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THE BANKING SYSTEM OF THE UK: ANALYSIS AND MODELLING

Abstract. The paper deals with the analysis of the banking system of the UK. The UK banking sector is quite diverse, and at the same time oligopolistic. The UK exit from the EU is already having a negative impact on main banking indicators. Uncertainty in the banking sector and among the business community is, definitely, very high. This means that banks will have to work on potential and alternative outcomes, depending on their development. The impact of Brexit on banks and banking in the UK will be determined by both government-level arrangements and the response of individual firms to operating conditions changes. At the same time, the realities of the banking environment after the crisis of 2008—2009 mean that it is necessary not only to strengthen market discipline, but also to avoid excessive proliferation and diversification of commercial banks and concentration of the banking system. The post-crisis environment is characterized by a decrease in the number of commercial banks in the UK. However, the reduction in the number of banks does not prevent an increase in the value of the banking system's assets and an improvement in their quality. Moreover, the paper explores the crisis of 2008—2009 impact on the functioning of the UK banking system (loans to monetary financial institutions, loans to non-monetary financial institutions, loans to non-monetary financial institutions, loans to the central government, deposits of monetary financial institutions, deposits of non-monetary financial institutions, central government deposits). For this purpose, the system of six vector models of autoregression has been constructed. The results of the simulations have shown that all variables have similar dynamics after the crisis shock, except for central government deposits. In the future, the leveling of the shock is observed for these variables starting from the fourth year. There is only an increase in central

government deposits, starting from the second year after the shock The other variables do not respond to the crisis shock.

Keywords: financial crisis, banks, bank assets, bank liabilities, problem loans, econometric modelling, VaR-models.

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БАНКІВСЬКА СИСТЕМА ВЕЛИКОЇ БРИТАНІЇ: АНАЛІЗ І МОДЕЛЮВАННЯ

Анотація. Присвячено аналізові банківської системи Великої Британії. Показано, що її банківський сектор є достатньо різноманітним і водночас олігополістичним. Вихід цієї країни з ЄС уже негативно вплинув на основні банківські показники. Крім того, невизначеність у банківському секторі та серед бізнес-спільноти, безумовно, є дуже високою. Це означає, що банкам доведеться працювати над потенційними та альтернативними результатами залежно від їхнього розвитку, а вплив Brexit на банки і банківську діяльність у Великобританії визначатиметься як угодами на урядовому рівні, так і реакцією окремих фірм на зміни умов діяльності. Водночас реалії банківського середовища після кризи 2008—2009 років означають, що потрібно не лише посилити ринкову дисципліну, а й уникати надмірного розповсюдження та диверсифікації комерційних банків і концентрації банківської системи. Посткризове середовище характеризується зменшенням кількості комерційних банків у Великобританії. Однак скорочення кількості банків не перешкоджає зростанню вартості активів банківської системи і поліпшенню їхньої якості. Крім того, досліджується вплив кризи 2008—2009 років на функціонування банківської системи Великобританії (позики грошово-кредитним фінансовим

установам, позики монетарним фінансовим установам, позики немонетарним фінансовим установам, позики центральному урядові, депозити грошово-кредитних фінансових установ, депозити немонетарних фінансових установ, депозити центрального уряду). Для цього була побудована система із шести векторних моделей авторегресії. Результати моделювання засвідчили, що всі змінні мають подібну динаміку після кризового шоку, за винятком депозитів центрального уряду. Нівелювання впливу цього шоку характерна для більшості показників, починаючи з четвертого року. Спостерігається тільки збільшення депозитів центрального уряду, починаючи з другого року після шокової дії. Інші змінні не реагують на кризовий шок.

Ключові слова: фінансова криза, банки, банківські активи, пасиви банку, проблемні кредити, економетричне моделювання, VaR-моделі.

Формул: 6; рис.: 6; табл.: 1; бібл.: 30.

Introduction. The UK banking sector is unique in its size and diversity. Based on long historical experience, a competitive environment that does not contradict the financial sector stability goals, has been created. The improvement in the architecture of the UK banking system has resulted in the removal of a number of legal obstacles. Today, out of the 16 clearing banks, that operated in 1960, 15 are owned by four major UK banking groups: RBS, Barclays, HSBC and Lloyds Banking Group. These banks, along with Nationvide and Santander, account for almost 80% of UK loans and deposits. Such consolidation of banks in recent decades has led to the «universality» of banking institutions that offer a wide range of services, including securities trading, derivatives, general insurance, etc., which can be explained by globalization, financial innovations, technological progress.

We believe that building a strong, stable banking system, which redistributes capital in the economy optimally, is the key to economic growth in any country. That is why central banks must continue increasing public confidence in banks, create a competitive environment for the efficient operation of banks and effectively address the issue of restructuring distressed assets.

Literature Review. Foreign and domestic scientists have made a significant contribution to the development of the theory and practice of banking systems.

