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BUSINESS & ECONOMICS

Banking in context

2206 - Banking | 2025S2 | Session 2 | Carla Rebelo

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Menti Time ☺

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WRAP UP FROM SESSION 1

Profitability drivers

Dupont adapted

$$ROE = \frac{\text{Net Income}}{\text{Equity}}$$

$$ROE = \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

Efficiency

. Net Interest Margin
. Fee Income
. Trading income
. Cost efficiency
. Losses on loan defaults

Rotation

. Loan maturity
. Trading strategy

Leverage

. Loan to Deposits ratio
. Funding strategy excl. Dep.
. Common Equity
. Asset leverage

ING: A success story

Context

ING Direct (www.ingdirect.com)

Fields of Operation

ING Direct is a subsidiary of ING Bank. It is essentially an internet/telephone bank, offering high yield savings accounts. In some countries, internet coffee shops offer a physical interface with the clients. For example, there is a *Café des Finances* in Paris and Lyon. ING Direct operates in North America (Canada and USA), Europe (France, Italy, Germany, Spain, and the United Kingdom), and Australia. Exhibit 1 reports the date of opening of operations in the eight countries, the number of clients, and the volume of deposits collected. ING Direct started operating in May 1997 in Canada, under the leadership of Arkadi Kuhlmann.[2] Its most recent opening was in the United Kingdom in May 2003. This was quite successful as, within seven-months time, it had acquired 305,000 clients and €11.5 billion of deposits. Its very large operation in Germany can be explained by the purchase of the German internet bank Entrium.

ING: A success story

Context

Introduction

In May 2004, ING Direct France, an internet bank (www.ingdirect.fr), was offering 5% on savings deposits to its customers resident in France. In November, the rate was raised to 7%. This offer was remarkable, at a time when the short-term 3-month interbank euro interest rate was 2%, and the return on money market funds was close to 1.7%. By the end of 2003, the bank, which had opened in France in January 2000, had attracted 339,000 clients and a volume of deposits of €7.6 billion, representing an annual deposit growth of 26% over the year 2002. A very visible adverting campaign, featuring a number of top models, had been quite successful.

Ben Tellings, CEO of the German subsidiary of ING Direct, DiBa, entitled his presentation to the Institute of Economic Affairs in London in March 2004: "ING Direct, A Growing Success Story".

offering 6%. This again spurred successful growth.[3] However, there was a marked difference between the deposit wars of the late 1980s and the current ING Direct case. In the 80s, the strict monetary policy needed to fight inflation had pushed market interest rates to 10% in Belgium and 14% in Spain. With the large incumbent domestic banks offering a meagre 6% return on savings deposits, there was ample room for a newcomer to bid with more aggressive rates at 9%, still below the market rate. Money could be borrowed at 9% and invested in a matched-maturity market asset yielding 10%. The case of ING Direct in 2004 was very different in that the bank was offering more than the short-term market rate.

ING: A success story

Strategy

Marketing Strategy

Besides the highly visible 'top model' campaign conducted in France, what made the ING Direct savings account attractive was the quality of service and the high interest rate paid on savings deposit accounts. As stated above, 7% was offered in November 2004, but a careful reading of the add would show that the offer was valid only until the end of the year, after which the deposit rate would be 3.05%. Still, this return was substantially higher than the 2% short-term euro interbank rate.

→ ***What is the real cost of funding?***

Profitability

In 2003, ING Direct's pre-tax earnings amounted to €151 million. This compares to ING Bank's operating profit-before-tax of €2,371 million. The pre-tax RAROC in 2003 for ING Direct was 12.5%. Pre-tax RAROC exceeded the pre-tax ING hurdle rate of 18.5% in three countries: Canada, the United States, and Australia. Positive profits were also reported in Germany and Spain. Thanks to an efficient control of expenses and economies of scale, its operating expenses-to-assets ratio fell from 0.59% in 2002 to 0.49% in 2003.

→ **Earnings = €151M**

→ **RAROC = 12.5%**

OPEX = 0.49% of assets

ING: A success story

Strategy

ING Direct Financial Strategy

The euro yield curve as of May 2004 is represented in Exhibit 6. Funded essentially with short term savings deposits, callable on demand, the bank invests a very large part of funds in fixed income assets of long maturity, yielding close to 4%. The structure of the asset portfolio is given in Exhibit 7. Assets include mortgage-backed securities, government bonds, corporate bonds, and bonds issued by the parent company ING Groep N.V. The average credit rating of the fixed-income corporate bond portfolio is AA. Although it would be tempting to grab additional returns by investing in riskier corporate bonds, the bank maintains a very strict policy on the quality of its asset portfolio. According to one analyst's report,[5] the average duration of the asset portfolio is three years.

