

China Liability Insurance Market Trend Report

May, 2019



Executive summary

The Chinese liability insurance market is currently small but its growth has accelerated.

The liability insurance market in China is currently small with total premiums 2018 of RMB 59.1 billion (5.03% of total non-life premiums) and with low penetration at 0.066% of gross domestic product (GDP) compared with over 0.2% globally, but growth has accelerated in recent years. Between 2010 and 2018 the average annual growth has been 18.4%. Key growth drivers include changes in regulation and in the legal system, government schemes using liability insurance to manage social disputes, product innovation and technological advancements.

Traditional business is seeing stable growth with the market structure changing.

Market structures are changing due to further implementation of government schemes and innovative products. The proportion of passenger carrier liability (PCL) on overall liability premiums has reduced to 11.37%, but it is still the main source of large losses within all of liability. Although employer liability is not profitable, competition is still strong within this segment as it is one of the easiest businesses to acquire. The new "Made in China 2025 Strategy" will increase business potential for product related insurance in the near future. The risk landscape for domestic financial line products is changing due to increasing risk awareness and the introduction of the Science and Technology Innovation Board (the Chinese version of the NASDAQ).

The government encourages the use of liability insurance to manage social disputes.

In order to use liability insurance as a risk management tool, the government has released policies and regulations to different industries to accelerate the development of liability insurance. The safety production liability (SPL) product is replacing traditional employer liability products on a wider scale. Regulation on mandatory coverage of gradual pollution in EIL is currently making slow progress, but this is expected to accelerate soon. For well-established schemes such as medical malpractice, school liability and travel agency liability, the government is expecting the insurance industry to write them on a low-profit to non-profit basis. Appointed as representatives of industry associations, brokers always play an important role in government schemes.

Product innovation is expected to bring more business.

Product innovation is another key enabler to further develop liability insurance in China. Established products from mature markets, including cyber insurance and intellectual property insurance, are gradually being introduced in China, but in general products for such risks are still at a very early stage. However, changing legal regimes and increasing losses will draw the industry's attention further towards such products. Litigation Property Preservation Liability has proven to be a successful product enabling market growth, which resulted in further innovation efforts to develop new litigation process-related products. Increasing sales of new energy vehicles is driving the need for new extended warranty insurance type cover.

Technological advancement is impacting liability insurance in a number of ways.

The fast development of E-commerce is also changing insurers' business model (e.g. online insurance distribution) as well as creating many new liability insurance products such as return shipping expense insurance, delivery service liability, etc. The automation used in many industries and emergent new sub-industries such as drones and 3-D printing will also lead to an increase in demand for liability insurance. Data science will further enhance analysis and modelling capabilities in liability, enabling increased pricing accuracy and product innovation.

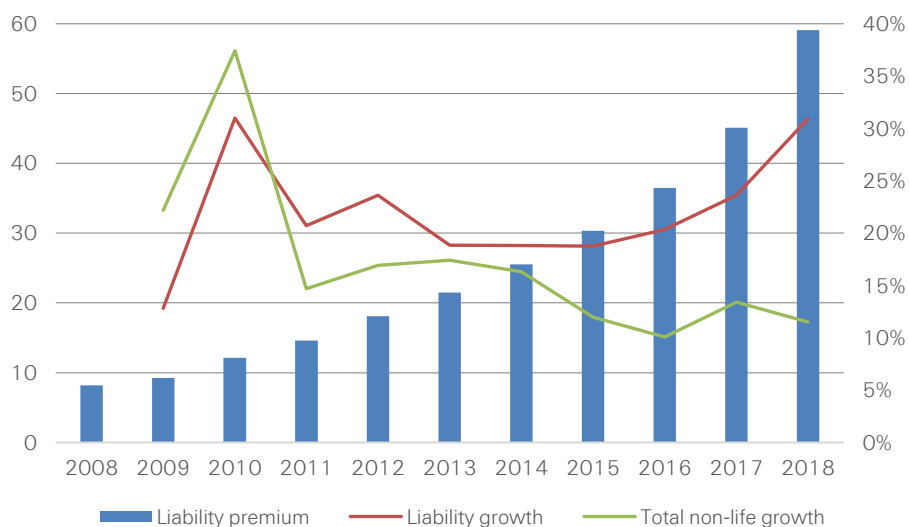
I. Market overview

The Chinese liability premium in 2018 was around RMB 59.1 billion.

