



August 30, 2018

Dietrich Domanski
Secretary General of the Financial Stability Board
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Re: Evaluation of the effects of financial regulatory reforms on infrastructure finance

Dear Mr. Domanski:

The Institute of International Finance (“IIF”) and the Global Financial Markets Association (“GFMA” and, together with IIF, the “Associations”) welcome the opportunity to respond to the request of the Financial Stability Board (“FSB”) to submit views on the effects of financial regulatory reforms on infrastructure finance (the “Consultation” or the “Report”).¹ The Associations appreciate the FSB’s initiative in launching a new program for evaluating the impacts of regulatory reforms overall. Examining effects and potential unintended consequences is crucial in enabling regulatory fine-tuning and ensuring that reforms contribute to optimal outcomes for society as a whole.

The priority of the Argentinian G20 presidency on improving the environment for infrastructure projects is particularly important, as this area will especially benefit from enhanced regulatory consistency alongside a review of elements of the post-crisis regulatory architecture which impact the ability of financial institutions to engage in infrastructure finance (“IF”). The FSB Report in this regard is a comprehensive review of the issues for IF and a good basis for better understanding trends in the financing of real economic activity and the contributions of reforms to the G20 objectives of strong, sustainable, balanced and inclusive economic growth. We believe, however, that certain conclusions drawn in the Report do not capture the negative implications of some reform initiatives on the global availability of IF.

Specifically, the FSB’s framework is limited to examining fully implemented regulations, which prevents it from anticipating detrimental future effects of regulations that are still in flight. It also neglects the importance of ensuring that international regulation currently under development gives due regard to the importance of the long-term investment horizon and asset/liability matching to support IF.

¹ Financial Stability Board, *Evaluation of the effects of financial regulatory reforms on infrastructure finance: Consultative Document*, 18 July 2018.

Our comments herein reflect upon the seventeen questions posed by the FSB in the Consultation² and we discuss the nature of IF as a subset of project finance under the specialized lending category for the purposes of classification by the Basel framework. We also provide feedback on trends seen by the industry in the financing of infrastructure in both Advanced Economies (“AE”) and Emerging Market and Developing Economies (“EMDE”), along with our analysis on the banking and insurance regulatory impact for the provision, availability and incentivization of IF.

Fundamentally, we believe the FSB should reevaluate its conclusion that the impact of regulatory reforms on IF is secondary to other issues by taking into account the priority set by the G20 on improving capacity for global infrastructure investment and establishing infrastructure as an asset class. The FSB should set a target to work closely with other international standard setting bodies, in particular the Basel Committee on Banking Supervision (“BCBS”) and the International Association of Insurance Supervisors (“IAIS”), to make specific changes to the implemented and pending reform standards in order to improve access globally to IF. The FSB should also emphasize the need for international standard setting bodies, when designing new standards or reviewing existing standards, to take into account the G20’s commitment to support growth, and the role that IF has to play in this respect.

In addition, as we believe the FSB’s work in the area of post-crisis reform review is of critical importance, we continue to suggest it should go further. With its framework finalized in July 2017, the FSB has set a modest ambition of just one to two confined projects per year. To provide comprehensive analysis, this initiative needs greater ambition, embracing cumulative impact analysis, with the support of additional resourcing from other areas, so that the delivery of these projects can be expedited.

Lastly, while we appreciated the opportunity to attend the FSB workshop on IF in February in London and we are grateful for the short extension granted by the FSB for our comments on this consultation, we believe industry outreach should be improved as further topics are considered for review. A five-week window for comments presents obvious limitations. Though we understand the expectations imposed by the G20 on the FSB in delivering a final report ahead of the 2018 Leaders’ Summit, serious consideration should be given to extending the time for public comment on future projects in line with the norms of nearly all international standard setting bodies.

We are grateful for your review of our feedback. We look forward to engaging further with you on this topic and on future areas of regulatory reform evaluation.

If you have any questions, please contact us or Matthew Ekberg (mekberg@iif.com) / Constance Usherwood (Constance.Usherwood@afme.eu).

Very truly yours,



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² IBID, P. iii-v

Evaluation of the Effects of Financial Regulatory Reforms on Infrastructure Finance

The Associations welcome the focus of the FSB on understanding the effects of the post-crisis reforms and in particular their impact on real economic activity and their contribution to the G20 objectives for global growth. Over the last ten years, the G20, through the international standard setting bodies, has achieved the goals of setting higher quality capital standards and mitigating pro-cyclicality; reforming compensation practices to support financial stability; establishing global liquidity standards; improving Over-The-Counter Derivative (“OTC”) markets; and addressing cross-border resolution. Authorities around the world have begun implementing these reforms. Concurrently, enhanced supervision and prudential standards have helped in further safeguarding the overall financial system.

Financial institutions in turn have responded, making significant advances in raising capital, deploying qualified staff for new responsibilities such as recovery and resolution planning, enhancing internal and external reporting, and upgrading corporate governance and risk management standards on a comprehensive basis. In doing so, banks have become more resilient and robust, in terms of holding more and better-quality capital, increased liquidity and less leverage.

