

Realkredit Danmark A/S

Danish Covered Bonds – Performance Update on Capital Centre S and Capital Centre T



Ratings rationale (summary)

The AAA/Stable ratings on the Danish mortgage-covered bonds (særligt dækkede realkreditobligationer, or SDROs) issued out of capital centres S and T by Realkredit Danmark A/S (Realkredit) are based on the issuer's rating enhanced by the programmes' fundamental credit support.

Cut-off date	CC ¹	Cover pool	Cover asset type	Covered bonds ²	Rating/Outlook
30 Mar 2021	S	DKK 322.3bn	Residential and commercial mortgage loans	DKK 305.1bn	AAA/Stable
30 Mar 2021	T	DKK 442.0bn		DKK 412.3bn	AAA/Stable

¹Capital centre (CC) S & T; ²særligt dækkede realkreditobligationer – Danish mortgage-covered bonds issued under the strict balance principle of the Danish Mortgage Act.

Fundamental credit support is the primary rating driver for both capital centres, providing six notches of uplift above the issuer rating. Only four notches are needed to raise the covered bond ratings to the highest achievable level.

We classified the interplay between complexity and transparency with a CPC Score of '1', allowing for the maximum additional uplift from cover pool support of three notches on top of the fundamental uplift. Together, the programme benefits from a five-notch buffer against an issuer downgrade.

The potential cover pool support benefits from the strong credit characteristics of both capital centres and the balance principle, almost fully eliminating market risk, particularly asset-liability mismatches.

FUNDAMENTAL CREDIT SUPPORT	COVER POOL SUPPORT	MAXIMUM RATING DISTANCE	RATING UPLIFT
	Cover pool support +3	D9	(unused)
	Cover pool support +2	D8	(unused)
	Cover pool support +1	D7	(unused)
Resolution regime +4	Covered Bonds Rating Floor	D6	(unused)
Resolution regime +3		D5	(unused)
Resolution regime +2		D4	AAA
Resolution regime +1		D3	AA+
Legal framework +2	Fundamental Credit Support	D2	AA
Legal framework +1		D1	AA-
Issuer rating		D0	A+

Stable Outlook

The Stable Outlook on the covered bonds reflects the rating buffer provided by our fundamental and cover pool support analysis, shielding the covered bond ratings from a multi-notch issuer rating deterioration.

Changes since the last performance update

Since our last analysis one year ago, the Danish housing sector has remained relatively resilient against the Covid-19 pandemic. House prices even increased, as they did in most other European countries. This is reflected in the lower loan-to value-ratios, which dropped by around 2pp for both capital centres. Property values have now grown beyond the level we consider sustainable. As a result, we increased the stressed market value declines by 5pp, offsetting the extraordinary growth during the pandemic.

Ratings & Outlook

Issuer rating	A+
Outlook	Negative
Last rating action	Affirmation
Last rating action	10. Aug. 2021
Covered bond	AAA
Outlook	Stable
Rating action	Affirmation
Last rating action	3. Aug. 2021

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Related Research

Scope affirms at AAA/Stable the covered bonds issued out of Realkredit's capital centres S and T August 2021

