Economics of Digital Transformation

Editors

Saša Drezgić
Saša Žiković
Marko Tomljanović

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ECONOMICS OF DIGITAL TRANSFORMATION

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Saša Žiković
Marko Tomljanović

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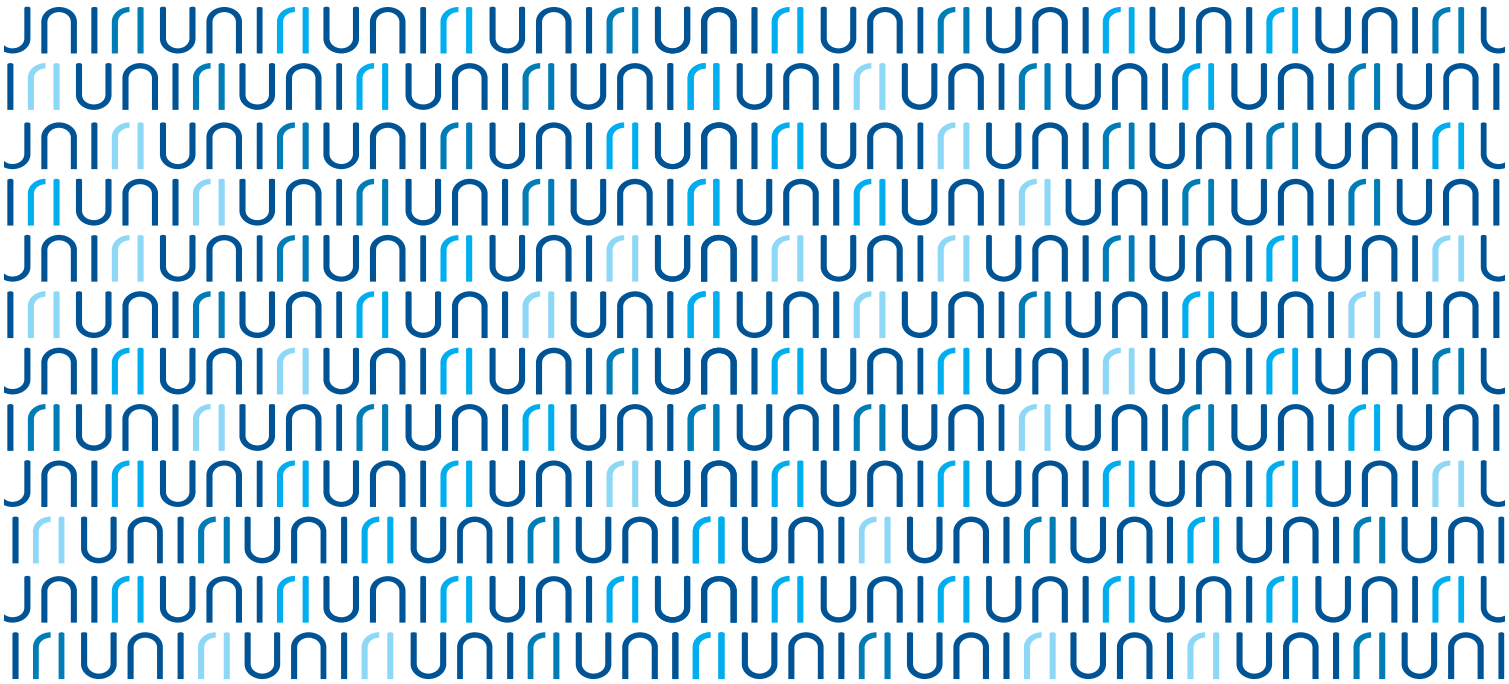

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FOREWORD

Dear authors, reviewers and readers,

It is our great pleasure to present first research monograph on the topic of Economics of digital transformation. The main goal of this research joint venture was to provide scientific proof of dramatic changes to contemporary and future economic reality caused by increasing digitalization processes. As far as we are informed, there are only few such publications which attempt to question impact of digital transformation on traditional economic systems and activities. Our contributors covered wide field of research within regulation economics, industry and European single market issues, entrepreneurship, local economic development, organization and innovation issues, digital marketing and monetary policy in the era of digital currencies.