There is indeed no desire on the part of the financial services industry to turn back the clock on what has been achieved. Nevertheless, the G20 reform objectives need to be considered in a dynamic environment, where economic and societal priorities have continued to evolve since the immediate post-crisis period. Undertaking such a review (and finding items that need tweaking or adjusting) is not a criticism of what went before – rather, it reflects the concepts of dynamic implementation and efficient resilience for regulation.³

As such, the FSB Report presents a unique opportunity to offer recommendations on refinements to the regulatory architecture on a consistent, global basis in order to improve access to IF. However, we believe the current, empirical assessment by the FSB on the impact of regulation for IF misses several fundamental areas where regulatory modifications would lead to increased IF capacity and enhance the opportunity for global growth. Specifically, the Consultation’s analysis does not recognize the opportunity to incentivize IF through the appropriate levels of regulation, while at the same time constraining risk - which is generally lower for IF than other types of bank intermediation.

To that end, and to address the questions outlined in the Consultation, we are pleased to provide the Association’s views on the following issues: 1. Trends in IF for EMDE and AE; 2. The risk profile of IF; 3. The impact of regulatory reforms (implemented and pending) for bank intermediated IF; and 4. The impact of current and pending regulatory and market forces on IF from an insurance perspective.

1. Trends for IF in EMDE and AE

Infrastructure investment has been identified by a wide range of public sector bodies and private sector groups as an essential component in addressing short-term and long-term growth challenges facing the global economy, both in mature and emerging markets. While infrastructure investment needs globally are estimated to be in the \$50 trillion range over the next 15 years, McKinsey analysis suggest that there will be a funding gap of some \$350 billion annually just to support current expected growth rates. This would translate to an infrastructure financing gap of

³ In April 2017, FSB Chairman Mark Carney outlined the important collective efforts of policy makers, regulators and the private sector to make the financial system safer and more resilient, offering a blueprint for further progress that included undertaking dynamic implementation of the post-crisis reform agenda and delivering efficient resilience: Mark Carney, *What a Difference a Decade Makes*, speech at the IIF Washington Policy Summit, Washington, April 20, 2017; fsb.org/wpcontent/uploads/What-a-Difference-a-Decade-Makes.pdf

over \$5 trillion—an amount that would triple if the additional investment needed to meet the UN Sustainable Development Goals is included.⁴ Given strained public-sector finances worldwide, this funding gap will need to be closed in large part by mobilizing private sector investment.

Infrastructure development remains particularly critical to the growth of developing economies. With growing populations, urbanization and globalization, the demand for power, water, roads, railways, internet access and other key infrastructural developments is increasing rapidly in EMDE. A recent World Bank Group study, for example, identified that the necessary investment in infrastructure in EMDE specifically over the next decade is around US\$2 trillion annually, around double the current level.⁵ These needs are driving a large and diverse pipeline of projects in many areas, though they are largely financed by DFIs and local lenders. Government initiatives such as the Belt and Road project in China are also playing a key role in increasing investment in Asia/EMDEs.

The market for advanced economies, however, has significantly slowed as a result of the financial crisis and fostering the supply of bankable projects remains a major issue compared to investor appetite, in line with the focus on infrastructure development in the G20 agenda. In mature markets, new projects are needed to refresh existing infrastructure and to enable the strong development in renewable energy and other associated sectors linked to the goals of the Paris Treaty on climate change. Beyond these areas, while a relatively limited number of other greenfield projects are presently expected, major investments often need to be made to address the evolving needs of AEs' internal population as well as AEs' competitiveness.

Search for yield can be a factor in growth for IF and can also explain the entrance of new players into the IF market, including debt driven IF funds.⁶ IF growth is largely driven though by the pipeline of projects to be financed but can still be affected by other factors raised in the Consultation including, but not limited to, the macro-financial environment, government policy and political risk, alongside regulatory impediments (noted in detail in sections 3 and 4 of this letter). Deepening the financial markets with new instruments/ vehicles such as project bonds and sovereign wealth fund investments, mobilizing new investors both on the debt and equity side including international sponsors and pension funds, along with making necessary adjustments in the regulation impacting the cost of funding of infrastructure loans, will be the key drivers for financing infrastructure projects in the long run for both AE and EMDE.⁷ This is already recognized to some extent by initiatives such as the European Union's ("EU") Capital Markets Union, a desire from Multilateral Development Banks ("MDB") to crowd in capital, and the role Export Credit Agencies ("ECA"), among others, play in lenders' financing decisions and project bankability through guarantees.

2. Risk profile of IF

A key aspect that we believe is missing from the Consultation analysis is a thorough discussion on the risk profile of IF and its relation to proper levels of regulation. On average, IF (as subset of project finance under the specialized lending category for the purposes of classification by the

⁴ McKinsey Global Institute, *Bridging Global Infrastructure Gaps*, June 2016.

