

# **RatingsDirect**®

### Permanent TSB Group Holdings PLC

#### **Primary Credit Analyst:**

Nigel Greenwood, London (44) 20-7176-1066; nigel.greenwood@spglobal.com

#### **Secondary Contact:**

Pierre Gautier, Paris (33) 1-4420-6711; pierre.gautier@spglobal.com

#### Table Of Contents

**Major Rating Factors** 

Outlook

Rationale

Related Criteria

Related Research

## Permanent TSB Group Holdings PLC

UGCP	bb+		bb+		+	Support	0	+	Additional Factors	0
Anchor	bbb		I	ALAC			Issuer Cre	edit Rating		
Business Position	Weak	-2		Support	0		BB+/Stable/B			
Capital and Earnings	Strong	+1		GRE Support	0		Resolution Counterparty Ratin			
Risk Position	Moderate	-1		Group	0		BBB-//A-3			
Funding	Average			Support	0		Holding Co	mpany ICR		
Liquidity	Adequate	0		Sovereign Support	_		BB-/St	able/B		

ICR--Issuer credit rating. NOHC--Nonoperating holding company. UGCP--The unsupported group credit profile of the Permanent TSB group. The NOHC ICR shown applies to Permanent TSB Group Holdings PLC and is two notches below the UGCP. The ICR and the resolution counterparty rating shown apply to the core bank operating subsidiary, Permanent TSB PLC.

### **Major Rating Factors**

**Issuer Credit Rating** BB-/Stable/B

Strengths:	Weaknesses:
<ul> <li>Strong capitalization.</li> <li>Meaningful position in the Irish mortgage market, with useful current account and savings franchises.</li> </ul>	<ul> <li>Narrow reliance on retail banking in a relatively small market.</li> <li>Improving its income diversity and generating meaningful returns in a low interest rate environment remains difficult.</li> <li>Stock of nonperforming loans (NPLs) relative to international peers remains high, but reducing.</li> </ul>

#### Outlook

#### Permanent TSB Group Holdings PLC

The stable outlook over our 12-month outlook horizon balances the notable reductions that we have observed in Permanent TSB Group's (PTSB) NPLs, with its reduced scale and yet-to-be proven ability to demonstrate better pre-provision earnings.

We could raise the ratings if PTSB is able to demonstrate better conversion of its retail banking strengths into earnings generation. We note that an upward revision of the UGCP would likely lead us to raise the long-term issuer credit rating on the NOHC by two notches, as we only apply a one-notch differential for a NOHC rating from an investment-grade group credit profile.

We could lower the ratings if we see evidence that the recovery in PTSB's asset quality is reversing, or its business growth ambitions falter.

#### Permanent TSB PLC

The stable outlook on the primary operating company of the group mirrors that on PTSB. We could lower or raise the ratings if we revised the UGCP downward or upward, as explained above.

We could raise the ratings on the main operating bank if we observe material progress in minimum requirements for own funds and eligible liabilities (MREL) issuance, which is currently unproven. This could lead us to believe that our additional loss-absorbing capacity (ALAC) measure will be above our 5% threshold for one-notch of ALAC support. Greater clarity on the group's future capital policy may also inform this analysis. This would only benefit the ratings on the operating company, because we do not include notches for ALAC support in the ratings on NOHC ratings such as PTSB.

#### Rationale

Given PTSB's domestic focus, the starting point for our ratings reflects our view of the Irish banking system. We consider that PTSB has a meaningful franchise in Irish retail banking, but that its lack of business diversity and franchise depth weakens its business position compared with market-leading peers AIB Group PLC (AIB) and Bank of Ireland Group PLC (BOI). We consider that PTSB has strong capitalization, reflected in a risk-adjusted capital (RAC) ratio of 12.2% at end-December 2017. We anticipate that this ratio will be higher at end-December 2018 because the group has made good progress on reducing its NPLs in 2018.

Converting its useful franchise in Irish retail banking into more meaningful returns is an important consideration. Although we consider there is further work to do to reduce NPLs, we do expect the management team to be able to shift its attention to its commercial agenda, after many years of focusing on its balance sheet profile and working through the bank's past problems.

PTSB's funding and liquidity profile is broadly comparable with domestic peers', reflecting significant improvements in the loan-to-deposit ratio and S&P Global Ratings' funding and liquidity ratios, supported by deleveraging.