Several observers commented that the strategy was highly dependent on a rising interest rate curve, which allowed it to invest in high yield assets (relative to the cost of deposits), and that the mismatch of maturities, fixed-income assets funded with short- term deposits, was a source of interest rate risk. Management's response was that this risk was fully monitored,

Exhibit 6

€ Interest Yield Curve (12 May, 2004)

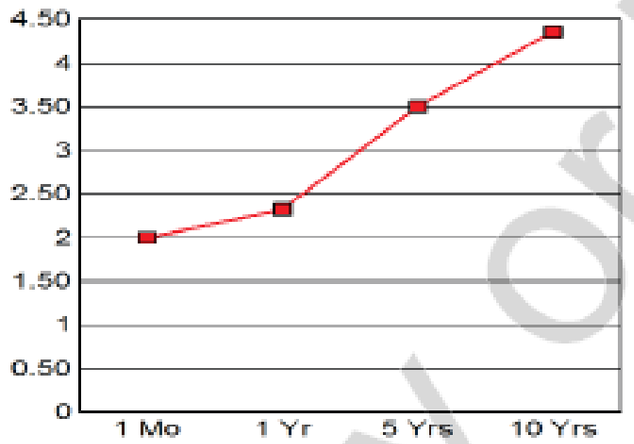
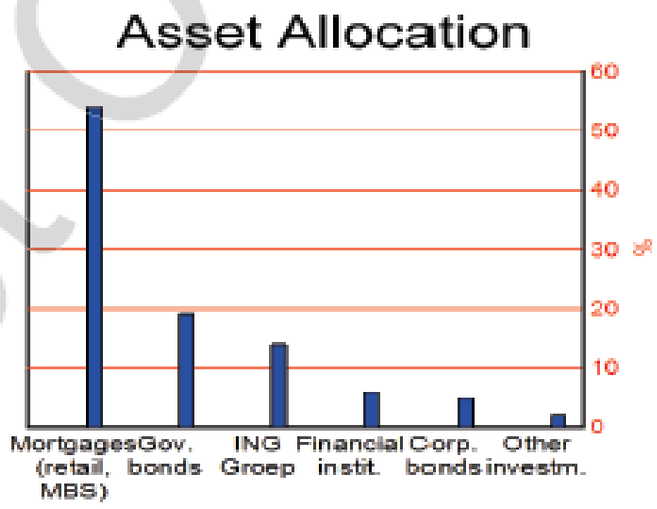


Exhibit 7

ING Direct's Asset Allocation



→ **Average Yield on Assets = 3.5%**

ING: A success story

Data I

Exhibit 1

ING Direct, Number of Clients and Funds Entrusted (2003)

ING Direct, Number of Clients and Funds Entrusted clients in thousands, funds entrusted in billions of euros (at year end)				
Country (Date of opening)	Clients ('000)		Deposits (€ billion)	
	2003	2002	2003	2002
Canada (05-1997)	905	684	7,0	5,1
Germany (06-1998)	3,735	1,894	38,1	20,3
Spain (05-1999)	753	610	7,9	6,0
Australia (08-1999)	719	475	6,9	4,1
France (03-2000)	339	270	7,6	6,3
USA (09-2000)	1,399	864	12,8	8,9
Italy (04-2001)	379	244	7,6	4,5
UK (05-2003)	305	-	11,5	-
Total	8,534		99,4	55,2

Source: ING Annual Report, 2003

What is the average debt stock?