New Analysis of Realkredit Danmark Sep 2020

Will safety of financial assets prevail over debt risk in Denmark? June 2021

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Bloomberg: RESP SCOP

Realkredit, a core subsidiary of the Danske banking group

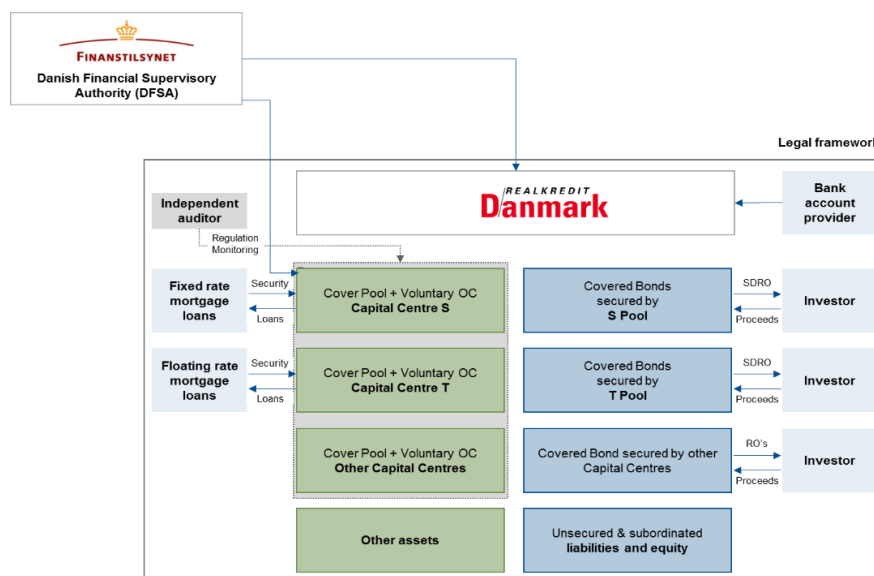
The issuer

We have a A+/Negative rating on Realkredit, the issuer of the rated mortgage-covered bonds.

As a core subsidiary of Danske Bank A/S, Realkredit is closely integrated into the Danske group, sharing its strategy and risk management principles. Realkredit's stand-alone financial profile is supported by strong asset quality, high capitalisation and its position as a major covered bond issuer in Denmark. The Negative Outlook reflects concerns triggered by the alleged money laundering activity by clients of Danske Bank's Estonian operations (ESG Factor). Realkredit has no direct exposure to these events, though it is indirectly affected by the reputational fall-out that has contributed to a fall in market share in Denmark. For further details on the bank's credit analysis see www.scoperatings.com.

Covered bond structure

Figure 1: On-balance sheet issuance structure



Source: Scope, Realkredit Danmark

Realkredit operates as a specialised mortgage bank, originating the majority of domestic mortgage loans within Danske Group. The loans are refinanced using SDROs, with issuances governed by the Danish Mortgage Act and supervised by Denmark's Financial Supervisory Authority (Finanstilsynet).

Fundamental credit support analysis

Full fundamental credit support of six notches

Ratings for the SDROs issued out of capital centres S and T are primarily supported by a six-notch credit uplift provided by the fundamental legal and resolution framework for Danish covered bonds. This enhances the ratings to their highest achievable level (AAA). Cover pool support is therefore not needed.

Two notches of credit differentiation result from our legal framework analysis. This is driven by the benefits afforded by Denmark's covered bond framework, which we consider one of Europe's strongest, particularly due to the strict 'balance principle' applicable to SDROs. Our resolution regime analysis provides an additional four-notch uplift. It reflects the programmes' preferential status and exemption from bail-in, our view on the resolvability and likely maintenance of Realkredit in the hypothetical scenario of regulatory intervention in the bank, and the very high importance of covered bonds in Denmark, where a strong domestic stakeholder group maintains confidence in the high credit quality of the covered bonds. For more information see our [related research](#).

Pool characteristics

Capital centre	S	T
Balance (DKK bn)	322.3	442.0
Residential (%)	76.7	64.6
Commercial (%)	18.0	28.7
Substitute (%)	5.3	6.7

General information

Capital centre	S	T
No. of exposures	172,225	211,653
Avg expos. ('000s)	1,771	2,088
Top 10 (%)	0.9	1.8
Remaining life (y)	25	22
LTV (%)	57.0	55.0

Interest rate type (%)

Capital centre	S	T
Floating	1.0	100
Fixed	99.0	0

Repayment type (%)

Capital Centre	S	T
Bullet	27.4	49.8
Amortising	72.6	50.2

Cover pool analysis

The programmes' fundamental credit support of up to six notches already provides the highest rating. It is the key rating driver and, as such, cover pool support is not needed. We further determine whether cover pool support could further stabilise the ratings, firstly by examining the interplay between complexity and transparency. This translates into a CPC Score of '1', which allows for a maximum three-notch cover pool uplift on top of the fundamental uplift.

Our cover pool analysis stabilises the rating at AAA, even if the bank was downgraded to BBB-, provided the current level of overcollateralisation is maintained.

Cover pool composition

Both capital centres are predominantly secured by Danish commercial and residential mortgage loans denominated in Danish kroner. As of March 2021, only 0.4bps of mortgage loans in capital centre S are denominated in euros. For capital centre T, 3.6% are denominated in Swedish kroner, 1.0% in euros, and 1.7% in Norwegian krone.

