

# Evaluando el Riesgo de Crédito bajo el Coronavirus (COVID-19)

# Temas para discutir

1. El panorama global y latinoamericano: Impactos a nivel de industria y país
2. Huida hacia la calidad: Acciones y renta fija
3. Proyectando el impacto de COVID-19 sobre el riesgo crediticio hacia el futuro

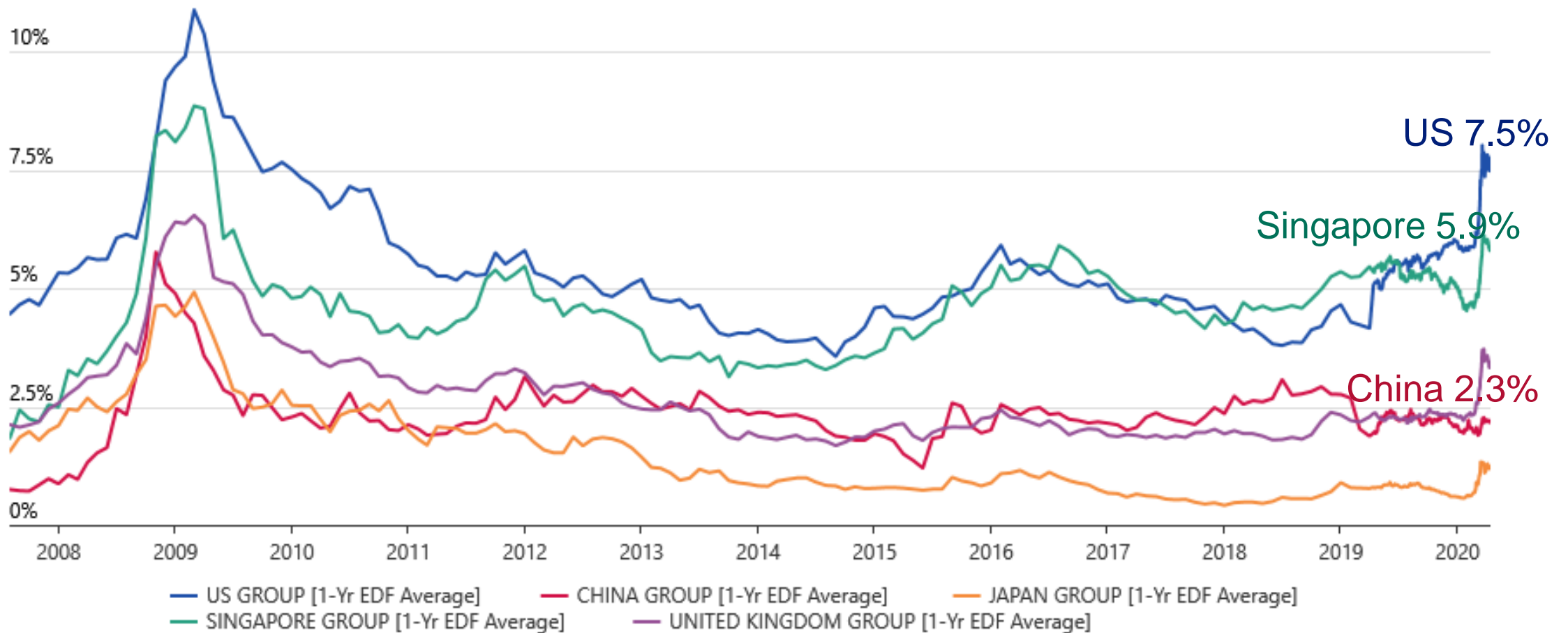
# Resumen ejecutivo

- Países cuyos sectores corporativos han estado entre los mas impactados desde enero:
  - Canadá y Noruega (exposición al petróleo y gas natural)
  - Los EEUU y países sur europeos (choques grandes relacionados al COVID-19 a varias industrias)
  - Algunos mercados emergentes (vulnerabilidades preexistentes mas huida del riesgo)
- Impactos principales a nivel de industria:
  - Impacto principal: Petróleo y gas, Entretenimiento y Ocio, Transporte Aéreo
  - Efectos de etapa secundaria: Bienes duraderos
  - Tendencia secular hacia la baja se junta con cisne negro: Medios audiovisuales
- Impacto en los mercados de acciones y renta fija
  - “Huida hacia la calidad crediticia”
  - Bonos de EDFs bajos han tenido mayor desempeño que bonos con EDFs altos; lo mismo pasa con las acciones
- Estresado EDFs bajo un escenario macro pandemia
  - La industria de petróleo y gas será seriamente impactada si sigue el panorama actual de oferta excesiva y demanda baja

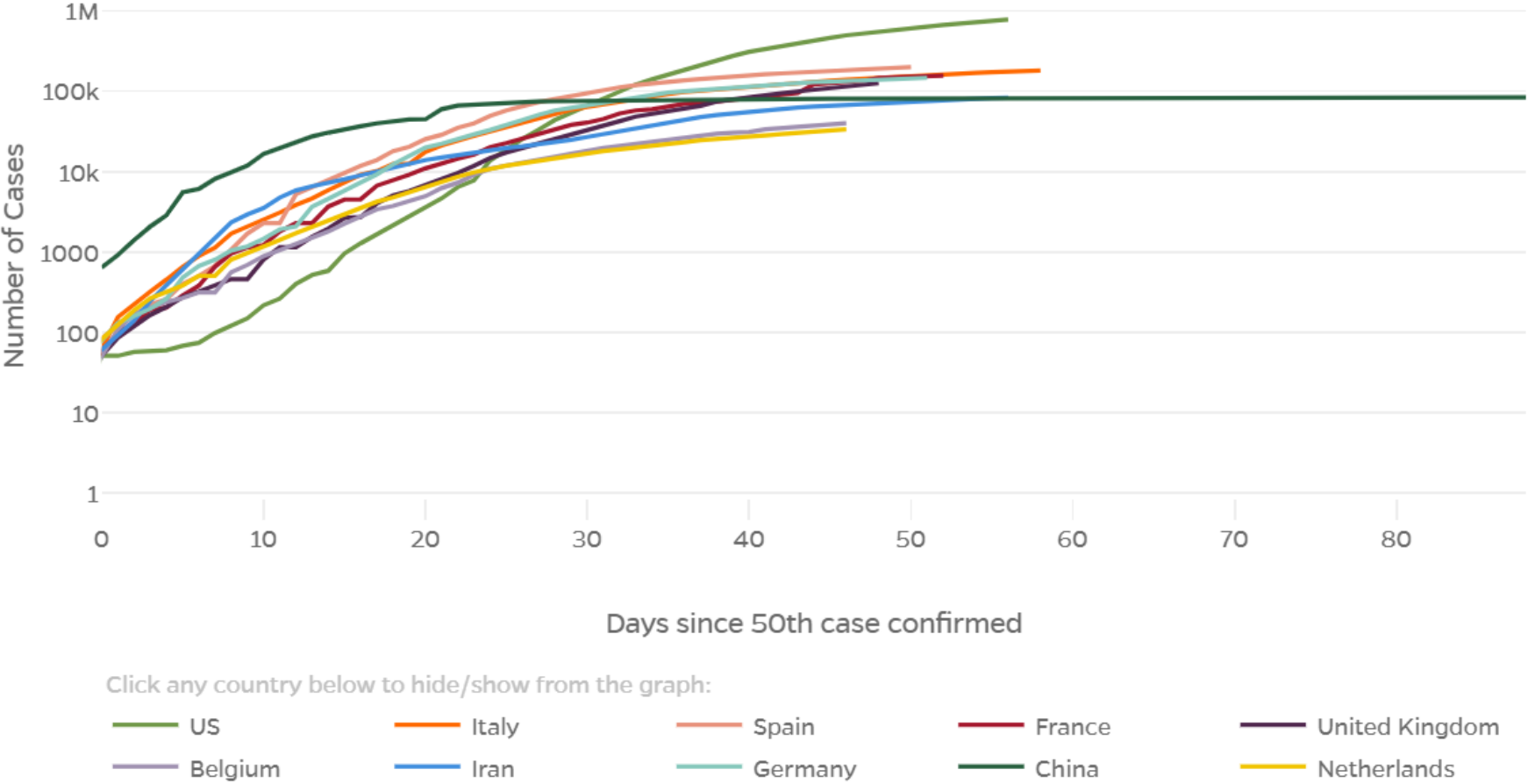
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Impactos a nivel de  
industria y país

