Government-Related Entities

Action Logement Services

Key Rating Drivers

Rating Derivation Summary: Fitch Ratings rates Action Logement Services (ALS) under its Government-Related Entities Rating Criteria, which takes into account the strength of links between ALS and its sponsor – the French state – and the incentive for the latter to prevent a default by ALS. The application of these criteria leads to a government-related entity (GRE) support score of 45 points out of a maximum of 60 and the equalisation of ALS' ratings with those of the sovereign.

Status, Ownership, and Control – 'Strong': ALS is a limited company owned by Action Logement Group (ALG), an association managed by representatives of employers and employees. The relations between ALG, and its subsidiaries, and the state are defined in the five-year agreement signed on 16 January 2018 and covering 2018-2022. The state also exercises control through three representatives with veto right on the board. ALS is subject to controls by the National Court of Auditors, ANCOLS, and ACPR, the French banking regulator.

Support Track Record – 'Very Strong': ALS benefits from a sound and predictable revenue framework. ALS's main source of income is the PEEC (participation des employeurs a l'effort de construction), a mandatory contribution paid by private-sector employers. The PEEC is a quasitax granted by the French parliament to ALS for its funding. The state is obliged to intervene in case an economic downturn leads to reduced PEEC income and potential financial stress. We consider there are no legal or regulatory restrictions to extraordinary support from the state.

Socio-Political Implications of Default – 'Strong': ALS is the second-largest lender to the French social housing sector after Caisse des Depots et Consignations (CDC; AA/Negative), with about 8% of the sector's debt stock. ALS also directly finances some state policies, such as those dedicated to renovating city centres. Fitch considers that a default by ALS would threaten the completion of its investment plan, with material socio-political implications for the state and local and regional governments (LRGs).

Financial Implications of Default – 'Very Strong': Fitch considers ALS a proxy-funding vehicle for the French state. Fitch views ALS as carrying out activities that could be done directly by the state or a public agency (such as the CDC) and that it benefits from a quasi-tax income to fund its operations. The outsourcing the financing of some public policies to ALS gives the state some flexibility as ALS's budget and debt are not consolidated into the state budget. A default by ALS could also have a major impact on the social housing sector by raising the cost of funding.

ESG Considerations: Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Rating Sensitivities

Sovereign Rating Action: Any rating action on the sovereign will be reflected in ALS' ratings.

Weaker Links with the State: A significantly weaker assessment of strength of linkage or incentive to support factors, leading to a score below 45 points under our GRE Rating Criteria, could lead to a downgrade

Ratings

Foreign Currency	
Long-Term IDR	AA
Short-Term IDR	F1+
Local Currency Long-Term IDR	AA
Senior Unsecured Notes	AA

Outlooks

Long-Term Foreign-Currency IDR Negative Long-Term Local-Currency IDR Negative

Issuer Profile

Action Logement Services is the financial arm of the Action Logement Group, an association managed by representatives of employers and employees tasked with providing affordable housing to workers. It is the entity in charge of collecting the PEEC (a mandatory contribution paid by private employers) and providing loans and grants to individuals and social housing providers.

Financial Data

Action Logement Services							
(EURm)	2018	2019					
Net interest income	145	135					
Net profit	436	398					
Loans	16,004	15,951					
Total assets	20,923	22,700					
Capital	13,542	13,940					
Interest revenue/ loans (%)	1.1	1.1					
Net interest income/ earning assets (%)	0.7	0.6					
Loan impairment charge/loans (%)	0.1	-0.1					
Loans/capital (%)	118.2	114.4					

Source: Fitch Ratings, Action Logement Services

Applicable Criteria

Government-Related Entities Rating Criteria (September 2020)

Related Research

French Social Housing Providers - Portfolio Review (September 2020)

No Direct Coronavirus Impact on French Social Housing Providers (April 2020)

Analysts

Nicolas Miloikovitch, CFA +33 1 44 29 91 89 nicolas.miloikovitch@fitchratings.com

Margaux Vincent +33 1 44 29 91 43 margaux.vincent@fitchratings.com



Rating Synopsis

Fitch rates ALS under its GRE Rating Criteria with the French state (AA/Negative) as its sponsor. Fitch assesses the 'Status, Ownership and Control' and the 'Socio-Political Implications of default' as 'Strong', and the 'Support Track Record' and 'Financial Implications of Default' as 'Very Strong'. Fitch does not assign a Standalone Credit Profile (SCP) to ALS as it is irrelevant considering ALS' business profile given its strong links with the state.