In 2018, the Chinese market liability premium were RMB 59.1 billion, an increase of 30.9% from 2017, accounting for 5.03% of total market non-life premium. Chinese market liability premium grew by 18.4% per annum between 2010 and 2018, and growth has accelerated in recent years. By way of comparison, China P&C overall premium grew by 14.0% during the same period and growth became stable.

The top three insurers - PICC, Pingan and CPIC - have shared over 60% of the liability market in the last 3 years (62.18% in 2016, 60.76% in 2017 and 60.02% in 2018).

Figure 1
Liability premiums and growth in China in RMB bn (2008-2018 financial period)



Source: Market data collected and consolidated by Swiss Re.

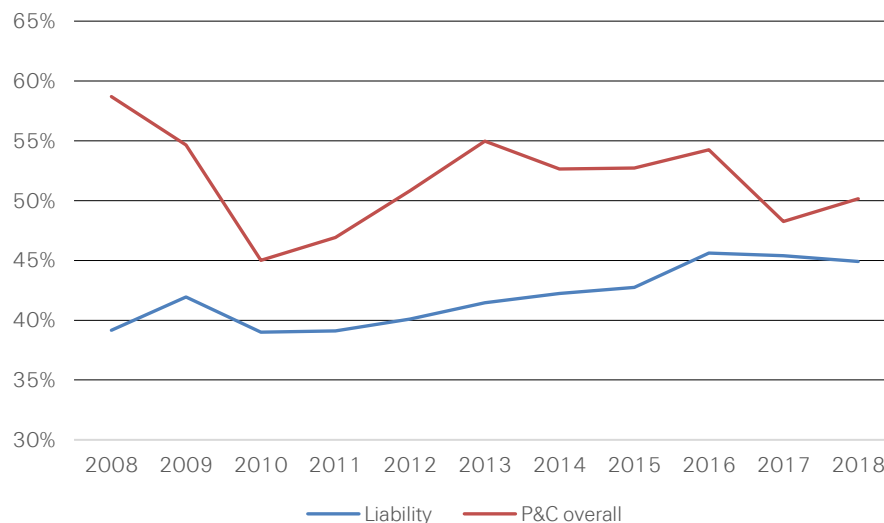
The loss ratio for liability remained relatively low compared with total non-life.

Due to the relatively low claims environment, both in terms of frequency and severity, the overall liability loss ratio remained low relative to other business lines. The liability financial year paid loss ratio has averaged 44% over the last six years, compared with 52% for total non-life insurance. However, an upward trend has been observed in recent years. Loss ratios are expected to increase further since consumers' claims awareness is increasing and the government is using liability insurance more to manage social disputes.

Market overview

Figure 2

Paid loss ratio comparison between liability and total non-life insurance in China, (2008-2018 financial period) %



Source: Market data collected and consolidated by Swiss Re. Note: before reinsurance

Table 1

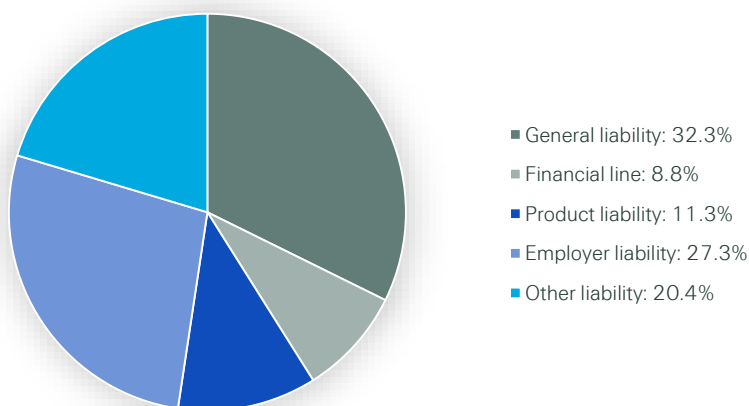
Official classification standard for liability products in China market

The scope of liability products in China differs from the one in other markets. CBIRC categorises liability into 5 sections; some speciality line products such as IDI, First Set and Flight Delay are also defined as liability products.

