

**GLOBAL INSURANCE INDUSTRY:
PECULIARITIES AND CURRENT DEVELOPMENT TRENDS**

***Abstract.** The article examines the current state and trends in the global insurance industry, as well as highlights peculiarities of the industry development in modern economic conditions with particular emphasis on technological component and new models of interaction between insurance market actors.*

***Key words:** global insurance industry, insurance market, risk, insurance premiums, technological disruption, Insurtech, region.*

***Анотація.** У статті досліджується сучасний стан і тенденції змін у глобальній страховій індустрії, а також виділяються особливості розвитку галузі в сучасних економічних умовах, з особливим акцентом на технологічній складовій і нових моделях взаємодії учасників страхового ринку.*

***Ключові слова:** глобальна страхова індустрія, страховий ринок, ризик, страхові внески, технологічний розрив, Insurtech, регіон.*

***Аннотация.** В статье исследуется современное состояние и тенденции изменений в глобальной страховой индустрии, а также выделяются особенности развития отрасли в современных экономических условиях, с особым акцентом на технологической компоненте и новых моделях взаимодействия участников страхового рынка.*

***Ключевые слова:** глобальная страховая индустрия, страховой рынок, риск, страховые взносы, технологический разрыв, Insurtech, регион.*

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Research Rationale. Since ancient times insurance has been developing as a tool for providing a guarantee of compensation for particular loss, damage, illness, or death in return for payment of a specified premium. Modern global insurance market is a multilevel system including such actors as the insurers and the insured, insurance agents and insurance brokers and auxiliary insurance institutions. Although there are slight differences among insurance systems of various states, their practices in different countries also have a lot in common. Moreover, many international organizations and associations of insurance supervisors, insurers and insurance experts are responsible for the control over the insurance industry, creation and implementation of standards in this field providing fair competition, high-quality services, safety and efficiency. For example, the International Association of Insurance Supervisors is a voluntary membership organization of insurance supervisors and regulators from more than 200 jurisdictions, constituting 97% of the world's insurance premiums, an international standard-setting body responsible for developing and assisting in implementing principles, standards and other supporting materials for supervision of the insurance sector¹.

It is important to note that global insurance industry, like many other sectors of modern economy, is transformed under the influence of the new industrial revolution (Industry 4.0) and has become an integral part of the digital economy.

Recent Research and Publications Analysis. Various aspects of the development process of the global insurance industry are discussed in the papers of J. Cummins, B. Venard, T. Nakahama, V. Njegomir, R. Sawadogo, S. Guerineau, I. Ouedraogo, T. Onu, A. Eckstein, O. Zhabynets, H. Kulyna, Y. Farion, L. Zavoloka, G. Misilyuk, I. Laptiev, V. Skachedub, O. Rogach, L. Pidchosa and others.

¹ Depending on what insurance services cover, they are classified as life and general insurance. According to the OECD, non-life insurance policies cover motor vehicle, fire and other property damage and accident and sickness insurance. These different insurance classes can experience different rates of growth and could offset one another in terms of the overall level of premium growth in the non-life insurance sector. Life insurance guarantees payment of a death benefit to named beneficiaries upon the death of the insured. The insurance company promises a death benefit in consideration of the payment of premium by the insured [1].

Research on quantitative and qualitative assessment of the development of the global insurance industry is conducted within the: OECD, Insurance Information Institute, International Association of Insurance Supervisors; consulting companies such as McKinsey & Company; global advisory, broking and solutions company: Willis Towers Watson, Deloitte, EY, PWC and KPMG; reinsurance companies such as Swiss Reinsurance Company; insurance and reinsurance federations such as Insurance Europe; and other national and supranational institutions.

Articulation of Issue. The main task of this paper is to research the current state and development trends of the global insurance industry as well as to highlight the peculiarities of the industry evolution under modern economic conditions.

Research Results. *Global Insurance Market General Overview:* In 2016, insurance premiums continued growing at a stable rate globally (Figure 1). As for 2017, gross premiums increased in most countries in life and/or non-life insurance sectors, especially in countries with relatively low insurance penetration (Table 1). Moreover, substitution effects may exist between insurance products and insurance and banking products, since some countries reported a shift from guaranteed life insurance products towards unit-linked products, which transfer investment risk from insurers to policyholders. An increased interest in insurance products was used in some countries to achieve returns higher than the bank savings products can provide [2].

