CHAPTER 7

Transformation of a Traditional Financial Conglomerate into a Financial Ecosystem

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Introduction

If any system expands, it faces new mechanisms which can no longer be subject to the previous regulation regime. The phenomenon of financial ecosystems developed gradually and revealed itself before long. Over the past decades, the global financial landscape has seriously changed and is currently characterized by both increasing interdependence of all participants in the global financial market and speed of transactions, which results from the rapid development and distribution of information and communication technologies, extended functions of financial institutions, structural adjustment of the market, and strengthening competition.

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Since the mid-1980s, financial intermediaries representing different segments of the financial market have demonstrated a higher level of interaction penetrating those segments that are non-typical of them.

Whereas, they apply a mechanism of financial convergence which is specific to the financial market. Digital technologies have only accelerated the process of interpenetration, giving them a fresh impetus and leading to the emergence of financial ecosystems.

The objective of this study is to determine the role of financial ecosystems in the overall evolution of financial institutions. It complements previous literature by developing a theoretical framework and practical issues of building a new business model on the global financial market, namely a financial ecosystem which is most in evidence amid transformation of a traditional financial conglomerate into an ecosystem financial conglomerate.

The study of the phenomenon of convergence of the nature of the financial market and its segments dates back to the 2000s (Van den Berghe and Verweire 2000). Some researchers (Hölzl 2003) consider convergence with regard to convergence in the country development indicators. Dowrick and Bradford DeLong (2003) developed a hypothesis that the least developed countries are unable to reach the level of income of the most developed economies, thus being locked in a "poverty trap". The convergence analysis with regard to general changes in financial institutions in national and regional financial markets was carried out by Di Giacinto and Esposito (2012) and Murinde et al. (2004). Kuznetsova and Chernova (2001) and Belozerov and Pisarenko (2014) made a serious contribution to the development of the theoretical basis of financial convergence as well as development of financial conglomerates and modification of financial markets in a crisis of a welfare state.

The concept of ecosystem, that is, a comprehensive perception of the financial market as a single organism, with all the elements being interconnected and interdependent, was unknown until relatively recently. Doroshenko and Shelomentsev (2017) and Walsh (2019) give a brief overview of building the entrepreneurial ecosystem and its understanding by modern authors. Epstein and Rhodes (2019) tried to explain the changes in the behaviour of banks prior and pursuant to the financial ecosystem crisis.

The ecosystem approach is considered to be a new approach towards the provision of social services (Aksoy et al. 2019). Zorio-Grima and Merello (2020) have revealed the causality links between consumer confidence and other agents within the financial information ecosystem with economic information. Customers are becoming more demanding and search for more personalized services, which results in the emergence of

insurtech and fintech giants, whereas traditional players have to adapt to the new reality by developing online platforms (Nebolsina 2018). The ecosystem approach implies the use of the so-called platform type of competition (Konopatov and Salienko 2018). However, in this case, the concept of ecosystem is considered in a narrow sense. By transition to an ecosystem business, we understand not only the use of modern technologies by businesses and transformation of business processes, thanks to these technologies, but also the transformation of the basic foundations of doing business, the erosion of traditional segments of the financial market (banking, insurance, investment, pension funds, etc.), and the formation of an innovative model of the ecosystem financial conglomerate (EFC).

The chapter is arranged as follows. The following section describes data and research methodology. Section "Results and Discussion" reveals and discusses major results. Conclusions and suggestions are provided in the final section.

Data and Methodology

This problem-oriented study is the result of mixed method research (Johnson and Onwuegbuzie 2004), with quantitative and qualitative research techniques and approaches combined.

The study is based on such methods of scientific research as historical analysis, comparative analysis, synthesis, deduction, induction, and a case study.

Based on the purpose of the study, the authors suggest the hypothesis that the process of financial convergence results in the development of financial ecosystems.

The major directions of the research are as follows: (1) revealing factors of developing financial convergence and modification of the traditional model of financial conglomerates (historical analysis, comparative analysis), (2) defining the stages of building financial ecosystems on the global financial market (historical analysis, synthesis, and a case study method), and (3) revealing risks of developing a financial ecosystem (prospective analysis).