# Niveles de riesgo de crédito corporativo no antes vistos desde la crisis financiera global

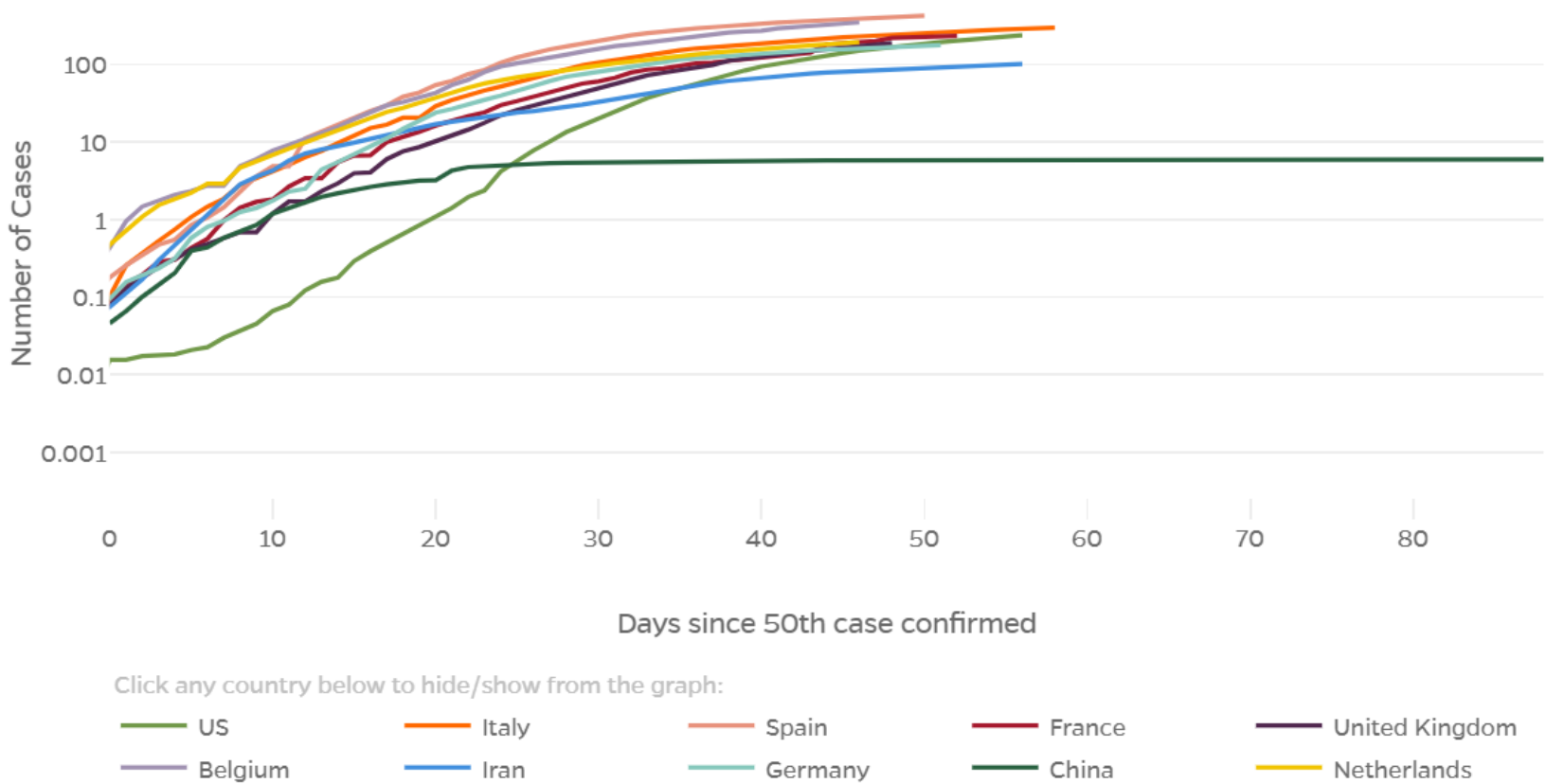


# Total de casos confirmados vs. tiempo: 21 de abril del 2020



Fuente: Johns Hopkins, <https://coronavirus.jhu.edu/data/cumulative-cases>

# Casos confirmados per 100k personas vs. tiempo: 21 de abril del 2020



Fuente: Johns Hopkins, <https://coronavirus.jhu.edu/data/cumulative-cases>

# Evaluando los probables impactos del riesgo de crédito corporativo

Ahora nos enfocamos en los choques en la cola derecha de la distribución PD

- El promedio y la cola de la distribución PD (percentil 75) para una industria o país revela mucho acerca de los posibles incumplimientos futuros.
- Entonces, veamos dónde la cola de la distribución PD ha sido más sensible a los efectos de la pandemia de COVID-19.



# Los 5 países principales por mayor incremento de riesgo de incumplimiento

Resultados por medidas de riesgo de incumplimiento de la cola de distribución PD y por fechas finales

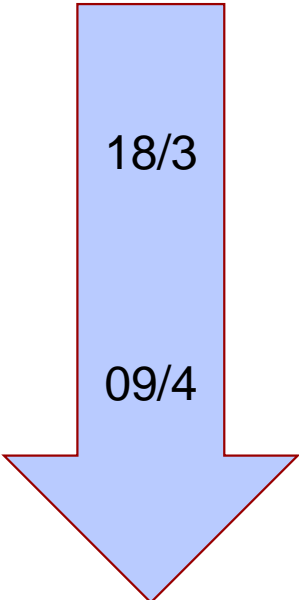
**Descubrimiento de riesgos:**

**Estados Unidos,**

**Productores desarrollados de petróleo**

**Mercados emergentes**

han sentido el mayor impacto



Top 5 Countries by Increased Default Risk (Jan. 20 to March 18)		
Tail extension	Tail deepening	Increase in mean
UNITED STATES	UNITED STATES	BERMUDA
BERMUDA	CANADA	NORWAY
CANADA	BERMUDA	ARGENTINA
NORWAY	ARGENTINA	CANADA
BRAZIL	GREECE	UNITED STATES
Top 5 Countries by Increased Default Risk (Jan. 20 to April 9)		
Tail extension	Tail deepening	Increase in mean
UNITED STATES	UNITED STATES	BERMUDA
BERMUDA	BERMUDA	NORWAY
SOUTH AFRICA	GREECE	UNITED STATES
SINGAPORE	CANADA	CANADA
GREECE	ARGENTINA	GREECE

