# MOODY'S INVESTORS SERVICE

# **CREDIT OPINION**

6 October 2020

# Update

Rate this Research

#### Contacts

Evan Wohlmann +44.20.7772.5567 VP-Sr Credit Officer evan.wohlmann@moodys.com

Lenaic Couderc +33.1.5330.1038 Associate Analyst lenaic.couderc@moodys.com

Dietmar Hornung +49.69.70730.790 Associate Managing Director dietmar.hornung@moodys.com

Yves Lemay +44.20.7772.5512 MD-Sovereign/Sub Sovereign yves.lemay@moodys.com

Alastair Wilson+44.20.7772.1372MD-Global Sovereign Riskalastair.wilson@moodys.com

#### **CLIENT SERVICES**

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

# Government of Iceland – A2 stable

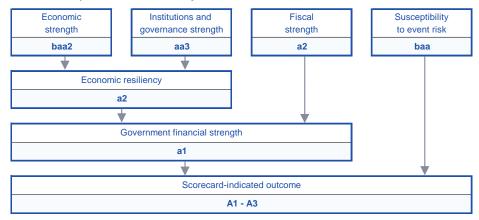
Regular update

#### **Summary**

The credit profile of <u>Iceland</u> (A2 stable) is supported by its wealthy and flexible economy as well as its favourable demographics which support its long-term growth prospects. Fiscal strength has been bolstered by the substantial decline in its government debt burden since 2011, while consistent current-account surpluses contribute to Iceland's net external creditor position. The credit profile is constrained by the economy's small size, high economic concentration and openness and small currency area, which increase its vulnerability to shocks and can cause volatility in growth. Iceland's swift policy response, high wealth buffers, reduced private sector debt and improved external position help increase resilience to the coronavirus shock as it temporarily weighs on Iceland's economic and fiscal performance.

Exhibit 1

#### Iceland's credit profile is determined by four factors



Source: Moody's Investors Service

# **Credit strengths**

- » Economic flexibility and very high wealth support shock-absorption capacity
- » Markedly improved fiscal position and low share of foreign currency debt
- » Well-funded pension system, long working lives and favorable demographics

## **Credit challenges**

» Small, open economy with high economic concentration and hence volatile growth

- » Substantial, albeit significantly reduced, exposure to external risks
- » Large contingent liabilities derived from state-owned companies

### **Rating outlook**

The stable outlook reflects our view that downside risks stemming from the economy's small size and high concentration are mitigated by Iceland's relative macroeconomic and financial robustness, based on reduced indebtedness and improved external balance.

We expect high wealth buffers, robust institutions, a track record of macroeconomic management and relative economic resilience will support Iceland's credit profile through the significant but temporary impact on economic and fiscal performance from the coronavirus outbreak. While the country's exposure to the disruption in the tourism sector will likely weigh on economic performance beyond 2020, we do not expect the temporary shock to weaken public or external debt sustainability or threaten financial stability.

#### Factors that could lead to an upgrade

While unlikely in light of the coronavirus outbreak, Iceland's rating would be upgraded if economic or institutional reforms help to significantly further insulate the credit profile from the risks posed by its small size and concentrated economy, including through a marked improvement in its external position and the build-up of financial buffers which materially further reduce its vulnerability to domestic and external shocks. For instance, a further and substantial strengthening of the government's balance sheet, through a track record of large primary surpluses or further sizeable one-off income flows, including from privatisations, would be positive, as would a further material reduction in the government's contingent liabilities.

#### Factors that could lead to a downgrade

A sharp and sustained increase in government debt would weigh on the credit profile given the economy's structural vulnerability to shifts in the global economy and risks posed by its concentrated economic model. This could result from the crystallisation of Iceland's still sizeable contingent liabilities, including from the large banking system, or from a substantial and sustained weakening in the country's fiscal performance if, for example, offsetting budgetary measures are not forthcoming in the event that a significant economic shock weighs on government revenues. A disruptive slowdown or other economic shock which leads to substantial capital outflows, weakening Iceland's external position and threatening financial stability, would be negative.

