MOODY'S

SECTOR PROFILE

9 February 2022

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Covered Bonds – Slovakia

Sector Update - Growing market with high-quality assets and strong protections against refinancing risk

1.0 Highlights

This report provides an update on the key macroeconomic, legal, regulatory, sovereign, issuer, programme and performance trends affecting the Slovak covered bond sector.¹

- » Sovereign and macroeconomic update: Slovakia's sovereign rating is A2 (stable). In recent years, house prices have significantly outpaced the euro area average, fuelled by increased mortgage affordability and relatively few dwellings per capita. The housing market withstood COVID-19 headwinds, although the fallout from the pandemic will likely exert downward pressure on prices as government support measures end. Slovakia has comprehensive macroprudential rules to constrain high-risk lending.
- » Legal and regulatory update: The Slovak legal framework for covered bonds is moderately strong. The framework includes a number provisions that mitigate refinancing risk, including a conservatively-sized 180 day liquidity buffer and extendable maturity structures for bonds issued after 2017. The framework will be further strengthened in July 2022 when amendments implementing the EU covered bond directive take effect.
- » Issuer and programme update: The outstanding volume of Moody's-rated Slovak covered bonds is around €7 billion, having grown strongly in recent years. Most covered bonds are of the highest credit quality, with three programmes rated Aaa and one rated Aa1, and our counterparty risk (CR) assessments for Moody's-rated issuers range from A1(cr) to A2(cr). All cover pool assets are high-quality residential mortgage loans.
- » Performance trends: In our modelling, we assume average cover pool losses of 19.4%, which is lower than the 20.7% average for mortgage programmes across Europe. Slovak covered bond ratings are somewhat highly linked to the credit quality of issuers; on average, publicly-rated issuers can be downgraded by just 2.3 notches without triggering a TPI-driven downgrade of covered bonds. However, the weighted average surplus OC for Slovak programmes is around ten percentage points higher than the European average, at 45%.

2.0 Sovereign and macroeconomic update

2.1 Slovakia's sovereign A2 credit rating is supported by the economy's robust track record of economic growth

Our sovereign rating for Slovakia is A2, with a stable outlook. The country's institutional environment has benefitted from <u>European</u> <u>Union</u> (Aaa stable) and euro area membership, although concerns over control of corruption and the rule of law remain. The country's main credit strengths are:

- » A strong track record of economic growth and income convergence with EU peers;
- » A moderate government debt ratio and high debt affordability;
- » A strong track record of financial stability with banking sector risks remaining low.

The main credit challenges for Slovakia are:

- » Institutional challenges related to control of corruption and the rule of law;
- » A demographic profile which weighs on potential growth and fiscal sustainability;
- » Weaknesses in innovation and the quality of the education system.

Our stable rating outlook for Slovakia reflects our expectation that the Slovakian economy will register robust rates of growth in 2022 beyond, and that the government fiscal metrics will remain broadly in line with those of rating peers. It also reflects our expectation that risks from the banking sector will remain contained, and that the government's reform efforts to tackle some of Slovakia's key structural economic and institutional challenges will produce positive outcomes.

Exhibit 1 shows key economic indicators for Slovakia.

Exhibit 1

Key economic indicators for Slovakia

	2021													
	Forecast	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Population (million)	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
GDP per capita (Thousand US\$)	21.2	19.2	19.3	19.4	17.5	16.5	16.3	18.7	18.3	17.5	18.4	16.8	16.5	18.6
Real GDP (% change)	3.0	(4.4)	2.6	3.8	3	1.9	5.2	2.7	0.7	1.4	2.8	5.9	(5.4)	5.6
Inflation (CPI, % change Dec/Dec)*	4.8	2.0	3.2	1.9	2	0.2	(0.5)	(0.1)	0.4	3.4	4.6	1.3	0	3.5
Unemployment Rate (%)	7.0	6.7	5.8	6.5	8.1	9.7	11.5	13.2	14.2	14	13.7	14.5	12.1	9.6
Current Account Balance/GDP (%)	(1.5)	0.1	(3.4)	(2.2)	(1.9)	(2.7)	(2.1)	1.1	1.9	0.9	(4.9)	(4.7)	(3.4)	(6.2)
Gen. gov. debt/GDP (%)	61.0	59.7	48.1	49.6	51.6	52.4	51.8	53.7	54.9	51.9	43.4	41	36.3	28.5

As of January 2022

Source: Moody's Investors Service

We forecast the government's debt burden at 61% of GDP in 2021, a significant increase from 48.5% of GDP at the end of 2019. This reflects a combination of the economic contraction and associated loss of government revenue during the pandemic, as well as the significant government support measures announced to tackle the impact of COVID-19.

For more details, see Government of Slovakia – A2 stable, December 2021.

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.

2.2 Banking system macro profile is Strong-

Our assessment of Slovak macro profile is Strong-, which is mid-ranking among the 30 countries with active covered bond issuers.