# Las 5 industrias globales por mayor incremento de riesgo de incumplimiento

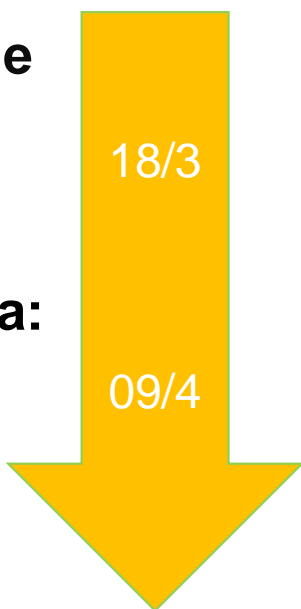
Resultados por medidas de riesgo de incumplimiento de la cola de distribución PD y por fechas finales

**Abundancia de suministro + Choque de demanda:**

**Petróleo y Gas**

**Choque de demanda:**

**Entretenimiento y Ocio, Transporte Aereo, Hoteles y Restaurantes**



Top 5 Industries by Increased Default Risk (Jan. 20 to March 18)		
Tail extension	Tail deepening	Increase in mean
OIL GAS & COAL EXPL/PROD	OIL GAS & COAL EXPL/PROD	OIL GAS & COAL EXPL/PROD
BROADCAST MEDIA	BROADCAST MEDIA	ENTERTAINMENT & LEISURE
CABLE TV	ENTERTAINMENT & LEISURE	AIR TRANSPORTATION
AGRICULTURE	AGRICULTURE	CONSUMER PRODUCTS RETL/WHSL
ENTERTAINMENT & LEISURE	CABLE TV	BROADCAST MEDIA
Top 5 Industries by Increased Default Risk (Jan. 20 to April 9)		
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OIL GAS & COAL EXPL/PROD	OIL GAS & COAL EXPL/PROD	OIL GAS & COAL EXPL/PROD
BROADCAST MEDIA	BROADCAST MEDIA	BROADCAST MEDIA
AIR TRANSPORTATION	AIR TRANSPORTATION	ENTERTAINMENT & LEISURE
ENTERTAINMENT & LEISURE	ENTERTAINMENT & LEISURE	CONSUMER PRODUCTS RETL/WHSL
HOTELS & RESTAURANTS	HOTELS & RESTAURANTS	AIR TRANSPORTATION

# Las 5 industrias globales por mayor incremento de riesgo de incumplimiento

Resultados por medidas de riesgo de incumplimiento de la cola de distribución PD y por fechas finales

**Declive estructural + cisne negro:**

**Petróleo y Gas**

**Televisión por cable y Medios de radiodifusión**



Top 5 Industries by Increased Default Risk (Jan. 20 to March 18)		
Tail extension	Tail deepening	Increase in mean
OIL GAS & COAL EXPL/PROD	OIL GAS & COAL EXPL/PROD	OIL GAS & COAL EXPL/PROD
BROADCAST MEDIA	BROADCAST MEDIA	ENTERTAINMENT & LEISURE
CABLE TV	ENTERTAINMENT & LEISURE	AIR TRANSPORTATION
AGRICULTURE	AGRICULTURE	CONSUMER PRODUCTS RETL/WHSL
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BROADCAST MEDIA	BROADCAST MEDIA	BROADCAST MEDIA
AIR TRANSPORTATION	AIR TRANSPORTATION	ENTERTAINMENT & LEISURE
ENTERTAINMENT & LEISURE	ENTERTAINMENT & LEISURE	CONSUMER PRODUCTS RETL/WHSL
HOTELS & RESTAURANTS	HOTELS & RESTAURANTS	AIR TRANSPORTATION

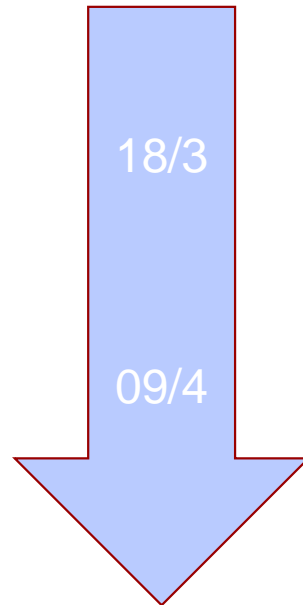
# Las 5 países en América Latina por mayor incremento de riesgo de incumplimiento

Resultados por medidas de riesgo de incumplimiento de la cola de distribución PD y por fechas finales

**Descubrimiento de riesgos:**

**Brasil, Argentina**

han sentido el mayor impacto



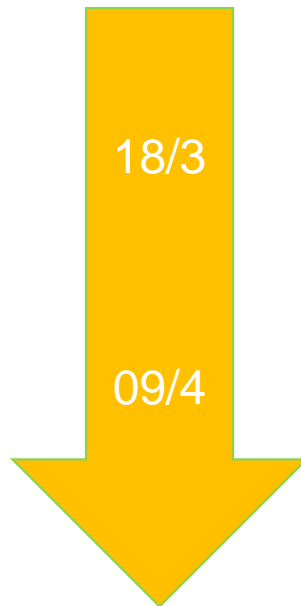
Top 5 Countries by Increased Default Risk (Jan. 20 to March 18)		
Tail extension	Tail deepening	Increase in mean
BRAZIL	ARGENTINA	ARGENTINA
ARGENTINA	BRAZIL	BRAZIL
COLOMBIA	COLOMBIA	COLOMBIA
PERU	MEXICO	MEXICO
MEXICO	PERU	PERU
Top 5 Countries by Increased Default Risk (Jan. 20 to April 9)		
Tail extension	Tail deepening	Increase in mean
BRAZIL	ARGENTINA	ARGENTINA
ARGENTINA	BRAZIL	BRAZIL
PERU	PERU	MEXICO
MEXICO	MEXICO	COLOMBIA
COLOMBIA	COLOMBIA	PERU

# Las 5 industrias en América Latina por mayor incremento de riesgo de incumplimiento

Resultados por medidas de riesgo de incumplimiento de la cola de distribución PD y por fechas finales

**Bienes no transables y productos básicos:**

**Construcción,**  
**Bienes Raíces,**  
**Productos de Acero y Metal,** y  
**Minería**



Top 5 Industries by Increased Default Risk (Jan. 20 to March 18)		
Tail extension	Tail deepening	Increase in mean
CONSTRUCTION	CONSTRUCTION	CONSTRUCTION
STEEL & METAL PRODUCTS	STEEL & METAL PRODUCTS	REAL ESTATE
FOOD & BEVERAGE	MINING	STEEL & METAL PRODUCTS
UTILITIES ELECTRIC	FOOD & BEVERAGE	MINING
MINING	UTILITIES ELECTRIC	UTILITIES ELECTRIC
Top 5 Industries by Increased Default Risk (Jan. 20 to April 9)		
Tail extension	Tail deepening	Increase in mean
CONSTRUCTION	CONSTRUCTION	REAL ESTATE
UTILITIES ELECTRIC	MINING	CONSTRUCTION
MINING	STEEL & METAL PRODUCTS	MINING
FOOD & BEVERAGE	UTILITIES ELECTRIC	STEEL & METAL PRODUCTS
BANKS AND S&LS	FOOD & BEVERAGE	UTILITIES ELECTRIC

