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Green Financial Products in the European Banks' Portfolios – with a Hungarian Perspective

Summary

Recently, the financial sector has also become increasingly sustainability-oriented. National central banks and national credit institutions are trying to follow the ever-expanding international regulatory framework and to develop new financial instruments to implement ESG requirements. Our research looked at the green finance portfolios of the ten major European banks by the total assets in 2021 to assess the market for green financial products. We have also examined the green instruments of the ten major domestic banks by balance sheet total, with the hypothesis that the green product market for domestic banks can learn a number of lessons from the green product portfolios of the major European banks.

Journal of Economic Literature (JEL) codes: F64, F65, G11, G15, G2, G3, K20, K32, O16
Keywords: sustainable finance, green finance, green investment, green bond, green credit

Methodology of the study

Our research looked at the green finance portfolios of the ten major European[1] and Hungarian[2] banks by their total assets in 2021 to assess the market for green financial products. We researched whether, in the current international regulatory environment, what are the

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most typical green market products, what are the bank disclosures on them and what are the sustainability objectives that banks are issuing these instruments to support, and whether there are specific green finance products in the European banks' portfolios.

The banks in our study have different histories, structures, portfolios and sizes, some operating as large organisations spanning continents, and some have developed their green finance product range to address different sustainability challenges, supporting corporate, institutional and individual customers in their transition to a more sustainable business model. The focus on sustainability can also be observed in the specialised subsidiaries of the European banks we studied, such as those dealing with fleet management and leasing, asset management and insurance, which have been restructuring their offerings in recent years to support the ecological transition. The biggest European banks have undergone significant green finance development processes and have gained substantial experience in the recent years, which is certainly an example for Hungarian banks.

For both European and Hungarian banks, in the comparison charts, a score of 100%, i.e. score of 10, was taken as the value if all ten banks addressed a given question, and 0 if none of them did. The figures in the graphs show the number of banks that have addressed a given green finance issue. The level of detail and depth of this is quite different for both groups, i.e. the big European banks and the domestic banks. However, it is clear that the biggest European banks are continuously developing their green market product range.

Our research looked at the more narrowly defined green finance documents made publicly available by credit institutions and published on the banks' central websites, using different comparison methodologies. Accordingly, we did not examine related business or corporate governance disclosures.

Key Indicators of Green Finance

Lately, we are witnessing a global sustainability explosion: social expectations are changing, the demand for sustainable products is growing and the epidemic situation has highlighted a number of issues that have put the focus on protecting our existing assets, in particular our health, environment and nature. According to preliminary estimates, the United Nations Development Goals (SDGs) will require between $5 billion and $7 billion per year worldwide by 2030.[3]

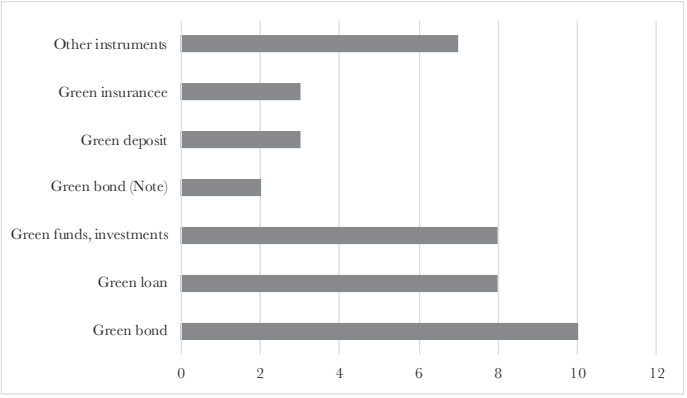
The European Green Deal is Europe's strategy for growth, with a key objective of ensuring health and prosperity and making the European climate neutral by 2050. The EU-level green economy goals, sustainable and inclusive economic recovery after the COVID-19 pandemic and Europe's long-term sustainable economic development require significant investments: this implies an energy system investment of €336 billion per year (2015 constant prices), equivalent to 2.3% of GDP.[4] Under the Multiannual Financial Framework of 2021-2027 and the European Union's Recovery Instrument (NextGenerationEU), the EU plans to invest an estimated €605 billion in projects to tackle the climate crisis, €100 billion in investments to support biodiversity, and 30% of the €750 billion NextGenerationEU envelope will come from green bonds.[5]

The NYU Stern Center for Sustainable Business, in partnership with Rockefeller Asset Management and Casey Clark, has examined the relationship between ESG and the financial performance in over 1,000 research articles published between 2015-2020.[6] The study found that ESG improves financial performance over a longer time horizon. This was confirmed by our research, which found that all the European banks we studied had conducted very intensive green finance research and preparatory work in recent years to make the green finance transition. As a result, sustainability finance in these banks is no longer just a catchphrase, but a set of well thought-out processes, both strategic and operational, across corporate and business segments.

