1BP333 – MODERN TRENDS IN BANKING AND FINANCIAL SECTOR

Source: https://www.livewireindia.com/blog/data-science-training-trivandrum/

Petr Teplý

Consumer lending and recent trends

Katedra bankovnictví a pojišťovnictví
Fakulta financí a účetnictví
VŠE v Praze

EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání

MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

červen 2019 (65 nových slidů)/LČ

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Agenda

1.	Consumer lending in theory
2.	Consumer lending in practice
3.	Future trends in finance and banking
4.	Challenges faced by EU and Czech banks

1. Consumer lending in theory

History of money and banking

Date	Event	Place	Illustration
3000 BC	Barley money (Mesopotamia)		
640 BC	First coins (Lydia)		
10th century	First coins in the CR (Denar)		
1024	First banknotes (Wu Jiao)		
1118-1307	Templars (Bills of exchange)		
14th century	Early Banking (Medici)		
16th century	Schlick thaler (later named "dollar")		
1892	Koruna (crown) (Austro-Hungarian)		
1918	Koruna (Czechoslovak)		
1993	Koruna (Czech)		
2007+	Planet Ponzi (debt as source of economic growth)		
2010+	Cloud banking (virtual money)		

Source: Teplý, P. (2015). When will Google become the biggest global bank?, internal study

1. Consumer lending in theory

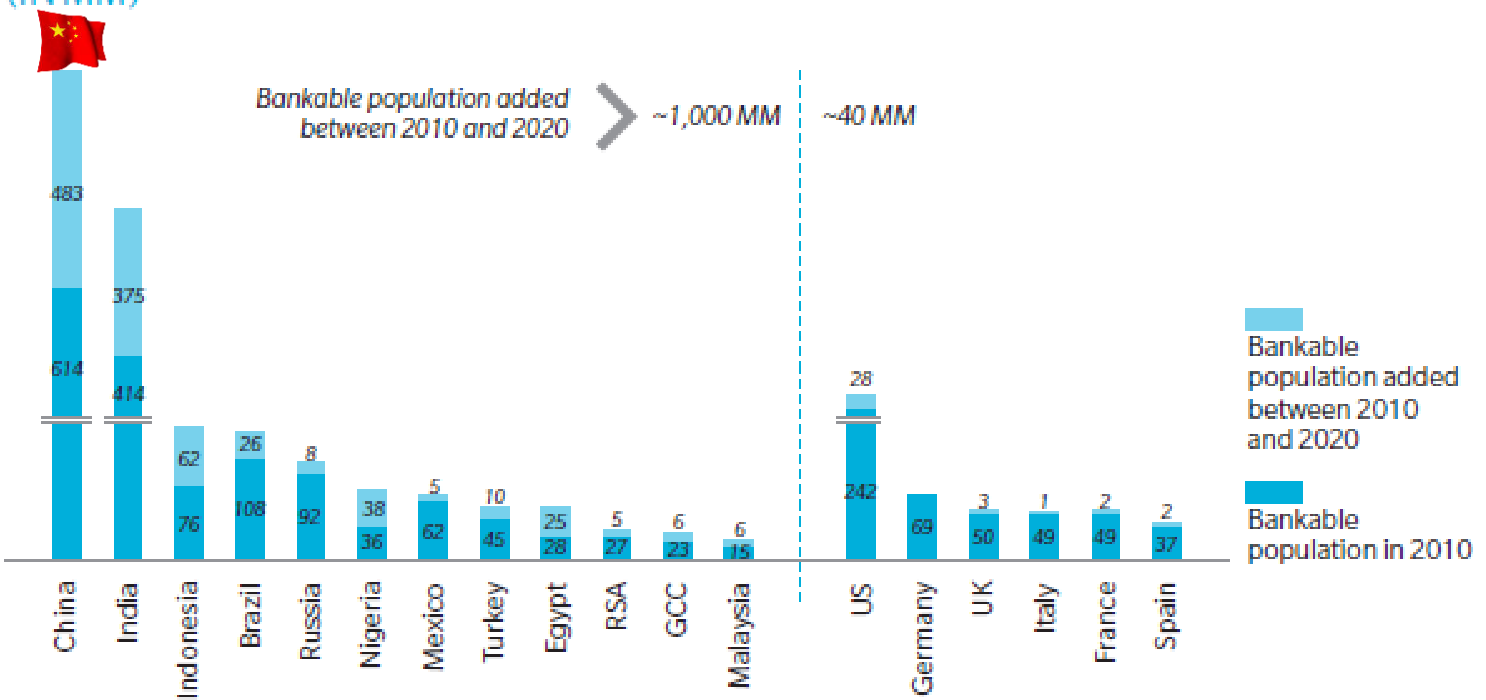
Key terms of consumer lending

1) Financial inclusion
2) Financial literacy (primary vs secondary)
3) A financially literate person
4) Key factors of financial literacy
5) Macroeconomic impact of a low level of financial literacy
6) Responsible lending & responsible borrowing
7) Over-indebtedness of the population
8) Life-cycle theory

1) Financial inclusion

- Financial inclusion = **keeping people in the formal financial sector** (i.e. clients are protected in regulated but not over-regulated sector)

EXHIBIT 10: BANKABLE POPULATION LEVELS ACROSS MARKETS AT 2010 AND 2020 (IN MM)



Source: EIU, Oxford Economics, IMF

Financial inclusion

- Some non-bank financial comanies (NBFCs) broaden financial inclusion for **the unbanked population** by providing a positive and safe borrowing experience – the first for many of our customers (by using non-bank services they start building up their credit history).
- Traditional lenders such as banks often do not adequately cater to the needs of those on lower incomes or first-time borrowers
- **The need for a developed credit history and collateralisation are common barriers for individuals who would benefit from using formal financial services.**

1. Consumer lending in theory

Financial inclusion in emerging markets

- In emerging markets in particular, these requirements leave many potential customers unable to take out loans, and in some cases drive them towards unregulated lenders.
- **This exclusion can have a detrimental effect on their financial and personal well-being, and hinders economic and social development**.
- In contrast, some NBFCs include these communities from the outset. They strive to introduce financial inclusion through **responsible lending**, hassle-free processes and affordable loans.

1. Consumer lending in theory
Financial inclusion - a case study

1) Educating people about the credit market and promoting resonsible lending and borrowing practices
2) Teaching communities the basic principles of money management and household budgeting
3) Spreading financial education for children and students, raising them to become responsible clients

- Obviously, different approaches are applied in different countries (i.e. they are more targeted at specific groups)

2) Primary vs secondary financial literacy

- **financial literacy** = the capability of consumers and small business owners to understand retail financial products with a view to making informed financial decisions
- **primary financial literacy** = the client is/is not financially literate enough to use the products and services provided by established standard institutions and not by lenders "in the street", such as loan sharks and usurers
- **secondary financial literacy** = the client is/is not financially literate enough to be able to compare the competitive offers of standard institutions and to use the services that are better or cheaper

Financial literacy/responsible borrowing & lending

- Financial literacy is one of the basic conditions of **responsible borrowing** (from a debtor).
- Where predatory lenders, who do not care about responsible lending, have taken hold on the consumer credit supply side, the best method of predatory lending prevention is – in addition to regulation – responsible behaviour of borrowers.
- **There can be no predatory lending without demand for predatory loans**. To ensure that borrowers act responsibly even if they are in financial difficulty, they must have the knowledge of the financial products and of the consequences of taking a loan
- **Responsible lending** (from a creditor´s view) = **a fair game** on both sides of a contract (a creditor & a debtor)

3) A financially literate person

- The Czech Ministry of Finance defines a **financially literate person** as:

1) Knowing at least approximately how much own money he or she currently has;
2) Preparing a budget and monitoring budgeted expenses;
3) Planning his or her expenses for at least a month in advance;
4) Being prepared for the possibility of losing the main source of income

Source: Ministry of Finance of the Czech Republic (2007). Framework policy of the ministry of finance on consumer protection in the financial market

Ministry Finance´s view on consumer protection

- From the MF's perspective, the general objective of consumer protection in the financial market is to attain the state where the consumer makes responsible and appropriate decisions in the financial market with regard to his current situation
- In other words, the consumer have sufficient information for his decisions (i.e. low information asymmetry exists)
- It means that he obtains services or acquires products that best suit his current needs and possibilities and has the possibility to promote and protect his rights and interests effectively.

Source: Ministry of Finance of the Czech Republic (2007). Framework policy of the ministry of finance on consumer protection in the financial market

