Public Finance

Scope

Ratings

Public Finance Quarterly Update: Key Risks, Scope's Views and Rating Actions

Scope's Public Finance Outlook for 2018, released in November 2017, highlighted continued economic recovery in Europe and robust global growth despite increasing global risks – including those attributed to trade protectionism, a return of market volatility, rising rates and China. While there have been signs of moderation in the speed of European growth recently, the outlook for 2018 remains positive overall, in Scope's view. This quarterly update reviews some of the main risks to the European and global outlooks and Scope's latest rating actions.

Figure 1: Scope's global long-term sovereign ratings, as of 12 April 2018

Europe							Other Countries	
	Europea	n Union		European Free Trade				
Euro area		Non-euro area		Association				
Austria	AAA/Stable	Bulgaria	BBB/Stable	Norway	AAA/Stable	China	A+/Stable	
Belgium	AA/Stable	Croatia	BB/Stable	Switzerland	AAA/Stable	Georgia	BB/Stable	
Estonia	A+/Stable	Czech Republic	AA/Stable			Japan	A+/Stable	
Finland	AA+/Stable	Denmark	AAA/Stable			Russia	BBB-/Stable	
France	AA/Stable	Hungary	BBB/Positive			Turkey	BB+/Stable	
Germany	AAA/Stable	Poland	A+/Stable			United States	AA/Stable	
Greece	B-/Stable	Romania	BBB/Negative					
Ireland	A+/Stable	Sweden	AAA/Stable					
Italy	A-/Stable	UK	AA/Negative					
Latvia	A-/Stable							
Lithuania	A-/Stable							
Netherlands	AAA/Stable							
Portugal	BBB/Stable							
Slovakia	A+/Stable							
Slovenia	A-/Stable							
Spain	A-/Stable							

Figure 2: Scope ratings vs US agencies', as of 12 April 2018 (rating notches)



NB: Calculated based on alpha-numeric conversion on a 20-point scale from AAA (20) to D (1). Positive/negative outlooks are treated with a +/-0.25 adjustment.

Figure 3: Scope's Q1 2018 rating actions

Date	Sovereign	Rating Action	Rating & Outlook	
26 Jan	Czech Republic	Affirmed	AA/Stable	
16 Feb	Denmark	Affirmed	AAA/Stable	
	Finland	Affirmed	AA+/Stable	
	Norway	Affirmed	AAA/Stable	
	Kingdom of Sweden	Affirmed	AAA/Stable	
23 Feb	Slovakia	Affirmed	A+/Stable	
	Hungary	Outlook change	BBB/Positive	
16 Mar	Japan	Affirmed	A+/Stable	

Source: Scope Ratings GmbH.

SCOPE

Dr Giacomo Barisone +49 69 6677389 22 g.barisone@scoperatings.com

Analysts

John Francis Opie +49 69 6677389 13 jf.opie@scoperatings.com

Rudolf Alvise Lennkh, CFA +49 69 6677389 85 a.lennkh@scoperatings.com

Dennis Shen +49 69 6677389 68 d.shen@scoperatings.com

Jakob Suwalski +49 69 6677389 45 j.suwalski@scoperatings.com

Levon Kameryan +49 69 6677389 21 I.kameryan@scoperatings.com

Pawel Borowski +49 69 6677389 45 p.borowski@scoperatings.com

Related Research

Publication Calendar

Scope Ratings GmbH

Neue Mainzer Straße 66-68 60311 Frankfurt am Main

Phone + 49 69 6677389 0

Headquarters

Lennéstraße 5 10785 Berlin

Phone +49 30 27891 0 Fax +49 30 27891 100

info@scoperatings.com www.scoperatings.com





Key Risks...

1. Return of asset price volatility amidst withdrawal of the 'Central Bank Put'

While P/E ratios have dropped after recent corrections, equity valuations remain elevated in a historical context with multiple global equity indices still not distant from all-time peaks. An ongoing reversal of the volatility paradox may hurt investor and business confidence, and have a more significant wealth effect should markets see sustained downside. An increase in volatility can also spill over to other markets, like credit.