General liability		Employer liability	Product liability	Financial line	Other liability
Public liability	Internship liability	Employer liability	Product liability	D&O	Extended warranty
Fire public liability	Food safety liability	Safety production liability (SPL)	Product guarantee	Med mal	Automobile extended warranty
Passenger carrier liability (PCL)	Healthcare service liability	Supplementary workers compensation	Product recall	Single Project PI	Litigation property preservation liability
Dangerous goods carrier liability	Power supply liability	Other employer liability	Inherent defect insurance (IDI)	PI for specific professionals	Flight delay
Natural disaster public liability	Travel agency liability		First set equipment	Miscellaneous PI	Return shipping expense
Waterway passenger carrier liability	Special equipment liability		Other product liability	Other PI	Account security insurance
Environmental impairment liability (EIL)	Patent infringement liability				Intellectual property insurance(1 st party)
Logistic liability	Other general liability				Other liability
School liability					

Liability premiums and portfolio split

Figure 3
Liability premiums, 2018,
by line of business, %
(Financial year)



Source: Market data collected and consolidated by Swiss Re.

On the primary market side, liability overall is still profitable but the margin is already very low.

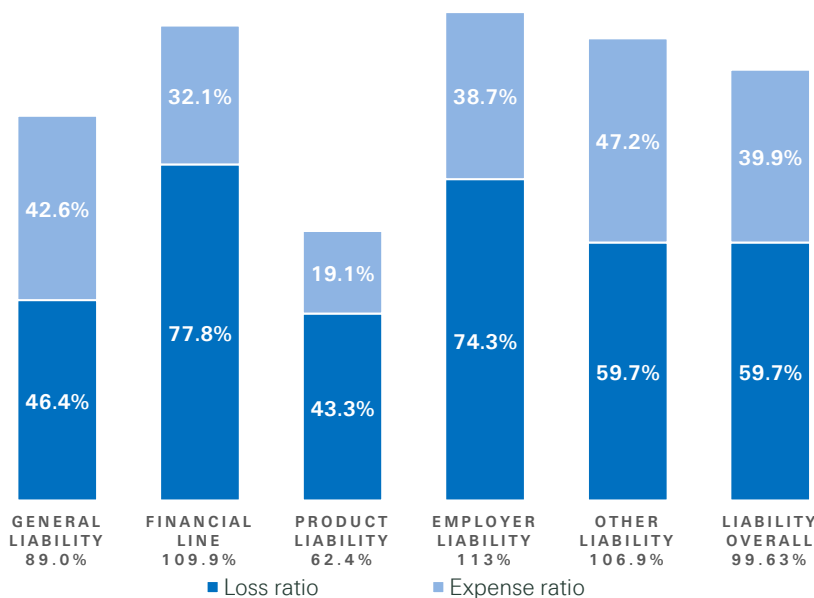
In 2018, the overall liability market combined ratio (after reinsurance) amounts to 99.63%. General liability with an 89.0% CR and product liability with a 62.4% CR are profitable, while the other three liability sub-lines are in the red.

The negative result within the financial lines segment is mainly due to the high proportion of medical malpractice where claims tend to be of high frequency but low severity; the government's idea of "break even within this government scheme" could not be achieved in practice. Anti-selection and inadequacy of premium lead to a high loss ratio within the employer liability segment. "Other liability" includes several non-traditional liability products such as extended warranty, flight delay, and 1st party IP insurance with high loss ratios.

