



Tendencias y retos en materia de infraestructura en América Latina

Agenda

- 1. Introducción: Características crediticias de la infraestructura**
- 2. Entorno adverso y otros retos de la región**
- 3. Tendencias y oportunidades**

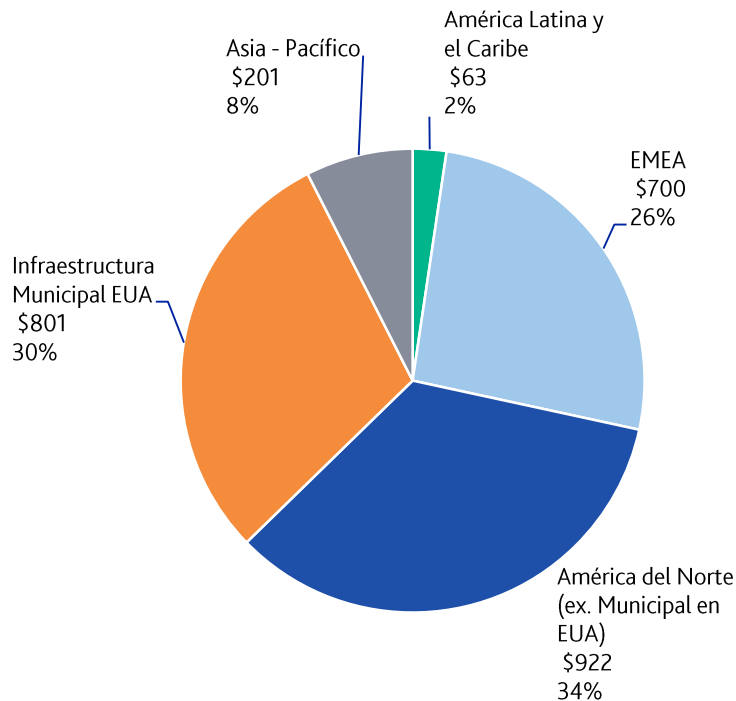
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Introducción: Características crediticias de la infraestructura

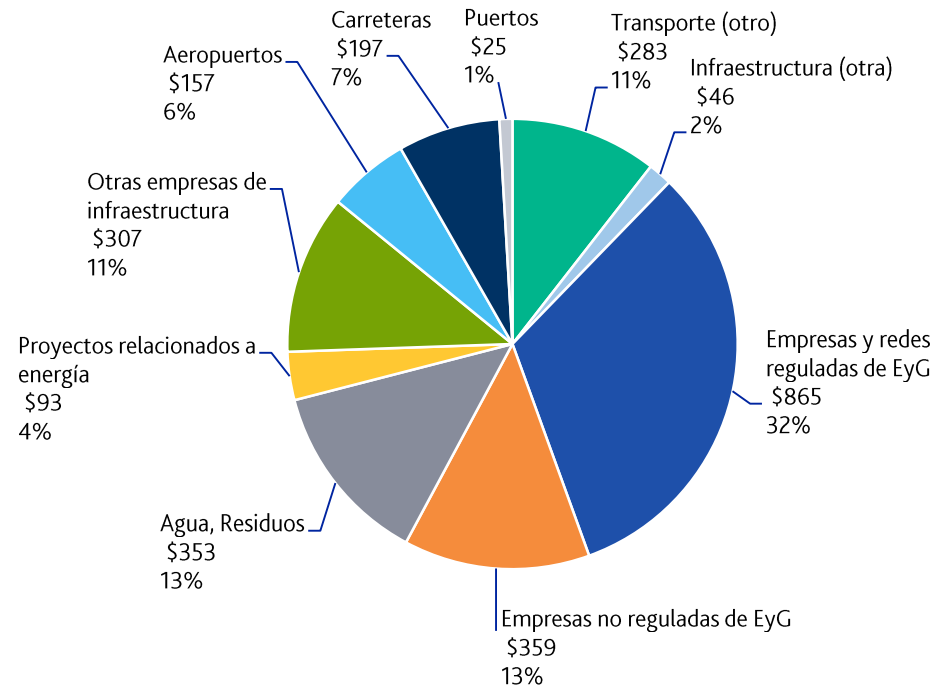
Moody's: \$2.7 billones de infraestructura calificada

Distribución regional y por sector de instrumentos de infraestructura (US\$, 2015)

