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#### PERSPECTIVE

WILEY

# InsurTech in the United States and Germany—What are the drivers behind the different business models?

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#### Abstract

Comparing the InsurTech ecosystems of the United States and Germany (Europe), there are significant regional differences in the choice of business models. While many InsurTechs in the United States have opted for the business model of a fully licensed insurer, this business model is much less common in Europe. In Europe, many InsurTechs seem to shy away from applying for a license as an insurer and limit themselves to the business model of a broker or a managing general agent. This paper analyzes the factors that influence an InsurTech's choice of business model when deciding whether or not to apply for an insurance license. It examines the impact of different local market environments on these decisions, as well as the role that access to venture capital plays in business model decisions and how regulators and their actions influence the decision-making process.

### **1** | INTRODUCTION

Over the course of the last decade, digitization has affected the life of millions of consumers and disrupted entire industries. Digitization is helping to improve connectivity and financial inclusion and enabling better access to trade and public services for a large share of the world's population (United Nations, n.d.). Digital and mobile devices have

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dramatically changed the way we communicate and consume information. The music and entertainment industries have been disrupted by online streaming services, traditional television, and newspaper companies are struggling to compete with social media, the world of retail has been completely changed and retail banks are closing branches since customers conduct most transactions online.

Compared to other industries, the insurance industry and incumbent insurers have moved less quickly to adopt change triggered by digitization (Johansson & Vogelgesang, 2015). Potential reasons for the slow development in the insurance industry are the insurers' long-term business model as well as complex IT infrastructures (Roth, 2022). Innovations in business processes do impact not only current business, but also business that was written by an insurer decades ago but is still active. Many IT systems that are still in use today were also developed decades ago and cannot easily be adapted to the needs of the digital age. But customers do not care about the long-term nature of the business model and they are not waiting for insurers to make up their mind. They have become accustomed to digitization and expect their insurance providers to offer digital solutions, just as other industries do. Thousands of newly founded InsurTech startups (InsurTechs) around the world have set out to fundamentally change the insurance industry and benefit from the slow pace of change at established insurers.

The wave of InsurTechs startups began around 2010, as in many other industries in the United States and Silicon Valley (Braun & Schreiber, 2017; Insurance Information Institute, 2020; InsurLab Germany, 2023). It did not take long until this trend found its way into other major insurance markets like the United Kingdom, Germany, and France. In some cases, founders in these markets were inspired by business models successfully implemented in the United States and they copied and adapted these to their local market environment (Wyman & Direkt, 2017).

While in the early years, it seemed as if there were no limits to the financing of new business models, the situation has changed significantly recently due to dramatic changes in the financial markets. Interest rates have risen significantly since the beginning of 2022, and investors can now find investment alternatives that did not exist in the early years of the startup and InsurTech boom. As a result, investment volumes in FinTech and InsurTech-related start-ups have dropped by almost 50% in 2022 (see Figure 1).<sup>1</sup>

Investors are now challenging business models a lot more and it has become much more difficult for founders to get the financing for capital-intensive business models (Ledbetter, 2022). Since certain objectives, such as meeting a specific insurance need or serving a specific target audience, can be achieved with different business models, founders must now place more emphasis on selecting the optimal business model for their startup while managing scarce capital.

The term business model is used in a variety of ways in the literature. Al-Debi et al. (2008) cite 17 different definitions for the term business model, and Veit (2014) provide comprehensive review of the existing literature on business models. The common denominator of many of the definitions is that the term business model describes how an organization creates value or makes money. When the term business model is used in this paper, the focus is on the position of the company in the insurance value chain and the

<sup>&</sup>lt;sup>1</sup>Based on De Stefano et al. (2023); similar data can be found in CB Insights (2023).



FIGURE 1 InsurTech equity investments.

legal structure an organization uses to secure this position (fully licensed insurer vs. MGA<sup>2</sup>).

Interestingly, there are significant regional differences in the choice of business models. While many InsurTechs in the United States have opted for the business model of a fully licensed insurer, this business model is much less common in Europe. In Europe, many InsurTechs seem to shy away from applying for a license as an insurer and limit themselves to the business model of a broker or underwriter (Capgemini; EFMA, 2020). This raises the question of how these regional differences in business models can be explained.

Although InsurTechs are a relatively recent phenomenon, there are already a number of research papers dealing with them. Braun and Schreiber (2017) are aiming "to facilitate the navigation of this rapidly evolving sector, and to provide an intuitive toolkit for an assessment of the entrants' disruptive potential ...." Xu and Zweifel (2020) are "seeking to develop a comprehensive, transparent, and consistent framework for evaluating InsurTech innovation," Neale et al. (2020) "examine the effect of insurer investment in technology for underwriting and claims, as well as certain lines of business" and Sosa and Montes (2022) aim "to understand the dynamics of InsurTech." Chang (2023) studies the impact of insurers' InsurTech-oriented investments on their financial performance. A broader overview over the early literature can be found in Eling and Lehmann (2018).

While there is some literature on specific business models such as on-demand insurance (Braun et al., 2023; Zeier-Röschmann et al., 2022), usage-based insurance (Che et al., 2022; Holzapfel et al., 2023) or the impact of artificial intelligence on business model transformation

<sup>&</sup>lt;sup>2</sup>Managing General Agent. A managing general agent is an insurance producer authorized by an insurance company to manage all or part of the insurer's business in a specific geographic territory. Activities on behalf of the insurer may include marketing, underwriting, issuing policies, collecting premiums, appointing and supervising other agents, paying claims, and negotiating reinsurance (NAIC, 2022).

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in the InsurTech scene (Berman et al., 2021), there has been relatively little focus on the general types of business models and legal structures of InsurTechs as well as on regional differences in their distribution. The impact of the most recent developments in the financial markets on the ability of InsurTechs and their founders to finance their business models has also not been analyzed in much detail yet. This paper intends to take a first step toward filling this gap and to answer the following research questions:

- What factors influence an InsurTech's choice of business model when deciding whether or not to apply for an insurance license?
- What is the impact of different local market environments have on the decision to operate as a fully licensed insurer versus an MGA?
- What role does access to venture capital play in business model decisions?
- How do regulators and their actions influence the decision process?

Given the paucity of reliable data related to InsurTech business model choices, this study uses a qualitative approach that includes a series of structured, in-depth interviews with founders and executives of InsurTechs and other industry experts, to better understand both the factors that drive business model decisions as well as the impact of different factors on these decisions.<sup>3</sup>

The structure of the paper is as follows: Section 2 provides an overview of the general development of InsurTech ecosystems with a specific focus on InsurTech activity in the United States and Germany. The methodology of the interviews and the process of deriving hypotheses are described in Section 3. Section 4 presents the results of the interviews and the conclusions drawn from them, and Section 5 summarizes the findings of this paper and provides some suggestions for further research.