Banking:
Money creation role

'Money creation' role

Banks' funding

Banks' assets

DEPOSITORS

- ***Families***
- ***Companies***
- ***Investors***

Savings

Trust

Financial Intermediation

BANKS

Credit / Funds

Support

COMPANIES & FAMILIES

- ***Investment & Consumption funding requirements***

Short term

Leverage

Long term

Risk

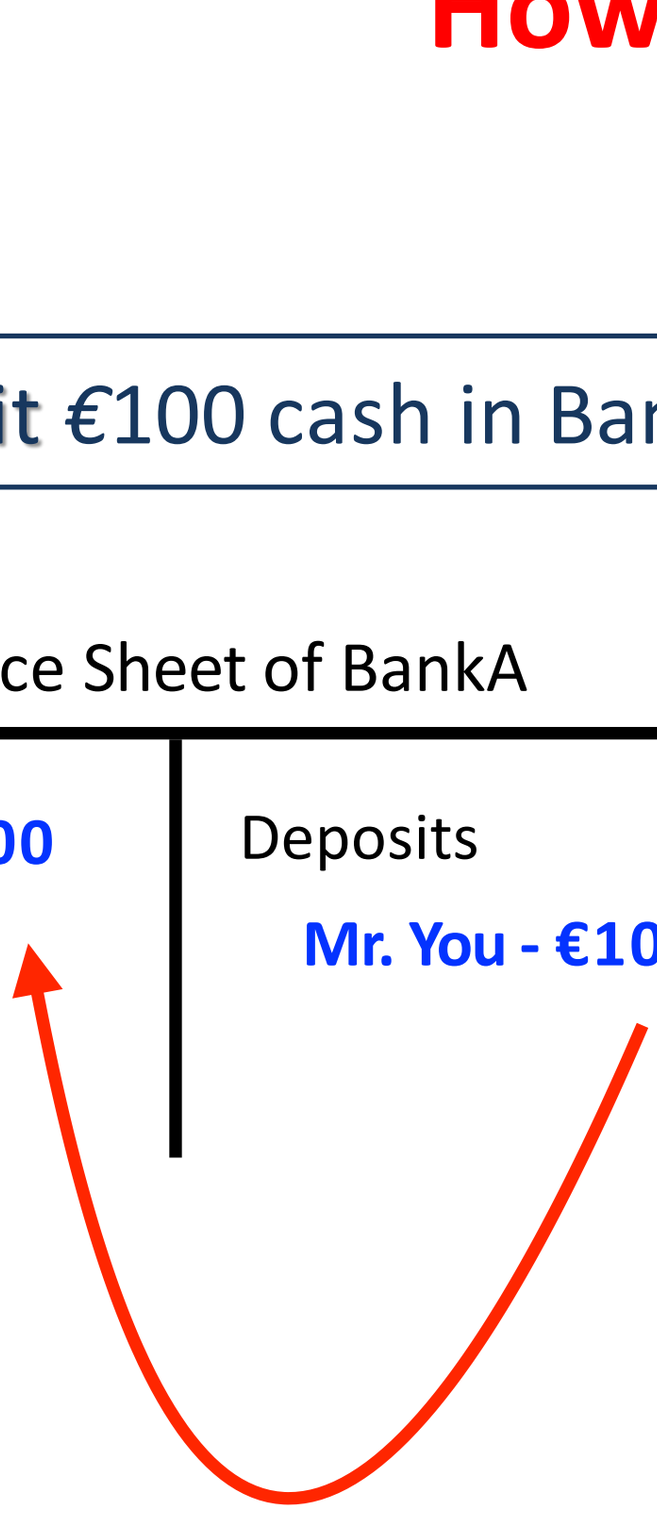
How the system works

Deposits

STEP 1 You deposit €100 cash in BankA.

Balance Sheet of BankA

Reserves - €100	Deposits
	Mr. You - €100



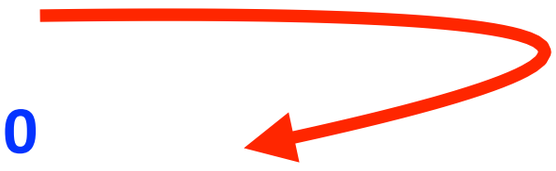
How the system works

Intra-bank transfer

STEP 2 You TRANSFER €20 to your doctor. He gets his money in his BankA account.

Balance Sheet of BankA

Reserves - €100	Deposits
	Mr. You - €80
	Mr. Doctor - €20



How the system works

Loan

STEP 3 You need money to pay your bills and so you ask for a €300 loan, granted from BankA.

Balance Sheet of BankA

Reserves - €100	Deposits
	Mr. You - €380
Loans	
Mr. You - €300	Mr. Doctor - €20

Money (M1) created out of thin air !!!

How the system works

Inter-bank transfer

STEP 4 You transfer €200 to the travel agency. The agency gets the money in its BankB account.

Balance Sheet of BankA

Reserves - €100	Deposits
	Mr. You - €180
Loans	Mr. Doctor - €20
Mr. You - €300	**Interbank Liability - €200**

Balance Sheet of BankB

Interbank Claim over BankA - €200	Deposits
	Mr. Travel - €200

How the system works

Clearing the transfer

STEP 5 BankA is informed first thing in the morning that BankB has a transfer pending on your account. BankA can:

- **OPTION A:** reject the transfer (if you do not have funds or your account is blocked or the signature is wrong…)
- **OPTION B:** accept the cheque for payment - and so BankA has to pay **<u>overnight</u>** €200 to BankB

How the system works

Money market at work

STEP 6 Options available to BankA to cover the cheque:

- ✓ **OPTION A:** BankA can transfer reserves to BankB
  - *This is usually done by transferring balances among deposit accounts of the banks at the Central Bank.*

- ✓ **OPTION B:** If no Central Bank reserves are available, BankA can ask for a Money Market loan (O/N, T/N and week as usual maturities)

- ✓ **OPTION Z** ☺: BankA expects to have some positive interbank balances in the following night. If negative balances keep mounting, BankA must consider other options:
  - ✓ *issue long maturity securities (equity or bonds)*
  - ✓ *sell some assets to generate cash (or repo them)*
  - ✓ *try to get more client deposits (marketing, higher interests)*

How the system works

The discount window*

STEP ∞

When all other options fail (or are not ready overnight), BankA can ask for a "discount" from the Central Bank.

