Financial Markets: From the “Tragedy of Commons” to Balanced Regulation

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Abstract

Nowadays the global financial system faces a triple challenge: the threat of a new systemic financial crisis at both global and regional levels; difficulties of constant adaptation of existing financial business and regulatory practices to intensive technological innovations; direct and hidden consequences of excessive political influence on the financial system through sanctions and selectively applied practices for sanction purposes. Improving the quality of financial regulation will require deeper cooperation between regulators of leading economies and a proactive position of the financial industry, as well as the decentralization of financial regulation. However, it is unlikely that this will happen at the global level. Financial stability became a key goal of global financial regulation in the post-crisis period. We consider financial stability as the “tragedy of commons.” The article describes the main trends of financial markets regulation after the crisis: transformation of global financial architecture, anti-money laundering and counter-terrorism financing practices (AML/ CT), financial sanctions. The article analyzes the existing failures of modern post-crisis financial regulation: credit crunch, reduction in the effectiveness of monetary policy, regulatory arbitrage, and increased compliance costs (AML/CT legislation, tax legislation, and the sanctions regime). In the future we expect simultaneous trends of harmonization and standardization of requirements in traditional sectors of financial markets (including traditional institutions of the shadow banking sector), but at the same time regulatory arbitrage will induce new financial technologies in order to reduce regulatory costs. The crisis triggered by the coronavirus pandemic in 2020 despite its non-financial nature will almost inevitably have a major impact on financial markets and their regulation. Possible steps to eliminate failures in the financial regulation system are proposed, including recommendations for international organizations.

Key words: financial regulation; financial supervision; global governance; international financial architecture; financial regulatory failures; financial stability; systemic risk

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Introduction

Outdated, inconsistent and technologically lagging financial regulatory practices are considered to have been one of the key causes of the Great Recession of 2008–09 and consequent losses to the global economy. In the context of widespread and inconsiderate market liberalization in 1990–2000, these practices led to an accumulation of multilayered risks. Since 2009, there have been systemic changes in global governance mechanisms, but tough financial regulation has become both expensive and burdensome such that the effectiveness of traditional financial institutions has been reduced. Today, the financial regulation system is being loaded with uncharacteristic functions, and governments are using financial regulation for law enforcement (though a growing network of anti-money laundering measures) and political purposes (via financial sanctions). As a result, the process of globalization and harmonization of financial markets has stopped, and regionalization processes have begun in certain market sectors. Banks and corporations have more limited access to capital, and non-market and non-financial considerations are increasingly used in financial decision-making. Under the conditions of over-regulation of traditional financial institutions, the development of shadow banking has been boosted.

After the Great Recession, financial global governance faced a serious challenge – the need to maintain a balance between the accumulation of systemic risk and the effectiveness of financial markets and institutions. In addition, technological innovations, changes in the approach to financial regulation and the increased impact on financial markets of compliance costs in the field of combating money laundering, terrorism, tax evasion and mutual sanctions have created additional opportunities and difficulties for regulators. These new factors increased the transparency of financial markets but significantly increased regulatory costs, destroyed existing business practices and, in many cases, reduced the coordination of actions of regulators and market participants. Thus, the collapse of the global financial system into separate components is the result of excessive regulatory burden.

Maintaining the integrity of the global financial system and developing well-coordinated financial regulation is a difficult task, despite reduced transaction costs and significantly simplified communication [Claessens, Kodres, 2014]. The demand for cryptocurrencies and the shift of financial activity from regulated areas to less regulated ones is a sign of significant structural and regulatory problems and the rigidity of regulatory practices.

In this article, we analyze prospects for regulating financial markets after the global financial crisis of 2008–09 using the concept of a common-pool resource. We consider the existing architecture of global financial regulation and its failures. In addition, prospects for regulating financial markets under the new global economic crisis caused by the coronavirus pandemic will be considered.

Why Should Financial Regulation Be Harmonized?

Modern financial markets are highly interconnected, both across sectors and across countries. High integration leads to faster transmission of shocks and financial crises, and regulators are not always able to prevent an upcoming crisis.

A high level of capital mobility leads to increased volatility in capital flows. Both developing and developed economies are affected by this phenomenon: the instability of consumption, investment and exchange rate increases [ECB, 2016].