1. The PCL estimated premium in 2018 was around RMB 6.7 billion. Source: Market data collected and consolidated by Swiss Re.
2. 2015 premium of RMB 2.3 billion from <Medical malpractice market report> by Zhonghui broker; 2016 premium of RMB 2.8 billion from market news. With an estimation that mean yoy growth slows down to an average 10%; 2018 premium estimation was around RMB 3.4 billion.
3. First pilot equipment/set insurance (First Set) is a government scheme insurance product. The coverage is combination of product guarantee and product liability.
4. In 2018, estimated premium for first set insurance was around RMB 3 billion; premium estimation for IDI was around RMB 0.8 billion.

Figure 4

Liability combined ratio, 2018,
by line of business, %
(Financial year)



Source: Market data collected and consolidated by Swiss Re.

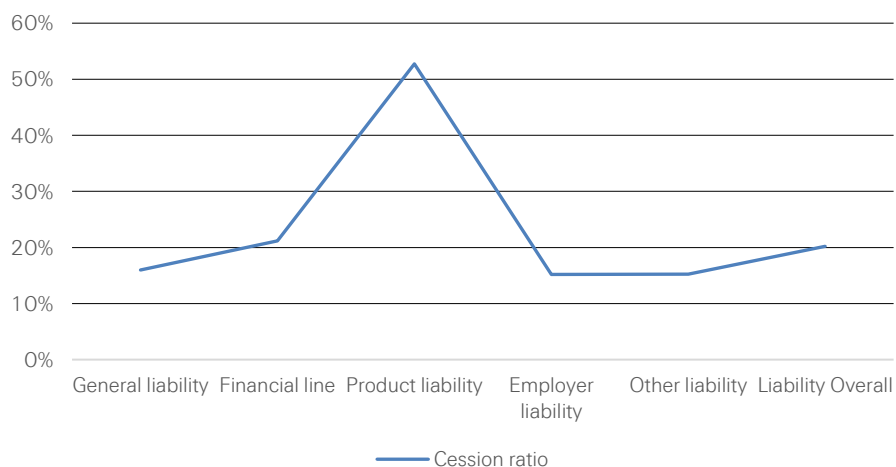
Note: after reinsurance. Combined loss ratio includes IBNR movement and ULAE.

Reinsurance cession ratio

Across all liability lines, product liability has the highest cession ratio with 52.74%, driven by high cession ratios⁵ for first set insurance and for export product liability. The second highest cession ratio with 21.16% comes from financial lines, which is due to the relatively limited capacity and expertise in the market for these lines / products. All other liability sub-lines have cession ratios in the area of 15%.

Figure 5

Reinsurance cession ratio, 2018,
by line of business, %
(Financial year)



Source: Market data collected and consolidated by Swiss Re.

Note: cession ratio includes both treaty and facultative. Facultative between insurers is also included.

⁵The major players' common retention ratio is 20% for first set and 40% for IDI.

II. Market trends

Traditional business is seeing stable growth with market structure changing

Market structure changed due to greater implementation of government schemes and innovative products.

Passenger carrier liability (PCL) and employer liability (EL) together used to make up over half of the liability market. With the high growth of government-driven business and the introduction of some new products in 2018, the proportion of PCL within overall liability reduced to 11.37%, the share of EL (including safety production liability) reduced to 27.3%. The growth and popularity of high speed railways also reduced the market potential for road passenger carriers and the PCL business. However, road traffic accidents under PCL are still the main contributor of large losses to non-proportional treaties in recent years.

Customised general liability products for specific industries are common in China market. Insurers like to use such specific products to gain more attention from industry regulators/associations and to leverage sub-markets. Successful practices could be transferred to government schemes.

Traditional employer liability is still the biggest non-profitable product.

Employer liability in China is not mandatory and business demand comes primarily from large companies with high risk awareness or from undertakings in high-risk manufacturing industries; thus the average EL-insured has a higher risk potential than the average insured in other product areas. In addition, strong competition for the premium-large EL portfolio leads to market price inadequacy. These two reasons make EL one of the least profitable liability products in the market.