The Most Typical Green Instruments

In recent years, in order to build a sustainable financing ecosystem, legal frameworks have been adopted in Europe to support the flow of capital to sustainable projects in the EU internal market. These legal frameworks also have a clear impact on the target areas for financing and on the green finance instruments that banks have developed over the past years. Apart from presenting the regulatory regime, this article will focus on green financial products and will therefore only refer to the EU Taxonomy Regulation, which is also of particular relevance for bank green finance, and[7] which has performance criteria to determine which economic activities contribute significantly to the objectives of the Green Deal. According to the preamble of the Taxonomy Regulation,[8] the provision of financial products that serve environmentally sustainable objectives is an effective way to channel private investment towards sustainable activities, thereby supporting investor confidence and awareness of the environmental impact of these financial products and corporate bonds, creating visibility and addressing concerns about "greening" (Reboredo, Juan, 2018:38-50). The documents published by the banks we studied show that the most common instruments are green bonds, followed by other loans and investment grants.

Figure 1: Green financing instruments in the European banks' portfolios



Source: own editing

Green bonds

Green bonds are fixed-interest instruments, the proceeds of which are used exclusively for projects that bring environmental benefits (Syzdykov et al., 2019). Since the World Bank issued the world's first green bond, the green bond market has undergone a significant transformation and the number of issuances has increased significantly.[9]According to the HSBC Green Bond Report, the green bond market grew by 51 per cent per year in 2019, with a total of USD 258.9 billion issued. According to Climate Bonds' Q3 2021 report, although there was an issuance slowdown in 2020 due to the epidemic situation, global issuance in 2020 has already surpassed 2019 levels, with issuance at the end of Q3 2021 reaching USD 354.2 billion, significantly higher than the USD 294.4 billion issuance level in 2020.[10]

The European Parliament's 2021 study[11] presents seven financial instruments that play an important role in the green economic transition as elements of green finance. The first is the green bond, a debt security that can be used to finance environmental or climate projects by investing in any of the following areas: renewable energy, energy efficiency, pollution prevention and control, biodiversity, clean transport, sustainable water management, climate change adaptation, green products, manufacturing technologies and processes. The sustainability bond is different in that it is designed to finance a combination of green and social projects. These include non-financial, corporate SDG bonds, SDG bonds issued by banks and financial institutions, asset-backed and project SDG bonds, public sector SDG bonds and municipal SDG bonds. Environmentally sustainable bonds (Reboredo, 2018:25-38) are the main instruments for financing investments in low-carbon technologies, energy and resource efficiency, sustainable transport infrastructure and research infrastructure. Such bonds can be issued by financial or non-financial corporations or sovereigns.[12]

The Parliament's study also mentions the concept of a sustainability-linked bond, where the financial or structural characteristics (e.g. interest rate) may vary depending on whether the issuer has achieved its pre-defined sustainability targets. This instrument is relatively new to the global financial market, with the first SDG-linked bond issued in September 2019 by the Italian-based international energy company Enel.[13] In January 2021, the European Central Bank made sustainability-linked bonds eligible for inclusion in asset purchase programmes and for use as collateral.[14]

The so-called blue bond is usually issued by governments or development banks to finance maritime and ocean projects. The Seychelles Blue Bond was the first of its kind, launched in October 2018 by the Republic of Seychelles to support the expansion of marine protected areas, the development of control of priority fishing areas and the development of the blue economy of Seychelles.

Finally, the Parliament also mentions the social bond, which is intended to finance social projects, including projects aimed at ensuring food security and sustainable food systems or even alleviating unemployment resulting from the socio-economic crisis. The use of social bonds remains limited compared to green bonds.

