MILKEN INSTITUTE

SECURITIZATION

Positive Instrument to Help Fund the Sustainable Development Goals

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ABOUT US

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These activities are designed to help people build meaningful lives in which they can experience health and well-being, pursue effective education and gainful employment, and access the resources required to create ever-expanding opportunities for themselves and their broader communities.

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FROM BANE TO BOON

Securitization is needed to help mobilize private capital and fill the estimated US$2.5 trillion annual financing gap that hinders achievement of the sustainable development goals (SDGs). Now is the time to emphasize that, when done right, securitization can be a stable, low-risk investment. And the ratings show that.[1]

But, when many people hear "securitization," they think "Uh-oh! 2008—big defaults." This association persists around the world even though the large defaults were triggered in the US but mainly affected subprime residential mortgage-backed securities (RMBS). And, according to the Organisation for Economic Co-operation and Development (OECD), the subprime mortgage sector only represented about 10 percent of US securitization. In addition, defaults in Europe were much lower. From mid-2007 to the end of 2010, only .95 percent of all European structured-finance issues defaulted.[2] Among emerging market countries, defaults were limited or nonexistent.

The US crisis was caused in part by a reliance on overly complex structures that obscured risks: for instance, through collateralized debt obligations that were often securitizing already-securitized bonds—so-called "resecuritizations." Transactions were "sliced and diced," assets were packaged then repackaged. Complex and opaque deals were too often compounded by insufficient due diligence. The generally better performance of non-US deals was tightly linked to their much less complex structures.

The negative publicity heaped on securitization in 2008 and afterward turned many potential investors off the process. What's critical to understand is that the problem was not with securitization itself but with how it was used and managed. Used responsibly, with transparent structures and clear risk-assessment and mitigation, securitization's inherent properties make it an attractive instrument. This message bears frequent repeating if countries are to mobilize the trillions needed to achieve the SDGs.

A PATH TOWARD MOBILIZING PRIVATE CAPITAL FOR SUSTAINABLE DEVELOPMENT

An estimated US$100 trillion in assets currently under management in the global financial system could be deployed to support sustainable development.[3] Unfortunately, there is a disconnect between where that capital is now and where it needs to go. Securitization could help bridge the gap.

A securitization is a bond collateralized by a large pool of predictable cash flows from assets such as bank loans, utility payments, credit card receivables, and many others. When such cash flows are aggregated and structured, *tranched* (assigned to tranches or slices according to defined characteristics), and credit enhanced, securitization can create bonds with the size, risks, and returns attractive to institutional investors. Aggregation is especially important because many SDG activities are provided by small and medium-sized enterprises (SMEs) that could not otherwise directly access capital markets because of their size. In addition, many SDG activities generate the types of cash flows that potentially can be securitized, such as utility payments to renewable energy providers, tuition payments, road tolls, and transportation tickets from affordable hybrid or electric metro buses.

In South Africa, for example, the Trust for Urban Housing Finance transaction is securitizing mortgages from housing developers to build affordable housing in inner-city Johannesburg. This is the Johannesburg Stock Exchange's first social bond listed on its new Sustainability Segment. In Nigeria, the Primero transaction securitized receivables from the sale of bus tickets to finance the expansion of Primero TSL, a leading provider of transportation services—a transaction applicable to an electric or hybrid bus fleet.

A RESILIENT, LOW-RISK INVESTMENT

Securitization can ensure a resilient, low-risk investment, mainly because of three elements: Securitized bonds are backed by a pool of diversified assets, asset pools are frequently reviewed to ensure that they can continue to finance the bond, and credit enhancement is drawn on if necessary to cover potential shortfalls.

More specifically, a key feature of securitized bonds is that each bond is backed by a pool of hundreds—sometimes thousands—of assets, including loans and receivables. Those assets and receivables, in turn, are paid by hundreds or sometimes thousands of entities. This means that the bond is backed by a diversified pool of credits and risks. Backing a bond with a large and diversified number of credits lowers its risk, as the likelihood that all such credits will be influenced by the same set of events at the same time in the same way is highly reduced.[4]

In addition, a diversified pool of assets makes it possible for securitization to create and offer tranches with different risk levels—including a senior investment-grade opportunity, a medium-risk mezzanine tranche, and a first-loss or equity tranche. The junior levels absorb losses before the most senior level, which allows the most senior level to have a low risk and a high rating.

