

GREEN BONDS

Stella Suljić Nikolaj*¹, Bojana Olgić Draženović¹, Denis Buterin²

¹University of Rijeka – Faculty of Economics and Business

²Polytechnic of Rijeka

*Corresponding author, e-mail: stella.suljic.nikolaj@efri.hr

OBJECTIVE

Green bonds are relatively new financial tool issued for the purpose of financing environmentally friendly or *socially responsible* projects: renewables, water, energy efficiency, bioenergy, and low-carbon transport (Campiglio, 2016). According to Banga (2019), issuing of green bonds is important for investors and policy makers. The fundamental disadvantage of green bonds from the point of view of investors, is the underdevelopment of the market green bonds and accordingly lower liquidity (Maltais & Nykvist, 2020).

The green bond market was created by the initiative of multilateral banks that encouraged market development to support the process of financing green and socially responsible projects. Climate Awareness Bond is the first green bond issued in 2007 from the European Investment Bank worth € 600 million. Next year, in 2008, the World Bank began selling green bonds by issuing \$ 300 million (OECD, 2014). Green bonds come in six different forms as a: Corporate bond, Project bond, Asset-backed security (ABS), Supranational, sub-sovereign and agency (SSA) bond, Municipal bond, and financial sector bond.

The objective of this paper is to highlight the characteristics, purpose of the issue and to display the presence of green bonds in the context of climate change that affect the financial sector as a systemic risk. The paper will highlight the prospects for the development of green bonds in the world, with special emphasis on Europe. It will test the scientific hypothesis of this paper about the role of the state in the formation of the regulatory framework that is indispensable for the further development of the green bond market.

METHODOLOGY

The research conducted is based on secondary data collected from the Climate Bonds Initiative database, capital markets regulators, and the International Capital Market Association. We applied statistical techniques to provide an overview of the course and characteristics of green bond representation by world regions with special emphasis on the representation of green bonds in Europe.

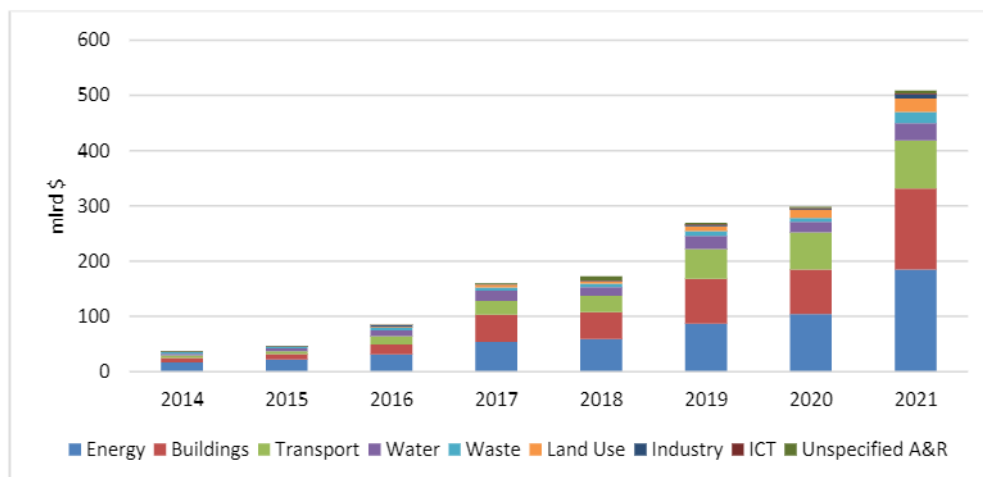


Figure 1: Financing with green bonds on a global level, according to the purpose of use, from 2014 to 2021

Previously highlighted statistics of the use of green bonds in the world, shows that green bonds are mostly issued to finance energy projects, followed by ecological construction and sustainable transport.