⁵ Inderst G. and Stewart, F. (2014). *Institutional Investment in Infrastructure in Emerging Markets and Developing Economies*, Public-Private Infrastructure Advisory Facility (PPIAF), World Bank Group; <http://www.ppiaf.org/sites/ppiaf.org/files/publication/PPIAF-Institutional-Investors-final-web.pdf>

⁶ We note that the Consultation takes into account, to varying degrees, banking and insurance and their role in IF. However, the FSB should also consider the wider universe of asset owners providing infrastructure finance such as pension funds and sovereign wealth funds when updating their analysis in the future.

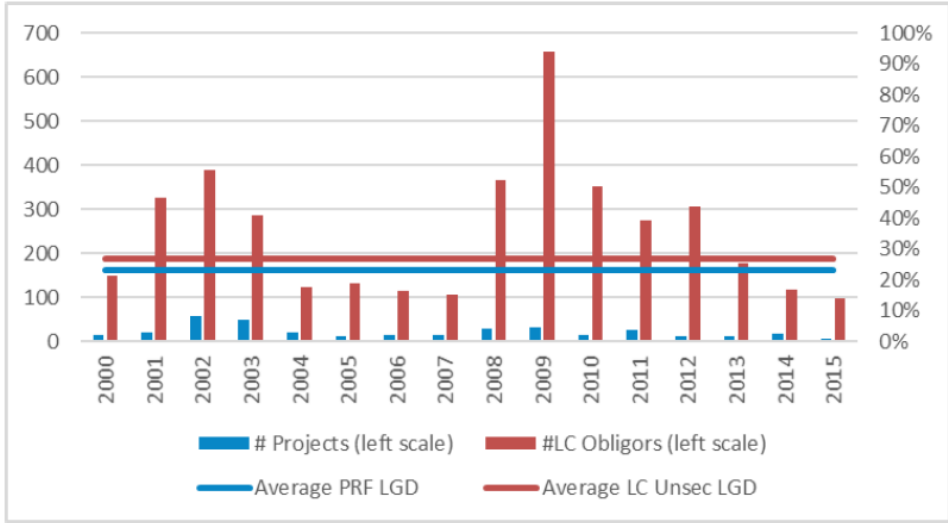
⁷ It is also important to note that specificities in national approaches to IF can have a major impact on the market. The Report takes a general view on AE versus EMDE, but would benefit from greater analysis at country level.

Basel framework) has exhibited low risk levels. This is due to the bespoke, structured and collateralized nature of this financing. For example, for project finance, structures are put in place so that the lender controls the cash flows generated from the underlying asset(s) and/or benefits from the security of the asset itself. On average this leads to low loss rates.

Given its unique nature, IF can also be described as “risk sensitive”. In other words, it is by definition a non-standardized business, not suited to flat risk weights. Banks can structure loans with conservative terms - taking into account the position in the cycle - and tight covenants and collateral structures which allow banks to pro-actively monitor the risk and anticipate potential payment difficulties well ahead of a default. The quality of the structuring of the deal is a key factor in the level of recovery in case of default.

Industry data show that historical loss rates are in the range of 0.12% – 0.35%, depending on the type of specialized lending product, with data on project finance collected by The Annual Global Project Finance Default and Recovery Study by S&P Capital IQ from December 2015 revealing an average Probability of Default (“PD”) of 1.5% and Loss Given Default (“LGD”) of 23% over the last 15 years. S&P’s observed default rates for project finance assets graded A, BBB and BB, which were 0.13%, 0.30% and 0.90% respectively, and average recovery rates of between 74% and 84% (including during the period of recession).

According to a study conducted by Global Credit Data (“GCD”) in 2018, project finance also shows on average a lower LGD than large corporate loans:



The risk profile of IF also lends itself to the structure of such transactions and the relationship of different market participants. Though risk in infrastructure financing is generally very low compared with other types of finance, construction (greenfield) and operational (brownfield) phases’ risks are different, where LGD correlates with whether or not the project defaulted in the construction versus operational phase, with a lower average LGD associated with the latter.

In 2017, Moodys conducted a study on credit performance of project loans in EMDE specifically. The study found that these loans exhibit a generally resilient credit performance, supported by predictable, resilient revenue streams over the long term, especially where revenue risk is

transferred through an offtake contract, which mitigates repayment contingencies from price and demand uncertainty.⁸

The World Bank also recently published a paper on the credit risk dynamics of infrastructure investment.⁹ The report found that “infrastructure projects are asset-intensive and generate predictable and stable cash flows over the long term, with low correlation to other assets. The historical default experience of infrastructure debt suggests a “hump-shaped” credit risk profile, which converges to investment grade quality within a few years after financial close—supported by a consistently high recovery rate with limited cross-country variation in non-accrual events.” The report went on to say, however, that “resilient credit performance of infrastructure—also in emerging market and developing economies— is not reflected in the standardized approaches for credit risk in most regulatory frameworks. Capital charges would decline significantly for a differentiated regulatory treatment of infrastructure debt as a separate asset class.”¹⁰

