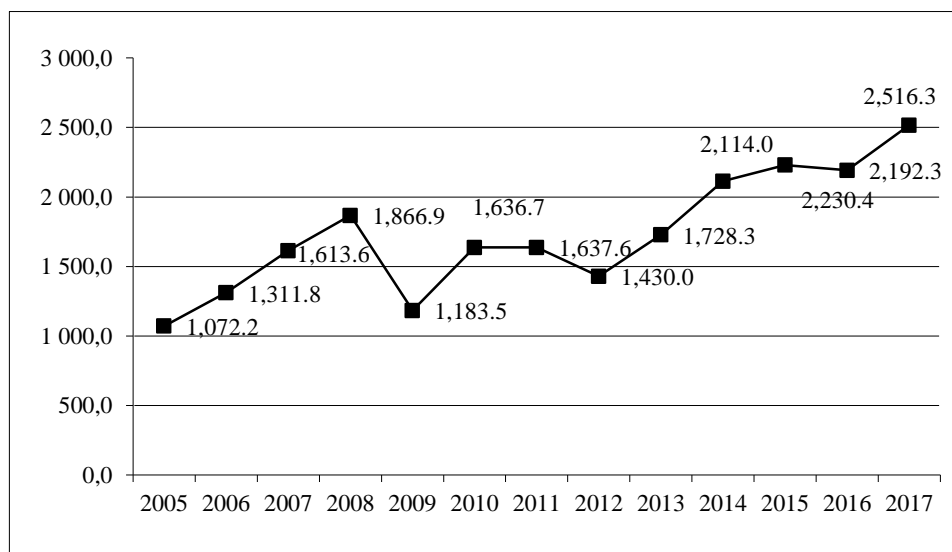
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<sup>14</sup> The top three norms identified in RIA Canada 2015 survey were the UN Global Compact, the UN Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multinational Enterprises (Responsible Investment Association, 2015).

#### 4.4. SRI market in Australia and New Zealand

Australia's and New Zealand's SRI market share was only 2.3% in 2016, but financial institutions of Australia and New Zealand were developing rapidly and applying responsible investment strategies. The SRI assets increased by 248% from 2014 to 2016, which was the second greatest indicator of the dynamics of SRI growth after Japan. Half of all investment under professional management was SRI. The volumes of SRI reached 515.7 billion dollars in total (with New Zealand's share of 10%) (GSIA, 2016). Dow Jones Sustainable Index (DJSI) dynamics is presented in Figure 7.

**Figure 7.** Dynamics of the Dow Jones Sustainable Index Australia



Source: Based on *DJSI/CSA Annual Review* (2018).

ESG integration as well as corporate engagement and shareholder action are the most popular RI approaches adopted by Australia's and New Zealand's funds in relation to equities (Australian and international), fixed income (all), private equity, property and infrastructure. Then follow the strategies of negative/exclusionary screening (aimed at tobacco and armaments exclusion) and sustainability-themed investing Responsible Investment Association Australasia, 2018).

Australia's SRI-based mutual funds gained higher returns in the short, medium, and long term than the market as a whole.

New Zealand's SRI market grew by 28% in the period from 2014 to 2016 and reached 53.5 billion USD. The consideration of ESG-factors by financial institutions, consumer demand and the corresponding supply on the part of financial organisations became the key characteristics of the market. Australia's and New Zealand's Stock Exchanges have standards for listing companies for reporting on ESG factors.

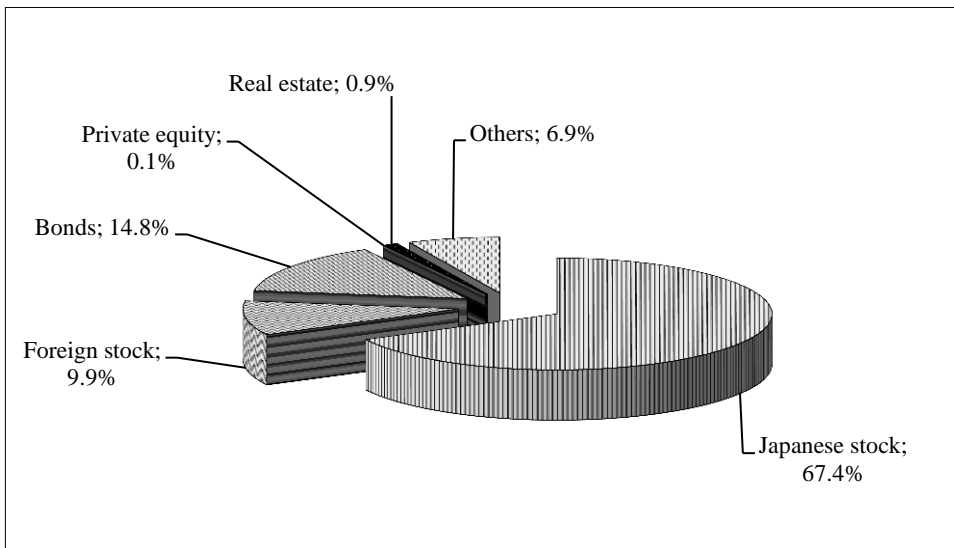
Australia's and New Zealand's SRI market is set to develop fast in the future because Antipodeans have a high level of expectations about responsible and ethical investing (Responsible Investment Association Australasia, 2018).