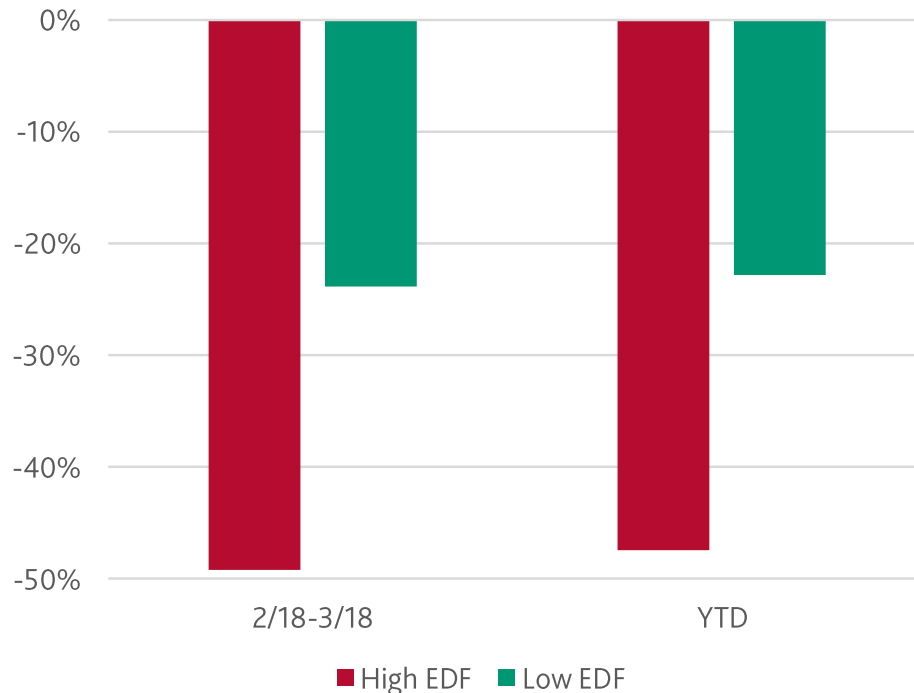
# 2

Huida a la calidad  
crediticia: renta variable y  
renta fija

# Retornos totales de estrategias de bajo EDF / alto EDF

## S&P 500

### Retorno Total



### Empresas con alto nivel de EDF

#### Corporaciones

Mylan NV  
 Alliance Data Systems Corp  
 American Airlines Group Inc  
 Apache Corp  
 DXC Technology Co  
 L Brands Inc  
 Macy's Inc  
 Nordstrom Inc  
 Western Digital Corp

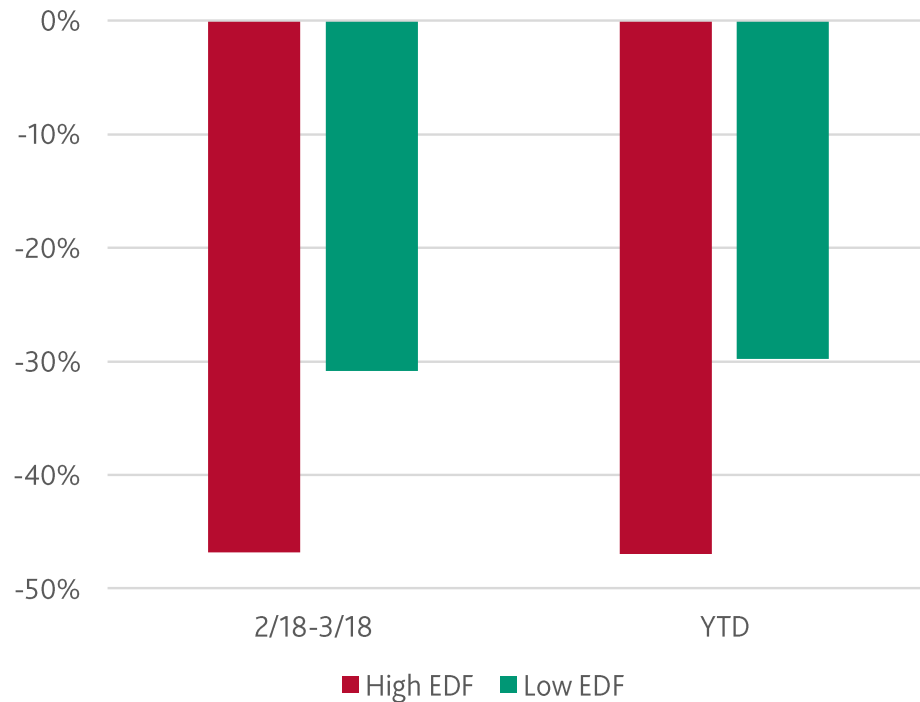
#### Instituciones Financieras

Citizens Financial Group Inc  
 Comerica Inc  
 E\*TRADE Financial Corp  
 Lincoln National Corp  
 Principal Financial Group Inc  
 Regions Financial Corp  
 SVB Financial Group  
 State Street Corp  
 Unum Group

# Retornos totales de estrategias de bajo EDF / alto EDF

## Europe Stoxx 600

### Retorno Total



### Empresas con alto nivel de EDF

#### Corporaciones

AMS AG  
K+S AG  
Faurecia SE  
Cineworld Group PLC  
John Wood Group PLC  
NMC Health PLC  
TechnipFMC PLC  
Pirelli & C SpA  
ArcelorMittal SA  
Altice Europe NV

#### Instituciones Financieras

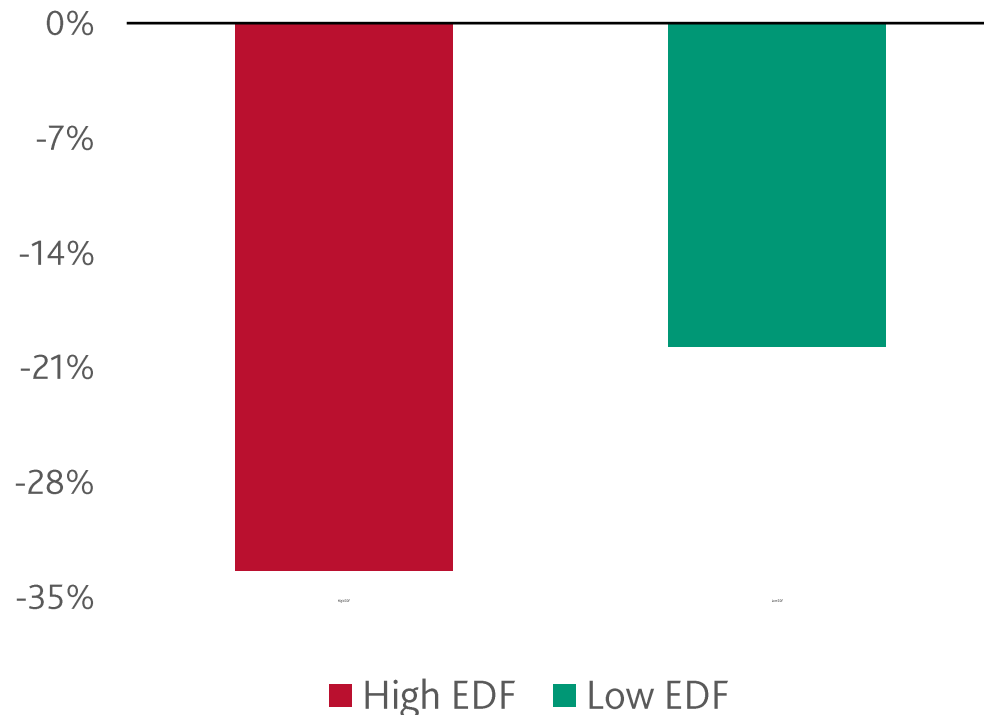
CaixaBank SA  
TP ICAP PLC  
Royal Bank of Scotland Group PLC  
Quilter PLC  
Phoenix Group Holdings PLC  
Bank of Ireland Group PLC  
AIB Group PLC  
Aegon NV  
Santander Bank Polska SA