Green bonds are supported by the so-called international Green Bond Standards, which allow for comparability of sustainability targets, transparency of resource use and the as-

surance of the investors' sustainability expectations. These include the ICMA1 Green Bond Principles, issued by the International Capital Market Association ('ICMA') in 2014. The rules set out in the ICMA set a voluntary minimum for issuers. These targets are complemented by mandatory certification elements in the Climate Bonds Initiative.

It is also worth referring to the draft[15] EU Green Bond Standard, which was developed because different standards and market methods make it difficult to compare different bonds (Ursule et al., 2021), create an uneven market playing field for issuers and risk distorting investment decisions. According to the impact assessment for the draft European Green Bond Standard,[16] the number of green bonds issued in the EU-27 grew by around 47.2% and the volume by around 50.9% per year between 2015 and 2020. In 2020, 48% of the €253 billion of global green bond issuance was in euro, but this segment accounted for only 4% of total corporate bond issuance.[17] To develop the green bond market, the Commission committed to developing an EU green bond standard in its Action Plan on Financing Sustainable Growth, adopted in March 2018. The final report of the Technical Expert Group on Sustainable Finance (TEG) was published in June 2019, with a usability guide published in March 2020.

The draft of the Green Bond Regulation sets out a single set of emission criteria at EU level. In line with the existing banking practice (Shaydurovaet al., 2018:710-715), the draft also stipulates that the proceeds of bonds using the designation "European Green Bond" or "EuGB" may only be used to finance economic activities that are environmentally sustainable.

The green bond market also varies by continent: green bond issuance in Africa accounts for 0.18% of total market capitalisation, compared to 0.4% in North America (US and Canada), 1.9% in the euro area and 0.89% in China (World Bank Group, 2019). The green bond has become a global financial green instrument in just a few years (Monket et al., 2020), and specific solutions have recently entered the financial market: in 2018, for example, HSBC Amanah Malaysia issued the world's first SDG Sukuk *(Sustainable Development Goals (SDG) sukuk),* a type of bond designed to comply with Islamic religious laws.[18] There are also mixed green bonds, such as Societe Generale's issuance of a bond using the yield of a third-party Green Bond (the benchmark bond) as a source of funding,[19] and Groupe BPCE's regular issuance of Social Samurai Bonds (SSBs), *which are* bonds denominated in yen by non-domestic issuers and are primarily aimed at refinancing loans in the education, health and other social sectors, in the Japanese market since 2012. Also specific to the original green bond concept is the green *repurchase* agreement, which Deutsche Bank AG adopted in September 2021 and signed the first green repurchase agreement, providing securities to a trustee in exchange for financing green projects. BNP Paribas SA entered into a similar transaction with Agricultural Bank of China Limited.[20]

Bank Information on Green Financial Products

All the major European banks we surveyed have bond instruments related to sustainable finance in their portfolios. All the major European banks have a prospectus on green financial products, which is available on their websites. These prospectus documents paint a very hetero-

geneous picture. *In* our research, we found that references to green finance products or product groups already appear on the main website, mostly with a primary reference to the *Green Bond Framework* or the Sustainable Finance Framework. Disclosures on individual products are in line with the bank disclosure rules for all European banks, but the majority of large European banks have recognised that disclosure has a key role beyond this: in most cases, it is provided alongside easily understandable summary disclosures, alongside a range of bank disclosure documents that are designed and structured in the traditional sense. In some cases, however, we found that information on green products could only be found after lengthy research, sometimes scattered in wordy bank documents. Also in a minority of the European banks we examined, we found that the published documents were well structured and understandable to specialists, but for those without financial expertise, they contained too much information, abbreviations and hyperlinks to further documents, reducing the clarity and ensuring publicity and transparency. In view of this, it is suggested that the main messages are set out in an infographic or summary document for those banks where too much information can be difficult to navigate.

In addition to the Green Bond Framework and other documents required for general banking operations (such as the auditor's report), a number of other documents on the websites of the major European banks support customer information. For example, *the Final Terms, pricing supplement,* prospectus, *offering circular as applicable, of the relevant Green Bond issuances, the Green Bond Investor Presentation, or the Second Party Opinion on the Green Bond Framework from independent second party.*

In the case of Hungarian banks, green financing is still in its infancy, so the information is usually limited to a specific product group or product. The European banks we studied have all developed a framework for issuing green bonds, which aims to regulate issuance, thereby supporting projects and businesses that have a positive impact on environmental sustainability (Cao, 2009). Most banks require that this impact be measurable and monitorable through specific indicators.