The old rule of Central Banking (*Bagehot's Dictum*):

Central Banks should discount <u>whatever amount</u>, at a <u>high price</u> against <u>good collateral</u>.

- ✓ *For Central Banks, money is unlimited… (really?!)*
- ✓ *The high price is an incentive to find a solution in the market*
- ✓ *The good collateral is there to avoid supporting insolvent banks.*

** aka Lender of Last Resort = Central Bank*

How the system works

The global view

DEPOSITARY role ('keeper')

Deposit

Intra-bank transfer

Inter-bank transfer

PAYMENTS function

LENDING function *(Money creation)*

Loan

Clearing the cheque

CLEARING function

Money market

Counterparty role

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REMINDER

Banking

Caught in an admirable web?

Source: The Future of Financial Services, World Economic Forum, June 2015.

Banks and Money

It all depends on the viewpoint

DEPOSIT

- **AN ASSET** from the viewpoint of the HOLDER
- **A LIABILITY** from the viewpoint of the BANK

LOAN

- **AN ASSET** from the viewpoint of the BANK
- **A LIABILITY** from the viewpoint of the debtor

INSIDE MONEY

By granting a loan, a bank simultaneously increases the asset side (the loan) and the liability side (as the value of the loan is credited on the debtor's deposit account).

CURRENCY

- **AN ASSET** from the viewpoint of the holder
- **A LIABILITY** from the viewpoint of the CENTRAL BANK

GOLD

- **AN ASSET** from the viewpoint of the holder
- **AN ASSET** from the viewpoint of the CENTRAL BANK

OUTSIDE MONEY

Market players cannot increase supply on their own

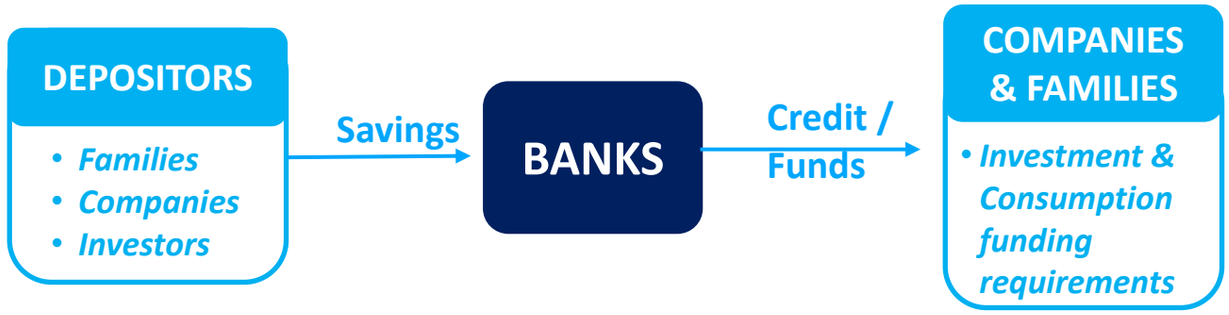
Banking: another definition

Creation of ‘inside money’ out of credit

‘Inside Money' is trustable only if it has similar features to those of ‘outside money':

- being “risk-free” (or perceived as such)
- available in the same denominations
- showing a similar liquidity profile

Why banks are different



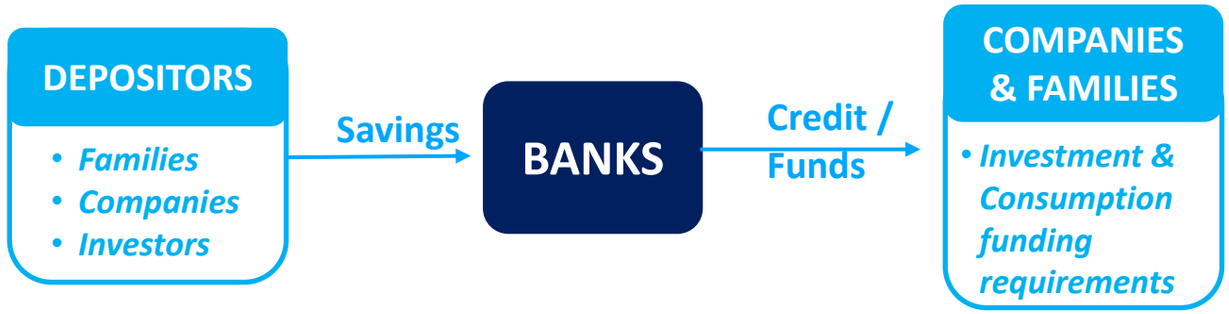
ASSET TRANSFORMATION

- Savers may not want exactly the maturity needed by investors
- However, they can sell their securities in the market whenever they need liquidity
- What banks do better than the market to deserve being paid for?