### **Key indicators**

Evhibit 2

Iceland	2014	2015	2016	2017	2018	2019	2020F	2021F
Real GDP (% change)	2.1	4.7	6.6	4.5	3.9	1.9	-7.6	3.7
Inflation (CPI, % change, Dec/Dec)	0.8	2.0	1.9	1.9	3.7	2.6	2.8	2.7
Gen. gov. financial balance/GDP (%)	-0.1	-0.8	12.4	0.6	0.8	-1.5	-9.4	-8.6
Gen. gov. primary balance/GDP (%)	4.5	3.6	16.4	4.5	3.7	1.1	-7.3	-6.4
Gen. gov. debt/GDP (%)	80.9	65.0	52.2	44.1	38.2	37.3	49.5	54.4
Gen. gov. debt/revenues (%)	184.9	160.2	91.7	101.4	88.8	91.4	128.5	143.2
Gen. gov. interest payment/revenues (%)	10.4	10.9	6.9	8.9	6.6	6.3	5.5	5.8
Current account balance/GDP (%)[1]	5.2	5.8	7.6	3.8	3.2	6.2	1.3	1.0

[1] Excludes DMBs undergoing winding up in 2008-2015

Source: Central Bank of Iceland, Statistics Iceland, Moody's Investors Service

#### **Detailed credit considerations**

We assess Iceland's **economic strength** as "baa2" given the country's small size and associated history of economic boom and bust episodes. That said, at \$56,066 in 2019 on a purchasing power basis, Iceland's GDP per capita is higher than that of around 90% of our sovereign rating universe, having overcome the significant losses registered during the country's banking and currency crisis. As

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

evidenced by its ranking at 26th globally by the World Economic Forum's Global Competitiveness Index for 2019, Iceland's economy is highly competitive – standing out compared with close peers, particularly given its small size.

Our final assessment of economic strength is slightly lower than the initial score of "baa1" given the high degree of concentration in the Icelandic economy. While more diversified than in the past, Iceland's very open economy still relies on three main export sectors, which suggests a smaller degree of diversification, and hence shock absorption, than that implied by the assessment of size in the scorecard.

A tourism boom has led to strong real GDP growth over the past five years, averaging 4.0% between 2013 and 2019. However, the coronavirus outbreak will push the Icelandic economy into recession in 2020 and we expect a contraction in real GDP of 7.6% this year before a gradual recovery in growth to 3.7% in 2021. Similar to other countries around the world, substantial policy measures announced by the authorities have helped support consumption and employment through the temporary shock, although the recovery will likely be gradual given Iceland's very high dependence on tourism, with tourism arrivals not expected to recover fully before 2022. These forecasts are subject to considerable uncertainty around the duration and scale of the unprecedented shock.

We assess Iceland's **institutions and governance strength** as "aa3", reflecting the country's strong scores in the Worldwide Governance Indicators and recent track record of effective macroeconomic management to restore economic and financial stability after the banking crisis. Our assessment of the quality of institutions reflects Iceland's clear competitive strengths in areas such as its high-quality education system, an innovative and high-tech oriented business sector, an efficient and flexible labour market and welldeveloped infrastructure. Iceland also has a long tradition of broad cooperation and consensus on economic matters between the government, employers and employee associations, which contributes positively to policy effectiveness.

Moreover, the progress that the authorities have achieved in restoring macroeconomic, financial, and fiscal health also informs our assessment of Iceland's institutions. For example, the regulatory framework for the banking sector has strengthened considerably – with domestic banks focusing inward to mitigate risk. Improvements to the monetary policy framework have also helped support relatively subdued inflation since 2008. Our assessment also recognizes the careful and successful liberalisation of capital account, with the process of removing capital restrictions largely concluded in early 2019.

We assess Iceland's **fiscal strength** as "a2" reflecting the country's markedly reduced debt burden relative to previous years and high debt affordability, although contingent liabilities remain sizeable. After peaking at 111.5% of GDP in 2011, Iceland's gross government debt burden declined rapidly thanks to persistent budget surpluses, debt buybacks and rapid economic growth, to stand at 37.3% in 2019.

The contraction in economic activity as a result of the coronavirus outbreak and the government's sizeable policy response will result in a material weakening in fiscal performance over the coming years. We expect government debt will rise to 54.4% by the end of 2021 and, following the recent announcement of the government's medium term fiscal plan, remain at elevated levels until 2025. That said, lceland's much improved fiscal headroom will help support its credit profile through a temporary rise in government debt. The rise in government debt is far smaller than seen during the global financial crisis when the banking system required substantial support. In addition, the substantial improvement in the structure of government debt leaves it less exposed to currency fluctuations and sudden capital outflows.