It is important to note that this thesis reflects the situation of increasing competition between various financial institutions in general and in some countries in particular. An intermediate conclusion can be made that hybridization of financial products occurs and, to a certain extent, consumers do not choose the most advantageous options for themselves within the framework of the classical interaction scheme, but within the framework of economic feasibility, focusing on an acceptable risk-profit ratio.

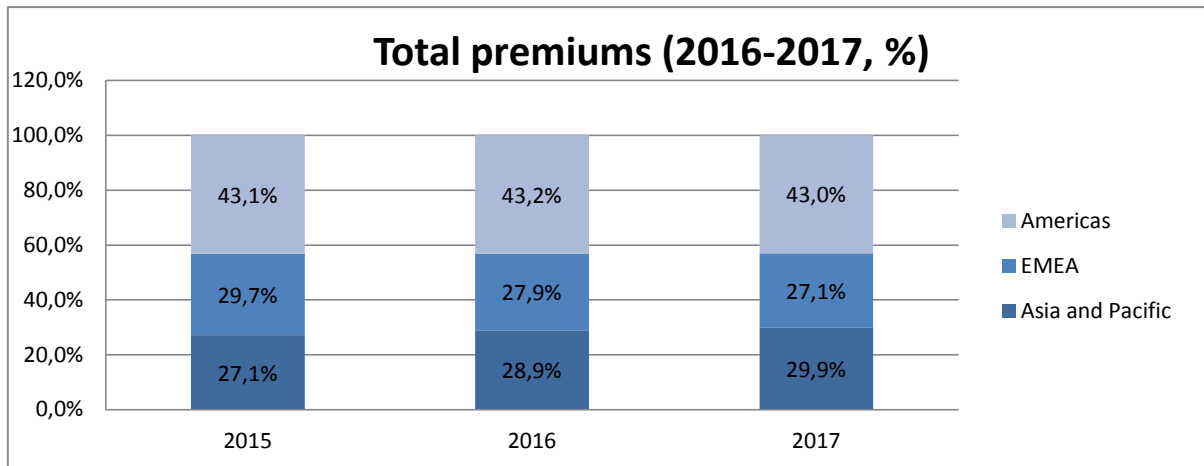


Fig. 1 Volume of Insurance Premiums by Regions in 2016-2017

Source: [3, p. 4].

In 2017 the biggest market shares in OECD countries belonged to the insurers of the USA (56.1%), the United Kingdom (7.8%), Japan (7.7%), France (6.2%), Germany (6.1%), Korea (3.6%), Italy (3.0%), Spain (1.5%) and Australia (1.4%). Turkey, the Slovak Republic, Poland, New Zealand, Mexico, Lithuania, Latvia, Iceland, Hungary, the Czech Republic, Chile (OECD) and Argentina, Bolivia, Brazil, Colombia, Costa Rica, India, Indonesia, Malaysia, Peru, Russia, Sri Lanka, Tunisia, Uruguay (Non-OECD) had the lowest penetration level not exceeding 5%; while France, Ireland, South Korea, Luxembourg, United Kingdom, United States (OECD), and Hong Kong and South Africa had the best indicators exceeding 10% [5].

Table 1

Global Insurance Industry (USD bln, 2016-2017)

	Life premiums		Non-Life premiums		Total premiums	
	2016	2017	2016	2017	2016	2017
North America	606.5	598.4	856.8	898.2	1463.3	1496.6
Latin America and the Caribbean	70.21	78.2	82.5	89.7	152.8	167.9
Europe	50.95	858	597.9	621.2	1448.8	1479.2
Asia	961.5	1028.2	469.2	502.4	1430.8	1530.6
Middle East and Central Asia	13.8	15.4	42.1	44.6	55.8	60.1
Africa	39.64	44.9	19.9	21.8	59.4	66.7
Oceania	39.48	34.1	52.5	56.5	91.9	90.5
Total World	2581.9	2657.2	2120.9	2234.4	4702.6	4891.6

Source: [6].

2017 also witnessed an upsurge in claim payments in all insurance sectors in most countries. In the life sector, advantageous life insurance policies reaching the end of

their terms in 2017 witnessed the highest increases, while natural disasters were the main factor in the non-life sector. Despite the challenges existing in the world, the whole insurance industry remained profitable in 2017 [7].

In this context, we believe that the development trend of both life and non-life sectors will continue (including collection of insurance premiums and insurance payments). In the life sector, it is primarily connected with problems in the pension systems of most countries of the world (shortage of pension funds), increased life expectancy, development of medical technology (increased demand for medical services and their cost), increasing risks associated with the future labour market (automated processes and robotization might reduce the need for a certain number of employees) and others.