#### 4.5. SRI in Japan

This was the most dynamic market in the period between 2014 and 2016. The market volume amounted to 473.6 billion dollars, showing an increase of 466.6 billion dollars over the biennium, due to changes in the methodology of reporting and calculation of data, as well as significant changes in the market of responsible investment.

As of 2016, among Japanese responsible asset classes, stock has the dominant position among other SRI assets, followed by bonds with 14.8% share (Figure 8).

**Figure 8.** SRI assets allocation in Japan



Source: Based on Japan Sustainable Investment (2017).

According to the Japan Sustainable Investment Forum (JSIF) (2017), the dominant strategy is the method of ESG-related engagement, exercising voting rights, ESG integration and norms-based screening strategy (Table 3).

**Table 3.** Japanese SRI market breakdown by strategies

SRI by strategies	2015 (millions JPY)	2016 (millions JPY)	Growth (%)
Exclusionary screening	4,573,384	2,249,951	-50.8
ESG integration	17,555,654	14,240,387	-18.9
General engagement/Exercising voting rights	11,709,822	15,710,315	198.0
ESG-related engagement		19,180,014	
Norms-based screening	6,075,200	6,741,902	11.0
Best-in-class	326,955	3,020,214	823.7
Sustainability themed investing	785,785	1,036,139	31.9
Impact and community investing	87,642	369,657	321.8

Source: Based on: Japan Sustainable Investment (2017).

The market is evenly balanced by a 50/50 share of SRI by institutional and retail investors.

Among the changes that contributed to the growth of the market, we should note adoption of codes regulating the activities of institutional investors and corporations, which are supported by a significant number of institutional investors, as well as the adherence of the Government Pension Fund to PRI.

#### 4.6. Some Asian SRI market characteristics (excluding Japan)

The Asian SRI market is quite small: it accounts only for 0.2% of global responsible assets. In 2016, the market reached the figure of 52 billion USD with the halved growth rate in comparison with the dynamics of 2012-2014. Despite these facts, we propose to consider some key characteristics of this developing regional market because the Asian investors' expectations and legislative initiatives give a signal for further development.

The main actors in this market are institutional investors, individual investors, asset managers and investment banks. The engagement of such a large number of participants in a financial market affects the number of those who are potentially involved in SRI market development.

The most popular strategy was that of ESG-integration and negative screening, and the most dynamic approach was the strategy of sustainable investment. At a slower growth rate, there was an increase in the number of funds offering SRI. The share of countries such as Malaysia, Hong Kong, South Korea and

China was the largest. At the same time, China showed the strongest interest in sustainable investment, with India and Pakistan also developing in this direction (105% and 104% growth rates of sustainable investment, respectively) (GSIA, 2016).

China's interest in sustainable investment is confirmed by the attention paid by investors to clean energy, green bonds and carbon dioxide emission limits, which is reflected at the legislative level. The permission for creating and autonomous functioning of foreign funds in China should be noted as one of the drivers for the future growth of SRI in China.

Asian market data include assets that are governed by Islamic law and Sharia principles. According to investors' expectations, the share of sustainable investment in portfolios will be about 19% over the next three years, and Chinese investors expect even a share of 23% in 2021 (Standard Chartered Bank, 2018).

The summing up characteristics (by 2016) of the above regional SRI markets are presented below (Table 4).