Banks remove price risk

…however, savers trade investor risk by bank risk…

Why banks are different



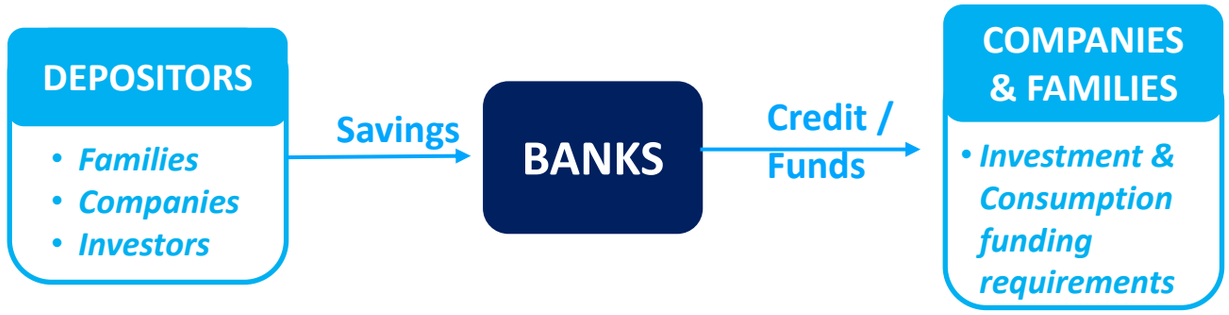
DELEGATED MONITORS

- There are information asymmetries: savers do not have perfect information about borrowers
- Banks learn a lot dealing with borrowers
- This information is less costly for small scale deals than rating agencies, external auditors and the like
- So, in certain circumstances, banks have superior market power

Banks have cost advantages

…however, monoliner players can actually excell universal banks in this regard…

Why banks are different



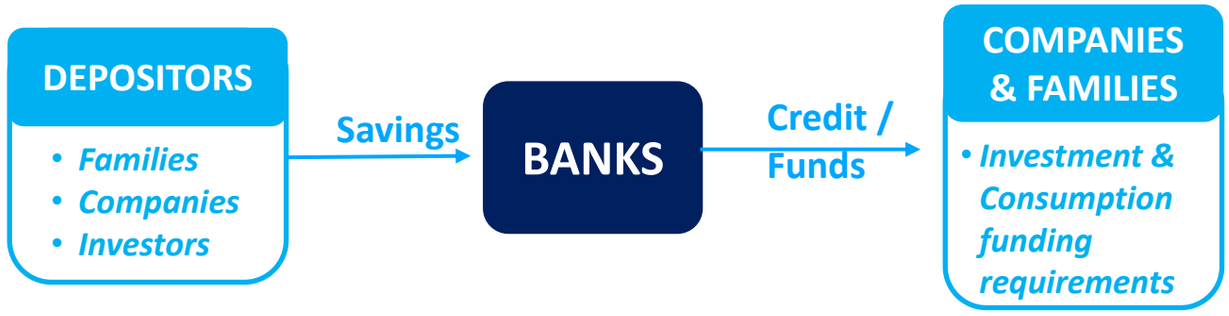
RISK MANAGEMENT

- Banks can manage with “large numbers’ theory
- Banks are well positioned for a broader diversification, using also lower correlation among risk categories
- By aggregating a lot of risks, banks can save on risk management

Banks have natural hedges

…a clear advantage for universal banks versus other dedicated players…

Why banks are different



PAYMENT SYSTEMS

- Banks have scale economies safekeeping valuables
- Banks have a convenient denomination of claims (a cent of the Euro)
- Banks excel at doing payments when species are inconvenient (large amounts, distance,…)
- Due to differences in liquidity among currencies (USD may be very liquid in the US but not so much here), banks have a business opportunity changing moneys

Banks have economies of scale

…however, technology has allowed non-bank players to grab increasing share of the business…

What is Money?

Money is what you can use to buy things.
If you can trade with it, then it is money.