In the non-life section, one can identify the risks associated with natural disasters conditioned by unpredictable climate change with a significant impact on agriculture, infrastructure, international transportation, etc.

There are also other very important aspects affecting development of the global insurance market: improving financial literacy of the population of almost all countries of the world (in varying degrees, but it is important to note the sustainability of this trend); increasing global financial connectivity through new electronic collaboration platforms, especially Insurtech (to be discussed below); using Big Data Analytics to assess risks and reduce the cost of insurance products, and others.

Emerging markets contributed 43% of the growth in the insurance industry in 2010-2017, 57 % in 2014-2017, whereas the share of such regions as Eastern Europe and developed Asia-Pacific region declined during the same period. The share of North America and developing Asia-Pacific region in the total premium growth constituted around 73% [8]. Adjusted to inflation, world insurance premiums rose 1.5% in 2017 down from 2.2% in 2016. Non-life premiums slowed to 2.8% growth in 2017, adjusted for inflation, from 3.3% growth in 2016. Life insurance premiums grew by 0.5 % after inflation in 2017, slower than the 1.4 % growth reported for 2016 (Fig. 2) [9]. In terms of profitability, the developing Asia-Pacific region, Latin America and Africa were the

most successful regions in 2014-2017. Due to severe losses from natural disasters North America had the worst indicators, and the same factors affected the insurance industry in the developed Asia-Pacific states.

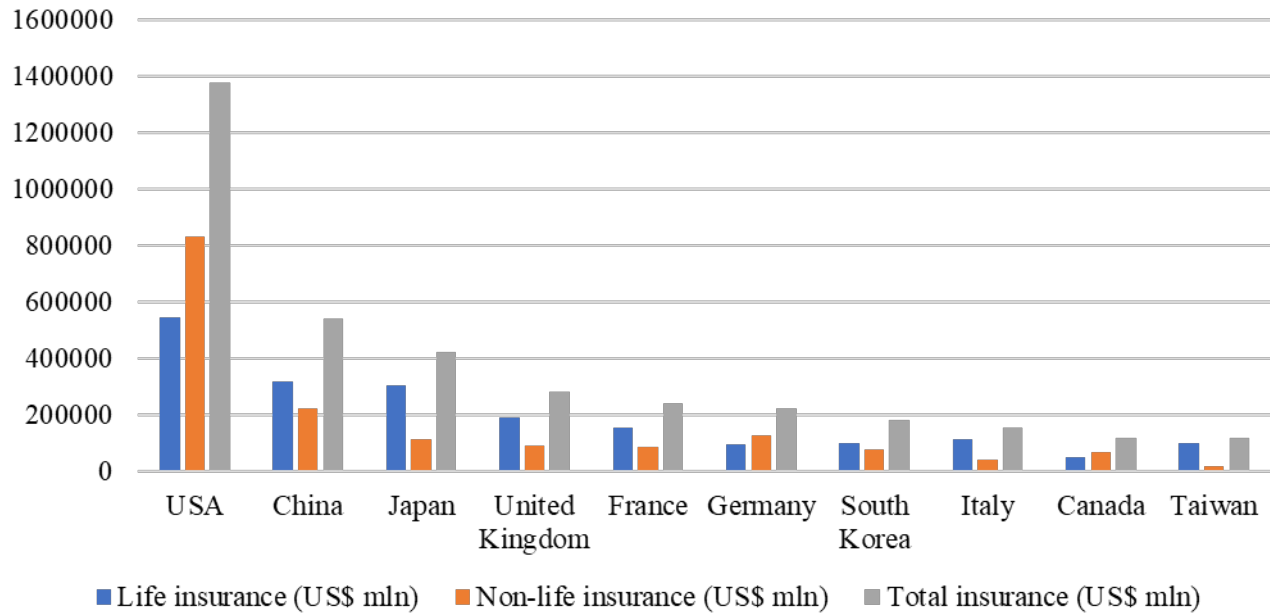


Fig. 2 Top-10 Countries with Largest Insurance Premium Volumes, 2017

Source: [9].

As of 2018, the United States was the largest insurance market, with \$1 377 bn, or more than 28% of the global turnover. However, many insurance experts claim that China can become the world’s largest insurance market by 2028 [4]. According to the statistics, there was a decrease in life insurance turnover in mature markets, although the same indicators showed an upsurge in the emerging markets in recent years. Nevertheless, the value of deals in the insurance M&A market has rebounded in the first half of 2018.