**Table 4.** Summarising of the main characteristics of the regional SRI markets

SRI market/ Characteristics	SRI asset allocation	SRI investors	Dominant strategies	SRI drivers
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Europe	bonds domination in general (but country-specific)	predominant share of institutional investors with the increasing presence of retail investors	<ul style="list-style-type: none"> <li>– exclusion norm-based screening</li> <li>– engagement</li> </ul>	<ul style="list-style-type: none"> <li>– legislation</li> <li>– pension funds investment strategy</li> <li>– corporate governance</li> <li>– environmental aspects</li> <li>– ethics</li> </ul>
USA	no data	institutional investors	<ul style="list-style-type: none"> <li>– ESG integration</li> <li>– negative screening</li> <li>– corporate engagement</li> </ul>	<ul style="list-style-type: none"> <li>– signing the PRI (principles of responsible investment) by big companies</li> <li>– climate changes</li> <li>– avoiding conflict risks</li> <li>– transparency, anti-corruption, gender equality</li> </ul>
Canada	equity has the dominant position	<ul style="list-style-type: none"> <li>– institutional investors (pension funds)</li> <li>– investment management firms</li> </ul>	<ul style="list-style-type: none"> <li>– ESG integration</li> <li>– shareholder engagement</li> <li>– norm-based screening</li> </ul>	<ul style="list-style-type: none"> <li>– tendency to long-term risk minimisation</li> <li>– return improvement over time</li> <li>– fulfilment of fiduciary duty</li> <li>– an increase in assets of pension funds</li> </ul>
Australia and New Zealand	equity	institutional investors	<ul style="list-style-type: none"> <li>– ESG integration</li> <li>– corporate engagement and shareholder action</li> <li>– negative/ exclusionary screening</li> </ul>	standards for listing companies on regional stock exchanges for reporting on ESG factors



**Table 4 cont.**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Japan	equity	balance between institutional and retail investors	<ul style="list-style-type: none"> <li>– ESG engagement</li> <li>– exercising voting rights</li> <li>– ESG integration</li> </ul>	<ul style="list-style-type: none"> <li>– codes for institutional investors and corporations</li> <li>– adherence of the Government Pension Fund to PRI</li> </ul>
Asia (excl. Japan)	no data	<ul style="list-style-type: none"> <li>– institutional investors</li> <li>– asset managers</li> <li>– investment banks</li> </ul>	<ul style="list-style-type: none"> <li>– ESG-integration</li> <li>– negative screening</li> </ul>	attention to climate changes, 'green economy' reflected at the legislative level

## 5. Discussion

Following the analysis conducted, it could be concluded that SRI market characteristics might differ substantially from country to country. Moreover, opportunities to conduct the analysis of regional markets are in direct dependence on the level of SRI market development (Table 5). The common features of all the SRI markets are the prevalence of institutional investors, global movements towards sustainable development and national legislative initiatives concerning sustainability and responsibility. All of which provides the necessary background and right environment for SRI development. Interest of investors in sustainable financial decisions has been increasing. Based on the analysis, it could be concluded that the most popular strategies are ESG-integration, corporate engagement and shareholders' action, screening and mix of the strategies.

The results of the analysis conducted within the paper proved the hypothesis that SRI markets are driven by other factors than those which drive the conventional investment market. Comparison of dynamics of conventional and SRI assets through the growth rates shows the preference of investors for more reliable and long-term investment, especially during the global financial crisis-2008 and post-crisis period. The combination of the main factors such as growth of pension funds, motivation to avoid/minimise risks (climate change, reduction of conflict risks), and the tendency towards transparency and sustainability is driving the SRI market and confirms the above hypothesis.

**Table 5.** SRI indicators by regions (as of 2016)

SRI market/SRI indicator	Size of SRI market (bn USD)	Share of SRI market in the global SRI	SRI per capita, (USD)	SRI market growth (%; 2014-2016)
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
European Union	<b>12,039.57</b>	<b>52.60%</b>	23,607.0	12.01%
Australia and New Zealand	515.73	2.25%	18,159.5	247.48%
Canada	1,085.97	4.74%	<b>30,334.4</b>	48.97%

**Table 5 cont.**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Japan	473.57	2.07%	3,728.9	<b>6,694.40%</b>
United States	8,723.22	38.11%	27,006.9	32.73%
Global	22,890.14	100.00%	4,907.6	25.25%
Average	4,567.6	0.2	20,567.3	14.1
Standard deviation	4,866.2	0.2	9,332.0	26.4

\* In bold are values which are at least one standard deviation away from the average value of the considered regions.

Source: Based on: GSIA (2016).

Based on the literature review, it could be concluded that the following dimensions of SRI drivers make a difference: demographics, economy, finance, institutions, and culture.