The FSB’s evaluation results suggest that financial reforms have not had a disproportionate effect on IF compared to other types of finance. We disagree. As explained below, the combination of higher capital ratio requirements and buffers, the introduction of a leverage ratio and other reforms which incentivize banks to reduce the size of their balance sheet has had a disproportionate impact on long term assets, including IF, as those assets weigh on the balance sheet size for longer than other types of wholesale finance. We would note that as IF generally exhibits a risk profile commensurate to low rates of default and a natural structure between construction and operational phases, a fresh view on certain aspects of the regulatory reform agenda would be warranted specifically as they relate to IF. This would contribute to the goals of the G20 on improving infrastructure financing availability by incentivizing investment in this area of lending and removing regulatory inducements to deleverage.

3. Banking regulatory impact on the provision and availability of IF

The FSB’s conclusion that the impact of regulatory reforms on IF is secondary to other issues, we believe, fails to take into account the very real effect regulation has on the pricing and volume of infrastructure activities. Regulatory developments can imply unfavorable terms for clients and consumers which are not commensurate with the risk of the underlying asset, in contradiction to G20 objectives. A core element of the FSB framework is comparing social benefits of regulations with social costs. We fully understand the need for appropriate levels of regulation corresponding with levels of risks involved. However, by comparing social benefits and costs of regulations on infrastructure finance relative to risk, the FSB and the global standard setting bodies should consider certain revisions.

The empirical evidence gathered on this issue in the Consultation also does not generally correlate in our view with industry experience. An improved regulatory environment can have a strong impact on incentivizing the financing of well designed infrastructure projects and help level the playing field between banks and new types of investors in this area.¹¹ Furthermore, we would argue that regulation is intrinsically linked to the impact of macro-economic factors such as interest rates, government policy and financing by ECAs and MDBs, and should therefore not be seen in isolation. For instance, the involvement of MDBs and ECAs can provide specific regulatory incentives such as credit enhancements to support infrastructure finance. In addition, rising

⁸ Moodys, *Default and recovery rates for project finance bank loans, 1983-2015: Resilient performance in emerging markets*, December 2017.

⁹ World Bank Group, *Credit Risk Dynamics of Infrastructure Investment Considerations for Financial Regulators*, 2018.

¹⁰ *IBID*, P. iii

¹¹ Increased regulatory requirements for banks financing has accelerated the entrance of new players in IF, making the evaluation and comparison of the different regulations applied to each necessary. For example, the different capital requirements/regulatory treatments as a function of format/debt provider can create distortions in the market that will favor the less regulated actors.

interest rates can have a significant impact on EMDEs and their credit ratings which again are reflected in the regulatory burden on supplying finance to projects in those regions.

Currently, the whole range of banks that are involved in large infrastructure projects can be impacted by the implemented and prospective global regulatory reform framework, which can limit their ability to adopt a long-term view for financing projects. Large banks, who have been the leaders in IF generally, have been obliged by post-crisis higher capital requirement to rethink their business models for IF. Many less specialized/medium size banks, who were not able to upscale their arranging roles, have exited the market. As the Basel framework sets limits on large exposures, infrastructure projects for small, local EMDE banks are also impacted.

Over-the-Counter (“OTC”) derivatives reform has increased the cost of infrastructure activities due to the requirement to post margin and the internal structure required to carry out the necessary reporting on hedged transactions. Project hedging is tailored by nature and cannot be clearable, therefore penalization for uncleared derivatives can unduly increase the cost for IF.¹² International Financial Reporting Standard (“IFRS”) 9 implementation (including the new impairment model and its classification and measurement approach) and its impact on long term lending also plays a role in banks’ appetite for IF.

There are also major sources of uncertainty for the current regulatory environment, where the continuous evolution of prudential framework for banks across jurisdictions (and specifically the national adoption of the finalized Basel III framework) creates difficulties in forward planning. This is particularly acute for IF, where the tenor of such projects makes long term preparation and regulatory certainty essential. We note that the Consultation has not specifically taken the finalization of the Basel III reforms into consideration. We believe this is a fundamental flaw in the overall analysis by the FSB, as these reforms now form the baseline for implementation of an updated regulatory structure for IF on a global basis.

Overall, there needs to be further incentives for IF by introducing not a preferential, but fair treatment for this type of financing with lower capital requirements and improved liquidity standards to better recognize the risk associated with these projects in order to support long term growth.¹³ Specifically, the following regulatory criteria is, in our view, impacting overall appetite for IF globally and should be reviewed as part of recommendations on changes by the FSB:

a. Advanced Internal Ratings Based Approach (“AIRB”)

The final Basel III standards have permitted the continuation of AIRB and Foundation IRB (“FIRB”), as well as a supervisory slotting criteria for specialized lending. We continue to believe

¹² We note that derivatives form an inherent part of the structuring of infrastructure projects, in order to provide better visibility to banks and investors over future cash-flows over a very long period of time. Projects are typically exposed to 1. Currency risk; 2. Inflation risk; 3. Interest rate risk and 4. Commodity risk and hedging is needed to further enhance visibility and therefore bankability. The increased cost/limited capacity for such hedging instruments due to tightened derivatives regulation impacts the cost of the projects and in extreme cases, notably in low income countries, may make projects that make full development sense unbankable.