Por región



Por sector



Fuente: Moody's "Infrastructure – Global: Infrastructure Default and Recovery Rates, 1983-2015"

Moody's: América Latina

- » 16 especialistas en infraestructura en Buenos Aires, Ciudad de México, Sao Paulo y Perú (Equilibrium)
- » Consistencia analítica global
- » Algunas publicaciones recientes:
 - [“Incumplimiento y Tasa de Recuperación de Préstamos Bancarios para Infraestructura”](#)
 - [“Infraestructura en Asia y Latinoamérica – Fuertes necesidades para incrementar la diversidad del financiamiento”](#)
 - [“Reporte de Tendencias Crediticias”](#) tanto de corporativos como de infraestructura.
 - [“Infraestructura en Latinoamérica: Cómo se están financiando los proyectos insignia en Perú, México y Colombia”](#).



SECTOR IN-DEPTH
25 May 2016

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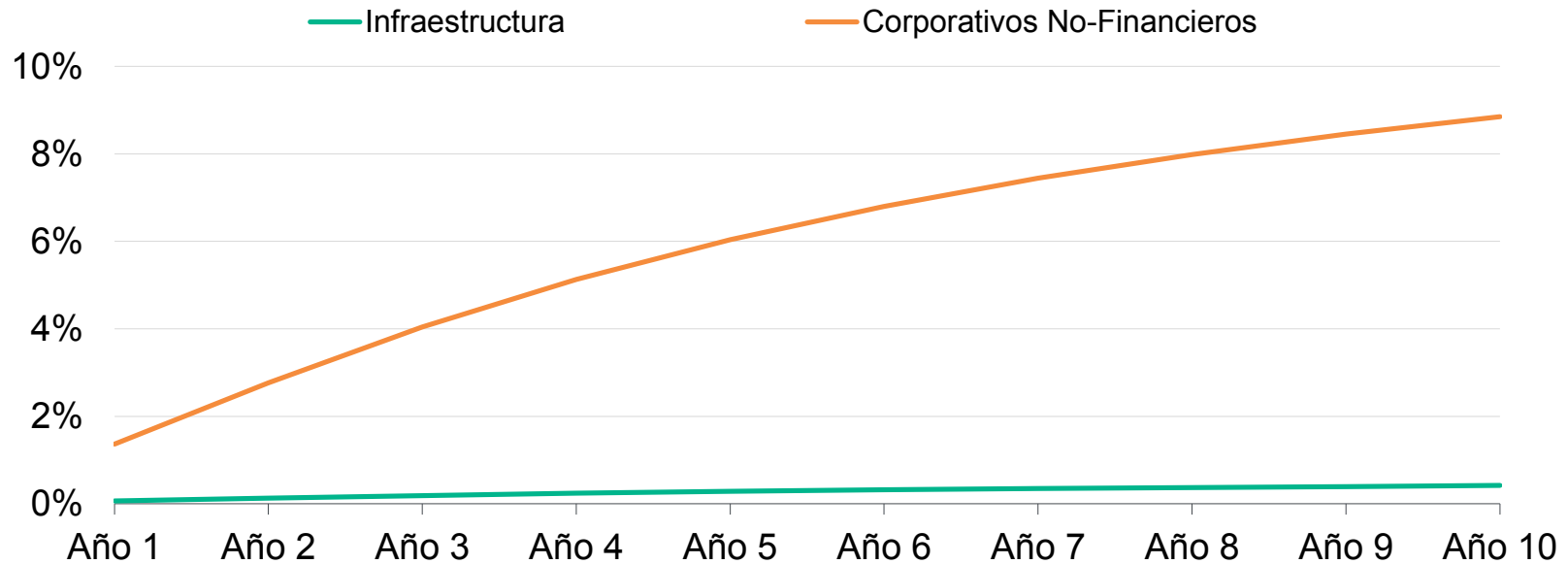
Infrastructure and Project Finance in Latin America How Peru, Mexico and Colombia Are Financing Flagship Infrastructure Projects

The governments of Peru, Mexico and Colombia each have taken a different approach to financing flagship infrastructure projects in an effort to reduce project risk, access international capital investment and reduce the government's upfront costs. Each approach has different credit strengths and weaknesses.