The research data was obtained from open sources on the Internet; official websites of international companies (Allianz, PingAn, AIG, etc.); consulting and rating agencies; international organizations (the European Union [EU], the Eurasian Economic Union [EAEU], the World Bank, etc.); financial market regulators: Japan Financial Services Agency, the

European Commission, the Federal Reserve System, the Bank of Russia; and laws and regulations of the EU, the EAEU, Russia, Japan, the United States, and so on. Authors have analyzed more than 40 theoretical research papers and empirical studies on the topic of interest, a part of which is included in references. The whole list cannot be provided due to the chapter size limits.

Results and Discussion

Financial Convergence, Factors of Its Development and Financial Conglomerate

On the basis of theoretical analysis, we define financial convergence as a mechanism of intersectoral competition, implemented either through combining the activities of entities operating in different segments of the financial market or through the interpenetration of the activities of competing entities, namely participants in different segments of the national and/or global financial market (as a system of interconnected national financial markets). That is, the essence of the process of financial convergence is the penetration of institutions of one segment of the financial market into segments which were previously non-typical of them. For example, insurance companies implying long-term saving insurance products that resemble banking products can compete with traditional deposits of the banks.

The rapidly changing environment of financial markets requires rethinking and complementing existing studies on the analysis of the causes of financial convergence. In our opinion, the most important drivers for stimulating financial convergence processes today are as follows:

- financial globalization and regional integration;
- breakthrough development of information technology and widespread digitalization;
- liberalization, deregulation and unification of work standards at national and international levels;
- creating a regulatory framework for financial convergence and financial conglomerates.

Financial Globalization and Regional Integration

According to most researchers, the beginning of full-scale financial globalization is considered to be the robust external expansion of national banks and the emergence of the first multinational banks in the 1990s, which turned into multinational giants by the beginning of the twenty-first century. Such changes happened due to several simultaneous trends: on the one hand, the development of information technology (IT) and a lower strain from supervision authorities; on the other hand, a tougher control and initiatives of international institutions. Quantitative measurement of the speed of financial globalization can be determined, among other things, by changes in foreign direct investment (FDI), the increase of which is especially evident in the 2000s and coincides with the rapid development of IT. Transitive and developing economies are lagging far behind, but capital flows from advanced economies benefit both groups, allowing for increased investment in capital-poor countries (Prasad et al. 2003).

Another process that changes the landscape of the global financial market and promotes financial convergence is regional integration. Regional economic/political associations create their additional incentives for the development of regional financial markets, providing free movement of capital. In the global economy, they are likely to become a new way to defend their interests. The major centers increasing institutionalization at a supranational level are the European Union and the Eurasian Economic Union (EAEU). If the EU, as a unique supranational association, has already existed for more than 30 years, purposefully creating a single financial market with minimal bureaucratic barriers and having an extensive structure of supranational regulation of financial markets, a legislative framework for financial conglomerates, the EAEU is at the early stage of evolution. The EAEU authorities are working on harmonizing legislation of the participating countries, ensuring free movement of capital and money, creating a common financial market which contributes to the process of financial convergence.

Breakthrough IT and Ubiquitous Digitalization

The paradox of financial convergence is that it allows rethinking the current business model. This is especially important for the oversaturated financial markets of developed countries, where more than 90% of the population already use financial services and the prospect of further growth

is very vague. Along with digital transformation, financial convergence makes it possible to avoid the "profit gap", creating new flexible and more attractive products and services, backed by an emerging ecosystem of business models that maximize value for the end user.

Today, the market players jockey for clients in the age of economic globalization and easy access to information, thanks to the development of the Internet and mobile applications, when it becomes possible to quickly find the necessary information and compare offers and prices. Such opportunities reduce the transaction time for the client, but imply serious expenses for the IT infrastructure of the service provider. As a result, the life cycle of the product shortens, making it necessary to consistently develop new offers and modify existing ones. Since consumption is now a display of wealth to mark one's social standing and distinguish oneself from the crowd, online round-the-clock financial services expand the options. They provide access to remote territories and encourage socialization through social networks, which changes not only the landscape of service provision, but also the consumer behaviour.