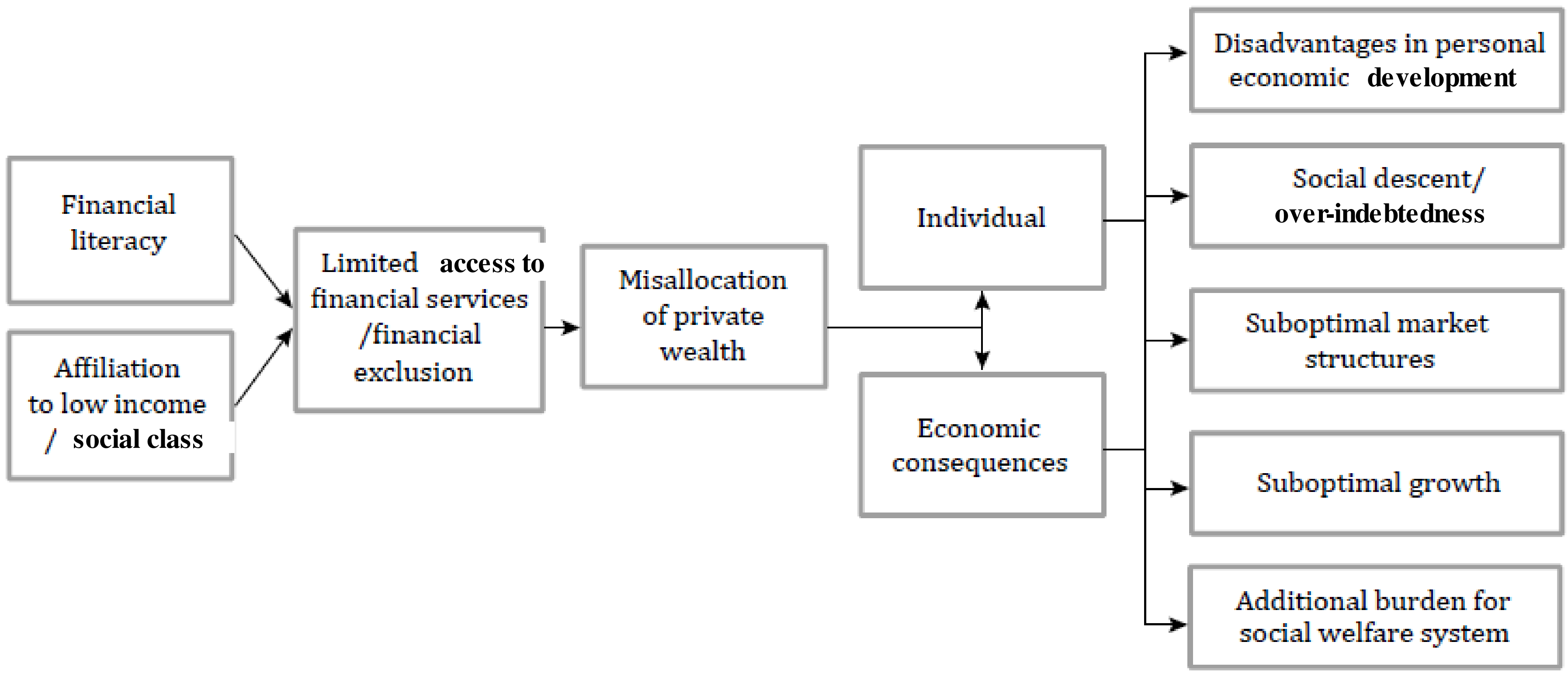
1. Consumer lending in theory

4) Key factors of financial literacy

Complexity of the individual's needs	Complexity of financial products
• Increasing non-stability of working life	• New distribution channels
• Decreasing social security	• Deregulation of financial markets
• Higher personal responsibility	• Wider range of financial products
• Higher prosperity	• Growing dynamics of development of innovative products
• Deeper indebtedness	• Increasing volumes of information
• A longer life expectancy	
• Increasing number of business owners	

Source: Teplý, P. (2015). Consumer lending in theory and practice. Prague: Karolinum Press

5) Macroeconomic impact of a low level of financial literacy

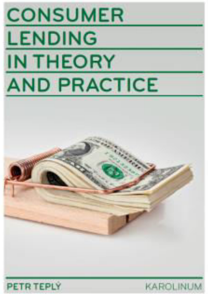


Source: Teplý, P. (2015). Consumer lending in theory and practice. Prague: Karolinum Press

1. Consumer lending in theory

6) Responsible borrowing and lending

- **Responsible lending** has received attention from world institutions and organizations as documented by works of Financial Stability Board (2011), OECD (2011) or more recently by World Bank (2013; 2014), Hubbard-Solli (2013), Prouza (2013) or Teplý (2015).
- Responsible borrowing and lending should be considered in a broader context of the **over-indebtedness of the population** (Porter, 2012) and **of financial inclusion** (World Bank, 2013).
- Responsible lending = a fair game on both sides of a contract (a creditor & a debtor)



Source: https://knihy.abz.cz/prodej/consumer-lending-in-theory-and-practice-1

7) Over-indebtedness of the population

- To address over-indebtedness effectively, we split the issue into two parts: 1) **prevention** (ex-ante approach) and 2) **alleviation of the consequences of over-indebtedness** (ex-post approach)

Table 1: Six factors of over-indebtedness

Over-indebtedness factors
Prevention of over-indebtedness
• Responsible lending • Responsible borrowing and cash management • Responsible loan repayment management
Alleviation of the consequences of over-indebtedness
• Debt counselling • Court solutions • Out-of court solutions

Source: Teplý, P. (2015). Consumer lending in theory and practice. Prague: Karolinum Press

Three main drivers of households' over-indebtedness

- Three main drivers of households' over-indebtedness:

1) financial imprudence

(poor financial decisions-making resulted either from poor planning of future expenses and income),

2) the occurrence of unexpected events

(this can happen on the individual-specific level (either through lower income resulting from a job loss or through higher expenses resulting from expensive medical care or through family issues such as divorce) or on the debt contract-specific level (a sudden rise in interest rates or lower value of collateral).

3) poverty

1. Consumer lending in theory

Poverty as the third driver

- **Poverty might cause heavy over-indebtedness** when people with low creditworthiness take loans to cover their expenses and do not earn enough to repay their debts.
- Even worse, some people take out a new loan, not only to repay current loans, but also to cover expenses on execution, which implies a vicious circle.
- This vicious circle of indebtedness can be compared with **Uroboros**, a mythic snake eating its own tail, showing that short-term distorted thinking (e.g. taking a new loan on current loan repayment) can result in long-term catastrophic consequences (e.g. reposse or personal bankruptcy as discussed later).

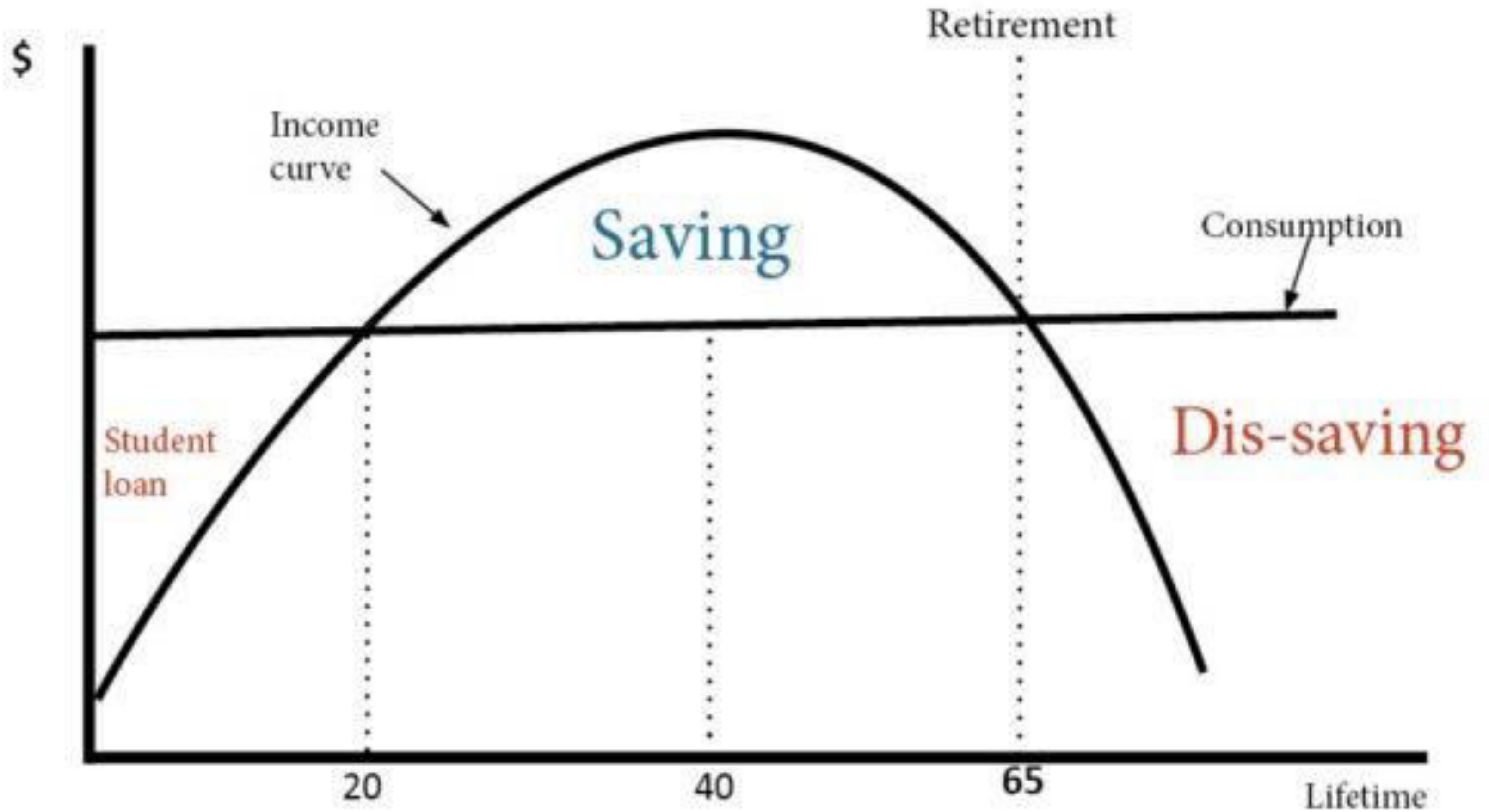
Source: https://www.kissclipart.com/dragon-eating-its-tail-clipart-snakes-ouroboros-se-owguvy/

8) Life-cycle theory: basics

- Life-cycle hypothesis (Franco Modigliani in 1957): individuals seek to smooth consumption over the course of a lifetime.
- Life-cycle is easier for people on high incomes, rather than on low incomes, however.
- People on low-incomes, with high credit card debts, may feel there is no disposable income to save (see also the discussion on over-indebtedness of the population)
- Three phases:
  1. student life (a loan to fund education)
  2. working life (repaying the student´s loan and saving for retirement)
  3. retirement (dis-saving)