The papers published in this monograph present best papers presented at the first conference of the Faculty of Economics and Bussiness of University of Rijeka organized on the topic of "Economics of digital transformation" from 2nd to 4th of May, 2018 in Opatija, Croatia (www.edt-conference.com). During the three days of the conference more than 50 researchers from European region contributed with their presentations. We are particularly proud on the results of our doctoral workshop where nine young researchers presented their research while five papers were published in the monograph. In this way we are building our future research capacities and expose young researchers to rigorous scientific challenge.

In addition, we also did our best to inform distinguished scientific indexing databases about our research contribution in order to enable wide dissemination of our research efforts and boost interest of both researchers and practitionares about this growing field of research. The best papers from the conference were selected for three distinguished scientific journals. These are Proceedings of Rijeka Faculty of Economics-Journal of Economics and Business, Public Sector Economics and Central European Public Administration Review. The information on papers published in these journals is given by the footnote of the topic of the paper.

Finnally, we would like to express our gratitude to our stellar keynote speakers Edward (Ned) Hill from John Glenn School of Urban Affairs, Ohio University, Iryna Lendl from Maxine Levine Goodman School of Urban Affairs, Cleveland State University and Eugenio Leanza, Head of Mandate Services of European Investmen Bank, as well as our panelists Cristian Popa, former Vice President of European Investment Bank and Boris Vujčić, Governer of the Croatian National Bank. We are immensely grateful to our contributors, reviewers, members of programme and organization board, partner universities and sponsors, as well as our students that received many complements from our guests for their knowledge, manners and hospitality.

Rijeka, December 2018

Editors

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CHAPTER 37

The bail-in principle – responsible banks for a sound financial system

Jovan Zafiroski

ABSTRACT

Since January 2016 the Single Resolution Mechanism became fully operational. As a second pillar of the European banking union it should provide equal treatment of the credit institutions when they are facing problems and when a bank failure is probable or occurs. Also, the Single Resolution Mechanism contributes to broader objectives of the banking union for achievement of deeper market integration and breaking the link between the sovereigns and banks. The financial crisis from 2008 has shown that even failures of the big international banks are possible. It is difficult to justify the situation when the bank's profits are always private and are distributed between the shareholders and the management while loses are covered by taxpayers. This dilemma goes beyond the problems of morality and has direct effects of the countries' public finances and the level of public debt. It is hard to justify the bank bail-outs. The negative consequences of the problems facing credit institutions were more emphasized on the EU financial market. The newly created Single Resolution Mechanism includes a solution to this problem which puts the responsibility and consequences of the bank difficulties to the bank itself. Thus, the newly created bail-in principle gives power to the resolution authorities to cancel shares and to write down or to convert liabilities of a bank. The text explains the bail-in principle and discusses the possible effects that it might have on the stability of the financial sector in the Eurozone. Also, the effects of the digitalization of money and the reduction of cash in the transactions are examined.

Key words: digital money, bail-in principle, bank failure, Eurozone, bail-out

JEL classification: G21, K39

1. Introduction

The financial crisis from 2008 has brought profound changes in the financial infrastructure in the developed countries while provoking series of reforms in the legal framework regulating the financial and monetary institutions. Unprecedented in its scale and scope in the recent decades the crisis has pushed the markets and the regulators to their limits, menacing to endanger the existence of the international financial order as we all know it. The bankruptcy of the *Lehman Brothers* (See: Williams M., 2010, 165-178) was a clear signal that even

the big banks might face difficulties and fail. In other words, there are no “stars” in the financial systems and every single financial institution, no matter how big and systemically important it is, may face the “Chapter 11”.