In a Milken Institute webinar on the topic, Markus Papenroth, managing director of structured finance at Fitch Ratings, remarked, "If you remove the instrument from the one entity generating the receivables, you can remove the idiosyncratic risk. It can't be eliminated, but it can be substantially reduced."[5]

Second, securitization ratings are reviewed regularly to make sure the assets in the pool are performing effectively and can cover the bond obligations. The performance of the pool is scrutinized frequently and extensively. The result is that challenges to the asset pool and cash flows can be quickly identified. Should there be a problem with the pool of assets such that the cash flows cannot meet payout obligations, the excess spread or overcollateralization, or another type of credit enhancement, will be activated to meet the payments.

Ratings are so actively and regularly monitored that they are described as "live." Detailed reporting makes this information available to investors to monitor the performance of the portfolio and see how steps are taken to mitigate risks that arise over time. Even when a securitization is rated privately or not at all, this review is done. As Yohan Assous, head of structured finance at Global Credit Ratings (GCR) in South Africa, said at the Milken Institute webinar, "Reports need to be produced on a regular basis that allow monitoring and surveillance of the assets' performance."

As mentioned, securitizations are typically structured with varying forms of credit enhancement. Some credit enhancement can be internal. Excess spread, overcollateralization, and subordination of notes (or tranching) are common forms of internal credit enhancement. External credit enhancement, such as third-party guarantees, reserves, and liquidity lines, adds additional protection. Investors can select how much protection they want by deciding which tranche to invest in—the most senior investment-grade tranche, a mezzanine tranche, or the first-loss/equity piece—according to the levels of risk and return they are looking for.[6]

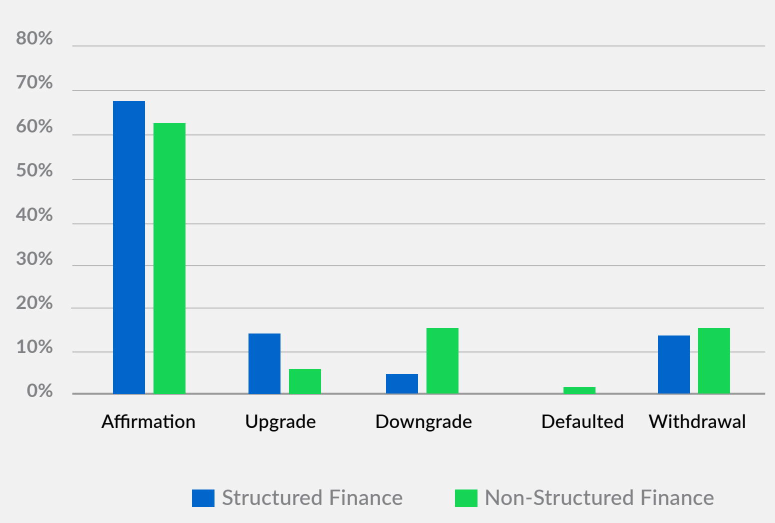
RATINGS DATA: STABLE AND RESILIENT SECURITIZATIONS

Even during the height of COVID-related economic challenges and dislocations in 2020, GCR ratings showed that securitization ratings were stable—more stable than ratings of many nonstructured financial (i.e., corporate) transactions. As **Figure 1** shows, when compared to a nonstructured finance instrument, securitizations demonstrated slightly more affirmations of the existing ratings, together with more upgrades and fewer downgrades. There were no defaults.

FIGURE 1: STRUCTURED FINANCE AND NON-STRUCTURED FINANCE RATING ACTIONS IN 2020 BY GCR

	Structured Finance	Non-Structured Finance
Affirmation	68%	63%
Upgrade	14%	5%
Downgrade	5%	15%
Defaulted	0%	1%
Withdrawal	14%	15%
	100%	**100%**

