

December 2, 2020

Dr. Victoria Saporta  
Chairperson  
Mr. Jonathan Dixon  
Secretary General  
International Association of Insurance Supervisors  
Centralbahnplatz 2  
CH-4002 Basel  
Switzerland



Re: IAIS Stock-take Questionnaire on Infrastructure and Strategic Equity

Dear Dr. Saporta and Mr. Dixon:

The Institute of International Finance (IIF) and its insurance members are pleased to respond to the IAIS' Stock-take Questionnaire on Infrastructure and Strategic Equity (Questionnaire).

As a general matter and guiding overarching principle, we believe that the capital treatment of infrastructure and strategic equity investments should reflect the true level of risk of these investments for insurers with a long-term focus. We believe that, at present, capital charges and other design features of the Insurance Capital Standard (ICS), such as the treatment of assets without an external or public credit rating, do not allow the risk characteristics of a wider range of assets, including but not limited to infrastructure and strategic equity investments, to be properly recognized.

We support the interest of the IAIS in further studying the proper risk-based treatment of infrastructure and strategic equity investments in the ICS but we do question the narrow focus of the stock-take. We would encourage the IAIS to extend this consideration of an appropriate regulatory capital treatment to equity holdings in general. We would also encourage the IAIS to consider not only the capital treatment but also the valuation of these assets.

We believe consideration should be given to the significant and potentially longer-term changes in market dynamics and investment activity arising from the COVID-19 crisis, including the lower for longer interest rate environment that is expected to persist for several more quarters, in designing an appropriate risk-based treatment of equity investments. A lower for longer rate environment means that long-term assets are even more critical for asset/liability matching and a holistic view of the balance sheet for risk management purposes.

When properly structured and risk managed, infrastructure and strategic equity investments, as well as other equity investments, can be inflation-resilient, diversified vehicles that perform well under stress<sup>1</sup> and counter procyclicality. Long-term equity investments allow insurers to better cover long-term liability

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<sup>1</sup> <file:///D:/Moody's%20-%20Infrastructure%20&%20Project%20Finance%20%E2%80%93%20Global%20Defaults%20&%20recoveries%20-%20Fewer%20coronavirusdriven%20downgrades%20than%20nonfinancial%20corporates%20-%20June%202020.pdf>

cash flows and to benefit from illiquidity premia. Short-term volatility generally is offset by the longer holding period of these assets.

With respect to infrastructure investments in particular, these investments can play an important role in promoting important societal goals of greater financial inclusion, increased growth, employment and productive capacity, and support for a greener recovery from the COVID-19 crisis. Infrastructure investments can provide a source of long-term liability matching and attractive risk-adjusted returns.<sup>2</sup> A low correlation with other investment classes offers diversification benefits. Infrastructure investments generally are less susceptible to economic cycles and offer stable cash flows, given the inelastic demand for physical assets that support economic and social activity and the regulation of public services.

Importantly, infrastructure investments can support increases in future productivity, new capital formation, output growth, GDP per capital and insurance penetration. These investments support sustainable and resilient infrastructure, which is one of the United Nations' Sustainable Development Goals (SDG 9).<sup>3</sup> An inappropriate valuation and capital treatment of these investments could have a negative impact on the efficient use of capital and could thwart the achievement of important social goals.

Infrastructure investments exhibited good resiliency during the financial crisis of 2008.<sup>4</sup> We note that, in general, data on the performance of these investments can lack robustness, given the low default history of this asset class. This lack of data should not result in a penalizing treatment or crude risk bucketing of these investments by prudential authorities if an insurer demonstrates good risk management. The application of prudent risk management tools is a more holistic approach to identifying, quantifying and mitigating the risks of equity investments in general and infrastructure investments in particular than is the assignment of standardized regulatory capital charges that likely will not reflect the particular attributes and risks of an investment.

We have provided below our response to the Questionnaire in its entirety, in addition to responding via the IAIS template.

Question 1 requests supporting materials, academic research reports, institutional or professional studies or publications that would assist in the assessment of suitability of a differentiated treatment for infrastructure investments. While many of these materials should be familiar to the IAIS and its members, we have compiled a brief bibliography in Appendix 1.