Many players in the market have noticed the high loss ratio and are taking action to increase premium rates and reduce losses. However, since EL is one of the easiest businesses to acquire and market capacity is sufficient, insureds can always get coverage at low prices. Thus, the quality of traditional EL business is not expected to improve significantly over the next years.

The <Made in China 2025 Strategy > would bring more business potential for product related insurance.

China has been the largest manufacturing country since 2010 and did account for around 40% of global industrial output in 2017. To counter the claim that Made-in-China represents low quality, the central government is putting more efforts into improving the average quality of Chinese products. In 2018, the State Administration for Market Regulation took over from several former regulatory bodies⁶ to become the overall supervisory agency for the Chinese manufacturing industry. This concentration of supervisory power should strengthen the implementation of the "Made in China 2025 Strategy", their main objective being to upgrade the Chinese industry to become an advanced manufacturing power. The US-China trade war is another factor that makes a manufacturing upgrade more urgent.

Other industries, including the insurance industry, are also involved in the implementation of this strategy. First set and new material insurance products have been introduced to support the development of the advanced manufacturing industry. Those products are currently government-subsidised and have already taken a leading position within the product liability sector. Still, continued high growth is expected in these products over the next few years.

⁶ State Administration of Industry and Commerce, General Administration of Quality Supervision, Inspection and Quarantine, and the China Food & Drug Administration

The risk landscape for domestic D&O is changing.

Conscious that those government subsidies are temporary, major insurance players are exploring other business modes to support the manufacturing industries. One potential idea is to provide comprehensive liability coverage out of one policy, including product liability, recall and product guarantee / extended warranty. Limited expertise and capacity make the related reinsurance requirement for such products / risks the highest among all liability lines of business.

False representation is the major cause of action in the A-share market (Chinese domestic stock market). Both the frequency and severity of such claims have increased considerably over the last 5 years. 2018 has seen more than 50 listed companies undergoing litigation processes due to false representation.⁷ The largest securities lawsuit in the A-share market - the Shanghai DZH case - has a total claim amount of around RMB 520 million. The final judgement for the first batch of plaintiffs was awarded in November 2018.⁸ Claims with such loss amounts have the potential to raise the risk awareness for such cases in the domestic market.

Besides above mentioned trends in securities suits, the introduction of the Science and Technology Innovation Board in 2019 (the Chinese version of NASDAQ) will also impact the domestic market risk landscape. A registration-based IPO mechanism is being piloted allowing companies with negative P&L to proceed towards an IPO. In addition, it allows stock prices to rise or fall by a maximum of 20% on any one trading day with no cap over the first 5 days following the IPO (versus limitations of 10% and 1 day for the A-share market).

In consequence of these risk trends and the introduction of the Innovation Board, the demand for domestic D&O and related insurance is expected to rise. Insurance companies are exploring potential business opportunities and capacity requirements are increasing.

The government encourages the use of liability insurance to manage social disputes

In order to use liability insurance as a risk management tool, the government has released policies and regulations in different industries to accelerate the development of liability insurance. Safety production liability, environmental impairment liability and medical malpractice are explicitly targeted to play prominent roles in resolving social disputes. The expectation of the government is that these schemes should be written on a low-profit to non-profit basis.

Safety production liability is replacing traditional employer liability on a wider scale.

Safety production liability is a combination of traditional public liability and employer liability coverage, adding coverage for rescue expense. It has been in the market since 2006 and was originally restricted to four major high-risk industries (coal mining, non-coal mining, chemical, fireworks/firecrackers), which led to small market premiums. After several rounds of adjustment, the National Administration Bureau of Safety Production promulgated the "Safety production liability insurance administration regulation" which came into effect 1 January 2018, making safety production liability mandatory for 9 industries (adding transportation, construction, civil explosives, metallurgy and fisheries to the original four), and encouraging all other industries also to use safety production liability to manage their risk.