¹³A good initiative in this sense is the European Commission proposal under Capital Requirements Regulation 2 (“CRR2”) regarding a supporting factor for infrastructure-related exposures to enhance bank lending for infrastructure projects in the EU. To encourage private investments in infrastructure projects, it is proposed to lay down a more risk-sensitive regulatory environment that is able to promote high quality infrastructure projects and reduce risks for investors. In particular, similar to what it is foreseen for insurance undertakings, capital charges for exposures to infrastructure projects are reduced, provided those projects comply with a set of criteria capable to lower their risk profile and enhance the predictability of their cash flows.

Moreover, considering the relevance and main goals of the Paris Agreement, which was adopted within the United Nations Framework Convention on Climate Change (“UNFCCC”) on December 2015. We believe it is necessary to explore the approach of capital to green finance for IF at an international level where a more globally coordinated view is undertaken.

the AIRB is still the most risk sensitive measure for these types of products as banks, under the strict control of their national supervisor, implement risk weighting models in line with their internal risk analysis. It allows banks to finetune capital needs for each of their exposures by relying on internal models to quantify each risk factor, including specifically for LGD, where it is particularly important to take into account the value of collateral and security package attached to an exposure, which in the case of IF is a case-by-case analysis given each project is unique and generates a unique set of risk factors. However, new constraints have been added on the calculation of the LGD risk factor, such that model results can become immaterial for the lowest-risk exposures, among which infrastructure projects are prominent. A LGD “input” floor is introduced at 15% for most secured funding, likely including project finance.¹⁴ This level is high given the risk level for this type of lending, as noted earlier in this submission, and is not designed with project finance in mind.

The calculation formula proposed by the Basel Committee for the floor¹⁵ is also only appropriate for assets where a realistic market value can be assessed, which is seldom the case for infrastructure finance. This leaves a very important question mark over the interpretation of the text. It seems highly likely that a 25% LGD floor, at a minimum, would apply to most project finance transactions, since project finance assets do not meet the conditions defined for generic transaction (*i.e.*, not fitted for specialized lending) to be recognized as “secured”, and would therefore be treated as “unsecured”. Projects may end up with the same LGD, at the level of the mandated floor, leading to a lack of differentiation between very different risk levels, which is not a sound basis for the allocation of capital. While we appreciate the Basel Committee retaining use of the AIRB for specialized lending in the final Basel III package, overstatement of capital through risk-insensitive measures can in the case of IF harm economic growth and cause misguided origination incentives. The appropriate revaluation of the input floor further taking into account project finance could assist in incentivizing bank investment in this area commensurate with risk.

b. Supervisory Slotting Approach

The supervisory slotting criteria for banks that do not meet the requirements for the estimation of PD for their specialized lending exposures under the final Basel III reform package is not sufficiently sensitive to the risk of the underlying project, overstating the capital requirements for these projects for several reasons:

- The slotting criteria is lacking in granularity of risk weights and does not differentiate by the maturity of the infrastructure project. Moreover, this approach is not capable of differentiating between the various tranches in a deal and does not offer “continuity” on the risk assessment, forcing the banks to suffer “jumps” in capital consumption when an asset migrates from one slot to the other.
- The supervisory slotting approach does not fully recognize the guarantees for risk mitigation, discouraging a sound and active credit risk management of this portfolio. For instance, the guarantees of ECAs and certain MDBs can only be used as a factor for assigning risk weights to specialized lending exposures, but they cannot be used as a post-mitigation technique.
- An ECA guarantee applied in a project finance transaction is considered in the rating of the transaction when assigning the risk weight, resulting in a 70% risk weight which is

¹⁴ Basel Committee on Banking Supervision, *Basel III: Finalising post-crisis reforms*, December 2017, Para 85.

¹⁵ IBID, Paras 86 and 87

associated with the lowest category. However, the guarantor of this transaction is an ECA (sovereign guarantee) and the risk is supported by the guarantor; therefore, this transaction should be treated accordingly, resulting in most cases, in a 0% RWA.

Implications also exist for funded guarantees that are used to transfer the risk of a project finance. For example, in the case of the European Investment Bank (“EIB”), the cash collateral cannot be used as a risk mitigant for project finance as banks cannot replace the PD of the exposure with the guarantor’s borrower grade (*i.e.* a full substitution approach) or modify the LGD of the project finance exposures under the slotting approach.