Rating History

n.a.

Date	Long-Term Foreign- Currency IDR	Long-Term Local-Currency IDR	
23 Sep 19	AA	AA	
Source: Fitch	7.0.1	AA	

Sponsor IDR GRE SCP

GRE IDR

GRE Rating Derivation Summary

Status, Ownership and Control	Strong	5
Support Track Record	Very Strong	10
Socio-Political Implications of GRE Default	Strong	10
Financial Implications of GRE Default	Very Strong	20
GRE Support Score		45
Score - Notching Guideline Table		>=45

Standalone Credit Profile (SCP) Derivation	
Revenue Defensibility	
Operating Risk	
Leverage Ratio (Rating Case Scenario)	N/A
Qualitative Factors Adjustments	
GRE SCP	
Distance - Notching Guideline Table	>4

AAA	aaa	AAA
AA+	aa+	AA+
AA	aa	AA
AA-	aa-	AA-
A+	a+	A+
A	а	Α
A-	a-	A-
BBB+	bbb+	BBB+
BBB	bbb	BBB
BBB-	bbb-	BBB-
BB+	bb+	BB+
BB	bb	BB
BB-	bb-	BB-
B+	b+	B+
В	b	В
B-	b-	B-
CCC/CC/C	ccc/cc/c	CCC/CC/C

GRE SU	ipport Sco	re (max sc	ore = 60)			
60	50	40	30	20	10	0
Notching	Guideline	Table				

Notching Guideline Table								
Distance \ Score	>=45	35-42.5	27.5-32.5	20-25	15-17.5	12.5	<=10	
= or above	Capped	Capped	Capped	Capped	Capped	Capped	Capped	
1,2,3	=	=	=	- 1	+ 1	+ 1	SCP	
4	=	- 1	- 1	- 2	+ 1	+ 1	SCP	
>4	=	- 1	- 2	- 3	+2/+3	+ 1	SCP	
Stylized Notching (Guideline	Tahla: ref	er to GRE	critoria f	or datails			

= or above	Capped	Capped	Capped	Capped	Capped	Capped	Capped	GRE Support Score	45
1,2,3	=	=	=	- 1	+ 1	+ 1	SCP	Notching Approach	Equalised
4	=	- 1	- 1	- 2	+ 1	+ 1	SCP	GRE Suggested IDR	
>4	=	- 1	- 2	- 3	+2/+3	+ 1	SCP	Single Equalisation Factor	No
tylized Notching (Guideline	Table: ref	er to GRE	criteria f	or details			GRE IDR	AA
ource: Fitch Ratir	ngs								

Summary Sponsor IDR GRE SCP

Distance Sponsor IDR vs GRE SCP

Issuer Profile

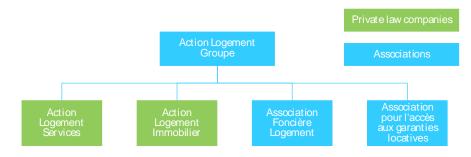
The group Action Logement, which is managed by employers' and trade unions' representatives, is in charge of the PEEC - which represents 0.45% of companies' payroll - and of using its proceeds to help private-sector employees find affordable housing through direct subsidies and loans and by promoting the construction of social housing.

Collection of the PEEC was reformed in 2017, to reduce costs and end competition between collectors. The number of regional collectors was reduced to 20 (from 198 in 1990). Action Logement Groupe (ALG), the holding entity of ALS, and Action Logement Immobilier, the entity in charge of managing the group's holdings in social housing providers, were created on 1 January 2017.

Two other entities were not affected by the reform: the APAGL (in charge of providing guarantees to landlords) and the Association Foncière Logement (AFL; in charge of financing and building dwellings in designated urban areas). AFL and APAGL are very small and do not represent any financial risk to the group.



Simplified Group Structure at End-2019



Source: Fitch Ratings

Support Rating Factors

Fitch considers the state to be the sponsor of ALS and "looks through" ALG, a holding company that is responsible for negotiating the multi-year contract with the state and ensuring it is implemented. Fitch therefore considers the state has a sufficient control over ALS for a parent /subsidiary relationship to be present.

