EDUCATION AND EUROPEAN GOVERNMENT BONDS

SIGNATORY TYPE

Investment Manager

OPERATING REGION

Global asset manager with investment centres across North and South America, Europe, Asia and Australia

ASSETS UNDER MANAGEMENT

€508 billion of AUM (of which €23 billion is in SRI-dedicated funds, including advisory).

AUTHOR

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BNP Paribas Investment Partners is the dedicated asset management business line of the BNP Paribas Group. As a leading global asset manager, we are committed to becoming a responsible investor in all aspects of our business, and to incorporating environmental, social and governance (ESG) standards into our investment criteria and ownership practices.

The PRI's Fixed Income Case Study series highlights examples of interesting and innovative approaches to responsible investment. Written by fixed income practitioners from around the world, the case studies cover topics such as integrating ESG, negative and positive screening, thematic investment and engagement.

Sharing these examples will enable investors to collectively build a concept of emerging good practice. The PRI aims to publish a set of these short pieces every quarter. If you would like to learn more or contribute your own case study please contact us.

An investor initiative in partnership with UNEP Finance Initiative and UN Global Compact

WHY EDUCATION QUALITY MATTERS FOR SOVEREIGN DEBT INVESTMENT

Education is illustrative of the high correlation between extra-financial factors and the creation of economic and social wealth. It improves the employability of individuals and insures them against economic risks and unemployment, and creates and accumulates human capital in society.

Academic work by Eric Hanushek[1] emphasises the correlation between academic skills and economic growth. In Hanushek's view, if all the countries in the world attained Finland's level in the Programme for International Student Assessment (PISA) tests, an additional €95 trillion of economic value would be created per year.

We also believe that a development model based solely on economic growth is incomplete because growth alone is not enough to ensure the well-being of citizens[2]. A state that fails to meet the needs of its population – for instance in terms of respect for civil liberties, environmental protection and an environment that is conducive to personal fulfilment – exposes itself to crisis situations that can destroy economic wealth[3].

We therefore believe that SRI funds' fiduciary duty means investing in the sovereign debt of countries committed to sustainable development.

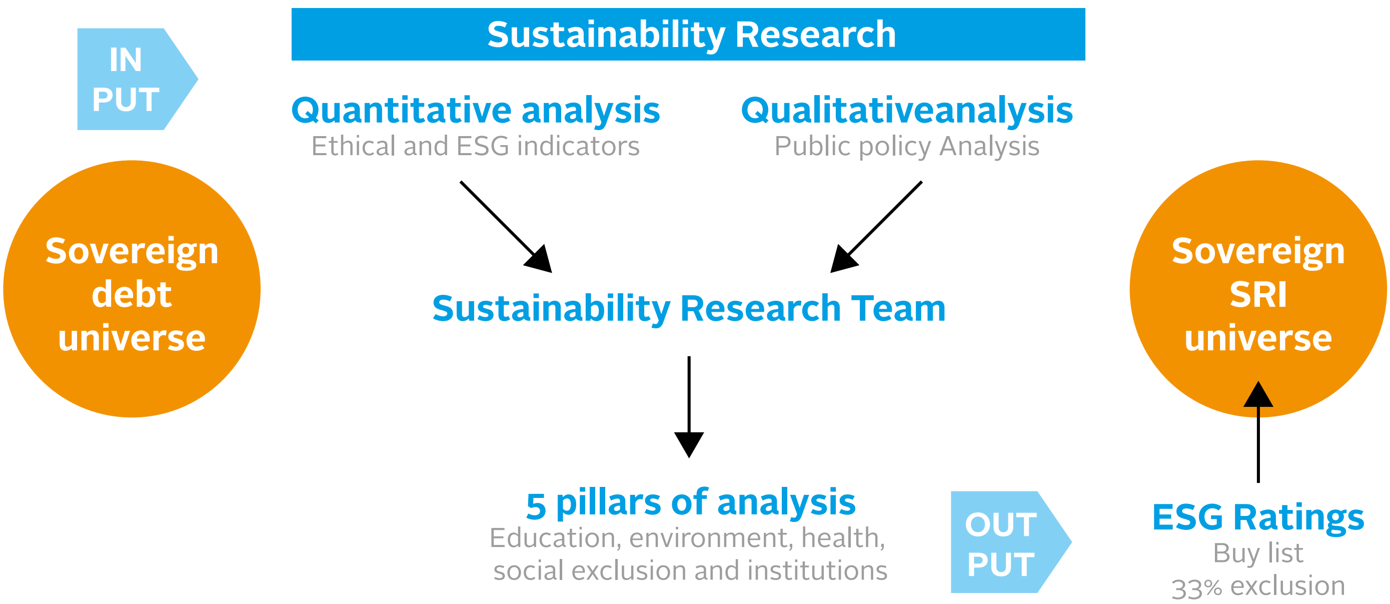
HOW WE ANALYSE EDUCATION QUALITY'S IMPACT ON SOVEREIGN DEBT

OUR ESG MODEL

Our sovereign debt ESG model assesses governments' ability to protect citizens' best interests and provide services and goods embedding environmental, social, or institutional strength. We assess investments across the 28 member states of the European Union.