In particular, J. Schumpeter put the role of financial intermediation at the center of economic development. He claimed that financial intermediation through the banking system plays a key role in economic development, influencing the distribution of savings, thereby improving productivity, technical change, and economic growth (Schumpeter, 2008). In addition, banks play a central role in the development of any economy, mobilizing resources for productive investment and being the leader of monetary policy (Sanusi, 2011).

A significant amount of scientific research is devoted to the impact of banks globalization on financial stability; regulatory environment of banks; competitiveness of banking systems; central banks and their impact on the country's financial system. There are also studies on the impact of Brexit on the banking activities of the United Kingdom and the European Union in general, and so on.

In particular, Haiyan Yin (Yin, 2019) studied the impact of banks globalization on financial stability. He claimed that the presence of foreign banks increases both the credit risk and the overall risk of bankruptcy of banks, as well as threatens the financial stability of the host country. However, this relationship depends on the regulatory and institutional framework of the host country. The adverse effects of foreign banks can be mitigated when the host country has more restrictions on fee-generating activities, less stringent capital requirements, more guidelines for asset diversification, a single supervisory authority, fewer state-owned banks, and so on.

Henry S. Terrell, Robert S. Dohner and Barbara R. Lowrey (Terrell et al., 1990) analyzed the activities of Japanese banks in the United States and the United Kingdom by integrating their activities in these two markets with the regulatory environment for Japanese banks and the overall external financial condition of Japan, as well as with business opportunities in the two host countries. In conclusion, the regulatory environment in Japan, including interest rate restrictions and possible quantitative restrictions, has affected the performance of Japanese banks in these two foreign markets.

Klaus Schaeck, Martin Cihak and Simon Wolfe (Schaeck et al., 2009) found that more competitive banking systems are less prone to systemic crises and show an increase in time to crisis. This result occurs even when we control the concentration of the banking system, which is associated with a greater likelihood of crisis and less time before the crisis. Their results show that competition and concentration cover different characteristics of banking systems, which means that concentration is an inappropriate indicator of competition. The findings suggest that policies that promote competition between banks, if implemented effectively, can improve systemic stability.

Ray Barrell and Dilruba Karim (Barrell, Karim, 2020) concluded that attempts to increase competition in banking, while welcomed for welfare reasons, should be accompanied by higher capital standards.

According to Yaseen Ghulama and Jana Doering (Ghulam, Doering, 2018), the recent financial crisis has shown that the relationship between different types of institutions leads to the transfer of risk between them, and hence an increase in systemic risk. For the United Kingdom, it is shown that the magnitude of risk transfer is similar to that observed for Germany. However, British insurance companies are less prone to distribution by hedge funds, but suffer more from the risks transferred by banks, indicating the possible consequences for policy-making. In general, the increase in the spread of risk in unstable times is impressive and suggests adapting future regulations to this phenomenon.

After studying the theories that explain the independence of the central bank, Michael Tager (Tager, 2007) examined how well they are applied in Britain and concluded that British constitutional reforms and political imperatives, backed by world events, best explain the 1997 reform of the Bank of England. However, he made reservations about the trend towards central bank independence.

Rachel Reeves and Michael Sawicki (Reeves, Sawicki, 2007) considered the reaction of the UK financial markets to the actions of the Bank of England. They claimed that asset prices respond to a formal announcement if it informs market participants of policy propensity, economic prospects and risks. They found evidence that the publication of the minutes of the Monetary Policy Committee and the inflation report have a significant impact on interest rate expectations in the near future.

The banking sector plays an important role in the UK economy as a whole, and investors becoming are more and more concerned by the ability of banks, located in the UK, to confront the effects of such great uncertainty as Brexit. In their study, Miia Chabot, Jean-Louis Bertrand and Eric Thorez (Chabot et al., 2019) on the resilience of the UK financial system, identified banks and groups of banks that could disrupt the system, in the hope that their research will help identify priority areas for regulators and managers.

At the same time, a decrease in the volume of loans in the syndicated market in the UK after the Brexit vote was recorded. The decline in lending, according to Tobias Berg, Anthony Saunders, Larissa Schäfer and Sascha Steffen (Berg et al., 2021) has led to a comprehensive decline in demand from British firms. Changes in the GDP forecast around the Brexit vote explain about a 61% decline in lending. However, they did not find indicators, as the UK is losing its privacy as a financial center for cross-border lending. They also claim that their results indicate the stability of global financial centers in the face of major emergencies.

However, scholars Anton Filipenko, Olena Bazhenova, Maryna Korol and Mariana Stegney (Filipenko et al., 2020), claim that the share of problem loans in total loans has risen sharply in the UK, Eurozone (remains quite high in Italy and Spain) and the US.

Xosé Luís Fernández, David Paz-Saavedra and Pablo Coto-Millán (Fernández et al., 2020) convince us that Britain's withdrawal from the European Union opens an unprecedented scenario for the UK and the EU economies. One of the sensitive issues concerns the banking sector. Their performance examines the impact of the Brexit referendum on the bank's efficiency. The Stochastic Frontier Analysis (SFA) method was used to estimate the input-oriented remoteness function for 56 leading banks in the United Kingdom and Ireland for the period 2007—2016. The results showed that the uncertainty created by the 2016 referendum had a negative impact on the banking sector. The loss of efficiency is estimated at 5.6% for UK banks and 3.7% for Irish banks.