Question 2 requests data that would be suitable for the purpose of calibrating a differentiated treatment for infrastructure investments. We note that the IAIS has a large inventory of data from insurers and insurance groups as a result of numerous ICS data calls, field testing results and confidential reporting and other data calls; we have included in Appendix 2 some additional data sources that may be helpful.

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<sup>2</sup> <http://documents1.worldbank.org/curated/en/125511521722022110/pdf/WPS8373.pdf>

<sup>3</sup> <https://www.swissre.com/institute/research/sigma-research/sigma-2020-03.html>

<sup>4</sup> <https://www.preqin.com/insights/research/blogs/infrastructure-outperforms-an-analysis-of-markets-since-the-global-financial-crisis>

Question 3 requests supporting materials, academic research reports, institutional or professional studies or publications that would assist in the assessment of suitability of a differentiated treatment for strategic equity investments. We have compiled a brief bibliography in Appendix 3.

Question 4 requests data that would be suitable for the purpose of calibrating a differentiated treatment for strategic equity investments. Again, we note that the IAIS has a large inventory of data from insurers and insurance groups as a result of numerous ICS data calls, field testing results and confidential reporting and other data calls. Some of the data sources included in Appendix 2 may also be helpful with respect to strategic equity investments.

Question 5 asks for feedback on the IAIS strawman proposal on definitions and criteria for infrastructure and strategic equity investments and Question 6 requests any additional relevant information.

Question 6 requests other relevant information regarding the treatment and calibration of risks attached to investments in infrastructure and strategic equity.

In this respect we would note that design features of the ICS will affect the treatment of assets such as infrastructure and other long-term equity investments, particularly the treatment of assets without an external or public credit rating, which has an impact on both capital risk charges and the valuation of liabilities.

Within the current design of the ICS in relation to the middle and top buckets, unrated assets including infrastructure assets and other long-term equity holdings are required to be treated as equivalent to sub-investment grade. In addition, under the ICS the spread of sub-investment grade assets is not allowed to be higher than the spread of investment grade assets. The effect of this can be to artificially reduce observable spreads on those unrated assets, which can result in a lower adjustment to the risk-free curve, which inflates liabilities. The disconnect between observable spreads and the spread allowed under the ICS also introduces unnecessary balance sheet volatility.

In addition to inflating liabilities, the assignment of a sub-investment grade rating to such investments also inflates required capital.

The current design of the ICS, as outlined above, negatively differentiates against investments including infrastructure and long-term equity investments that do not have an external or public credit rating, by treating them as poorer quality assets than an economic view would indicate is the case.

We would also note that the financial crisis of 2007/08 demonstrated that reliance on external credit ratings is not an adequate substitute for good risk management. We therefore encourage the IAIS to allow for the recognition of internal ratings and supervisory approved ratings, subject to appropriate supervisory oversight.

### **Feedback on the Strawman Proposal and Other Relevant Information**

We appreciate the IAIS' careful and thoughtful consideration of infrastructure and strategic equity as a separate asset class potentially warranting a separate capital or other prudential treatment.

The introduction to the strawman proposal properly recognizes the need to address concentration risk in any asset class, including infrastructure and strategic equity investments. It is important for insurers to

properly risk manage these exposures in a manner that reduces and mitigates risk, including but not limited to concentration risk.

## **Infrastructure**

### ***2.1 General Definitions***

With respect to the definition of infrastructure provided in Section 2.1, we believe that this section and Table 1 provide a complete view of the different classes of infrastructure assets at this point in time. We note, however, that the definition and conceptualization of infrastructure assets (as well as strategic equity investments) is dynamic, reflecting an evolving financial services sector, global economy and global financial system. We would encourage the IAIS to adopt a more open-ended, future-proof approach to categorizing infrastructure and strategic equity investments that recognizes the potential for the expansion of these asset classes over time. As just a few examples of these types of investments, we would highlight renewable energy, data centers, stadia and greenspaces, which can be financed via private sector investments or public-private partnerships.

A more dynamic and future-proof approach to the treatment of infrastructure and strategic equity investments may be better accomplished by setting forth principles for the treatment of these assets, and other long-term equity investments, rather than by providing specific criteria or lists of qualifying types of financial instruments or issuers. We believe that the types of issuers identified in Section 2.1 may not encompass the entire range of potential issuers at this point in time or in the future. For example, we do not see explicit reference to private equity or venture capital structures.