Action Logement Services - Assessment of Support

Status, ownership, and control	Support, track record	Socio-political implications of default	Financial implications of default	GRE score
Strong	Very strong	Strong	Very strong	45
Source: Fitch Ratings				

Status, Ownership and Control: Strong

Legal Status

ALS is a limited company (société par action simplifié), whose status was approved by decree 2016-1769 on 19 December 2016, with a 99-year duration. As a financial institution, ALS is regulated by the commercial, housing & construction, and monetary & financial codes.

ALG is the sole shareholder of ALS (article 7 of its status) and cannot reduce its stake in ALS.

ALS is also subject to law 2014-856, chapter 1, regarding Solidarity and Social Economy, which stipulates it must remain a democratically governed, not-for-profit entity that cannot pay dividends.

ALS can be dissolved like any limited-liability company. Its assets and liabilities would be automatically transferred to its sole shareholder, according to article 19 of its status. However, the dissolution must be approved by a state decree.

Governance

The board of ALS has 10 social partner members: five representatives of employers' organisations (four from MEDEF and one from CPME) and five representatives from trade unions, one each from the main employee unions – CFDT, CFE-CGC, CFTC, CGT and FO. The board is chaired by Joel Cheritel (MEDEF). The board also includes three state representatives, nominated by the Ministries of Housing, Budget and Economy. They have the right to veto board decisions if they consider them to threaten the financial stability of the group (art. L313-18-6 of the housing and construction code).

Fitch reckons that they are some talks between the state and the social partners over a potential reform of the group's governance. Fitch believes that such a reform would reinforce the state's control over the group's operations and would not be detrimental to the ratings.



Control

A committee comprising 24 state-nominated representatives, equally from the group, social housing sector and LRGs, issues opinions on the use of PEEC proceeds. ALG and its subsidiaries are controlled by the National Court of Auditors and ANCOLS (the agency that monitors the social housing sector and publishes an annual report on the use of these proceeds.)

ALG's relationship with the state is defined in the five-year contract (2018-2022) signed in January 2018. If the state and ALG fail to agree a new contract before 1 January 2023, the current one remains in force. Each year, ALG submits a report on the sustainability of its commitments to the state and ANCOLS.

ALG currently is committed to invest EUR15 billion over five years. In April 2019, ALG and the government signed an amendment VIP, under which ALG commits to increase its investments by EUR9 billion in 2019-2022. This brings ALG's total investment commitments to EUR23 billion by 2022.

Article 12 of the contract also sets a ceiling for the group's operating costs, which have to decrease by 10% over five years. It also includes a series of financial and economic metrics, which are checked quarterly.

ALS is also subject to supervision by the ACPR, the French Prudential Supervision and Resolution Authority.

Support Track Record: Very Strong

The very strong assessment of this attribute factors in the sound and predictable revenue framework from which ALS benefits. The PEEC is ALS' main source of income (the other is the repayment of loans granted to social housing providers and individuals). The PEAEC (PEEC paid by farmers), and the PSEEC (supplementary contribution paid by companies) are two other smaller contributions to ALS.

ALS is in charge of collecting the PEEC. It is a dynamic income source directly correlated to total payroll in France. As a result, it is also correlated to the economic cycle.

Fitch considers the PEEC a quasi-tax income granted to ALS by the French parliament to fund its needs. Historically, every time the state has modified the taxable basis (the PACTE law of May 2019 increased the threshold from 20 to 50 employees, reducing the taxable base PEEC), its net impact on ALS has been broadly neutral due to dedicated state subsidies. In 2020, the state granted ALS a EUR238 million subsidy. None is expected in 2021. Previously, in 2005, the state increased the threshold to 20 employees, while granting a EUR133 million annual subsidy to ALS, which ended in 2017.

Revenue Sources of Action Logement Services (Annual Change in %)

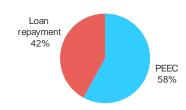


Source: Fitch Ratings, Action Logement Services

If economic downturn causes ALS's PEEC income to fall and create financial stress, the government is obliged to intervene. Fitch expects the state to amend the contract either by increasing its own contribution to ALS or by reducing ALS' spending objectives.

Fitch considers there are no legal or regulatory restrictions to extraordinary support from the state in case of need. Fitch does not consider that EU state aid regulation would limit the government's ability to provide ALS with timely support.