- » **Peru is partnering with the private sector to develop and finance projects.** From a project finance perspective, Peru's model carries the least risk for bondholders because the debt is serviced by unconditional, irrevocable payments from the government. Construction risk is mainly borne by the private party and is separated from the financing structure. The ratings of projects are closely tied to the rating of Peru (A3, stable), recognizing the strong sovereign connection². However, some of the enhancements embedded in the debt structure have not yet been tested in the market.
- » **Mexico is leveraging future flows of the government-owned Mexico City International Airport to finance and support the construction of a new airport.** The financing structure to build a new US\$9.4 billion airport in Mexico City utilizes the existing airport's operating cash flow as a source of debt payment, which mitigates the credit impact arising from potential cost overruns and delays from the construction risk of the large project. While there are operating and demand risks, these are offset by the favorable traffic trends and the long track record of sound operations of the existing airport. Furthermore, given the strategic importance of the airport and since the concessionaires are government-owned entities, we believe that the government would provide support in case of financial stress.
- » **Colombia has developed its own public-private partnership (P3 or PPP) model that it has used to develop a network of toll roads.** Under Colombia's 4G toll road concession program, with an estimated investment of US\$16 billion, the concessionaires and the government share construction, operating and demand risks. Colombia's P3s also have unique risk-sharing elements like cost overrun sharing, and availability and traffic compensation payments that reduce the concessionaires' construction, operating and demand risks.

Infraestructura: Menor pérdida esperada

Tasas de Pérdida Esperada Acumulada Promedio, 1983-2015

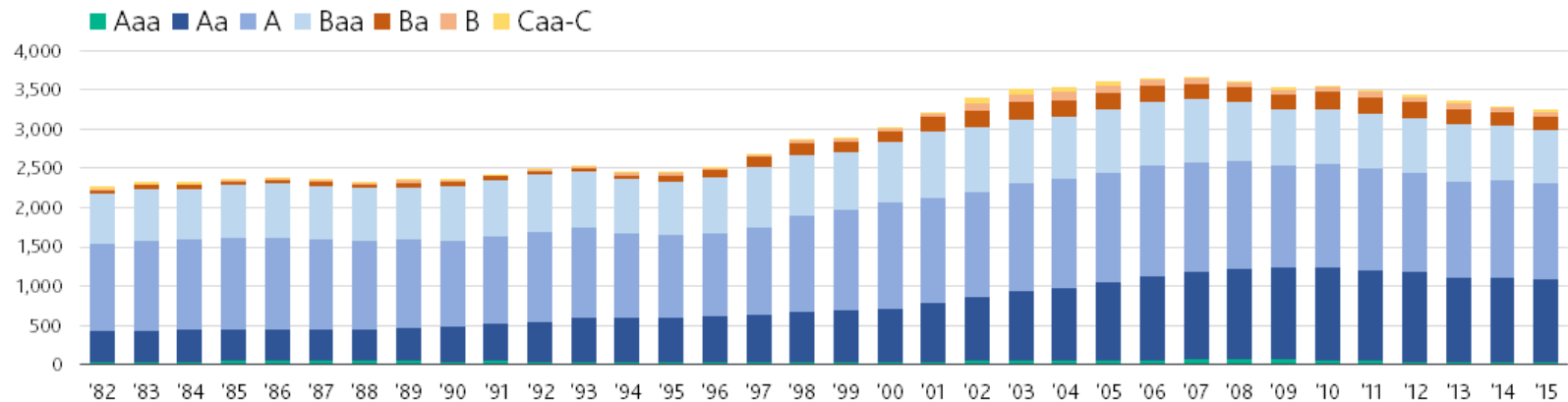


- » Las tasas de incumplimiento acumulado y de pérdida esperada de los bonos de deuda de infraestructura son menores a las de corporativos no-financieros
- » Las calificaciones son menos volátiles