### **2** | THE DEVELOPMENT OF INSURTECH UNTIL TODAY

The term "InsurTech" originated as a combination of the words "insurance" and "technology." In practice, there is neither a uniform legal definition for the term InsurTech (Bafin, 2022) nor one that is used consistently in publications dealing with InsurTech. InsurTech is often used as a collective term for all concepts based on digital technologies with customer-oriented insurance services (Gablers Versicherungslexikon, n.d.), but many other publications use a narrower definition. They describe InsurTech in terms of new market entrants (startups) taking advantage of the digitization and the "changing rules of the game" (Braun & Schreiber, 2017). In the narrowest definition, only young and tech-savvy companies with an insurance license are called InsurTechs (Bafin, 2021).

This paper uses a relatively broad approach in which InsurTech refers to "innovative companies that specialize in using digital technologies to provide services and/or product solutions to the insurance industry." As such, any company that contributes to the digitization of the insurance industry can qualify as an InsurTech under this definition and this is independent of the specific business model of the company.

<sup>&</sup>lt;sup>3</sup>The focus here is on two countries that have seen InsurTech activity, the United States and Germany (as a "pars pro toto" for the continental European markets).

### 2.1 | InsurTech business models

Typically, InsurTech business models are grouped in three major categories (Capgemini; EFMA, 2020):

- **Full-stack insurers** (full carriers) develop and distribute insurance products and are licensed as insurers by their local regulatory authority.
- **Distributors** operate like traditional intermediaries (agents, brokers) where they focus on the distribution of insurance products.
- **Enablers** provide software solutions to improve individual aspects of the insurance business model and cooperate with incumbent insurers to bring these solutions to the consumer.

Beyond this very broad categorization, there are a large number of different variants of these business model types, which will be examined in more detail later in this paper.

We do find InsurTechs in all lines of insurance, P&C, Life and Health. More InsurTechs focus on property and casualty insurance compared to life and health insurance, and the presence of InsurTechs seems to be more pronounced in personal lines than in commercial lines (see Figure 2—Gupta et al., 2023, as well as Capgemini; EFMA, 2021; De Stefano et al., 2022; Gallagher, 2023). Both observations suggest that InsurTechs' technology-driven solutions work better with less complex insurance products.

The wave of InsurTechs did not only begin in the United States; to date, by far the largest share of InsurTech financing flows into American companies. US-based InsurTechs account for about 51% of total InsurTech funding from 2012 to 2021, with the next largest markets being the United Kingdom at 9%, China at 6%, and Germany and India at 4% each (STATISTA, 2023).

#### 2.2 | The InsurTech ecosystem in the United States

The InsurTech ecosystem in the United States has evolved since 2010 and estimates for the number of InsurTech companies today range from just over 300 to as many as 2000. Based on



FIGURE 2 InsurTech focus (Gupta et al., 2023).

the relatively broad definition given earlier, which includes not only licensed insurers and insurance brokers but also technology companies focused on improving individual insurance processes, the actual number is likely to be closer to the upper end of this range.<sup>4</sup>

It is a diverse mix of companies including those focused on specific segments of the insurance value chain, such as administration platforms, product development, underwriting and risk management, claims management, analytics, and marketing and sales as well as comparison websites, digital brokers, and fully licensed insurance companies.<sup>5</sup>

Unlike in Germany and many other countries, insurance in the United States is not regulated on the federal but on the state level.<sup>6</sup> This, of course, has implications for building a "full stack" InsurTech if that company intends to write business in more than just one state. While the insurance company itself may be headquartered in one state, it must make product filings in all states in which it wishes to write business. The complexity of the individual product filing depends on the complexity and novelty of the product to be filed. The states may set seasoning requirements, meaning that an insurer registered in State A has to have operated successfully in a line of business for a number of years in that state before it will be allowed to write business in that line of business in State B (NAIC, 2023b).

While most US InsurTechs are still relatively young and rely on venture capital to fund their development, a few have gone public in recent years. Lemonade went public in July 2020, Root followed in October 2020, Metromile in February 2021 and Oscar went public in March 2021. Hippo went public in August 2021 via a SPAC, a transaction that seemed to be somewhat controversial among the SPACs investors (the day before Hippo went public as a publicly traded company, the SPAC lost 83% of its capital as investors pulled out—Jones, 2021).

Over an 18-month period from early 2021 to mid-2022, all InsurTechs that had gone public lost significant market value (see Figure 3), some more than 90% compared to their highest valuations and these companies were among the biggest victims of the public market sell-off (Heim, 2022). While some of this may be related to changing market conditions, such as rising interest rates, the significant underperformance compared to the S&P 500 suggests that investors in public markets have fundamentally changed their view of the "full-stack" InsurTech business model.

Like other startups, InsurTechs are typically financed via venture capital in their early years. While data providers such as Crunchbase provide some information on financing volumes and investors, the valuation of venture capital (VC)-backed startups is generally less transparent than that of publicly listed companies. Although valuations in VC rounds appear to be relatively stable compared to the valuation of InsurTechs in the public markets, it can be assumed that the lower valuations in public markets will also impact venture capital valuation models in the longer term and that it will be more difficult for InsurTechs to raise large rounds of capital in the near future.

<sup>&</sup>lt;sup>4</sup>Since there is no globally accepted definition of InsurTech, the total number of InsurTech companies in the United States varies widely from publication to publication. Cag (2021) estimates the number at 1370 and his definition seems more or less in line with the definition used in this paper.

<sup>&</sup>lt;sup>5</sup>Examples for each segment can be found in different sources like "The Digital Insurer https://www.the-digital-insurer. com/dynamic-insurtech-maps."

<sup>&</sup>lt;sup>6</sup>In the McCarran-Ferguson Act of 1945, the US congress delegated the authority regarding the regulation and taxation of the business of insurance to the 50 states (Coope, 2009; NAIC, 2023a).



FIGURE 3 Relative/comparable InsurTech stock price changes over time versus S&P 500 (Gallagher, 2022).

### 2.3 | The InsurTech ecosystem in Germany

The development of InsurTech startups and business models in Germany began around 2012. The New Players Network, which studies InsurTech ecosystems in the German-speaking DACH<sup>7</sup> countries, identified 12 InsurTech companies founded in 2012.<sup>8</sup> The number of newly founded InsurTechs increased in the following years and peaked in 2017 with 40 new market participants. Of the approximately 200 InsurTechs founded in the last 10 years, 162 were classified as still active in a recent survey (NEW PLAYERS NETWORK, 2022).<sup>9</sup>

As the United States and European insurance industries share similar characteristics—a mediocre customer experience, cost pressure, inefficient distribution systems, digital natives who don't want to buy insurance products from traditional intermediaries—the ideas of InsurTech founders in Germany to bring innovation to the industry through new digital business models were quite similar to those in the United States. Founders in Europe obviously looked to the United States to learn from successful InsurTechs in the United States, and they copied some of their ideas. Although there is no easily enforceable copyright for business models, in at least one case, the impression that elements of the business model and even the underlying tech stack were copied led to a legal dispute between two of the most prominent InsurTechs in the United States and Germany.<sup>10</sup> In other cases, where the challenges in the United States and Germany appear comparable at first glance, similar solutions have led to significantly different outcomes due to different market conditions and regulatory frameworks, as can be seen with Oscar and Ottonova, two fully licensed health insurance InsurTechs in the United States and Germany.