Source: http://www.economicshelp.org

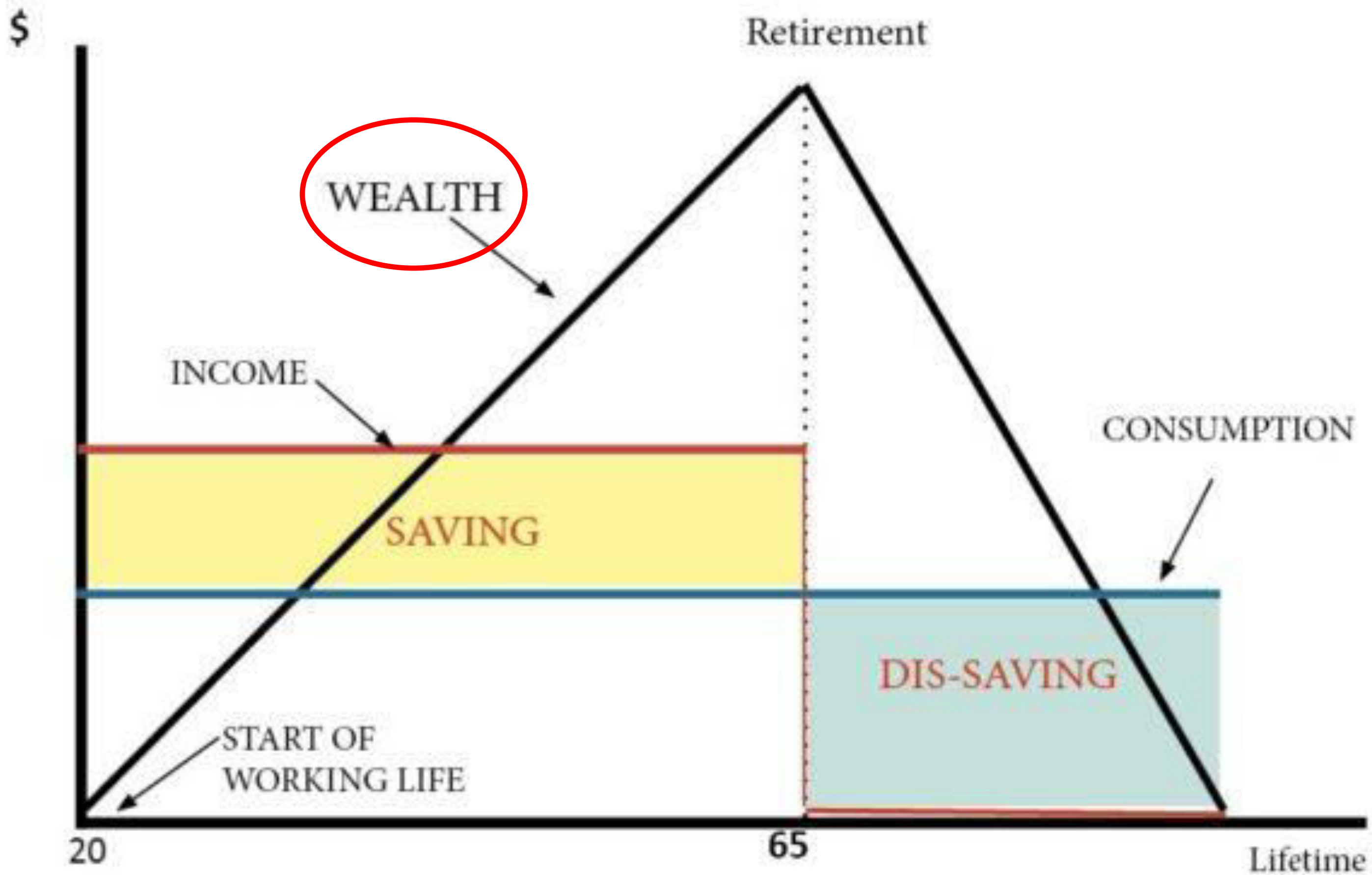
Life-cycle theory on a picture: (dis)saving



Source: http://www.economicshelp.org

Life-cycle theory on a picture: wealth

- Wealth will build up in working age, but then fall in retirement.



Source: http://www.economicshelp.org

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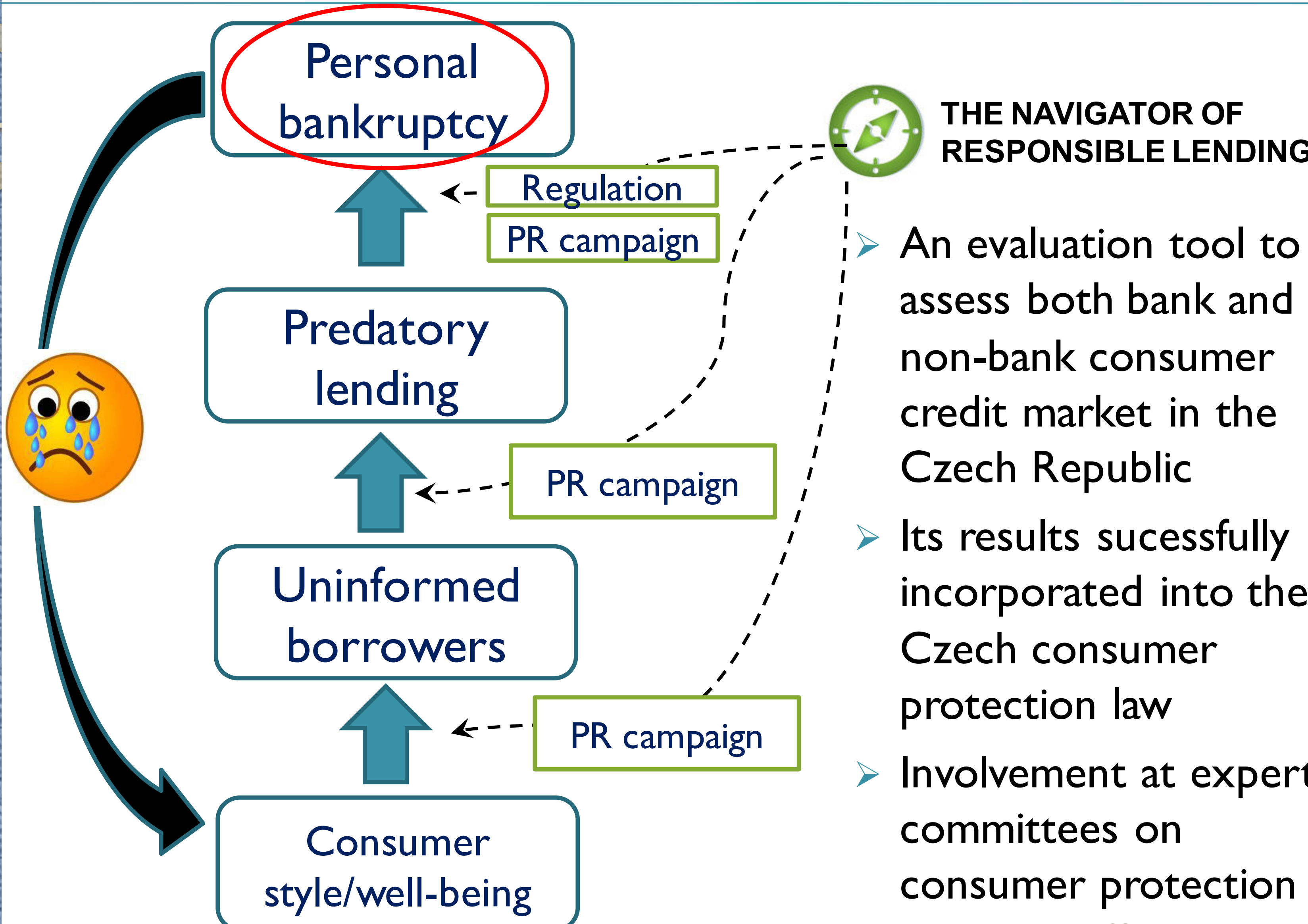
3. Consumer lending in practice

What is The Navigator of Responsible Lending?



Source: Author

- An evaluation tool to assess both bank and non-bank consumer credit market in the Czech Republic
- Its results sucessfully incorporated into the Czech consumer protection law
- Involvement at expert committees on consumer protection

3. Consumer lending in practice
PR campaign: personal bankruptcy vs. Uroboros

- A vicious circle of indebtedness can be compared with Uroboros, a mythic snake eating its own tail, showing that short-term distorted thinking (e.g. taking a new loan on current loan repayment) can result in long-term catastrophic consequences (e.g. personal bankruptcy or repossession).
- Similarity of Uroboros with Chinese Yin-Yang
- Message for Czech debtors with PR campaign:

Source: http://pluspng.com/circle-objects-png-4436.html

DONT´S BEHAVE AS UROBOROS!

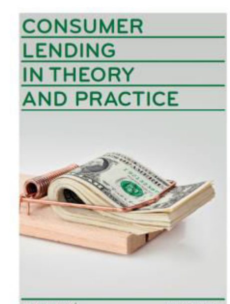
Source: https://www.kissclipart.com/dragon-eating-its-tail-clipart-snakes-ouroboros-se-owguvy/

Source: Teplý, P. (2015). Consumer lending in theory and practice. Prague: Karolinum Press

3. Consumer lending in practice
Definition of responsible lending

- Our definition of responsible lending from the point of view of the loan applicant:

1) **Know the quality of the lender** (the supply side of the credit);
2) **Understand the parameters of the loan** (product design);
3) **Understand the consequences of proper repayment and of default** (the demand side of the credit).



Source: https://knihy.abz.cz/prodej/consumer-lending-in-theory-and-practice-1

3. Consumer lending in practice

Calculation of The Navigator

- The NRL value (<0,10>) is calculated as the weighted average of 14 criteria in 3 groups:
- **1) The potential lender**