⁷ <http://wenshu.court.gov.cn/Index>

⁸ http://news.21so.com/2019/hexun_0411/36994.html

With the implementation of the new regulation, safety production liability is promoted at provincial level and almost all provinces have issued local enforcement regulations. In several provinces such as Zhejiang and Guangdong, the government has set up special funds to subsidise safe production liability. The estimated premium in 2018 has already exceeded RMB 2 billion and it is expected that safety production liability will replace traditional employer liability on a wider scale, continuing to see significant growth in the coming years.

Though the average insured risk is higher than for traditional EL, the loss ratio for safety production is currently lower than for EL. In practice, a relatively adequate premium rate level is currently being charged to safety production. In addition, a <Safety production accident report> has to be issued by regulators at county level and above for each and every claim. To avoid such requirement, insureds prefer to retain small losses. However, the loss ratio is expected to increase in coming years because there is a trend of removing such requirement, making safety production liability more similar to traditional EL.

Mandatory coverage of gradual pollution in EIL is currently making slow progress but is expected to accelerate.

The <Compulsory environmental liability insurance regulation (draft)> was reviewed and approved in principle in May 2018, making coverage of accidental, gradual pollution and ecological system restoration mandatory for several high-risk industries. The mandatory pre-insurance risk assessment and post-insurance risk service requirements further turn EIL insurance into a risk mitigation tool.

Based on figures from the State Administration of Industry and Commerce, there are more than 600'000 companies nationwide falling under this new scheme. The overall EIL market would grow significantly over the next few years if this national scheme would be implemented successfully.

Pending nationwide, official promulgation of this regulation, several regions including Guizhou, Shenzhen and Shandong have already started to pilot EIL schemes. Wide coverage and unclear policy language is seen in the current regional schemes, presenting a significant challenges to the insurance industry. At this stage relatively low policy limits (RMB 1M to 10M) and co-insurance mode mitigate capacity needs for insurers and correspondingly reinsurance requirements.

However, policy limits are likely to increase to more than RMB 10 million as this market matures. In addition, insurance companies may strive for market-admission mode within these government schemes. These two factors, together with the provision of expertise and risk assessment tools from reinsurance companies, will significantly increase the need and attractiveness of reinsurance in the EIL market.

Successful government schemes include med mal, school liability and travel agency liability, but normally with a low/no margin for the insurance industry.

Though professional indemnity insurance is still at a very early stage of development in China due to lax regulatory oversight, one insurance product that has experienced strong growth is medical malpractice. By the end of 2015, all level three and 90% of level two public hospitals were said to have medical malpractice coverage.⁹ The concentration of coverage to level three and level two hospitals only, those with higher risk practices, has led to very high loss ratios. Growth in his segment is expected to slow down as the government's drive to promote medical malpractice coverage to level one hospital facilities is relatively modest given the relatively fewer disputes raised there.

⁹ There are 3 levels of hospitals in China. The higher the level, the larger the size with generally better medical facilities.

More government schemes may be expected.

School liability and travel agency liability are two other successful government schemes. Even with high penetration ratio, the market size of these two schemes is relatively small and the insurance industry's margin are very low.

Regulators' guidance for using liability insurance to manage risk is not limited to these high profile areas, but is also applied to many other niche markets such as internship, housekeeping, waterway passenger transportation, lift operation, etc. The insurance industry, by using customised insurance products, is exploring this businesses together with the respective industry associations. Such endeavours may bring about more government schemes in the future.

Events such as the baby formula scandal or the vaccine scandal are also triggers to motivate government and regulators to promote liability insurance. Recently, the Changsheng bio-tech ineffective vaccine scenario has drawn the regulators' attention, making vaccine liability mandatory subject to further review.

Brokers play an important role in government schemes.

Appointed as representatives of industry associations, brokers usually play an important role in government schemes. A very common procedure is to include a post-insurance service fee in the brokerage. Using the service fee, brokers establish mediation or similar committees to undertake claims handling and risk service.

Product Innovation is expected to bring more business

Product innovation is another option to further promote liability insurance in China. The introduction of established products from mature markets is thereby one way of exploring new business. But differences in regulations, culture and business environment may mean that those products are not suited to China market. Major players are thus investing in innovation to develop products adapted to local practices.