Exhibit 2

Our banking system macro profile for Slovakia is "Strong -"



Source: Moody's Investors Service

Slovak banks benefit from good access to stable customer deposits and have a low reliance on capital market or parent funding. However, there are considerable asset concentrations on banks' balance sheets, including high exposure to the sovereign.

For further details, see Banks - Slovakia: Macro Profile: Strong-, February 2021.

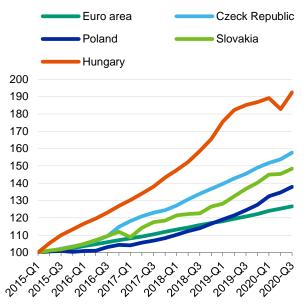
2.3 House price growth remained strong in 2020 despite COVID-19 headwinds

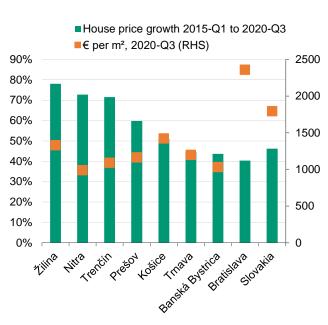
Between 2015 and 2020, Slovak house prices increased by around 50%, which is broadly in line with other central European countries and notably higher than for the wider euro area (Exhibit 3). Within Slovakia, house price growth over this period varied markedly by region, ranging from almost 80% in Žilina to around 40% in the most expensive region, Bratislava (Exhibit 4). Due to COVID-19 headwinds, nationwide prices were flat in the second quarter of 2020; however, they quickly resumed their pre-pandemic trajectory, increasing by over 2% in the third quarter.

Exhibit 4

Exhibit 3

House prices in Slovakia and neighbouring countries have recently outpaced those in the wider euro area House price indices, 2015-Q1 = 100





Slovak house price growth has varied markedly by region

Recent house price growth and 2020 prices by region

Source: OECD (2021), <u>https://www.oecd-ilibrary.org/economics/housing-prices/indicator/</u> english_63008438-en (accessed on 26 February 2021) Source: National Bank of Slovakia

In recent years, the supply of new dwellings in Slovakia has outpaced population growth, as shown in Exhibit 5. Nonetheless, compared to other European countries, Slovakia has a low number of dwellings relative to the size of its population (Exhibit 6), which is supportive for house prices.

100000

90000

80000 70000

60000

50000 40000

30000

20000

10000

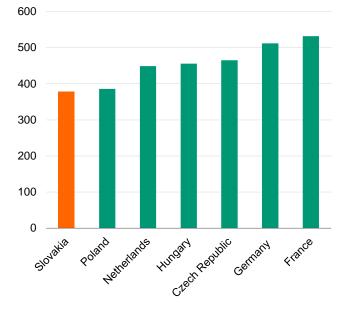
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In recent years, new dwellings have outpaced population growth Cumulative new dwellings and population change from 2015 to 2019

Cumulative new dwellingsCumulative population change



Slovakia has a low number of dwellings relative to population Number of dwellings per 1000 citizens for selected European countries



Source: National Bank of Slovakia

2015

2016

Source: Deloitte Property Index, July 2020

The fallout from the pandemic will likely exert downward pressure on prices as government support measures come to an end. However, Slovakia has a lower death rate from COVID-19 than many other countries and its economy is recovering relatively quickly.

2019

2018

2.4 High proportion of owner occupancy without mortgages

2017

In common with other central European countries, Slovakia has a high share of owner occupancy (around 90%) compared to the wider euro area (Exhibit 7).

Exhibit 7

Owner occupancy in Slovakia is well above the euro area average Distribution by tenure status, 2019 (% of population)



Source: Eurostat

Between 2010 and 2019, owner occupancy rates in Slovakia largely remained unchanged (Exhibit 8). However, the availability of affordable mortgage loans led to a material rise in the share of the population living in mortgaged properties, as shown in Exhibit 9.

Exhibit 8

Owner occupancy in Slovakia has remained flat in recent years... Owner occupancy rates for selected countries (2010 = 100)

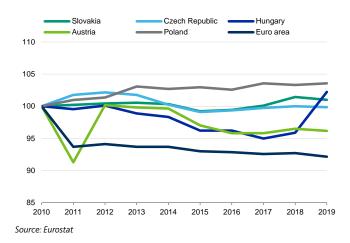
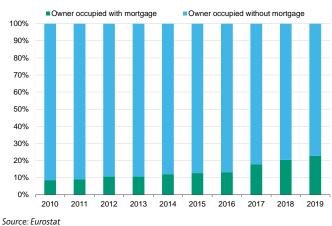


Exhibit 9

\ldots while the share of owner occupancy involving mortgages has increased

Distribution of owner occupancy by mortgage status



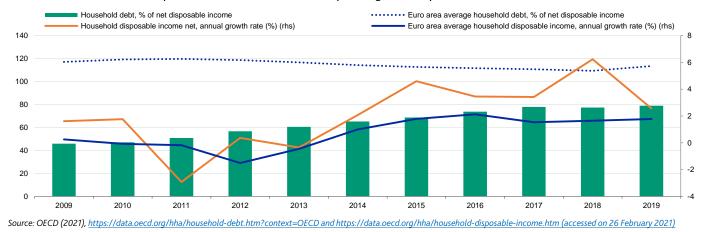
2.5 Mortgage affordability is supported by moderate household debt and low interest rates

Households' capacity to service mortgages is strong in the current environment, thanks to moderate household debt and record low interest rates.