The withdrawal of central bank accommodation is a concern after years of low or negative rates and unconventional policies, with the potential to trigger global capital flow reversals. Higher sovereign borrowing rates can be tied to pro-cyclical tax cuts and increases in public spending in the US (AA/Stable) and Europe that may generate higher inflation expectations and drive greater issuance of government securities to finance deficits – a risk to debt sustainability.

2. Growing threat of protectionism

An emphasis from the US administration on creating conditions more favourable for US manufacturers by reviewing trade agreements, and reducing bilateral trade deficits may raise the stakes for trade conflicts, with counter-measures from trading partners. The recent dispute between the United States and China holds implications for Europe and the globe (even if the impact so far has been modest), with risk of investment and financial counter-measures becoming entangled. Ongoing threats risk weakening the global rules-based trading system that has supported decades of economic development since the end of the Second World War.

Trump's trade policies unlikely to see near-term reduction in deficit with China, March 27

3. Risk to Europe's institutional reforms amidst anti-establishment gains

Scope's 2018 outlook highlighted the upside potential for euro area sovereign ratings in the scenario of a new German government supporting French President Emmanuel Macron's European reform agenda. This progress may however be slowed with Merkel IV the most fragile German administration she has led. Europe's institutional integrity and capacity to enact necessary innovations to shield the European Union (EU) from future economic and financial crisis are challenged by the ongoing Brexit negotiations and associated risks, the Eurosceptic tone of Italy's recent election outcome and populist gains across the region.

France: Macron's labour market measures are likely to boost structural reform momentum, March 7

Merkel IV will be her most fragile government with unclear implications for Europe, March 6

4. China's growth versus financial stability conundrum

Scope views systemically-relevant high levels of public- and private-sector debt in China (A+/Stable) with concern. Here, much is being done by the Xi Jinping government to redress overcapacity sectors, financial and corporate sector indebtedness, as well as local government borrowing. However, with China as the largest driver of global growth and demand in multiple commodity markets, the conundrum remains on how China strikes the right balance between maintaining demand, supporting the global cycle, whilst tackling areas of monetary and fiscal excess.

China's National People's Congress holds meaningful credit implications, March 8

5. Geopolitical risks, underscored by US policies and growing Russian interventionism

Scope believes geopolitical tensions require monitoring. The unpredictability of the US administration increases the prospect of unanticipated announcements, raising international uncertainty. In addition, conflicts in the Middle East threaten spill-over into neighbouring countries, and Russia's increasing interventionism continues to represent a potential source of instability.

...and Scope's Major Calls on:

Brexit

Scope outlined early on (in a summer 2017 special comment) that the most probable outcome is either an eventual soft Brexit (Scope's baseline) or a no-Brexit scenario, rather than hard Brexit. This owes to the inherent complexity of the exit negotiations hindering a successful 'hard' Brexit under any near- to medium-term horizon, as well as the significant and disproportionate costs of any immediate no-deal exit. Scope has a AA/Negative Outlook on the UK. A further modest slowdown in the economy appears on the cards in 2018 due to less favourable tailwinds and the costs of Brexit uncertainty.

Brexit presents unique challenges to the UK's economic outlook and debt sustainability, March 20

Italian elections and government formation

Before the election, Scope outlined its anticipation of a hung parliament, post-election uncertainty and increase in market volatility, with five core scenarios to end an impasse (including those that involve a government with anti-establishment Five Star Movement (M5S), a centre-right government or a repeat election). The risk of a radicalist coalition (with M5S and Lega) is the scenario that poses the most significant credit implications. While Scope considers the risk of 'Italexit' to be limited, the risk of reform back-sliding clouds Italy's sovereign outlook on the A-/Stable rating.

Italian election points to policy uncertainty as support for anti-establishment rises, March 5

Election Risk to Reforms Clouds Italian Sovereign Outlook, February 5



Greece

Greece's EU financial assistance programme is scheduled to end on 20 August 2018. Scope expects EU oversight on Greece (B-/Stable) to continue, in one form or another, after the conclusion of the ESM programme, with this future oversight potentially linked to additional debt measures.

Euro area periphery

National and European reforms since the sovereign debt crisis have bolstered the EU's resilience and continue to support the outlook in the euro area periphery. While periphery ratings remain constrained by high levels of public- and privatesector debt, political uncertainties and banking system fragilities, Scope holds a market-leading, more constructive opinion on the periphery, including on Spain, Ireland, Italy and Portugal, leading recent catch-up upgrades by the US rating agencies.