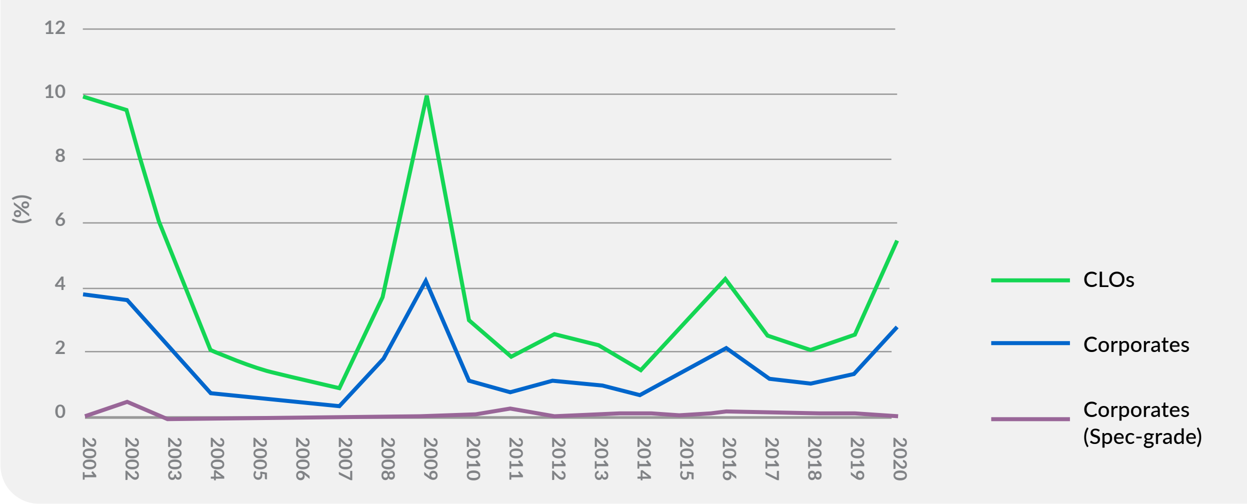
- *SF numbers exclude Credit-Linked notes transactions and Repackaging vehicles*
- *Affirmations and upgrades make up more than 80% of total SF rating actions in 2020*
- *No defaults affecting SF transactions*



Note: Column totals do not add to 100 due to rounding.
Source: Adapted from GCR (2021)

Information from S&P Global echoes these points: "The global structured finance default rate fell to 1.4 percent in 2020 ... despite a global recession and pandemic."[7] S&P data also show that collateralized loan obligations (CLOs)—securitization of business loans—outperformed corporate debt not only during 2020 but also earlier (see **Figure 2**).

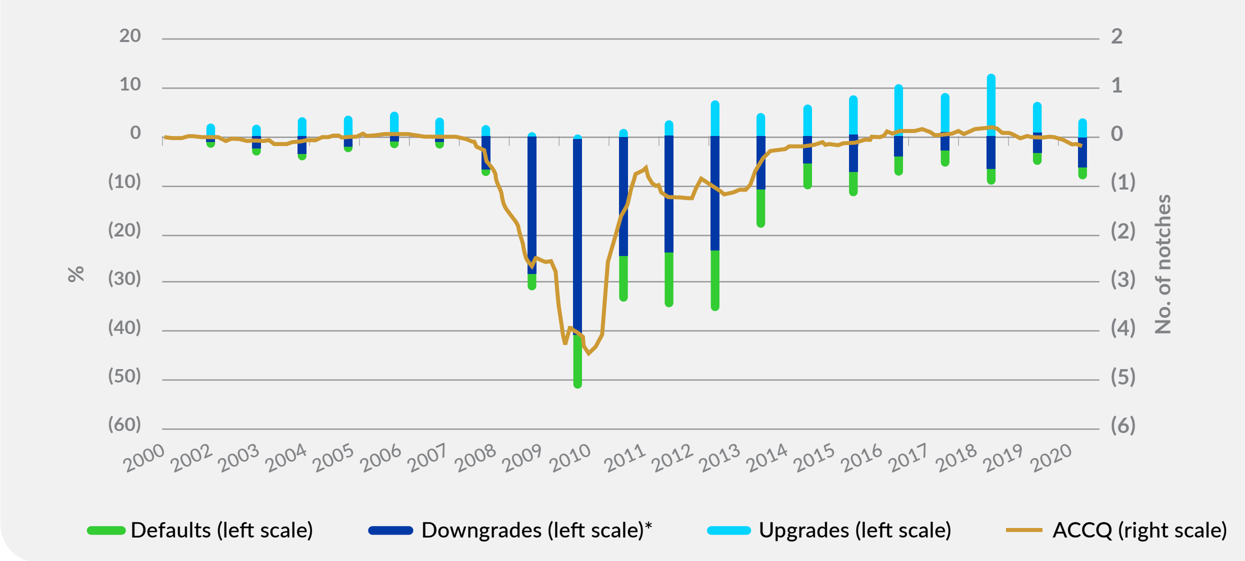
FIGURE 2: ANNUAL GLOBAL DEFAULT RATES: CLOS VERSUS CORPORATES