PTSB is currently not eligible for rating uplift under our ALAC criteria because we calculate that its ALAC ratio, which was about 2.3% as of end-2017, today remains below the 5% threshold for one notch of uplift, and we have yet to see evidence of MREL issuance.

#### Anchor: 'bbb' for a commercial bank operating in Ireland

In our view, the economic risk trend in Ireland is stable. This reflects our assumption that Ireland's GDP growth will remain brisk, which in turn will continue to feed through to further property price appreciation and reduction in unemployment--all of which should help, at least in the short term, to improve the resilience of banks' balance sheets. We assume that the era of household and corporate deleveraging is now largely done and we would need to see evidence of a substantial further reduction in NPLs before we could consider an improved assessment. Even then, ongoing house price inflation and any potential risks to Ireland from its close trading partner, the U.K., leaving the EU may also cause us to delay a stronger assessment.

The industry risk trend is also stable. We assume that our metric of deposits to loans will remain above 75% on a sustainable basis, as lending growth revives, and that regular access to wholesale markets will persist. We also assume that net interest margin pressure will not emerge sufficiently to weigh upon statutory earnings. Banks will likely continue to invest in their operations and digital capability. Finally, we also assume that the longstanding government stakes in a large part of the banking system will only be reduced to zero during the 2020s.

Table 1

Permanent TSB Group Holdings PLC Key Figures							
		Year-ended Dec. 31					
(Mil. €)	2018*	2017	2016	2015	2014		
Adjusted assets	22,900	22,734	23,567	29,284	36,225		
Customer loans (gross)	20,294	20,616	21,368	25,718	30,928		
Adjusted common equity	1,449	1,511	1,488	1,709	1,723		
Operating revenues	234	444	434	381	316		
Noninterest expenses	161	330	335	322	394		
Core earnings	72	50	127	33	(90)		

<sup>\*</sup>Data as of June 30. Source: S&P Global Ratings.

#### Business position:Less diversified than larger Irish peers

We base our assessment of PTSB's business position on our view of the lack of business diversity and franchise depth relative to industry-leading peers, AIB and BOI, combined with our expectation that earnings prospects are muted. We recently revised this assessment to weak from moderate, owing to an improvement in our Ireland industry risk assessment, which informs our peer analysis. Henceforth, we assume that the management team will be able to turn its attention to a more commercially focused strategy, rather than working through difficulties in its balance sheet profile, including a gradual broadening of new lending beyond residential mortgages.

Other than AIB and BOI, PTSB's main rated peers active in the Irish banking industry include foreign-owned banks

Ulster Bank Ireland DAC and KBC Bank Ireland PLC. Peers outside Ireland include Portugal-based Banco Comercial Portugues S.A. (UGCP is 'bb'), Spain-based Ibercaja Banco S.A. ('bb+') and Kutxabank S.A. ('bbb+'; issuer credit rating is 'BBB'), and U.K.-based CYBG PLC ('bbb'). These banks have somewhat similar business models to PTSB and operate in systems that have similar economic and industry risks to Ireland.

Indicative of our view of the differential versus peers, PTSB is reliant upon net interest income, which we estimate will average almost 90% of revenues over the three years to 2019; this compares with our estimate of about 75% at AIB, BOI, and Ulster Bank, and close to 60% across the international peers.

The key supportive factor is that we consider PTSB has a meaningful franchise in Irish retail banking. This franchise is underpinned by its sizable share of the outstanding Irish mortgage stock of about 15%-20% (market share of gross new lending in 2017 of 12.6%, improving to a reported 14.7% through the first nine months of 2018), and useful market share of Irish retail deposits and current accounts. We consider that further growth may be more difficult as we expect the mortgage market will become more competitive. PTSB's current market position in other retail lending products and lending to businesses is small.

PTSB completed the European Commission-mandated deleveraging of its noncore business--which comprised its U.K. and Isle of Man portfolios--in 2016, and is now a fully domestic Irish retail bank (see chart 1). This chart does not capture the impact of two large NPL portfolio sales announced in the second half of 2018:

- Project Glas, which has a gross balance sheet value of €2.1 billion (€1.3 billion net); and
- A securitization arrangement to transfer the beneficial interest in loans with a gross value of €1.3 billion (€0.9 billion net) to Glenbeigh Securities; PTSB will hold 5% of the notes issued by Glenbeigh.