Asia-Pacific The Asia-Pacific life insurance market was developing more actively in comparison with the global market in 2012-2017 (Table 2). Nevertheless, according to the Willis Towers Watson 2019 report there are an increasing number of risks making the Asian commercial insurance market unsustainable and the main factors include disruptive technologies, demographic, and societal changes establishing new business requirements [10].

Insurance growth in Asia-Pacific (CAGR, 2012-2017, %)

	Life	Non-Life	Overall
Asia-Pacific	0,4	8	2,8
Rest of the world	0,2	0,9	0,6

Source: [11].

The region has a positive growth outlook for 2019-2020. Booming Asian economies, low interest rates and quickly expanding middle class are creating a lot of new opportunities. Rising incomes, increasing awareness of insurance products, ageing society have driven the growth of insurance markets. Other factors which are expected to foster its development are product design, distribution and technology adoption. Asia-Pacific countries are among the growth drivers for the global insurance industry having a 2.8% compounded annual growth rate [12]. Non-life's relatively high growth was fuelled by overall economic growth in key markets. Policy decisions and regulation enabled growth in health, crop and auto insurance [11].

In 2018 the two milestone takeovers have marked the insurance industry in the region. For example, AXA announced the purchase of XL, whereby it established AXA as the world's largest P&C insurance company and created a powerhouse carrier in Asia [10, p. 4].

Since China's accession to the WTO, the country has adopted a schedule of gradual opening of its insurance market to foreign companies and several multinational companies, among AIG, Allianz, AXA, Aviva, Generali, Prudential and Manulife have gained footholds in China. In 2017 the Chinese government announced the increase of foreign shareholding in the capital of local insurance companies and in the end of the year China was home to 50 foreign insurers, 28 of which in life (6%) and 22 in non-life business (2%) fostering fair competition and diversification of products, improving the quality of services and paving the way for new technologies [13].

E&Y 2019 report states that the life insurers in the region linking regulatory compliance and business transformation, analysing demographic shifts in order to reassess strategic priorities, elevating the cost management approach from tactical to

strategic and retaining the best of their traditional distribution channels, while wholeheartedly embracing digital.

The situation in the insurance industry varies from country to country from the economic successes that Indonesia has been experiencing to the stagnation that has become the norm in Japan; from the free markets of Hong Kong and Singapore to the heavily regulated economies of China and India; from the youthful nations of Southeast Asia to the ageing population facing South Korea; from the high life insurance penetration rates found in Taiwan (approximately 14%) to the approximately 1% penetration rate of the Philippines [14]. Due to this fact it is rather difficult for the global insurers to develop standardized products for the whole region. In terms of Insurtech deal activity Asia still falls behind North America and Europe, however the region has seen 90 transactions over the past five years.

Africa According to the PWC Report, the opportunities for growth in Africa’s insurance industry are huge despite recent economic and political uncertainty, since the industry is well adapted to continuous technological disruption evidenced by the dynamics of insurance premiums (Table 3) [15]. The experts expect increase in both life and non-life gross premiums over the next three years.

Table 3

Insurance Premiums in Africa

(2016-2017, USD mln)

	2016	2017	2016/2017 % change
South Africa	41080	47796	16,35%
Morocco	3561	3718	4,41%
Kenya	1923	2000	4,00%
Egypt	2125	1587	-25,32%
Algeria	1197	1215	1,50%
Namibia	763	965	26,47%
Nigeria	1103	902	-18,22%
Tunisia	857	814	-5,02%
Angola	617	780	26,42%
Rest of the market	6182	6914	11,84%
Total Africa	59408	66691	12,26%

Source: [16].

Europe According to E&Y report, the three largest insurance markets in Europe – UK, Germany and France – saw marginal growth in gross written premiums across life and non-life segments in local currency terms during the last five years. However, they

have declined in USD terms owing to the adverse foreign exchange effects. During the last 5 years growth has been weak due to low interest rates and complex products [17].

Total European direct gross written premiums totalled €1,213bn in 2017, of which €110bn were life premiums, €371bn were property and casualty premiums and €132bn were health premiums. Total premiums increased 4.7% on 2016, with life premiums growing 5%, P&C 4.4%, and health 3.9%. In 2017, insurance penetration increased by 0.14 of a percentage point to 7.53% and ranged from 0.9% in Latvia to 12.2% in the UK [18]. Dynamics of insurance industry growth in Europe from 2012 to 2107 are presented in Table 4.