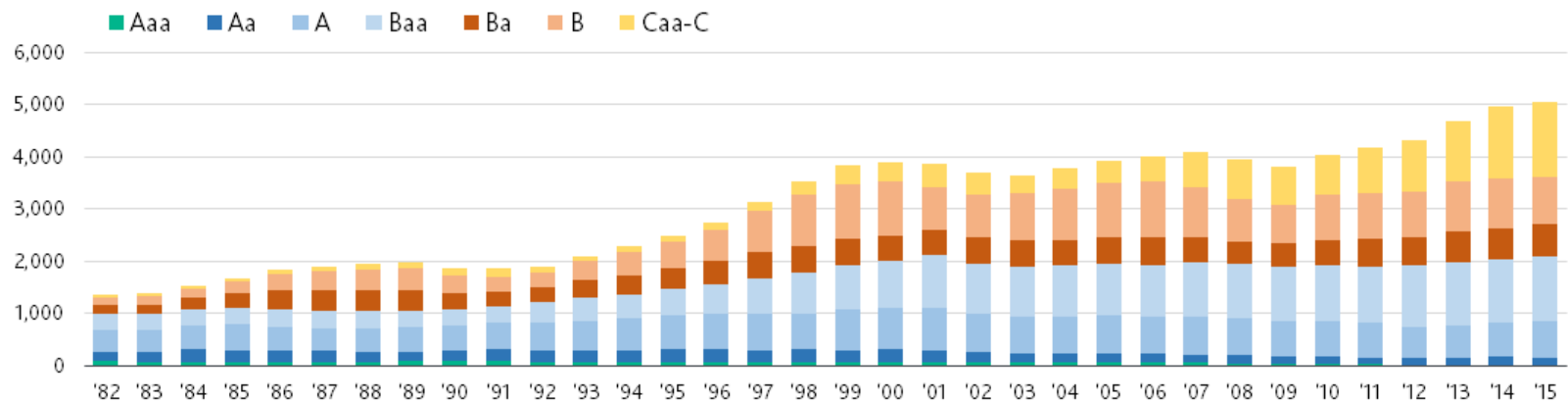
Fuente: Moody's "Infrastructure – Global: Infrastructure Default and Recovery Rates, 1983-2015"

