

Observations on *The Danish Experience With Negative Interest Rates*

Alex Roever^{AC}

Head of US Interest Rate Strategy

J.P. Morgan Securities LLC

alex.roever@jpmorgan.com

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Observations

- Deposit rates and the toothpaste problem
 - Negative deposit rates impact institutional deposits, households differently.
 - **Households**
 - Banknotes are primarily a household / small business asset
 - Benefits of Deposit tiering
 - Question: aided by evolution in payment technology -- who uses bills?
 - **Institutional and corporate entities**
 - Two effects:
 - Pass on excess cash to households - increased dividends on KAX
 - Take more risk? Longer term bonds? More Credit Risk?
 - Banks – Profit increased - due to impairment resolution; Net Interest & Fee revenue relatively stable. Interesting outcome – probably shouldn't generalize to other markets
 - Comment on negative bond yields

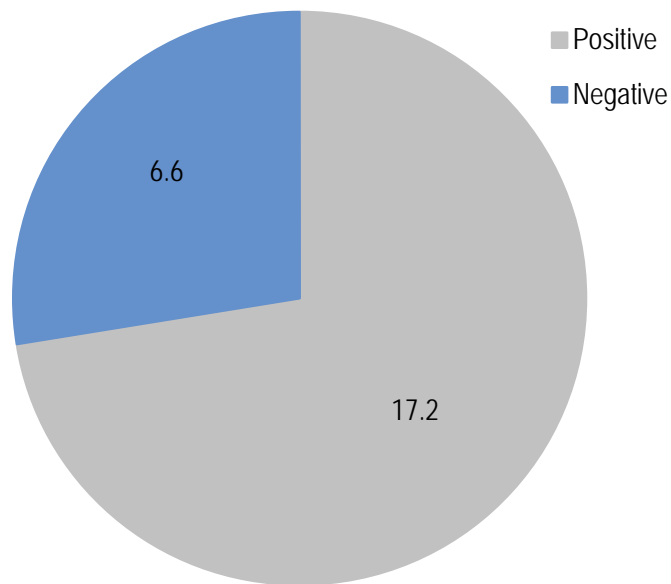
There are now five central banks with a negative deposit rate. These banks set a number of interest rates at which they are prepared to borrow and lend to the financial system

Various central bank policy rates; current and last change

Central Bank	Key interest rates	Current level (%)	Last change (bp)	Announcement date
ECB	Main refinancing rate	0.00	-5	10-Mar-16
	Main deposit facility rate	-0.30	-10	10-Mar-16
BoJ	IOER	-0.10	-20	28-Jan-16
SNB	3M CHF Libor target band	-1.25, -0.25	-50	15-Jan-15
	Sight deposit interest rate	-0.75	-50	15-Jan-15
Riksbank	Lending rate	0.25	-15	11-Feb-16
	Repo rate	-0.50	-15	11-Feb-16
	Deposit rate	-1.25	-15	11-Feb-16
Danmark National Bank	Lending rate	0.05	-15	19-Jan-15
	Current-account rate	0.00	-15	31-May-12
	Discount rate	0.00	-25	05-Jul-12
	CD rate	-0.65	+10	07-Jan-16

A significant share of fixed income in Europe and Japan are trading with a negative yield. The JPM global bond index now trades close to 1%

Amount of global bonds outstanding with negative yield in JPM GBI broad index; \$tn



Source: J.P. Morgan

J.P. Morgan global bond index yield; %



Where are the negative bond yields?

	Negative US\$ bn	Debt Maturity				
		'1-3'	'3-5'	'5-7'	'7-10'	'10+'
Australia		0.0%	0.0%	0.0%	0.0%	0.0%
Austria	130	36.3%	27.3%	36.4%	0.0%	0.0%
Belgium	163	33.0%	25.8%	41.2%	0.0%	0.0%
Canada		0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	48	30.3%	35.2%	34.5%	0.0%	0.0%
Finland	55	23.7%	53.9%	22.4%	0.0%	0.0%
France	764	39.5%	38.9%	21.6%	0.0%	0.0%
Germany	759	35.1%	28.2%	22.3%	14.3%	0.0%
Italy	234	100.0%	0.0%	0.0%	0.0%	0.0%
Ireland	66	30.0%	70.0%	0.0%	0.0%	0.0%
Japan	3,231	25.8%	24.1%	16.9%	18.5%	14.6%
Netherlands	225	38.4%	25.1%	27.6%	8.9%	0.0%
Portugal		0.0%	0.0%	0.0%	0.0%	0.0%
Spain	146	100.0%	0.0%	0.0%	0.0%	0.0%
Sweden	35	59.3%	40.7%	0.0%	0.0%	0.0%
UK		0.0%	0.0%	0.0%	0.0%	0.0%
US		0.0%	0.0%	0.0%	0.0%	0.0%
GBI Global	5,856	35.0%	25.3%	18.3%	13.0%	8.4%
EMU	2,542	46.0%	28.4%	20.6%	5.1%	0.0%

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