We assess Iceland's susceptibility to event risk as "baa", driven by our banking system risk assessment.

We assess political risk as "aa" due to relatively consistent policy in key areas important to safeguarding the government's credit profile. Although only one government has served an entire term since 2007, political consensus on the economic and fiscal direction for Iceland has remained strong such that we don't expect a notable change in policy direction.

We assess government liquidity risk as "aa". The previous marked reduction in government debt, prudent liquidity management, with significant cash buffers, and a stable domestic investor base will help to mitigate the risks posed by a large increase in borrowing requirements this year.

Our assessment of Iceland's banking sector risk as "baa" balances the significant progress achieved since the crisis in restoring the financial sector's health against the sector's vulnerability to contagion risk given Iceland's concentrated economy, making it difficult for

the banking system to diversify from the three main economic sectors. While we do not rate any Icelandic banks, we incorporate our aggregate analysis of the Icelandic banking system derived from publicly available information into our final assessment.

The system's strong capitalisation and liquidity have significantly lowered risks to financial stability since the 2008 banking crisis, and the rebuilt buffers place Icelandic banks in a much stronger position to withstand the shock created by the coronavirus outbreak. The sector's concentrated exposures, including to the hard-hit tourism sector, could serve to amplify the impact of the sharp economic contraction arising from the coronavirus outbreak on banks, although we expect the improvement in banks' solvency ratios will help to provide adequate buffers to absorb higher losses without breaching regulatory requirements.

Iceland's external vulnerability risk assessment at "a" reflects its current-account surpluses since 2013 which contribute to Iceland's net external creditor position. Furthermore, positive balance of payments dynamics have allowed the Central Bank of Iceland to purchase substantial foreign currency which will help to support the country's external position through the sharp but temporary economic shock. The current account is expected to remain in a small surplus in 2020 as a weaker currency helps to support exports at the same time as the reduction in consumption weighs heavily on imports.

## **ESG considerations**

#### How environmental, social and governance risks inform our credit analysis of Iceland

Moody's takes account of the impact of environmental (E), social (S) and governance (G) factors when assessing sovereign issuers' economic, institutions and governance and fiscal strength and their susceptibility to event risk. In the case of Iceland, the materiality of ESG to the credit profile is as follows:

Iceland faces some exposure to **environmental risks** in its key sectors of tourism and fishing, particularly given the presence of active volcanoes on the island and the possible migration of fish stocks due to warming seas.

**Social risks** currently exert some impact on Iceland' credit profile. Social pressures exert themselves through intensive wage negotiations every four years which can impact on Iceland's competitiveness. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

In terms of **governance**, while Iceland's institutions are very strong, there are still some weaknesses in the financial supervisory framework that remain unaddressed including around deficiencies in anti-money laundering processes after Iceland was recently placed on the Financial Action Task Force's "grey list".

All of these considerations are further discussed in the "Detailed credit considerations" section above. Our approach to ESG is explained in our report on how ESG risks influence sovereign credit profiles and our cross-sector methodology <u>General Principles for</u> <u>Assessing ESG Risks</u>.

## **Recent developments**

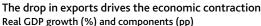
#### Coronavirus outbreak will have a significant temporary economic impact

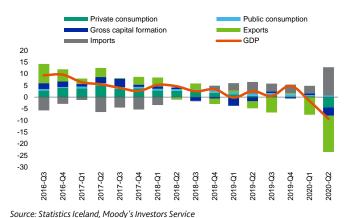
The demand and supply shock caused by the coronavirus outbreak has significantly impacted economic activity in Iceland. We expect all demand components, with the exception of public consumption, to experience a severe contraction. As a result, we project full-year real GDP to contract by 7.6% in 2020, slightly improved from our previous estimate of a contraction of 8.8%, after domestic demand grew stronger than expected following the easing of containment measures in the spring. In the second quarter, real GDP fell by 9.3% year-on-year after contracting by 1.7% in the first quarter, mainly driven by a fall in private consumption and net exports (see Exhibit 3). Iceland's limited economic diversification, with the three largest sectors accounting for around 70% of total export revenue, and high degree of trade openness means it is particularly susceptible to shocks which disrupt international trade.