# Retornos totales de estrategias de bajo EDF / alto EDF

## Renta Variable, Brasil

### Retorno Total



### Empresas con alto nivel de EDF

CIELO S.A.  
BRASKEM S.A.  
SUZANO PAPEL E CELULOSE SA  
BANCO DO BRASIL SA  
EMBRAER SA  
COMPANHIA SIDERURGICA NACIONAL  
USINAS SIDERURGICAS DE MINAS GERAIS SA USIMINAS  
VALE S.A

### Empresas con bajo nivel de EDF

AMBEV SA  
ITAUSA - INVESTIMENTOS ITAU SA  
TELEFONICA BRASIL SA  
TRANSMISSORA ALIANCA DE ENERGIA ELETRICA SA  
FLEURY SA  
B3 SA BRASIL BOLSA BALCAO  
COSAN SA INDUSTRIA E COMERCIO  
GOL LINHAS AEREAS INTELIGENTES S.A.

- \* Rendimiento total del año hasta el 13 de abril; Las carteras de renta variable de EDF alta / baja se construyeron el 27 de diciembre del 2019. \* Ibovespa Brasil ge Index está compuesto por las acciones mas líquidas que se negocian en la Bolsa de Valores de Sao Paulo. A partir de abril, hay 73 empresas en el índice.

# Estrategia de Renta Fija: Tomar una posición larga en bonos de alta calidad crediticia

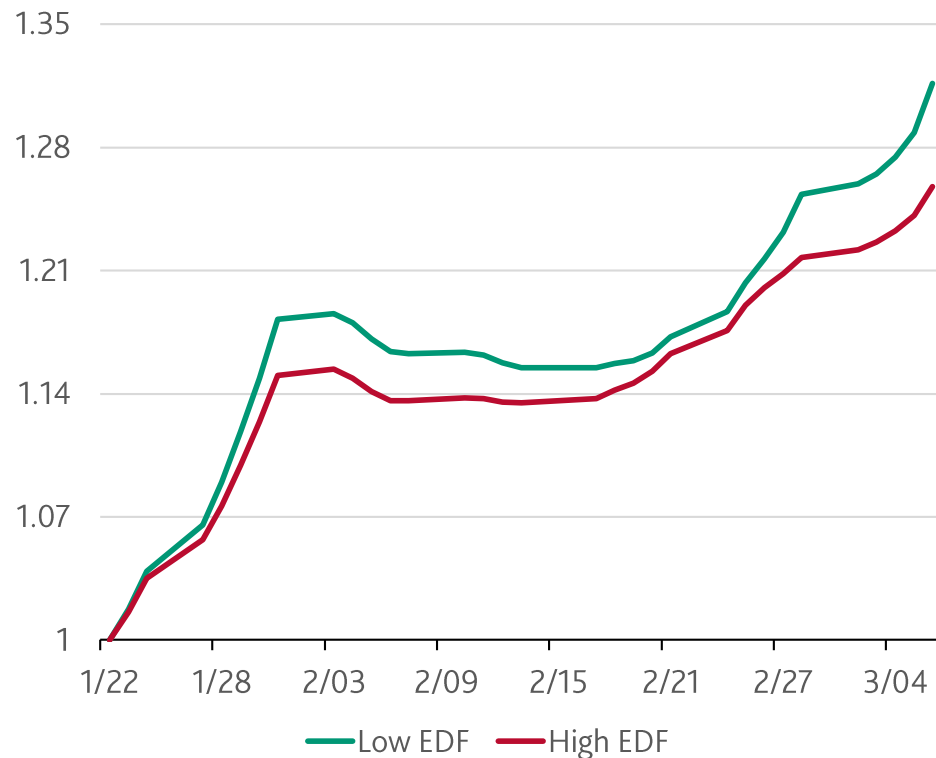
Usar la PD para hacer una distinción más fina entre los bonos

- Divida los valores elegibles en cinco segmentos de duración y dos segmentos de sectores (FIN e IND / UTL, solo para grado de inversión) por celda de duración, así que 10 en total (5 en Alto rendimiento).
- Dentro de cada segmento de duración / sector, clasifique los bonos por sus EDFs.
- Seleccione los bonos en el 20% superior y el 20% inferior por el orden de rango de EDF de cada canasta de duración.
- Diariamente, calcule los rendimientos totales ponderados por el valor de mercado del segmento del 20% superior y el 20% inferior en cada segmento de duración / sector.
- Combine los resultados del período de duración en función del valor de mercado.

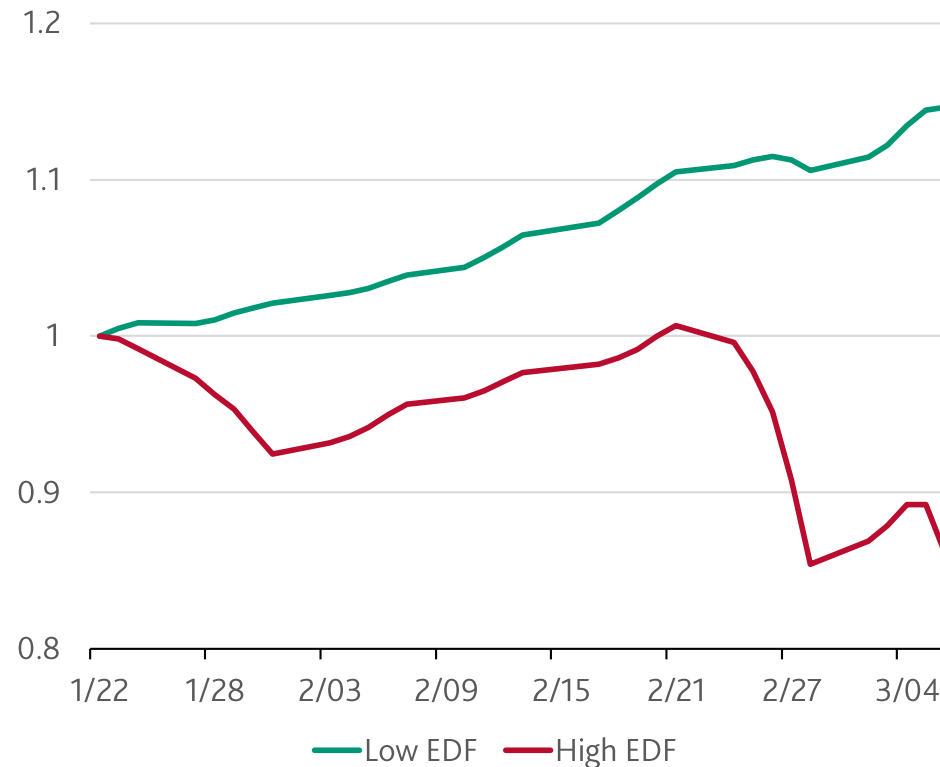
# Retorno total acumulado de estrategias de bajo EDF / alto EDF