Source: Adapted from Standard & Poor's Financial Services LLC (2021)

As **Figure 3** shows, since the fallout from the 2008 crisis and all the resultant defaults, securitization defaults and downgrades have been limited, particularly after 2013. The average change in credit quality (ACCQ) has hovered around zero, and upgrades are far more frequent than downgrades. Importantly, for seven years before the crisis, the ACCQ was around zero, defaults were minimal, and upgrades exceeded defaults.

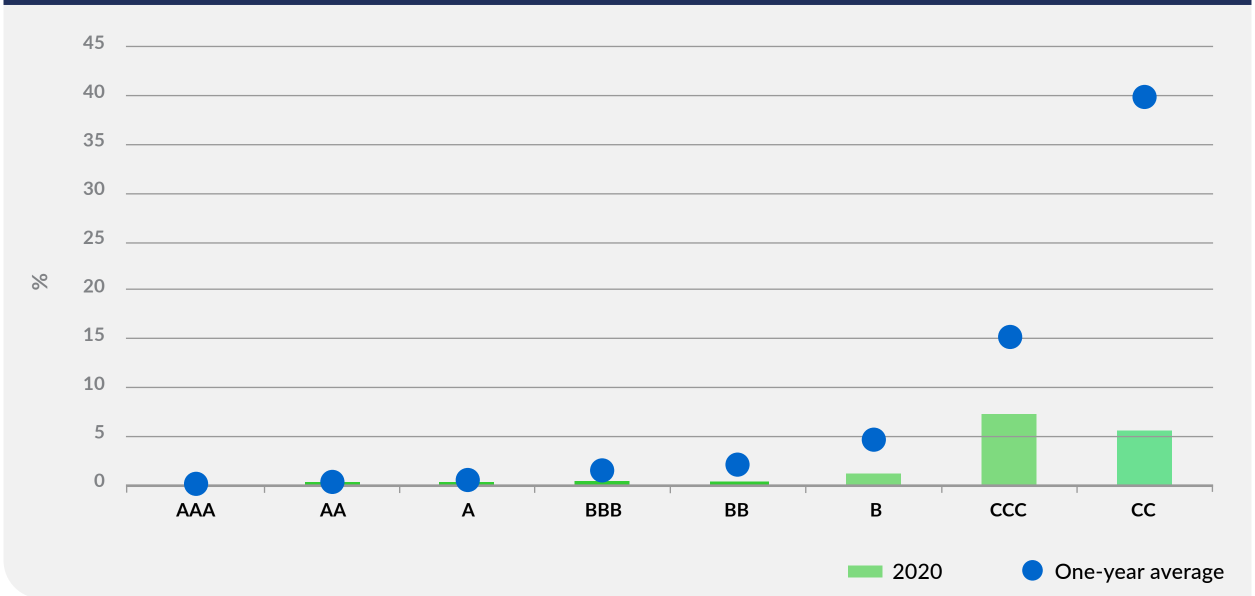
FIGURE 3: GLOBAL STRUCTURED FINANCE TRANSITION RATES AND AVERAGE CHANGE IN CREDIT QUALITY



Source: Adapted from Standard & Poor's Financial Services LLC (2021)

As S&P's analysis further notes and **Figure 4** shows, the majority of defaults during the COVID pandemic in 2020 were in bonds rated CCC or below. The highest default rate—about 7.1 percent—was for bonds rated CCC. The default rate for B-rated securitizations was about 1 percent and even lower, close to zero, for securitizations rated higher than BBB. In addition, S&P reported that "Upgrade rates were generally elevated for higher rating categories. Securities rated 'BBB' recorded the highest upgrade rate in 2020, at 7.0 percent." [8]