  (supply side) - 40% weight

  2) The ex-ante credit parameters

  (product design) - 30% weight

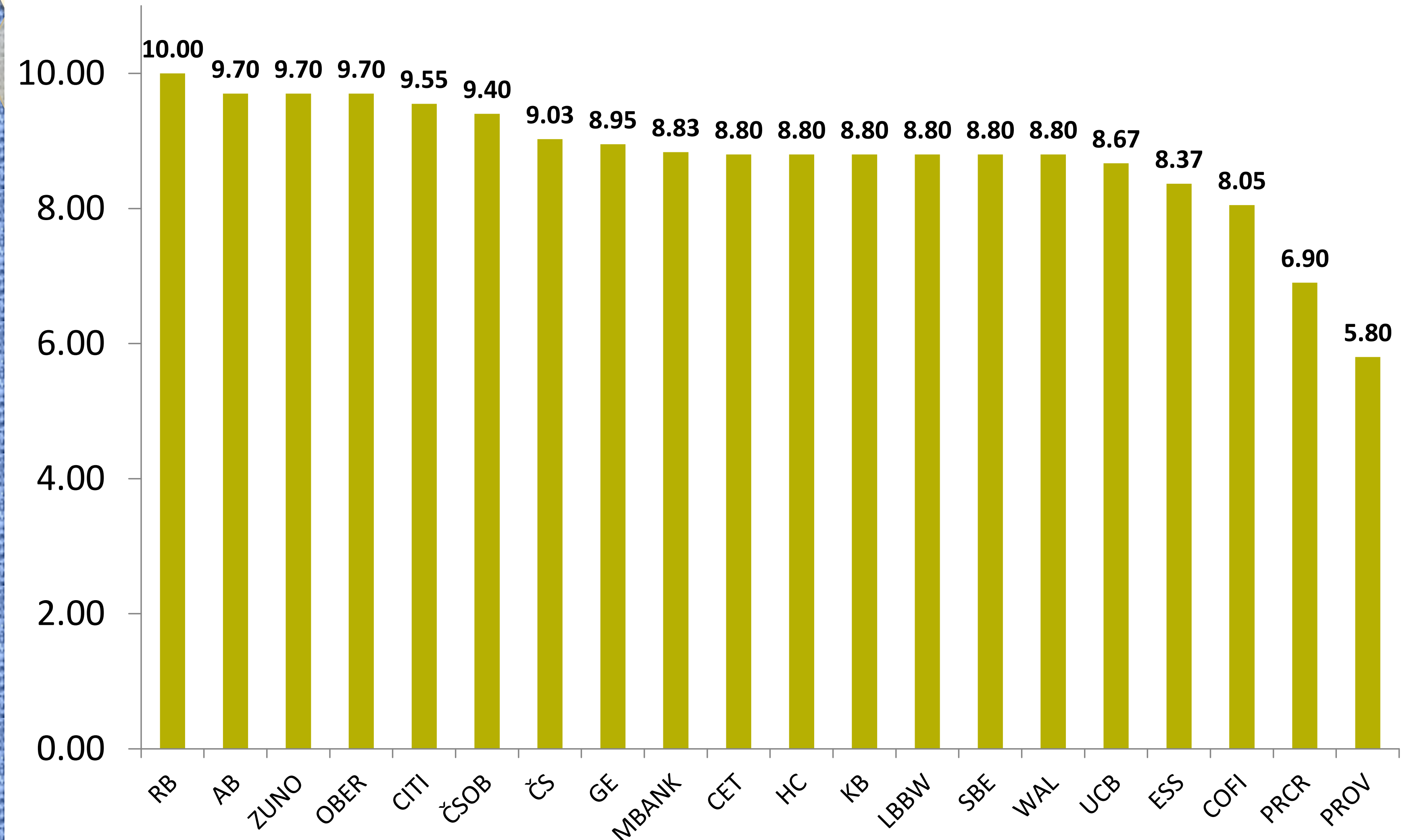
  3) The ex-post credit parameters

  (consequences of default) - 30% weight

- NRL <5.0,10.0> Responsible lender
- NRL <0.0,4.9> Loan shark

4. Consumer finance – a case study

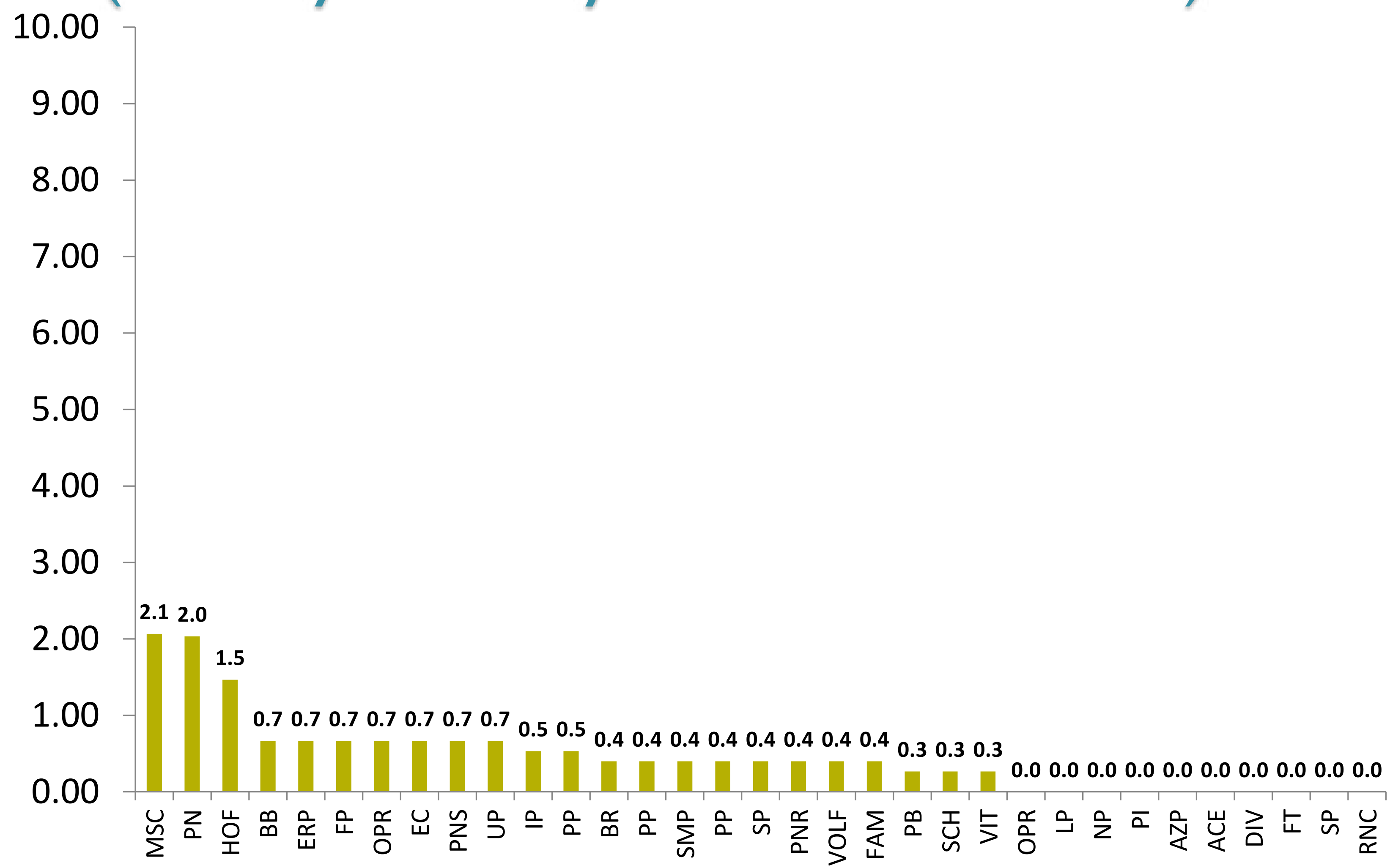
HC´s score was similar to traditional banks



Source: Teplý, P. (2015). Consumer lending in theory and practice. Prague: Karolinum Press
Note: Data for the year of 2013.

3. Consumer lending in practice

Loan sharks posted low scores (i.e. they are risky lenders for a client)

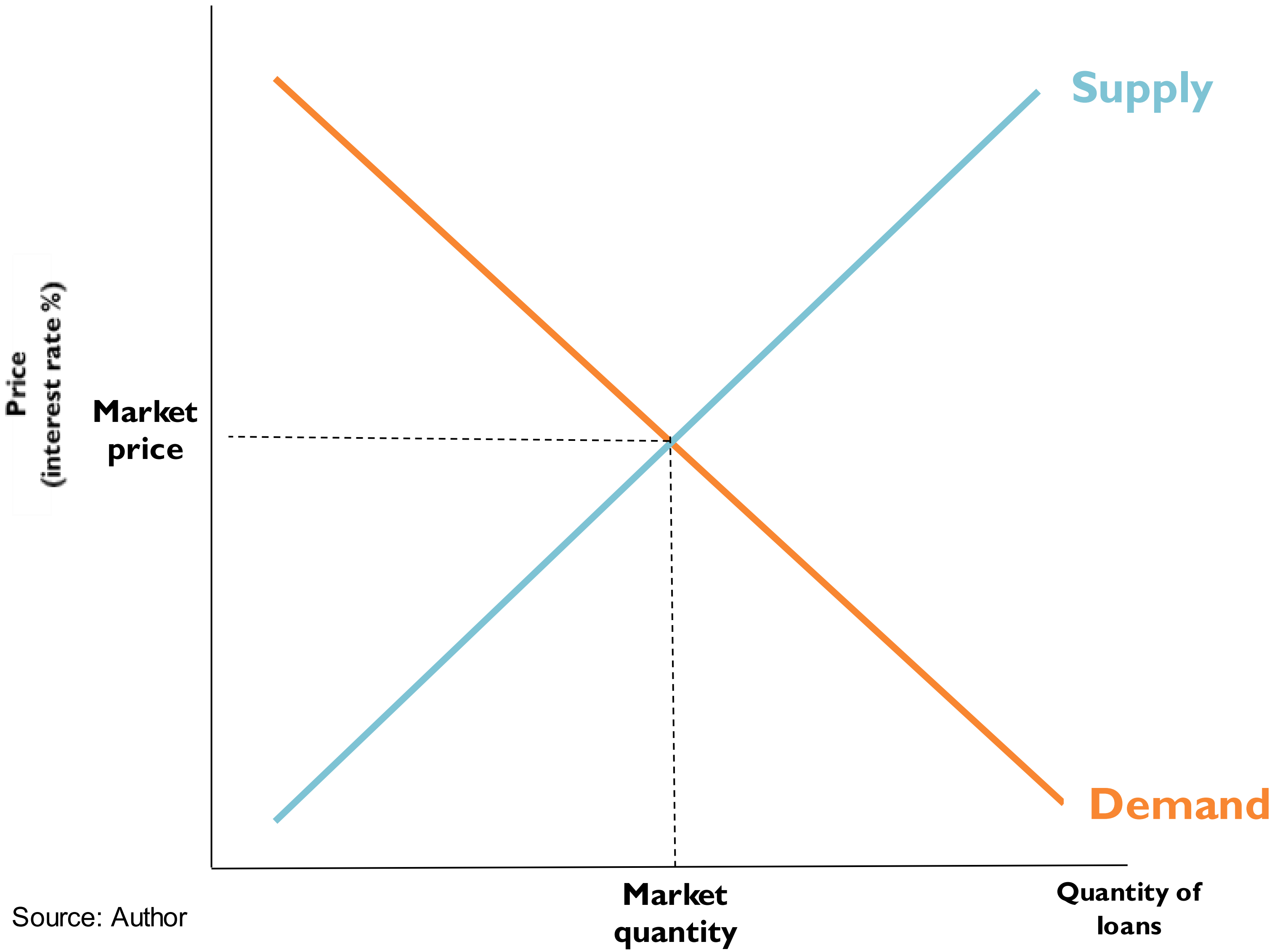


Source: Teplý, P. (2015). Consumer lending in theory and practice. Prague: Karolinum Press
Note: Data for the year of 2013.