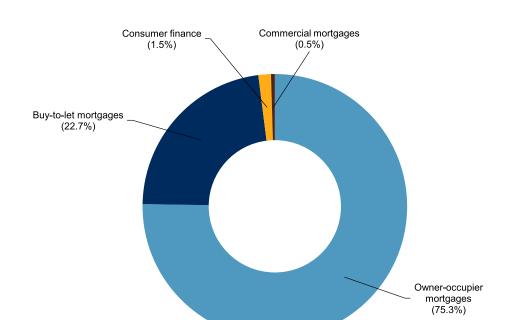


Chart 1 Reported Net Loans As Of June 30, 2018 (€18.1 billion)

Note: Includes assets held for sale and other assets pending derecognition at balance-sheet date. Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

We think that PTSB's management team has proved its capability over the past couple of years by completing the European Commission-mandated restructuring plan and stabilizing the business, improving the balance-sheet profile, and running an effective mortgage arrears and collections function. Moreover, as previously mentioned, in 2018 the management made good progress toward reducing its regulatory nonperforming exposure (NPE) ratio, and achieved this without a negative impact on regulatory capital. PTSB states that it expects its end-2018 NPE ratio to be below 10%, down from about 26% at Jan. 1, 2018. We understand that the European Central Bank (ECB) has encouraged Irish banks to reduce this measure to about 5% by end-2019.

Even if PTSB makes further progress with NPE reductions in 2019, it remains uncertain whether the bank can demonstrate recurring returns that might satisfy private investors in a low interest rate environment. One measure is preprovision income to revenues, which we estimate will average slightly more than 20% over the three years to 2019 for PTSB; this compares to our estimate of 30%-40% at AIB and BOI, and still-higher figures at PTSB's international peers.

The Irish government owns about 75% of PTSB's ordinary shares. We believe that the government is unlikely to reduce its stake further in the near term, and that the process to return the bank to full private ownership will take several years.

#### Capital and earnings: Absence of dividends supports our assessment

We view PTSB's capital and earnings as strong, reflected in our projection that its RAC ratio could be about 14.0%-14.5% through end-2019. We have improved this assessment from approximately 12% previously, mainly owing to the good progress made on NPL reductions. The likely absence of dividend payouts through the projection period supports our assessment. We doubt that internal capital generation will further boost the RAC ratio above our 15% threshold for a stronger assessment.

PTSB's RAC ratio at Dec. 31, 2017 was 12.2%. This ratio has benefitted in recent years from a significant reduction in S&P Global Ratings' risk-weighted assets, due to continued net deleveraging.

PTSB's capitalization is somewhat weaker under our RAC framework compared to its reported regulatory Common Equity Tier 1 (CET1) ratio. On a reported transitional basis, this metric was 16.7% at Sept. 30, 2018. This ratio does not reflect the impact of Project Glas or Project Glenbeigh, which PTSB expects will increase the CET1 ratio by about 200 basis points (bps) and 30 bps, respectively. Conversely, in the fourth quarter of 2018, PTSB expects regulatory changes to risk weightings on Irish assets will reduce the CET1 ratio by almost 200 bps. One difference between our capital measure and PTSB's regulatory ratios is that we largely apply more-conservative risk weights to reflect our view of economic risk in Ireland. We also exclude €343 million of tax loss carry-forward (at Dec. 31, 2017) from our measure of capital.

The key assumptions underpinning our RAC forecast through end-2019 are as follows:

- A reduction in the net loan book to roughly €15.75 billion from €18.0 billion at June 30, 2018, mainly due to the impact of Project Glas and Project Glenbeigh.
- Pre-provision income in 2019 to be about one-half our calculation of €114 million in 2017.
- A modest impact from new loan loss provisions.
- S&P Global Ratings' risk-weighted assets (RWAs) to be about €11.3 billion.
- We have incorporated the full negative day one impact of International Financial Reporting Standard (IFRS) 9 on total adjusted capital (TAC), a reported figure of about €100 million post tax.

PTSB posted moderate net statutory profit for full-year 2017, and we expect the bank to have remained profitable in 2018.

We consider PTSB's quality of capital to be relatively solid because 92% of the capital base comprises common equity. We include the €122 million of AT1 securities in our calculation of TAC. They receive intermediate equity credit because they are perpetual instruments with loss-absorption features on a going-concern basis, giving the bank the ability to suspend coupons at any time.