Spain's evolving fiscal framework: implications for the sovereign and its regions, January 17

ECB monetary policy

Scope expects the European Central Bank's asset purchase programme to be extended past September in a "minor taper", given intentions to minimise market impact, still low inflation alongside the euro's appreciation.

United States

Collective economic, fiscal and political challenges underpin Scope's AA sovereign rating on the United States. In Scope's view, it is unlikely that a new spirit of bipartisanship will emerge post-congressional elections in November to address the country's underlying structural challenges, including a weakening potential growth outlook, high and rising public debt which is set to worsen following recent tax cuts and the expansionary budgetary legislation, and significant pension- and healthcare-related liabilities.

US Fiscal Outlook: Politically polarising tax cut boosts short-term growth, raises deficits, February 7

Russia and Turkey

Despite Russia's strengthened economic resilience and policy continuity following President Vladimir Putin's re-election, the threat of additional sanctions remains a risk. Meanwhile, elevated external vulnerabilities in the form of large external financing needs, political risks and a weakening institutional framework constrain Turkey's ratings. Scope has highlighted its investment-grade rating on Russia (BBB-) versus non-investment grade on Turkey (BB+) differential, and upgraded Russia to investment-grade in 2017, ahead of some of the US agencies.

A Putin victory may spur some structural reforms, but not enough to boost Russia's subdued growth, March 14

Four Reasons Why Russia Is Investment Grade and Turkey Is Not, January 19

Central & Eastern Europe

Scope affirmed Hungary's BBB rating and changed the outlook to Positive in February reflecting the sovereign's robust economic developments and continued consolidation of public finances. Scope is mindful that Hungary's relationship with the EU has worsened in recent years, with persistent concerns among the EU institutions over the "serious deterioration of the rule of law, democracy and fundamental rights". These concerns also extend to Poland (A+/Stable), which Scope expects to maintain high growth rates despite an Article 7 invocation. Scope notes that the concentration of political power, at the expense of independent institutions, could affect sovereign ratings if investment flows – including EU structural funds and private FDI inflows – were to be reduced, adversely impacting the economic and fiscal outlook of sovereigns in the region.

Hungary's Orban triumphs amid buoyant economy, but public debt is high, row with EU unresolved, April 9

Growing uncertainty in Slovakia unlikely to derail fiscal consolidation and structural reform, March 21

Special Comment: Poland to maintain robust growth, despite threat from Article 7, February 22

Georgia's liberal trade policy will help to mitigate its external vulnerabilities, February 14

A pan-Baltic capital market: Sign of progress towards a European capital markets union, January 10

ESG & sovereign risk

Environmental, Social and Governance (ESG) risks play an increasing role in financial markets. Scope's Public Finance team reviewed the distinct nature of ESG factors and sovereign credit risks, their areas of overlap and inter-dependence as well as some of the challenges the financial community faces when integrating both concepts into decision-making processes. Scope views the further exploration of sustainability in sovereign risk as an important area of research in developing a more holistic view on areas where there's overlap, from the perspective of a European rating agency.

ESG and sovereign ratings: Distinct risks, overlap exists, but challenges ahead, March 22

Public Finance Quarterly Update: Key Risks, Scope's Views and Rating Actions

Annex I: Macro-economic Outlook 2018-20

For the 2018-19 period, Scope expects robust and broad-based economic growth of around 2% in the euro area, compared to 2.6% in the US, slightly lower growth rates for the UK (1.5%) and Japan (1.1%), and a slowdown in China (down to 6.5% from 6.8%). Global growth conditions will be supported by robust consumer and business confidence though downside risks are rising (highlighted earlier in this report). Despite stronger growth in domestic demand, inflation has remained weak and below target in many advanced economies, reflecting still-weak wage growth and driving Scope's baseline for a very gradual monetary policy reversal, with the United States an exception. Continued improvements in fiscal balances in the euro area are expected and, together with robust growth, debt-to-GDP ratios are expected to gradually fall for most European sovereigns. Lastly, few significant changes are expected in current-account balances, though China's current account surplus will continue to fall while the UK's current account deficit will correct to an extent.