These green standards define a priori the economic activities eligible under the sustainability objectives that can be accepted under green bond frameworks.

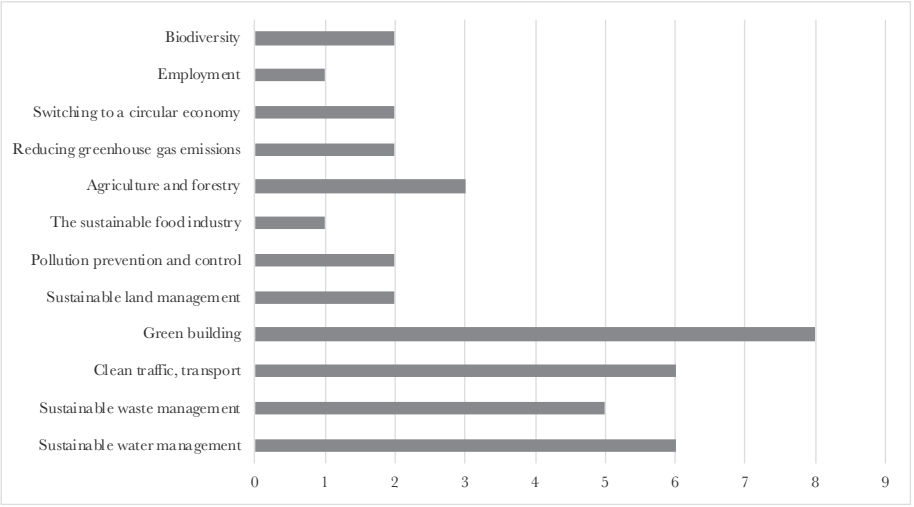
The Eligible Green Assets can be categorised into different eligibility categories and the major European banks we surveyed also publish their *Eligibility Criteria*.

European banks mostly finance renewable energy projects that promote the transition to a low-carbon economy (Gibon et al., 2020). The proceeds from green bonds are used by the issuing bank to finance projects or companies that make a positive contribution to reducing the impact of climate change or addressing other environmental challenges (e.g. biodiversity, waste and water management efficiency).

As shown in the figure above, the major European banks have extended their green market solutions to address a number of sustainability issues in their green finance lending targeting. In addition to environmental sustainability issues, some banks also regulate social sustainability-related financial instruments separately.

All of the European banks we surveyed also published rules on the selection criteria. In general, identification and selection is a two-step process that includes internal screening and external third-party review. The internal screening selection is intended to ensure that the banks identify the impacts and associated sustainability criteria for eligible projects.

Figure 2: Green bond funding targeting: green eligibility categories for European banks (2021)



Source: own editing

The banks keep records of the eligible loans, in some cases separately in the form of green and social sub-registers (Barua, et al, 2019). The registers include details of the bond (ISIN, pricing date, maturity date, etc.), the green, social and sustainability eligibility category concerned, and a description of the expected social and/or environmental benefits. The banks will also identify areas that they will not provide green finance to support, most commonly in the case of support for weapons, tobacco, gambling, hazardous chemicals, or agricultural solutions that threaten deforestation. The banks will report on the issuance of green financial products, in particular green bonds, in line with the ICMA Green Bond Principles 2018, Social Bond Principles 2020 and the Sustainability Guidelines 2018.

In the Hungarian banking system, the Hungarian National Bank (hereinafter: MNB) is a key player in the establishment of green economy principles, supporting domestic banks in the green transition with a number of guidelines and recommendations. As a result, an increasing number of green products have started to be developed in the Hungarian financial market. The MNB launched its corporate bond purchase programme, the Growth Bond Programme (NKP), in July 2019. Under the Growth Bond Programme (NKP), the central bank buys HUF-denominated bonds issued by non-financial non-public corporations and public enterprises domiciled in Hungary that have a credit rating of at least B+, a maturity of between 3 and 30 years and a total nominal value of at least HUF 1 billion. In August 2020, as an important milestone for the Hungarian capital market, the first Hungarian green corporate bond issue was launched under the Growth Bond Programme (NKP): CPI Hungary Kft. (CPI Property Group), one of the largest real estate developers in Hungary, issued HUF 30 billion in sustainability-rated debt instruments.[21] According to the MNB, by the end of September 2021, all Hungarian green corporate bonds had been placed under the Growth Bond

Programme (NKP) framework, with a total of 13 green bond series successfully issued by 12 issuers. At the end of Q3 2021, the MNB had a total of HUF 189 billion of green bonds on its balance sheet, which means that, uniquely among – European central banks, 20% of its corporate bond portfolio – was sustainability-labelled instruments.