Infraestructura: Principalmente grado de inversión

Número de Calificaciones del Sector de Infraestructura



Número de Calificaciones del Sector Corporativos No-Financieros

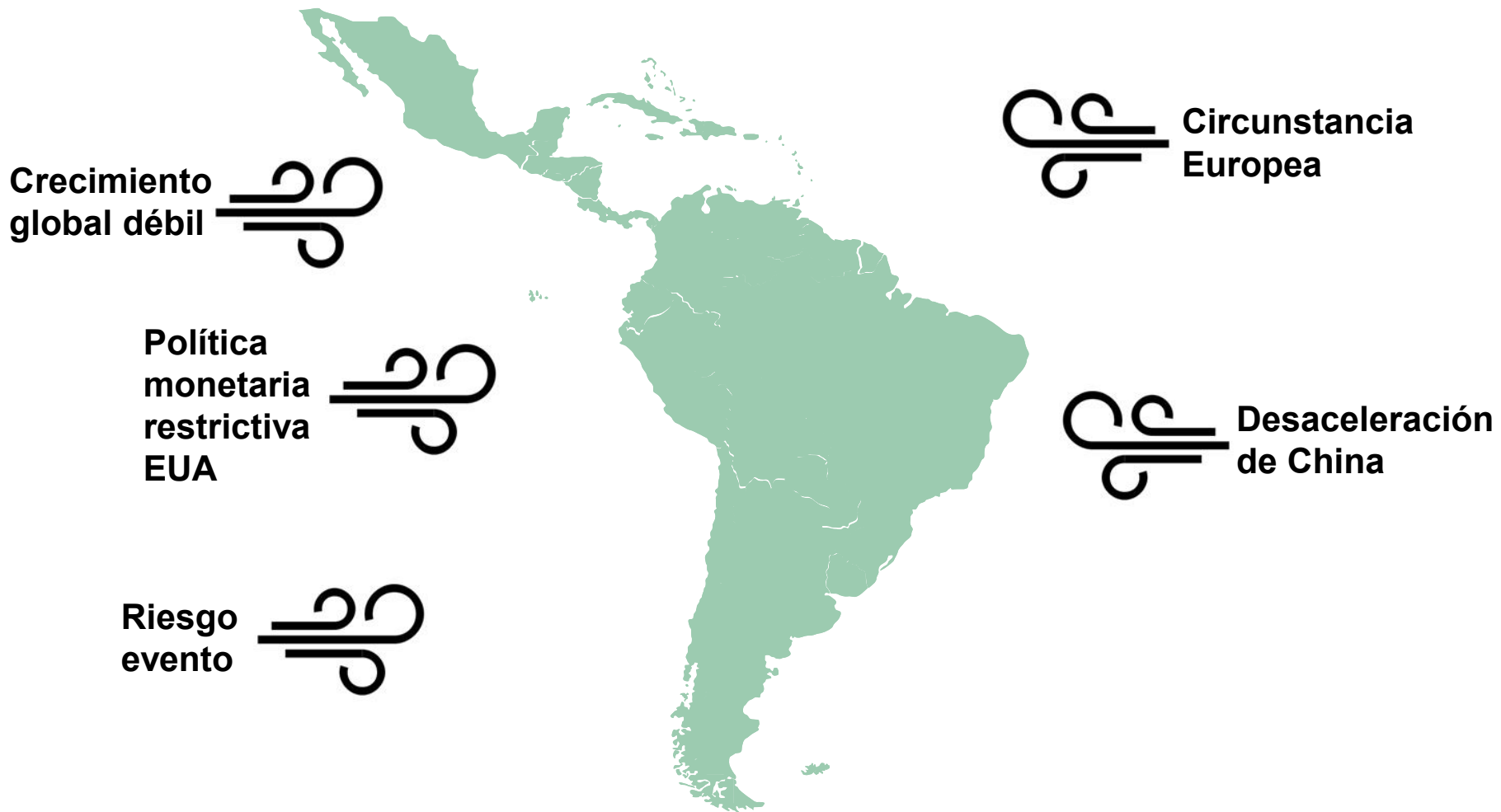


Fuente: Moody's "Infrastructure – Global: Infrastructure Default and Recovery Rates, 1983-2015"

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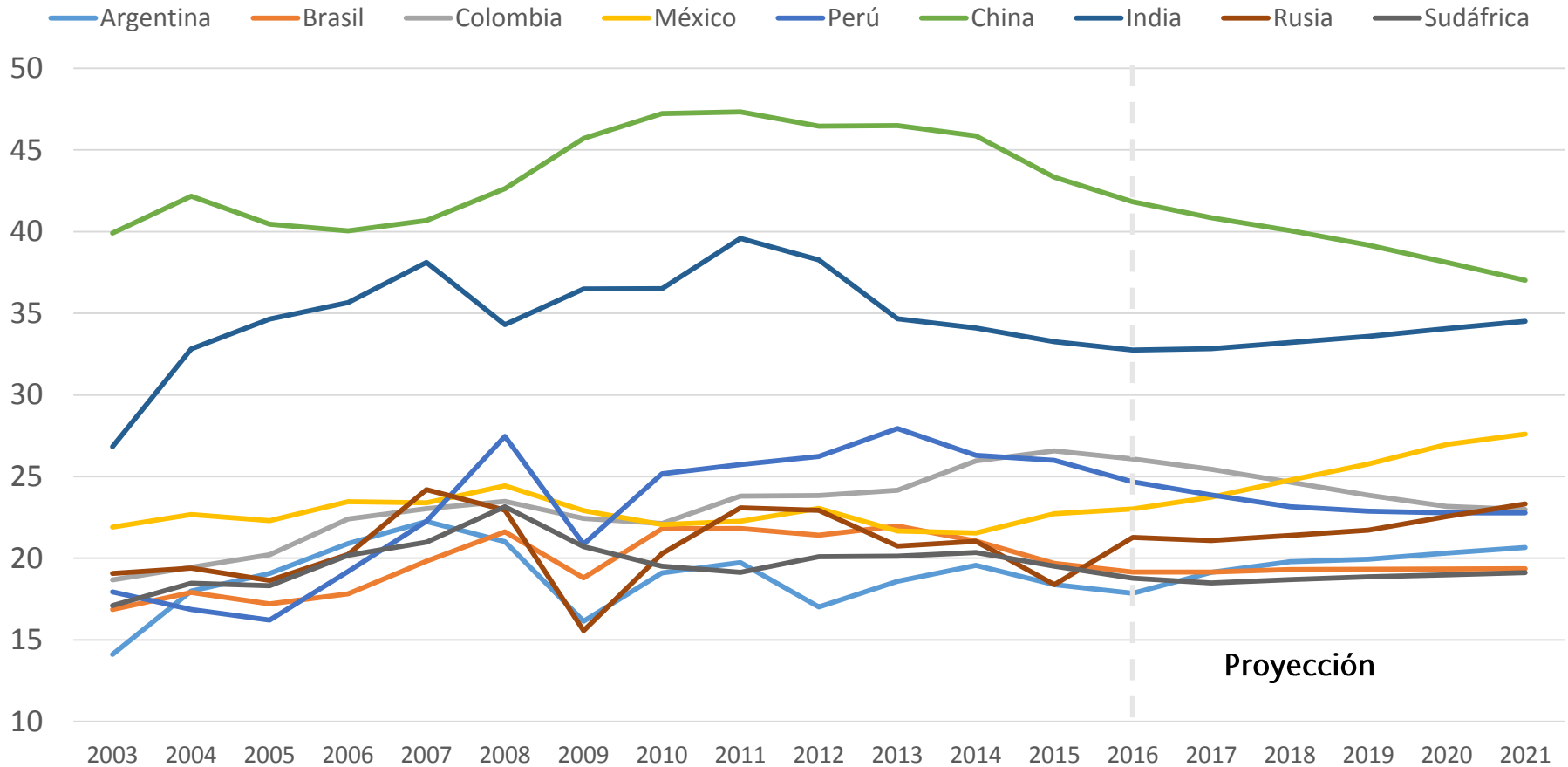
Entorno adverso y otros retos de la región