<sup>&</sup>lt;sup>7</sup>Germany (D), Austria (A), Switzerland (CH).

<sup>&</sup>lt;sup>8</sup>Even though a single-digit number of companies that could be classified as InsurTech startups were founded earlier (NEW PLAYERS NETWORK, 2019), there was no systematic development until 2012.

<sup>&</sup>lt;sup>9</sup>Other sources arrive at somewhat lower figures. InsurLab Germany (2023) identifies 128 InsurTech startups founded in Germany in the last 10 years. The differences could be explained by the focus on Germany instead of DACH including Austria and Switzerland and by a narrower definition of companies that are considered InsurTechs.

<sup>&</sup>lt;sup>10</sup>The US-based InsurTech Lemonade had suspected the German InsurTech WeFox of copying its claims app (Fromme, 2018). The case was resolved shortly thereafter by a settlement in a face-to-face meeting between CEOs Daniel Schreiber and Julian Teicke.

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In Germany, InsurTechs must apply for an insurance license if they want to operate as a full-stack insurer. The laws and regulations based on of which the supervisory authority issues the insurance license are not written at the national level but at the European level-the European Union (EU) Solvency II regulation provides the framework for the licensing process. While the European Insurance and Occupational Pensions Authority acts as the EU's central financial supervisory authority, the licensing process itself is carried out at the national level, and in Germany the Federal Financial Supervisory Authority (BaFin) is responsible for this process.

Even though the regulation itself is the same for all 27 counties of the EU, national regulators have some discretion in interpreting the regulation. While some EU members, such as the United Kingdom when it was still a member of the EU, Denmark, the Netherlands, Lithuania, Poland, Hungary, Austria, Italy, Portugal, Spain and Greece, adopted a "regulatory sandbox" approach to help FinTech and InsurTech startups become regulated entities (NTT Data, n.d.), the German BaFin remains opposed to the concept and has decided not to offer this service (Bafin, 2018). Instead, BaFin applies the so-called "principle of proportionality" which determines the extent to which supervisory requirements must be met in individual cases in relation to the level of risk taken. A lower risk profile can result in exemptions from requirements, a more pronounced risk profile will lead to tighter implementation requirements (Bafin, 2019).

At the beginning of 2021, BaFin made it clear that it would take a stricter approach to regulating full-stack InsurTech and require more capital. "In addition, future startups are to have significantly more equity at their disposal when they are launched than was the case with comparable predecessors. They must already be fully funded on the day of their application for admission so that they no longer require supplementary financing rounds" (Bafin, 2021). This change of course was seen partly as a reaction to the Wirecard scandal, in which BaFin was criticized for a lack of oversight of this financial services provider. Given the way startups are typically funded, the requirement to be fully funded on the day of applying for a license will make it extremely difficult for InsurTechs to qualify for a BaFin license in the future, as venture capital investments are typically made in a series of funding rounds based on reaching certain milestones over time. It can come as no surprise that BaFin drew massive criticism for its restrictive stance (Berkenkopf, 2021).

Since EU member states recognize registration by any EU member under the Sovency II regime, InsurTechs that want to operate in Germany have the option to partially avoid BaFin and get licensed in another EU country. Interestingly, at least two of the approximately one dozen full-stack InsurTechs operating in Germany have obtained their insurance licenses from another regulator. Friday, the digital car insurer received its license from the national insurance supervisor in Luxembourg, and WeFox Insurance from Liechtenstein<sup>11</sup>—both companies are headquartered with their operations in Berlin, Germany.

#### Comparison of the InsurTech ecosystems in the United States 2.4 and Germany

The startup ecosystem in the United States benefits from a very developed local venture capital market. While InsurTechs in European countries such as Germany have difficulty finding domestic investors to support their business models with venture capital (InsurLab

<sup>&</sup>lt;sup>11</sup>Even though Liechtenstein is not a member of the EU, the license from Liechtenstein is recognized based on agreements between the EU, Switzerland, and Liechtenstein.

Germany, 2023), US-based startups find it relatively easy to access investors in Silicon Valley and other financial centers in the United States. In the United States, there are 11 InsurTechs that had raised more than \$400 million in capital by 2021 (Rosanes, 2021), while Wefox is the only German InsurTech which had reached this level.

The mix of business models within the group of InsurTechs in the United States appears to be significantly different from the mix of business models in Europe. A report by CapGemini and EFMA shows that only 4% of European InsurTechs have chosen the business model of a licensed "full carrier," while in the United States, an InsurTech is five times more likely to choose this business model, with a share of 20% (see Figure 4).

There are a number of possible reasons that could explain this phenomenon. Most fullservice insurers do not apply for an insurance license with their regulator on Day 1. They start as a digital broker or MGA and might apply for an insurance license later (Braun & Schreiber, 2017). So, since the InsurTech wave started early in the United States and the development of the InsurTech ecosystem in Europe is two or 3 years behind, it could be that some European InsurTechs that will eventually become full insurers have not yet applied for or received their license. Another reason could be access to (venture) capital (InsurLab Germany, 2023). The business model of a "full carrier" requires significantly more capital than that of a broker or MGA. If access to venture capital is easier in the United States, US InsurTechs might be more inclined to apply for a license than their European counterparts. Other explanations could be differences in insurance regulation and supervision (Chatzara, 2020), different customer preferences, and access to insurance capacity as an MGA and/or a broker. The actual motivations for these business model decisions will be analyzed in Sections 3–5 of this paper.

As mentioned before, a major challenge for European InsurTechs has been access to venture capital. Venture capital markets are less developed in Europe than in the United States, and traditional insurance investors have been reluctant to fill the gap with venture capital for InsurTechs, to say the least. Companies like WeFox have been able to compensate for this problem by attracting a group of international investors outside of Europe, but this may be difficult for the large group of smaller young InsurTechs. So far, no German InsurTech startup



FIGURE 4 Business Model Mix the United States versus Europe (Capgemini/EFMA, 2020).

has gone public, and even WeFox, which has raised more than \$1.3 billion in venture capital to date, is not expected to go public anytime soon under current market conditions (Hagen, 2022). The disappointing stock performance of US-based InsurTechs in the public markets seems to make this move even less attractive for European InsurTechs.