Methods and methodology. Let us consider the impact of the crisis on the main indicators of the functioning of the UK banking system (*Table*).

Table

**Statistical characteristics of variable models that reflect the sensitivity
of the main indicators of the UK banking system to the impact of crisis factors**

	CRED_MFI _UK	CRED_GOV _UK	CRED_NON_ MFI_UK	DEP_MFI_ UK	DEP_NON_ MFI_UK	DEP_GOV _UK
Average	1145766.	15901.70	2721525.	979915.8	2546705.	14547.60
Median	1142889.	13987.50	2861539.	931552.5	2699877.	11780.00
Maximum	1866575.	28336.00	3225478.	1895556.	3336571.	41266.00
Minimum	563346.0	10332.00	1826734.	573786.0	1537164.	6088.000
Standard deviation	292164.4	5704.284	410969.6	307500.1	589288.4	8928.915
Asymmetry	0.200169	1.108911	-0.900594	1.369948	-0.477385	1.817147
Excess	3.644338	2.734818	2.581693	5.063242	1.845295	5.527363
Criterion Jacques-Bera	0.479535	4.157549	2.849385	9.803334	1.870773	16.32971
Probability	0.786811	0.125083	0.240582	0.007434	0.392434	0.000284

Source: own calculations of authors.

The following variables are used in the models (in millions of euros):
cred_mfi_uk — loans to monetary financial institutions;
cred_non_mfi_uk — loans to non-monetary financial institutions;
cred_gov_uk — loans to the central government;
dep_mfi_uk — deposits of monetary financial institutions;
dep_non_mfi_uk — deposits of non-monetary financial institutions;
dep_gov_uk — central government deposits,
crisis — a dummy variable that takes the value «1» from 2008 to the 1st quarter of 2009 and «0» in other periods.

For modeling we use annual data for 2000—2019. The table below shows the descriptive statistics of these variables, as well as the Jacques — Bera statistics and the corresponding *p*-values for testing the normal distribution.

Testing of these variables for unit root based on the Dickey — Fuller test has showed that almost all variables are first-order integrated, except for the variable *dep_gov_uk*. Therefore, the differences of these variables have been used in the models.

Thus, six vector models of autoregression were built to analyze the impact of the crisis of 2008—2009 on indicators that characterize the functioning of the UK banking system:

$$Z_{1,t} = B_{10} + B_{11}Z_{1,t-1} + B_{12}Z_{1,t-2} + \eta_{1t}, \tag{1}$$

$$Z_{2,t} = B_{20} + B_{21}Z_{2,t-1} + B_{22}Z_{2,t-2} + \eta_{2t}, \tag{2}$$

$$Z_{3,t} = B_{30} + B_{31}Z_{3,t-1} + \eta_{3t}, \tag{3}$$

$$Z_{4,t} = B_{40} + B_{41}Z_{4,t-1} + \eta_{4t}, \tag{4}$$

$$Z_{5,t} = B_{50} + B_{51}Z_{5,t-1} + B_{52}Z_{5,t-2} + \eta_{5t}, \tag{5}$$

$$Z_{6,t} = B_{60} + B_{61}Z_{6,t-1} + \eta_{6t}, \tag{6}$$

where $Z_{1,t} = (d(cred\_mfi\_uk)_t, crisis_t)$, $Z_{2,t} = (d(cred\_non\_mfi\_uk)_t, crisis_t)$, $Z_{3,t} = (d(cred\_gov\_uk)_t, crisis_t)$, $Z_{4,t} = (d(dep\_mfi\_uk)_t, crisis_t)$, $Z_{5,t} = (d(dep\_non\_mfi\_uk)_t, crisis_t)$, $Z_{6,t} = (dep\_gov\_uk_t, crisis_t)$ — vectors of endogenous variables, B_{10}, B_{20}, B_{30}, B_{40}, B_{50}, B_{60} — constants, B_{1j} $(j = \overline{1,2})$, B_{21}, B_{22}, B_{31}, B_{41}, B_{51}, B_{52}, B_{61} — coefficient matrices, η_{1t}, η_{2t}, η_{3t}, η_{4t}, η_{5t}, η_{6t} — vectors of perturbations.

The number of lags (the order of vector models of autoregression) was determined on the basis of minimizing the values of the information criteria of Akaike, Schwartz and Hannan — Quinn.

The analysis of the values of the inverse roots of the AR characteristic polynomial testified to the stationarity of the constructed vector models of autoregression to study the sensitivity of the main indicators characterizing the functioning of the British banking system to crisis disturbances.

Thus, based on constructed VAR models, we will analyze the response of indicators characterizing the functioning of the UK banking system to the crisis shock.

To do this, we are going to construct the functions of the impulse response to the perturbation in one standard deviation of Cholesky.