Entorno global adverso



Inversión en infraestructura: reto persistente

Inversión como porcentaje del PIB por país, 2003-2021



Fuente: International Monetary Fund World Economic Outlook database (Abril 2016)

Deuda para infraestructura disponible únicamente en países estables y con buena calidad crediticia

- » Bajos niveles de tasas han creado liquidez sustancial en los mercados financieros globales
- » Bancos e inversionistas institucionales cuentan con capacidad para financiar a largo plazo pero sólo en países estables y con buena calidad crediticia
- » Financiamiento restringido cuando hay riesgos difíciles de cuantificar y mitigar:
 - Riesgo político y riesgo país
 - Riesgo tipo de cambio (ingresos vs deuda)
 - Riesgos regulatorios y legales
 - Riesgo de ingresos significativo, como tráfico y tarifas en una nueva carretera
 - Riesgo construcción o tecnología cuando ha antecedentes limitados
- » Banca de desarrollo multilaterales (y locales) pueden tener un rol importante para mitigar riesgos claves y facilitar la participación privada
 - Cuentan con la habilidad y el apetito de riesgo para enfrentar estos riesgos en países emergentes

Condiciones varían por país

| Panorama general | Chile Aa3 estable | Perú A3 estable | México A3 negativa | Colombia Baa2 estable | Brasil Ba2 negativa | Argentina B3 estable |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Número limitado de proyectos financiables en los mercados internacionales</p> <p>Financiamiento bancario vinculado a mecanismos de respaldo por parte del gobierno</p> <p>Incremento de inversionistas institucionales locales pero aún poca penetración</p> | <p>Entorno político estable y de respaldo, sin embargo hay relativamente pocos proyectos en desarrollo</p> | <p>Momentum y track record consolidándose</p> | <p>Inicio de la implementación de la reforma energética con riesgos de ejecución. Proyectos clave en marcha aunque se esperan algunos retrasos dadas las restricciones presupuestales.</p> | <p>Apoyo del gobierno con un ambicioso programa de infraestructura, compensado por riesgos institucionales y restricciones presupuestales</p> | <p>Señales incipientes de un entorno más favorable propiciado por los ajustes fiscales en el país. Escándalos relacionados a corrupción limitan la obtención de financiamiento. Menores subsidios resultan en un incremento de los costos de financiamiento y no hay alternativas locales de fuentes de financiamiento</p> | <p>Expectativas positivas alrededor de la nueva administración pero expectativas prudentes respecto a cambios estructurales en el corto plazo</p> |

Retos locales para el desarrollo de infraestructura

Alta necesidad de inversión

- » Activos operando por encima de su capacidad
- » Creciente 'gap' de infraestructura

Recursos limitados

- » Restricciones presupuestales
- » Poco acceso a inversionistas institucionales y a mercados internacionales

Retos institucionales

- » Marcos legales e instituciones recientes
- » Corrupción, inestabilidad política

Planeación y diseño

- » Visión de corto plazo
- » Factibilidades comercial y técnica
- » Asignación de riesgos

¿Podemos enfrentar el reto?