Although Slovak household debt as a percentage of disposable income has risen steadily over the last decade (reaching a record 79% in 2019), it remains significantly lower than the euro area average, as shown in Exhibit 10. Meanwhile, Slovak household disposable income has recently increased at a faster pace than in the wider euro area.

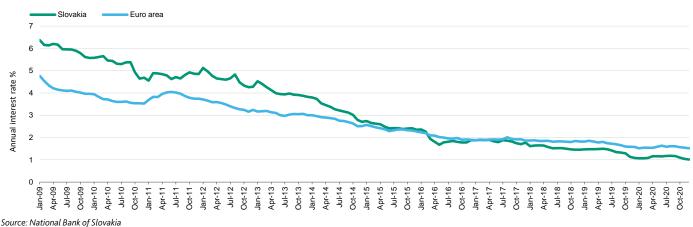
Exhibit 10

Household debt is moderate and disposable income is rising faster than in the euro area Slovak and euro area household disposable income and household debt as percentage of net disposable income



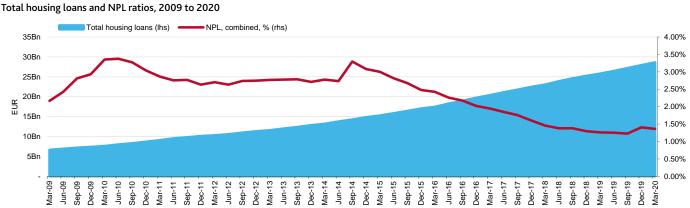
Since the financial crisis, interest rates for Slovak mortgages have fallen to record lows and are now below the euro area average, as shown in Exhibit 11. Mortgages in Slovakia are predominantly fixed-rate products, so the extent to which existing borrowers benefit from recent rate reductions depends on when their loans were originated (or reset) and the duration of their fixed-rate period.

Interest rates on mortgage loans are at historical lows Annual interest rate on new mortgage loans with initial fixed-rate period of 1 to 5 years



Against the backdrop of growing disposable income and falling interest rates, Slovak mortgage lending has increased dramatically over the last decade and loan performance has improved (Exhibit 12).

Exhibit 12



Mortgage lending has increased amid improving performance

Source: National Bank of Slovakia

3.0 Legal and regulatory update

3.1 Macroprudential rules for loan underwriting have a marked credit positive impact

In 2016, Slovakia introduced a legal framework for macroprudential regulation to reduce risks related to the growth of household indebtedness. Under this framework, the National Bank of Slovakia has imposed wide-ranging restrictions on mortgage lending, which are summarised in Exhibit 13.² These restrictions reduce the risk that households will borrow more debt than they can afford to service and therefore bolster the credit quality of mortgage loans. They apply to all providers of housing loans, including both banks and non-bank financial companies.

Exhibit 13 Macroprudential rules limit mortgage borrowing Slovak mortgage market lending restrictions

8-8-	
Loan to value (LTV)	LTV ratio cannot exceed 90%
	Share of new loans with LTV between 80% and 90% cannot exceed 20%
Debt service to income (DSTI)	DSTI cannot exceed 60% (with exceptions)
Debt to income (DTI)	The maximum share of new loans for which the DTI ratio exceeds 8 is 5% (with exceptions)
Maximum term	30 years (with exceptions)

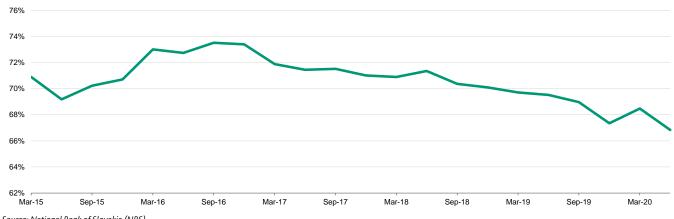
For floating rate loans of more than 8 years, DSTI calculation assumes a 2% rise in interest rates DSTI and DTI ratios count existing debt as well as the new debt Source: National Bank of Slovakia

Macroprudential rules have influenced Slovak lending practices. For example, having been on an upward trend before the introduction of lending restrictions, LTV ratios for new housing loans began to fall after 2016, as shown in Exhibit 14.

Exhibit 14

Macroprudential lending rules have achieved lower LTV ratios

LTV ratios for new housing loans, 2015 to 2020



Source: National Bank of Slovakia (NBS)

3.2 The Slovak legal framework for covered bonds is moderately strong

The Slovak covered bond legal framework is moderately strong. In 2018, the framework was strengthened by various amendments, including.³

- » Removal of the minimum financing ratio that required issuers to finance 90% of cover pool assets with covered bonds and effectively restricted overcollateralisation (OC) to 11%.
- » Introduction of a 5% minimum nominal OC requirement.
- » Provision for automatic maturity extension following issuer default.
- » A requirement for a buffer of liquid assets to cover negative cash flows, which is conservatively sized by reference to expected, rather than extended, maturity dates.