Also, the crisis has clearly shown that nowadays, in times when financial markets are highly integrated, the national response to problems is not enough when the threat to the financial system is global. This is even more accented in the EU before the crisis. The banks have had cross border activities while the authorities for regulation and supervision were national. In other words, the crisis was an unambiguous warning sign that either the EU will commence profound reforms in the field of the financial services infrastructure or it will face a collapse of the entire integration project. Thus, a broader reform of the European financial system and the establishment of the Banking union including the Single Supervisory Mechanism (hereinafter SSM), the Single Resolution Mechanism (hereinafter SRM) and the Common Deposit Insurance Schemes (hereinafter CDIS) has taken place.

While SSM provides a coherent supervision at the EU level the SRM should ensure equal rules and procedures when a bank is facing difficulties and is likely to fail. Different treatment of a failing bank might undermine the competition and put in danger the functioning of the internal market with the four freedoms as its core element.

As far as bank failure is concerned two questions are the most important. Who is responsible for conducting the process of resolution and who carries the costs of the bank failure? Before the crisis national authorities were responsible for bank resolution while a common response to a systemic banking crisis was a bail-out of the banking sector which involves public finances. The bail-out might consist of different instruments and procedures for intervention including government takeovers, purchases of bad assets, mergers of financial institutions etc. However, the cost of the banking crises goes far beyond the simple numbers of the bank bail-out. It includes the costs of the overall economic downturn in both the financial and real sector which is difficult to be measured in its entirety. The history teaches us that along with the direct cost for bank bail-out the negative impact of the bank crisis on the public revenues is considerable (See: Reinhart C., Rogoff K., 2009, 163-171).

With different interventions on the financial markets, primarily by capital injections to problematic banks and by guarantees on the deposits to prevent bank runs, the recent crisis has put enormous pressure on the public finances in the EU Member States. The indirect costs are difficult to be measured while the numbers are saying that the EU Member States have intervened with large amounts of money. This raises a series of questions about the moral aspects

of spending public money for saving private institutions which in normal times were making huge profits for shareholders and premiums for the management[1].

The financial crisis had significant impact on the financial institutions in the EU. To reduce the negative effects of the crisis and to restore confidence, EU governments provided State aid to financial institutions through different instruments such as recapitalizations, impaired asset measures, guarantees on liabilities liquidity measures other than guarantees on liabilities etc. The data relating to the State aid to financial institutions in the years 2008-2015 shows that the overall amount of state aid approved was above 5 trillion Euros while amounts of state aid used was around 2 trillion euro (European Commission, 2016). Considering the financial costs of the bailing out and financial aid for the troubled financial institutions for the public finances and ultimately for the taxpayer's money the need for a new model dealing with a failing institution was undisputable. Banks could no longer be permitted to be *European in life but national in death* (Boccuzzi G., 2016, pg.15).

The text will present the newly established bail-in principle (2) as a pillar on the foundations of the SRM (1) while also discussing some important legal questions deriving from the implementation of bail-in principle as the principle of protection of property (3). Also, the last part (4) will consider the effects on the dematerialization of money on the implementation on the bail-in principle. The paper does not go into details about the rules and procedures of the bail-in as a resolution tool but gives an overview of this instrument which is somehow a revolution in the resolution process of a failing financial institution.

2. The foundations on the new resolution mechanism

The newly created SRM should provide a unique treatment of institutions which are facing bad times. Different rules and procedures for bank resolution could bring differences in treatment of the failing bank depending on the member state where resolution is taken. Therefore, in some cases, the decision on the establishment or on certain business activities might be taken on the grounds of facts determining which Member State provides better conditions for a failing credit institution. This will undoubtedly undermine the competition and the principle of equal treatment of the European financial operators. The SRM is a unique mechanism that includes supranational bodies and national resolution authorities. The legal framework regulation the SRM consists the

1 Also, the state intervention in the banking sector for bailing out systemic important banks is problematic from legal point of view in terms of competition policy and state aid rules. The fear from disaster in the financial sector was too great that even the EU did not take serious measures to limit the state aid in the financial institutions and to make profound analysis on the mergers in the financial sector (See: Marsden P., Kokkoris I., 2012, 331-336)

Recovery and resolution Directive[2] (hereinafter: the Directive) and the Regulation establishing uniform procedures for resolution on the credit institution[3] (hereinafter: the Regulation).