However, not all money is alike…

If it is a promise => then it is credit => If you can pay with it => then it is money

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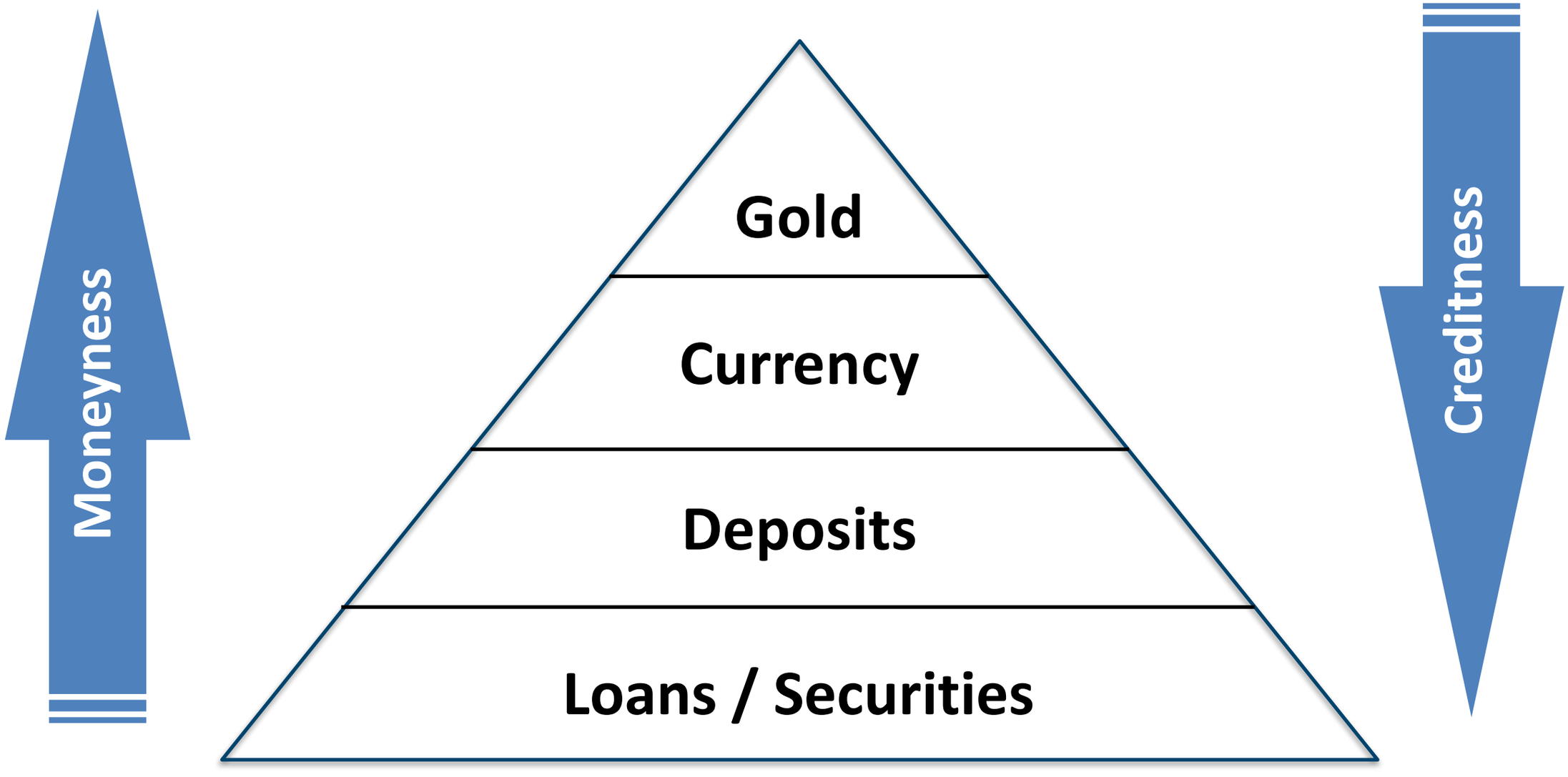
Hierarchy of money