However, while we consider that PTSB's earnings profile should now be more predictable than before, we note that its earnings buffer is negative. This indicates the inability of underlying pre-provision earnings to cover normalized losses (€111 million in 2017, as per our RAC framework). We incorporate the negative earnings buffer into our RAC projection by subtracting the deficiency from TAC.

Table 2

Permanent TSB Group Holdings PLC Capital And Earnings						
	_	Year-ended Dec. 31				
(%)	2018*	2017	2016	2015	2014	
Tier 1 capital ratio	14.2	15.5	15.7	16.0	14.2	
S&P Global Ratings' RAC ratio before diversification	N/A	12.2	9.6	10.2	7.8	
S&P Global Ratings' RAC ratio after diversification	N/A	8.1	6.4	7.5	6.5	
Adjusted common equity/total adjusted capital	92.2	92.5	92.4	93.3	100.0	
Net interest income/operating revenues	82.5	91.2	89.9	90.4	85.5	
Fee income/operating revenues	8.1	8.8	9.0	10.2	11.7	
Market-sensitive income/operating revenues	3.8	(0.7)	0.7	(1.1)	1.6	
Noninterest expenses/operating revenues	68.8	74.3	77.2	84.6	124.8	
Preprovision operating income/average assets	0.6	0.5	0.4	0.2	(0.2)	
Core earnings/average managed assets	0.6	0.2	0.4	0.1	(0.2)	

 $<sup>\</sup>hbox{^*Data as of June 30. N/A--Not applicable. RAC--Risk-adjusted capital. Source: S\&P~Global~Ratings~database.}$ 

Table 3

(Mil. €)	Exposure*	Basel III RWA	Average Basel III RW (%)	S&P Global RWA	Average S&P Global RW (%)
Credit risk					
Government and central banks	3,151	50	2	88	3
Of which regional governments and local authorities	0	0	0	0	0
Institutions and CCPs	1,163	350	30	335	29
Corporate	256	213	83	261	102
Retail	21,154	8,750	41	10,507	50
Of which mortgage	20,354	8,413	41	9,507	47
Securitization§	65	0	0	13	20
Other assets†	774	425	55	1,191	154
Total credit risk	26,563	9,788	37	12,396	47
Credit valuation adjustment					
Total credit valuation adjustment		138		0	
Market risk					
Equity in the banking book	11	38	341	83	750
Trading book market risk		0		0	
Total market risk		38		83	
Operational risk					
Total operational risk		600		868	
(Mil. €)		Basel III RWA		S&P Global RWA	% of S&P Global RWA
Diversification adjustments					
RWA before diversification		10,588		13,346	100

Table 3

Total diversification/concentration adjustments			6,799	51
RWA after diversification	10,588		20,145	151
(Mil. €)	Tier 1 capital	Tier 1 ratio (%)	Total adjusted capital	S&P Global RAC ratio (%)
Capital ratio				
Capital ratio before adjustments	1,642	15.5	1,633	12.2
Capital ratio after adjustments‡	1.642	15.5	1,633	8.1

<sup>\*</sup>Exposure at default. §Securitization exposure includes the securitization tranches deducted from capital in the regulatory framework. †Other assets includes deferred tax assets (DTAs) not deducted from ACE. ‡Adjustments to Tier 1 ratio are additional regulatory requirements (e.g., transitional floor or Pillar 2 add-ons). RAC--Risk-adjusted capital. RW--Risk weight. RWA--Risk-weighted assets. Sources: Company data as of Dec. 31, 2017, S&P Global Ratings.

#### Risk position: Proactive progress on NPL reduction

We compare PTSB's risk position with the same peers as for its business position, because these peers have a generally similar product mix to PTSB and operate in banking systems with fairly similar economic risk as Ireland. We recently revised PTSB's risk position to moderate from weak, owing to the progress made in NPL reduction, but we note that asset quality is still weaker than that of higher-rated peers with a residential mortgage book bias.

Irish mortgages dominate PTSB's net loan book. As of June 30, 2018, they accounted for 98% of total lending. We also consider the profile of this book to be poor. For example, at this date there was a bias toward weaker performing BTL mortgages (23% of the Irish mortgage book), negative equity (29% of the book at Dec. 31, 2017), and the vintage profile is weaker.