La huida a la calidad, que se muestra en grado de inversión, es abrumador en Alto Rendimiento

## Grado de inversión de EE. UU.

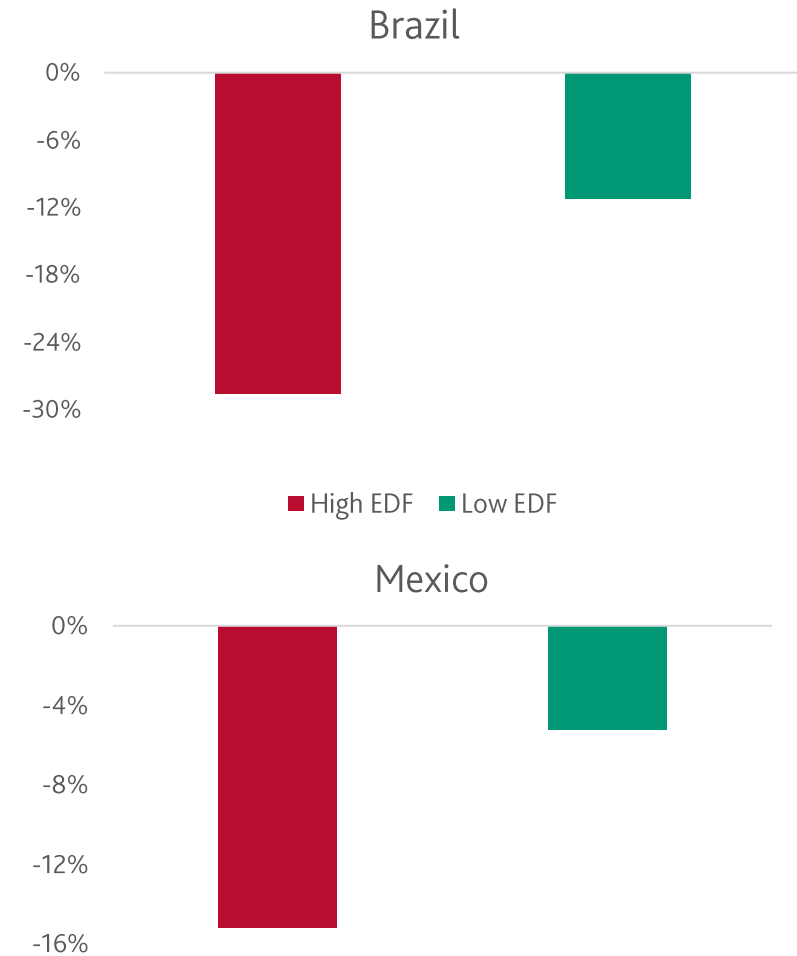
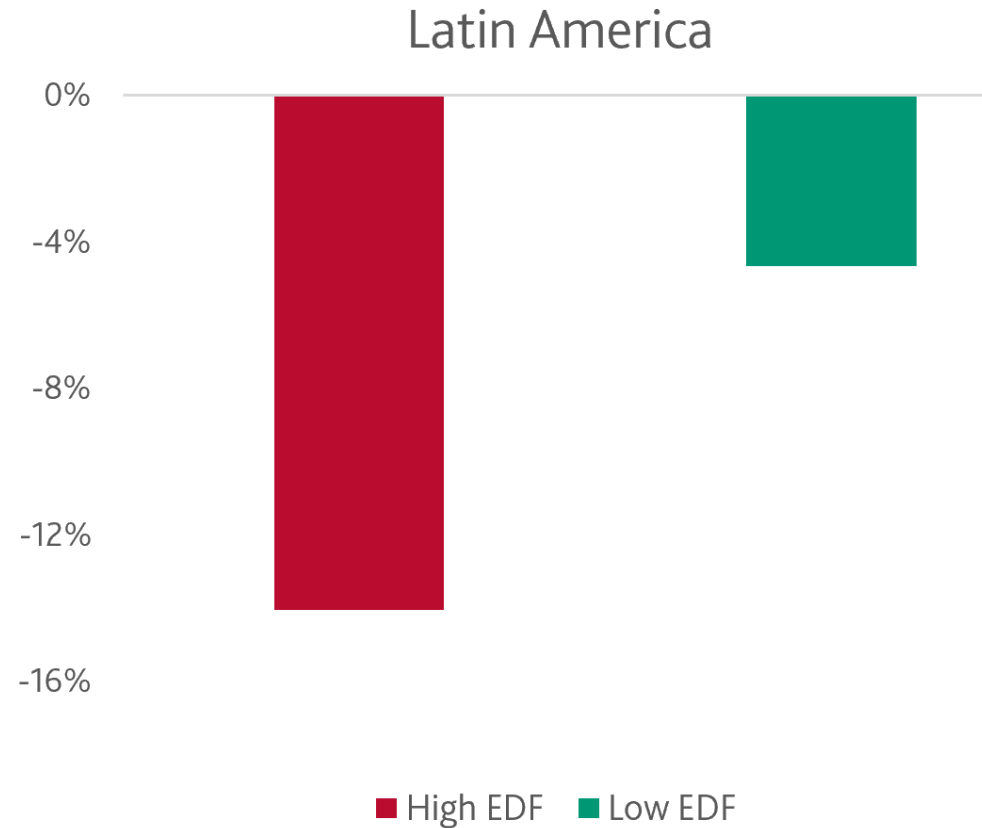


## Alto Rendimiento de EE. UU.



# Retorno total de las estrategias de bajo EDF / alto EDF

## Bonos USD de America Latina



\* Rendimiento total anual hasta el 13 de abril; Las carteras de bonos EDF altos / bajos se construyen el 27 de diciembre del 2019. El número de bonos en cada índice es el siguiente: 106 (índice Bloomberg LatAm), 41 (Brasil) y 26 (México). Cada cartera de quintiles tiene un número de bonos igual a aprox. un quinto del recuento de bonos índice relevante.

# 3

Proyección del impacto del  
riesgo de crédito  
corporativo de COVID-19

# Metodología de modelo de PD estresada

- Estimamos los PD agregados estresados para los países combinados de Argentina, Brasil, Chile, Colombia, México y Perú
- Método: Regrese series temporales de EDF contra variables macro históricas para cuantiles dados de la distribución de EDF, luego proyecte bajo escenarios de estrés macro
- Tanto el VIX como el sector doméstico local son impulsores clave del riesgo de crédito.

