

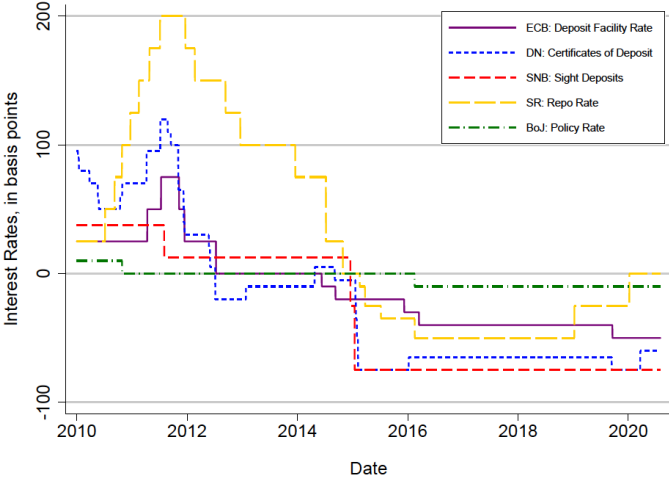
# Banks and negative interest rates

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European Central Bank & CEPR

SUERF BAFFI BOCCONI E-Lecture  
6 May, 2021

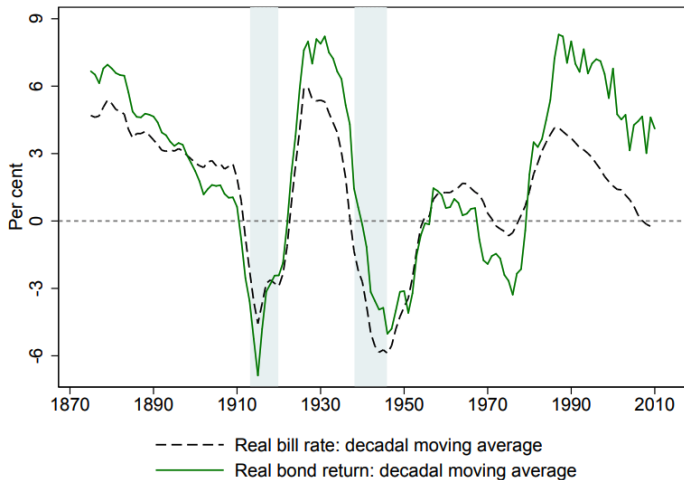
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# Central bank policy rates have become negative



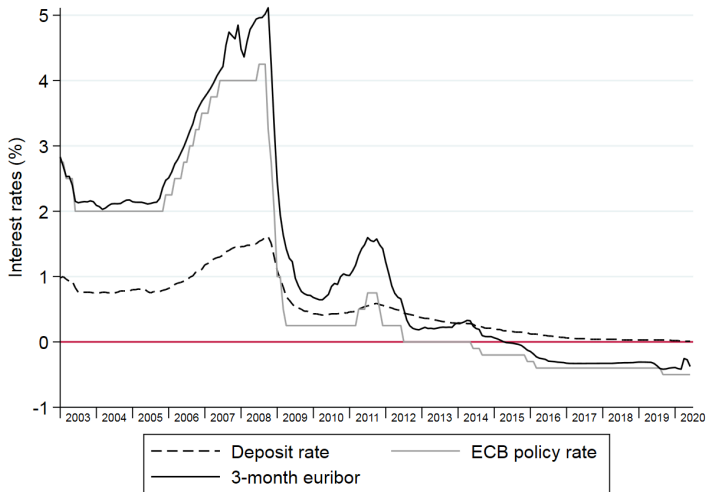
Source: Ulate (2021)

## Also real rates have fallen



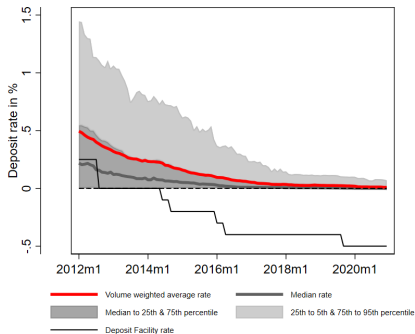
Source: Jordà, Knoll, Kuvshinov, Schularick, and Taylor (2019)