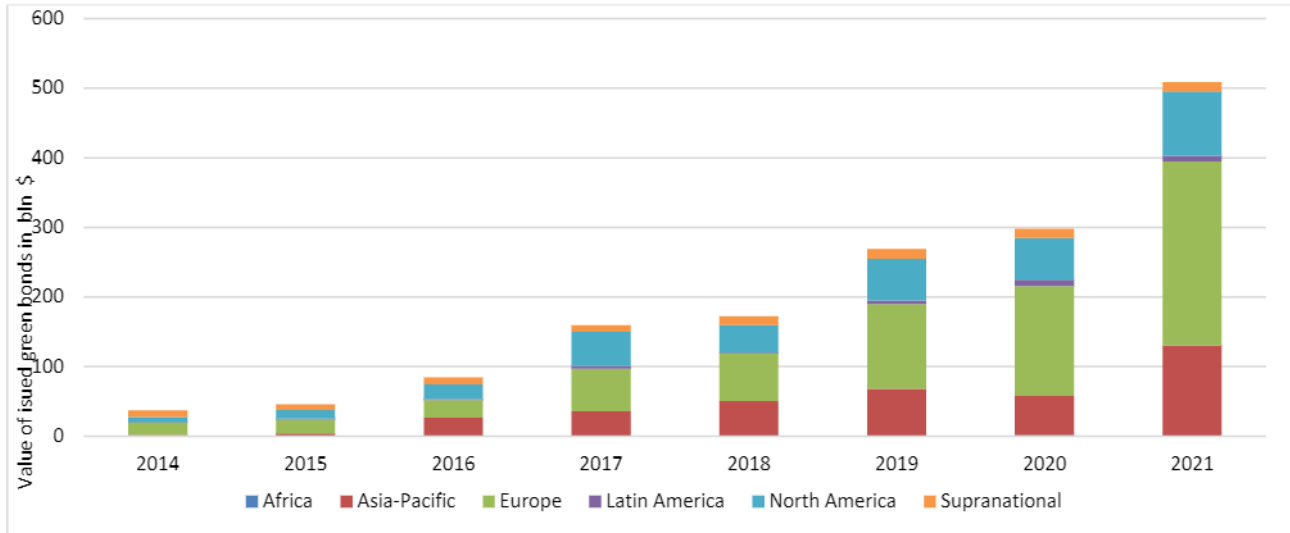


Figure 2: Annual issue of green bonds by regions of the world, from 2014 to 2021

According to the presented statistical data, green bonds are the most represented in Europe. Therefore, the chart below provides data on the representation of green bonds in individual European countries.