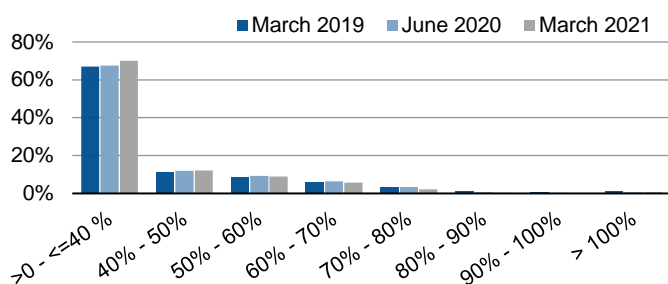
Both pools are highly granular with 172,225 mortgage loans for capital centre S and 211,653 for capital centre T as of March 2021. The top 10 borrowers account for 0.9% in capital centre S and 1.8% in capital centre T.

Since our last analysis as of 30 June 2020, the trends have continued. The asset balance of capital centre S again increased, by around 8%, while capital centre T's decreased by 5.5% (-4.5% earlier). This may have been driven by increasing demand into fixed-rate mortgages due to the ultra-low interest rates. Furthermore, the overall loan-to-value dropped further by 2.5 percentage points to 57.0% for capital centre S and by 2.1pp to 55.0% for capital centre T.

The main and most important difference between the two capital centres are their interest rates: 99.0% of the mortgage loans in capital centre S have fixed rates for life; all of the loans in capital centre T are floating-rate and reset loans (adjustable rate mortgages), most of which have reset periods of under five years.

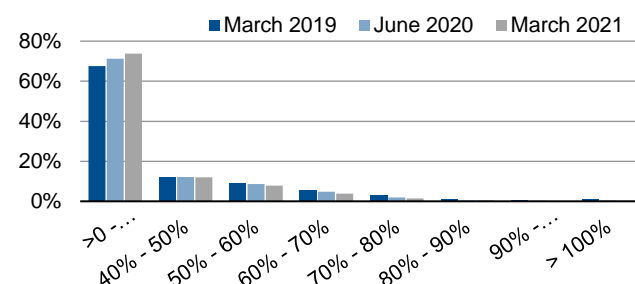
The share of commercial loans in capital centre S remains lower. Residential mortgage loans account for 76.7% of the total asset balance, including subsidised housing and private rental. If we include cooperative housing, residential accounts for 83.6% of the total asset balance in capital centre S and 66.3% in capital centre T.

Figure 2: LTV distribution (capital centre S)



Source: Scope Ratings, Realkredit Danmark

Figure 3: LTV distribution (capital centre T)



Source: Scope Ratings, Realkredit Danmark

Asset risk analysis

The credit quality of the two granular capital centres is strong. Changes in our lifetime mean default rate of 2.3% (from 3.9%) for capital centre S and 2.4% (from 3.2%) for capital centre T result from the higher credit given to life amortisation. The decrease in recovery rates, in particular for capital centre T, is driven by our higher value decline assumptions as a consequence of unsustainable house price growth in recent years.

Strong credit quality reflected in low default expectation...

Our projection of default on mortgage loans uses an inverse Gaussian distribution, based on available credit performance data provided by the bank (in particular, 90+dpd vintage data) and benchmarking. While the updated vintage data did not show any material changes in the performance of the mortgage assets, we kept the benefit we gave to the historical cure rates of defaulted loans at 50%.

We assumed a volatility of defaults (weighted average coefficient of variation) of 50% for capital centre S and 75% for capital centre T. Assumptions for capital centre T incorporate a potential increase in borrower defaults if margins increase by up to 500bps – in the event that a covered bond’s refinancing fails. Capital centre S is not exposed to refinancing risk because loans are fixed rate for life.

...and moderate recoveries, even under stressed scenarios

We estimated a weighted average recovery rate for capital centre S ranging from 92.2% (from 92.1%) for the base case to 73.2% (from 74.7%) for the most stressful scenario; for capital centre T, the respective figures are 91.0% (from 94.7%) and 77.9% (from 77.1%).