### ***2.2 Criteria to identify less risky subsets of infrastructure investments***

Section 2.2 would benefit from a more principles-based articulation of the indicia of less risky infrastructure corporate and infrastructure project investments and other equity investments. For example, predictable revenues may be characterized by factors other than those listed in Paragraphs 9.a. and 10.a., especially over time as these asset classes develop and mature. An exclusive listing of only a few factors may result in supervisors not taking into consideration other indicia of predictability for a particular investment or project. The predictability of revenue generation can be very investment- or project-specific and, as well, the nature and form of investment vehicles and project finance may change rapidly in the coming years.

With respect to diversification of infrastructure corporate investments (Paragraph 9.b.), consideration should be given to the diversification of the entire equity investment portfolio, not only the infrastructure portfolio. The diversification inherent in the infrastructure and strategic equity asset classes should also be recognized explicitly. These asset classes have low correlation with other asset classes, particularly public equities and debt.

The credit quality of infrastructure corporate investments (Paragraph 9.c.) is an important consideration but a strict reference to ICS RC 1-4 does not provide appropriate flexibility to consider other methods of ensuring credit quality, nor does a reference to a three-year track record. Credit quality can be enhanced

by guarantees, credit enhancements, hedging and public-private arrangements, as well as by the characteristics enumerated in that Paragraph.<sup>5</sup>

The strategy of holding an infrastructure corporate investment or infrastructure project investment to maturity (Paragraphs 9.d. and 10.d.) may be appropriate for some, but not all, investments and projects. Investments can be made at different stages of a project, including development, construction and operation.<sup>6</sup> The “hold to maturity” criterion could be read as requiring that investments span the lifecycle of an infrastructure project, which may not be feasible or appropriate. An investor may decide to enter (or exit) an investment or project at various points over the investment or project lifecycle for a number of strategic reasons; investors should not be constrained in their ability to make those business decisions based on the totality of the circumstances.<sup>7</sup>

The additional criteria enumerated in Paragraph 11 for infrastructure investments projects through equity and unrated debt are subjective and do not reflect the full range of potential risk mitigants. Investors are responsible for proper risk management and mitigation that best meets the specific characteristics of the investment or project, as well as the investor’s risk appetite. Supervisors should review the quality and comprehensiveness of the insurers’ risk management framework, rather than reviewing in granular detail the risk mitigation measures applied to an individual investment or project.

### **Strategic Equity**

At the outset, while we support consideration of a differentiated capital treatment for strategic equity, we believe that the scope of equity holdings warranting a differentiated approach should be broader to encompass all equity holdings of an insurer. Moreover, consideration of the treatment of equity holdings should encompass both capital and valuation issues.

The criteria contained in Paragraph 13.a. for determining whether an investment is strategic equity is overly subjective and it would be difficult to measure and document how the influence of the IAIG would reduce the volatility of the investment. We would propose that the first sentence be revised to read, “Based on quantitative evidence, the IAIG is able to demonstrate to its GWS on an annual basis that the value of the [strategic] equity investment is less volatile than the value of other equities.”

The six year holding period criterion for strategic equity in Paragraph 13.b. is subjective and does not recognize that an investor may decide to exit an investment for a number of reasons, including a determination that the investment no longer meets the investor’s risk appetite, hurdle rate or strategic goals, each of which may change over time.

The reference to “the consistency of such strategy with the main policies guiding or limiting the actions of the participation and the IAIG” is unclear. An investment strategy may change over time to reflect the evolution of the investment, or changes in risk appetite, hurdle rate or strategic goals.

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<sup>5</sup> <https://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf>

<sup>6</sup> <https://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf>

<sup>7</sup> [https://www.swissre.com/dam/jcr:513b66a1-0ea5-485a-8ef8-eeaec27b6749/Infrastructure\\_Investment\\_IIF.pdf](https://www.swissre.com/dam/jcr:513b66a1-0ea5-485a-8ef8-eeaec27b6749/Infrastructure_Investment_IIF.pdf)

In closing, we would encourage the IAIS to reconsider the prudential treatment of the full range of insurance equity investments, including but not limited to infrastructure and strategic equity investments, and apply an approach that aligns with the true risk profile of these assets, which is a lower risk profile than is currently reflected in the ICS. The current persistent low rate environment makes these investments an ever more critical part of robust asset/liability management and it is important for insurance supervisors to provide the proper risk management incentives to insurers through an appropriate risk-based prudential capital treatment.