Results. The UK banking sector includes retail and commercial banks that focus on safekeeping, lending and payment services, as well as investment banks that help institutional clients accumulate capital and participate in securities and derivatives transactions. Most UK deposit banks are universal and combine a range of services provided by retail, commercial and investment banks, but the ring-fencing regime has in recent years encouraged these groups of banks to structurally allocate retail and investment banking.

Following the financial crisis, the United Kingdom introduced an internal banking restriction regime to separate riskier investment activities from retail banking. The main goal was for large retail banks to be less likely to fail, otherwise government support could be used to save the retail bank in a wider group without directing taxpayers' money to rescue an investment bank within one group. During this period, the UK banking sector faced many challenges: low interest rates reduced profits due to the spread between deposit and loan rates, competition between small retail banks and fintech firms increased, and the provision of «free» bank accounts puts pressure on banks and provokes them to receive an income from other services.

From a regulatory point of view, banks had to deal with increased capital requirements, the requirement to create comprehensive recovery and settlement plans, the requirements for the «ring fence» regime. Increased attention to governance and accountability of senior management, MiFID II (Directive 2004/39/EC of the European Parliament and of the Council on Markets in Financial Instruments), Brexit and the reform of the LIBOR rate – all these aspects require banks to allocate significant resources that in other case could be used to do business (Nihaus, Johnston, 2019). Despite these difficulties, in recent years the growth in the number of credit and monetary financial institutions in the UK has resumed (*Fig. 1*).
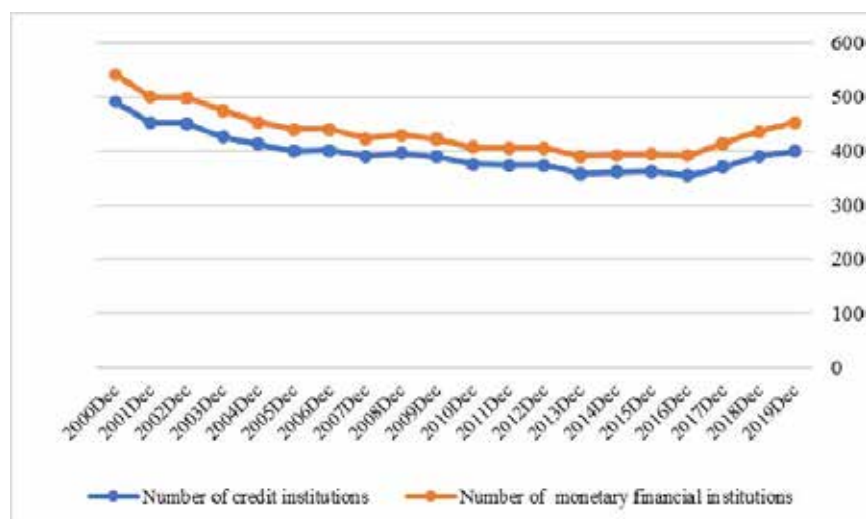

Fig. 1. **Number of credit and monetary financial institutions
in Great Britain, 2000—2019**

Source: Data Source in SDW: null, 2019.

Note: in our study, the analysis is based on MFI balance sheets (excluding the central bank), which also include detailed indicators: UK-owned MFIs (UKIN); other EU-owned MFIs (OTEU); US-owned MFIs (USAN); Japanese MFIs (JAPN); other MFIs owned by developed countries. These include OECD member countries and the Republic of South Africa (ODEV); MFIs owned by other countries (OTHE) (Further details about Monetary financial institutions (excluding central bank) balance sheets-groups data, 2019).

Consumer banking services are traditionally provided in branches, but since 2000 there has been a noticeable tendency to close them (*Fig. 2*).
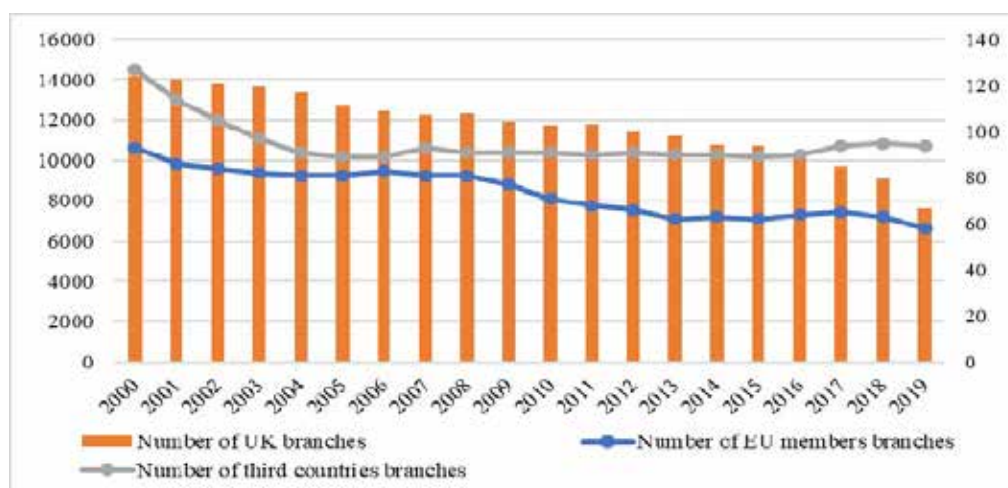
Fig. 2. **Dynamics of the number of branches in the UK, 2000—2019**
Source: built on the basis of (Banks and building societies 2010 to 2018, 2019; Data Source in SDW: null, 2020; Further details about other banks' balance sheet (until December 2009) data, 2019).