Interest rate (IR) cap basics

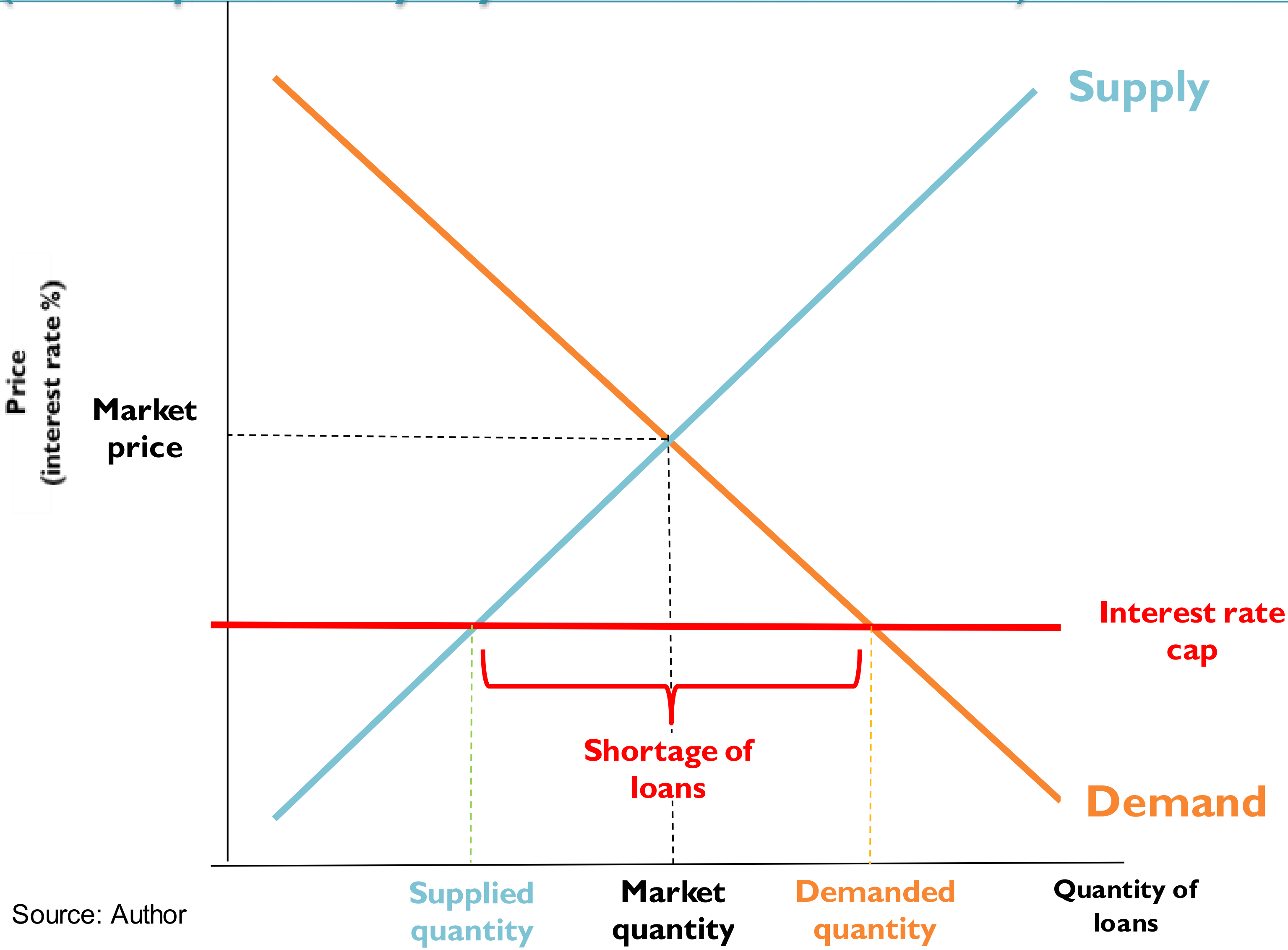
- How much interest should a borrower be made to pay?
- Hammurabi, ruler of Babylon in around 1800 BC: maximum rates of 33.3% for loans of grain and 20% for those of silver.
- In medieval times this would have been forbidden as **usury** (the charging of excessive rates of interest).
- The definition of "excessive" varied, although it is safe to say that payday loans would have qualified.
- Many studies show that <u>the use of interest rate caps since they are an inefficient tool for lowering interest rates</u>, especially in the long run (World Bank, 2014).
- IR cap = risk of over(regulation)

Interest rate cap (price floor) in theory



Source: Author

IR cap implies a shortage of loans in a market (filled probably by the black market)



Source: Author

IR cap – arguments FOR

1) To support a specific industry or sector of the economy where a market failure exists or where a greater concentration of financial resources is needed.
2) To protect consumers from usury and exploitation by guaranteeing access to credit at reasonable interest rates and to facilitate prosecution of exploitative and deceptive lenders. They can also help protect the public interest by ensuring a fair and reasonable interest rate on loans (IR caps may also be a good way to limit access to credit to some impaired and low-income consumers, because they help avoid social harm).
3) Because prices charged for credit can be arbitrary and anticompetitive and thus be higher than the true cost of lending, setting a lower cap on interest would still allow lenders to operate.

IR cap – arguments AGAINST (1/2)

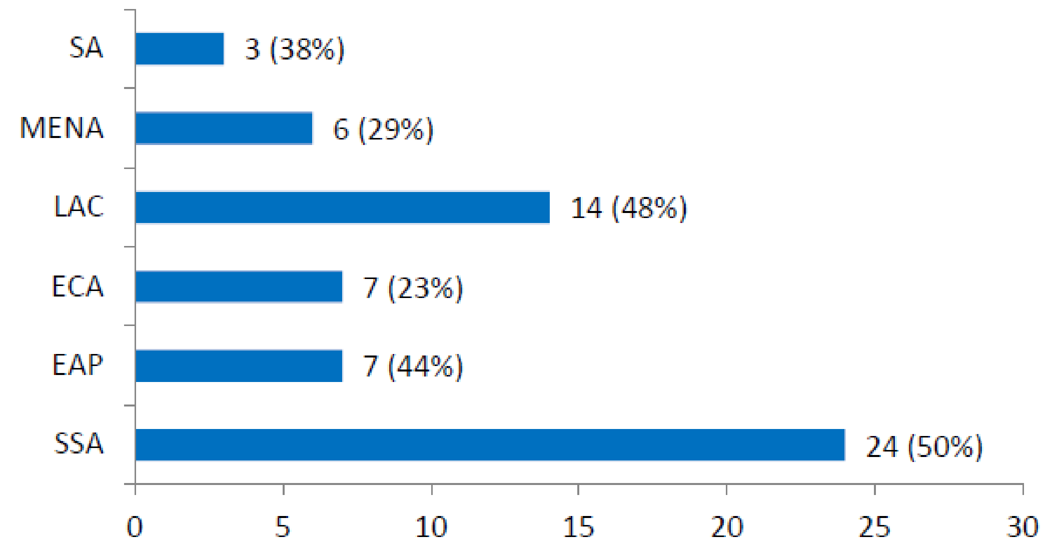
1) The use of IR caps since they are an inefficient tool for lowering interest rates, especially in the long run. IR caps
   a. limit access to credit,
   b. reduce transparency,
   c. decrease product diversity and competition.
   d. could undercut the demand for formal credit and
   e. affect firms' productivity.
2) Because IR caps distort the market and generate adverse selection, financial entities tend to lend to clients with higher collateral, thereby creating **inefficiencies in financial intermediation.**

IR cap – arguments AGAINST (2/2)

3) In extreme cases where ceilings are set at unprofitable levels, banks and regulated institutions may withdraw from certain locales such as rural areas or from expensive market segments because they cannot cover their costs. **Low-income borrowers with few options for borrowing in the formal market could turn to the black market** (unlicensed moneylenders), probably at a higher interest rate.
4) It is difficult to find „the optimum IR cap“ in countries where the caps do not cover fees and commissions and when **the definition of interest rate is not clear** (for example, financial institutions may give the impression of compliance with the ceiling but charge fees and commissions that are not considered part of the cost of the loan – see discussion on the APR below)

IR cap in practice

Figure 1. Number and Percentage of Countries with Interest Rate Ceilings, by Region



Source: Helms and Reille 2004; Mbengue 2013; Castellanos 2012; Porteous, Collins, and Abrams 2010; iff/ZEW 2010; EIU 2012, 2013; CGAP-MIX 2011; Steiner and Agudelo 2012.

Notes: The value in parenthesis represents the share of countries with interest rate caps in the region. EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; SSA = Sub-Saharan Africa.

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

IR cap in practice – reasons (1/2)

- 3 reasons:
  1) protect consumers from excessive interest rates,
  2) to increase access to finance, and
  3) to make loans more affordable.
- Most countries regulate interest rates with the broad aim of protecting consumers, as in the case of Spain. Other countries provided more specific objectives, such as protecting the weakest parties (Portugal); shielding consumers from predatory lending and excessive interest rates (Belgium, France, the Kyrgyz Republic, Poland, the Slovak Republic, and the United Kingdom);

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

IR cap in practice – reasons (2/2)

- Stopping the abuses arising from too much freedom (Greece); controlling over-indebtedness (Estonia); and decreasing the risk-taking behavior of credit providers (the Netherlands).
- Thailand: the purpose of the caps was to make finance affordable for low-income borrowers.
- Zambia's authorities introduced the caps to mitigate the perceived risk of over indebtedness and the high cost of credit, as well as to enhance access to the underserved.