We appreciate the opportunity to provide feedback on the Stock-take and we are available to discuss our comments in greater detail.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mary Frances Monroe", with a long horizontal flourish extending to the right.

Mary Frances Monroe  
Senior Advisor and Insurance Lead

**Infrastructure and Strategic Equity – Prudential Capital Treatment**

**IIF Literature Review -- Infrastructure**

**November 2020**

**Infrastructure**

<https://www.worldbank.org/en/publication/wdr2020>

**World Bank World Development Report 2020: Trading for Development in the Age of Global Value Chains**

- Infrastructure investment can help advance global value chains, particularly benefitting lower income countries that particularly need economic growth and advancement
- In particular, investment in ICT infrastructure can advance global value chains in services
- The failure of countries to coordinate the provision of infrastructure impedes global value chain investments, expansion and upgrading
- Coordinated efforts to develop infrastructure can enhance international connectivity

<https://www.worldbank.org/en/news/feature/2017/12/22/risk-and-capital-requirements-for-infrastructure-investment-in-emerging-market-and-developing-economies.print>

**Risk & Capital Requirements for Infrastructure Investments in Emerging Markets and Developing Economies, December 2017**

- Infrastructure is a natural match for insurers' long-term liabilities but, as of the 2017 data of this report, data indicated that insurers allocate less than 2.5 percent of AUM to infrastructure investment, in part because of regulatory capital charges
- New empirical evidence supports a risk-based reduction in the capital charge on infrastructure investments, including the capital charge in the ICS
  - Only the intrinsic risk profile of infrastructure debt vis-à-vis the standard risk assumptions on long-term debt was considered. Moody's found that, for a 10-year risk horizon, the annual expected loss of project finance loans (1.6 percent) is half of the expected losses implied by "Ba/BB"-rated non-financial corporates. Under the ICS, the implied capital charge would drop from 12.7 to 10.7 percent, consistent with the estimated economic capital within the range of 10.5 to 13.8 percent (based on the 99.5 percent conditional tail expectation).
- A (then)-recent Moody's study (Moody's Project Loan Data Consortium) supports a more favorable treatment of infrastructure debt since the cumulative default probability lowers as the debt matures to the brownfield stage
- Even a modest reduction in infrastructure capital charges could boost RoE and maximize finance for development, unlocking an important source of long-term capital for global growth

<https://www.oecd.org/g20/topics/development/Report-on-Risk-and-Return-Characteristics-of-Infrastructure-Investment-in-Low-Income-Countries.pdf>

### **Risk and Return Characteristics of Infrastructure Investment in Low Income Countries, 3 September 2015**

Focused on low-income countries and does not address prudential capital treatment but some findings and recommendations have broader implications for the prudential treatment of this asset class:

- Calls for further differentiation of risks linked to specific infrastructure sectors and differentiation between greenfield and brownfield investments
- Need to understand risks at different phases: project development, construction, operation and termination
- Need for additional data on the quality of existing infrastructure networks to reassure investors, strengthen the credibility of government commitments and avoid asymmetric information among public and private partners
- Need for additional data on the risk of infrastructure projects, both at the project level and as an asset class
- Need to avoid painting infrastructure risk with a broad brush and focus on long-term prospects
- Need to consider non-financial risks: e.g. political and regulatory risks, technical risks and which party is best suited to mitigate those risks

<https://register.eiopa.europa.eu/Publications/Consultations/FAQ%20on%20Advice%20on%20infrastructure%20corporates.pdf>

### **EIOPA Technical Advice on the identification and calibration of infrastructure investments risk categories, i.e. infrastructure corporates, June 2016**

- EIOPA advises to enhance the asset class for high quality infrastructure investments under Solvency II
- Risk charges for investing in qualifying infrastructure corporates have been carefully calibrated to the respective risks leading to a different treatment
- To benefit from a differentiated treatment, insurers should conduct due diligence and have adequate risk management systems
- Qualifying investments must demonstrate revenue predictability and credit quality and are restricted to specified (but fairly broad) lines of business