Liberalization, Deregulation, and Unification of Work Standards at National and International Levels

The further spread of financial convergence is fuelled by the gradual liberalization of financial legislation, with regulators of the national financial markets of Europe conducting pioneer research. Basically, new regulatory initiatives covered the interaction of the insurance and banking segments, which resulted in the removal of certain restrictions and led to increased competition within the sectors. Back in 1985, the first steps were taken towards the merger of banking and insurance capital in the United Kingdom and France. Germany and Italy began to follow the same path in 1986 and 1990 respectively, as a result of which banks were able to start investing in insurance companies. In the United States, in 1999, the Gramm-Leach-Bliley Act on Financial Modernization abolished the Glass-Steagall Act of 1933, which barred banks from engaging in investment and insurance activities. The Act revolutionized the US financial market, enabling banks to penetrate the insurance sector of the financial market.

Creating a Regulatory Framework for Financial Convergence and Financial Conglomerates

A rigorous separation of the services-provision-related functions of financial institutions forces owners and interested parties to search for tools to overcome such regulatory restrictions. As a result of the development of financial convergence, it leads to the diverse economic agents joining major global associations, namely financial conglomerates (FC). The classical model of FC is designed as follows: banking, insurance, and investment lines of business. However, these are informal groups of large multinational corporations from different sectors of the global financial market. The form of the conglomerate is blurry, the structure is unstable. As an institutional and organizational form of financial convergence, financial conglomerates have certain particular features. For example, similarity parameters are client, product, and technological and sales communities of different sectors of the financial market; there are different ways of pooling funds within the financial conglomerate.

The European Union and Japan have the most elaborate concepts of financial conglomerate. In the EU, a group qualifies as a FC if, first, more than 50% of group activities is financial and, second, if the shares of the banking and insurance sectors in the total of the financial activities amount to 10–90%. If the minority share has a balance sheet larger than 6 billion euro, the group is regarded as a financial conglomerate (Curi 2016). A list of major financial corporations officially regarded as FC is published annually in the EU. In 2019, the list included 78 FCs.

The FSA, which is a Japanese integrated financial regulator, defines a financial conglomerate as a corporate group that includes the following areas of activity: insurance, banking, securities, trust management, or investment and consulting business. This approach represents the conglomerate as a group of organizations, focusing on the group. In Russia, the concept of FC has not yet been legally fixed. In 2016, the Central Bank (CB) of Russia, which is a mega-regulator of all financial markets of the country, issued a report for public consultation which states the presence of de facto 314 active informal conglomerates in the territory of the Russian Federation (RF; the CB relies on the definition of the FC from EU Directive No. 2002/87/EC). However, in the RF, the work on the development of regulatory initiatives has only just begun.

The foregoing partly proves the hypothesis. The process of financial convergence results in the development on financial markets of entirely

new super-powerful multinational financial giants—financial conglomerates.

The primary process of financial convergence, which is basically heterogeneous, fuels rapid development of the necessary infrastructure (both vertical and horizontal) for servicing these products, which begin to form new financial ecosystems amid advancement in digital technologies. Meanwhile, financial services, primarily insurance and banking, naturally integrate into many ecosystems. In the economic literature there is no unambiguous approach to the definition of the term "ecosystem" and its model. The ecosystem is considered as

- a group of participants interacting with the organization, directly or indirectly participating in the creation of the "value chain", as well as its customers;
- an ecosystem as a marketplace for goods and services, which offers a variety of integrated products and services that cover the widest possible range of customer needs of the same job profile;
- an ecosystem as a self-developing organization that uses innovative approaches to management and considers the company as a "living organism".

On analyzing the existing literature, we propose to define the financial ecosystem as a model of complex economic relationships that is formed by transforming a traditional type of financial conglomerate into interdependent business environment thanks to modern technologies and innovations. This model requires in-depth knowledge of consumer needs, ability to analyze a large amount of dynamic data to elaborate an effective pricing policy, as well as processing capabilities for instant offers focused on a particular consumer of the product. In fact, in this model, a new individual financial product is formed with each purchase.