The prerequisites for such a process are: reduction of costs by banks; mergers within the industry; competitive pressure from new entrants to the banking sector; the growing popularity of Internet banking; reducing the use of funds; reduced use of checks and less use of cash. Despite the availability of alternative ways to access banking services, branch closures still remain controversial. Many customers value face-to-face services, and some people do not have access to alternatives online.

The government's policy on closing bank branches is discussed in detail in the House of Commons Reference Document — «Bank branches: why are they closing and what is the impact?». According to this document, banks are related to «Access to Banking Standards», which came into force in May 2017. The main purpose of the standard is to ensure that customers and stakeholders of the closing bank branch receive clear and accessible documentation and information on specific closure, as well as proposals for further work with the bank in the event of termination of the activities of a branch. The standard does not require banks to disclose the number of branches opened or the number of branches they have closed. Thus, there is no official source for statistics on bank branches and branch closures (Bank branch and ATM statistics, 2021).

Until 2009, consolidated data on the portfolio of assets and liabilities of banking institutions included indicators of institutions that are authorized to raise deposits in accordance with Part 4 of the FSMA (Financial Services and Markets Act 2000) but are not: credit unions; firms that are allowed to accept deposits only when concluding insurance contracts in accordance with this permit; friendly societies; construction companies (Further details about other banks' balance sheet, 2019). Following the transfer on January 1, 2008 of the statistical reporting of construction companies from the FSA (Financial Services Authority) to the Bank of England, the consolidated balance sheet includes indicators of construction companies from the first quarter of 2009, which were previously separated (Further details about Monetary financial institutions (excluding central bank) balance sheets-groups data, 2019).

On June 1, 1998, the statutory Cash ratio deposits scheme came into force, under which both banks and construction companies with an average liability of £400 million or more are required to hold interest-free deposits in the Bank of England of 0.15% of their commitments amounting to more than 400 million pounds. From June 1, 2004, the threshold was raised to 500 million pounds, and from June 2, 2008 the percentage was reduced to 0.11%. As of June 3, 2013, the liability threshold has been raised to 600 million pounds. The Cash ratio deposits level of each institution is calculated twice a year (now — in May and November) at 0.18% of liabilities for the previous six months, exceeding 600 million pounds (Further details about Monetary financial institutions (excluding central bank) balance sheets-groups data, 2019).

According to a central bank report, with more than £1 trillion in high-quality liquid assets, leading UK banks can meet their obligations for many months without access to wholesale financing or exchange markets (Financial Stability Report July 2019, 2020, p. ii).

The capital positions of large banks in the UK have been stable since early November 2018. At the beginning of 2019, the banking system maintained the level of Tier 1 capital of about 17% of assets, which is more than three times higher than before the global financial crisis. Assets of the UK banks have not become more risky after the stress tests of 2018 (Financial Stability Report July 2019, 2020, p. 12).

Like other countries, the significant growth of the UK banking assets since the early 2000s has extended the impact of financial activities to all sectors of the economy. Assets rose from 1.2 trillion pounds in 1990 to a record high of 6.9 trillion pounds in 2007. An active factor in this growth was the huge increase in domestic assets, including borrowing by households and the corporate sector (discussed below), and continued foreign banks penetration into the UK banking system and the growth of foreign assets of British banks. Until 2007, half of all assets in the UK banking sector were related to non-domestic activities, which is significantly higher than in most other developed economies (Shabani et al., 2015, p. 39).

Between 2007 and 2009, the UK banks increased their holdings of liquid assets (low-risk short-term securities or central bank assets), which increased from less than 1% of total assets in 2007 to 4% in 2009 (Nahmias, 2011).

There are 453 monetary and financial institutions in the United Kingdom. Slightly less than half of their industry balance (47%) is denominated in pounds, 20% in euros and 33% in other currencies. By country of ownership, 50% of the balance sheet asset reflects the ownership of the United Kingdom, 15% — the EU, and the remaining 34% — institutions of other countries. Total balance sheet assets of 9 trillion euros are the largest banking sector in the EU and the fourth largest in the world. The regulatory capital coefficient in the sector improved again — to 21.4% at the end of 2018, fixed tier 1 capital — 488 billion euros, slightly higher than a year earlier (United Kingdom's banking sector: Facts & Figures. 2020).