$\log(\text{median EDF}) \sim \text{Intercept} + \text{Consumer demand} + \text{Unemployment rate} + \text{VIX}$

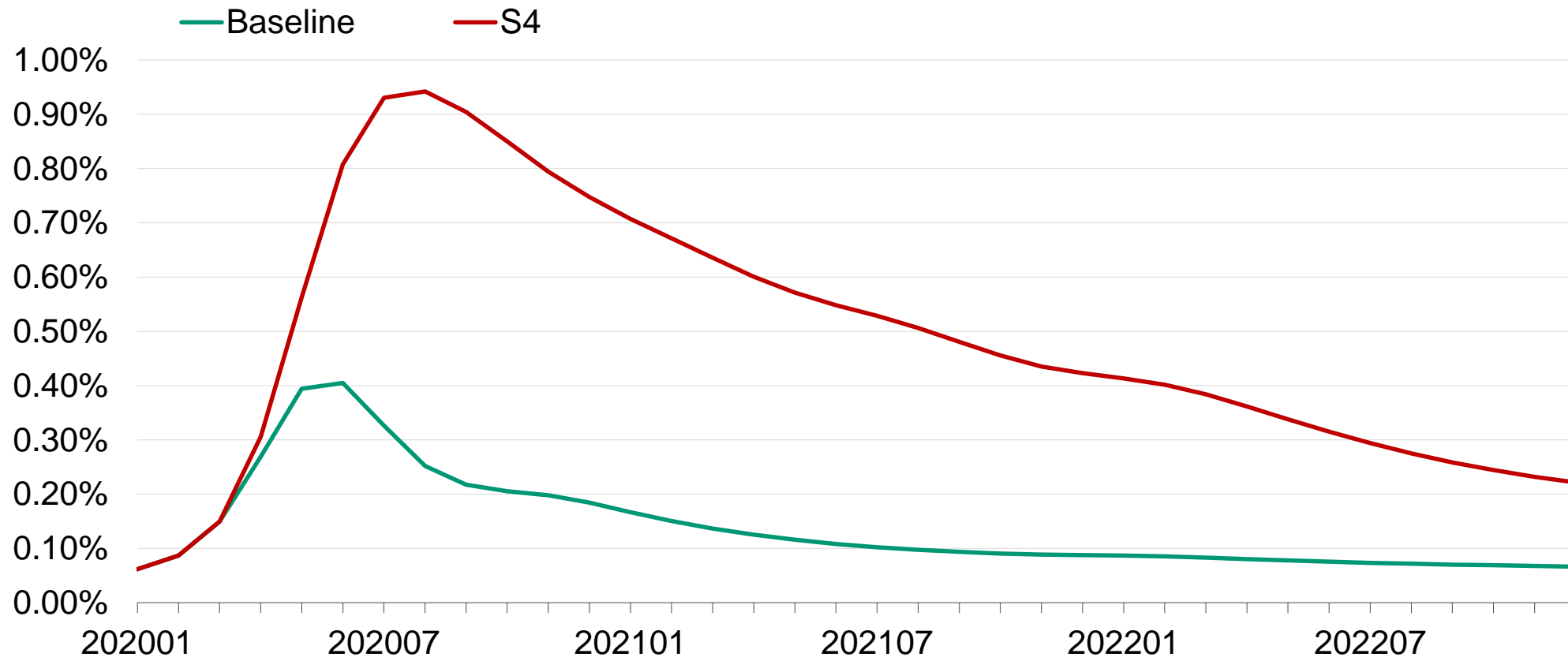
	Coefficient	t value
Intercept	-4.2	-15.0
%y/y Consumer demand (weighted average)	0.05	-3.4
Unemployment rate (weighted average)	0.47	14.5
VIX	0.37	6.1

# Resultado del modelo PD estresado

- Mostramos PD estresados agregados en los percentiles 10, 50, 75 y 90
- El escenario de referencia supone una fuerte recesión en el 1S2020, pero una recuperación que comienza a mediados de 2020
- El escenario S4 supone un deterioro de la situación de COVID-19 y una caída prolongada de la actividad económica mundial.
  - El PIB combinado cae 5.5% pico-a-valle en el escenario base vs. 8% en S4 (LatAm)
  - La tasa de desempleo combinada aumenta de 8% a 10.5% en el escenario base y 13% en S4 (LatAm)