We distinguish four stages in the model formation (Fig. 7.1). At the first stage, globalization and regional integration, modern trends in the development of society and the economy, liberalization, and increased competition on the financial markets make individual financial market institutions using financial convergence mechanisms form associations in related segments of the financial market.

Then this process becomes more complex, with company alliances emerging. The pioneers of financial conglomeration were banks. The liberalization of financial markets caused a continuous series of mergers and

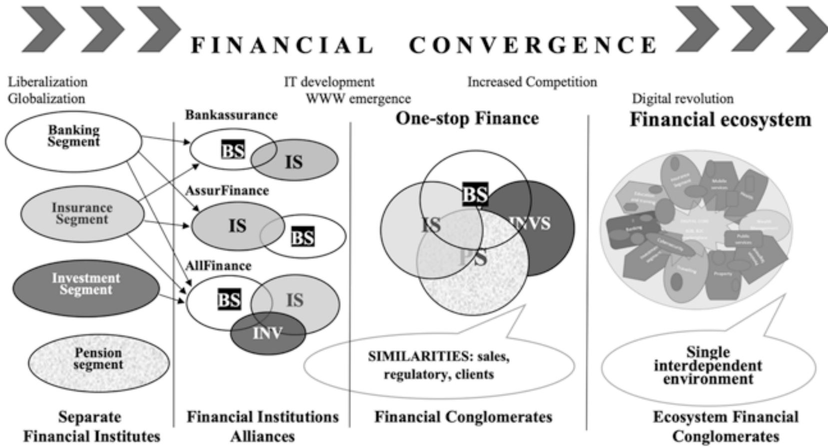

Fig. 7.1 Evolution of the ecosystem approach on financial markets. (*Source*: Compiled by the authors)

acquisitions, which began in the 1980s, and spawned a new type of financial institution, namely bancassurance groups. They laid the foundation for such new concepts as bankassurance/assurfinance/allfinance, denoting the integration of banking and insurance services and the partial transfer by the insurance company of its selling functions to an intermediary represented by a bank, or vice versa. The advantage of this type of organization was its ability to offer its customers a complete package of financial services, including both basic banking and insurance services. Meanwhile, the insurance division of such an organization, having a large amount of "long" money, was able to make short-term investments through a banking division. For example, it provided short-term loans to customers. Bancassurance groups were much more ubiquitous, as banks have a significant network of branches and representative offices. Thus, we moved from the concept of isolated financial services to the concept of a complex converged financial product, the provision of which, due to legal requirements, becomes possible only as part of a group of financial market institutions. In a particular case, great value for an individual client implies lower costs, since the set of business processes remains unchanged, and the price may be higher.

At the next stage, along with the concept of financial conglomerate being integrated into legislation, financial conglomerates emerge.

Penetration into new sectors of the financial market allows FC participants to master the technologies of competitors from other sectors and begin to develop hybrid financial products that have features of both a deposit and an insurance policy.

The concept of ecosystem, that is, a comprehensive perception of the financial market as a single organism, where everything is interconnected and interdependent, begins to take shape amid rapid development of information technologies. Ecosystem thinking becomes the most valuable competency, as it allows combining online and offline "worlds". A financial conglomerate is an institutional and organizational form of integration of its member firms from different sectors of the financial market, aimed at increasing the competitiveness of these firms by combining capital and interpenetration into each other's activities. It has powerful resources and becomes the main beneficiary of the emerging ecosystem approach on the global financial market. Financial conglomerates have already begun the transformation towards financial ecosystems, forming a new type of FC, namely the ecosystem financial conglomerate (EFC).

Financial ecosystems have become a symbol of China's technological vanguard and make a significant contribution to the country economy. The transformation and rapid growth in the number of ecosystem companies is based on powerful incentives for innovation and support for entrepreneurship; competition for traditional sales channels by "Internet insurers", and thereby lower insurance rates; and high-tech "financial ecosystems" designed by insurance corporations to change the concept of insurance services and develop new consumer habits by means of smart phone applications.