Significant travel restrictions worldwide have suppressed demand for Iceland's important tourism sector, a key driver of robust economic growth in recent years, with foreign tourist arrivals declining 67% over the first seven months of 2020 compared to the same period in 2019. According to the World Travel and Tourism Council (WTTC), travel and tourism accounted directly and indirectly for 22.8% of Iceland's GDP in 2019, 21.9% of employment and 30% of total exports. Iceland saw a slight improvement in tourist arrivals during the summer together with support to the industry from stronger domestic tourism (see Exhibit 4). That said, the tightening of

border restrictions on 18 August planned to last at least until December<sup>1</sup> will likely halt the nascent recovery of the tourism industry and we expect tourist arrivals to drop by around 75% in 2020.

#### Exhibit 3

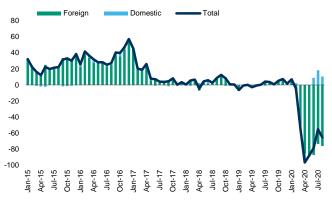




#### Exhibit 4

Strong increase in domestic tourism helps to partially mitigate the drop of foreign arrivals

Overnight stays (year-on-year % change)



Source: Statistics Iceland, Moody's Investors Service

At the same time, subdued demand for restaurants and hotels in Europe led to a drop in demand for fresh fish, weakening marine exports, which account for 19% of total exports. Marine export volumes were down 13% year-on-year in the first half of 2020, though the depreciation of the króna has supported export revenues, which fell by only 6% over the same period. Moreover, exports of lower value and hence less expensive frozen fish have held steady and somewhat helped to offset the decline, facilitated by the high degree of flexibility in the sector. As market conditions are expected to remain challenging, with economic contractions in key export markets, including the <u>United Kingdom</u> (UK, Aa2 negative), we expect the value of fish exports to decline materially over the course of the year.

Finally, slower manufacturing activity and excess supply have led to a drop in the price of aluminium, weighing on Iceland's third largest export sector, with aluminium exports from Iceland recording a 10.5% year-on-year decline in the second quarter. The sector already faced challenges as <u>Rio Tinto</u> (A2 stable), the operator of Iceland's third-largest aluminium smelter, announced in February that it was undergoing a strategic review of its Icelandic operations which could result in it shutting down its smelter altogether as it struggles to generate profits. The company had already reduced production at the smelter by 15%. Moreover, ferrosilicon plant closures in the summer on account of weak demand and low prices will further reduce Iceland's manufacturing exports.

Our expectation remains that the coronavirus outbreak constitutes a severe but temporary dislocation and, despite an increase in infection rates across Europe, we don't expect the same severity of containment measures to be reinstated. As such, economic activity is forecast to begin to recover gradually from the second half of 2020. Domestic card payment turnover increased by 15.7% on average between May and July, supported by the significant increase in public spending, though it slowed to 1.8% in August. That said, the recovery is likely to be slower in Iceland compared to countries which are not as exposed to tourism. Similar to other forecasters, we expect a very gradual resumption in tourist arrivals to around 50% of 2019 levels by next year, and the economy to return to full year growth of 3.7% in 2021 (around 1pp weaker than our previous forecast in July). After a marked rise in job losses this year – the unemployment rate reached 6% in August compared to 3.5% in 2019 – we expect unemployment levels to still remain elevated in 2021 and not to return to pre-crisis forecasts for some years.

Risks to our forecasts remain elevated. In particular, the expiration in H2 2020 of some government measures to support wages and employment could lead to a marked fall in spending and a spike in job losses during the autumn. In addition, further domestic outbreaks and the need to reinstate containment measures (including extending the already tight restrictions on tourists arriving into lceland) also pose significant risks to our forecasts. Finally, future developments around tourism remain highly uncertain following a new wave of infections in Iceland and other European countries. Nevertheless, Iceland's credit profile will benefit from the significant buffers built since the financial crisis, including the high incomes and savings of Icelandic households which serve as an important shock absorber. Furthermore, the healthy underlying fundamentals of Iceland's economic model, given its large untapped potential in the tourism sector and still abundant stocks of fish, support its strong medium-term growth potential.

#### Iceland's fiscal headroom will help support its credit profile as the pandemic weakens fiscal metrics

The large economic contraction and the fiscal measures adopted by the authorities to counteract the effects of the pandemic will drive a marked deterioration of Iceland's public finances. We forecast the fiscal balance will fall significantly this year to a deficit of 9.4% of GDP from a deficit of 1.5% in 2019.