PTSB stated that Stage 3 loans were €5.05 billion or a high 25% of total gross loans at June 30, 2018. A broader analysis of asset quality also captures Stage 2 loans. For PTSB, total Stage 2 loans were €4.3 billion or 21.3% of gross loans at the same date. These metrics are weaker than those for AIB and BOI. Expected credit loss allowance coverage of Stage 2 and Stage 3 loans was 23.5%.

PTSB stated that NPEs totaled €5.3 billion or 25% of gross loans at June 30, 2018. PTSB expects this metric will be below 10% post the completion of Project Glas and Project Glenbeigh; we understand that these transactions mainly comprised treated mortgages with the remaining NPEs tending to be longer-term arrears, or cases in the legal process.

Table 4

Permanent TSB Group Holdings PLC Risk Position					
	_	_	-Year-ended	Dec. 31	
(%)	2018*	2017	2016	2015	2014
Growth in customer loans	(3.1)	(3.5)	(16.9)	(16.8)	(7.2)
Total diversification adjustment/S&P Global Ratings' RWA before diversification	N/A	50.9	50.1	35.4	19.9
Total managed assets/adjusted common equity (x)	16.7	15.7	18.7	21.6	26.2
New loan loss provisions/average customer loans	0.0	0.2	(0.3)	0.1	(0.1)
Net charge-offs/average customer loans	0.9	0.3	0.5	0.4	0.5
Gross nonperforming assets§/customer loans + other real estate owned	N.M.	31.4	33.7	29.8	33.1

Table 4

Permanent TSB Group Holdings PLC Risk Position (cont.)						
	_		Year-ended	Dec. 31		
(%)	2018*	2017	2016	2015	2014	
Loan loss reserves/gross nonperforming assets§	N.M.	34.7	34.5	35.1	36.4	

<sup>\*</sup>Data as of June 30. §IAS39: impaired loans plus 90 days past due loans and renegotiated loans. N/A--Not applicable. N.M.--Not meaningful. Source: S&P Global Ratings database.

#### Funding and liquidity: Improved funding and liquidity profile due to deleveraging and no reliance on monetary authorities

We regard PTSB's funding as average and its liquidity position as adequate. We primarily compare funding with the domestic industry average, while liquidity is an absolute assessment.

PTSB's funding profile has improved substantially over the past few years. This has been supported by lower funding needs due to deleveraging--as redemptions continue to exceed new lending--and the sale of noncore assets. Current account and deposit balances have also been resilient. We note that the share of deposits now represents a high 83% of the funding base, and that current accounts represent a useful 22% of customer deposits.

Accordingly, by our calculations, PTSB's loan-to-deposit ratio improved to 105% at June 30, 2018, from 111% at end-2016 and more than 200% at end-2011. PTSB's improved funding profile is also evident from its stronger S&P Global Ratings stable funding ratio, which increased to 107% at June 30, 2018, from 104% at end-2016 and 46% at end-2011. Our base case expectation is that there is room for further improvement in these two ratios over the coming 12 months due to lower funding needs, as net loan balances continue to reduce on the back of redemptions and NPL sales, while deposit balances may remain broadly stable.

Our adequate liquidity assessment reflects PTSB's improved liquidity position due to a significant reduction in ECB funding and deposits from other financial institutions. ECB funding reduced significantly to €230 million at June 30, 2018 (€1.4 billion at end-2016).

The improvement in PTSB's liquidity position is also reflected in our ratio of broad liquid assets to short-term wholesale funding, which rose to 1.8x at June 30, 2018, from 1.5x at end-2016. Following the maturity of a €300 million senior unsecured bond (issued by the operating bank) in the first half of 2018, there are effectively no medium-term notes outstanding.