Unlike the situation in the United States, the filing and preapproval of products in the insurance industry was abolished in Germany and the EU in the course of deregulation in 1994. However, there seems to have been a paradigm shift toward more product supervision in certain areas in recent years with the amended European Markets in Financial Instruments Directive, MIFID 2 (Becker, 2018).<sup>12</sup>

For InsurTechs, there are more relevant regulations than just insurance-specific rules. In particular, data protection regulations in the EU<sup>13</sup> are stricter than in the United States, which limits certain data-driven business models and requires insurers and their employees to handle personal data of their customers with the utmost care.<sup>14</sup>

## **3** | DESIGN OF THE STUDY

Based on the state of the InsurTech ecosystems in the United States and Germany described in Section 2, the interviews with the InsurTech founders and industry experts interviewed were structured along the following initial hypotheses.

### 3.1 | Initial hypotheses for the interview series

# 3.1.1 | Similar insurance market fundamentals lead to similar business model decisions

The insurance markets in the United States and Germany (Europe) are very similar in many respects. The supply side is dominated by traditional insurers that have been in the market for decades or even centuries and operate with complex IT infrastructures and outdated legacy IT systems. Insurance distribution is dominated by agents and brokers. The existing business models do not seem to be very attractive for digital natives, the next generation of insurance customers. This leaves significant room for innovation, which attracts new market entrants (InsurTechs). Successful new business models can be easily copied across borders.

# 3.1.2 | The time lag between the United States and Germany (Europe) contributes to the fact that there are more licensed full-stack InsurTechs in the United States

The InsurTech wave started 2–3 years earlier in the United States than in most European countries. Since it takes time to develop and grow business models and successfully apply for

<sup>&</sup>lt;sup>12</sup>For a more detailed comparison of regulatory approaches, see Klein (2012).

<sup>&</sup>lt;sup>13</sup>Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016.

<sup>&</sup>lt;sup>14</sup>In §203, the German Criminal Code threatens employees in life, health, and accident insurance companies with a prison sentence of up to 1 year if they violate the confidentiality of personal data.

an insurance license, the time lag could explain part of the difference in share of "full carriers" among all InsurTechs. "Economies of scale" could also play a role, making it easier and more likely to fund a "full carrier" InsurTech in a large market like the United States than in the relatively smaller European markets.

# 3.1.3 | Regulation does have a significant impact on business model selection

The basis for operating a "full carrier" business model is a formal insurance license, while the regulatory hurdles for the MGA business model are much lower. Moreover, the capital required for a "full carrier" is determined by regulation and regulatory practice in addition to economic fundamentals. BaFin's relatively restrictive stance after the Wirecard scandal, requiring InsurTechs to fully fund the business model from Day 1 if they want to obtain a "full carrier" license, will likely have a negative impact on their numbers in Germany.<sup>15</sup>

# 3.1.4 | Comparative advantage in access to venture capital enables "capital-intensive" business models in the United States

It does require significantly more capital to fund a "full carrier" than a broker or an MGA. Since venture capital markets are more developed in the United States compared to Germany, it might be easier for US founders to raise the necessary venture capital. While this hypothesis seems plausible overall, it should be noted that investor preferences may have changed with the recent changes in financial markets and interest rates in particular, as well as due to the relatively disappointing development of US InsurTech's valuations in the public markets.

# 3.1.5 | Differences in entrepreneurial cultures favor more capital-intensive business models in the United States

Differences in the culture of entrepreneurship could also contribute to business model decisions. It is generally assumed that entrepreneurship is more widespread in the United States than in Germany and that US founders are willing to take more risks (Maier, 2011). This could contribute to a tendency toward bigger, bolder, more capital-intensive business models in the United States compared to Germany. Founders in the United States are more willing to take risks and are more likely to strive for the big solution.

### 3.2 | Methodology

While there are initial hypotheses about the reasons for the differences between the distribution of business models in the United States and the German (European) InsurTech

<sup>&</sup>lt;sup>15</sup>However, this would not explain why the proportion of fully insured companies is also significantly lower in other EU countries and the United Kingdom than in the United States, as not all European regulators are as restrictive as BaFin.

ecosystem, we still need to better understand the logic founders use to select their business models. Therefore, this study is designed as a qualitative research based on series of structured, in-depth interviews with founders and executives of InsurTechs as well as industry experts.

### 3.3 | Interviews

To better understand how business model decisions are made and what factors impact the outcome of those decisions, a group of high-profile interviewees was assembled, consisting of InsurTechs founders and executives as well as industry experts from the United States and Germany (see Table 1).

As this study aims to contribute to a better understanding of how InsurTech founders make their business model decisions and decide whether to apply for an insurance license, the panel of respondents was selected to represent the different business model types, full-stack InsurTechs as well as MGAs. To gain a better overall understanding, not only founders and executives of individual startups were interviewed, but also industry experts focused on InsurTech ecosystems.

The interviews were conducted using a structured interview guide (see Appendix A). The interview guide was slightly modified for the industry experts, who were asked to talk about their general experience with regard to business model decisions in the InsurTech sector rather than about an individual company case.

The creation of the interview guide followed the principle "As open as possible, as structuring as necessary." The aim of the procedure was to control the interview process to a certain extent, despite all the fundamental openness, and to give the interviewees suitable impulses to contribute to answering the research question of this study.<sup>16</sup> Interviews were conducted between November 29, 2022 and January 5, 2023. The interviews were recorded,<sup>17</sup> transcribed, and systematically analyzed with regard to the research question.

### 4 | STUDY RESULTS

Respondents were very open and interested in discussing the reasons for their own decisions regarding their choice of business model and in discussing business model decisions made by others. The results allow interesting conclusions to be drawn about the drivers of business model decisions in the different InsurTech ecosystems. While there seems to be little difference between the responses of participants from Germany and the United States in some areas, other areas show very clear differences between the two subgroups.

### 4.1 | Developing a business idea and defining the value chain

From the founders' descriptions during the interviews about the process of developing their business idea, two different approaches can be identified.

<sup>&</sup>lt;sup>16</sup>For the procedure and methodology of structured expert interviews, see Helfferich (2022).

<sup>&</sup>lt;sup>17</sup>One interviewee requested that his interview not be recorded. The analysis of this interview was done based on the notes taken during the interview.