The government announced three successive support packages in March and April, which in total amounted to around ISK352 billion (11.9% of GDP), to provide individuals and companies with liquidity support during the acute phase of the pandemic and support the subsequent economic recovery. The focus of the immediate fiscal measures, which have been similar in nature to that seen in other countries, has been on avoiding large-scale labour shedding and corporate defaults as a result of temporarily lower revenue, to which the government has responded with a combination of wage subsidies, tax reductions and deferrals, guaranteed credit lines, allowing individuals greater access to their pension savings and sector specific measures, including for the large tourism sector.

The fiscal deficit is forecast to improve slightly next year as the economy returns to growth and given that, while the government has outlined a number of costly measures, the vast majority of the government's initial support package is temporary. That said, the pandemic will still weigh on Iceland's fiscal performance next year, particularly through weaker tax revenues and higher unemployment benefits, with the budget forecast to record a deficit of 8.6% of GDP.

As a result of the fiscal measures and the deterioration in the economic environment, we expect government debt will rise to 49.5% of GDP in 2020 from 37.3% in 2019, and reach around 54% at the end of 2021. Furthermore, the recently announced fiscal plans for the coming 5 years indicate that the authorities intend to use Iceland's fiscal headroom to support the economic recovery, with the government debt burden expected to remain at elevated levels until 2025<sup>2</sup>. The medium term fiscal plan includes large infrastructure investment with projects totaling ISK111 billion (3.7% of GDP) over 2021-2025, with ISK27.2 billion in 2021 (1% of GDP), including the construction of the new Landspitali hospital, and increased spending in key areas of health, education, environment and research and development.

That said, the marked increase in Iceland's fiscal space in recent years will help its credit profile to withstand the resulting rise in the government debt. The rise in government debt is far smaller than seen during the global financial crisis when the banking system required substantial support. In addition, we see the risk of a much sharper increase in the debt-to-GDP ratio to be relatively contained, due in part to the substantial improvement in the structure of government debt that leaves it less exposed to currency fluctuations and sudden capital outflows. Moreover, the retirement of higher-cost debt and the rebuilding of the government's revenue base since the banking crisis have helped to improve the affordability of Iceland's government debt.

In line with our expectation, the government has provided a 90% guarantee on a US\$120 million (0.5% of GDP) credit facility to Icelandair, the country's flagship airline, given its strategic importance to the country's economic model. The credit line was conditional on a successful share offering, which was completed on 18 September.

# Moody's rating methodology and scorecard factors: Iceland - A2 stable

			•			
				Initial	Final	Weight
				Factor	score	weight
Factor 1: Economic strength				baa1	baa2	50%
Growth dynamics	Average real GDP growth (%)	2015-2024F	2.6	baa2		25%
	Volatility in real GDP growth (%)	2010-2019	2.7	ba2		10%
Scale of the economy	Nominal GDP (\$ billion)	2019	24.2	b2		30%
National income	GDP per capita (PPP, Intl\$)	2019	56,066	aaa		35%
Adjustment to factor 1	# notches				-1	max ±
actor 2: Institutions and govern	nance strength			aa3	aa3	50%
Quality of institutions	Quality of legislative and executive institutions Strength of civil society and the judiciary			aa aa		20% 20%
Policy effectiveness	Fiscal policy effectiveness Monetary and macroeconomic policy effectiveness			aa a		30% 30%
Specified adjustment	Government default history and track record of arrears	;			0	max -
Other adjustment to factor 2	# notches				0	max ±
1 x F2: Economic resiliency				a2	a2	
actor 3: Fiscal strength				a2	a2	
Debt burden	General government debt/GDP (%) General government debt/revenue (%)	2019 2019	37.3 91.4	a1 aa2		25% 25%
Debt affordability	General government interest payments/revenue (%) General government interest payments/GDP (%)	2019 2019	6.3 2.6	aa3 baa1		25% 25%
Specified adjustments	Total of specified adjustment (# notches)			-1	-1	max ±
	Debt trend	2016-2021F	2.2	0	0	
	Foreign currency debt/general government debt	2019	17.7	0	0	
	Other non-financial public sector debt/GDP Public sector assets/general government debt	2019 2019	20.5 0.0	-1 0	-1 0	
Other adjustment to factor 2		2019	0.0	0		20.01/
Other adjustment to factor 3	# notches			-4	0	max ±
1 x F2 x F3: Government financial st	-			a1	a1	
actor 4: Susceptibility to event	risk			baa	baa	Min
Political risk				a	a	
Covernment liquidity rick	Domestic political risk and geopolitical risk			aa		
Government liquidity risk	Ease of access to funding			aa	aa	
Specified adjustment	High refinancing risk			dd	0	max
Banking sector risk				baa	baa	
	Risk of banking sector credit event (BSCE)	Latest available		baa3	buu	
	Total domestic bank assets/GDP	2019	168.6	180-230		
Adjustment to F4 BSR	# notches				0	max ±
External vulnerability risk				а	а	
Adjustment to E4 EVP	External vulnerability risk # notches			а	0	mov
Adjustment to F4 EVR Overall adjustment to F4	# notches					max :
F1 x F2 x F3 x F4: Scorecard-indicated outcome					0	max -
E1 v E2 v E3 v E4. Scorecard-inc	licated outcome			A1 - A3	A1 - A3	