When guaranteeing a project finance portfolio and transferring risk through a securitization, the Supervisory Formula Method cannot be used for unrated positions of securitizations where the underlying securitized exposures are project finance using the supervisory slotting approach. Therefore, banks are forced to externally rate these securitization positions to calculate the capital requirements. This makes the securitization inefficient in terms of cost, compared to the capital relief achieved. Thus, current regulation can disincentive any type of guarantee when the underlying asset is project finance under the slotting approach, thereby discouraging investment in these types of assets.

A more granular approach to the slotting criteria would assist in improving the overall appetite for the financing of IF. This concept was discussed in detail in the IIF submission to the Basel Committee on their consultation concerning constraints on the use of internal models approaches.¹⁶ In light of the FSB mandate to evaluate the implications of post-crisis reforms, further consideration should be given to how the supervisory slotting approach impacts IF and how it can be adjusted in line with proportionate levels of risk.

c. Standardized Approach (“SA”)

The recognition under Basel III of specialized lending as a specific asset class, the use of ratings for specialized lending exposures and the division between the pre-operational and post-operational phases where project finance is concerned in the final Basel III package are important steps towards increasing risk sensitivity for IF. Nevertheless, project finance exposures rarely issue specific external ratings when they are financed by banks. Therefore, these exposures will generally be subject to the flat risk weights proposed in the case of unrated projects (or for those in jurisdictions that do not permit the use of ratings). These RWAs are extremely high and do not reflect the risk reality of these projects.

For instance, the pre-operational phase is excessively penalized with a 130% risk weight, (the same risk weight as for defaulted exposures). This would appear disproportionate given that construction risk is highly collateralized and any additional drawdown on the financing is subject to a project meeting pre-agreed milestones. Generally, it is highly unlikely that a construction firm would abandon a project in the middle of the construction phase, given the amount of time and resources it has invested in it. However, it would be relatively easy to replace it with another construction firm, which would profit from all the work previously carried out at no cost.

As previously noted, project finance exposures exhibit lower risk and lower losses than corporate exposures, including unsecured corporates exposures, due to the structured and highly collateralized nature of these products. By definition this is a non-standardized business and thereby, flat risk weights do not reflect the underlying risk profile of these assets and their idiosyncratic features (for instance, highly collateralized nature and different types of collaterals,

¹⁶ IIF, *Consultative Document, Reducing variation in credit risk-weighted assets – constraints on the use of internal model approaches*, June 2017, Pp. 35-38

long loan maturities, different sponsors and developers). Other drivers which provide a meaningful risk differentiation should be taken into account, such as the maturity, the progress of the project, transaction and/or asset characteristics, the strength of the sponsor/developer and collateral.

Given that infrastructure investments generally have low rates of return, they are relatively more price-elastic compared to other kind of investments and magnify the impacts in terms of credit supply for this segment, a matter of great importance among EMDE.

In the case of EMDE, this type of instrument provided by banks is vital, given underdeveloped capital markets. Adverse treatment set for the specialized lending asset classes will particularly affect the ability of commercial banks to assist in the financing of key infrastructure developments. In addition, as projects in EMDE are commonly funded by EMDE banks which are typically on the SA, these banks will be penalized relative to larger global players by not being able to utilize more risk sensitive models for project finance.

Calibration of the SA risk weights applicable to this exposure class need to reflect the low risk levels emphasized in section 2 of this letter and should, for example, be lower than unsecured corporate risk weights.

d. Net Stable Funding Ratio (“NSFR”) and Liquidity Coverage Ratio (“LCR”)

The new Basel III liquidity rules can have a significant impact on IF. The financing of long-term projects obviously must be coherent with sources of long-term funding and, although the long tenors of project finance debt do not necessarily require matched funding of the same tenor, banks use relatively long-term funding in these cases to avoid the risk and cost involved with rolling over shorter term funding. This aspect naturally is included the cost of financing and increases the amount of prepaid fees included in loan contracts for IF. This is inherent to the business and not an issue.

What is problematic is some specific rules to compute the LCR and NSFR, which overstate the funding risk and create a funding need that represents an extra undue cost. The LCR can reduce the attractiveness of IF deals which include Letters of Credit (“LC”) and Revolving Credit Facilities (“RCF”), as they do not receive favorable treatment in terms of impact on net cash outflow over a thirty-day period. A bank will need HQLA in the amount at least equal to its liabilities for the full amount of any undrawn RCFs and a certain percentage for the amount of any undrawn LCs. This additional HQLA buffer will increase balance sheet size and deteriorate the leverage ratio. As it relates to the NSFR, required stable funding for trade finance facilities and export credit - instruments which are often used in IF - is also overstated in the BCBS rules, compared to the historical track record of these products.