Within the scope of our paper we propose to consider a closer economic dimension. Economic development, especially wealth and capital, might result in demand for SRI, and also affect its size. Economic openness (the ratio of imports and exports to GDP) can be associated with differences in the size and composition of SRI. For this purpose, the methodological approach proposed by Scholtens & Sievanen (2013) concerning the economic domain is applied. The data are derived from the databases of the World Bank (Table 6).

**Table 6.** Macroeconomic indicators

SRI market/ Indicator	GDP per capita (constant 2010 thousand USD)	GNI per capita (constant 2010 thousand USD)	Imports of goods and services (% of GDP)	Exports of goods and services (% of GDP)	FDI net inflows (% of GDP)	FDI net outflows (% of GDP)	Gross savings (% of GDP)
European Union	35.81	35.65	<b>39.71</b>	<b>43.16</b>	<b>5.23</b>	<b>4.96</b>	22
Australia	49.90	<b>54.56</b>	21.52	19.25	3.52	-0.21	21.9
Canada	42.35	49.73	33.38	30.97	2.25	4.61	19.22
Japan	38.97	47.63	15.15	16.12	0.79	3.51	<b>27.33</b>
United States	<b>57.59</b>	52.71	14.69	11.89	2.57	1.67	18.09
New Zealand	40.33	35.32	25.5	25.82	1.02	-0.48	18.9
Average	44.16	45.93	24.99	24.53	2.567	2.35	21.24
Standard deviation	7.39	7.70	9.15	10.4	1.51	2.17	3.1

\* In bold are maximum values.

Source: Based on: World Bank Open Data (2019).

Those macroeconomic indicators which reflect the level of economic development are taken into consideration (GDP per capita, economic openness (import-export of goods and services as % of GDP, FDI net inflows-outflows as % of GDP), savings (gross savings as % of GDP), and wealth (GNI per capita).

Such a methodology was applied by Scholtens & Sievanen (2013) for four Nordic countries (Finland, Norway, Denmark, and Sweden) and we have decided to apply it for the investigated regional SRI markets.

Examining trade, it appears that the European Union has the most open economy in terms of the ratio of imports and exports and FDI inflows-outflows to GDP. These findings support the argument put forward by Gjørberg (2009a) about CSR and openness, which states that more openness will result in more CSR.

We also observe that Australia is wealthier on a per capita basis, but Japan has by far the highest savings rate. However, these countries are not leaders of SRI development. As a result, it could be concluded that only indicators of openness can be linked to regional SRI market development.

## 6. Conclusions

SRI is becoming the mainstream all over the world. The latest GSIA and regional SIF reports show that this tendency is relevant.

**Research contribution.** The conducted study contributes to current research and practice in the following ways:

1. The common features of all the SRI markets are the prevalence of institutional investors, global movements towards sustainable development and national legislative initiatives concerning sustainability and responsibility as a necessary background of SRI development.
2. SRI markets have regional peculiarities, even within a particular region, country-specifics can be seen. Analysing the SRI assets as a part of investment assets and in comparison with them, it is evident that SRI gives an opportunity for the investors to use them as a haven and assurance tool, thinking about the future and the achievement of both financial and non-financial goals.
3. SRI leaders like Europe and the United States have different preconditions and peculiarities of SRI market development: the European focus on the three building blocks – social, environmental and financial – connected with the impact of the concept of sustainable development, which is far more powerful in Europe than in the United States. European SRI funds are often related to sustainability and equalise it with the concept of ‘planet, people, and profits’.
4. Among the analysed economic indicators, only indicators of openness can be linked to the regional SRI market development.

**Research implication.** The implication of the study is more scientific than practical. The results obtained could be used by researchers as background for further comparative analyses of regional SRI markets. From the practical point of view, the findings are helpful (useful) for the development of SRI markets at the stage of their formation (as in Ukraine, for example). Based on the research findings it has become obvious that SRI markets could not have been formed without pension funds, legislative initiatives, and a high level of economic openness. According to the regional coverage of the analysis conducted and the scope of parametrical features, the findings are unique and have scientific novelty which adds to the achievements of previous research.

**Research limitation and future works.** Of course, the reality of the regional practice of SRI is more complex than that conveyed by the distinctions analysed here and contains many exceptions which are beyond the scope of this paper. The following dimensions of SRI drivers make a difference: demographics, economy, finance, institutions, and culture. However, only economic factors were investigated within this paper. The next steps in this investigation of regional characteristics of SRI are going to be taken in the direction of cultural and institutional factors.

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