Cash flow risk analysis

The overcollateralisation supporting the AAA ratings is 0% for both pools and is based on fundamental support. Consequently, cover pool support is not a rating driver.

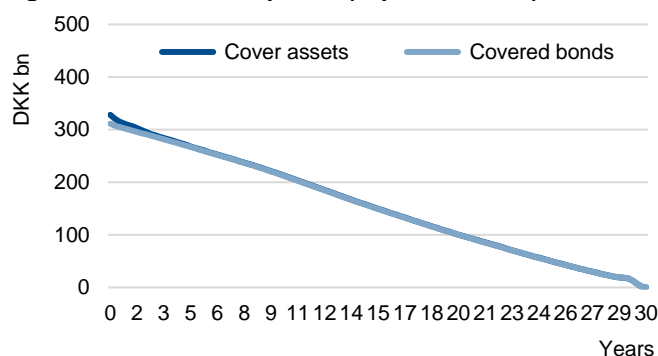
To test the stability of the ratings we established the overcollateralisation levels needed to support the current rating uplift if the programme had to rely on cover pool support. We performed a full analysis supported by detailed data provided by Realkredit. Our analysis showed that cover pool support can stabilise the current AAA ratings against an issuer downgrade of up to five notches.

The main risk driver from the cover pool is credit risk, but this remains low, reflecting the strong credit quality of the two pools.

Aided by the balance principle, market risks mainly result from minimum, regulatory and voluntary overcollateralisation, but are negligible in terms of the total balance and remaining term.

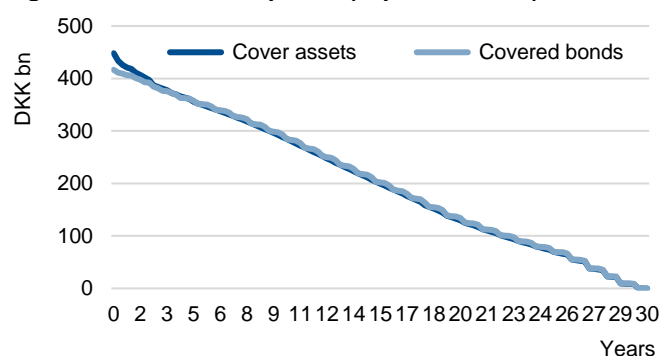
Asset sales due to asset-liability mismatches from remaining hard-bullet bonds are immaterial and therefore do not pose a risk. Only 0.002% (from 0.2%) of bonds in capital centre S are grandfathered hard-bullet bonds as they were issued before the March 2014 legal amendment introducing soft bullets. Around 0.8% (from 1.0%) of bonds in capital centre T were issued as hard-bullet bonds.

Figure 4: Amortisation profile (capital centre S)



Source: Scope Ratings, Realkredit Danmark

Figure 5: Amortisation profile (capital centre T)

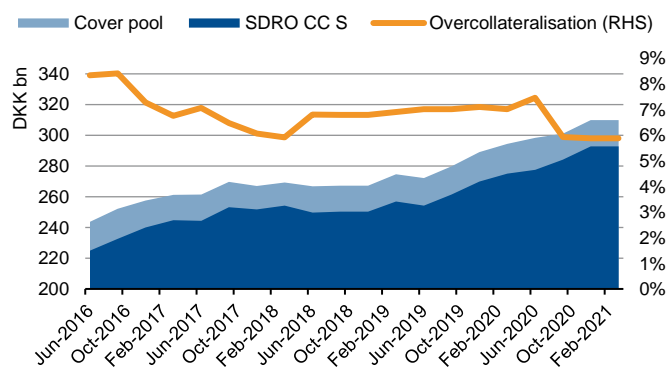


Source: Scope Ratings, Realkredit Danmark

Availability of overcollateralisation

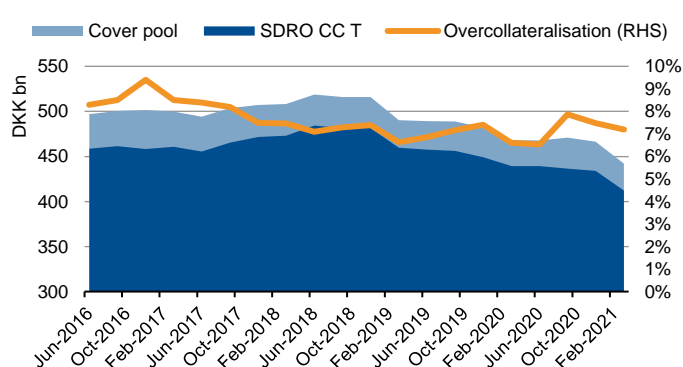
Realkredit's covered bond ratings are wholly supported by fundamental factors and therefore do not rely on the issuer's ability and willingness to provide overcollateralisation above the legal minimum. However, the current ratings allow us to fully account for the provided overcollateralisation.