An example of a successful merger is the emerging financial ecosystem of the largest Chinese insurance company PingAn, which is transforming its business from purely insurance to a model of an ecosystem financial conglomerate. The company (actually being a FC) is switching to an ecosystem-based business model which includes insurance, banking, investment, and technological business services provided to almost 90 million customers. PingAn became the largest competitor of the Allianz insurance FC, which also initiated a paradigm shift. With the Allianz digital business division, the insurer invests in the development of a digital business model. On the one hand, Allianz takes on the role of organizer, creating, and supporting several ecosystems (data intelligence and cybersecurity, wealth management and retirement benefits, connected solutions in healthcare, property, and mobility, etc.) and providing interfaces for

portfolio companies. On the other hand, Allianz takes on the role of a donor, connecting its own digital products to ecosystems outside the Allianz group. Combining these two typologies, Allianz applies a hybrid strategy and actually forms a financial ecosystem. A new technology for the production of a financial product is created, with a single set of services being provided by various legal entities. They are followed by other reputable enterprises in their attempts to catch up with the new financial market reality. HSBC, one of the largest financial conglomerates in the world, has created its own innovative fintech solutions. AXA, Alibaba and Ant Financial Services have signed a global partnership to distribute insurance products via Alibaba's global ecosystem.

Financial innovations have been and remain one of the important sources for improving economic results in the medium term, and their development should be encouraged. To increase their overall effectiveness, it is required to provide carefully prudential measures, financial protection systems, and crisis management mechanisms. The increased complexity of the system and the emergence of new global players in the face of eco-friendly financial conglomerates demand more precise regulation.

The conducted empirical analysis has proved the hypothesis that the process of financial convergence and technology development results in the emergency of financial ecosystems.

Given the circumstances, regulators face the following challenges:

- the contradiction between the international nature of the financial business and the national basis for its regulation;
- lack of uniform standards for supervision and regulation;
- lack of coordination (interaction) of national regulators;
- underestimation of information technology risks;
- availability of regulatory arbitration (using the difference in the regulatory framework of various jurisdictions to one's advantage);
- the risk of excessive influence of transforming financial conglomerates on the decision-making of both individual states and interstate associations, and non-governmental organizations;
- increased systemic risk.

The combination of different financial institutions causes risk concentration, which requires new innovative approaches to the technique of measuring and managing risks in a conglomerate. Firstly, risk management

is mainly a problem of individual financial institutions rather than institutions within a group; therefore, there is no understanding of the risk profile for the group. Building a risk management system poses a risk management dilemma: manage by business processes or by homogeneous risks? Secondly, when creating a unified and interconnected reporting and accounting system which is essential for the control and management of a financial conglomerate, it is necessary to link non-matching accounting and reporting systems of banks and insurance companies. Thirdly, at the stage of evaluating the financial results achieved by the group as a whole, additional obstacles arise due to the use different techniques applied by the members of the group.

In addition to the above risks, when combining insurance and banking within a financial conglomerate, endogenous consecutive failures become more likely. If bank deposit insurance is provided by an insurance company that is a member of the conglomerate placing its reserves within this conglomerate, the loss event will cause disruptions to the entire system. The bank will lose money not only due to direct damage from the event, but also due to the withdrawal of reserves by the insurance company.

An increasing number of financial conglomerates are determined by changes in the management structure and the development of a new organizational management mechanism, since the interpenetration of cultures of integrating sectors (banking, insurance, investment, pension funds) within a financial conglomerate has the risk of losing the competitive advantage of the conglomerate due to insufficient staff qualifications.

Conclusions

The conducted research is the first attempt to determine the role of financial ecosystems in the overall evolution of financial institutions. We have revealed that the transition from the traditional model of a financial conglomerate to a model of financial ecosystems has become an obvious and logical response to the development of technologies and changing needs of market consumers of goods and services, as well as in respect to quality and speed of service. The objective of this study has been achieved.

First, it is shown that financial ecosystems are developing not only as a modern business model, but also as a methodological concept.

Second, it is demonstrated that financial ecosystems can give modern customers an opportunity to solve their daily problems via mobile devices

and online platforms. This enables financial ecosystems to lie at the heart of the digital market.

Thus, the conducted research has proved our hypothesis. Ecosystem financial conglomerates as new entities of the global financial market receive additional international competitive advantages, including but not limited to the field of insurance, banking, investment and pension, and technologies, which is facilitated by the convergence of relevant interests, the similarity of activities, and communion of client interests.