In January 2022, the MNB also issued a Green Bond Guide, the primary purpose of which is to provide support for further domestic market-based green bond issuance after the end of the Growth Bond Programme (NKP), including the time and resources required for the issuance and the main differences with conventional corporate bond issuance.

The MNB's guidance highlights that, unlike conventional issuance, green bond issuance requires additional documentation, including the definition of sustainable use targets prior to issuance and a statement of the appropriate use of resources and the impact of environmental targets after issuance.[22]

In addition, in December 2021, Hungary became the world's first foreign sovereign Green Panda bond issuer to enter the Chinese bond market, issuing a green government bond worth RMB 1 billion, or about HUF 50 billion, in December 2021, marking an important step in Hungary's financial history. According to the Ministry of Finance, the bonds were available to Chinese domestic and foreign investors with a maturity of three years.

Other Credit Instruments

In addition to bonds, the European Parliament's study also looks at various credit instruments. In the Parliament's definition, a green loan is a loan whose amount is used exclusively for green projects. An important feature of a green loan is that the borrower periodically reports to the lender on the actual use of the amount borrowed, using both qualitative performance indicators and quantitative performance indicators. A sustainability-linked loan, on the other hand, is a loan for which the interest rate is variable because it is linked to selected sustainability performance indicators, such as carbon emissions. [23] In December 2021, for example, the European Investment Bank co-financed the first green loan scheme in Central and South-Eastern Europe, the first of its kind in this region, for the Hungarian housing renovation programme, which focuses on improving the energy efficiency of homes.[24] All European banks have lending instruments that can be integrated into this sustainability target. The NHP Green Home Programme was introduced in Hungary in 2021 to support the green home loan market in Hungary. The Monetary Council of the Central Bank has set the NHP Green Home Programme credit line at HUF 200 billion. Under the Programme, the Central Bank will provide refinancing loans at zero interest for a maximum term of 25 years to credit institutions, which will continue to give credit to consumers in the form of a HUF-denominated loan secured by a mortgage for the purchase or construction of energy-efficient new residential housing and land for new housing construction in Hungary, with a maximum annual interest rate of 2.5%, and to other credit institutions for the same purpose. The NHP Green Home Loan is available at all ten of the major domestic banks. The NHP Green Home Loan can only be used for the purchase or construction of an energy-efficient new dwelling house or apartment with a primary energy demand of 90kWh/m2/year and

an energy rating of at least "BB", located in Hungary. In addition, the MNB has extended the Green Corporate and Municipal Capital Allowance scheme for credit institutions, which also supports various energy efficiency investments, according to a notice published in early September 2021. From 1 July 2021, the MNB allowed for a more favourable inclusion of green resources in the Mortgage Finance Compliance Measure (JMM). [25] 2021 also saw the launch of the Green Mortgage Bond Purchase Programme, one of the first asset purchase note programmes in the world to focus on sustainability. [26] Four banks operating in Hungary have now issued green mortgage bonds: OTP Mortgage Bank, Takarék Mortgage Bank, UniCredit Mortgage Bank and Erste Mortgage Bank Ltd. The proceeds of the underwriting will be used to finance the construction of energy-efficient residential properties and the energy-efficient renovation of second-hand properties.

Sustainable Investments, Funds

The major institutional investors and credit institutions are increasingly able to positively influence the development of corporate social and environmental responsibility through their investment policies. Accordingly, one of the very important green financial instruments of credit institutions is to support green investments (Lingyun, 2020).

Sustainable investment is an umbrella term for investment. It includes ethical investment, which does not support companies or industries that may have a negative impact on society and the environment (Lewis et al., 1990). Also included here is ESG Investing, which supports companies that meet certain environmental, social and governance requirements and takes into account corporate ESG efforts.[27] In contrast, Impact Investing[28] supports companies whose activities have a measurable positive environmental or social impact.To help investors choose between investments, banks usually provide guidance in the form of advice, but we have also seen a major European bank that provides its clients with a separate database of the characteristics of the fund managers available. Lloyds Bank, for example, has launched a free online Home Energy Saving Tool (*Green Buildings Tool*) that calculates potential savings based on information about the building.