Name	Company	Role	Group	Market
Dahmen, Patrick	InsurLab Germany	Chairman InsurLab Germany, Angel Investor, Management Consultant	Industry Expert	Germany
Fromme, Herbert	Versicherungs-monitor	Journalist, Editor	Industry Expert	Germany
Goldstein, Guy	Next Insurance	Co-founder, 01CEO	Full-stack Insurer	The United States
Gritz, David	Insurtech New York	Managing Director	Industry Expert	The United States
Kiera, Robin	Digitalscouting	Blogger, Influencer, Management Consultant	Industry Expert	Germany
Lekas, Steve	Branch Insurance	Co-founder, CEO	Full-stack Insurer (Reciprocal Exch.)	The United States
Malin, Gordon	Elpha Secure	Co-founder, COO	MGA	The United States
Rittweger, Roman	Ottonova	Founder, former CEO, President of the Board	Full-stack Insurer	Germany
Teicke, Julian	Wefox	Co-founder, CEO	Full-stack Insurer	Germany
Uebing, Matthias	mailo	Co-founder, CEO	MGA	Germany
Voss, Stephen	Neodigital	Co-founder, CEO	Full-stack Insurer	Germany
Wälder, Jörg	Cogitanda	Co-founder, CEO	MGA	Germany
Wand, Assaf	Hippo	Co-founder, former CEO, Chairman of the Board	Full-stack Insurer	The United States
Wiens, Christian	Getsafe	Co-founder, CEO	MGA/Full-stack Insurer	Germany
Zafavi, Ali	Covu	Co-founder, CEO (prior: Industry Lead Insurance, Plug&Play)	Industry Expert	The United States

TABLE 1 List of interviewees.

- The first approach starts with a deep understanding of existing insurance products and processes and their weaknesses and inefficiencies. This approach is primarily taken by founders who have already gained some years of experience in the insurance industry and have often not been able to implement their ideas of better, more digital insurance solutions with their former employers in the industry.
- The second approach is based on the customer perspective and many customers' frustration with opaque, complex, and inflexible insurance offerings. The founders who took this perspective often had little or no experience in the insurance world when they launched their InsurTech startup, but they don't necessarily see that as a disadvantage. They believe that true innovation and disruption require a fresh look at industry challenges, or as one interviewee put it: "There's a hypothesis that the founders, who start the biggest unicorns, don't come from the industry because then they don't believe in the constraints."

Both approaches were represented among the American as well as the German respondents. In this respect, there do not seem to be systematic differences between the two markets. One German interviewee also stated that his team was inspired for their business model by a successful US startup in the same line of business.

The InsurTechs represented in the panel by their founders almost all focus on the entire insurance value chain. They want to offer a consistent insurance customer experience and, to this end, try to control most relevant aspects of the value chain and use outsourcing relatively selectively. Only in the aspect of risk bearing are there obviously different approaches between fully insured companies and MGAs, while again no systematic differences between American and German respondents could be identified.

# 4.2 | Business model selection and general criteria for the insurance license decision

The process for selecting a business model based on the business idea and value chain considerations seems to be highly individual and to vary from founder to founder. Respondents mentioned a number of different criteria when talking about the process of deciding on a business model:

- **Control and flexibility** ("To better control the experience for the broker around the customer, we (...) also need our own insurer to be able to control everything from start to finish."; "Speed and flexibility in underwriting decisions are extremely critical to success in this small-scale business, and that's why we wanted to have the entire value chain, including the risk carrier function, under one roof at that time.")
- **Resource and cost efficiency** ("We decided that we would run this as networks that we manage; in this way we can scale as we wish. We don't need to have hundreds of people on the payroll to also manage a large portfolio worldwide."; "The big insurance companies (...) grew market share only when they had a less expensive similar product to their incumbency. That being the case, then I was really trying to identify, how could I take the cost out of a known structure.")
- Availability and cost of capital ("The problem was that we needed \$ 25mn for the licensed insurance company alone. Therefore, we started with a broker first and then did build an MGA model. (...) Only later, we acquired the insurer."; "Even if you have three or four lines

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or six lines of business in a few different geographies, you never have a diversification that a Swiss (Re) or a Munich (Re) has after hundreds of years of building essentially this diversification. So, there's always going to be an arbitrage, they are going to have a lower cost (of capital).")

- Available skills ("Of course, we looked at the option of starting a fully licensed insurer, but we were neither experienced enough for that nor did we find investors who would have financed it. In this respect, we started 'light weight' as a broker.")
- External perceptions ("With the reputation of an insurance company rather than just another MGA or insurance broker, you have a different standing with distributors, especially large brokerage houses.")

The different criteria used by the founders can be explained, at least in part, by the different business ideas, business areas and target customer groups. It makes a difference whether you want to focus on a specific line of business, such as cyber insurance, or offer a broad range of products. And it also matters if your main distribution channel is large brokerage houses or if you focus on retail distribution through agents or aggregators. And many startups go through an evolution of business models. They start with a simple model that requires limited resources and capital and then expand to more sophisticated, complex models.

While there were some similarities between the responses of the German and US participants, it appeared that the US founders placed a higher priority on the cost of capital aspect and thought more systematically about the impact of their chosen business model on the cost of capital than their German counterparts.

# 4.3 | The influence of investors and capital costs on business model decisions

The questionnaire for this study contained two questions on financing sources and investor attitudes. First, respondents were asked about the influence of funding needs and available funding sources on their business model decision. Later, respondents were asked how they perceived investors' attitudes toward the business model decision of InsurTech startups and whether they currently prefer certain business models.

On the part of the German participants in the study, the question of financing appears to have an extremely high weight in the decision about the business model. Individual participants emphasized that the pressure on the financing side was not as great at the time their startup was founded as it is today ("We were very fortunate in 2016 to be in a market (...) where the whole economic environment was different and where it was also easier to raise these funds."), but all agreed that under today's market conditions, the question of financing must be one of the central aspects for the business model decision of German InsurTechs and that the profitability of the business model has become much more central than in the early days of InsurTechs, when investors were primarily looking for growth stories ("The 'Name of the Game' in the last years was growth and less profitability; the 'Name of the Game' today is profitability.").

On the American side of the panel, the answers were much more differentiated. While some participants emphasized the central role of the financing issue for business model decisions, others pointed out that the decision depended much more on the type of market, timing, and valuation issues than solely on the availability of financing sources.

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Respondents from both countries agreed that investors currently have a clear preference for "capital-light" business models and that they currently prefer broker- or MGA-like business models to fully licensed insurance carriers ("VCs say an MGA delivers similar benefits to a licensed insurer after all with less capital tied up and therefore better value enhancement options and stronger fungibility of capital."). Both the German and US participants in the study also pointed out that investor preferences change over time and that a model that is "en vogue" today may be out of fashion tomorrow ("That has totally changed over time. At the beginning, everyone said 'asset-light, asset-light', around 2015. Then there were success stories from America, primarily with full stack. And with the beginning of this year (2022) and the crash, it has turned around again and it's so strong that investors are now saying, you'd better write off the balance sheet completely and you'd better sell it, it doesn't contribute anything to the valuation.").