<http://documents1.worldbank.org/curated/en/125511521722022110/pdf/WPS8373.pdf>

### **Credit Risk Dynamics of Infrastructure Investment: Considerations for Financial Regulators, Andreas A. Jobst, March 2018**

- Need to crowd in private capital to counter the fact that the need for investment outstrips the capacity for development assistance
- Infrastructure investment increases demand for goods and services and creates employment/raises productive capacity
- Infrastructure investment can also finance the low-carbon transition and enhance socio-economic resilience



- Long-term fixed income instruments with resilient revenue streams match the long-dated liabilities of insurers, particularly life and annuity providers
- Except for Solvency II, insurance regulation treats infrastructure debt like any other long-term debt, which attracts relatively high capital charges
- The diminishing marginal default risk of infrastructure debt over time cannot be approximated by a linear positive function of amortization in the current internal models-based approaches
  - The expected loss is equivalent to low investment grade rated non-financial corporates
- A differentiated capital treatment would encourage a more efficient use of capital for infrastructure finance
- Infrastructure finance can bring significant diversification benefits to larger portfolios
- Insurers would be ideally suited as financiers of projects in the operational phase of projects by refinancing bank loans or providing continued funding

<https://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf>

### **Infrastructure Financing Instruments and Incentives, OECD, 2015**

- Notes that infrastructure projects tend to produce stable cash flows in the operational phase
- Need to consider intangible social benefits
- Lack of transparency and data impede measurement of investment performance
- Potential for large information asymmetries
- Regulators need a better understanding of the investment channels for infrastructure investment and related risks in order to calibrate the risk-based regulatory frameworks adequately to the risks of such investments
- Infrastructure investment risks: political and regulatory risk; macroeconomic and business risks; and technical risks
- Risks by project phase: project development, construction, operation and termination; paper includes good risk lexicon
- Ability to diversify operational risks across a portfolio of projects; risk transfer mechanisms also mitigate risk
- Financial risk mitigants:
  - Guarantees
  - Private sector insurance and external credit enhancement
  - Hedging with derivatives contracts
  - Contract design (e.g. take or pay)
  - Public provision of capital or first loss positions
  - Public “cornerstone” investments
  - Grants and tax incentives

<https://www.swissre.com/institute/research/sigma-research/sigma-2020-03.html>

### **Power up: investing in infrastructure to drive sustainable growth in emerging markets, No 3/2020**

- Insurers are well positioned to support infrastructure needs
- Attractive yields can match long-term liabilities

- Insurers can also underwrite the risks inherent in the construction and operational phases of infrastructure projects
- Infrastructure investment can support increases in future productivity, new capital formation, output growth, GDP per capita and insurance penetration and also supports UN SDG 9: sustainable and resilient infrastructure
- Finance embedded risk transfer can be used to insure the cash flows of the loans in the case of a disaster event
- Contractors' all risk and Delay in start-up insurance can also mitigate risks

[https://www.swissre.com/dam/jcr:513b66a1-0ea5-485a-8ef8-aaec27b6749/Infrastructure\\_Investment\\_IIF.pdf](https://www.swissre.com/dam/jcr:513b66a1-0ea5-485a-8ef8-aaec27b6749/Infrastructure_Investment_IIF.pdf)

#### **Infrastructure Investing. It Matters, Swiss Re and IIF, 2014**

- Role of long-term infrastructure investing as a driver of cost-effective growth, a contributor to increased productive capacity and productivity, a source of diverse private capital markets funding and a financial markets stabilizer
- Despite the benefits of infrastructure investment, the creation of a widely recognized and well-functioning infrastructure asset class has been slow in coming
- It should not be assumed that long-term investors simply buy assets to hold to maturity; investors need the ability to make adjustments to their portfolios as needed
- Consistent and harmonized regulatory treatment that is not pro-cyclical can promote infrastructure investment that can benefit societies and economies

<file:///D:/Moody's%20-%20Default%20Trends%20%E2%80%93%20Global%20August%202020%20Default%20Report%20-%20August%202020.pdf>

#### **Default Trends Global – August 2020 Default Report**

- Overall review, not infrastructure focused
- Relatively low default rates in the technology and utilities sectors

<file:///D:/Moody's%20-%20Infrastructure%20&%20Project%20Finance%20%E2%80%93%20Global%20Defaults%20&%20recoveries%20-%20Fewer%20coronavirusdriven%20downgrades%20than%20nonfinancial%20corporates%20-%20June%202020.pdf>