Financial stability is essentially a public good, or common-pool resource, so the state and international organizations must regulate and supervise financial markets at different levels to ensure smooth regulation and avoid major disruptions in their functioning. Today, because financial markets function at the global level, national governments cannot provide sufficient regulation and supervision, as evidenced by serious financial losses and increased destabilization of financial markets as a result of conflicting approaches to the bailout and bankruptcy of large investment funds in the U.S. and UK in 2008 and the ambiguous requirements for eurozone banks in 2010–13.

Coordinated monetary, fiscal and macroprudential policies in different countries can reduce the volatility of capital flows. Uncoordinated macroeconomic policies, on the contrary, can lead to negative external effects for other countries (especially developing economies) and increase vulnerability to financial shocks [Mohan, Kapur, 2014].

The lack of, or limited coordination between, regulators can lead to regulatory arbitrage, that is, the practice of transferring financial assets or certain transactions from a tightly regulated environment to a less regulated one. Regulatory arbitrage can occur between different sectors of the financial market or between different jurisdictions. As a result, risks accumulate in a poorly regulated environment, which threatens financial stability. The accumulation of huge off-balance-sheet liabilities on credit default swaps and the use of insurance companies that have fewer restrictions and requirements for transactions of this kind were significant factors in the collapse of Lehman Brothers and AIG. In the context of growing interdependence of financial markets, regulatory arbitrage has become easier and therefore more dangerous. In particular, there is empirical evidence that U.S. banks prefer to open subsidiaries in a less regulated environment [Frame, Mihov, Sanz, 2020]; the share of the shadow banking sector increased significantly over 2007–15, and at least a third of this increase was due to the additional regulatory burden placed on traditional financial institutions [Buchak et al., 2018]. Thus, requirements for banking and non-banking financial institutions, as well as requirements for financial institutions in different countries, should be as harmonized as possible in order to reduce the benefits of regulatory arbitration.

Harmonized regulation is particularly necessary for over-the-counter (OTC) transactions, which have historically been very poorly regulated due to the offshore nature of a significant part of this market. Without adequate regulation, cross-country regulatory arbitrage will occur with minimal obstacles, and financial assets will actively accumulate in a country with weak regulation or a "captive regulator" serving the interests of players of the regulated industry rather than the purpose of effective regulation. A crisis in one of these "financial casinos" will spread across the world economy very quickly due to the high interconnection of OTC markets. Some experts see the OTC market as a particular case of the "tragedy of the commons" that can be solved by internalizing costs [Coffee, 2014].

Transformation of the Global Financial Regulation Model

Post-crisis strengthening of financial market surveillance coordination and financial regulation harmonization began at the Group of 20 (G20) summit in London in 2009. The summit decided to transform the Financial Stability Forum (FSF) into a permanent Financial Stability Board (FSB). The main purpose of the FSB is to coordinate the work of national financial authorities and international standard-setting bodies in order to promote financial stability.

The creation of the FSB was the first step toward establishing an *institution of financial stability* representing a set of rules and standards adopted to increase financial stability. Its infrastructure includes all international organizations that promote financial stability – the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the World Bank (WB) and others. We believe that this financial stability institution is part of the global governance system.

The four main tasks of the FSB as the main coordinator for the financial stability institution are to build resilient financial institutions, end the "too-big-to-fail" problem, make derivatives markets safer, and transform shadow banking.

The BIS and the Basel Committee on Banking Supervision play a key role in solving the first two tasks – building resilient financial institutions and ending the "too-big-to-fail" problem. Basel III focuses on tightening capital, liquidity and leverage requirements, covering risk, and improving the stability of systemically important banks (international and national). The

International Association of Insurance Supervisors (IAIS) is also involved in improving the sustainability of financial institutions by developing the Insurance Capital Standard (ICS) and other supervisory standards.

The key player in achieving the last two goals is the International Organization of Securities Commissions (IOSCO). Together with the Committee on Payments and Market Infrastructures BIS, IOSCO has developed the Principles for Financial Market Infrastructures (PFMI) and recommendations for money market funds (MMFs).