All legacy covered bonds (mortgage bonds) issued under the previous framework have been converted to covered bonds, which means the 2018 amendments are generally applicable to them.

Some provisions of the 2018 amendments do not apply to converted bonds, including the provisions relating to maturity extensions. However, Slovakia is making further amendments to its covered bond legal framework to implement the EU's covered bonds directive⁴ and, following implementation of these amendments in July 2022, all converted covered bonds will likely become extendable.

In addition, Slovakia will implement the directive's requirement for derivative counterparties to rank equally with bondholders, which will make it easier for Slovak programmes to obtain hedging for interest rate and currency risks.

For more details on the impact of the new EU rules, see <u>Covered Bonds – Central & Eastern Europe: EU rules will strengthen national</u> <u>legal frameworks</u>, September 2020.

Exhibit 15 shows the typical structure of Slovak covered bond programmes.

Structure of typical Slovak covered bond programme Supervision under general Reporting to banking law and covered regulator bond legal framework Cover pool **National Bank** Issuer (Slovak bank) of Slovakia Monitoring of covered bond programme **Covered bonds** Cover pool assets Unsecured debt Non-cover pool assets Equity Source: Moody's Investors Service

Exhibit 16 summarises the relative strengths and weaknesses of the covered bond legal framework and typical contractual arrangements for Slovak covered bond programmes.⁵

More legal features are above average than below average Key law-based and contractual features of Slovak covered bonds

	Slovak features that are stronger than an 'average' framework	Slovak features that are weaker than an 'average' framework
Law-based features	Both non-performing and ineligible assets are excluded from coverage tests, and therefore cannot dilute pool quality.	The law has no specific requirements on managing interest rate and currency risks, although issuers are generically required to perform yearly stress tests.
<u> </u>	The law includes an automatic 12-month extension period to sell the cover pool (which can be lengthened by a further 12 months if needed) and allows covered bond liabilities to be transferred without requiring bondholders' consent.	There is no requirement for asset coverage to be maintained on a net present value basis.
	Primary cover pool assets are restricted to residential mortgage loans. Foreign mortgages are not eligible.	
	Issuers must maintain a liquidity buffer to cover the maximum cumulative daily net liquidity outflow for the next 180 days. The buffer is based on expected, rather than extended, maturity dates, which is more conservative than the minimum requirement under the EU covered bond directive.	
Contractual features	Issuers typically commit to higher OC levels than the minimum required by the law.	
	Currency risk is uncommon.	

Source: Moody's Investors Service

3.3 Slovak credit institutions are subject to resolution procedures based on EU law

The EU's Bank Recovery and Resolution Directive (BRRD) provides that failing credit institutions can be placed into resolution and subjected to write-downs of their liabilities (bail-in).⁶ However, covered bonds are excluded from bail-in to the extent they are backed by collateral.

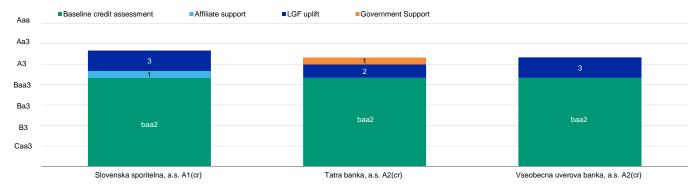
4.0 Issuer and programme update

4.1 Credit quality of issuers is strong and our outlook for the banking system is stable

The issuers for three of the four covered bond programmes we rate in Slovakia have counterparty risk (CR) assessments ranging from A1(cr) to A2(cr) (Exhibit 17). We have stable rating outlooks for all these issuers. The other issuer, Prima Banka Slovensko, does not have a public Moody's rating.

Exhibit 17

All public CR assessments for covered bond issuers are in the single-A category CR assessments for Slovak covered bond issuers



LGF = "Loss Given Failure" Source: Moody's Investors Service Our outlook for the Slovak banking system is stable. For further details, see Banking System Outlook Update - Slovakia, April 2021.

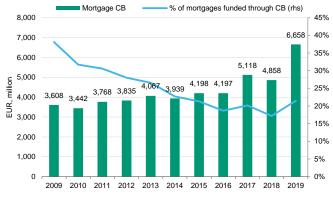
4.2 Growing covered bond market of the highest credit quality

Between 2009 and 2019, outstanding Slovak covered bonds increased from ≤ 3.6 billion to ≤ 6.7 billion even though the share of Slovak mortgages funded by covered by bonds fell from almost 40% to around 20% (Exhibit 18). Relative to GDP and total residential mortgages, the size of the Slovak covered bond market is similar to other European countries (Exhibit 19).