Investors are increasingly conscious of their sustainable choices, according to the April 2020 Schroders Global Investor Survey.[29] 47% of investors surveyed now prefer to invest in sustainable investment funds rather than those that do not take sustainability factors into account.

A number of funds have been set up recently in the Hungarian banks we examined. In October 2020, the Budapest Alapkezelő Zrt. (Budapest Fund Management Ltd.) launched a fund named Budapest NEXT Sustainable Environment Fund, which aims to invest in the shares of companies that contribute to maintaining the global ecological balance and develop and sell technologies and products that promote environmentally sustainable development.[30]

The regular investment programme of Erste Bank Hungary also offers sustainable investment opportunities through the Erste Future green package. This is one of the most popular investment packages, which includes two or three sustainability-themed investment funds, depending on the clientele, in which more than 3,000 customers invested HUF 2 billion in 2021 in nearly 24,000 transactions.[31]

OTP's Hungarian product is the OTP Climate Change 130/30 Fund, which is designed to achieve longer-term (5-7 years) financial goals and build a portfolio for those who expect the rise of global green industries to deliver returns on their investments over the timeframe indicated.[32]

At least 80% of the assets in the portfolio of UniCreditBank's Amundi Climate Aware ESG Mixed Funds Fund in Hungary are invested in ESG-oriented funds. In addition, a key component of this fund is the CPR Invest - Climate Action investment fund, which focuses on climate-conscious companies.[33]

K&H Bank's KBC Eco Fund Impact Investing fund in Hungary invests in the shares of international companies whose products have a positive environmental and social impact on global development.[34] In addition, the K&H Sustainable Development Dynamic Mixed Fund takes into account the environmental and social impact of the investment in addition to the returns available and the fund portfolio is designed accordingly. The fund invests its assets only in assets (bonds, equities) that comply with the strict investment rules for sustainable development in the KBC Group.[35]

Summary

In our research, we looked at the green finance portfolios of the ten major European and Hungarian banks by total assets in 2021, with the aim of assessing the market for green finance products. Our aim was to determine which are the most typical green market products in the current international regulatory environment and what are the bank disclosures on them.

Based on the documents, literature and publicly available bank prospectuses reviewed, we found that green bonds are the most common instrument for European banks, followed by other loans and investment grants. All of the European banks we studied have already developed a framework for issuing green bonds and have a prospectus for green financial products publicly available on their websites, but it is important to note that these prospectuses are very heterogeneous, with a lack of uniformity in structure and detail.

In the Hungarian banking system, the MNB is a key player in laying down green economy principles, supporting domestic banks in the green transition with a number of guidelines, and as a result, an increasing number of green products have started to be developed in the Hungarian financial market. However, it is important to note that green financing is still in its infancy for Hungarian banks, so the information available from banks is usually limited to a specific product group or product. Nevertheless, Hungary has already achieved a number of internationally important green finance milestones, such as the first green loan scheme at regional level by the European Investment Bank linked to the Hungarian housing renovation programme, or the outstandingly high volume sustainable corporate bond portfolio of the Hungarian Central Bank.

Notes

1 HSBC Holdings plc, BNP Paribas SA, France, Crédit Agricole Group, France, Banco Santander SA, Spain, Société Générale SA, France, Barclays plc, UK, Groupe BPCE, France, Deutsche Bank AG, Germany, Lloyds Banking Group plc, UK, Intesa Sanpaolo SpA, Italy.

2 OTP Bank, K&H Bank, UniCredit Bank, Erste Bank, Raiffeisen Bank, Takarékbank, MKB Bank, CIB Bank, Budapest Bank and MFB. We also refer to the fact that Magyar Bankholding, Budapest Bank Zrt., MKB Bank Nyrt. and Magyar Takarékbank Zrt. started their effective operations on 15 December 2020.

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[35] https://www.kh.hu/megtakaritas-befektetes/kozeptav-hosszutav/nyiltvegu-befektetesi-alap/vegyes/fenntarthato-fejlodes-dinamikus (Date of download: 10, January 2022).

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