The Directive sets the resolution objectives which requires that the resolution process ensures the continuity of the critical functions of the financial institution, protection of public funds by minimizing reliance on public financial support, protection of depositors, protection of client funds and assets[4]. The conditions for resolution are laid in the Directive's provisions demanding certain conditions to be met before resolution process might be undertaken. Thus, the determination if the credit institution is failing or is likely to fail has been made by competent authority, there is no private sector solution for the credit institution and if the resolution action is necessary in the public interest[5] and there is a replacement of the management body and senior management of the institution under resolution which should provide all necessary assistance for achievement of the resolution objectives[6]. General principles governing resolution requires that the shareholders of the institution bear first loses, creditors of the same class are treated equally, and they bear loses after shareholders, while covered deposits are fully protected. At the end of the resolution process no creditor shall incur greater loses than he would have under normal insolvency proceedings. The resolution procedure is defined in the Directive where there are three different phases. The first stage is the *preparatory phase*; the second phase is the *early intervention* while the third stage is the *resolution stage*. The resolution tools include: the sale of the business tool, the bridge of the institution tool, the asset separation tool and the bail-in tool[7]. The novelty in the resolution tools deemed as a "revolution" in the resolution process which will make the credit institutions more responsible and will protect the public finances from excessive debt created by bail outs of the banks is the bail-in tool and it will be elaborated in the next part of this article.

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2 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council, available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0059&from=EN

3 Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010, available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0806&from=EN

4 Article 31 of the Directive

5 Article 32 of the Directive

6 Article 34 of the Directive

7 Article 37 of the Directive

3. The bail – in principle

As in every other business, banks may face difficulties and go into default. That means that there will be more room for other credit institutions that are working better. They are more efficient, innovative and that is why they will continue and expand their activities (See: Nouy D., 2017). To be out of the business is a normal phenomenon. A failure of a bank is a signal for well functioning of the financial system. If the financial infrastructure is well designed a failure of one bank should not pose a problem to the entire financial system. However, a problem arises, as in 2008, when a failure of one bank might undermine the well-functioning of the entire financial system. The trust in the system and the institutions for control and supervision is eroded while panic is spread. Usually, the state is faced to difficult choices. To let the bank fail with risk to endanger the functioning of the system or to save the bank with public money and to continue the work as usual. In fact, the theory offers two different concepts for dealing with a failing bank. The opposing theoretical concepts*: liberal vs. interventionist*. The former states that the bank should be left to the forces of market and let to fail while the position of the latter is that the authorities should intervene and protect the stability of the overall financial system. In times when the problems of one banks are spreading to other financial institution the common choice is intervention. As explained before, the intervention means huge cost for the public finances and poses moral dilemmas about the different treatment of the banks in good and in bed times. When they have profits they are private institution but when it comes for loses they are covered by the state.

The first attempt to solve this problem and to limit the government intervention with public money to save private banks was in the case of Cyprus. In 2012, the banking sector in Cyprus or the country's two largest banks were facing difficult times and was clear that they need financial aid to continue with their work and to avoid failure which might provoke collapse of the entire financial and economic system considering the fact that country's banking sector is much bigger than its GDP. The financial assistance for troubling banks in Europe was offered before though different mechanisms. It was the case with banks in Island, Ireland, Spain, Greece etc. However, in order to preserve its macroeconomic stability and to keep the public finances in good condition the Cypriot authorities together with the EU institutions proposed unusual measure at that time i.e. use of funds from uninsured bank depositors for helping the troubled institutions. It was very different situation from what we have previously seen and has rarely occurred in the financial history. The solution has been deemed as a form of taxation or as a modern "nationalization" of the bank deposits (See: Zafiroski J., 2013). At that time, strange and unusual but this mechanism become one of the core elements in the further reform process and the creation of the SRM.