Exhibit 18

Slovak covered bond market has grown strongly even though share of mortgages funded by covered bonds has fallen

Slovak mortgage covered bonds (\in mil. and % of residential mortgage loans)

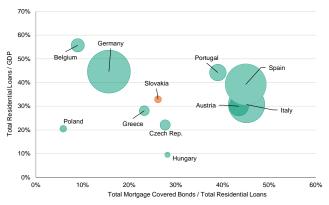


Source: European Mortgage Federation

Exhibit 19

Covered bonds are of average importance compared to other European countries

Covered bond market (as % of residential mortgage loans) and residential mortgage market (as % of GDP) for Slovakia and selected European countries



Size of bubble reflects amount of outstanding mortgage covered bonds Source: Moody's Investors Service, European Mortgage Federation

We rate four covered bond programmes in Slovakia. The credit quality of these programmes is generally of the highest standard, with four rated Aaa and one rated Aa2. Exhibit 20 shows programme-specific issuance volumes and ratings.

Exhibit 20

Most Slovak covered bond programmes we rate are Aaa Overview of Moody's-rated Slovak covered bond programmes

Covered bond Programme	Acronym	Covered bond rating	TPI*	Issuer CR assessment	Issuer rating outlook	Volume outstanding CBs (EUR billion)	CB issuance volume 2020 (EUR billion)
Prima banka Slovensko, a.s Mortgage Covered Bonds	PRSL	Aaa	Probable	Unpublished	Unpublished	0.5	-
Slovenska Sporitelna, a.s Mortgage Covered Bonds	SLS	Aaa	Probable	A1(cr)	Stable	2.2	0.5
Tatra Banka, a.s Mortgage Covered Bonds	TB	Aaa	Probable	A2(cr)	Stable	1.0	0.5
Vseobecna Uverova Banka a.s Mortgage Covered Bonds	VUB	Aa1	Probable	A2(cr)	Stable	3.3	0.5

* See Section 5.3 for explanation of TPI

Source: Moody's Investors Service

4.3 Cover pools have similar characteristics with material concentrations in capital region

Cover pools largely consist of high-quality residential loans

Slovak covered bond programmes are almost exclusively backed by residential mortgage loans to owner occupiers. A typical cover pool loan has (1) an interest rate fixed for three years, (2) amortising principal payments and (3) an original term between 15 and 25 years.

Income underwriting and valuation procedures are highly standardised. Exhibit 21 summarises typical practices.^Z

Internal inspection

Exhibit 21

Loan underwriting and property appraisal practices are highly standardised Typical underwriting and valuation criteria for Slovak cover pool mortgages

Income underwriting	
Is income always checked?	Yes
Does income constrain the maximum loan?	Yes
Net income must cover both interest and principal?	Yes
Assumed repayment period	Payment of interest and principal on an annuity basis
Borrower's age constrains amortisation period?	Yes
Stressed made to interest rates?	Yes
Are all other debts of the borrower taken into account?	Yes
How are living expenses of the borrower calculated?	Based on standardized amounts calculated by the Statistical Office of the Slovak Republic
Property appraisal	
Are valuations based on market or lending values?	Market values
Internal or external valuers?	Mostly external, although internal is possible (especially for apartments)

What is the valuation method?

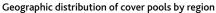
Source: Moody's Investors Service

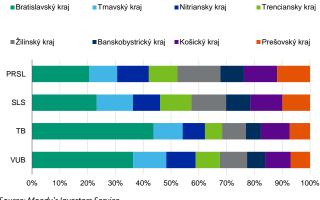
Cover pools are concentrated in Bratislava region

All four programmes have material concentrations in the Bratislava region, as shown in Exhibits 22 and 23.

Exhibit 22

Regional concentration is significant for some covered bond programmes





Source: Moody's Investors Service

Exhibit 23 Regions of Slovakia



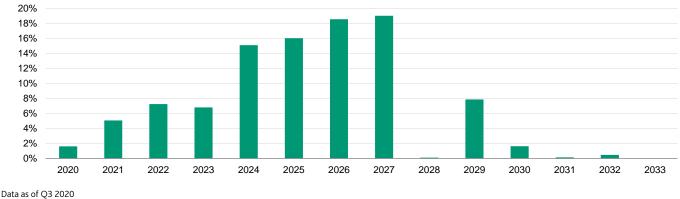
Source: Moody's Investors Service

4.4 Covered bonds benefit from protections against market risks

The maturity profile of Slovak covered bonds is relatively short compared to the underlying mortgage loans, with over 90% of covered bonds falling due within 7 years (Exhibit 24).

Exhibit 24

Most covered bonds mature within 7 years Percentage of total Slovak covered bonds maturing per year



Source: Moody's Investors Service

In the event that cover pool assets need to be sold to repay covered bonds, their liquidation value would be sensitive to (1) the prevailing market conditions regarding interest rate and credit risk and (2) the weighted average remaining fixed-rate period.