Table 5

Permanent TSB Group Holdings PLC Funding And Liquidity					
	_	Year-ended Dec. 31			
(%)	2018*	2017	2016	2015	2014
Core deposits/funding base	82.6	82.9	80.0	67.0	55.6
Customer loans (net)/customer deposits	105.4	108.1	111.2	130.5	146.8
Long-term funding ratio	90.5	91.5	89.5	73.2	63.7
Stable funding ratio	107.5	106.4	104.3	86.1	76.4
Short-term wholesale funding/funding base	10.4	9.4	11.5	29.2	38.7
Broad liquid assets/short-term wholesale funding (x)	1.8	1.8	1.5	0.7	0.5

Table 5

Permanent TSB Group Holdings PLC Funding And Liquidity (cont.)					
	_		-Year-ended	ear-ended Dec. 31	
(%)	2018*	2017	2016	2015	2014
Net broad liquid assets/short-term customer deposits	10.9	9.8	8.9	(14.2)	(33.2)
Short-term wholesale funding/total wholesale funding	57.7	53.3	55.8	87.2	87.2
Narrow liquid assets/3-month wholesale funding (x)	2.2	2.6	1.5	0.9	1.0
*Data as of June 30. Source: S&P Global Ratings database	e.				

#### Support: No uplift for ALAC support

We have not included notches in the long-term rating on the main operating bank under our ALAC criteria because PTSB does not yet exceed our required 5% threshold for one notch of support, nor have we seen evidence of MREL issuance. The management has indicated that its required MREL issuance is about €900 million.

We do not include notches for ALAC support in the ratings on NOHCs, such as PTSB, because we do not think that their senior obligations would continue to receive full and timely payment in a resolution scenario. Therefore, potential future ALAC support would only benefit the ratings on the operating company, Permanent TSB PLC.

We calculate PTSB's ALAC ratio to be about 2.3% of S&P Global Ratings' risk-weighted assets at year-end 2017. Our calculation of PTSB's ALAC stock primarily includes the amount of TAC above the amount needed to maintain our current strong assessment of capital and earnings. We include in our calculation PTSB's €125 million nominal value AT1; PTSB does not have any material amounts of other eligible instruments.

#### External support: None

No other factors affect the ratings.

#### Resolution counterparty ratings

We set the BBB/--/A-2 resolution counterparty ratings (RCRs) on Permanent TSB PLC two notches above the long-term issuer credit rating, rather than the typical one notch, reflecting the speculative-grade issuer credit rating. The RCRs also reflect our jurisdiction assessment for Ireland.

An RCR is a forward-looking opinion of the relative default risk of certain senior liabilities that may be protected from default through an effective bail-in resolution process for the issuing financial institutions. RCRs apply to issuers in jurisdictions where we assess the resolution regime to be effective and we consider the issuer likely to be subject to a resolution that entails a bail-in if it reaches nonviability.

#### Additional rating factors: None

No additional rating factors affect this rating.

#### **Related Criteria**

- Criteria Financial Institutions General: Methodology For Assigning Financial Institution Resolution Counterparty Ratings, April 19, 2018
- Criteria Financial Institutions General: Risk-Adjusted Capital Framework Methodology, July 20, 2017

- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- · Criteria Financial Institutions Banks: Bank Rating Methodology And Assumptions: Additional Loss-Absorbing Capacity, April 27, 2015
- · Criteria Financial Institutions Banks: Bank Hybrid Capital And Nondeferrable Subordinated Debt Methodology And Assumptions, Jan. 29, 2015
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- · Criteria Financial Institutions Banks: Quantitative Metrics For Rating Banks Globally: Methodology And Assumptions, July 17, 2013
- Criteria Financial Institutions Banks: Banks: Rating Methodology And Assumptions, Nov. 9, 2011
- Criteria Financial Institutions Banks: Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

#### **Related Research**

- Banking Industry Country Risk Assessment: Ireland, Dec. 17, 2018
- · Various Positive Rating Actions Taken On Irish Banks On Improving Funding Profile, Dec. 17, 2018
- Merely A Win, No Grand Slam Glory For Irish Banks, March 26, 2018

Ratings Detail (As Of January 8, 2019)	
Permanent TSB Group Holdings PLC	
Issuer Credit Rating	BB-/Stable/B
Senior Unsecured	BB-
Short-Term Debt	В
<b>Issuer Credit Ratings History</b>	
17-Dec-2018	BB-/Stable/B
03-Aug-2017	B+/Positive/B
13-Jan-2017	B+/Stable/B
21-Dec-2016	B/Stable/B
Sovereign Rating	
Ireland	A+/Stable/A-1
Related Entities	
Permanent TSB PLC	
Issuer Credit Rating	BB+/Stable/B
Resolution Counterparty Rating	BBB//A-2
Senior Unsecured	BB+
Senior Unsecured	BB+/B

<sup>\*</sup>Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.