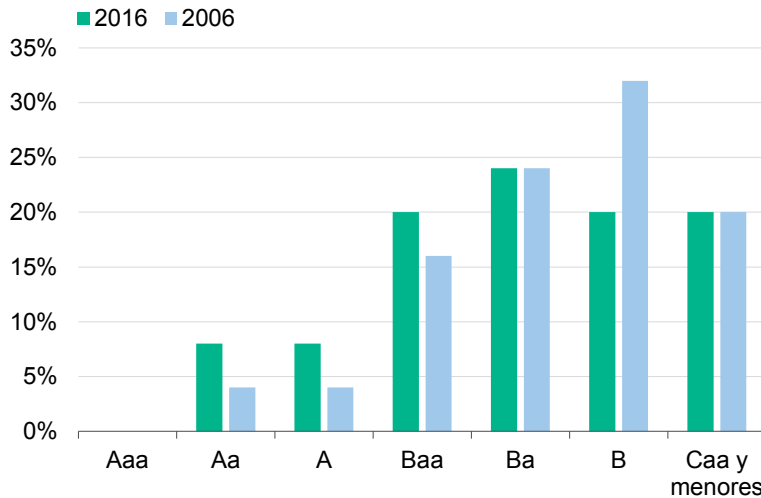
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Tendencias y oportunidades

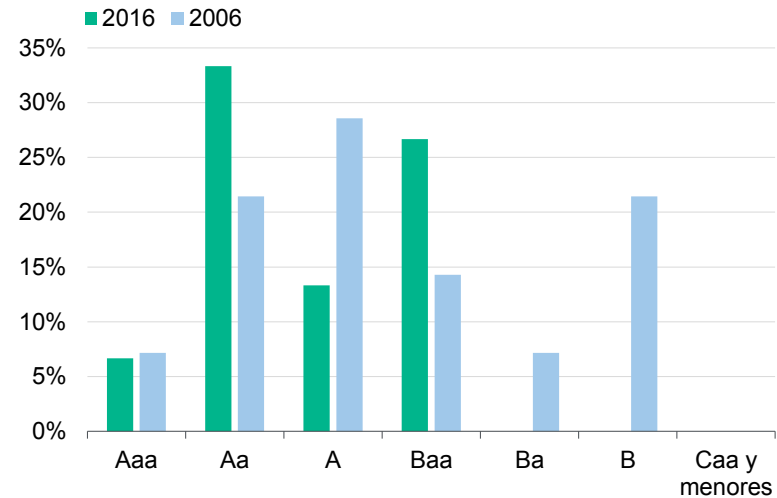
Mejor calidad crediticia de la región

- » Condiciones crediticias soberanas han mejorado
- » Sin embargo sólo 36% de países en América Latina en grado de inversión (Asia 80%)

Calificaciones Soberanas América Latina



Asia

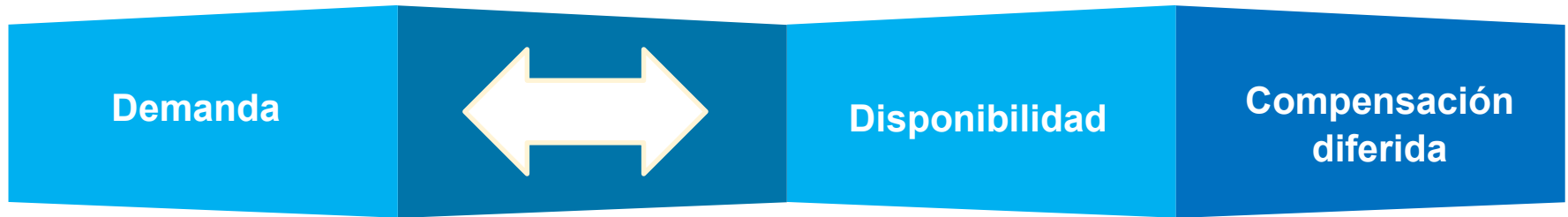


Nota: Calificaciones de emisor de largo plazo en moneda extranjera (a 14 de octubre de 2016)

Fuente: Moody's Investors Service

Modelos diferentes e innovadores

Esquemas para la distribución de riesgos entre público y privado



Tráfico de vehículos, comercial y de pasajeros aéreos



Tráfico, “vigencias futuras”, garantías de mínimo de ingresos



Disponibilidad (ej. buques petroleros)



Pagos incondicionales, irrevocables, transferibles del gobierno (RPAOs, RPIs, RPI-CAOs, PAO-CAOs)

4G: Estructura proyecto mitiga riesgo corporativo

- » Vehículo de uso específico (SPV)
- » El alcance del proyecto se define a través de contratos
- » SPV obtiene financiamiento del proyecto (frecuentemente altamente apalancado) para financiar las obras de construcción por adelantado
- » Servicio de deuda depende de los flujos del proyecto y es pagado a través del SPV
- » Garantía sobre los activos
- » Características estructurales mejoran calidad crediticia
 - Reservas
 - Coberturas mínimas
 - Límites al endeudamiento
 - Barridos de caja
 - Límites a las distribuciones
 - Otras