The risk of losses resulting from asset sales is mitigated because Slovak programmes are predominantly backed by mortgage loans with short fixed interest periods of between two and five years. Additionally, Slovak covered bond legal framework contains protections against the risk of market losses upon cover pool liquidation. In particular:

- » The insolvency administrator of a defaulting issuer may transfer the entire programme, including covered bond liabilities, to a third party without requiring bondholders' consent.
- » To reduce the prospect of fire sales and increase the likelihood of successful programme transfers, the law prescribes a 12-month maturity extension (which can be lengthened by a further 12 months if needed) and a required liquidity buffer equal to net outflows over 180 days. The buffer is based on expected, rather than extended, maturity dates, which is more conservative than the minimum requirement under the EU covered bond directive.

4.5 Typical programme features and outliers

Exhibit 25

Overview of Slovak programme features

	Typical	
CB programme features	programme	Comments on outliers
WA remaining term outstanding covered bonds	5 years	Range from 4.5 years (SLS) to 6 years (PRSL)
WA remaining term cover pool	11 years	Range from 10.7 years (SLS) to 11.7 years (PRSL)
Fixed-rate covered bonds	100%	
Interest rate swaps in pool?	No	
Intra-group interest rate swaps?	No	
FX swaps in pool?	No	
Intra-group FX swaps?	No	
Maximum maturity mismatch	62%	Range from 56.7% (SLS) to 68.0% (PRSL)

Source: Moody's Investors Service

4.6 Typical cover pool features and outliers

Exhibit 26

Overview of Slovak cover pool features

	Typical	
Cover pool features	cover pool	Comments on outliers
Asset type	Residential	
Asset balance	EUR 2.5bn	Range from EUR 1.4bn (TB) to EUR 3.5bn
Number of borrowers	52,000	Range from 24,011 (TB) to 78,647 (SLS)
WA seasoning (months)	43	Range from 30 months (PRSL) to 49 months
WA indexed LTV	54%	Range from 46.9% (SLS) to 57.5% (PRSL)
Loans for second homes / vacation	0%	
Buy to let loans properties	0%	
Loans to tenants of tenant-owned housing cooperatives	0%	
Loan with external guarantee	0%	
NPL > 6 months	0%	
LTV characteristics		
<40%	22%	
40%-70%	58%	
70%-80%	20%	
80%-90%	0%	
90%+	0%	
Repayment		
Interest-only loans	0%	
Floating interest rate	10%	Range from 0% (TB) to 18% (PRSL)
Fixed interest rate	90%	Range from 82% (PRSL) to 100% (TB
Fixed rate period	3 years	
Seasoning < 60 mths	76%	Range from 68.4% (SLS) to 87.3% (PRSL)
Seasoning > 60 mths	24%	Range from 12.7% (PRSL) to 31.6% (SLS)
Geographical concentration		
Area of highest concentration	Bratislavský kraj	
Size of highest concentration	31%	Range from 20.6% (PRSL) to 43.7% (TB)
Area of 2nd highest concentration	Trnavský kraj	
Size of 2nd highest concentration	13%	Range from 10.5% (TB) to 15.4% (PRSL)

Source: Moody's Investors Service

5.0 Performance trends

5.1 Collateral scores are relatively low

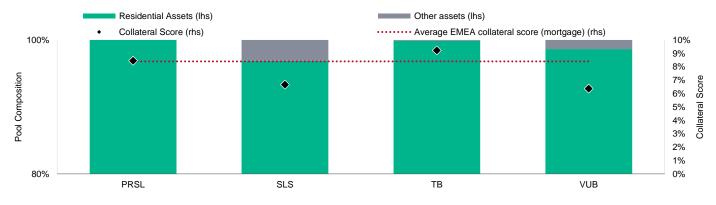
Our average collateral score for Slovak covered bond programmes is 7.7%, which is lower than the European average for mortgage programmes (8.4%).⁸

The collateral score is our measure of the credit risk of cover pool assets. The lower the collateral score, the lower the credit risk.

Slovak collateral scores are low due to the prevalence of high-quality residential mortgage loans (with relatively low LTV ratios) and the absence of any exposure to commercial real estate, as shown in Exhibit 27.

Collateral scores are relatively low

Collateral scores and pool compositions of Slovak covered bond programmes



Source: Moody's Investors Service

5.2 Cover pool losses are relatively low

In our modelling, we assume average cover pool losses of 19.4% for Slovak covered bond programmes, which is lower than the European average for mortgage programmes (20.7%).⁹

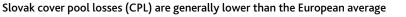
Cover pool losses are an estimate of the amount of cover pool assets that would be written down following an issuer default.

For many European programmes that we rate, including those in Slovakia, the largest component of cover pool losses relates to market risk, which includes refinancing, foreign exchange risk and interest rate risk.