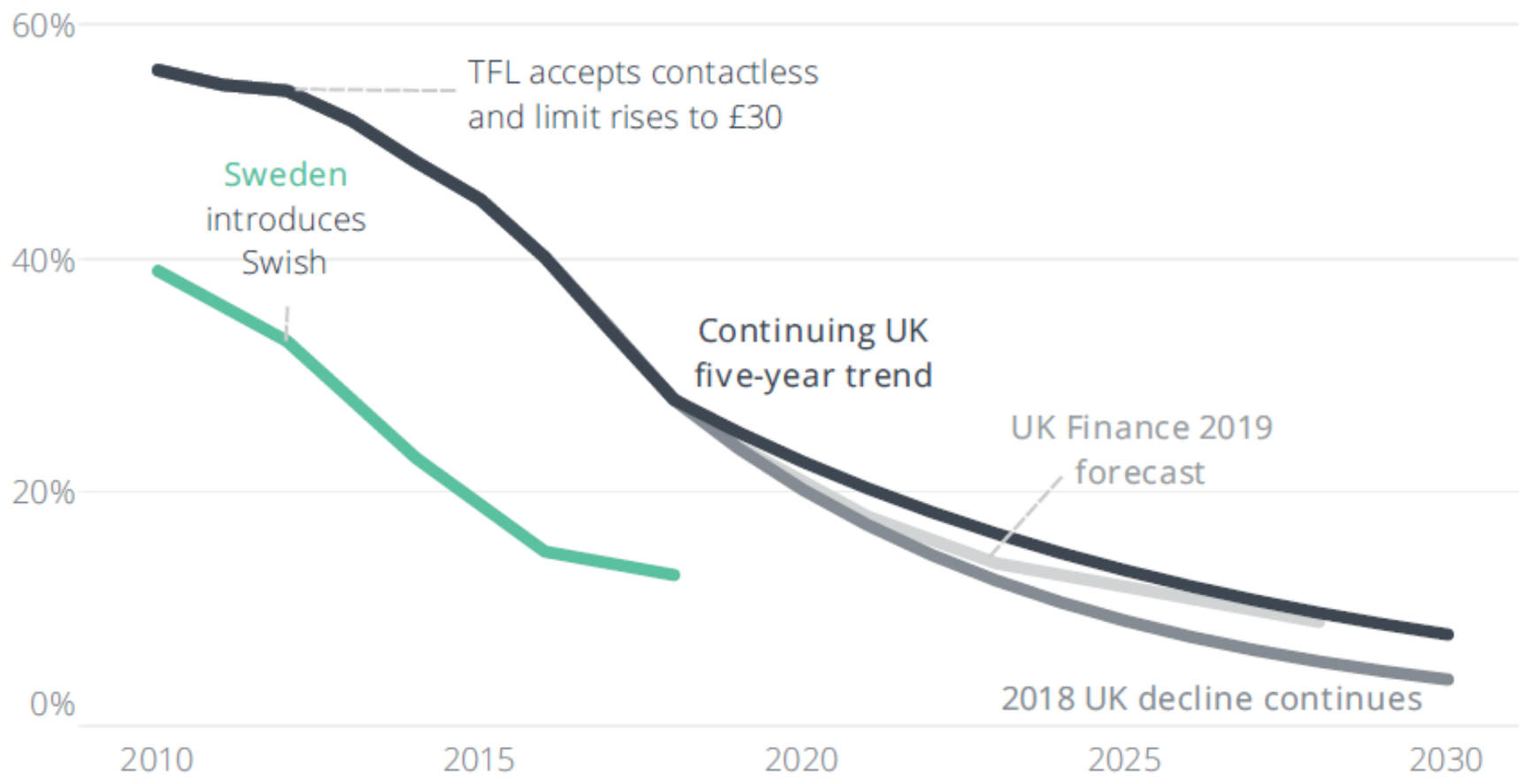


The roles of Money

- Unit of Account
- Store of Value
- Mean of Exchange

Where is Money heading?

Figure 7: The use of cash could follow different paths
Proportion of total payments made in cash



Source: Sveriges Riksbank, UK Finance June 2019, Bank of England calculations.

Note: UK actuals include consumer and business payments. The Bank's direct involvement in cash distribution is limited to issuing new banknotes, withdrawing banknotes following the launch of a new series and destroying banknotes that are no longer fit for circulation. Notes are distributed by members of the Note Circulation Scheme (NCS) who have a contractual relationship with the Bank.

Source: Future of Finance, 2019, Royal Bank of England.

Where is Money heading?

The Libra attempt

Digital currencies + Add to myFT

Facebook's Libra currency to launch next year in limited format

Long-awaited project to arrive as soon as January, with just one dollar-backed coin

Source: FT, 27 Nov 2020

Opinion **Digital currencies**

Facebook's Libra is a threat to national sovereignty

The company has shown economic and political ambitions with its plan for a digital currency

BRUNO LE MAIRE

© AFP/Getty, FT montage

Facebook gives up on crypto ambitions with Diem asset sale

Digital payments project winds down, marking retreat from dream of revolutionising finance

Where is Money heading?

Digital currency

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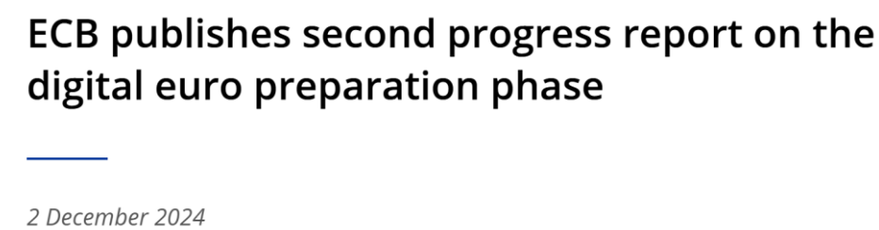
Oct 2019

Oct 2020 **Report on a digital euro**

Report on a digital euro (europa.eu)



https://www.ft.com/content/d6dd2e3a-41e7-11ea-a047-eae9bd51ceba

ECB confident it can overcome challenges to create a digital euro | Financial Times (ft.com)

https://www.ecb.europa.eu/paym/digital_euro/timeline/html/index.en.html

https://www.ecb.europa.eu/euro/digital_euro/progress/html/ecb.deprp202412.en.html

Where is Money heading?