Income Split



Source: Fitch Ratings, Action Logement Services



Socio-Political Implications of Default: Strong

The strong assessment of this factor reflects the importance of ALS for the funding of the government's housing policies through three main channels:

- ALS is the second-largest lender to the sector after CDC, with about 8% of the sector's debt stock. ALS's financing is attractive for social housing providers as ALS has more leeway to set its lending rates than CDC and it does not require a guarantee (unlike CDC, for which a guarantee is a regulatory requirement). In exchange for a loan, ALS requires from social housing providers a "reservation right" on future dwellings.
- ALS also extends loans and grants to employees who can, through their employers, access ALSs' subsidised funds to finance some individual housing projects.
- ALS directly finances through subsidies some state agencies, such as the Agence Nationale pour la Rénovation urbaine (ANRU; National Urban Renewal Agency), the Fonds National des Aides à la Pierre (FNAP/National Construction Fund) and the Fonds National d'Aide au Logement (FNAL/National Housing Fund). The ANRU is the state agency in charge of renovating urban centres and is financed mostly by ALS.

Fitch considers that ALS's importance to the economy and the state will increase in the medium term with the 2019 VIP. ALS's role as a key actor for the social housing sector is being reinforced at a time when the sector is changing fast, confirming its importance by financing national public policies.

In 2019, ALS also created the Organisme National de Vente (ONV), which bulk-buys dwellings from social housing providers that they want to sell, and subsequently sells them back to individuals. ALS directly funds the ONV with a EUR1 billion subsidy paid in three installments over 2019-2021. ONV is to play a key role as the government pushes social housing providers to sell social dwellings to finance new ones.

Fitch believes that were ALS to be unable to operate, it would be difficult to replace in the short-to-medium term due to the diversity of its activities and its ubiquitous presence in France's housing policies. Such a disruption could have significant political and economic repercussions for the government, which is in charge of monitoring its operations.

Fitch also considers that a default by ALS on its financial obligations could lead it to revise down its investment plan, with negative political repercussions for the government, but is unlikely to affect its day-to-day activities given its low reliance on external funding.

Financial Implications of Default: Very Strong

Fitch considers ALS a proxy-funding vehicle for the state as it is a collector of a quasi-national tax directly financing some national policies. Fitch considers that outsourcing the financing of some public policies to ALS gives the state some flexibility as ALS's budget and debt are not consolidated into the state budget.

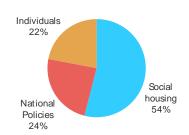
ALS is present on the capital markets through its EUR6.2 billion EMTN programme set up to finance its VIP and its inaugural EUR1 billion unsecured note issued in 2019 and maturing in 2034.

Fitch also considers that a default by ALS could have a major impact on the social housing sector as a whole by raising the cost of funding, with an indirect impact on the cost of funding for the state and its GREs. Fitch therefore believes the state would try to prevent default by ALS.

Overall GRE Assessment

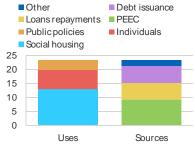
The assessment of the four rating factors results in a score of 45 out of a possible 60. Therefore, Fitch equalises the ratings of ALS with those of the sovereign.

Expenses Split



Source: Fitch Ratings, Action Logement Services

2018-2022 Plan (EURbn)



Source: Fitch Ratings, Action Logement Services



Operations

Financial Performance

ALS's main income sources are the proceeds from the PEEC and the loan repayments from regulated housing providers and individuals. Companies can choose to pay the PEEC directly to ALS as a subsidy (80% of companies do this as it is easier) or pay it in the form of a 20-year interest-free loan.

PEEC proceeds correlate broadly with growth in the national payroll. They fell by 4% in 2017 due to a cut in a compensation transfer from the state (dating from 2005). The cut took place as part of the group reorganization, with some economies of scale expected. Fitch does not expect the PEEC proceeds to deviate significantly from national payroll growth.

ALS's main expenditure relates to the financing, through loans and subsidies, of social housing providers (to build new dwellings), individuals and national policies.

In 2019, ALS's net income declined to EUR0.4 billion from EUR0.5 billion in 2018. Fitch expects ALS to post some net losses in the next few years, due to an increase in subsidies owing to the five-year agreement with the state, before returning to profitability.

ALS employed 2,500 people at end-2019, 4% fewer than the year earlier, leading to a 5% reduction in staff costs. Overall administrative costs rose 15%, however, due to the costs of locating all ALS teams in a single site in Paris and a voluntary redundancy scheme.