The ESG model consists of two levels of analysis (figure 1).

Figure 1: Our approach to ESG sovereign debt analysis



1 Eric A. Hanushek and Ludger Woessmann. The Economic Benefit of Educational Reform in the EU. Page 73. CESifo Economic Studies, Vol. 58, 1/2012, 73–109. January 2012.

2 Joseph E. Stiglitz, Amartya Sen, Jean-Paul Fitoussi. Report by the Commission on the Measurement of Economic Performance and Social Progress. Available online: http://www.stiglitz-sen-fitoussi.fr/en/index.htm

3 Porter, Michael, Stern, Scott and Green, Michael. Social Progress Index 2014. [Available online](.).

Firstly, we quantitatively assess each government, based on 30 data points grouped in five pillars: environment, education, social exclusion, health care and institutional strength. The main data sources are publically available databases such as Eurostat, World Bank, World Health Organisation (WHO) and Organisation for Economic Co-operation and Development (OECD).

Secondly, we evaluate governments' capacity to address sustainability challenges through their public policy. Our research is based on public policy assessments from specialised agencies such as the OECD and the European Environmental Agency (EEA). Every year we choose one or two topics depending on investors' interests and the topics' relevance to prevailing public policy debates. In 2014 we assessed tobacco and alcohol policies. This year, we focused on responses to air pollution and climate change.

At the end of the process, we blend the quantitative and qualitative scores into one ESG score for each issuer. We then apply a best-in-class rule that excludes the third of issuers with the worst sustainability performance.

For education, we examine two indicators that are critical to developing human capital and the efficiency of education systems: school enrolment and cognitive skills.

School enrolment: It is better for young people to continue in education for as long as possible

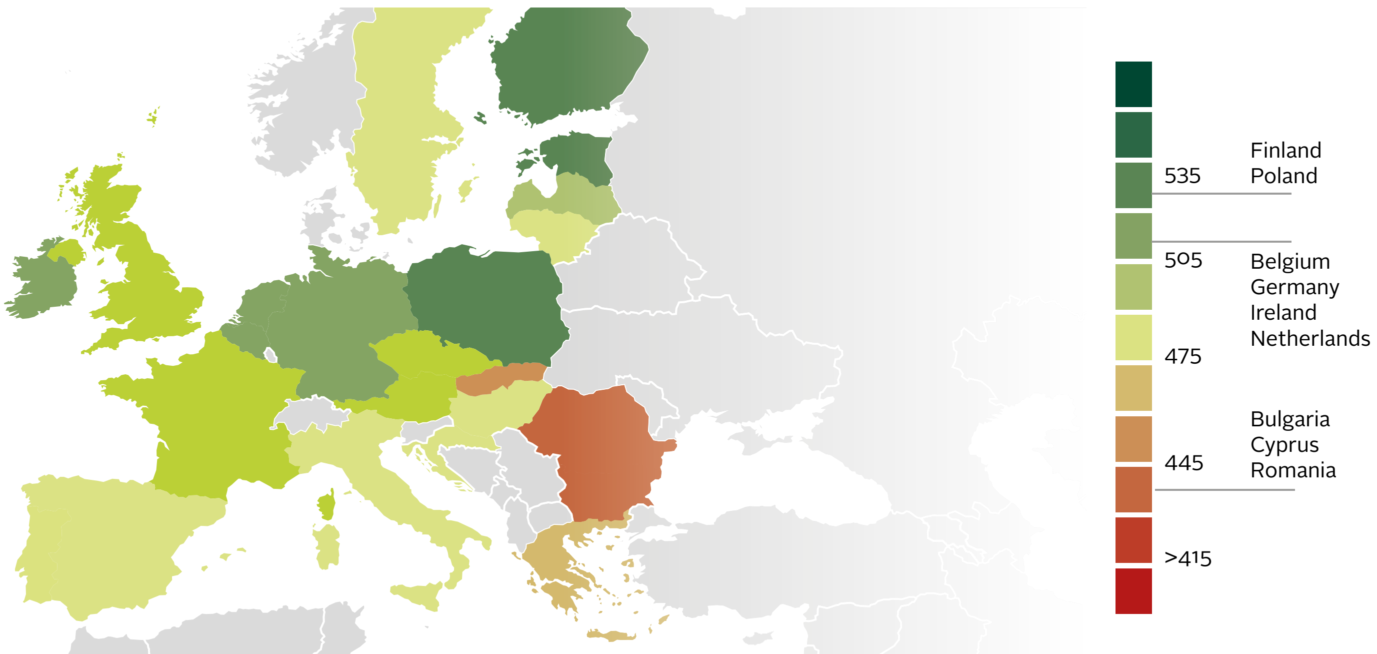
The level of educational achievement attained by young students determines their employability. According to the OECD, the unemployment rate among individuals with a tertiary degree is 4.8%, compared to 12.6% for those without[4].