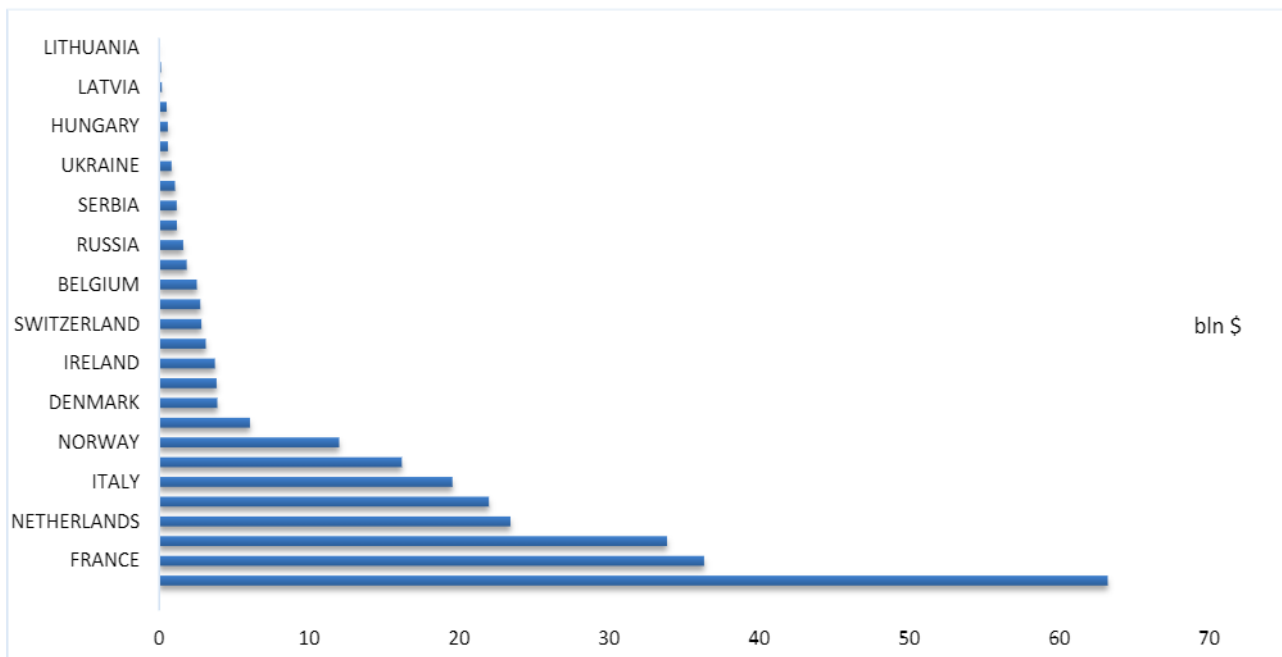


Figure 3: Total number of green bond issues in European countries in 2021

Based on the presented data, it can be noticed that the largest share of green bonds is issued by more developed European countries with developed capital markets. This confirms that countries with underdeveloped capital markets are significantly less involved in green bond issuance (Banga, 2019).

RESULTS

An analysis of the representation of green bonds indicates an underdeveloped green bond market in the world. This form of financing appeared during the financial crisis in 2008 and in those years was considered insufficiently secure financing. But after the financial crisis, the issuance of green bonds has increased as

climate conditions warn us of the need for sustainable financing. Despite the increase in the issuance of green bonds, they are still underrepresented in underdeveloped capital markets.

CONCLUSION

Although there is a need to finance environmentally sustainable projects around the world, green bonds are unequally represented in the world. The reason for this is the underdeveloped capital market of some countries. On the other hand, it should be noted that the use of this form of financing depends on the legal framework. To avoid this problem, governments should set up a regulatory framework and thus influence the increase in green bond issues and ultimately the development of capital markets.

Keywords: *environment, Europe, regulation, capital market*

REFERENCES

- [1] Banga, J. (2019). The green bond market: a potential source of climate finance for developing countries. *Journal of Sustainable Finance & Investment*, 9(1), 17-32. DOI: 10.1080/20430795.2018.1498617
- [2] Campiglio, E. (2016). Beyond Carbon Pricing: The Role of Banking and Monetary Policy in Financing the Transition to a Low-carbon Economy. *Ecological Economics*, 121: 220-230. DOI: 10.1016/j.ecolecon.2015.03.020.
- [3] Climate bonds initiative (2022). Interactive Data platform. Retrieved from www.climatebonds.net/market/data/
- [4] Hanfa, (2022). *Održivo financiranje*. Retrieved from www.hanfa.hr/upozorenja-hanfe/odr%C5%BEivo-financiranje/#section12
- [5] International Capital Market Association (2021). *Green Bond Principles*. Retrieved from www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/
- [6] Maltais, A., & Nykvist, B. (2020). Understanding the role of green bonds in advancing sustainability. *Journal of Sustainable Finance & Investment*, 34(2), 286-317. DOI: 10.1080/20430795.2020.1724864
- [7] OECD (2014). Green bonds: Mobilising the debt capital markets for a low-carbon transition, policy perspectives. Retrieved from www.oecd.org/environment/cc/Green%20bonds%20PP%20%5Bf3%5D%20%5Blr%5D.pdf