In addition to implementing the principles of financial stability, the FSB constantly monitors the state of national financial systems. The joint IMF – World Bank Financial Sector Assessment Program (FSAP) exists for the same purposes.

The IMF's task is also to coordinate macroeconomic policies in different countries, but the IMF has very limited capacity to directly implement this task because the choice of macroeconomic policy is often a choice between national welfare and reducing external effects for other countries.

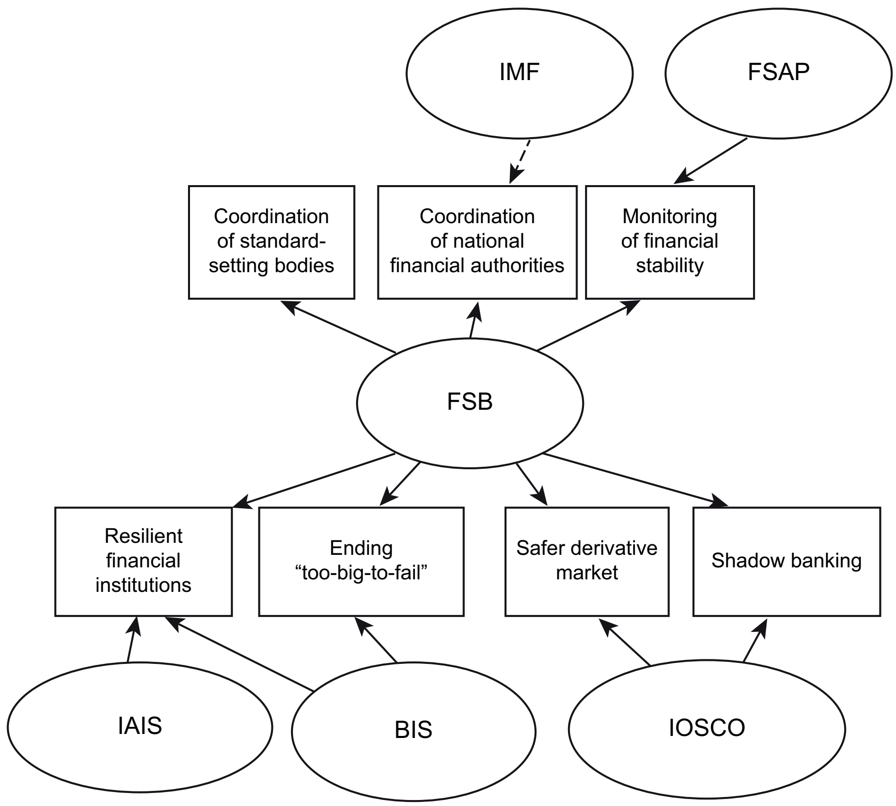

Fig. 1. Financial Stability Institution Structure

Source: Compiled by the authors.

According to the fourth FSB annual report on the implementation of financial regulatory reforms and their effects [FSB, 2018], a new institutional framework for financial regulation has been created over the years and major reforms have been introduced; the financial system has become more stable, but there are still elements of reforms that remain to be implemented.

Most researchers agree that Basel III had a positive impact on the stability of the financial system [IMF, 2018] both in developed economies [Gehrig, Iannino, 2017] and in developing economies [Hossain et al., 2018]. At the same time, economic growth has slowed due to the introduction of the Basel requirements. However, according to a new meta-analysis [Fidrmuc, Lind, 2018], the damage to national economic growth was less than expected: gross domestic product declined by only 0.2% in response to an increase in capital requirements of 1% per year.

According to the same FSB report, "good progress" has been made in the reform of OTC derivatives markets: trade reporting requirements, Central Counterparty Clearing (CCP) systems, margin requirements and capital requirements for derivatives that do not pass through the CCP system have been implemented. Moreover, the regulatory reform of OTC derivatives has had a positive impact on the volume and liquidity of the market. However, the reform is still being implemented, so it is not yet possible to assess the long-term effect.

Improving the stability of non-bank financial institutions is also not completed. IOSCO recommendations for money market funds are being implemented, and an incentive alignment regime for securitization is being introduced. The introduction of regulatory practices for shadow banking is at an early stage due to inconsistent definitions of this phenomenon and the lack of a legal framework, among other factors.