We believe that both the NSFR and LCR should be reevaluated by the Basel Committee to assess their full impact on the dis-incentivization of IF. This can be done through the technical amendment process instituted by the Basel Committee and recently applied for adjustments to the Required Stable Funding (“RSF”) factor under the NSFR for the treatment of extraordinary monetary policy operations.¹⁷

e. Market Risk

One of the impediments for IF in terms of market risk rules is that currency mismatch as a source of revenue comes from inside the host country. This is critical to credit volume for infrastructure

¹⁷ Basel Committee on Banking Supervision, *Treatment of extraordinary monetary policy operations in the Net Stable Funding Ratio*, June 2018.

activities in EMDE, considering its impact on bankability itself. AE projects can generally be funded by their own currency while EMDE projects usually cannot and the government of such projects needs to undertake the risk of currency mismatch, which is usually a huge burden. The combination of the Fundamental Review of the Trading Book (“FRTB”), the standardised approach for measuring counterparty credit risk (“SA CCR”) and penalties applied to unclearable derivatives can make long term hedging difficult.

Under the proposed FRTB framework, EMDE currencies are not included in the list of Basel selected currencies and hence are subject to a differential and more punitive prudential capital treatment. This will constrain the development of derivative markets in EMDE, as well as having negative implications for the broader development of capital markets in EMDE . This is particularly relevant to IF given the long funding profile of infrastructure projects and the consequent importance of access to efficient hedging, and long-term funding, options. As the Basel Committee reviews FRTB and assesses revisions, the FSB should work with the BCBS to address issues noted herein in order to improve access to IF, particularly in EMDE.

f. Leverage Ratio

The introduction of a leverage ratio as a backstop to the risk based framework has modified the incentives given to banks in capital planning and allocation. Before the leverage ratio, balance sheet size was not a major driver for capital requirements. With the same balance sheet size, depending on the risk profile of the assets in the balance sheet, capital requirements could have been very different. With the leverage ratio becoming a second dimension of risk, balance sheet size, or rather leverage exposure, must be contained. This implies the need to either reduce portfolios, or to increase the velocity of the portfolio, by shifting assets out of the balance sheet . Obviously, long term assets such as IF are the most sticky, and rest in the balance sheet for long periods of time. In the absence of an efficient securitization market for such assets, banks have been very cautious not to onboard long term assets, should there be further ex post pressure. The issues for IF herein may also be impacted through implementation of the 2017 G-SIB surcharge.

While it is under consideration in some jurisdictions, regulators have also yet to confirm whether ECA backed assets will be outside the scope of leverage ratio requirements, as incremental leverage cost is higher than current margins required to give an adequate return on equity in this area. Confirmation that these assets are outside the scope of the leverage ratio will help to increase ECA backed IF.

4. Insurance and the impact of current regulatory and market forces for IF

We believe the Report does not adequately address the issues for regulatory and market forces impacting insurance and IF. Insurers, especially those offering long-term products, require a stable source of long-term investments to properly match their long-term liabilities. While several post-crisis reforms directly impacting the insurance sector remain in development, there are trends and regional and local models that provide a backdrop for identifying several ways in which the ability of the sector to invest appropriately in infrastructure vehicles can and should be improved to unlock the ability of insurers to deploy their resources from US \$25 trillion in assets under management worldwide. Amid these concerns, insurers are adjusting internal risk appetite decisions in balance with the regulatory environment to preserve continued support for investment in these assets, given their strong down-side protection and stable cashflows.

a. Treatment of risk

As noted more generally above, in several ways trends in insurance regulation also have resulted in misalignment between true economic risks of investing in infrastructure and measurements of

this risk. For example, insurance accounting that introduces excessive volatility through a “mark to market” methodology is fundamentally misaligned with the economics of long-term insurance business and its investments including in infrastructure. This is the basis for the global movement in insurance accounting for capital purposes, appearing in the EU’s Solvency II regime and currently a foundation for the IAIS Insurance Capital Standard’s “market adjusted valuation” (“MAV”) approach.

As noted in the FSB’s report, regulatory features that may affect infrastructure investments include measures aimed at smoothing out short term movements in regulatory balance sheets that can arise due to the recognition of assets at their market value. The final version of Solvency II introduced a series of long term guarantee measures including a ‘matching adjustment’ that recognize cash flow matching and long-term investment. Although this has still been quite restrictive on the types of assets that can be used to match illiquid liabilities, it excludes a wide range of long-term infrastructure projects that would otherwise be a natural fit for those liabilities.

In addition, in place already in various jurisdictions are regulatory capital requirements that have proven excessive relative to the underlying economic risks from infrastructure and other asset classes such as private debt (often used to finance infrastructure projects). These accounting and regulatory capital approaches make long term products and matching long term investments – a critical feature of asset-liability management for providers of long-term products - including in infrastructure, commercially challenging to offer.

From a global perspective, it will be vital to ensure that international regulation currently under development, particularly version 2.0 of the IAIS Insurance Capital Standard (“ICS”) gives due regard to the importance of the long-term investment horizon and asset/liability matching. Without it, insurers are unlikely to be able to play their natural role as providers of long-term capital for infrastructure, and more broadly to maximize their ability to contribute to financial stability and retirement security for consumers. To ensure this role is preserved, the FSB should use this focus on infrastructure finance to call on the IAIS to fully assess the potential impact on long-term products and the assets held against them prior to implementation of an ICS.