Table 4

Insurance Growth in Europe
(CAGR, 2012-2017, %)

	Life	Non-Life	Overall
Europe	-0.5	-1.2	-0.8
Rest of the world	0.6	4.3	2.2

Source: [17].

North America The biggest share of global Insurtech deals has been concentrated in North America over the past five years, with 312 of 599 deals in the region during the period. Nevertheless, the proportion of deals involving Insurtech companies based in the region declined from 58% in 2014 to 49.2% in 2018, as companies in other regions of the world garner the attention of investors [19]. Having a large share of global insured losses amounting to 93%, North America was hurt the most in 2017, since all major NatCat events occurred in this region (three in category 4+, hurricanes, Californian wildfires, and Mexican earthquakes). However, growth was robust and backed by improving motor prices, rebound in commodities and overall macroeconomic uplift [20]. The United States remained the world’s largest single-country insurance market in 2017, with a 28% market share of global direct premiums written. Canadian insurers were the 9th in the world in terms of total premium volume.

South America Latin America’s life insurance market is young. Annual premiums in 2017 constituted \$158.5bn (non-life businesses comprise 54%, and 46% belongs to life insurance). The penetration Index is on average 2.17%. Although the market

potential is huge, the insurance culture, confidence in the financial system and purchasing power are scarce. Political and economic instability are considerably affecting development of the insurance industry. Voluntary individual insurance has historically focused on the upper- and middle-income markets and only simple insurance products have been successful so far, particularly using mass market distribution channels. The main problems facing insurance companies in the region are increased competition and market consolidation, greater contagion risk and rising customer expectations.

However, against this backdrop, there is a complex regulatory landscape where companies are at various stages in advancing risk transparency and adopting global solvency standards, corporate governance and enterprise risk management (ERM) [21]. Product innovation in Latin America is expensive. Nevertheless, all countries are actively striving to achieve good international practices, following the guidelines of the framework created by Solvency II. The region is also concerned about creating regulation for cybersecurity and new players like Insurtech companies [22].

Challenges and Risks Most insurers are currently facing various obstacles involving a range of factors and requiring new marketing, financial and technological strategies as well as new insurance products. Such strategies and products must consider consumer sophistication in a country or region. Despite the advancements in various fields, the number of environmental, technological, social, political, economic and other risks that exist globally is constantly increasing. Such risks include disruption caused by technological development, climate change, environmental pollution, demographic problems, changing business environment, cyber risks, issues such as Brexit, complications in trade between the USA and China, hostilities, political instability, etc.

Currently not all insurers believe that their policies are able to cover all emerging risks appropriately. Altogether the aforesaid threats are shaping the world creating new dangers and escalating the old ones. Consumers need new tailored insurance solutions having regard to the peculiarities not only of every region, but also of every individual and entity.

The results of the BCG Digital Satisfaction and Value Survey (2013) reflect the fact that consumer satisfaction with digital interactions in the field of insurance is among the lowest. Relative satisfaction utility score amounted to 4.0% in 2013 (Fig. 3) [23, p. 8]. Thus, there is a necessity of prioritizing customers' individual needs using insights and modern technologies to develop not only affordable, but also profitable and high-quality products covering each type of risk.

The KPMG Insurtech Trends 2019 state that customer satisfaction and retention will be a more important key performance indicator than operational efficiency and insurers must change their business models. Such changes require making cultural change and shifting focus away from the product to the customer [24].