Thus, at present, changes in banking sector regulation are at an active stage and its elements are being rapidly implemented in different countries, while other sectors of the financial markets are receiving much less attention.

Failures of the Financial Stability Institution

The financial stability institution is imperfect. There are a number of so called "failures" – situations in which the operation of the institution leads to an inefficient state, to a certain extent hindering the development of the economy. Among these failures are traditional regulatory failures, such as regulatory capture, failures caused by the operation of the institution itself (bias toward regulation of the banking sector), and failures associated with the implementation of new technologies.

Regulatory capture is a failure common to any regulatory practice, including financial regulation. This is a situation in which the regulator acts not in the public interest (to improve the efficiency of the economy) but in the interests of the stability and profitability of the regulated sector and begins to make decisions based on commercial and even extraneous (that is, political) considerations.

Regulatory capture is considered to have been an important factor in the global financial crisis, both at the national and global levels; after the crisis, the problem persists despite positive changes in global financial regulation [Baker, 2010].

Moreover, as discussed above, the set of measures to improve financial stability has a significant bias toward stricter banking regulation. At the same time, the derivatives market and shadow banking still fall under the minimum regulations. This bias creates three key problems. First, tough requirements for banks, along with high compliance costs [Deloitte, 2017], lead to a reduction in bank lending opportunities and, consequently, to a credit crunch by reducing the supply of loans under the low interest rates. After the global financial crisis, there was an abnormally long credit crunch – the recovery of credit and investment activity took seven years, from 2010–17. Second, the bank lending channel of monetary policy transmission was disrupted because of the credit crunch. The key mechanism of the bank lending channel is to influence the supply of bank loans by affecting deposits, but in the context of the Basel requirements, the effectiveness of this channel is reduced. The third relates to regulatory arbitrage (mostly intersectoral but also cross-country). A significant part of banking assets and many financial activities (market making, derivatives trading) are shifting to the shadow banking sector. Many borrowers use alternative sources of funding: small businesses and companies with short-term financing needs use the opportunities of shadow banking, while large businesses move to the bond market to obtain long-term funding. Reforms to the OTC derivatives market also have side effects. Small companies have difficulty reaching clearing agreements and incur high regulatory compliance costs, so cross-country arbitration occurs [FSB, 2017a].

Another failure of the financial stability institution is the regulation of new financial technologies in general and cryptocurrencies in particular. Fintech blurs the boundaries between financial markets and reduces the cost of financial transactions and barriers to market entry. It is likely that a significant part of the financial services currently provided by the banking and non-banking financial sectors will be replaced by services using new technologies (machine learning, predictive analysis, decentralized networks, blockchain and others). For example, in 2019, Facebook tried to launch the Libra cryptocurrency as part of the Libra payment system but faced intense opposition. Jens Weidmann, the president of the Bundesbank and ECB board member, called on eurozone banks to fight Libra [Gordon, 2020]. The U.S. Congress and the European Commission also made claims. According to Bloomberg, in early 2020 Facebook decided to reorient the Libra payment system to work with various digital currencies [Light, Bain, Kharif, 2020].

Fintech is developing rapidly but the financial stability institution cannot respond to innovations in a timely and adequate manner. A report published in 2017 by the FSB states the following: "The Financial Stability Board has developed a concept that defines the scope of activities using financial technologies, as well as the potential benefits and risks to financial stability. This will provide the basis for future analysis and monitoring" [2017b]. In other words, the FSB has admitted its inability to keep up with innovations, and the situation has not improved over the past two years.

Thus, the structure of the global financial system is changing under the influence of tools that are supposed prevent a potential shock. However, the possible reaction of the global financial system to a possible shock is also changing as the system's vulnerabilities are shifting [Knight, 2018].

Sources of financial instability, actions taken to address this instability, and the consequences are presented in Table 1 (positive consequences are highlighted in bold and negative consequences in italics; neutral consequences are not highlighted).