# What is special about negative policy rates? ZLB on retail deposit rates

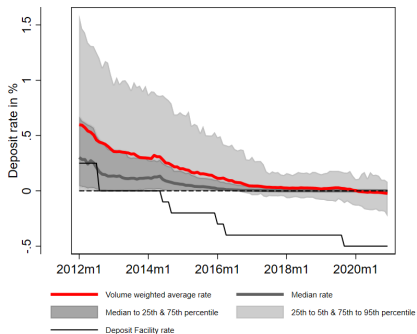


# The ZLB on (overnight) retail deposit rates is pretty hard

## Household deposits



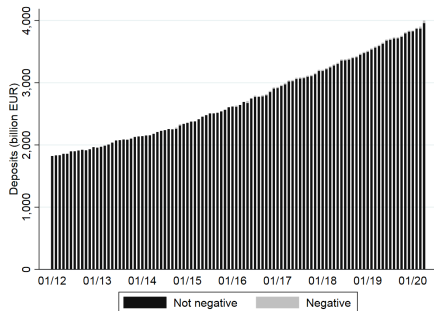
## Corporate deposits



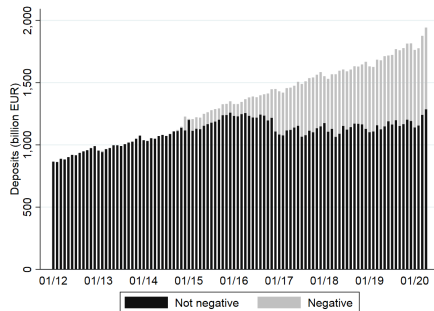
Source: Own calculations

# 85% of all deposits remain non-negative

## Household deposits

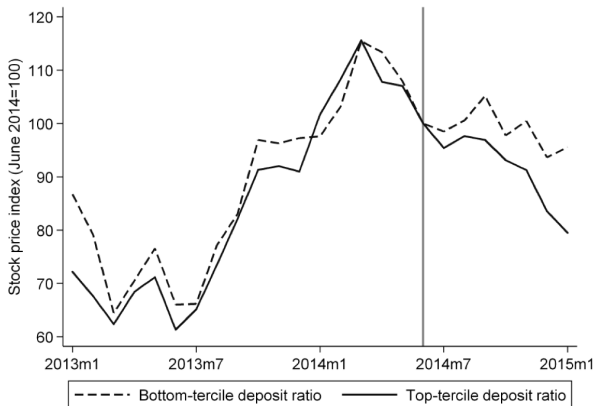


## Corporate deposits



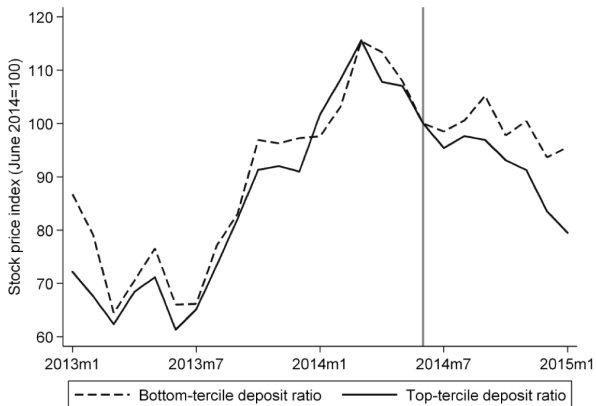
Source: Heider, Saidi, and Schepens (2021)

# ZLB on deposit rates hurts deposit-dependent banks



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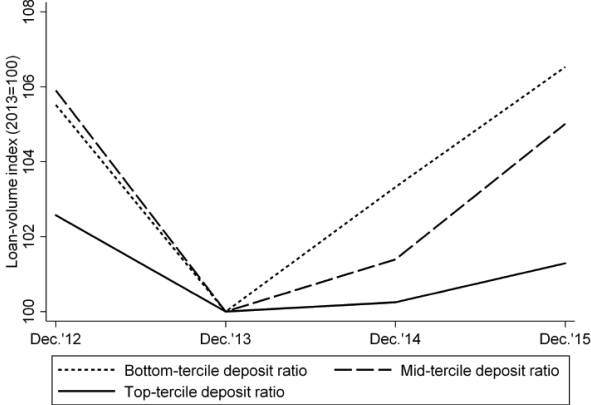


Source: Heider, Saidi, and Schepens (2019)

See also Ampudia and Van den Heuvel (2018)

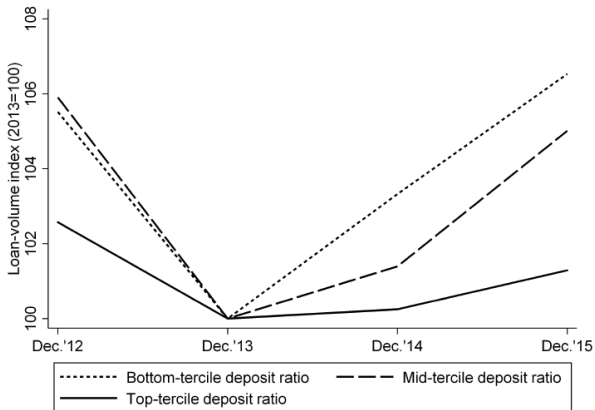


# Deposit-dependent banks lend relatively less ...



Source: Heider, Saidi, and Schepens (2019)