Credit Risk

Loans to social housing providers and individuals comprised 70% of ALS's assets in 2019, down from 76% in 2018, as ALS issued a EUR1 billion bond to finance the VIP, to be disbursed from 2020. Loans to social housing providers represent 54% of its assets. Fitch considers ALS's loan portfolio to be of good quality, with a non-performing loans ratio limited to 2.0% for social housing providers, and to 2.6% for individuals.

Fitch considers the French social-housing sector low risk, as highlighted in our recent report French Social Housing Providers – Portfolio Review. There is some loan concentration in the subsidiaries of Action Logement Immobilier (32% of ALS' total loan book), ALS' sister company, but the risk is low as Fitch has assigned Action Logement Immobilier the same ratings as ALS.

Similarly, loans to individuals (17% of total assets) are also of good quality, in our opinion, with a non-performing loans ratio limited to 2.6%

Fitch therefore considers overall on-balance-sheet risk to be limited due to a well-performing loan portfolio resulting from a well-defined credit risk-assessment process consisting of quantitative and qualitative analyses.

Fitch does not expect ALS's loan book quality to materially deteriorate following the VIP and the expected increase in loans granted.

Loans extended to social housing providers are indexed to the "Livret A", a French regulated savings account whose rate is set by the state (currently 0.50%).

Covid-19 Impact

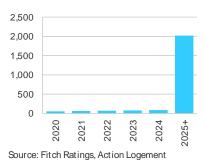
Fitch does not expect the health and economic crisis linked to the pandemic to have a material impact on ALS's financial profile. In terms of credit risk, Fitch considers the social housing sector as anti-cyclical as it is little affected by a slowdown in economic activity (demand for social dwellings rises, while unpaid rents are limited by the housing benefits paid directly by the state to the providers on behalf of tenants).

The biggest impact of the crisis was a slowdown in PEEC collection due to some private companies going bankrupt and because employees on the government's partial employment scheme (chomage partiel) are not included in the PEEC calculation, which could lead to a 10% reduction in the PEEC collected in 2020. A material increase in the unemployment rate could also pressure PEEC collection.

As a public policy vehicle, ALS is committed to supporting social housing providers and tenants with an extra EUR200 million of subsidies in the medium term.

Debt Repayment (EURm)

Services





Debt, Liquidity and Contingent Liabilities

ALS has very low leverage as it has almost never used external financing to fund its activities. ALS issued an inaugural EUR1 billion unsecured note in October 2019 with a 15-year maturity under its EUR6.2 billion EMTN programme. ALS also has EUR1.2 billion of loans with CDC at end-2019 dated to 2013 and 2015.

ALS does not rely on short-term funding to finance its operations, limiting liquidity risk. Fitch does not expect this to change in the medium term. ALS manages its liquidity carefully, with most of it invested in low-risk interest-bearing accounts and term deposits. At end-2019, ALS's available liquidity totalled EUR6.0 billion, inflated by the proceeds from the October 2019 issue it had not had time to use. Its liquidity is managed by French commercial banks rated by Fitch in the 'A' category.

ALS therefore has very strong regulatory capital and liquidity ratios, with a common equity Tier 1 ratio of 81% at end-2019 (against a threshold of 10.75%) and a liquidity ratio of 937% (threshold of 100%). ALS expects the common equity Tier 1 ratio to deteriorate to 33% by 2024, but remain well above the regulatory limit.

Peer Analysis

The three Action Logement entities benefit from a GRE score of 45, lower than that of CDC but higher than CDC Habitat. The difference is because Action Logement is less important to the state than CDC that focuses on intermediary housing, which Fitch views as slightly less supported than pure social housing.

The three Action Logement entities benefit from the same GRE score as JSC Russia Housing and Urban Development Corporation, a state-owned company that implements Russia's housing-sector policies.

They benefit from a higher GRE score than Kazkhstan Mortgage Company (KMC), which implements housing-sector policies.



Peers

Issuers	Sponsor	GRE score	IDR	Rating approach
Action Logement Services	France	45	AA	Equalisation
Action Logement Immobilier	France	45	AA	Equalisation
Action Logement Groupe	France	45	AA	Equalisation
Caisse des Depots et Consignations	France	55	AA	Equalisation
CDC Habitat	France	40	AA-	Top-down -1
Joint-Stock Company Russia Housing and Urban Development Corporation	Russia	45	BBB	Equalisation
Kazakhstan Mortgage Company	Kazakhstan	35	BBB-	Top-down -1

Source: Fitch Ratings

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3' – ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity.