Many researchers and experts regularly criticize the governance within the organizations of the financial stability institution and their coordination. The non-governmental organization New Rules for Global Finance described the quality of global financial management as "inadequate, unsatisfactory." The criteria for evaluation were transparency, inclusiveness, accountability and responsibility; the G20, the FSB, the IMF and the World Bank were evaluated. The same organization in the same year described the impact of global financial regulation as very limited, especially in poor countries. The European think tank Bruegel also claimed in 2014 that the G20 failed to establish an adequate financial institutional infrastructure [Véron, 2014].

The debate over the quality of global financial regulation continues. Some experts disagree with the characterization of regulation as unsatisfactory [Sheets, 2017]. Other experts only partially agree that financial regulation has a limited impact [Knight, 2018]. At the same time, the U.S., being the largest source of capital, has several separate, poorly coordinated financial regulatory bodies whose decisions have had global consequences. Either way, it is unlikely that this source of uncertainty will disappear.

Further harmonization of financial regulation practices and financial standards can be expected in the future. The bias toward the banking sector is likely to continue. In particular, the implementation of the final elements of Basel III (detailed principles for assessing market, operational and credit risk) is perceived by the market as Basel IV [KPMG, 2018] due to the high potential costs for banks to implement additional requirements.

Table 1. Sources of Financial Vulnerabilities, Actions and Consequences

Source of Vulnerability	Actions	Consequences
Banking sector	Basel II, Basel III	**Financial stability has improved**
		Credit crunch. Lower efficiency of the bank lending channel. Regulatory arbitrage (lenders and capital shift to the debt market and shadow banking sector)
Derivatives	Increased transparency. Encouraging the CCP	**Reducing counterparty credit risks. Reducing systemic risk. Narrowing of spreads**
		Compliance costs
Shadow banking	Monitoring	Growth of the sector due to the reduction of the banking sector
Fintech	Analysis	**Lower transaction costs**
		Uncontrolled development
		Unsupervised risk source

Source: Compiled by the authors.

The high cost of regulatory compliance in the banking sector has to some extent displaced financial innovation in the less regulated shadow banking sector.

The model of global financial governance has significantly transformed with the introduction of a new institutional environment. Evaluating the effectiveness of the new model is difficult enough; we will never be able to say with certainty whether the financial system has become more resilient thanks to the work of this institution or in spite of it, or whether it has become more resilient to any particular shocks or to all of them. However, we can suggest some steps that will help improve the institution of financial stability in one way or another.

Other Sources of Problems for Financial Markets

Combating Money Laundering and the Financing of Terrorism (AML/FT). Money laundering – concealing the origin of illegally obtained income, usually through transfers through foreign banks or legal businesses – has been considered a problem for decades. Since 2000, the global anti-money laundering system has gradually shifted the burden of proving illegal activities from law enforcement agencies to financial institutions.

The main actor in the global fight against money laundering is the Financial Action Task Force (FATF), formed in 1989 by members of the Group of 7 (G7) and currently including 36 countries and two international organizations. FATF is an international organization, the goal of which is to develop and promote international action against money laundering. Since October 2001, the FATF was also included in the fight against the financing of terrorism. The FATF is currently drafting international legislation and developing national legislative and regulatory reforms to combat money laundering and the financing of terrorism. To date, FATF has developed 40 recommendations related to money laundering and nine recommendations related to the financing of terrorism. Countries that do not fully comply with the FATF recommendations may be pressured by the organization, which may recommend that member countries end relations with the non-compliant country's financial and non-financial institutions (this is the case, for example, for North Korea and, to a lesser degree, Iran).

Multi-million-dollar fines for major banks (such as Deutsche Bank or Société Générale, as well as "cleaning up" the banking systems of Latvia and Cyprus) for violations of legislation and international agreements on ATM, as well as the potential revocation of the license, provide incentives for full compliance with the law. Financial institutions find it extremely necessary to avoid suspicion and reputational risks.

Emerging economies are also under pressure – agreements oblige them to introduce similar rules at the national level. As a result, the cost of compliance and the number of employees required have increased significantly, as well as the difficulty of obtaining financial services for clients using the know-your-client (KYC) practice: in accordance with FATF requirements, information about each client of a financial institution must be analyzed in detail; every suspicious transaction must be reported.

Another problem is the emergence of blacklists with millions of potentially toxic companies and individuals who cannot receive traditional financial services due to complex procedures. It is becoming a global problem as data exchange between organizations and countries increases. Procedures for mutual inclusion on blacklists and rehabilitation of their participants are still in the embryonic stage.