FIGURE 4: GLOBAL STRUCTURED FINANCE DEFAULT RATES BY RATING CATEGORY: 2020 VERSUS ONE-YEAR AVERAGE



Source: Adapted from Standard & Poor's Financial Services LLC (2021)

SECURITIZATION RATINGS: CHANGES AND PROGRESS SINCE 2008

It is reasonable to ask whether securitization ratings have improved since their weak performance in 2008. Many changes have been instituted to help prevent a repeat of the 2008 financial debacle. Close attention was paid and actions were prompted through the Dodd-Frank legislation in the US and comparative regulatory changes in Europe. Although Europe had limited defaults, the EU perceived the potential for problems with ratings and securitizations and introduced changes similar to those adopted in the US.

More specifically, these initiatives gave more power to securities commissions to establish regulatory oversight regimes for rating agencies and rating transactions.

For rating agencies, the US SEC and other securities commissions expanded disclosure about rating agencies' policies, procedures, methodologies, and due diligence on underlying asset models and key rating assumptions. To reduce conflicts of interest, new regulations required firewalls so that rating analysts have no access to information about the commercial side of their business, such as fees paid for ratings. Certifications were tightened to require all members of a rating committee to agree that private firms did not influence the rating. Review requirements were revised to ensure data are solid and that policies and processes related to accessing and analyzing those data are strong.

For transactions, new rules were adopted requiring an arranger to retain at least 5 percent of the credit risk in a transaction as "skin in the game" and reduce "originate to distribute" problems, which were prevalent in 2008. More extensive disclosure and reporting on the assets by the issuer were introduced.

Last and importantly, when rating agencies construct cash flow modeling assumptions—e.g., expected defaults, recoveries, and the like in the asset portfolio—they incorporate historical performance from several economic cycles. Because the 2008 cycle has been incorporated into modeling assumptions, asset classes that were particularly affected by the 2008 crisis now face more stringent credit enhancement requirements to achieve a targeted rating than they did before the crisis.

In a Milken Institute webinar on investor benefits, panelists remarked that the post-2008 changes strengthened the securitization market. The changes mandated stricter eligibility requirements for the components of a securitization pool and reduced the chance of including bad or misunderstood assets. They improved the analysis of the pooled assets and risk mitigation to support them. They strengthened requirements on overcollateralization.[9]

SECURITIZATION: A GATEWAY TO FUTURE INVESTING

Today, when securitization is increasingly recognized as a much needed tool for mobilizing private capital to finance the SDGs, new regulations are in progress to encourage its use and prevent possible downsides.

Notably, the EU sees securitization as a key to financing its ambitious plan for sustainable development. To ensure that securitization is a positive financing force, the EU in 2019 adopted regulations giving preferential regulatory treatment to "STS" —simple, transparent, standardized—securitizations to incentivize their use. (These regulations updated those on securitization that the EU adopted after 2008.)

The STS framework makes it easier for investors to evaluate transaction risks. Complex structures are harder to evaluate and can reduce the benefits of disclosure. By contrast, simple means assets that are homogeneous and creditworthy; transparent, that investors must be given information on cash flow models, historical defaults, and loss performance, as well as transparency about servicers' roles and obligations; standardized means that risk-retention requirements are satisfied and derivatives are not allowed. The regulations also ban complex, high-risk structures such as resecuritizations that obscure transparency.[10] The EU encourages third-party verification of STS transactions and publishes a list of authorized verifiers. The EU approach offers a model for other countries to adapt to their own needs.

SECURITIZATION: STRUCTURE TODAY, STRENGTH TO ENDURE

The strengths of securitization do not happen by accident. For positive results, securitizations must be well structured and involve strong due diligence. Simple, straightforward, transparent structures provide a sturdy foundation on which to build markets in emerging-market countries where securitization is new and capacity is still forming. Not all securitizations need to meet every aspect of the STS standard. For example, complex structures may be needed to support particular financing needs. But focusing on STS securitizations can enhance the ability to grow the market faster and wider.

Overall, it is critical to understand the portfolio's risks, manage expectations for future performance, and use credit enhancement to mitigate risks as needed to achieve a desired risk or return. Familiarity with the asset's performance history and other key data is essential for anticipating potential default risks and structuring the transaction accordingly. Legal infrastructure must be in place to protect cash flows and ensure they are fully dedicated to financing the bond. Capable servicers and administrators are also crucial to ensure that cash flows are correctly calculated and flowing where needed (e.g., to protect against operational risk). All parties must conduct strong due diligence to understand, prepare, and react according to changing circumstances. As background to the transaction, the local bond market must work well and be seen as fair and well regulated.