#### **Moody's Investors Service Sector In-depth Report, Infrastructure & Project Finance – Global: *Defaults & recoveries: Fewer coronavirus-driven downgrades than nonfinancial corporates, June 2020***

- The COVID-19 slowdown is weighing on the credit quality of infrastructure and project finance entities but at a much lower rate compared to nonfinancial corporates (e.g. from March to May 2020, 66 corporates defaulted compared to two corporate infrastructure and project finance issuers)
  - For the longer period of May 2019 to May 2020, there were six corporate infrastructure and project finance defaults

- Moody's rates over 5,000 nonfinancial corporates and approximately 1,735 infrastructure and project finance issuers as of 31 May 2020
- Moody's expects that infrastructure and project finance will perform better as an asset class than nonfinancial corporates in the COVID-19 downturn, based on default trends during previous recessions across both sectors, defaults since March 2020 and the fundamental characteristics of the sectors
- As of 10 June 2020, less than 20% of infrastructure and project finance ratings have a negative outlook or are under review for downgrade and sovereign rating actions were behind many of the downgrades
- Rating drift for total infrastructure and corporate infrastructure was less pronounced than for nonfinancial corporates
- 83% of infrastructure and project finance issuers are rated investment grade as of 31 May 2020 and many benefit from structural protections to lenders, contractual revenue streams not exposed to market risk and government support that support credit quality
  - Infrastructure and project finance credits with market risk, reduced demand because of social distancing measures or energy exposures are most vulnerable to a deterioration in credit quality
    - These credits include unregulated utilities and transportation; however, strong liquidity and structural support can mitigate demand risk exposure
    - Regulated utilities and availability-based public-private partnerships are most resilient

[https://www.standardandpoors.com/pt\\_LA/delegate/getPDF;jsessionid=B81EE4DC120F300560F9C972D03D77C9?articleId=2425191&type=COMMENTS&subType=](https://www.standardandpoors.com/pt_LA/delegate/getPDF;jsessionid=B81EE4DC120F300560F9C972D03D77C9?articleId=2425191&type=COMMENTS&subType=)

- Infrastructure assets and projects face a bigger economic and financial test from the coronavirus pandemic than during the 2008-09 financial crisis, when they proved to be fairly resilient; however, impacts are likely to differ by asset class, with airports and assets related to social mobility most negatively impacted
  - For airports, a three- to five-year recovery period to pre-pandemic levels is anticipated
  - Regulated utilities should fare better, but constrained by sovereign credit ratings
- Low infrastructure sensitivity to COVID-19 in the regulated utilities sector, medium for power generation, high for volume toll roads and very high for airports
- Government rescue packages will lead to higher sovereign debt and less scope for government investment but governments likely will engage in extraordinary measures to accelerate recovery

[https://www.moodys.com/research/Moodys-Infrastructure-sector-demonstrates-low-risk-of-credit-losses-stable--PBC\\_1187993](https://www.moodys.com/research/Moodys-Infrastructure-sector-demonstrates-low-risk-of-credit-losses-stable--PBC_1187993)

**Research Announcement: Moody's – Infrastructure sector demonstrates low risk of credit losses, stable credit quality for \$2.8 trillion of raised debt, August 2019**

- Infrastructure debt securities remain less likely than non-financial corporates to incur credit losses, particularly over longer time horizons
- On average, infrastructure ratings have been 62% less volatile than nonfinancial corporate ratings over the time period 1983-2018

<file:///D:/Moody's%20-%20Infrastructure%20&%20Project%20Finance%20Infrastructure%20default%20and%20recovery%20rates,%201983-2018%20-%20August%202019.pdf>

### **Infrastructure & Project Finance, Infrastructure default and recovery rates, 1983-2018, August 2019**

- In aggregate, infrastructure debts have been less likely than nonfinancial corporate issuers to incur credit losses, especially over longer horizons
  - On average, an infrastructure debt security lost 0.3% of its face value over five years and 0.4% of its face value over 10 years, compared with 6.0% and 8.8%, respectively, for a nonfinancial corporate issuer
  - Infrastructure ratings have been more stable than nonfinancial corporate ratings
  - Ratings accuracy for corporate infrastructure and project finance ratings has been modestly higher than for nonfinancial corporate ratings over one- and three-year horizons; ratings accuracy is equivalent for the two sectors over a five-year period