Macro-economic overview

SCOPE

Region	Real GDP growth (%)		Inflation (%)		Fiscal balances (% GDP)		Debt level (% of GDP)		Current account (% of GDP)	
	2015-17	2018-19F	2015-17	2018-20F	2015-17	2018-20F	2017	2020F	2015-17	2018-20F
Euro area	2.0	2.1	0.6	1.5	-1.6	-0.7	87.4	81.1	3.2	2.9
Germany	1.8	2.2	0.7	1.9	0.7	1.0	65.0	55.7	8.3	7.5
France	1.3	1.9	0.5	1.5	-3.3	-2.7	96.8	95.6	-0.9	-0.5
Italy	1.1	1.3	0.5	1.3	-2.5	-0.6	133.0	125.8	2.2	2.0
Spain	3.2	2.3	0.4	1.6	-4.3	-2.2	98.7	94.5	1.7	2.0
Netherlands	2.5	2.2	0.5	1.5	-0.3	1.2	57.4	48.4	9.0	9.8
United Kingdom	1.9	1.5	1.1	2.3	-3.4	-1.6	89.5	87.6	-4.1	-3.0
Russia	-0.4	1.6	8.9	4.0	-3.1	-1.0	17.4	18.2	3.3	3.5
Turkey	4.8	3.5	8.8	8.7	-2.3	-2.3	27.9	27.2	-4.0	-4.4
United States	2.2	2.6	1.2	2.4	-4.1	-3.9	108.1	108.3	-2.4	-2.7
China	6.8	6.5	1.7	2.5	-3.4	-3.9	47.6	57.0	1.9	0.9
Japan	1.2	1.1	0.3	1.1	-4.0	-2.8	240.3	237.2	3.5	3.7

Source: IMF, ECB, EC, BoE, CNBS, RSSTAT, TRSTAT, FRBSF, BOJ; core inflation is based on the core PCE index in the US.

Public Finance Quarterly Update: Key Risks, Scope's Views and Rating Actions

Annex II: Scope's 2017-18 rating actions & publications

Country	Rating	Rating action	Strengths	Weaknesses	Publications
Austria	AAA/Stable	Affirmed	 Wealthy & diversified economy Strong external position Sound public finances 	 Banking sector vulnerability High public debt Ageing population 	Rating Report
Belgium	AA/Stable	Affirmed	1) Wealthy & diversified economy 2) Sound external position 3) Reform efforts	 Slow fiscal consolidation High public debt Labour market rigidities 	Rating Report
Estonia	A+/Stable	Upgraded from A to A+	 Solid eco. fundamentals* Strong public finances* Euro area membership* 	 Small size of the economy External vulnerability Eroding competitiveness 	A pan-Baltic capital market: Sign of progress towards a European capital markets union <u>Rating Report</u>
Finland	AA+/Stable	Affirmed	 Wealthy & diversified economy Strong institutions High debt affordability 	 Growth constraints High and rising household debt 	Rating Report
France	AA/Stable	Affirmed	 Large & diversified economy + euro area membership Macro-financial stability Favourable debt structure 	 High public debt and deficit Labour market rigidities 	France: Macron's labour market measures are likely to boost structural reform momentum <u>Rating Report</u>
Germany	AAA/Stable	Affirmed	 Large and diversified economy Sound public finances Sound external position 	 Ageing population Banking sector fragilities 	Merkel IV will be her most fragile government with unclear implications for Europe Merkel's government to push ahead, despite weakened authority German elections: Low risk event but important for reform prospects in Europe Rating Report
Greece	B-/Stable	Upgraded from CC to B-	 Compliance adjustment prog* Improving budget performance* Stabilising macroeconomy* 	 High public debt Fragile recovery prospects Banking sector risks 	Rating Report
Ireland	A+/Stable	Affirmed	 Large & diversified economy euro area membership Declining public debt Strong institutions 	 High public & private debt External vulnerabilities 	Rating Report
Italy	A-/Stable	Affirmed	 Large & diversified economy + euro area membership Primary surpluses & reforms Resilient debt structure 	 High public debt Growth below potential Banking fragilities Political uncertainties 	Election Risk to Reforms Clouds Italian Sovereign Outlook <u>Rating Report</u>
Latvia	A-/Stable	Affirmed	 Sound economic performance Commitment to structural reforms Effective fiscal consolidation Euro area membership 	 1) Vulnerability to external shocks 2) Subdued potential growth 3) Unfavourable demographics 	A pan-Baltic capital market: Sign of progress towards a European capital markets union Rating Report
Lithuania	A-/Stable	Upgraded from BBB+ to A-	 Continued fiscal consolidation* Euro area membership* Commitment to structural reforms* 	 1) Unfavourable demographics 2) Low potential growth 3) Vulnerability to external shocks 	A pan-Baltic capital market: Sign of progress towards a European capital markets union Rating Report
Netherlands	AAA/Stable	Affirmed	 Wealthy & diversified economy Solid external position Sound public finances 	 High private debt Vulnerability to external risks Labour market inefficiencies 	Rating Report