Several actions can accelerate the ability of securitization to mobilize capital for sustainable finance in prudent and positive ways. Countries can identify targeted areas for sustainable development, identify where securitization can play an important role in financing such development, and build performance data while strengthening the legal framework and institutional capacity. These elements may take several years to put in place; focus and advance planning are indispensable. Governments can ensure a macroenvironment that is conducive to debt financing. Looking to the EU's example, governments and market participants can adopt regulations to encourage STS approaches.[11] These measures are particularly beneficial for emerging market countries where capital markets and products such as securitization typically are less understood, and investors and other market participants are less experienced.

The prospects for securitization are bright. New issuance of global structured finance increased 60 percent year over year to approximately US$685 billion in the first half of 2021, driven mainly by the US, Europe, and China. S&P raised its 2021 forecast by about 15 percent to slightly more than $1.4 trillion, after a first half that was more active than expected.[12] This is good news as the world continues to seek ways to scale up financing using securitization for the goals embodied in the SDGs. Greater visibility, deeper knowledge, and broader experience of securitization's positive contributions will help emerging market countries press forward with their challenging sustainable finance agendas.

ENDNOTES

[1] This note draws on the Milken Institute's webinar on "Rating Securitization Transactions," January 28, 2021, part of the Institute's Africa Securitization Alliance series on developing securitization markets in Africa. https://milkeninstitute.org/video/africa-rating-securitization-transactions.

[2] Hans J. Blommestein, Ahmet Keskinler, and Carrick Lucas, "Outlook for the Securitisation Market," *Financial Market Trends*, Volume 2011–Issue 1, OECD 2011.

[3] Lubasha Heredia, Simon Bartletta, Joe Carrubba, et al., "The $100 Trillion Machine: Global Asset Management 2021" (Boston Consulting Group, July 8, 2021), https://www.bcg.com/publications/2021/global-asset-management-industry-report.

[4] The borrower's (i.e., the "originator's") credit quality is not a factor in the bond's rating because the borrower is not the obligor of the bond; the cash flows from the assets are the obligor.

[5] Milken Institute webinar on "Rating Securitization Transactions," January 28, 2021.

[6] Importantly, because securitization can give rise to ratings that are higher than straight corporate credit, it can provide lower-cost financing to borrowers. Furthermore, credit risk is not the only risk in a securitization. Legal, performance, and operational risks are also key. A rating is built on the strength of the legal elements (e.g., how well the assets/cash flows are ring fenced and inaccessible to the borrower, laws defining and protecting the special purpose vehicle, regulations on securitization transactions), performance data, competency of servicers and administrators, and tax policies.

[7] Nick W. Kraemer and Kirsten R. Mccabe, "Default, Transition and Recovery: 2020 Annual Global Structured Finance Default and Rating Transition Study" (S&P Global, May 13, 2021). All defaults were in the US and Europe. https://www.spglobal.com/ratings/en/research/articles/210513-default-transition-and-recovery-2020-annual-global-structured-finance-default-and-rating-transition-study-11946068.

[8] Ibid.

[9] "Accelerating Securitization in Africa: The Benefits of Investing in Securitization," Milken Institute webinar, September 10, 2020, https://milkeninstitute.org/videos/accelerating-securitization-africa-benefits-investing-securitization-transactions.

[10] In January 2019, the EU adopted securitization regulations as part of its Capital Market Union action plan. See https://www.esma.europa.eu/policy-activities/securitisation/simple-transparent-and-standardised-sts-securitisation.

[11] See the EU's strategy and action plan for building a sustainable future and finance to support it: https://ec.europa.eu/info/publications/210706-sustainable-finance-strategy_en.

[12] "Global Structured Finance Midyear Outlook 2021: Issuance Forecast Raised to $1.4 Trillion" (S&P Global Ratings, July 20, 2021), https://www.spglobal.com/ratings/en/research/articles/210720-global-structured-finance-midyear-outlook-2021-issuance-forecast-raised-to-1-4-trillion-12040594.

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