Figure 6: Overcollateralisation (capital centre S)



Source: Scope Ratings, Realkredit Danmark

Figure 7: Overcollateralisation (capital centre T)



Source: Scope Ratings, Realkredit Danmark

Main counterparty exposure relates to Realkredit

Other risk considerations

The rated covered bonds have counterparty exposures to the issuer, as well as to the issuer's parent as loan originator, servicer, bank account provider and paying agent. No documented replacement mechanisms would automatically shield the covered bonds from a credit deterioration of counterparties providing bank accounts. However, we believe that the strong alignment of interests between the bank and covered bond holders would prevent a negative impact from such risks before regulatory intervention became necessary. The bank's risk management process regularly monitors accounts to ensure that remedial action can be taken early on.

Country risk does not affect the ratings

Sovereign risk does not limit the ratings of the mortgage-covered bonds. We believe the risks of an institutional framework meltdown, legal insecurity and currency-convertibility problems are currently remote.

No direct impact from ESG

We have not directly included ESG aspects in the ratings because information provided on the collateral and its performance does not allow us to determine impacts from energy efficiency or differences in recovery proceeds.

However, we acknowledge the bank's green bond framework and first green covered bonds launched in 2019, which opens up the investor base and improves the appeal and liquidity of covered bonds issued by Realkredit.

Challenging environment for benchmark ESG covered bonds

On the other hand, the Danish match funding principle complicates an effective selection of eligible assets. This is because Danish mortgage banks have to ensure that covered bonds match the loans' maturity and interest profile, limiting the supply of eligible cover loans. This will make issuances of benchmark ESG covered bonds less frequent.



Realkredit Danmark A/S

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Appendix: Summary of covered bond characteristics

Reporting date	30-Mar-21	30-Jun-20	30-Mar-21	30-Jun-20
Issuer name	Realkredit Danmark A/S			
Capital centre	S		T	
Country	Denmark			
Covered bond name	særligt dækkede realkreditobligationer (SDROs)			
	Danish mortgage covered bonds issued under the Danish mortgage act			
	(Specific balance principle)			
Covered bond legal framework	Danish legal covered bond framework			
Cover pool type	Mortgage loans			
Composition	Residential = 76.7%	Residential = 74.68%	Residential = 64.6%	Residential = 65.75%
	Commercial = 18.0%	Commercial = 18.3%	Commercial = 28.6%	Commercial = 28.1%
	Substitute = 5.6%	Substitute = 6.95%	Substitute = 6.7%	Substitute = 6.14%
Issuer rating ¹	A+	A+	A+	A+
Current covered bond rating	AAA/Stable	AAA/Stable	AAA/Stable	AAA/Stable
Covered bond maturity type	Hard bullets	Hard bullets	Hard bullets	Hard bullets
Cover pool currencies	DKK (100%)	DKK (100%)	DKK (94.4%)	DKK (94.8%)
	EUR (0.0%)	EUR (0.0%)	EUR (1.1%)	EUR (1.2%)
			SEK (3.1%)	SEK (2.7%)
			NOK (1.4%)	NOK (1.2%)
Covered bond currencies	DKK (100%)	DKK (100%)	DKK (93.7%)	DKK (94.5%)
	EUR (0.0%)	EUR (0.0%)	EUR (1.0%)	EUR (1.1%)
			SEK (3.6%)	SEK (3.1%)
			NOK (1.7%)	NOK (1.3%)
Fundamental cover pool support	6	6	6	6
Maximum additional uplift from CPC Score	3		3	
Maximum achievable covered bond uplift	9	9	9	9
Potential covered bond rating buffer	5	5	5	5
Cover pool (DKK m)	322,346	298,294	441,998	467,991
Thereof substitute assets (DKK m)	17,224	20,730	29,674	28,731
Covered bonds (DKK m)	305,122	277,564	412,324	439,260
Current overcollateralisation/ legal minimum overcollateralisation ³	5.6% / 8%	7.5% / 8%	7.2% / 8%	6.5% / 8%
Overcollateralisation to support current rating	not applicable	not applicable	not applicable	not applicable
Overcollateralisation upon a one-notch issuer downgrade	not applicable	not applicable	not applicable	not applicable
Cover pool supporting overcollateralisation to support current rating	0.00%	0.00%	0.00%	0.00%
Cover pool overcollateralisation upon a one-notch issuer downgrade	0.00%	0.00%	0.00%	0.00%
Weighted average life of assets	25 years	24 years	22 years	22 years
Weighted average life of liabilities ⁵	27 years	26 years	2 years	3 years
Number of exposures	177,125	166,829	211,653	232,428
Average loan size (in DKK '000s)	1,862	1,788	2,088	2,013
Top 10 residential	0.8%	0.87%	1.5%	1.33%
Top 10 commercial	4.2%	4.46%	5.9%	5.78%
Interest rate type – assets	Floating 0.9%	Floating 1.2%	Floating 0%	Floating 0%
	Fixed 99.1%	Fixed 98.7%	Fixed 100%	Fixed 100%
Interest rate type – liabilities (fixed/floating)	Floating 0.1%	Floating 0.1%	Floating 32.9%	Floating 25.3%
	Fixed 99.2%	Fixed 98.9%	Fixed 67.1%	Fixed 74.7%
	Other 0.7%	Other 1%		Other 0%
Weighted average LTV (whole loan)	57.0%	59.5%	55.0%	57.1%