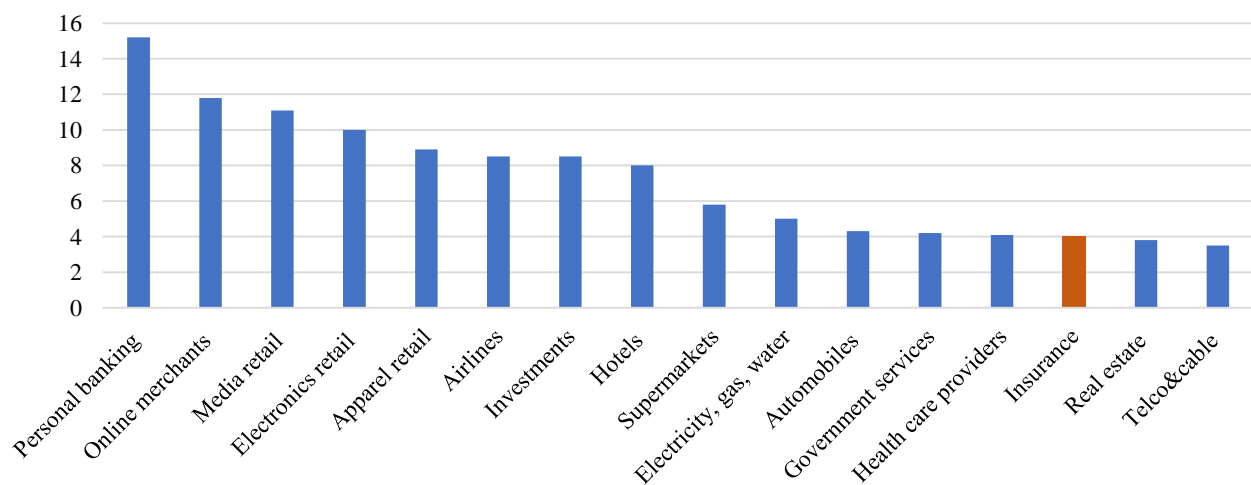


Fig. 3 Relative Satisfaction Utility Score (%), 2013)

Source: [25, p. 6].

Innovation is affecting the operation of insurance companies. New technologies are disrupting the way of providing classical insurance services, changing business models, affecting price for services, creating new opportunities, new threats and needs.

On the one side, policies having tailored coverage and simplified claims processes can provide coverage to segments of society that hitherto were not able to access financial protection, fostering fair competition and improving the quality of products [26]. Innovative technology may be useful in increasing penetration and density levels globally.

On the other side, renewed business environment in the insurance industry requires proper reaction of the governments, international organizations and regulators in this field. Currently, regulatory approaches, such as the regulatory sandbox, are being developed by a number of jurisdictions. One of the most important issues requiring closer examination by regulators is protecting personal data, ensuring fair treatment of policyholders.

Internal processes of insurance companies are often overcomplicated. Experts claim that it is possible to lower costs by about 40% by automating up to 30% of operations. The research of Morgan Stanley and BCG evidences that many insurers tend to provide poor customer experience [25]. In 2014 about 60% of insurance clients worldwide were not satisfied with their service providers and nearly 50% of insurance clients were willing to switch to newer models and products. University graduates often prefer to choose other financial companies rather than insurance companies. Therefore, the industry lacks technically skilled employees.

Insurtech. As the world economy is changing with the span of time, so changes the environment of global insurance market. Such notions as digitalization, Big Data, the Internet of things, smart contracts, blockchain, cryptocurrencies, artificial intelligence, rapid advancement of technology, and gig economy have become new challenges for insurance services. Having stumbled across, insurance and technology have created a new direction in this field – Insurtech.

According to the OECD, *Insurtech* is the term being used to describe the new technology with the potential to bring innovation to the insurance sector and impact the regulatory practices of insurance markets. The term emerged around 2010, but the global Insurtech market is expected to grow annually by 41% between 2019 and 2023 [27].

Moreover, \$3.18bn was invested in the Insurtech startups and scale-ups worldwide in 2018, and \$1.65bn was invested in 2017, over \$8.5 billion was raised by Insurtech companies over the last five years, in 600 deals (Fig. 4) [28]. Insurtech companies pay attention to ultra-customized policies, social insurance, and using new

streams of data from internet-enabled devices to dynamically price premiums according to observed behaviour [29].

Many tech companies have already accessed the health insurance industry through partnerships and investment. For example, Google invested in insurance startups Oscar and Clover, while Amazon now accepts pre-tax payments from health savings accounts and flexible spending accounts.