In the European Union, the number of early school leavers has been in constant decline, and stood at 12.8% in 2012[5], meaning the EU target of 10% early-leavers in 2020 seems attainable.[6]

However, some countries lag behind the overall level. Italy, Malta, Portugal, Romania, Bulgaria and Spain have the most worrying rates of student "non-retention" in the European Union, with dropout rates exceeding 16% of the youth population. The ability to generate human capital in these countries may be at risk, because their dropped out students are more likely to be unemployed in the future.

Cognitive skills: It is better for young people to develop cognitive skills than to accumulate knowledge

Figure 2: European Union: 2012 PISA test performances



4 OECD Directorate for Education. Education at a Glance 2013. Page 13. 2013

5 Eurostat. Sustainable Development in the European Union. 2013. Available online.

6 European Union. Europe 2020 Targets. Available online.

To measure the cognitive skills generated by the education systems of European governments, we use the PISA test results. The tests – which are organised and published every three years by the OECD – span mathematics, reading and science. Globally, Shanghai-China, Hong Kong and Singapore perform the best, with scores in excess of 560 points in mathematics, 551 in science and 542 in reading. Peru, meanwhile, scores the lowest, with 368 points in mathematics, 373 in science and 384 in reading according to the latest results published in 2013[7].

European Union countries fall within these two extremes, with average scores in maths and reading of 475 points. Bulgaria, Cyprus, Romania, and Greece show the weakest ability to create skills in mathematics and reading, with average scores of 430 points.

IMPACT ON INVESTMENT DECISIONS

Our ESG model is able to identify the countries at risk, sending signals to portfolio managers and highlighting the factors that might impede the well-being of citizens.

Figure 3: Extract sovereign debt buy list

COUNTRY NAME	FINAL ENVIRONMENT SCORE (MAX 100)	EARLY LEAVERS FROM EDUCATION AND TRAINING	PISA RESULTS	FINAL EDUCATION SCORE (MAX 100)	FINAL HEALTH SCORE (MAX 100)	FINAL EXCLUSION SCORE (MAX 100)	FINAL INSTITUTIONS SCORE (MAX 100)	FINAL ESG SCORE	NEW BIC SRI RECO
	30%			15%	15%	15%	25%		
Bulgaria	34	40	20	22	34	31	48	63,14	**Negative**
Romania	62	0	20	18	37	33	52	44,18	**Negative**
Average	**54**	**68**	**55**	**48**	**48**	**55**	**69**	**56**	

Our model found that Bulgaria and Romania are the worst performers in the education pillar, underperforming on both student retention rates and PISA test indicators.

The education pillar weights 15% of the total ESG score. Therefore, to understand the negative investment recommendation of Bulgaria and Romania, we need to take into account all pillars (figure 3). Bulgaria underperforms the European average across environment, education, social exclusion and institutional pillars. Romania is similar, except for a positive performance in the environment pillar.

Among the large Eurozone economies, Italy and Greece are a concern, whereas Germany and France perform markedly higher than the European Union averages.

The sustainability research signals are primarily used by our SRI-dedicated fund managers. The assessment of the 28 EU member states results in 19 sovereign debt issuers being eligible for investment, representing 78.7% of Euro Treasury GDP, our benchmark for euro sovereign SRI-dedicated funds.

However, as part of our ESG integration strategy, the insights and key messages are disseminated across all of our fixed income strategies. Non-SRI portfolio managers are able to access our research and investment recommendations and to engage with the sustainability team.

7 OECD. Pisa 2012 Results in Focus. Pages 5-6. Available online.