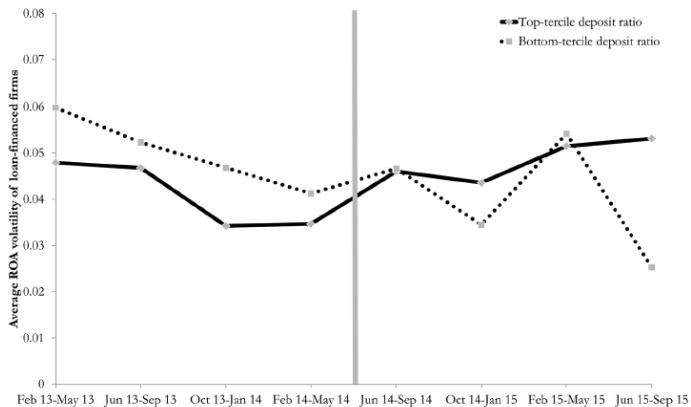
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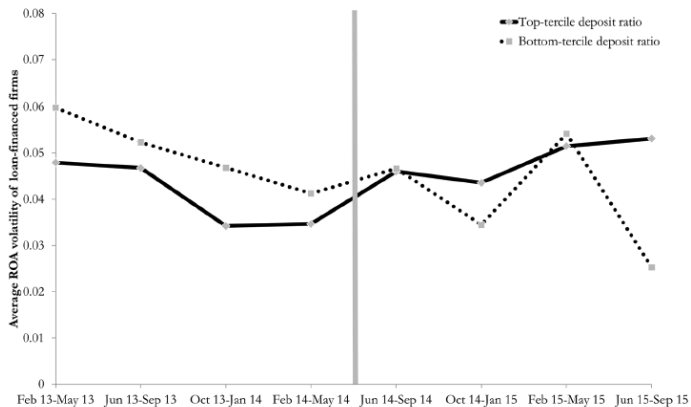
See also Ulate (2021) and Eggertsson et al. (2020)

... and take more risk (not inefficient though)



Source: Heider, Saidi & Schepens (2019)

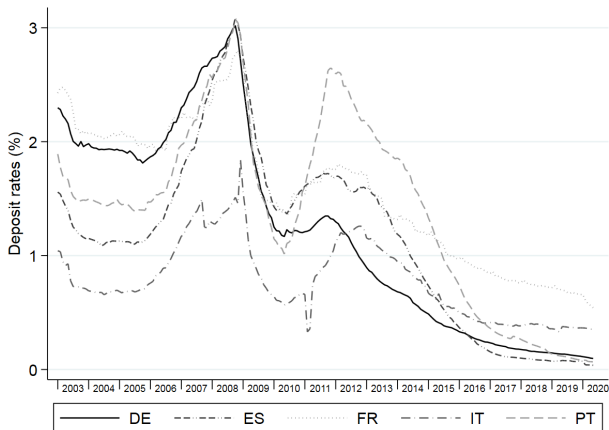
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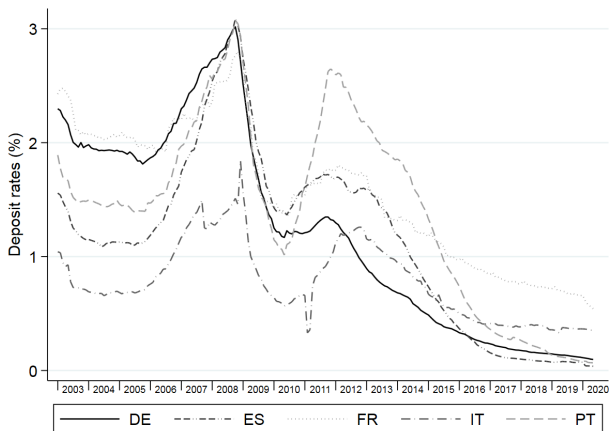
See also Bubeck, Maddaloni, and Peydró (2020)

## Euro area heterogeneity in deposit rates



Source: Heider, Saidi, and Schepens (2021)

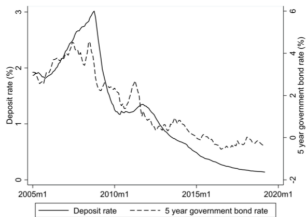
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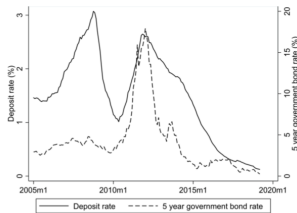
Source: Heider, Saidi, and Schepens (2021)

See also Bittner, Bonfim, Heider, Saidi, Schepens, and Soares (2020)

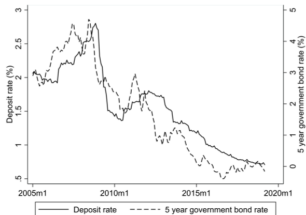
# Relationship between deposit rates and sovereign bond rates



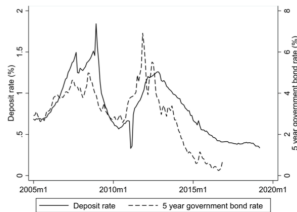
(a) Germany



(b) Portugal



(c) France



(d) Italy

## Other potential channels

Bank holdings of excess reserves...but reserves are always costly

Basten and Mariathan (2020) use exemption threshold in Swiss tiering

Demiralp, Eisenschmidt, and Vlassopoulos (2021) show high-deposit banks with lots of excess reserves lend more



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Bank holding of short-term liquid assets

Bottero et al. (2019), Arseneau (2020)

But what about long-term rates? They came down too

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But what about long-term rates? They came down too

Bank holdings of government bonds

In euro area, setting a negative policy rate had very strong impact on long-term rates

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