Note: While information used to determine the grid mapping is mainly historical, our ratings incorporate expectations around future metrics and risk developments that may differ from the ones implied by the scorecard-indicated outcome. Thus, the rating process is deliberative and not mechanical, meaning that it depends on peer comparisons and should leave room for exceptional risk factors to be taken into account that may result in an assigned rating outside the scorecard-indicated outcome. For more information please see our Sovereign Ratings Methodology.

Footnotes: (1) Initial factor score: scorecard indicators combine with the automatic adjustments to produce an initial factor score for every rating factor, as detailed in Moody's Sovereign Ratings Methodology. (2) Final factor score: where additional analytical considerations exit, initial factor scores are augmented to produce a final factor score. Guidance on additional factor storely considerations exit, initial factor scores are augmented to produce a final factor score. Guidance on additional factor storely considerations exit, initial factor scores are augmented to produce a final factor score. Guidance on additional factor storely considerations exit, initial factor scores are augmented to produce a final factor score. Guidance on additional factor storely considerations exit, initial factor scores are augmented to produce a final factor score. Guidance on additional factor storely considerations exit, initial factor scores are augmented to produce a final factor score. Guidance on additional factor storely considerations exit, initial factor scores are augmented to produce a final factor score. Guidance on additional factor stores thready is found in Moody's Sovereign Ratings. Methodology, details on country-specific considerations are provided in Moody's research. (3) Scorecard-indicated outcome: Factor 1: Economic Strength, and Factor 3: Fiscal Strength, following a non-linear pattern where Fiscal Strength has higher weight for countries with moderate ER and lower weight for countries with high or low ER. As a final step, Factor 4: a country's Susceptibility to Event Risk, is a constraint which can only lower the government financial strength as given by combining the first three factors. (4) There are 20 ranking categories for quantitative sub-factors: aaa, aa, aa, aa, aa, aa, abaa, ba, b, caa, ca (5) Indicator value: if not explicitly stated otherwise, the indicator value corresponds to the latest data available.

# Moody's related publications

- » Issuer In-depth: Government of Iceland A2 stable: Annual credit analysis, 29 July 2020
- » Credit Opinion: Government of Iceland A2 stable: Update after forecast changes, 7 April 2020
- » Sector In-Depth: <u>Sovereigns Global Coronavirus and oil price shock magnify weaknesses highlighted in negative 2020 outlook</u>, 20 March 2020
- » Issuer in-Depth: Government of Iceland: FAQ on recent credit developments, 12 December 2019
- » Credit Opinion: Government of Iceland A2 stable: Update following upgrade and outlook change, 11 November 2019
- » Sector In-Depth: Sovereigns Global: Ageing-related credit pressure to rise in 2030s in advanced economies, 23 October 2019
- » Rating Methodology: Sovereign Ratings Methodology, 25 November 2019

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

#### Endnotes

- 1 Passengers arriving to Iceland must choose either to submit to two screening tests, separated by a five-day quarantine until the results of the second test are known, or to submit to only one screening test but instead spend 14 days in quarantine after arrival.
- 2 The fiscal plan also includes measures to prevent a more significant deterioration in the fiscal accounts, such that government debt according to Ministry of Finance calculations will peak at 59% of GDP rather than 65%.

© 2020 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S INVESTORS SERVICE CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS, AND PUBLICATIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDERCONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1245351

