DANMARKS NATIONALBANK

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# Technical adjustment of the monetary policy instruments

- Danmarks Nationalbank introduces one single rate for deposits and one single rate for monetary policy loans. Simultaneously, the difference between the monetary policy rates is narrowed.
- The adjustments ensure more stable money market rates and thus a more predictable effect on the Danish krone.
- The adjustments are not intended nor expected to affect the level of money market rates or the Danish krone.

**Stable Danish krone for more than 30 years**
Danmarks Nationalbank has kept the krone stable for more than 30 years. First pegged against the German Mark and since against the euro.

In order to manage the krone, it is crucial that there is a close link between Danmarks Nationalbank's interest rates and the Danish money market rates. Technically, this corresponds to a strong transmission of policy rates to the money market. This is important since the krone in normal times is primarily determined by the interest rate differential between money market rates in Denmark and the euro area (the interest rate differential). With an efficient monetary policy transmission, the interest rate differential can be affected by Danmarks Nationalbank changing the policy rates without the ECB making any changes. Changes in the interest rate differential impacts the krone as market participants are incentivised to buy or sell Danish kroner against foreign currency. This restores the balance between buyers and sellers of Danish kroner.

**Monetary policy rates in the 2000's**
Through the 2000s, Danish monetary policy rates were very close to each other. The rate on certificates of deposit and the lending rate were equal, while the current-account rate was slightly below the rate on certificates of deposit. This meant a high and stable transmission of monetary policy rates to money market rates regardless of the size and composition of the banking sector's deposits and lending at Danmarks Nationalbank.

During the Great Financial Crisis in 2009, a spread was introduced between the rate on certificates of deposit and the lending rate to support turnover in the money market and to reduce an excessive balance sheet increase as the banking sector concurrently maintained large loans and large deposits at the central bank.

## Adjustments to the monetary policy instruments since 2010

Box 1

**Negative deposit rates due to the European sovereign debt crisis 2011-12**
The European sovereign debt crisis triggered strong demand for Danish kroner. This strengthened the krone and led Danmarks Nationalbank to introduce negative rates on certificates of deposit in July 2012. Negative interest rates were unchartered territory with great uncertainty about the behavioral effects both socially and for the financial system. Therefore, the banks' day-to-day liquidity was exempt from negative rates as the current-account rate was maintained at zero. Thus, the monetary policy deposit rates were "reversed", as the interest rate on certificates of deposit, unlike before, was set lower than the current-account rate.

**The certificates of deposit rate was reduced further in 2015 which widened the spread between deposit rates**
The cap on the Swiss franc was removed in January 2015. The following market reaction also led to a strong demand for Danish kroner. Danmarks Nationalbank responded by selling kroner and lowering the certificates of deposit rate to -0.75 per cent. The sale of kroner resulted in a high net position[1], which ensured that the leading policy rate was the certificates of deposit rate. However, the large gap between the current-account rate and the certificates of deposit rate created significant fluctuations in the very short money market rates, see The money market at pressure on the Danish krone and negative interest rates[2] (*link*).

**Daily market operations in certificates of deposit reduced the large fluctuations in money market rates in 2017**
In order to reduce fluctuations in the very short money market interest rates, which foreign market participants in particular had difficulty understanding and acting in, the banks' total deposits in Danmarks Nationalbank (current-account deposits and certificates of deposit) were made available on a daily basis as Danmarks Nationalbank offered to purchase and sell certificates of deposit every day. This resulted in banks' using certificates of deposit to adjust their daily change in liquidity as the yield differential made them maximize the amount deposited in their current accounts.

**Extraordinary lending facility introduced in 2020 during covid-19**
In March 2020, an extraordinary lending facility was introduced to temporarily increase the monetary policy counterparties' access to liquidity and financing in the longer term. Danmarks Nationalbank introduced extraordinary 1-week lending at an interest rate of -0.35 per cent as well as 3-month loans with variable interest rates.

1. The net position shows the banks net deposits in Danmarks Nationalbank. This means the banks total deposits minus the monetary policy loans.
2. Danmarks Nationalbank, *Monetary review*, 4th Quarter, 2015.