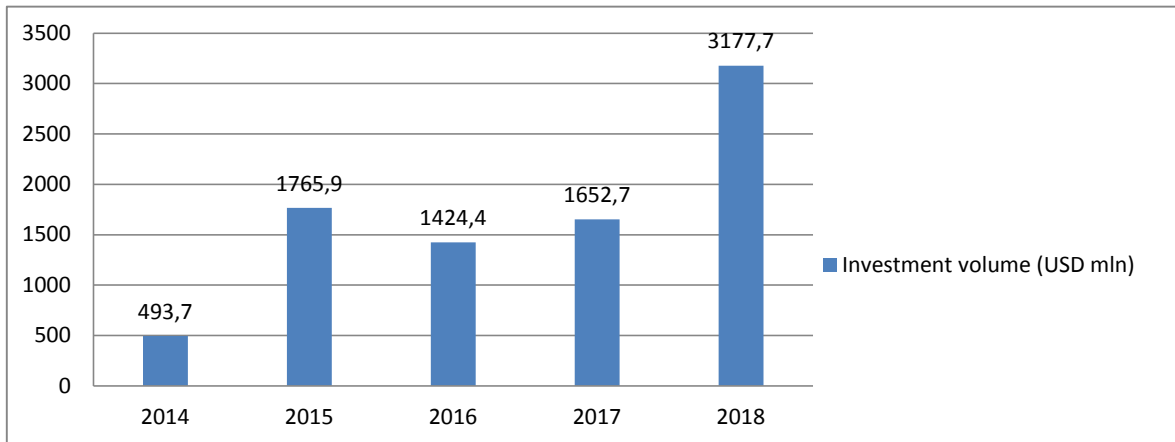


Fig. 4 Insurtech Investment Volume (2014-2018, USD, mln)

Source: [19].

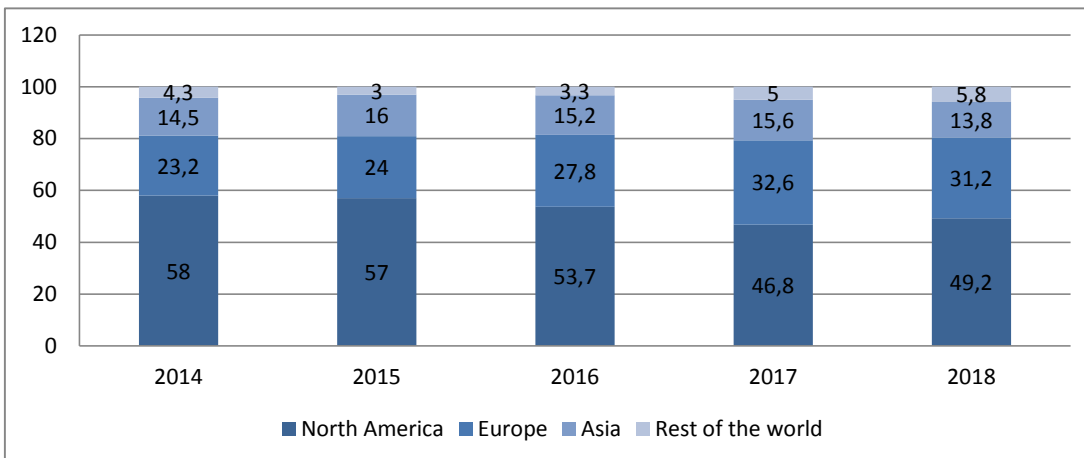


Fig. 5 Global Insurtech Deals by Region (2014-2018, %)

Source: [19].

More than \$8.5bn was raised by Insurtech companies globally between 2014 and 2018, with 599 deals completed during the period (Fig. 5) [19].

Internet of Things and social media can be used by insurers in order to improve policy pricing, risk assessment and allow developing personalized products. The large amounts of stored information regarding anybody who has ever had a digital connection create big data. Generally, insurers use structured data in order to have insights for calculating risk, identifying product sales opportunities, and fraud investigation [30]. Devices and social media can provide large amounts of more personal data. Thus, such method may help consumers get cheaper or better coverage and highly personalized services.