The most important novelty brought by the bail-in principle is that when a bank fails it is the banks' shareholders and creditors that bear the costs. The main purpose of the bail in principle is to break the link between sovereigns and financial institutions in trouble putting pressure on the bank's management and

shareholders to be more responsible for their own decisions. Thus, the management and shareholders cannot be sure that the bank will be rescued with public money when things go wrong while earning big returns when things go well. This mechanism will also reduce the risk that the banks are ready to take when taking decisions.

At the essence of the bail-in objectives is the reshaping the bank balance sheet provided that the financial institution under resolution has a positive net value. To achieve this the competent authority might decide that equity holders or existing shares or other instruments of ownership are cancelled or transferred to bailed-in creditors or, as far as the debt holders are concerned, the competent authorities might convert liabilities[8], bonds for instance (Spiegeleer De J. and al.,2014), into shares or other instruments of ownership[9].

4. Challenges to the traditional legal principles and the fundamental right to property

The role of the State in the financial sector is to protect the soundness and well-functioning of the system as well as to promote competition. The recent financial crisis has shown that the public finances could suffer by excessive use of the taxpayer's money that are used to save the systemic important institutions in order a collapse of the entire financial and economic system to be avoided. The bail-in is a useful tool in this respect. However, it opens series of questions about the justification of these measures in view of the basic legal principles as the protection of right to property. Measures such as bail-in decision which include cancelation or transfer of shares, suspension or conversion of liabilities into shares are often contested by concerned individuals or companies on the ground on Article17 of the EU Charter of fundamental rights relating to the right to property[10]. The Charter is applicable when EU institutions, bodies and agencies are deciding and thus implementing EU law and national authorities when are implementing the EU law. In the Case law of the European Court of Human Rights it is established that company shares[11] and debt instruments

8 All liabilities of a bank in resolution are eligible to the bail-in tool if they are not explicitly excluded by the provisions of the directive (such as covered deposits, for example), see Article 44(2) of the Directive

9 Articles 47 (1)(b) and 63 (1)(f) of the Directive

10 Article 17(1) of the Charter provides that: everyone has the right to own, use, dispose of and bequeath his or her lawfully acquired possessions. No one may be deprived of his or her possessions, except in the public interest and in the cases and under conditions provided for by the law, subject to fair compensation being paid in good time for their loss. The use of property may be regulated by law in so far as is necessary for the general interest. Also, Article 1 of Protocol No 1 to the European Convention on Human Rights states that: Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

11 See: ECtHR, Sovtransavto Holding v. Ukraine, Appl. No 48553/99, paragraphs 90-93, available at: http://hudoc.echr.coe.int/eng?i=001-60634

and liabilities deriving from them are falling in the category or in the scope of the article 1 of the Protocol relating to the property rights.

From the legal point of view the limitations to the right to property should be examined through proportionality test regularly used in the process of expropriation. However, the bail-in ban not be qualifying for expropriation or "deprivation of possession" simply because the process of writing down or canceling of shares or of a liability is not a transfer of property from shareholder or creditor to another person. The financial stability and fiscal protection is the public interest on which grounds the limitation of the right to property is justified in the case of using bail-in tool (Wojcik K-P., 2016).

Moreover, in its recent judgement[12] concerning State aid rules to support measures in favour of banks in the context of the Slovenian banks the Court found that the right to property must be interpreted as not precluding the Banking communication (European commission, 2013) in respect to the points 40-41 stating that "state support can create moral hazard and undermine market discipline. To reduce moral hazard, aid should only be granted on terms which involve adequate burden-sharing by existing investor". Therefore, "since shareholders are liable for the debts of a bank up to the amount of its share capital, the fact that the Banking Communication requires that, in order to overcome the capital shortfall of the bank, prior to the grant of State aid, those shareholders should contribute to the absorption of the losses suffered by that bank to the same extent as if there were no State aid, cannot be regarded as adversely affecting their right to property"[13]. This judgment is a clear confirmation that the bail-in as a resolution tool cannot be perceived an instrument undermining the right to property.