Digital currency

Digital currencies + Add to myFT

Fed opens debate over possible digital currency

US central bank seeks to maintain supremacy of dollar amid rush of global financial innovation

22 January 2022

Opinion **Free Lunch**

The main objection to digital currencies is misguided

Bank disintermediation could be a feature, not a bug

MARTIN SANDBU + Add to myFT

27 January 2022

House of Lords warns Bank of England on risks of state-backed digital currency

Peers' report flags 'far-reaching consequences' of central bank competing with commercial lenders

13 January 2022

FT Alphaville **European banks** Added

How many banks might ECBitcoin break?

And if a European CBDC doesn't break a few, what's the point?

© Frinkiac

10 Jan 2024

Source: Financial Times

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Where is Money heading?

Digital currency

The Federal Reserve is exploring the implications of, and options for, issuing a CBDC. For the purpose of this paper, a CBDC is defined as a digital liability of the Federal Reserve that is widely available to the general public. While Americans have long held money predominantly in digital form—for example in bank accounts recorded as computer entries on commercial bank ledgers—a CBDC would differ from existing digital money available to the general public because a CBDC would be a liability of the Federal Reserve, not of a commercial bank.[1]

A CBDC could potentially offer a range of benefits. For example, it could provide households and businesses a convenient, electronic form of central bank money, with the safety and liquidity that would entail; give entrepreneurs a platform on which to create new financial products and services; support faster and cheaper payments (including cross-border payments); and expand consumer access to the financial system. A CBDC could also pose certain risks and would raise a variety of important policy questions, including how it might affect financial-sector market structure, the cost and availability of credit, the safety and stability of the financial system, and the efficacy of monetary policy.

Source: Federal Reserve, Money and Payments, January 2022

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Where is Money heading?

What about banks?

A digital euro could also support the general economic policies of the European Union (EU). It could satisfy the emerging payment needs of a modern economy by offering, alongside cash, a safe digital asset with advanced functionalities. The public sector may prove to be best placed to provide the safety, scale, level of convenience and accessibility needed to allow citizens, businesses and financial institutions to participate in the digital payment market.

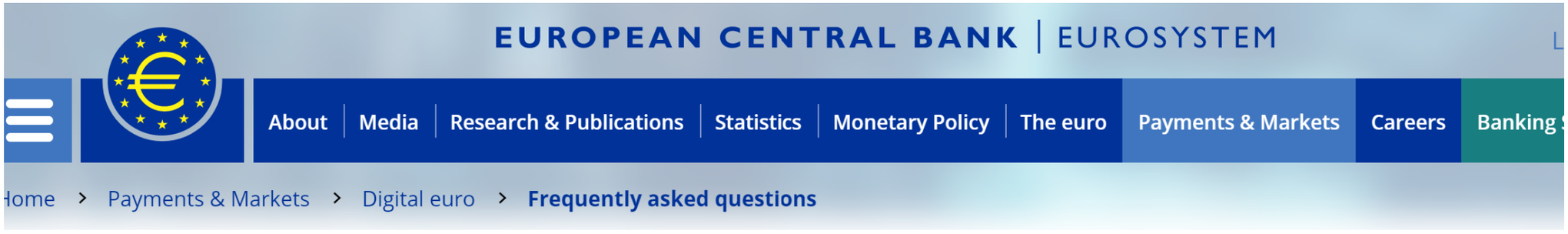
While the Eurosystem would always retain control over the issuance of a digital euro, supervised private intermediaries would be best placed to provide ancillary, user-facing services and to build new business models on its core back-end functionality. A model whereby access to the digital euro is intermediated by the private sector is therefore preferable.

Source: ECB, Report on a digital Euro, October 2020

https://www.ecb.europa.eu/paym/digital_euro/faqs/html/ecb.faq_digital_euro.en.html

Where is Money heading?

What about banks?



FAQs on the digital euro

Q1. Would a digital euro replace cash?

Banking: another definition?

Part of the Someone is wrong on the internet series

Are banks really magic money trees?

128

NOVEMBER 20 2019 By: **Thomas Hale**

Read more articles in **SOMEONE IS WRONG ON THE INTERNET SERIES**

Source: Financial Times, 19 November 2019

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