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Danish Covered Bonds – Performance Update on Capital Centre S and Capital Centre T

Geographic split (top 3)	Denmark 100%	Denmark 100%	Denmark 95.4%	Denmark 96.8%
			Norway 1.4%	Norway 0.8%
			Sweden 3.2%	Sweden 2.3%
Domestic region split (top 3)	Hovedstaden 46.9%	Hovedstaden 46%	Hovedstaden 47.7%	Hovedstaden 46.5%
	Midtjylland 17.2%	Midtjylland 17.3%	Midtjylland 16.7%	Midtjylland 17%
	Syddanmark 16.3%	Syddanmark 16.8%	Syddanmark 17.5%	Syddanmark 17.8%
Default measure	Inverse Gaussian/ non-parametric			
Weighted average default rate (mortgage/substitute)	2.3%/ 0.08%	3.9%/ 0.06%	2.4%/ 0.08%	3.2%/ 0.05%
Weighted average coefficient of variation (mortgage/substitute)	50%/ 1092%	50%/ 1546%	75%/ 1113%	75%/ 1438%
Weighted average recovery assumption (D0/D9)⁴	92.2% / 73.2%	92.1% / 74.7%	91.0% / 77.9%	94.7% / 77.1%
Share of loans > three months in arrears (NPL)	0.08%	0.126%	0.30%	0.398%
Interest rate stresses (max./min.; currency-dependent)	-1 to 10%	-1 to 10%	-1 to 10%	-1 to 10%
FX stresses (max./min.; currency-dependent)	25% / -20%	7% / -7%	35% / -30%	32% / -33%
D9¹ liquidity premium	150bps/ 300bps	150bps/ 300bps	150bps/ 300bps	150bps/ 300bps
Servicing fee (mortgage)	27bps	27bps	32bps	32bps

¹ The issuer's rating Outlook is Negative.

² Covered bonds issued after 2014 can be extended if refinancing fails.

³ 8% of legal overcollateralisation is calculated based on risk-weighted assets and effectively results in a lower overcollateralisation level as long as the risk-weighted assets are below 100% of the assets' nominal outstanding balance; Realkredit applies an internal rating-based risk weighting.

⁴ D0 or D9 denote the stresses commensurate with the rating distance between the issuer rating and the covered bond ratings.

⁵ Fixed-rate bonds in capital centre T are refinanced regularly, reflecting the reset cycles of the mortgage loans.



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