For more information on our ESG Relevance Scores, visit https://www.fitchratings.com/site/esg.



Appendix A: Financial Data

Action Logement Services

8			
Profit and loss (EURm)	2017	2018	2019
Interest revenue	191.8	172.5	168.2
Interest expenditure	-25.7	-27.8	-33.0
Net interest income	166.1	144.7	135.1
Net fees and commissions	0	0	0
Other operating income	456.7	372.7	435.7
Personnel expenses	-179.8	-204.2	-193.0
Other operating expenses	-1,711.9	-1,370.0	-1,555.8
Net gains and losses on securities and trading	0	0	0
Net operating income/(loss)	-1,269.0	-1,056.8	-1,177.9
Provisions	41.7	-13.4	10.5
Operating profit (loss) after provisions	-1,227.3	-1,070.2	-1,167.4
Other non-operating revenues/expenses	6	0	41.1
Contributions from state budgets	1,480.5	1,507.3	1,535.6
Profit (loss) before tax	252.6	437.1	411.1
Taxation	0.0	-0.6	-11.3
Net profit (loss)	252.6	436.5	397.9
Balance sheet (EURm)			
Cash and cash equivalents	2,687.9	2,330.3	1,145.2
Liquid securities	952.7	1,709.7	4,815.9
Deposits with banks	0	0	0
Loans	16,158.6	16,004.4	15,950.8
Other earning assets	1.3	1.1	1.1
Long-term investments	0	0	0
Fixed assets	428.2	437.6	643.7
Intangible	6.6	7.2	11.3
Other long-term assets	76.5	432.9	132.0
Total assets	20,311.9	20,923.3	22,700.0
Customer deposits	0	0	0
Deposits from banks	0	0	0
Short-term borrowing	0	60.0	61.2
Other short-term liabilities	0	0	0
Debt maturing after 1 year	1,422.6	1,235.7	2,313.0
Other provisions and reserves	0	0	0
Other long-term liabilities	5,783.6	6,085.6	6,386.6
Equity	20.0	20.0	20.0
Reserves	13,085.6	13,522.1	13,920.1
Total liabilities & equity	20,311.9	20,923.3	22,700.0
Source: Fitch Ratings, Action Logement Services			



Appendix B:

Financial Ratios

2.0	0047	0040	2042
Performance	2017	2018	2019
Interest revenue on loans/loans (%)	1.2	1.1	1.1
Interest expense/borrowings and deposits (%)	1.8	2.1	1.4
Net interest income/earning assets (%)	.8	.7	.6
Net operating income/net interest income and other operating revenue (%)	-203.7	-204.3	-206.3
Net operating income/equity and reserves (%)	-9.7	-7.8	-8.4
Net operating income/total assets (%)	-6.2	-5.1	-5.2
Credit			
Growth of total assets (%)	-	3.0	8.5
Growth of loans (%)	-	-1.0	3
Impaired loans/total loans	-	-	-
Reserves for impaired loans/impaired loans	-	-	-
Loan impairment charges/loans (%)	-0.3	0.1	-0.1
Liquidity and funding			
Long-term debt/total equity and reserves (%)	10.9	9.1	16.6
Liquid assets/total assets (%)	17.9	19.3	26.3
Total deposits and debt/total assets (%)	7.0	6.2	10.5
Liquid assets/short-term deposits and borrowing (%)	-	6,733.3	9,883.5
Capitalisation			
Equity and reserves/total assets (%)	64.5	64.7	61.4
Net profit/total equity and reserves (%)	1.9	3.2	2.9
Loans/equity and reserves (%)	123.3	118.2	114.4
CET 1 (%)	81	83	81
Source: Fitch Ratings, Action Logement Services			



The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: HTTPS://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS. IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM.PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR WHICH THE LEAD ANALYST IS BASED IN AN ESMA- OR FCA-REGISTERED FITCH RATINGS COMPANY (OR BRANCH OF SUCH A COMPANY) CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH RATINGS WEBSITE.

Copyright © 2020 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch a

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from U\$\$1,000 to U\$\$75,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration state

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.