Investor background obviously affects investment preferences, and investors without an insurance background in particular seem to be more reluctant to commit capital to highly regulated business models. ("Technology investors don't understand insurance that much and they prefer a capital-light model."; "Whether or not some of the VC investors understand the dynamics of the underlying capital regime and the cost of capital of different companies, that's a whole other question.") That raises the question, according to one industry expert, of whether'ew or different types of investors could help boost InsurTech business models that need more capital ("Family offices would be ideal, but they are afraid of such things."). Basically, the respondents confirm the impression that it is currently very difficult for startups to convince investors and find financing for their business model. ("We are seeing a pull-back from the market from investors. Their business is a business of being confident to sign a term sheet. And confidence is on an all-time low.")

#### 4.4 | Access to insurance capacity

To offer insurance services, InsurTechs do need insurance capacity in the form of either their own risk capital or reinsurance to underwrite risks. InsurTechs with the business model of a licensed full-stack insurer create some of this capacity themselves by raising capital from investors and using it as the basis for their solvency capital. They can expand their capacity through reinsurance contracts. In contrast, MGAs do not "own" insurance capacity. They write their business on the balance sheet of the primary insurers with whom they partner. This gives them access to insurance capacity. Capacity providers for MGAs can be both, traditional primary insurers with their own retail business as well as so-called "fronters" that specialize exclusively in making their capacity and insurance license available to partners who do not have it. Since insurance capacity can be a scarce resource and the two business models procure it in different ways, access to insurance capacity could be a relevant criterion for the business model decisions of InsurTech founders.

However, a majority of respondents, regardless of whether they were Americans or Germans, did not cite access to insurance capacity as a main criterion for InsurTech business model decisions. They either indicated that sufficient capacity was available for their preferred business model or that capacity constraints are quite similar across business models. The idea behind this is that the availability of capacity depends only on the quality of the business written ("Capacity is a dime a dozen if you get the fundamentals right."; "That is 100% dictated by your own loss ratios. If you can produce loss ratios that are accretive to your partners book of

business, then you will in perpetuity have access to third party capital. If you do not, if you produce poor loss ratios, then you won't.").

Still, individual experts point out that access to capacity is critical to success, especially for InsurTech founders who choose the MGA business model ("For startups who want to play in the MGA space, access to capacity affects almost like their entire livelihood"), and they may even face expectations from capacity providers to establish a risk-bearing entity such as an offshore reinsurer or captive just to share in the risk and attract capacity.

# 4.5 | Strategic independence as a criterion for business model decisions

In theory, the business model and decision-making processes between the licensed full-stack insurer and the MGA differ only on the issues of licensing and capacity provision. In practice, however, this need not be so. The idea behind the "strategic independence" argument is that the business model of the full-stack insurer could allow InsurTechs to develop solutions for their customers faster and more flexibly, without having to coordinate with the capacity provider.

Not surprisingly, the distribution of opinions on this topic seems to follow the business model of one's own company rather than the country of origin. While the founders of full-stack insurers cite strategic independence as an important argument for their business model, the founders of MGAs do not seem to be so convinced.

The fact that the problem of strategic independence can arise at different levels in all business models is illustrated by the response of one participant whose InsurTech started as an MGA and now also operates as a full-stack primary insurer ("Our reinsurance partner at that time had no interest, but also no flexibility to somehow incorporate this data into their underwriting models. (...) If we'an't incorporate what actually differentiates us, access to very exciting usage data of our customers, into our product and into our models, then the whole exercise makes no sense and then we waste value and (...) that was the point for us where we actually felt limited (as an MGA)."). Ultimately, the importance of this criterion depends on whether the star'up's value proposition can still be realized in cooperation with various partners or whether this is only possible on the basis of the comp'ny's own capital and capacities.

# 4.6 | The influence of insurance regulators and supervisors on business model decisions

Insurance is a highly regulated industry and, therefore, one could assume that InsurTe'hs' business model decisions are also strongly influenced by regulation and the way it is interpreted by the relevant insurance supervisor. As described in Section 2 of this paper, the regulatory environment of the insurance industry differs significantly between the United States and Germany (Europe). While in the United States, the focus is on product filings with the 50 states, in the EU, the focus under the Solvency II Regulation is on the regulation of the company itself and its solvency rather than on product filings.

The different regulatory framework conditions can also be seen almost one-to-one from the responses in the study. US founders seem relatively relaxed about regulation on the company and solvency level and more concerned about the hassle of satisfying state regulatory

requirements regarding product filings in 50 different states ("In the U.S., the carrier is hardly any work. The filing is the majority of the work."). Insurance regulators' capital requirements do not seem to be a major limiting factor for InsurTechs, so economic models and external rating agencies are getting more attention from founders ("In the U.S. it is all about the rating agencies like S&P or AM Best, not so much about the regulators.").

A very different picture emerges from the responses of the German study participants. Respondents seemed concerned that the way the German banking and insurance regulator BaFin handles the licensing process clashes with the typical funding procedures for startups ("The logic of supervision in Germany is at odds with the logic of venture capital financing. Venture capital says, I'll give you money for the next year and if it turns out well, you'll get money for the year after next, and if not, we'll close the store. And Bafin says, you can only acquire customers if I know that you are financed for eternity.") And the concern is that ultimately this dilemma will slow down and hinder innovation. Therefore, some German participants in the study argued that BaFin should change its approach and be more open when it comes to new licenses for InsurTechs:

- "The task of insurance supervision is first and foremost to protect the consumer. And then the question is, how do they want to promote innovation in this area? I think there is a balance that has to be struck there."
- "BaFin should move back in the direction of allowing new risk carriers. (...) I simply don't think it's a good idea to allow new companies to be established only abroad, because then consumers in the German market will then have to deal with insurers from abroad."
- "If I want innovation, if I want an industry to strive to meet future demands, then, as a supervisor, you could develop the idea that I'm also helping startups to play a role in this market."
- "I would like BaFin to be a more open in its dealings with InsurTech startups and to build up the necessary expertise, which in my experience it does not have today, because anything else is not good for the policyholder in the end."

This was the point in the study where there was the greatest consensus within a group of participants from one country and the greatest difference between the two groups. While US participants did not see a problem for their companies, German participants were very concerned that their regulator's approach would make it unattractive or even impossible to start a licensed InsurTech in Germany in the future. This suggests that this could be a key aspect in explaining some of the differences between the distribution of business models in the United States and Germany. The restrictive stance of the German supervisor BaFin also does not appear to be consistent with the position of the International Association of Insurance Supervisors (IAIS), according to which the risks associated with innovations must be duly balanced against the benefits to the customers and the insurance sector as a whole and that technological innovation should be supported by the insurance supervisors (Chatzara, 2020).

#### 4.7 | Customer preferences

The choice of a specific business model is influenced by a number of factors, including the characteristics and preferences of the target market. If customers prefer to buy from a fully admitted insurer rather than an MGA, that might be a reason to apply for an insurance license.

On the other hand, if customers prefer a strong balance sheet behind their insurance coverage, it might make sense for a start-up to start as an MGA and partner with a capacity provider with a strong balance sheet.