Tax Evasion. National tax authorities cooperate with each other to prevent tax evasion but the global exchange of tax data and the introduction of requirements for financial institutions to verify suspicious transactions are relatively new. In the United States, FATCA (Foreign Account Tax Compliance Act), the law on tax reporting on foreign accounts, was adopted in 2010 for this purpose. FATCA provides serious penalties for foreign financial institutions that do not report the financial activity of American clients. For foreign financial institutions that do not comply with strict disclosure requirements, a 30% U.S. tax is imposed on all payments from the United States. FATCA defines foreign financial institutions extremely broadly – all possible types of financial institutions outside the U.S. fall under the definition. Foreign financial institutions are required to report directly to the Internal Revenue Service.

Almost all countries have signed the FATCA agreement, including countries that are under U.S. sanctions. FATCA and similar laws have a very limited impact on tax collection efficiency but impose additional regulatory burdens and pressure on financial institutions: on average, the compliance burden is about 1.2% of a financial institution's assets [Belnap, Thornock, Williams, 2018].

Sanctions and Countersanctions: A New Source of Costs and Regulatory Demands. Financial sanctions – such as the ban on financial transactions – have a long history. They were actively used during the Cold War and involve pressure on other countries to change their policies. In recent years, the importance of sanctions has increased significantly. Both the European Union (EU) and the U.S. use a wide range of bans and restrictions against Iran, Russia and, to a lesser extent, other countries for actions unrelated to the financial sector. Sanctions are imposed unilaterally, but the choice of measures is not transparent and is poorly regulated, even between countries that impose sanctions.

In this situation, financial institutions are forced to adjust their business practices and risk-sharing decision-making processes to avoid not only prohibited transactions but also potentially toxic transactions in the future. This itself increases compliance costs and requires the creation of an expensive and slow-functioning internal infrastructure to deal with the regulator in complex cases. At the national systemic level, alternative infrastructures (such as payment systems) need to be maintained or created to avoid possible impediments to financial flows.

Such violations (real or expected) and uncertainty increase costs for business and regulation, even in jurisdictions that are not directly sanctioned. For example, Chinese banking institutions are experiencing difficulties due to anti-Russian sanctions. To comply with the sanction regime and national requirements, regulators and Chinese banks block and cancel Russian transactions, close bank accounts and delay the payment verification procedure. In accordance with U.S. requirements, sanctions must be imposed on every company with at least 50% participation of the person or company under sanctions. Also, sanctions should be imposed on every individual or legal entity that "was aware of and facilitated a significant transaction for or on behalf of one of the sanctioned individuals." Assessing the risk of approving a Russian transaction for Chinese banks is difficult – it requires additional resources and knowledge of the Russian market and affiliations. In this situation, of course, Russian banks and companies are primarily affected, but there are losses on the Chinese side too.

The Impact of the Coronavirus Pandemic on the Regulation of Financial Markets

In the first quarter of 2020, the World Health Organization (WHO) announced a coronavirus pandemic, which led to a downturn in the economy at the time of writing and will lead to a global economic crisis in 2020 and possibly 2021.

The probability of a banking system collapse is low. On the one hand, regulation of the banking sector has increased its resilience to various kinds of shocks, while on the other hand, in March 2020, central banks around the globe announced the easing of monetary and regulatory measures aimed at providing financial markets with abundant liquidity. Ultra-low or negative interest rates significantly reduce costs of servicing debt. Such rates are observed in all markets of developed countries, while in emerging markets rates are historically low and receding.

The credit cycle of developed countries is likely to return to a period of credit crunch. Under the lower rates on government debt, yields on corporate bonds and loan rates have increased both in relative and absolute terms (outside of special government programmes to support businesses). Artificial restriction of demand due to the imposition of measures against the spread of the epidemic and the forced shutdown of economic activity will cause significant damage to small- and medium-sized businesses and large companies of various sectors. In conjunction with the policy of near-zero or zero interest rates, it will increase the degree of credit crunch and complicate overcoming this state after the crisis.