4G: Modelo requiere un análisis exhaustivo

Construcción

REQUEST FOR COMMENT / RESULTS OF CONSULTATION

Construction Risk in Privately-Financed Public Infrastructure (PFI/PPP/P3) Projects

Request for Comment:
 Updated Rating Methodology for Construction Risk in Privately-Financed Public Infrastructure (PFI/PPP/P3) Projects, December 23, 2013

Summary of RFC Proposal:
 Please see Request for Comment Construction Risk in Privately-Financed Public Infrastructure (PFI/PPP/P3) Projects

Summary of Received Responses:
 MDS has received a total of five comments in response to this Request for Comment, of which one respondent has requested confidentiality; identify four comments are attached.

Received Responses Broad Themes:
 In general, three comments or portions of comments were in favor of the proposed changes described in this Request for Comment.

Changes to the Credit Rating Methodology:
 Further material changes were made during the consultation period on the following topic and these are reflected in the final version of the Credit Rating Methodology available on www.moody.com.

- Section "Other Rating Factors", Government Contributions during Construction

Riesgo construcción

- Complejidad del proyecto
- Experiencia y solidez financiera del consorcio
- Sobrecostos, retrasos
- Transferencia de riesgos
- Liquidez, garantías

Operación

Moody's INVESTORS SERVICE

RATING METHODOLOGY

Privately Managed Toll Roads

Table of Contents:

- 1 SUMMARY
- 2 ABOUT THE RATING METHODOLOGY
- 3 DISCUSSION OF THE CRITERIA FACTORS
- 4 QUALITATIVE AND QUANTITATIVE CONSIDERATIONS THAT MAY BE REFLECTED IN THE GRID
- 5 OPERATING CONSIDERATIONS
- 6 CONCLUSION SUMMARY OF THE GRID
- 7 RATING RATIONALE OUTLINE
- 8 APPENDIX A: PRIVATELY MANAGED TOLL ROADS METHODOLOGY FACTOR GRID
- 9 APPENDIX B: PRIVATELY MANAGED TOLL ROADS QUALITATIVE CONSIDERATIONS
- 10 TABLES
- 11 APPENDIX C: TOLL ROAD IN ADDITIONAL COUNTRIES
- 12 APPENDIX D: MANAGED LANE PROJECTS: SPECIAL FACTORS
- 13 APPENDIX E: ACCOUNTING CONSIDERATIONS: SPECIAL FACTORS
- 14 APPENDIX F: ASSET VALUE AND CALL PROTECTION AND INTEREST

Summary:
 This rating methodology explains Moody's approach to assessing credit risk for companies in the global privately managed toll roads industry. This document is intended to provide general guidance that helps companies, investors, and other interested market participants understand how qualitative and quantitative risk characteristics are likely to affect rating outcomes for companies in the privately managed toll roads sector. This document does not include an exhaustive treatment of all factors that are reflected in Moody's ratings but should enable the reader to understand the qualitative considerations and financial information and ratios that are usually most important for ratings in this sector.

This rating methodology replaces the Operational Toll Roads Methodology published in December 2006. While reflecting many of the same core principles as the 2006 methodology, this updated document incorporates refinements to our analysis that better reflect the evolution of credit fundamentals of the industry and the rating universe. No rating changes will result from publication of this rating methodology.

This report includes a detailed rating grid and illustrative examples that compare the mapping of credit profiles against the factors in the grid. The grid is a reference tool that can be used to approximate credit profiles within the privately managed toll roads sector in most cases. The grid provides sustained guidance for the factors that are generally most important in assigning ratings to companies in the privately managed toll roads sector. However, the grid is a summary that does not include every rating consideration. The

Riesgo demanda

- Perfil del activo
- Ajuste de tarifas
- Tipo de usuarios
- Volumen de tráfico
- Historia, volatilidad, crecimiento
- Solidez financiera

Riesgo disponibilidad

- Aspectos técnicos
- Contrato (descuentos, penas)
- Costos de operación
- Transferencia de riesgos
- Relación y calidad crediticia de contraparte
- Solidez financiera

Circulo virtuoso para atraer inversionistas institucionales internacionales



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