### Introduction of negative rates in 2012
Danmarks Nationalbank introduced in 2012 a negative rate on certificates of deposit, see Box 1. This was unchartered territory, and its effects on society and the financial system were uncertain. At that time, it was also unclear whether negative rates would persist. Against this background, the banking sector's current accounts were exempt from negative rates.

Negative rates did not become a short-term phenomenon, neither in Denmark nor globally. Today, the main deposit rate at Danmarks Nationalbank is significantly below zero and during the covid-19 crisis in March 2020 a temporary lending facility with a negative rate was introduced.

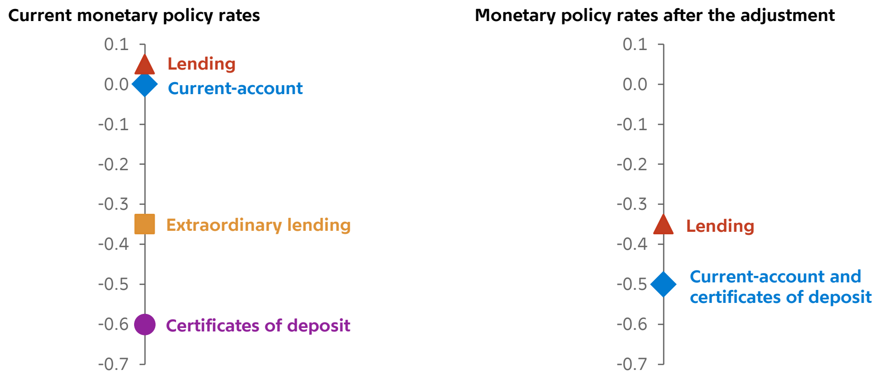
### Reduced transmission of policy rates
As a result of the previous adjustments to the monetary policy instruments, Danmarks Nationalbank currently has two different deposit rates in the form of the current-account interest rate at 0 per cent and the rate on certificates of deposit at -0.60 per cent, as well as two lending rates of which one is temporary, see Chart 1 (left). Today, there is a large spread between the two deposit rates, which are respectively above and below the temporary and effective lending rate. This means that the monetary policy transmission to the money market interest rates is lower and less stable as they largely depend on the banks' use of monetary policy instruments and the distribution of liquidity between the banks.

As long as the banking sector holds a large amount of certificates of deposit, the money market rates will primarily be determined by the rate on certificates of deposit. This was mainly the case in the 2010's.

When the net position drops, it might be necessary for the banking sector to obtain monetary policy loans to ensure sufficient free liquidity. In addition, current-account deposits make up a larger part of the banks' total deposits. This was the case in the period after March 2020 when the net position decreased as a result of intervention in the foreign

**The adjustments ensure one single rate for deposits and one single rate for monetary policy loans and reduce the difference between them**

Chart 1




exchange market. This drove money market rates towards the rate on the extraordinary lending facility, see Chart 2.

Further, money market rates could potentially rise above the extraordinary lending rate and in periods approach the current-account rate at zero, if the net position becomes sufficiently low. This might occur when banks' current-account deposits constitute a very large proportion of their total deposits. The situation can arise if there is a long-term decline in the net position, but also in the event of short-term declines, for instance as a result of a large shift in government inflows or outflows. Government payments have been difficult to predict during the extraordinary situation caused by covid-19.

**Improved monetary policy transmission**

The monetary policy transmission to money market rates can potentially take place within a relatively large corridor. This creates uncertainty around the level of money market rates which is undesirable when maintaining the currency peg against the euro.

In order to better manage the Danish krone, the monetary policy instruments are adjusted. One single deposit rate is introduced, as the current-account rate and the rate on certificates of deposit are set equal to each other. Extraordinary 1-week loans are abolished, so that there is only one lending rate. In addition, the difference between the deposit and lending rate is narrowed to ensure a stable transmission to money market interest rates, regardless of the size and composition of the banking sector's deposits and lending at Danmarks Nationalbank. The stable transmission will also apply in the event that the general interest rate level becomes positive again.