When asked about customers' business model preferences, almost all participants of the study indicated that customers do not care about or even recognize the differences between business models. These responses are consistent with research findings that suggest insurance is a low-involvement product and customers try not to spend time and effort buying insurance (Müller & Müller-Peters, 2008; Reich, 2018).

One participant suggested that the business model may have at least an indirect impact on customer satisfaction that depends on how much a provider controls key elements of the value chain ("Customers sense whether you have internalized good processes, whether you own more or less part of the value chain, and how deep you are in the value chain."). It was also mentioned that commercial customers may have clearer preferences than retail customers. Overall, however, there was consensus among respondents from both countries that customer preferences do not have a significant influence on the business model decisions of InsurTech founders.

# 4.8 | Potential reasons for differences between the United States and Germany (Europe)

As a follow-up question on business model choice, study participants were asked about the differences in the distribution of InsurTech business models in the United States and Germany (Europe). Specifically, they were asked why they believe more InsurTechs apply for insurance licenses as full-stack carriers in the United States than in Germany.

The main reasons mentioned by the German participants were:

- **Differences in the licensing processes** ("Easier licensing by the regulator (in the U.S.)"; "Capital and supervision. After all, Solvency II is not just for fun.").
- Better access to capital in the United States ("A much better availability of capital (in the U.S.). You simply get every startup financed very differently than in Europe."; "Raising capital in the USA is disproportionately easier."; "Bullish investors like Sequoia, Andreessen Horowitz and Google Ventures and so on, who simply believe that entire industries can and must be changed at their core, are much more prevalent there than here.")
- A different mentality and more experience among US founders ("This is a mentality issue. In the United States, entrepreneurship is very much associated with risk taking, and failure is not a problem for them.")
- Fewer advanced InsurTechs in Germany ("The phases that the different InsurTechs are in—early, mid, mature. Because we also don't have as many giants as perhaps elsewhere.")

While the German study participants had relatively clear ideas about the differences between the United States and Germany (Europe), the American participants seemed less aware of these differences. This makes intuitive sense, since InsurTech development began in the United States and European founders were more likely to look to the United States for ideas and inspiration than vice versa.

Some US participants of the study did mention similar points like their German counterparts:

- Licensing process ("Maybe it is a different regulatory environment.")
- Lack of maturity of European InsurTechs ("Very few European InsurTech companies have reached a significant size yet.")

However, these comments were less pronounced and less frequent. Some of the US study participants cautioned against reading too much into the different business model distributions. They pointed out that the development in the United States was not all intended but was caused in part by a lack of available insurance capacity through fronting or reinsurance. ("None of these quys (U.S. full stack carriers) started with the intent of having a proper balance sheet. They just ran out of places to put risk because Munich (Re) said this is 110 combined ratio to me, because your loss ratios are gargantuan (...), no thank you! And then Lemonade goes 'I have all this money, I just raised from all those investors, so I am going to start a balance sheet."). Another point made was a simple time lag between the markets, assuming that successful US-based business models will be copied in Europe soon after ("I would not read too much into it. What I have learned is that in Europe and the US the value is not super far apart. (...). Many InsurTechs in Europe were trying to do stuff, that has been proven in the U.S.").

#### 4.9 | Current InsurTech business model trends

Respondents were then asked to identify trends that will be relevant in the longer term and their impact on the development of InsurTech ecosystems in the coming years. One of the obvious trends discussed was the significant change in financial markets with a noticeable increase in interest rates and how this is already impacting InsurTech ecosystems and business model decisions today and will impact them in the future.

In Germany, industry experts had already a couple of years ago noticed a trend toward more MGA business models. This trend has been attributed to the stricter BaFin regulations for young digital insurers announced in early 2021. These entail significantly higher capital requirements for licensed insurers on Day 1, which could explain a shift toward the MGA business model as the preferred solution for a greenfield digital all-rounder (NEW PLAYERS NETWORK, 2021). While the regulatory trigger for this trend was obviously specific to the German market, it could be assumed that rising interest rates and a decline in available VC funding could trigger a similar development in the United States. Participants in the study were, therefore, asked, which trends they see in InsurTech business models.

Quite a few study participants confirmed the impression of a trend toward the MGA business model and a preference among investors for companies that can operate "capital-light." Not only has the MGA business model become better known and understood, but the collapse in valuations of publicly listed digital full-stack insurers has led to a paradigm shift among founders and investors. Or as one participant put it: "As a result of the overall shift in the valuations of InsurTechs, the courage to tackle the big issues has been completely lost, and as a result people are naturally trying to focus more on niches or sub-segments of the value chain."

Individual study participants consider this trend to be quite healthy and a sign of increasing maturity of InsurTech ecosystems ("Fundamentally that is absolutely what should be happening and that goes back to the economic fundamentals ...").

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Founders are now thinking much more about how to make InsurTech business models financially efficient, how to limit capital requirements and reduce the cost of capital. One example of this trend is Branch Insurance, a digital US carrier that offers P&C insurance products for retail customers. Rather than simply choosing between a "full carrier" and an MGA, the founder has set-up a "Reciprocal Exchange" structure to lower its cost of capital. This very specific legal form of ownership and control is based on the idea of peer-to-peer insurance and combines the advantages of a stock-based insurer with those of a mutual. The general concept has been around for more than a century, and some of America's largest insurers, such as USAA and Farmers, are organized as reciprocals.<sup>18</sup> While the concept is very specific to the US legal framework and does not easily translate to other jurisdictions, it is an example of how InsurTechs are building on established concepts to solve current problems and create innovative new business models.

And while some respondents in this study argued that the movement toward low-capitalintensity business models like MGA may be cyclical and not a sustainable long-term trend, it seems safe to assume that the days of abundant capital for InsurTech startups will at least not return in the short term. For a healthy development of InsurTech ecosystems, a prudent use of capital and the use of more capital-efficient business models will most likely be crucial. And the example of US cyber insurance specialist Coalition shows that those who are conscientious about their business model can still successfully make the step from MGA to licensed insurer even under difficult market conditions (Coalition, 2022).

#### **5** | SUMMARY, CONCLUSIONS, AND IMPLICATIONS

In this paper, we examine the factors that influence the choice of business model for an InsurTech and the decision whether or not to apply for an insurance license. Based on the responses of the study participants, we have gained a clearer understanding of the initial hypotheses regarding the relevant factors.

The market-related challenges for InsurTech founders in the United States and Germany appear to be relatively similar. On the supply side, they need to find ways to access capacity, and they are dealing with more or less the same players, namely reinsurers, traditional primary insurers and fronting companies. On the demand side, customers do not really seem to care too much which business model their insurance partner chooses, no matter whether the customers are in the United States or in Europe.