Accordingly, measures that recognize the matching of long-term liabilities with long-term assets will be critical. One such approach is an ‘own assets with guard rails’ (“OAG”) methodology, including the use of internal ratings advocated by many in the industry (and with similarities to an expansion of the matching adjustment approach). The proposed OAG approach also has the advantage that it would provide an appropriate framework to facilitate investment in equity infrastructure finance projects as well as debt.

Similarly, the FSB should encourage the IAIS to recognize the aggregation method as an outcome-equivalent alternative to the draft ICS MAV approach given the benefit it would afford jurisdictions that rely on the private insurance sector for continued offering of long-term guarantee products, such as retirement products. An aggregation method ultimately deemed “outcome equivalent” to the ICS would minimize disruption to markets, regulatory and business models and product offerings triggered by the establishment of a new market consistent regime such as the current draft ICS, and would support continued need for corresponding investment in long-term instruments such as infrastructure finance projects.

b. Impact of non-financial regulation

Some elements of non-financial regulation (*e.g.*, rule of law, tax policy, credit ratings, etc.) introduce substantial uncertainty that is not conducive to committing funds longer-term as

required by infrastructure projects. More specifically, the private debt market, which is often used to finance infrastructure, generally does not come with public ratings for a variety of commercial reasons motivated by the need to preserve confidentiality and competitiveness by the issuer and investors. The apprehension towards the use of internal ratings, transplanted from banking regulations, or even towards the use of third party “private” ratings, tends to result in this debt being treated as “unrated” which in turn attracts regulatory capital charges that are excessive relative to the risk profile of such debt. This misalignment between capital charges and risk reduces the appetite to invest in such instruments by regulated companies, thus providing an unfair advantage to unregulated competitors who are able to bid based on the true risks embedded in private debt.

c. Examples of impact of capital regulations

Investing decisions are made to maximize relative value measured from an economic perspective subject to a variety of constraints which include, *inter alia*, accounting, regulatory capital and risk appetite. These constraints, if material, can create a non-level playing field and drive suboptimal decisions for both the investor and society. A few examples illustrate where the blunt approach taken within the capital regulations has a material impact:

- Capital charges for infrastructure that inappropriately ignore the actual real-world stability and term of the underlying asset cash flows, and do not differentiate enough between risk profiles characterizing various non-fixed income assets may contribute a lack of infrastructure investment.
- The treatment of the private debt market, often used to finance infrastructure, as “unrated” and therefore subject to excessive regulatory capital charges that are inappropriate relative to the risk, and providing an unfair advantage to unregulated competitors who are able to bid based on the true risks embedded in private debt
- The current regulatory environment for insurance is not conducive to long-term financing of infrastructure projects. The short-term perspective inherent in mark-to-market accounting and regulations creates a disconnect with the long-term nature of infrastructure projects and their economic alignment with long-term insurance liability cashflows. Regulatory misalignment with the underlying economics will lead to poor risk / return choices, unfairly disadvantaging regulated companies over unregulated investors in competing for investment opportunities in infrastructure. We believe the interests of commercial investors and society at large converge when it comes to creating and safeguarding an economically rational investment environment. Economic risks and their measurement should be aligned, and accounting and regulatory standards should be encouraging, if not requiring, this objective.

d. Standardized debt document and disclosures

The Consultation does not focus enough on solutions to improve capital market access (*e.g.* through pooling of projects and securitization, among other things). The low yield environment has led many investors into infrastructure assets, thereby compressing spreads. While demand for infrastructure assets remains strong, supply is scarce. These two factors have had a very strong effect on the volume and pricing of infrastructure activities over recent years. There is a lack of standardization in financial reporting and disclosure documentation. This angle is missing and it inhibits more supply and, in particular the tradability of infrastructure projects. A standardized

debt documentation template should be universally applied.¹⁸ This would support the deal flow and encourage more supply whilst also enabling more demand by more efficiently mobilizing private sector financing.

Beyond the needed universal application of a standardized debt disclosure and reporting template, more public-private partnership (“PPP”) approaches should be considered and executed. Given the large debt overhang of many governments, more private sector funds need to be mobilized. A model PPP transaction of an advanced economy is needed to pave the way for more PPP infrastructure project approaches. In addition, multilateral development banks and regional development banks (including the EIB) should show more conditionality in their infrastructure lending practices. In particular, the multilateral development banks and regional development banks should only support projects that meet “best practices”/minimum standards for financial documentation and reporting, for example through the consistent application of the financial documentation template designed by the European Financial Services Roundtable mentioned above.

¹⁸ One developed by the European Financial Services Roundtable is available here:
<http://www.efr.be/documents/news/86.02.03.2015%20EFR%20Expanded%20on%20Infrastructure%202015.pdf>