A necessary prerequisite for the successful development of the bank is not only a qualitative growth of assets, but also their rational and optimal structure, progressive changes aimed at diversifying active operations, as well as improving their quality. According to the data (*Fig. 3*), the structure of MFI loans is dominated by loans to households. Moreover, such dynamics is observed throughout the study period.
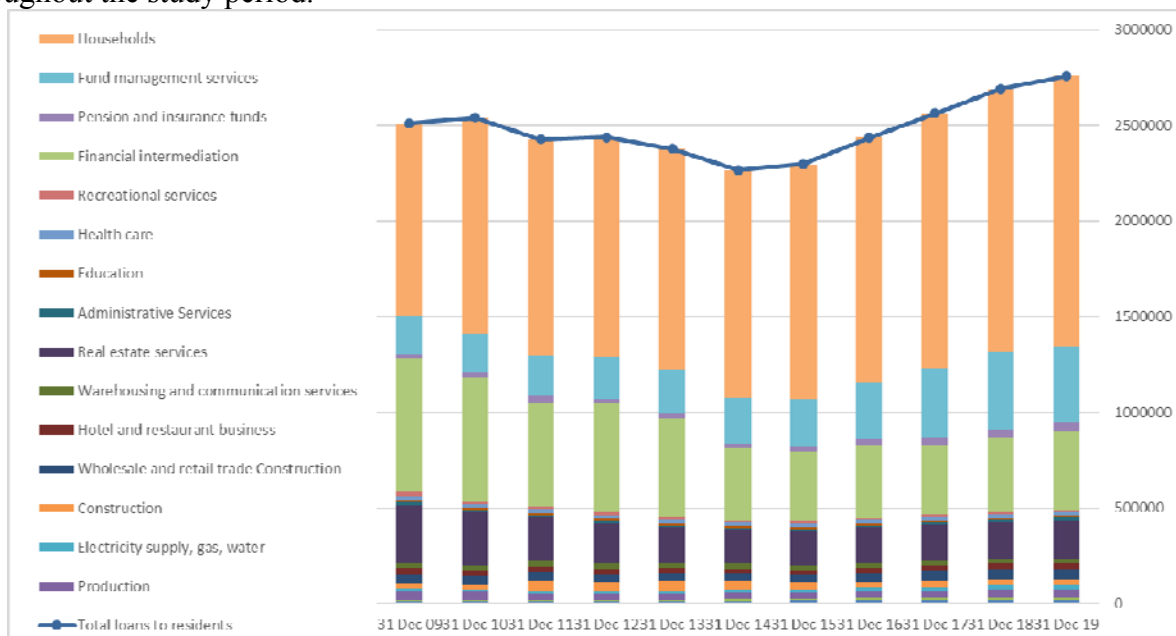

Fig. 3. **Structure of MFI loans registered for the United Kingdom residents, 2009—2019,** million pounds

Source: based on (Industrial analysis of monetary financial institutions' lending to UK residents, 2020).

Raised funds play an important role in the structure of banking resources, effective management of which helps to reduce costs and increase the level of profitability of banks, maintaining their liquidity and profitability (*Fig. 4*).
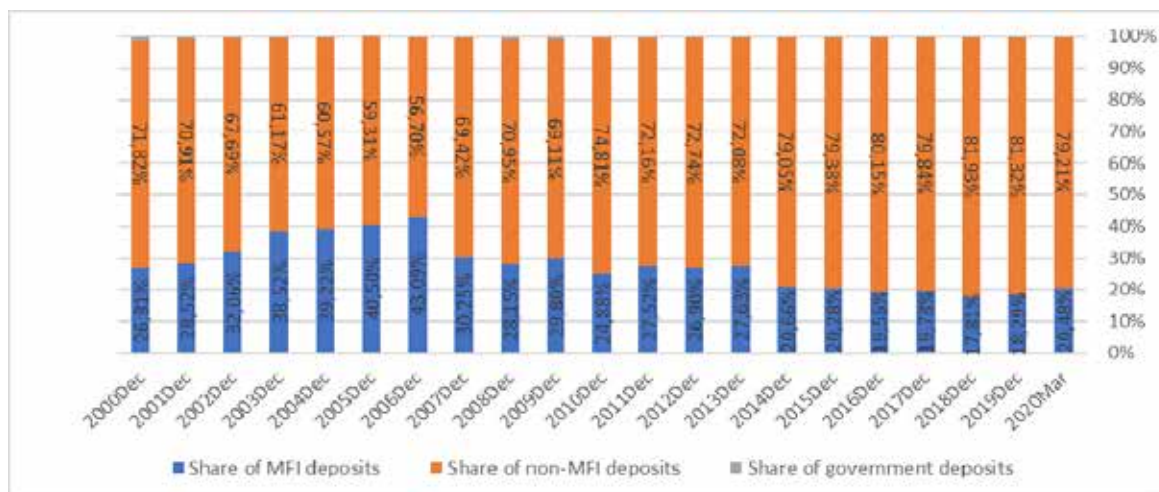
Fig. 4. **The structure of MFI deposits in the banking system
of Great Britain, 2000 — 03.2020,** %

Source: based on (Statistical data Warehouse. Money, credit and banking. MFI aggregated balance sheet Liabilities, 2020).