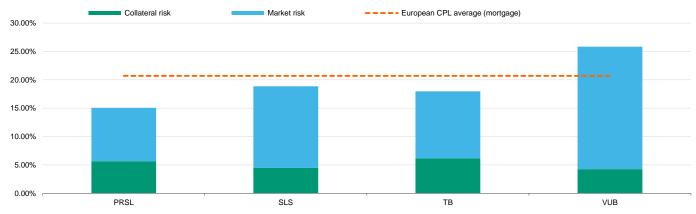
Slovak programmes have relatively low refinancing risk (given that Slovak mortgages generally have short reset periods and benefit from legal protections such as maturity extensions following issuer default (see further Section 4.4 above)) and negligible exposure to foreign exchange risk. This leaves interest rate risk on refinancing as the primary component of cover pool losses, which is relatively high due to the prevalence of fixed rate cover pool assets.

Exhibit 28 shows the cover pool losses that we model for each programme.

Exhibit 28



Estimated cover pool losses for Slovak covered bond programmes, by market and collateral risks



The collateral risk for each programme equals the collateral score minus a haircut to reflect our expectation of ongoing issuer support Source: Moody's Investors Service

5.3 Likelihood of timely payment is 'probable' for all programmes

Our timely payment indicator (TPI) indicates the probability that covered bond payments will continue to be made on time following a default of the issuer, and limits the uplift that covered bond ratings can achieve over the CR assessment of the issuer. All else being equal, the higher the probability of timely payment, the higher the potential rating uplift.

All Slovak programmes have a 'probable' TPI, which corresponds to a timely payment probability of 50-75%.¹⁰ Across Europe, around half of all covered bond programmes have a 'probable' TPI.

Exhibit 29 shows the key drivers of our 'probable' TPI assessment for Slovak programmes.

Exhibit 29

Multiple factors drive our 'probable' TPI assessment Drivers of 'probable' TPI for Slovak covered bonds

Drivers of TPI	Credit positive (+) credit negative (-)	Relevant characteristics
Asset characteristics	+	Cover pool assets are limited to prime residential mortgage loans secured by property in Slovakia.
	-	Most assets have fixed interest rates, which increases market risks
	+	however, short fixed interest periods mitigate the risk of losses on refinancing.
Liability characteristics	+	Most outstanding bonds have extendable maturities, and remaining hard-bullet bonds will likely become extendable following implementation of the EU covered bond directive in July 2022.
	+	All covered bonds are denominated in euro and have fixed rate coupons, resulting in minimal currency and interest rate mismatches.
Strength of legislation	+	Liquidity coverage is required for net outflows over 180 days and is calculated according to expected, rather than extended, maturity dates.
	+	Mandatory minimum overcollateralisation of 5%.
	-	No requirement for asset coverage to be maintained on a net present value basis.
	-	No specific requirements on managing interest rate and currency risks.
Government and financial market support	+	Covered bonds are an important source of funding for the Slovak mortgage market.

Source: Moody's Investors Service

5.4 Combination of TPI leeway and surplus OC protects against credit quality deterioration of issuers

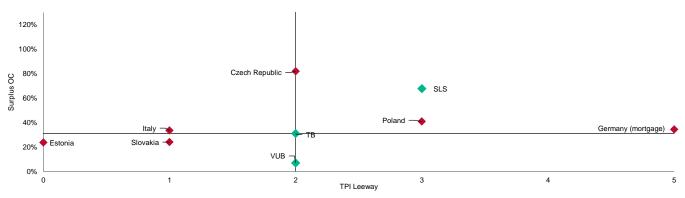
Our average TPI leeway for Slovak covered bonds (excluding PRSL) is 2.3 notches, which is lower than the European average for Aaa programmes (3-4 notches). The TPI leeway is the number of notches the CR assessment of the issuer could be lowered without triggering a downgrade of covered bonds. It reflects both the TPI and the credit strength of the issuer.

For Slovak covered bond programmes (excluding PRSL), the weighted average surplus OC - that is, OC that exceeds the minimum level consistent with the current rating - is 45%, which is higher than the weighted average surplus OC for European programmes (36%). The surplus OC for PRSL is substantially higher at 124%.

The greater the combined levels of TPI leeway and surplus OC, the more robust a covered bond programme is likely to be against a deterioration in the credit quality of the issuer. Surplus OC also indicates a programme's resilience to deterioration in cover pool performance.

Exhibit 30 shows the TPI leeway and surplus OC for Slovak covered bond programmes (excluding PRSL) and selected European markets compared to the median values for Slovakia.

TPI leeway and surplus OC indicate degree of linkage to issuer credit strength TPI leeway and surplus OC for selected Slovak covered bond programmes and European markets



The lines show median values for Slovakia excluding PRSL. The red diamonds show median values for other countries as of Q2 2020. Source: Moody's Investors Service

5.5 Performance indicators

Exhibit 31 shows the performance indicators and outliers of a typical Slovak covered bond programme.

Exhibit 31 Overview of performance indicators

Performance features	Typical Slovak programme	Comments on outliers
Collateral risk	5%	Range from 4.3% (VUB) to 6.2% (TB)
Market risk	14%	Range from 9% (PRSL) to 22% (VUB)
00	65%	Range from 10.9% (VUB) to 137.6% (PRSL)
OC consistent with current rating	10%	Range from 4% (VUB) to 13.5% (PRSL)
ТРІ	Probable	
TPI leeway*	2 notches	3 notches (SLS)

* Excluding PRSL

Source: Moody's Investors Service

6.0 New ratings and issuance trends

6.1 New ratings

In 2020, we did not assign any ratings to new Slovak covered bond programmes.