5. New technology, dematerialization of money and the bail-in principle

In the last period there are certain trends in the monetary field that are in favor or against the bail-in principle and have influence on its efficiency in delivering expected results. Those trends are related to the use of the new technologies in the payment systems and to the process of dematerialization of money. Also, the effects form the crisis are present in some of the developed countries while the measures taken in that period are still in place which has certain effects on the possible success of implementation of the bail-in principle in the bank resolution process. Thus, there is a general trend of dematerialization of money. Some authors even consider cash as redundant in the economy (Rogoff K. S., 2016).

12 Case C526/14, JUDGMENT OF THE COURT (Grand Chamber) of 19 July 2016, REQUEST for a preliminary ruling under Article 267 TFEU from the Ustavno sodišče (Constitutional Court, Slovenia), made by decision of 6 November 2014, received at the Court on 20 November 2014, available at: http://curia.europa.eu/juris/document/document.jsf?text=&docid=181842&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=95988

13 Court of Justice of the European Union, PRESS RELEASE No 80/16 Luxembourg, 19 July 2016, pg. 2, available at: https://curia.europa.eu/jcms/upload/docs/application/pdf/2016-07/cp160080en.pdf

According to this position all the transactions should be made through electronic payments while the cash might be used in transactions on very small amounts. There are many arguments for this: combat against tax evasion, money laundering, financing of terrorism etc. This process creates a situation in which all the money in the economy are "visible" in the banking system. The money is on current accounts, deposit accounts etc. which makes a possible use of the bail-in principle efficient. This trend of dematerialization of money goes in favor of the bail-in principle. However, there are two other trends that are making the success of the implementation of the bail-in principle less likely. The use of technology and the launch of cryptocurrencies as means of payment makes the use of the bail-in principle inefficient. The cryptocurrencies are outside the traditional payment system and are not part of the system of bank deposits. They are not "visible" for the authorities while the transactions and owners of the funds are anonymous. Also, another factor which a result of the current monetary policy, most notably in the Eurozone, could jeopardize the success of the possible use of the bail-in principle. Namely, the real interest rates on bank deposits in certain economies are negative which makes cash more attractive than bank deposits. Banknotes have 0% return while certain deposits have negative return which is unprecedented in the monetary and banking history, but we are witnessing today. When one will also consider the fact that deposits might be subject to bail-in in case of bank failure the cash is even more attractive.

6. Conclusions

In the aftermath of the financial crisis profound reforms in the financial infrastructure in the EU has been undertaken. The result is more competences on European level for many important issues relating to the financial system. From institutional point of view the creation of the European banking union implies transfer of powers to the supranational institution and cooperation with the national authorities responsible for supervision and resolution of the credit institutions.

The crisis from 2008 had significant impact on the public finances in the Member States. Vast amounts of money were spent by Governments and EU institutions on bailing out the systemically important banks in in Island, Ireland, Spain Greece etc. The authorities were forced to save this institutions with public money in order to preserve the stability of the overall financial system. The bail-out opened a series of debates about the moral hazard problem with saving the big banks. The current mode of the global financial system can not let banks to be private when making profits while public good and bailed out when facing loses.

The most important novelty in the resolution process on European level is the bail-in principle that gives powers to the resolution authorities to cancel shares and to write down or to convert liabilities of a bank. Thus, if a bank fails it is the banks' shareholders and creditors that bear the costs.

The main goal of the bail-in tool is to reduce the risk that the management of the bank is ready to take. By putting more pressure on the bank's management and shareholders will be more responsible for their own decisions. Thus, the management and shareholders cannot be sure that the will be saved with taxpayer's money when things go wrong. Similar resolution tool was successfully used during the crisis in the banking sector in Cyprus in 2012.

However, even if the bail-in principle may look like a revolution in the resolution process that will break the vicious cycle between the governments and the systemically important banks it has been challenged by the core legal principles as the fundamental right to property.

Also, there are certain trends in the monetary field that go in favor of the successful use of the bail in principle as is the case with the process of dematerialization of money. However, there are also some developments as it is the case with the use of the cryptocurrencies and the negative interest rates that are making the possible implementation of the bail-in principle much more difficult task.

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