Another positive phenomenon in the banking system is the improvement of the quality of the loan portfolio, in particular, the reduction of bad loans (*Fig. 5*). A significant increase in the write-off in June 2009 of loans to other financial corporations should be noted.
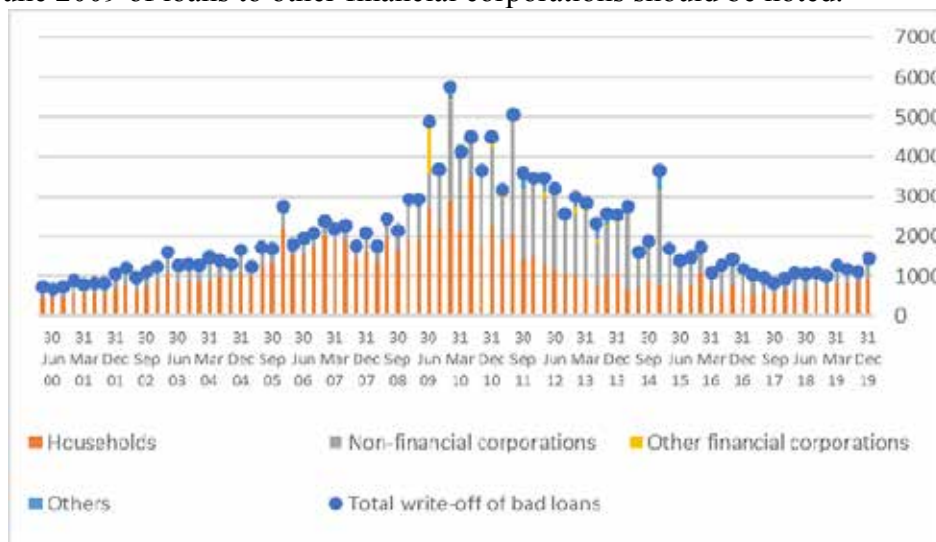

Fig. 5. **Volume of Great Britain's bad loans write-offs of MFIs, 2000—2019,** million pounds

Source: Write-offs of loans by monetary financial institutions (excluding central bank, 2020).

Note: According to the National Bank of England, other financial corporations include: non-bank credit institutions, mortgage credit corporations, bank holding companies, special purpose vehicle securitization companies SPV (special purpose vehicle) — a special purpose company that is created for a specific operation and for solving certain tasks. In the financial market, SPVs most often act as a borrower and are used to attract financing through the issuance of classic local bonds, Eurobonds (LPN) and securitization agreements (issue of securities secured by various asset classes, such as mortgages, car loans, SME loans, leasing assets, commercial real estate, etc., and financial intermediation (Further details about M4 excluding intermediate other financial corporations (OFCs) data, 2019).

Similarly, in another Anglo-Saxon country, Canada, the dynamics of the share of outstanding loans in the banking sector since 2009 shows a significant decrease (Korol M., 2020).

In response to the global financial crisis of 2008—2009, the UK banking sector underwent a process of consolidation. In January 2009, Halifax Bank of Scotland (HBOS) merged with Lloyds TBS to form a single large banking group, the Lloyds Group (UK Banks, 2020). However, the UK banking sector remains oligopolistic. The largest banks include Lloyds Group, Barclays, the Royal Bank of Scotland (RBS) and HSBC.

The UK left the EU on 31 January 2020 and entered a transitional period until 31 December 2020. EU laws and regulations applied to the UK during this period, but there is no certainty as to what the future relationship with the EU will be like. This creates market volatility and economic

risk, especially in the UK. HSBC's global presence and diverse customer base should help mitigate the impact of the UK's exit from the EU (Annual Report and Accounts 2019, 2020, p. 39).

The analysis of these functions in the econometric model shows that all variables have similar dynamics after the crisis shock, except for deposits of central government and deposits of non-monetary financial institutions (graphs of pulse response functions on the OX axis show periods (years) after shock — percentage changes in the mentioned indicators, on the OY axis — the percentage changes in the mentioned indicators).