The ability and willingness of entrepreneurs to take risks and create new innovative converged financial products, as well as participate in new market associations that can successfully sell newly created products (create demand), can become an additional catalyst for economic growth amid the ongoing economic downturn.

The combination of different financial institutions leads to risk concentration, which requires innovative tools to efficiently measure and manage risks in the conglomerate as well as adequate supervision measures.

The directions of further research are connected with an increasing number of ecosystem financial conglomerates, which determines a change in the management structure and the development of a new organizational management mechanism, since the interpenetration of integrating sectors within a financial conglomerate may ruin the competitive advantage of the conglomerate. It would be desirable to conduct risk structure analysis for the whole ecosystem financial conglomerate rather than for its individual components.

References

Aksoy, L., Alkire (née Nasr), L., Choi, S., Kim, P., & Zhang, L. (2019). Social Innovation in Service: A Conceptual Framework and Research Agenda. *Journal of Service Management, 30*(3), 429–448.

Belozyorov, S. A., & Pisarenko, Z. V. (2014). Empirical Analyses for Financial Convergence of Russian Insurance Market. *Economika Regiona*, (3), 198–208.

Curi, C. (2016). *Valuing Financial Conglomerates. Stylised Factors and New Evidence from Financial Crises.* Milano: FrancoAngeli Editore.

Di Giacinto, V., & Esposito, L. (2012). Convergence of Financial Structures in Europe: An Application of Factorial Matrices Analysis. In R. De Bonis & A. Pozzolo (Eds.), *The Financial Systems of Industrial Countries* (pp. 183–215). Berlin, Heidelberg: Springer.

Doroshenko, S. V., & Shelomentsev, A. G. (2017). Entrepreneurial Ecosystem in Modern Socioeconomical Research. *Journal of Economic Theory*, (4), 212–221.

Dowrick, S., & Bradford DeLong, J. (2003). "Globalization and Convergence", NBER Chapters. In *Globalization in Historical Perspective* (pp. 191–226). National Bureau of Economic Research, Inc.

Epstein, R., & Rhodes, M. J. (2019). Good and bad banking on Europe's periphery: pathways to catching up and falling behind. *West European Politics, 42*(5), 965–988.

Hölzl, W. (2003). Convergence of Financial Systems: Towards an Evolutionary Perspective. *Journal of Institutional Economics, 2*(1), 67–90.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher, 33*(7), 14–26.

Konopatov, S. N., & Salienko, N. V. (2018). Platform-Based Business Models. *Scientific Journal NRU ITMO, Series "Economics and Environmental Management", 1*, 21–32.

Kuznetsova, N. P., & Chernova, G. V. (2001). Convergence in the Sphere of Financial Services. *Bulletin of Saint Petersburg State University of Engineering and economics, Series: Economics, 2012*(3), 431–433.

Murinde, V., Agung, J., & Mullineux, A. (2004). Patterns of Corporate Financing and Financial System Convergence in Europe. *Review of International Economics, 12*(4), 693–705.

Nebolsina, E. (2018). Peculiarities of Insurtech Development in the USA, the UK, China and Russia. In *Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional Expansion to Global Growth Proceedings of the 32nd International Business Information Management Association (IBIMA) Conference in Seville* (pp. 3509–3516). Spain.

Prasad, E., Rogoff, K., Wei, Sh.-J., & Kose, M. (2003). Effects of Financial Globalization on Developing Countries: Some Empirical Evidence. *IMF Occasional Paper* No. 220.

Van den Berghe, L., & Verweire, K. (2000). Convergence in the Financial Services Industry. *The Geneva Papers on Risk and Insurance. Issues and Practice*. Palgrave Macmillan, *25*(2), 262–272.

Walsh, K. (2019). Regional Capability Emergence in an Entrepreneurial Ecosystem. *Journal of Entrepreneurship and Public Policy, 8*(3), 359–383.

Zorio-Grima, A., & Merello, P. (2020). Consumer Confidence: Causality Links with Subjective and Objective Information Sources. *Technological Forecasting and Social Change, 150.*