In government support programmes, including concessional loans, credit resources will be rationed, not through interest rates or risk assessment, but through non-financial instruments. A side effect of a viral recession ("pandecession") could be a radical increase in the share of the state and its agents in the credit market, even in those countries that managed to avoid this in 2008–10.

The probability of deoffshorization of national economies increases. Withdrawing capital from offshores will lead to a more even distribution of risks in the economy, reducing the number of high-risk assets in "financial casinos." The volatility of capital flows between developed and developing economies is also likely to decrease.

The pace of fintech development will increase. The industry is almost guaranteed to benefit from the crisis, and its recovery has already begun. According to a study by deVere Group, the use of financial applications in Europe increased by 72% in the last week of March [2020].

Ways to Modernize Financial Market Regulation

Decentralization of Financial Regulation. Small economies with developed financial markets do not have enough incentives to resist systemic risk, because they can benefit from regulatory arbitrage and at the same time avoid large losses if a financial crisis occurs. As mentioned earlier, financial stability is a common-pool resource, so there is a "tragedy of the commons." Nobel laureate Elinor Ostrom has proven that small groups can manage resources efficiently and sustainably. Perhaps two-party or group agreements (if the group size is small) can work successfully not only for pastures but also for financial markets.

In contrast to the multilateral approach to financial regulation, agreements between a small number of countries can be reached and updated much faster, which means that they can respond to innovations in a timely manner. The jurisdictions that will be most affected in the event of a financial crisis should take a proactive position and formulate requirements for a particular financial market. In this case, these countries will be able to insist on extending these requirements to other jurisdictions directly or through organizations of the financial stability institution.

Ostrom also formulated the necessary conditions for the stability of such agreements: clarity of the law, unambiguous decision-making procedures, and rules for conflict resolution [2015]. Therefore, the financial stability institution should play a serious role in this process by creating a transparent institutional environment.

Thus, in the current institutional framework, financial regulation in small groups would be effective. One example of such a small group is the Eurasian Economic Union (EAEU).

At the moment, the EAEU is working on the concept of a common financial market, which involves the gradual harmonization of legislation in financial markets of EAEU states (including the harmonization of requirements for financial market participants, the creation of a single exchange space and the creation of a single supervisory authority). The banking sector, which dominates the institutional structure of the financial markets of EAEU members, was chosen as the priority sector for the first stage of the formation of the common financial market. However, it is expected to develop a common approach to regulating all sectors of the financial market, up to the regulation of cryptocurrencies.

The pandecession further contributes to the decentralization of financial regulation. Closing borders as part of measures to reduce the spread of the virus will reduce the volatility of capital flows and reduce the degree of regulatory arbitrage. However, opening borders may trigger a new wave of capital movements, so harmonization of financial regulation remains necessary.

Self-Regulation. Self-regulation is one of the most effective elements of regulation in financial markets. A self-regulating organization (SRO) is a non-profit organization that unites industry participants and is able to respond more quickly and effectively to changes in financial market practices or the external environment. Setting standards and requirements that are appropriate to existing business practices will ensure that such requirements are met at a higher level. The state regulator must ensure a balance between supervision of SROs and a certain freedom of action for them to work effectively.

The creation of international SROs for the largest participants in financial markets will ensure effective financial management at the micro level.

One example of a successful international self-regulatory organization is the International Swaps and Derivatives Association (ISDA). The main goals of the Association are to reduce coun-

terparty risk, increase transparency in the relevant financial market sector, and improve the institutional environment in the OTC derivatives market. The Association has developed standardized terms for OTC swaps and derivatives contracts, which are successfully used by more than 900 market participants from 71 countries.

The Financial Regulatory Sandbox. The "sandbox" is a special legal regime established by the financial regulator for testing financial innovations in a controlled environment. The main goal of the sandbox is to find a balance between reducing risks, suppressing economic growth, regulatory compliance costs, and protecting consumers' rights in new, mostly financial and technological business models. The first financial regulatory sandbox was created in the UK in 2016 to support disruptive financial innovation [FCA, 2015]. To date, more than 25 countries have created or are planning to create similar sandboxes.

Financial regulatory sandboxes can help improve communication between the regulator and firms implementing financial innovations to establish an optimal legal regime for such firms. Moreover, financial regulatory sandboxes encourage operation and innovations of fintech companies in financial markets.