Public Finance Quarterly Update: Key Risks, Scope's Views and Rating Actions

Portugal	BBB/Stable	Affirmed	 Euro area membership Improving public finances Commitment to structural reforms 	 1) High private & public debt 2) Structural rigidities 3) Banking sector fragilities 	Rating Report
Slovakia	A+/Stable	Affirmed	 Euro area membership Robust economic performance Moderate levels of government debt 	 1) External vulnerabilities 2) Adverse demographics 3) Rising household indebtedness 	Rating Report
Slovenia	A-/Stable	Upgraded from BBB to A-	 Euro area membership* Improved macro & fiscal performance* Improved external position* 	 1) Reform implementation 2) Ageing population 	Rating Report
Spain	A-/Stable	Affirmed	 Large & diversified economy euro area membership Resilient economic recovery Improving banking sector 	 High unemployment High external debt Fiscal imbalances Political uncertainties 	Spain's evolving fiscal framework: implications for the sovereign and its regions Catalan election will not lead to the region's independence – regardless of the result Catalonia to remain in Spain, but tensions escalate
					Rating Report
			EU non-euro area		
Croatia	BB/Stable	Affirmed	 EU membership Moderate recovery Reduced fiscal deficits 	 Low growth potential High public & private debt Institutional shortcomings 	Rating Report
Bulgaria	BBB/Stable	Affirmed	1) EU membership 2) Low & declining public debt 3) CA surplus & sound reserve coverage	 Private sector spillover risks No lender of last resort Institutional weaknesses 	Rating Report
Czech Republic	AA/Stable	Affirmed	 Broad & diversified economy Sound public finances Resilient current account 	 Demographics Household financial vulnerability 	Rating Report
Denmark	AAA/Stable	Affirmed	 Wealthy & diversified economy Robust public finances Sound external position 	 High private debt Labour market constraints Banking sector vulnerabilities 	Rating Report
Hungary	BBB/Positive	Affirmed; changed Outlook to Positive	 Robust economic performance* Improving public finances* Reduction of ext. imbalances* 	 High public debt Poor non-price competitiveness Weak institutional credibility 	Rating Report
Poland	A+/Stable	Upgraded from A to A+	 Improving economic prospects* Reduced CA vulnerabilities* Increasing external buffers* 	 Reliance on capital inflows Budgetary pressures Political uncertainties 	Special Comment: Poland to maintain robust growth, despite threat from Article 7 <u>Rating Report</u>
Romania	BBB/Negative	Affirmed, changed Outlook to Negative	 EU membership Convergence process High growth rate 	 Pro-cyclical fiscal policies Vulnerabilities to short-term shocks Institutional weaknesses 	Rating Report
Sweden	AAA/Stable	Affirmed	1) Wealthy & div. economy 2) Solid growth & fiscal performance 3) Low external risk	 Financial stability risks High private debt levels 	Rating Report
UK	AA/Negative	Affirmed; changed Outlook to Negative	 Large & diversified economy Monetary & FX flexibility Reserve currency status 	 Brexit-related uncertainty Weaker eco. & fiscal outlook Less predictable policy framework 	Brexit presents unique challenges to the UK's economic outlook and debt sustainability Risks to Brexit Trade Talks Pronounced as UK, EU
					Approach Next Phase
					Uncertainties around Brexit challenge UK credit outlook