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

Characteristics of IR cap regimes (1/2)

- For setting the IR cap, the following five schemes are to be defined

1) Source of Authority
   a. interest rate controls,
   b. usury limits,
   c. de facto ceilings.
2) Legal Instrument
   a. usury laws,
   b. criminal or civil codes,
   c. consumer credit laws,
   d. microfinance laws and credit union acts

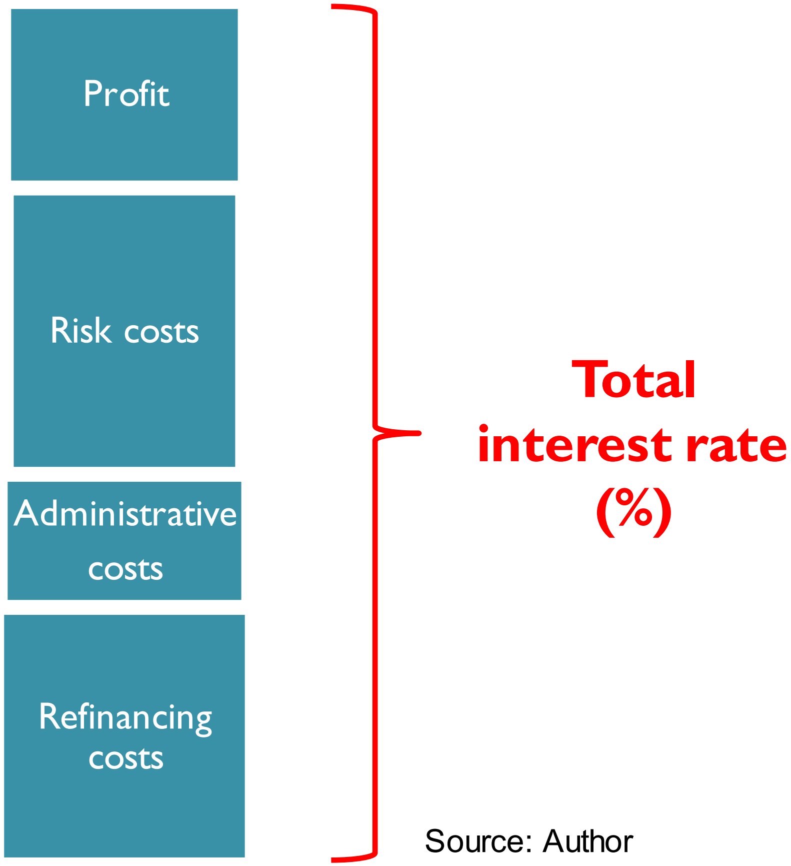
Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

Characteristics of IR cap regimes (1/2)

3. Criteria
   a. **Annual percentage rate of charge (APR)**
   b. Effective interest rate
   c. Nominal interest rate
4. Methodologies
   a. an absolute cap
   b. a relative cap
5. Unique or different ceilings
   a. one universal cap for all loans
   b. more caps

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070
Note:* Defintion by the World Bank (2014)

Components of the total loan interest rate – what to cap?



Source: Author

- Important note: the total nominal interest rate does not include fees and commissions unlike the APR

Annual percentage rate of charge (APR)

- APR means the total cost of the credit to the consumer, expressed as an annual percentage of the total amount of credit, where applicable including the costs* (including interest, commissions, taxes and any other kind of fees which the consumer is required to pay in connection with the credit agreement and which are known to the creditor)
- However, the APR has several weaknesses:
  1. Hard to calculate (timing of cashflows, discounting method)
  2. Hard to understand (in comparison to e.g. overpayment)
  3. It might be a misleading measure for short-term loans

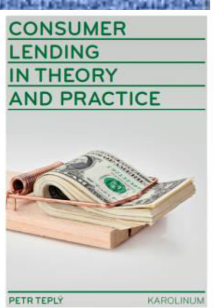
Note:* Defintion by the European Commission (2009)

How to calculate APR in the Czech Republic?

$$\sum_{k=1}^{m} C_k (1+X)^{-t_k} = \sum_{l=1}^{m\prime} D_l (1+X)^{-S_l}$$

X is the APR,
m is the number of the last drawdown,
k is the number of a drawdown, thus $1 \leq k \leq m$,
C_k is the amount of drawdown k,
t_k is the interval, expressed in years and fractions of a year, between the date of the first drawdown and the date of each subsequent drawdown, thus $t_1 = 0$,
m' is the number of the last repayment or payment of charges,
l is the number of a repayment or payment of charges,
D_l is the amount of a repayment or payment of charges,
S_l is the interval, expressed in years and fractions of a year, between the date of the first drawdown and the date of each repayment or payment of charges.

- A special committee on the APR calculation in the CR, many experts -> many opinions (a consensus reached but it was a cumbersome process)



Source: https://knihy.abz.cz/prodej/consumer-lending-in-theory-and-practice-1

Effects of IR caps (1/3)

- **In most cases, the effects were predominantly negative,** even though, in the case of the United States, a few studies supported positive outcomes.
- **South Africa:** some financial institutions evaded caps by charging credit life insurance and other services, which reduced the transparency of the total cost of credit
- **The West African and Monetary Union:** the imposition of ir caps on microfinance loans caused microfinance institutions to withdraw from poor and more remote areas and to increase the average loan size to improve efficiency and returns because the interest rate ceiling was considered too low

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

Effects of IR caps (2/3)

- **Armenia:** the lack of clarity on how to calculate the interest rate led banks and microfinance institutions to impose fees and commissions, thus avoiding the ceiling and reducing the transparency for consumers
- **Poland**: interest restrictions reduced both access to credit and welfare.
- **France and Germany:** IR caps decreased the diversity of products for low-income households. In France, lenders have used revolving credit to reach lower-income households, while in Germany many low-income and high-risk borrowers are excluded from credit.
- **Bolivia:** the introduction of maximum interest rates in 2004 led to a decrease in the licensing of new lending institutions

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

Effects of IR caps (3/3)

- **United States:**
  - financial liberalization measures, such as the elimination of interest caps, have positively affected small enterprises' access to finance
  - a migration of clients to states with less restrictive lending
  - access to credit for high-risk borrowers is greater when interest rate caps are higher but that the high cost of credit increases the probability of default
  - the introduction of caps in the credit union sector lowered interest rates, the credit supply decreased

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

Results of the World Bank study (2014)

- There are more effective ways of reducing interest rates on loans over the long run and of improving access to finance measures that
  1. enhance competition and product innovation,
  2. improve financial consumer protection frameworks,
  3. increase financial literacy,
  4. promote credit bureaus,
  5. enforce disclosure of interest rates, and
  6. promote microcredit products

Source: World Bank (2014). Interest Rate Caps around the World, Policy Research Working Paper 7070

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The shifting balance of money and information yesterday in contrast to today

Source: Oliver Wyman (2013). A money and information business

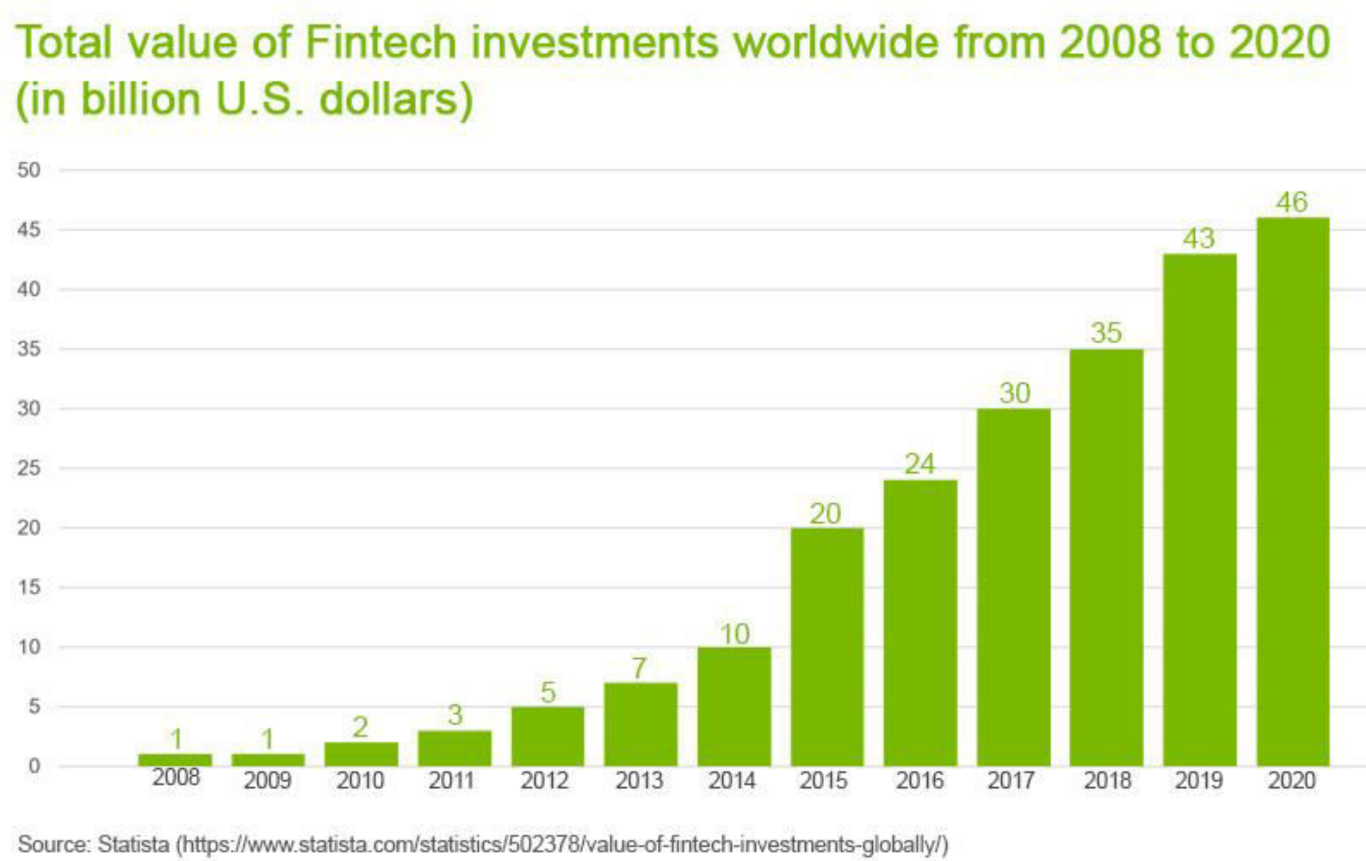
Recent global trends in finance

1) **Digitalization** (IT financial ecosystem, artificial intelligence, robo-advisors)
2) **Commoditization** (products = commodities; customers rely on prices; increasing role of price comparators)
3) **Globalisation** (fierce competition; technology disrupters/Fintech)

Source: Author

The rising role of Fintech

- Fintech = financial-services business that use technologically innovative apps, processes or business models



Fintech enter the banking cloud model and challenge traditional banks

Tencent 腾讯

Source: https://worldvectorlogo.com/logo/tencent

Source: https://truedemocracyparty.net/2016/11/fractional-reserve-wars-part-2-the-empire-strikes-back-with-blockchain-central-bankers-want-digital-currency-digital-slavery-total-control-of-you/

Google

Source: https://images.app.goo.gl/oz5jYZCNc1jXBwpq6

捷信 HOME CREDIT

Source: https://www.homecreditcfc.cn

PayPal™

Source: https://www.con-telegraph.ie/2011/12/08/was-navan-overlooked-for-paypals-1000-job-project/

Alibaba Group 阿里巴巴集团

Source: https://images.app.goo.gl/H1cSvcP2fDe7Hmfr8

TOP 10 Fintech companies (5 from China)

1) **Ant Financial - China**
2) **JD Finance - China**
3) Grab - Singapore
4) **Du Xiaoman Financial - China**
5) SOFI - US
6) Oscar Health - US
7) Nubank - Brazil
8) Robinhood - US
9) Atom Bank - UK
10) **Lufax - China**