**Market-neutral adjustment of policy rates**

The adjustments to the monetary policy instruments are introduced in a period without a need to adjust policy rates. Therefore, the monetary policy rates are set such that money market rates and the exchange rate between Danish kroner and euro are not intended to be affected. On that basis, the current-account rate and the certificates of deposit rate are set at -0.50 per cent, and the lending rate is set at -0.35 per cent. The interest rate spread is, thus, narrowed to 0.15 per cent. This ensures limited fluctuations in money market interest rates, while maintaining an incentive to exchange liquidity through the money market.

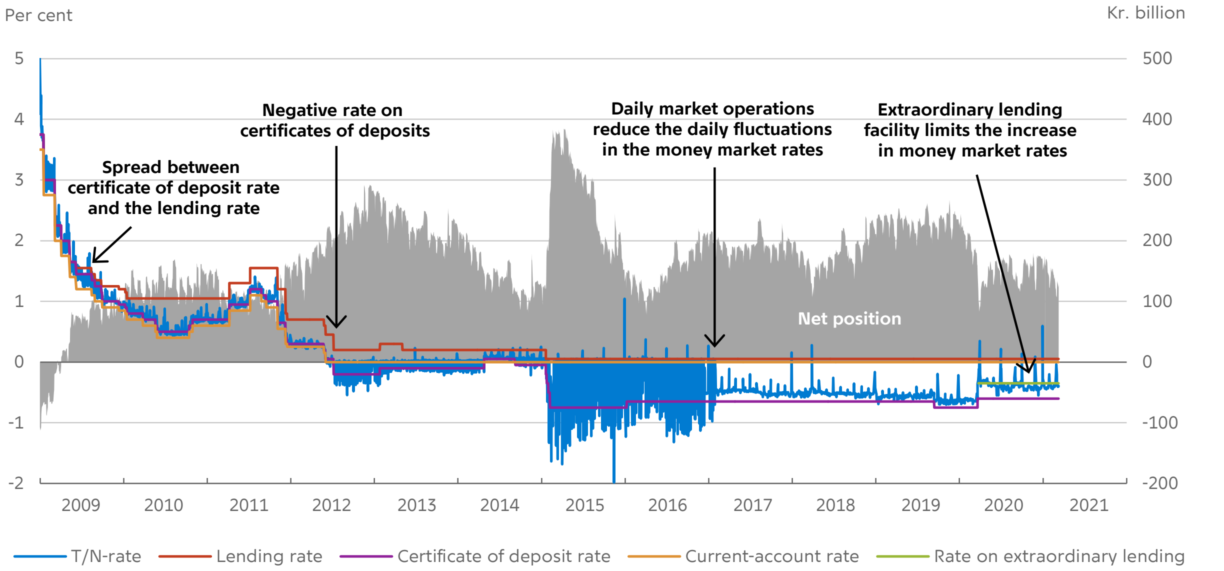
Deposits at Danmarks Nationalbank are no longer partly exempt from negative interest rates. Previously, a small part of the banking sector's deposits were remunerated at 0 per cent, while the majority was remunerated at -0.60 per cent. The interest rate on deposits with Danmarks Nationalbank is now changed to -0.50 per cent. The changes do not entail any significant cost for the banking sector as a whole.

**The ceiling on current-account deposits is removed**

By removing the ceiling on current-account deposits, the banks will in future be able to place all deposits on their current account. Thus, it is no longer

**Monetary policy rates and transmission to money market rates**

Chart 2




Source: Danmarks Nationalbank and Bloomberg.

necessary to buy or sell certificates of deposit on a daily basis in order to adjust liquidity. Against this background, daily market operations are phased out after a transition period.

Just as during the period with daily market operations, the banks can dispose of all their deposits with Danmarks Nationalbank on a daily basis.

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DANMARKS NATIONALBANK
LANGELINIE ALLÉ 47
DK-2100 COPENHAGEN Ø
WWW.NATIONALBANKEN.DK

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### CONTACT

**Ole Mikkelsen**
Communications and Press Officer

*omi@nationalbanken.dk*
*+45 3363 6027*

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