When economic activity is restricted or suspended as part of the response to the coronavirus pandemic, it is important to avoid suspending regulatory sandboxes as much as possible (at the time of writing, no country has suspended sandboxes).

Regulatory Technologies (Regtech). The rapid evolution of technology not only creates problems for financial regulation but also offers solutions. Modern technologies can simplify financial regulation in the context of regulatory monitoring, information provision and compliance.

A key area of focus for regtech today is compliance with the requirements of AML legislation and the KYC rule. In addition, regtech makes it easier for prudential regulation authorities to comply with disclosure requirements: the amount of information that needs to be disclosed every day is huge for a large bank, and modern technology makes it possible to automate this process. Thus, regtech allows for a significant reduction of the cost of disclosure and compliance.

Regtech will soon be able to eliminate the regulatory capture by implementing automated data access and automated data management and analysis. Perhaps in the future, regtech will allow for the setting of financial standards in accordance with a proportional approach, considering risk factors [Arner, Barberis, Buckey, 2017].

New Sources of Capital. Finding new sources of capital outside the EU and the U.S. may be a solution to problems for countries that are under varying degrees of sanctions pressure. New development banks are an example of such capital – they can help reduce the negative consequences of the sanctions regime in the future but at present they often make it difficult to effectively regulate the financial system.

Reducing the Regulatory Burden on Pandecession. The current economic crisis is of a non-financial nature, so there is no problem of moral hazard in helping banks – the crisis in the financial sector is not associated with excessively risky behaviour of banks or lack of regulation. Reducing the regulatory burden on the banking sector, along with other incentives for the financial sector, will help the economy recover from the crisis. This is also the position of the BIS: "banks should be part of the solution, not part of the problem," said Agustín Carstens, director general of the BIS [2020].

Conclusion

Regulatory practices in the last decade, armed with new technologies, have developed remarkably, which can significantly reduce the level of risk for financial institutions. However, the absence of major financial shocks since 2009 is more a result of low interest rates and relaxed fiscal policies in major markets than an accomplishment of better governance. We are seeing major economies diverge in their approach to regulating financial markets while maintaining one common trend – rising regulatory compliance costs. For more than a decade, the media and public have viewed the financial sector not as a source of development opportunities but as a swamp that needs to be drained, leading to even greater concern about the potential risks of transactions that were considered routine a few years ago.

In the nearest future, it is likely that regulatory practices will gradually be coordinated and harmonized, as will the requirements of legislation to combat money laundering and the financing of terrorism, and financial standards for regulators and major institutions will be established. At the same time, technology will allow some sectors of financial markets to move away from regulation into unregulated areas of operation.

The pandecession will strengthen some trends – the credit crunch, harmonization of regulatory practices, and the development of fintech. Other trends will likely slow down – the pressure on the banking sector will ease, and the problem of combating money laundering and terrorist financing most likely will lose priority status.

There is a set of measures that can help regulate financial markets more effectively. The first is continued harmonization of rules and practices by proactive regulators and greater reliance on modern technologies and self-regulation. The Basel requirements are one of the directions. Another step, which will require the cooperation of large institutions, is the unification of standards for evaluating clients and creating client profiles that can be transferred to different markets. Standardization can allow far more efficient use of huge data flows.

Second, methods of dealing with distressed financial institutions that created significant problems in 2008–09 and during the Greek debt crisis in the eurozone should be unified. Systemically important, too-big-to-fail banks and investment companies must not only comply with additional capital requirements but also, in the event of a systemic crisis, methods of working with such organizations must be coordinated. In the context of an economic crisis of a non-financial nature, the pressure on systemically important financial institutions should be relaxed and coordinated.

Third, modern technologies make it possible to improve the approach to risk assessment, and thus it would be effective for financial institutions to rely on independent risk management tools, such as rating agencies, to identify problem areas. However, in this case, additional measures should be applied to protect the independence of such instruments.

Finally, creating alternative infrastructure to reduce the impact of sanctions – although this is likely to be a difficult process – or creating more transparent and specific rules for setting them will help reduce the risks for financial institutions and their clients.

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