6.2 Issuance trends

Exhibit 32 shows rated issuance in Slovakia on a quarterly basis.

Exhibit 32

Issuance of Slovak covered bonds has recently been highest in the second quarter Quarterly new issuance of Moody's-rated covered bonds in Slovakia



Source: Moody's Investors Service

7.0 Rating action summary

7.1 Covered bond rating actions

In 2021, we took one rating action on Slovak covered bonds: the upgrade of VUB from Aa2 to Aa1.¹¹

8.0 Moody's related publications

Credit opinion:

» Government of Slovakia – A2 stable, December 2021

Outlooks

- » Covered bonds Global: 2022 Outlook Stable issuers, strong assets and new rules will support credit quality, December 2021
- » Banking System Outlook Update Slovakia: Outlook shifts to stable from negative asthe economy rebounds rapidly, April 2021

Sector in-depth

- » Covered bonds Europe: New liquidity and maturity extension rules are positive but credit benefits will be uneven, January 2022
- » Banks Slovakia: Macro profile: Strong -, February 2021
- » <u>Covered bonds Central & Eastern Europe: Covered bonds' expansion into CEE markets reduces refinancing risk, improves liquidity,</u> September 2019
- » Covered bonds Slovakia: Legal Framework for Covered Bonds, April 2019
- » <u>Covered bonds Global: Germany has strongest legal framework overall, while other countries have strengths in specific areas</u>, August 2018

Sector profile:

- » <u>Covered Bonds: Sector update Q4 2021: Positive</u> regulatory change in Europe will support <u>covered bonds' credit quality in 2022</u>, December 2022
- » Banks Slovakia: Banking system profile, February 2020

Sector comment:

» Covered bonds - Slovakia: Amendments to Slovakia's covered bond law are credit positive, November 2017

Legal frameworks:

» Covered bond legal framework reports for individual jurisdictions

Rating methodology:

» Moody's Approach to Rating Covered Bonds, December 2021

Webpages:

» Moody's covered bonds webpage

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.

Appendix

Website of each covered bond programme

Exhibit 33

Follow the links below to reach the website of each covered bond programme:

ProgrammeName	Key Name
Prima banka Slovensko, a.s Mortgage Covered Bonds	PRSL
Slovenska Sporitelna, a.s Mortgage Covered Bonds	SLS
Tatra Banka, a.s Mortgage Covered Bonds	TB
Vseobecna Uverova Banka a.s Mortgage Covered Bonds	VUB

Source: Moody's Investors Service

Endnotes

- Unless otherwise stated, in this report (1) data relating to cover pool assets and covered bonds is given as of 30 September 2020, (2) Moody's ratings are given as of publication date, (3) Moody's performance indicators for Slovak covered bond programmes are based on data as of 30 June 2021 (for SLS, TB and VUB) and 30 September 2021 (for PRSL); some of these indicators differ from those given in the related quarterly Performance Overview reports because we recently updated certain rating assumptions most significantly, we ceased modelling set-off risk for Slovak programmes in December 2021 see Moody's upgrades Vseobecna Uverova Banka a.s. Mortgage Covered Bonds to Aa1 and aligns timely payment indicator for Slovak covered bonds to probable, and (4) average performance indicators for European covered bond programmes are given as of 30 September 2020.
- 2 Decree of Národná banka Slovenska (NBS) of 13 December 2016 No 10/2016 laying down detailed provisions on the assessment of borrowers' ability to repay housing loans, in force since 1 January 2017.
- 3 For more details, see Covered bonds Slovakia: Amendments to Slovakia's covered bond law are credit positive, November 2017
- 4 The directive contains minimum standards for covered bond legal frameworks and aims to harmonise practices in relation to credit risk, transparency and supervision across the EU.
- 5 For more details, see Covered bonds Slovakia: Legal framework for covered bonds, April 2019.
- 6 Slovakia implemented the BRRD in 2015.
- 7 For more detail, see questionnaire feedback from issuers in our new issue reports for individual programes.
- 8 Simple average, see Covered Bonds Global: Sector Update Q3 2020.
- 9 Simple average, see <u>Covered Bonds Global: Sector Update Q3 2020</u>.
- <u>10</u> Our TPIs for VUB, TB and SLS were changed from 'improbable' to 'probable' in December 2021 see <u>Moody's upgrades Vseobecna Uverova Banka a.s.</u> -<u>Mortgage Covered Bonds to Aa1 and aligns timely payment indicator for Slovak covered bonds to probable</u>.
- 11 See Moody's upgrades Vseobecna Uverova Banka a.s. Mortgage Covered Bonds to Aa1 and aligns timely payment indicator for Slovak covered bonds to probable.

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