In addition to the impulse response functions (marked in blue), the graphs (*Fig. 6*) also show asymptotic standard errors (red dotted graphs).
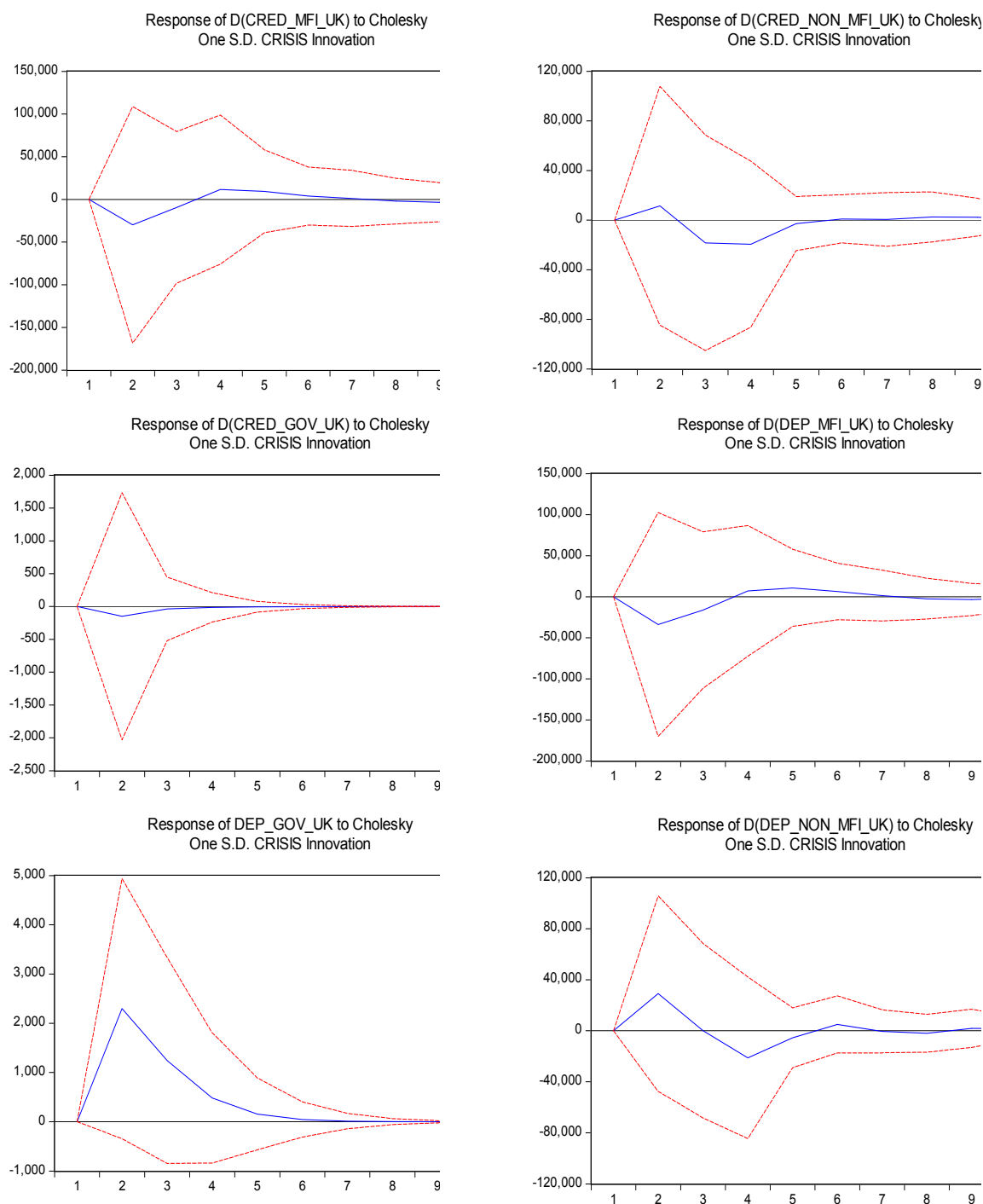

Fig. 6. **Graphs of impulse response functions for models that reflect the sensitivity of key indicators of the UK banking system to the effects of crisis factors**
Source: own calculations of authors.

Thus, starting from the second year after the onset of shock, there is a deterioration of almost all indicators, including *cred_mfi_uk*, *cred_non_mfi_uk*, *cred_gov_uk*, *dep_mfi_uk*. In the future, the leveling of the shock is observed for these variables starting from the fourth year.

The variables *dep_non_mfi_uk* and *dep_gov_uk* show the opposite behavior. From the second period there is their growth, followed by a gradual decrease and stabilization after the sixth year.

Discussion. The increased dependence of lending activity on savings in the UK can be explained by the presence of savings banks and institutions that provide loans only from deposits, as well as the strengthening of the saving nature of households' behavior that are forced to save regardless of interest rates and inflation. It can be assumed that in the case of the transition to a more usual higher level of interest rates in the next 3—5 years, the banking systems of the Anglo-Saxon countries will have significant advantages, but with greater reliance on Canadian-style mechanisms of functioning, which provide less liberal conditions and more reliance on «Retail» financing — through deposits of individuals, which is considered the most stable in times of crisis.

Conclusion. The realities of the banking environment after the crisis of 2008—2009 mean that it is necessary not only to strengthen market discipline, but also to avoid excessive proliferation and diversification of commercial banks and concentration of the banking system. The post-crisis environment is characterized by a decrease in the number of commercial banks in the UK. However, the reduction in the number of banks does not prevent an increase in the value of the banking system's assets and an improvement in their quality. The banking system remains an important element of the financial architecture in the regional and global dimensions.

To simulate the crisis impact on the indicators that characterize the functioning of the UK banking system a system of six vector autoregression models that describes the dynamic relationships between different time series, where previous values of variables help to explain the current ones.

Commenting on the simulation results, it should be noted that all variables have similar dynamics after the crisis shock, except for central government deposits. Thus, starting from the second year after the shock, there is an increase in government deposits. The other variables do not respond to the crisis shock.

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