Source: KPMG (2018). The Fintech100 – Announcing the world's leading fintech innovators for 2018

Recent global risk management

- ✓ **Credit risk**
  - ➢ Importance of credit scoring (social networks: Facebook, Twitter, LinkedIn)
  - ➢ Big data/information processing
  - ➢ Reinvention of securitization
- ✓ **Operational risk** (cyber risk)
- ✓ **Regulatory risk** (regulatory tsunami)
- ✓ **Market/FX risk** (low interest rate environment)
- ✓ **Liquidity risk** (funding risk vs fire sales)
- ✓ Importance of **stress testing and scenario analysis**

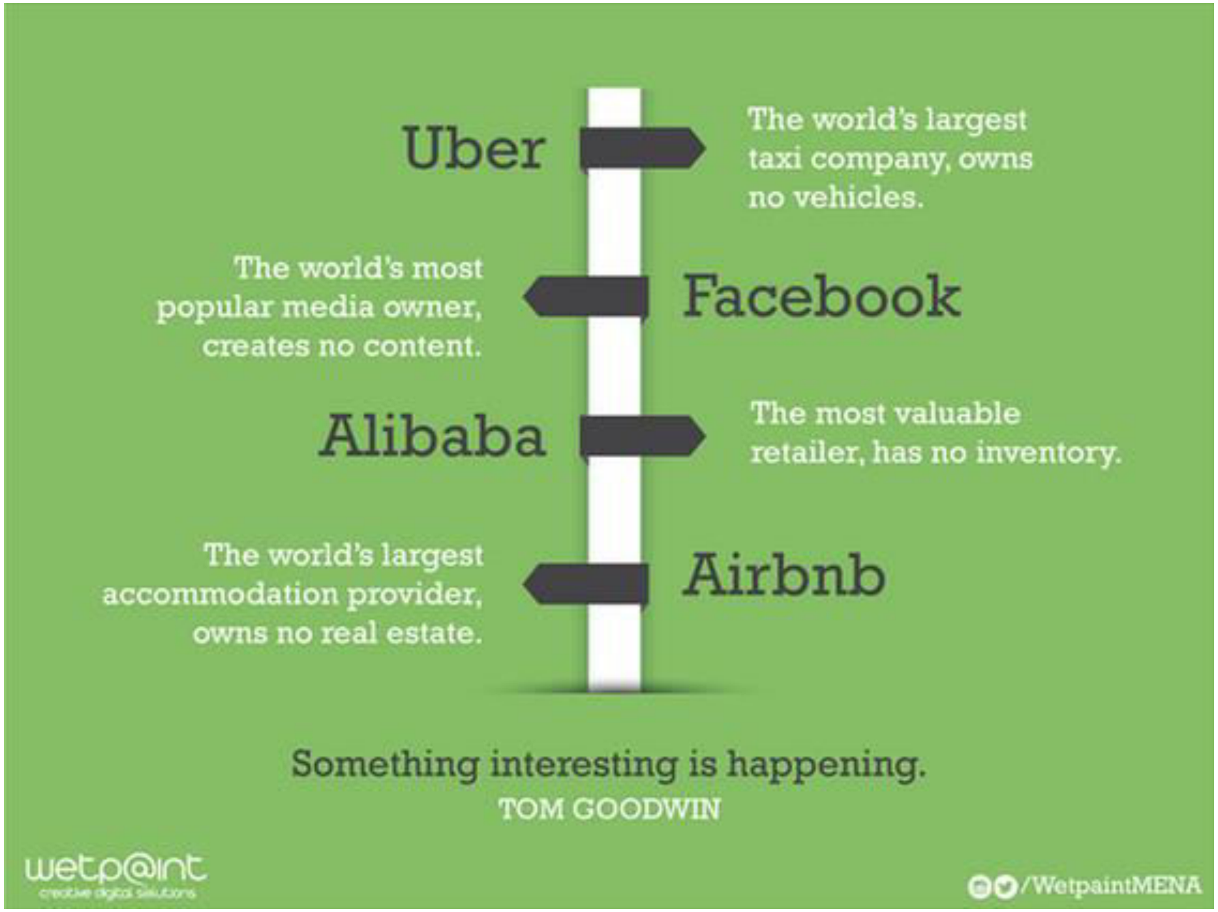
Three scenarios of bank future

1) Adaption and transformation of banks
   - ✓ Regulated banks as low-margin utilities (rather than high-margin 'casinos'/investment banks)
   - ✓ Changes needed: i) optimization of branches, ii) adaption of technology, iii) attracting talented employees
   - ✓ Bank-Fintech partnerships expected
2) Uberization of banking
   - ✓ Banks loose their direct contact with clients
   - ✓ Banks at the end of global financial services chain
   - ✓ Payment Services Directive 2 (PSD2) in the EU: open banking
3) Bankless future/Blockchain
   - ✓ The use of distributive ledger technology for bank services
   - ✓ Pilots projects: R3V CEV, Utility Settlement Coin (USC)

Source: Author

4. Future trends in finance and banking

Scenario 2: Uberization of banking

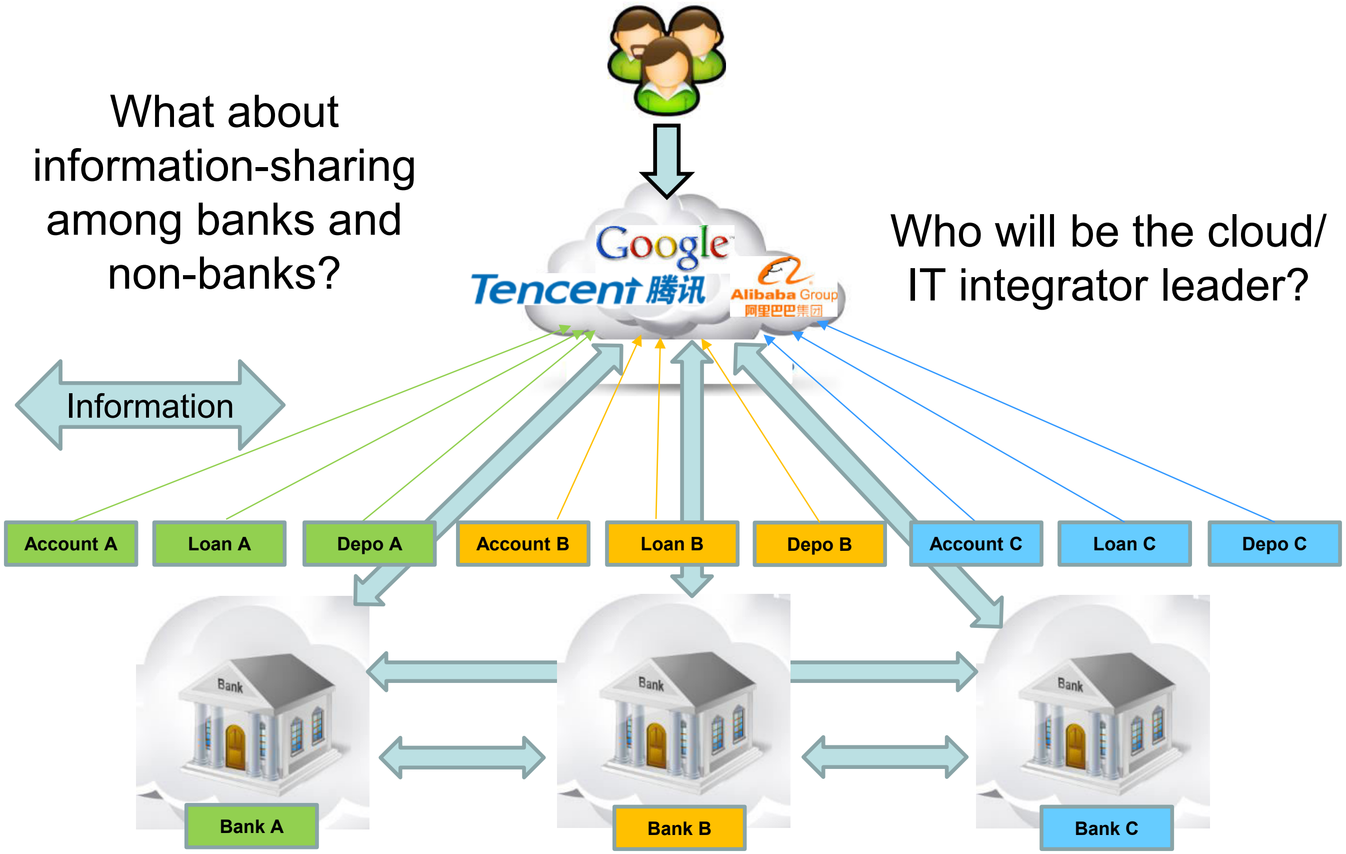


- Similarity: banks are losing their direct contact with clients and also its position in value chain

Source: http://thefinancialbrand.com/52148/uber-financial-services-banking-disruption

4. Future trends in finance and banking

Scenario 2: Uberization of banking



- In the EU the Payment Services Directive 2 (PSD2) has enabled open banking since 13 January 2018

Source: Author, https://images.app.goo.gl/H1cSvcP2fDe7Hmfr8, https://worldvectorlogo.com/logo/tencent, https://images.app.goo.gl/oz5jYZCNc1jXBwpq6, https://truedemocracyparty.net/2016/11/fractional-reserve-wars-part-2-the-empire-strikes-back-with-blockchain-central-bankers-want-digital-currency-digital-slavery-total-control-of-you/

Scenario 3: Blockchain/bank less future

- Blockchain = software that enables data sharing across a network of individual computers. A blockchain describes computers transferring blocks of records in a chronological chain.
- Blockchain technology is also known as distributed ledger. The term "distributed ledger" refers to the concept that each user shares the same "ledger" or set of accounts as defined by the software.
- It works through shared software infrastructure and trust. Users agree to a software protocol describing the rules for the type, quality, and transferability of data in addition to the rules for authorisation, verification and permutation.
- Users trust that information entered into and transactions conducted over the blockchain software are valid.
- Bank less future is NOT probable now

Source: Oliver Wyman (2016): Blockchain in Capital Markets - The Prize and the Journey

Agenda

1.	Consumer lending in theory
2.	Consumer lending in practice
3.	Future trends in finance and banking
4.	Challenges faced by EU and Czech banks

4 posible sollutions to higher EA banks´ profitability (by the European Central Bank)