# Proyecciones de PD estresada – Escenario base + S4

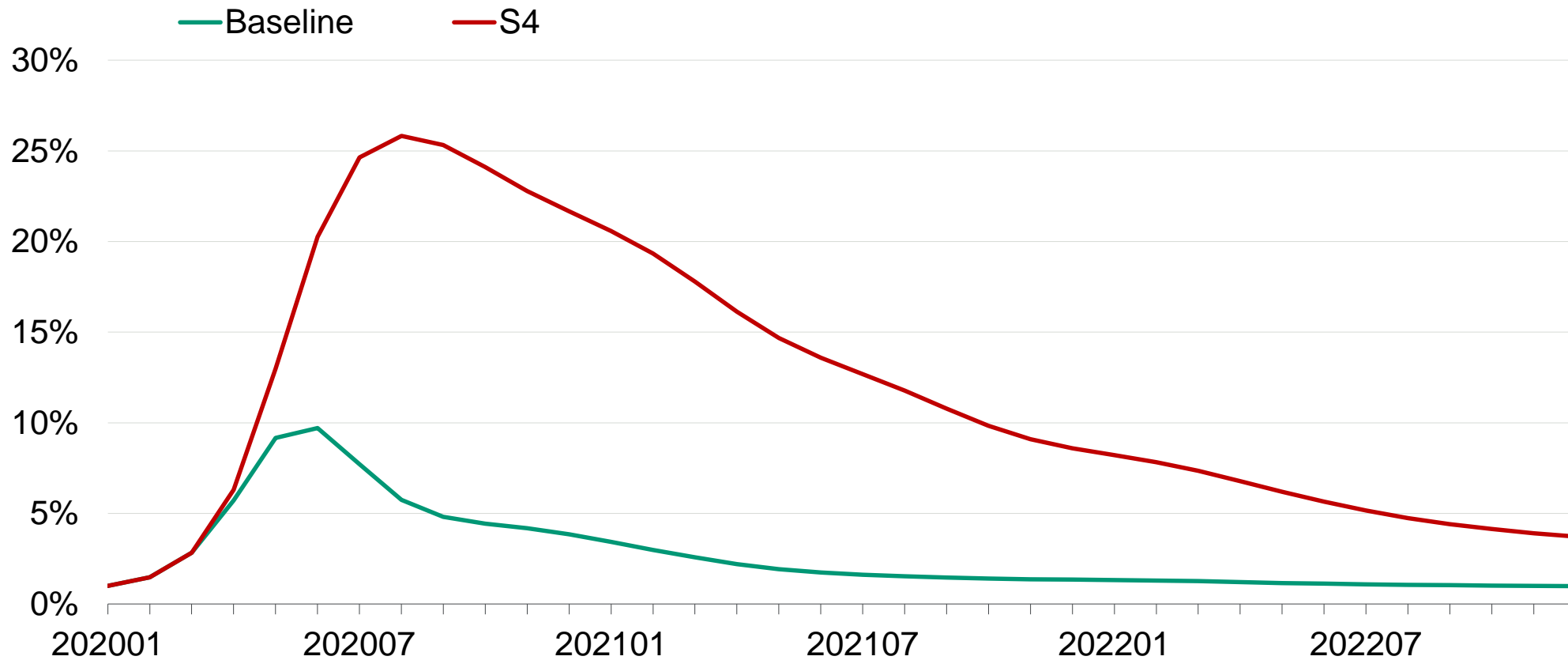
PD estresada del percentil 10





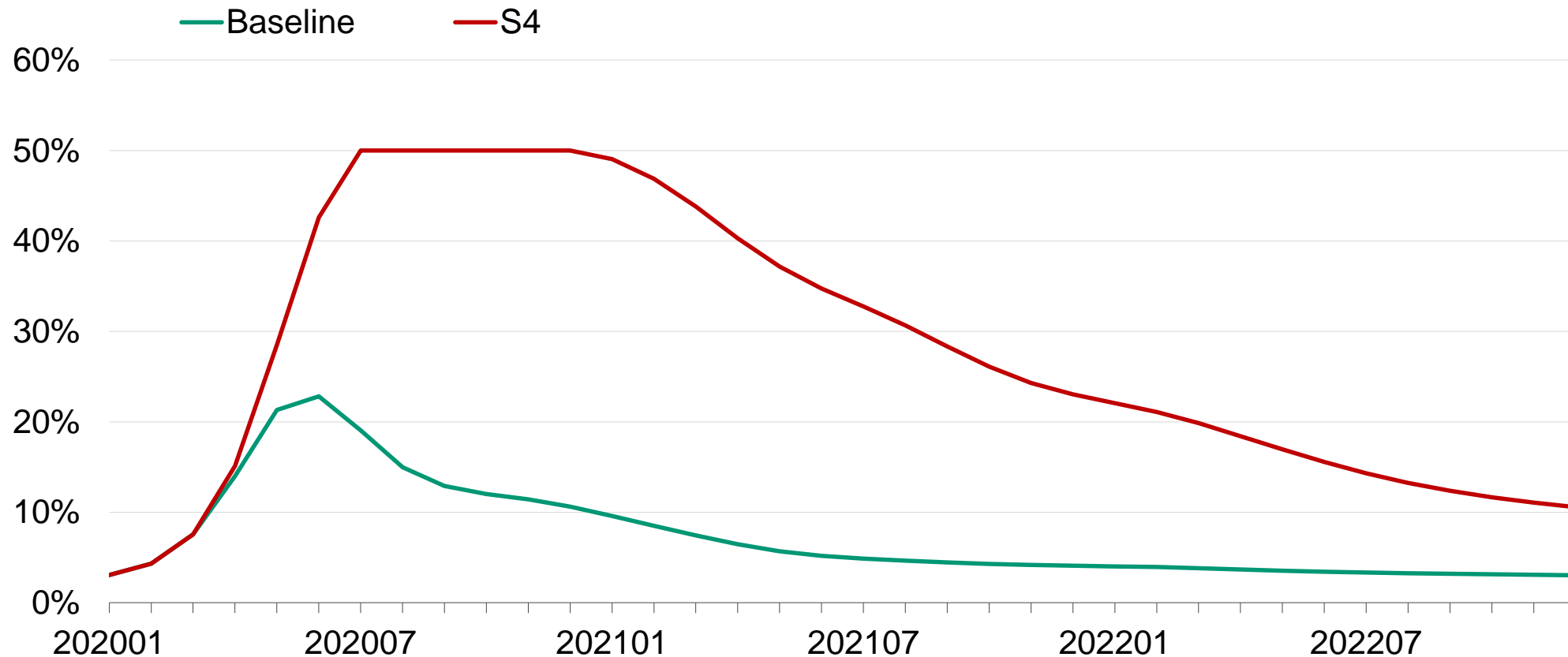
# Proyecciones de PD estresada – Escenario base + S4

Mediana de PD estresada



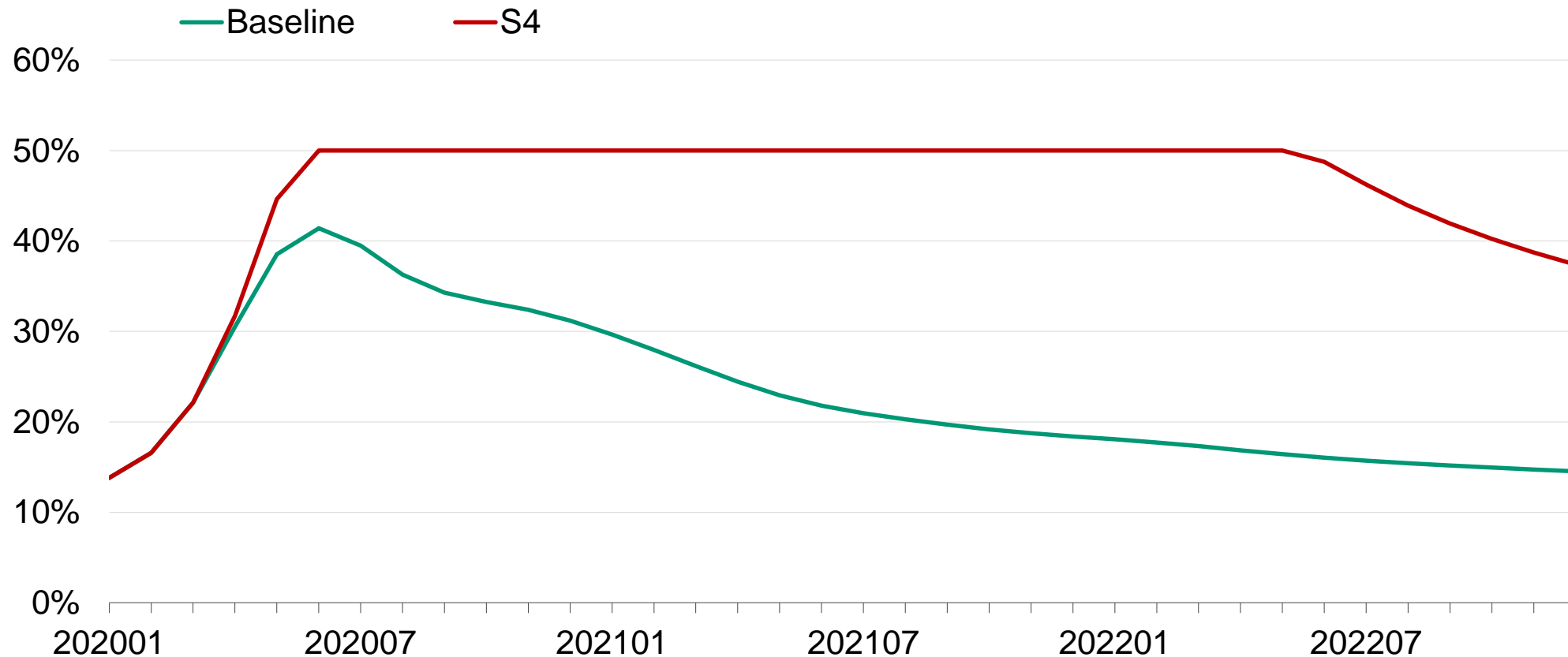
# Proyecciones de PD estresada – Escenario base + S4

PD estresada del percentil 75



# Proyecciones de PD estresada – Escenario base + S4

PD estresada del percentil 90



# Resumen y Conclusion

A dónde podríamos ir desde aquí

- Hasta ahora, los impactos de riesgo de incumplimiento de COVID-19 han sido notables para varias industrias.
- Nuestra proyección del riesgo de incumplimiento para la industria del Petróleo y Gas en particular es grave a nivel mundial si persisten las condiciones actuales de oferta y demanda.
- Los sectores corporativos de EE. UU. y del sur de Europa tienen un riesgo elevado.
- Para LatAm, las industrias de construcción y bienes raíces están en mayor riesgo, y los sectores corporativos de Argentina y Brasil sienten un gran impacto.

# Q&A

Por favor complete la corta encuesta a continuación y comparta sus comentarios con nosotros!

Para más análisis visite: [moodysanalytics.com/latam](https://moodysanalytics.com/latam)

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