## Appendix 2

Data source	Description of the type of data and rationale	Publicly available	Time period available	Data update frequency
Infrastructure Trusts	UK Traded investment Trusts, self-created value weighted index	Yes	2006	Daily
EDHEC private infrastructure indices	Various type, broad, unlisted, corporate, project GBP & EUR <a href="https://edhec.infrastructure.institute/indices/">https://edhec.infrastructure.institute/indices/</a>	Yes	2006	Monthly
Broad infrastructure & Utility indices	Various indices but including corporates adds dilution.  DJ BROOKFIELD (USD) FTSE DEVELOPED CORE (USD) FTSE EMERGING MARKETS CORE (USD) FTSE GLOBAL CORE (USD) MSCI EUROPE (EUR) MSCI_WORLD (USD) S&P GLOBAL (USD) FTSE UTILITIES (GBP) STOXX600 UTILITIES (EUR)	Yes	2000	Daily

**Infrastructure and Strategic Equity – Prudential Capital Treatment**  
**IIF Literature Review – Strategic Equity**  
**November 2020**

### **Strategic Equity**

Strategic equity investments by insurers include:

- Derivatives, structured products and other strategies for reducing/mitigating/hedging investment-related exposures and/or enhancing yield
- Internal financing strategies (e.g. investment subsidiaries or pools, investment funds, structured investment vehicles)
- Direct and indirect investments in:
  - Direct private placements
  - Limited partnerships
  - Private equity and hedge funds
  - Joint ventures
  - Start-ups
  - Real estate

Long-term equity investments by insurers can finance the economy and, in particular, small and medium-sized entities that issue unlisted equity and debt

Equity investments by insurers can be an alternative to bank financing, especially as banks retrench in the face of higher loss provisions for non-financial corporate legacy exposures

<https://www.oecd.org/pensions/Evolution-insurer-strategies-long-term-investing.pdf>

**The evolution of insurer portfolio investment strategies for long-term investing, Helmut Grundl, Ming (Ivy) Dong, Jens Gal, OECD Journal: Financial Market Trends, Volume 2016, Issue 1**

- Regulation should neither unduly favor nor hinder long-term investment but, rather, should place priority on incentivizing prudent asset and liability management with mechanisms that allow for a true and fair value of insurers' risk exposures
- Large insurers hold relatively more diversified insurance and investment products, which given them relatively greater latitude to invest in assets or underwrite obligations that could otherwise be considered risky on a stand-alone basis
- ORSAs can help insurers to understand the risks of their investments
- Capital requirements could better capture the risk management considerations for long-term investments
- Investments through public-private partnerships could be granted to increase the expected return on long-term investments and, at the same time, decrease their risk
- The insurance industry contributes to economic efficiency and foster economic growth:
  - Improves risk allocation and reduces transaction costs
  - Provides economic agents with a more stable financial basis

- Encourages risk mitigation by monitoring risks
- Serves as an alternative and supplemental financial support in the event of economic losses
- A long-term investment asset class should be reflected in the capital requirements according to actual risk, with lower requirements for cash flows that reflect low volatility and low uncertainty
- Regulation that has the possibility of greater discretion in capital charges for investments in certain asset classes, when accompanied by appropriate risk management, could facilitate and address the need for long-term investment

[https://ec.europa.eu/info/sites/info/files/191216-insurers-pension-funds-investments-in-equity\\_en\\_2.pdf](https://ec.europa.eu/info/sites/info/files/191216-insurers-pension-funds-investments-in-equity_en_2.pdf)

**Study on the drivers of investments in equity by insurers and pension funds, European Commission, December 2019**

- Equity delivers a higher return over the long run, adjusted for risk and volatility, provides important diversification and hedging benefits, and allows insurers to compensate for a lack of sufficiently long maturities in the bond markets
- Cash flows related to equities can help manage duration mismatch
- The prudential framework affects the asset allocation, within the limits of the insurer's risk appetite
- The report contains specific findings as to the mixed impact of Solvency II and IFRS on equity investments
- The theoretical model shows a positive relationship between higher equity investments and an increase in the internal rate of return on own funds (but this finding is dependent on the observation period)