Public Finance Quarterly Update: Key Risks, Scope's Views and Rating Actions

			EFTA		
Norway	AAA/Stable	Affirmed	 Fiscal & CA surpluses Sovereign wealth fund Strong macro governance 	 Macroeconomic imbalances High household debt Low productivity growth 	Rating Report
Switzerland	AAA/Stable	Affirmed	 Wealthy & diversified economy Prudent fiscal management Strong external position Deep capital markets 	 Adverse demographics Large and concentrated banking sector Exposure to real estate risks 	Rating Report
			Non-Europe		
China	A+/Stable	Downgraded from AA- to A+	 1) Large and diversified economy 2) High external resilience 3) Scope for reforms 	 High and rising economy-wide debt* Worsening public finances* Weaker external position* 	China's National People's Congress holds meaningful credit implications China's sovereign ratings hinge on deleveraging initiatives Rating Report
Georgia	BB/Stable	Affirmed	 Economic resilience Moderate public debt Commitment to structural reforms 	 High CA deficit Reliance on capital inflows Large contingent liabilities Political risks 	Georgia's liberal trade policy will help to mitigate its external vulnerabilities <u>Rating Report</u>
Japan	A+/Stable	Affirmed	 1) Diversified economy 2) Great funding flexibility 3) Strong external position 	 1) High debt levels 2) Growth below trend 3) Weak public finances 	Unfavourable demographics and structural bottlenecks limit fiscal consolidation efforts in Japan <u>Rating Report</u>
Russia	BBB-/Stable	Upgraded from BB- to BBB-	 Strengthening macro stability* Improving external position* Sound public finances* Declining financial risks* 	 Low growth potential Geopolitical risks Weak governance 	A Putin victory may spur some structural reforms, but not enough to boost Russia's subdued growth Four Reasons Why Russia Is Investment Grade and Turkey Is Not Rating Report
Turkey	BB+/Stable	Upgraded from BB to BB+	 Growing & resilient economy* Improving public finances* Effective economic policy response* 	 High external financing needs Political uncertainties Worsening business environment 	Four Reasons Why Russia Is Investment Grade and Turkey Is Not Rating Report
USA	AA/Stable	Affirmed	 Wealthy & competitive economy Accountable institutions USD reserve currency 	 Weakening potential growth High public debt Significant contingent liabilities Political polarisation 	US Fiscal Outlook: Politically polarising tax cuts boosts short-term growth, raises deficits US government obligations & contingent liabilities: a high and rising fiscal risk The unparalleled status of the US dollar in an evolving global environment Polarisation in US politics is leading to policy inaction and uncertainty Why the United States is no longer AAA <u>Rating Report</u>



Scope Ratings GmbH

Headquarters Berlin

Lennéstraße 5 D-10785 Berlin Phone +49 30 27891 0

London

Suite 301 2 Angel Square London EC1V 1NY

Phone +44 203-457 0 4444

Oslo

Haakon VII's gate 6 N-0161 Oslo

Phone +47 21 62 31 42

info@scoperatings.com www.scoperatings.com

Frankfurt am Main

Neue Mainzer Straße 66-68 D-60311 Frankfurt am Main

Phone +49 69 66 77 389-0

Madrid

Paseo de la Castellana 95 Edificio Torre Europa E-28046 Madrid

Phone +34 914 186 973

Paris

33 rue La Fayette F-75009 Paris

Phone +33 1 82 88 55 57

Milan

Via Paleocapa 7 IT-20121 Milan

Phone +39 02 30315 814

Disclaimer

© 2018 Scope SE & Co. KGaA and all its subsidiaries including Scope Ratings GmbH, Scope Analysis GmbH, Scope Investor Services GmbH and Scope Risk Solutions GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope's ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data. Scope's ratings, rating reports, rating opinions, or related research and credit opinions are provided 'as is' without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or other damages, expenses of any kind, or losses arising from any use of Scope's ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party as, opinions on relative credit risk and not a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope's credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings GmbH at Lennéstraße 5, D-10785 Berlin.

Scope Ratings GmbH, Lennéstrasse 5, 10785 Berlin, District Court for Berlin (Charlottenburg) HRB 192993 B, Managing Director(s): Dr. Stefan Bund, Torsten Hinrichs.