To date, fewer InsurTechs in Germany have reached a mature stage, which might explain the lower number of fully licensed InsurTechs among them. It remains somewhat unclear, whether this is just a matter of a time lag of 2–3 years or whether German (European) (European) InsurTechs are systematically less successful in building scale and the number of licensed full-stack InsurTech players in Europe will remain lower in the longer term.

German respondents made a strong case regarding that the restrictive stance of their regulator BaFin is responsible for the limited number of fully licensed InsurTechs in Germany. While this argument seems plausible, it does not explain why the number of full-stack InsurTech business models in other European countries is also significantly lower than in the

<sup>&</sup>lt;sup>18</sup>For more details about the reciprocal exchange concept, see Norgaard (1964), Reinmuth (1967), Mayers and Smith (2002).

United States as well. Although the FCA in the United Kingdom has a reputation for being relatively supportive of FinTech and InsurTech startups, the number of full-stack InsurTech companies in the UK is no higher than in Germany. Nevertheless, regulators and supervisors should take seriously the comment of one US participant in the study: "Regulators who aren't actually interested in creating value through innovation for their constituents are a real barrier to change."

US-based InsurTechs appear to have a comparative advantage in access to venture capital compared to their German (European) counterparts, which may explain the lower number of capital-intensive full-stack business models in Germany (Europe). However, it is unclear how this will play out in the future, as financial markets have changed significantly in the last 2 years and more US InsurTechs are now facing the same challenges in raising venture capital that German (European) InsurTech founders have been facing for some time.

"Soft" factors such as different entrepreneurial cultures seem to be less important for the distribution of business models in the InsurTech ecosystems.

Summarizing these results, the most important factors influencing the choice of business model of InsurTechs seem to be (1) access to and cost of capital, (2) regulation and actions taken by the relevant regulator, and (3) the maturity of a startup or an entire startup ecosystem. InsurTech ecosystems are currently at an interesting stage as we are seeing significant changes in all three factors. As interest rates rise, so does the cost of capital for founders and InsurTech startups. Regulators are taking an increasingly close look at the business models of InsurTechs and have—at least in Germany—tightened their licensing and supervisory practices. And the maturity of InsurTech ecosystems is increasing; we will see more mature, professional startups, but we should also expect "the wheat to be separated from the chaff." Under the current challenging conditions, it is to be expected that fewer InsurTechs—not only in Germany—will choose the full carrier business model. In this respect, there could be a convergence in the distribution of business models between the United States and Germany and the other European markets.

This research is a first step in analyzing the business model choices of InsurTech founders. It could be expanded in several ways. One would be to include other relevant InsurTech markets such as China, the United Kingdom, France or the Scandinavian countries. Another would be to back up this qualitative research with a detailed quantitative study analyzing the choice of InsurTech business models in different markets. A third approach would be to conduct in-depth analyses of individual drivers such as regulation or access to capital in a variety of geographic markets.

It will be interesting to see how the business model decisions of InsurTech startups evolve due to the changing financial market environment. The results of the interviews with the decision makers and experts interviewed in this study indicate that the international InsurTech ecosystems are undergoing a consolidation phase for the first time after years of strong growth. In such a phase, sound business model decisions are likely to become even more important for InsurTechs to differentiate themselves from the competition and secure the necessary financing for their future growth.

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#### **APPENDIX A: Interview Guideline/Questionnaire**

#### Introduction

- 1. Thank you for your willingness to conduct an interview on the selection of your company's business model.
- 2. The background of the interview request is a scientific study in which we investigate differences between the business models of InsurTech startups in the United States and in Germany/Europe. The starting point was the observation that significantly more InsurTech startups in the United States have opted for the licensed insurer business model, while only a few companies of this type exist in Germany/Europe. Many insurance startups in Germany/Europe seem to decide against licensing as an insurer and instead tend to choose the managing general agent (MGAs) business model. I would like to ask you a few questions about this in relation to your company.
- 3. May I record the interview for easier follow-up?

General part—mainly open questions

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- 4. Please briefly describe your company and your role in it.
- 5. Which aspects of the insurance value chain does your company cover?
  - Product development
  - Distribution
  - Underwriting
  - Customer service
  - Claims settlement
  - Risk bearing (on own balance sheet)
  - Other (please specify)
- 6. What is the legal status of your company (licensed insurer, insurance broker, MGA, other)?
- 7. Please briefly describe the founding phase of your company: how did the founding idea come about and what was the process of finding a business model?
- 8. Did you discuss different business models during the founding phase and-if yes-on the basis of which criteria did you decide on a business model?
- 9. Has the original business model remained stable since the founding or has it changed?
- 10. If changes have occurred, what did they look like and what were the reasons for these changes?
- 11. What factors played a role in your decision to adopt the chosen business model and whether to apply for an insurance license for the markets relevant to you?
- 12. Did you make the decision identically for all markets (countries, states) or did you reach different conclusions? If so, what are the differences and what do you believe were the reasons for them?
- 13. Would your decision today be exactly the same as at the time of the foundation/decision and-if not-what are the reasons for deviations (knowledge gained in the foundation, changed framework conditions, ...)?

Only if necessary: Follow-up questions on unaddressed influencing factors.

- 14. Which influence did the financial requirements and available funding sources for the business model of the fully licensed insurer have on your decision?
- 15. How do you ensure the availability of sufficient capacity and what influence did this have on your business model decision?
- 16. What role did the issue of (in)dependence on a risk carrier play in your decision?
- 17. Which influence did the effort and time required for the application process for a license have on this decision?
- 18. Which opportunities and risks do you see in the licensed insurer business model compared to the MGAs business model?
- 19. What influence did the growth potential in the different business models have on your decision?
- 20. What influence did the impact of the business model have on your customers in your business model decision?

### Supplementary questions

21. In various publications, I have read that there is a trend among InsurTech startups to move away from licensing as an insurer toward the MGAs business model? Do you share this assessment and what reasons might play a role in this?

- 22. The share of InsurTech startups that act as insurers with their own license seems to be significantly higher in the United States than in Germany/Europe so far. What possible reasons do you see for this?
- 23. How should insurance regulators position themselves with regard to the business model decisions of InsurTech startups? Are there things that insurance supervisors could do to facilitate the startup and business model decision process?
- 24. What is your perception of investor attitudes with respect to InsurTech startups' business model decisions? Are there any particular business models that investors currently prefer?
- 25. How do you currently perceive the attitude of insurance customers with regard to InsurTech startups and their business model decision? How does this look for retail customers, and how does it look for business customers?

#### Final questions

- 26. Did I forget a topic in the course of our conversation that you would like to address?
- 27. Are there any people in your network who could make an interesting contribution to this topic and whom I should also interview if necessary?
- 28. Would you agree to be named as an interviewee in the study or should I anonymize the evaluation with regard to you personally?
- 29. Thank you very much for taking the time for this interview!