1) **Revenue growth**
   - ✓ Higher fees and commissions, a change in the product mix, the funding structure, increasing the geographic diversification of activities
2) **Cost efficiency improvements**
   - ✓ Downsizing, branch closures, adoption of new cost-saving technologies (trend: digitalisation)
3) **Consolidation through mergers and acquisitions (M&As)**
4) **Non-performing loans (NPL) resolution**
   - ✓ Direct sales complemented by securitisations, asset management companies, and NPL trading platforms

Source: Constâncio, V. (2017). Challenges faced by the European banking sector, 14.6.2017

Non-performing loans (NPL) basics

- NPL = the loan becoming past due for more than 90 days (bad/unpaid loan)
- The NPL problem is one of the main reasons behind the low aggregate profitability of European banks
- Average NPL ratio in the Euro area increases from 2.4% in 2007 to 6.6% in 2016 (the US: 1.4%☞1.5% only!)
- Lessons from history: the resolution of NPLs that have reached systemic levels is complex and costly
- NPL resolution strategies in history: the Global Financial Crisis (GFC) in 2007-2009 in Europe and the US, the Asian and Nordic financial crises of the 1990s, and the US savings and loan (S&L) crisis in the 1980s.
- General principles and lessons might be applicable in China when undertaking NPL resolution strategies

Policy instruments to resolve systemic NPLs

Debtors (non-financial companies)

Policy instruments	How it works
Debt restructuring, including out-of-court workouts	Either corporate or loan restructuring, involving the banks that are creditors to the same customer

Banks

Policy instruments	How it works
Write-off	Loans are written off from banks' balance sheets
Direct sale	Banks or AMCs sell NPLs in dedicated markets
Securitisation	Banks, special purpose vehicles or AMCs pool and tranche loans and sell the securitised products in dedicated markets
Asset protection schemes	State-backed entities offer insurance on loss on NPLs in order to restart banks' credit provision
Centralised asset management company (AMC)	Dedicated companies buy bad assets from the problem bank(s)

- Some countries such as Korea decided to take advantage of <u>international auctions to gain access to foreign NPL markets and their specialised buyers</u>

Source: Baudino, P. Yun, H. (2018). Resolution of non-performing loans – policy options. Financial Stability Institute, The Bank for International Settlements (BIS).

Direct sales: basic terms

- In a direct sale, the bank sells the asset to a counterparty, which is typically another financial institution, possibly a bank, but possibly also various types of investment funds.
- The selling bank (or Asset Management Company "AMC") provides prospective buyers with the information they need to conduct due diligence. Recent examples of this approach are direct sales in Ireland, Spain and the UK
- In some cases, direct sales have covered packages of loans, rather than individual loans, taking advantage of the diversification of risks via asset pooling.
- Transaction platforms are being considered as a possible solution to Europe's high stock of non-performing loans

Source: Baudino, P. Yun, H. (2018). Resolution of non-performing loans – policy options. Financial Stability Institute, The Bank for International Settlements (BIS).

Direct sale as one of NPL resolutions in several countries

	Crisis episode	Main NPL resolution instruments[1]					
		Debt restructuring & out-of-court workouts[4]	Write-offs	Direct sales[2]	Securitisation[3]	Asset protection scheme	AMCs
United States	S&L crisis	√	√	√	√		√
	GFC	√	√	√	√	√	
Sweden	Nordic crisis		√	√			√
United Kingdom	GFC		√	√		√	√
Ireland	GFC		√	√			√
Italy	GFC		√	√	√		
Spain	GFC		√	√			√
Japan	Japan. crisis	√	√		√		√
Korea	Asian crisis	√	√	√	√		√
Malaysia	Asian crisis	√	√		√		√

1) Some measures are a common bank response, and not all are documented in the international literature. For instance, write-offs are likely in all NPL crises, as documented by the IMF in several country reports. To keep the references manageable, ticks are applied only when the measures listed in the literature are included in the bibliography.

2) United States (Department of the Treasury (2010)), Italy and Spain (Deloitte (2016)); KAMCO (2011).

3) By AMC (United States, Korea, Malaysia and Japan) or by special fund (Italy in 2016).

4) Examples are: United States (GM and Chrysler cases), Japan (JAL case), Korea and Malaysia (Fung et al (2004)).

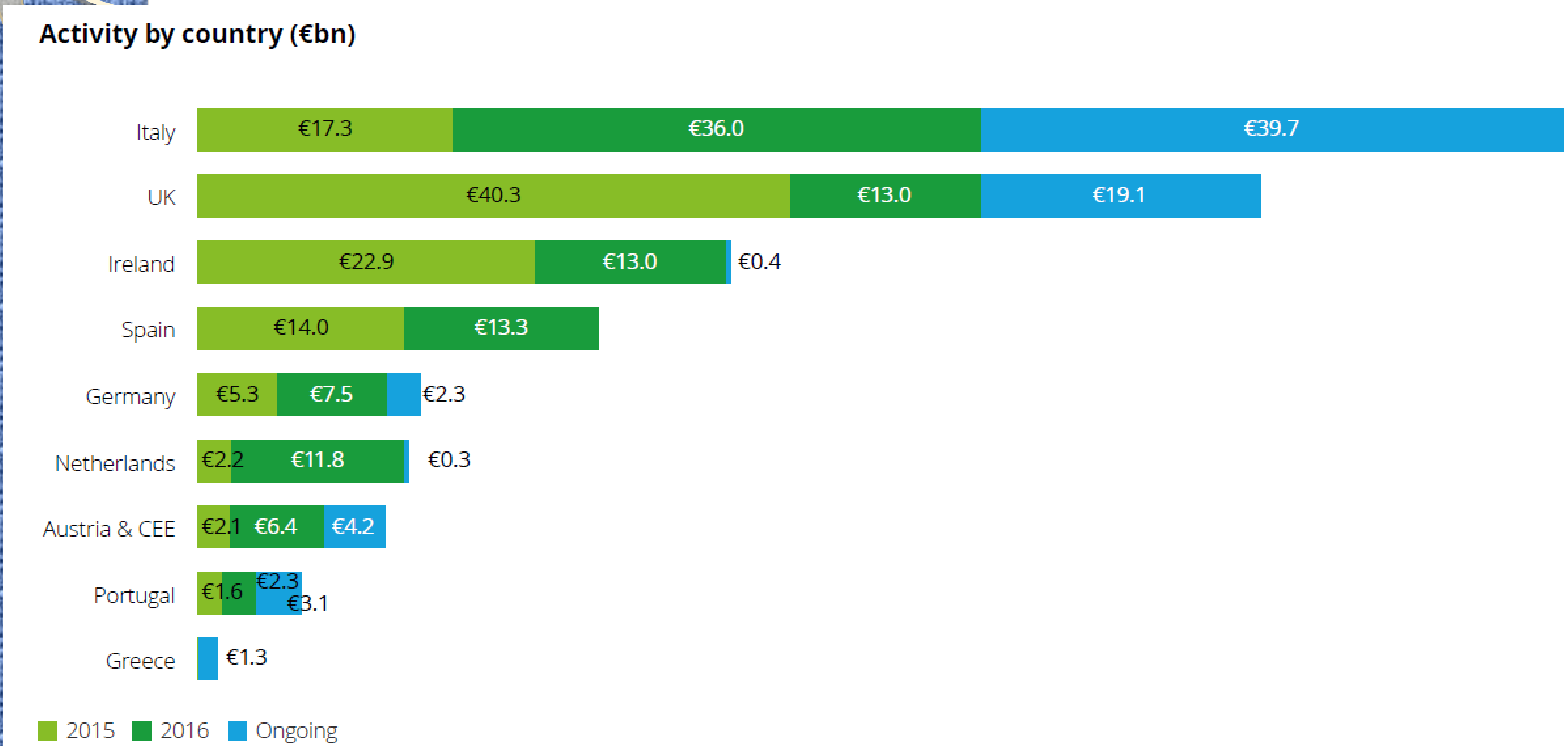
Source: Baudino, P. Yun, H. (2018). Resolution of non-performing loans – policy options. Financial Stability Institute, The Bank for International Settlements (BIS).

Direct sales: information on the EU

- EU loan portfolio sales were estimated at about EUR 118 billion in 2016.
- The market grew from EUR 30 billion in 2013, thanks also to the establishment of AMCs in Ireland and Spain.
- Based on the same data for 2015, around 66% of loan portfolio transactions are loans collateralised by residential and commercial real estate.
- <u>The major buyers in the EU market are US hedge funds and private equity funds</u>. Regardless of the rapid growth in Europe's NPL market, according to a survey conducted by the European Banking Authority in 2016, the majority of countries still consider the local distressed market to be either too small or not sufficiently effective.

Source: Baudino, P. Yun, H. (2018). Resolution of non-performing loans – policy options. Financial Stability Institute, The Bank for International Settlements (BIS).

NPL sales by countries in Europe



Source: Deloitte (2017): "Uncovering opportunities in 2017: Deleveraging Europe 2016–2017", March.

The NPL market in the US

- For instance, in the United States, loan portfolio sales from 2009 to 2014 have been estimated at around USD 188 billion.
- The major players in the US loan portfolio market are US hedge funds and private equity funds.
- Over the period 1996 to 2007, hedge funds were involved in close to 90% of the cases of insolvency of Chapter 11
- In 2009, the US Treasury launched the Public-Private Investment Program (PPIP). The PPIP facilitated the creation of individual public-private investment funds (PPIFs) to purchase asset pools. The US Treasury provided 50% of the equity capital for each fund, but private managers retained control of asset management

Source: Baudino, P. Yun, H. (2018). Resolution of non-performing loans – policy options. Financial Stability Institute, The Bank for International Settlements (BIS).

Regulation of NPL in the EU

1) **The ECB's 2017 guidelines for banks' management of NPLs***
   - ✓ NPL resolution has been designated as one of the top priorities of the Single Supervisory Mechanism
2) **The EBA's 2018 guidelines****
3) **Accounting standards**
   - ✓ Formerly IAS 39, since 2018 a new standard IFRS 9
   - ✓ Recognition of losses (=book value - market value of an asset)
   - ✓ Forward-looking provisioning (instead of backward-looking)
     ☞provisions in EU banks could rise by about 13%
4) **The Bank Recovery and Resolution Directive (BRRD)*****

Sources: *ECB (2017). Guidance to banks on non-performing loans. The European Central Bank
**EBA (2018). Draft Guidelines on management of non-performing and forborne exposures
*** European Commission (2014). The Bank Recovery and Resolution Directive No. 2014/59/EU