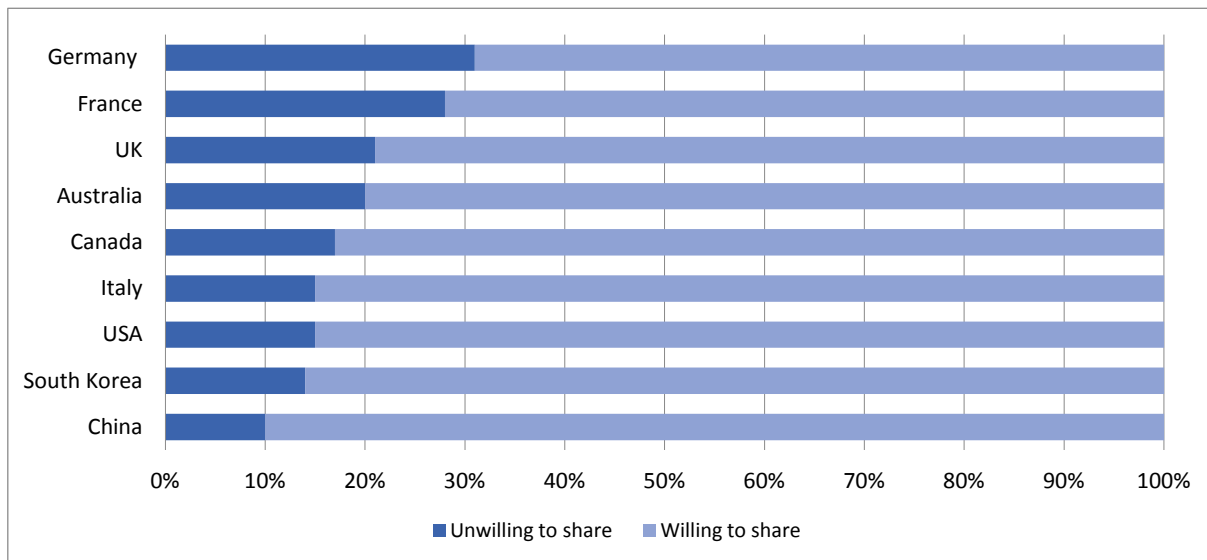


Fig. 6 Willingness to Share Information in Order to Benefit From Price Reduction

Source: [25].

Blockchain & Cryptocurrency are notions that have disrupted classic finance. Upgrading core systems for blockchain compatibility may improve data protection and safety of ‘insurer-insured relations’. Despite the possibility to use online brokers` services, a lot of consumers still call insurance brokers by phone to purchase new policies requiring a lot of paperwork and control, since personal data may be misinterpreted at each further stage. Blockchain technology is a secured form of shared record-keeping which may simplify the processes of the insurance industry whereby making services high-quality and cheap (Table 5).

Benefits of Blockchain in Insurance Industry

Fraud detection & risk prevention	elimination of frauds at early stages
Providing insurance	using smart contracts increases the confidence of customers and reliability of service providers
	quick and secured exchange of information
	reducing time for processing data and providing services
	simplification of the flow of payments

Source: Developed by authors.

Telematics Insurance is based on using telematics boxes installed in a car having such devices as a GPS system, motion sensors, a SIM-card and analytics software. By tracking location, speed, time, distances, crash accidents it is easier to collect accurate data quickly and create tailored insurance policies. Usage-based insurance (UBI), pay-as-you-drive (PAYD) and pay-how-you-drive (PHYD) are a car insurance type allowing insurance companies to track the driving behaviour of the insured by placing a monitoring device inside their car. Rather than being charged a premium based on their risk class, the rate the insured pays is partly determined by the information provided through the device.

Artificial Intelligence. Chatbots, image analysis and online customer communications provide a range of opportunities for algorithmic processing of information and prediction. The insurance industry is already taking advantage of some AI capabilities, such as web chatbots for online customer communications, image analysis for claim investigation, and risk analysis for underwriting [31].

Peer-to-Peer (P2P) Insurance entails that the network of people agrees to cover similar risks by creating a single finance pool consisting of their premium shares. Such model does not require traditional intermediaries like insurance companies. Available money is refunded at the end of each coverage period. This approach is one of the most disruptive, allowing insurers to minimize their costs and mitigate claim conflicts. Nevertheless, P2P insurance has a number of drawbacks such as fraud sensitivity, ethical aspects, difficulties in achieving consensus, and lack of trust between peers.

Insurance APIs allow insurers to create new business models regarding the needs of the present time. Application programming interfaces provide an opportunity to share information and services with third parties. Using this approach, companies may not

only increase their turnover and profitability, but also offer better customer experience and develop new digital products.

Despite the advantages of all the above-mentioned technology advancements, it is worth underlining that insurance is a highly regulated industry. Many jurisdictions lack relevant legislation and the response of some regulators in the insurance industry is still unknown. Moreover, many of the Insurtech startups still require help from traditional insurers due to insufficient experience, restrictions in legislation, and limited opportunities.

Conclusion. In general, it should be noted that the global insurance industry is developing dynamically due to the fact that the number of traditional risks does not decrease, while new ones appear. The risks and threats existing globally and significant differences between regions need tailored solutions and create new challenges for insurers. Global trends are constantly changing the modern world and the insurance industry is not an exception. Disruption caused by digital technology has brought more personalization and automation; the benefits include reduction in costs, more accurate risk assessment, and better customer experience. Meanwhile, such digital transformation requires additional action of the governments and regulators to ensure fair competition, high-quality services and adherence to legislation. And the insurance industry is one of the industries where this issue is most acute due to its very fast digitalization.

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