Litigation property preservation liability insurance is the biggest liability "star" over the last few years.

Litigation property preservation liability insurance (LPPL) is a new liability product launched nationwide in 2015. The basis for this product is the <Civil Procedure Law> allowing a plaintiff to apply to the court for the preservation of the defendant's assets up to the claimed value of the suit. LPPL is used as an equivalence to other potential guarantees (letter of guarantee, own deposit, etc.) required by the court to cover the pure financial losses suffered by the defendant if the motion for preservation turns out to be wrong. In 2018, the estimated market premium was more than RMB 2.2 billion¹⁰, with a market loss ratio still in single digits.

Initially, the premium rate for LPPL was less but close to the fee for a letter of guarantee from a commercial bank. Due to strong competition and low loss ratios the premium rate deteriorated fast but has now reached a somewhat stable level. Since the legal environment is benign with no significant changes in litigation procedure in sight to alter the risk landscape, many players still believe this to be a low-risk business.

However, more property preservation claims have been hitting the market recently, some with a claim amount in excess of RMB 10 million. The largest settled case for wrongful preservation was finalised by the Supreme People's Court on 8 December

¹⁰ Taking the LPPL premiums of 12 major players from client interviews or submissions, the result is around RMB 2.18 billion.

2017 ((2017) Supreme Court Civil Final No.118), where the court held that the Zhongjin Industrial Company should compensate the Qingdao Yuneng Company for the loss of around RMB 66.7 million caused by wrongful property preservation¹¹. Although no insurance coverage was provided in this case (the dispute stems from 2011, prior to the launch/availability of LPPL in the market), the size of the claim as well as the long tail should provide for a warning to the insurance industry about the loss potentials inherent in this product.

Another issue that might impact the development of LPPL insurance relates to its policy wording: in practice, most courts treat LPPL policy exactly the same as letters of guarantee, and exclusions are not acceptable. Sometimes, even independent letters of guarantee issued by the insurer in addition to the insurance policy are required, which increases the risk to LPPL business.

LPPL's success leads to increased efforts by insurers with regard to other litigation process-related coverage.

Given LPPL's contribution to liability growth as well as its low loss ratio, the market is exploring further litigation process-related liability business. Arbitration property preservation liability, continuous enforcement liability (CEL), insolvency practitioner liability (IPL) and legal expense coverage are typical products currently being introduced to the market. High growth is to be expected in this sector in the coming years.

Customer's risk awareness of cyber is increasing.

The cyber insurance market in China is generally under-developed compared with economies at a similar level of digitalisation. Low demand is partly due to over-confidence in existing data security and low awareness of availability of cyber insurance.

Insurance companies underwriting cyber risks are challenged by the low transparency of claim or incident data available related to cyber events, ambiguity in wording interpretation and lack of official guidance. Accordingly, only very limited insurance coverage is provided in standalone cyber products.

The <Cyber Security Law> effective 1 June 2017, together with other supporting legislation and national standards, provides for a legal framework in China which will tighten the regime for data handlers. The increasing frequency and severity of cyber attacks will also help to increase overall cyber risk awareness.

Intellectual Property insurance is still at a very early stage.

China has been the world leader in patent applications for four years, but relatively low control over patents means that IP liability is still an issue for most Chinese companies. The National Intellectual Property Administration has been promoting Intellectual property insurance since 2015, but without detailed nationwide guidance and a mandatory requirement the growth of IP insurance is still slow. The market is currently driven by government subsidies at city level. Given that it is easier to apply these subsidies during the patent application process, most IP business is in the form of 1st party standalone products that cover legal expense and related costs during IP rights protection procedures. Due to the moral hazard of vexatious litigation, the loss ratio of this product is very high.

There are also other types of IP insurance policies available in China market, including 3rd party standalone policies, comprehensive policies and overseas IP liability policies. Though they have not yet taken off, IP liability products (3rd party coverage) match the government's mandate better. Accordingly, future growth is expected to come primarily from IP liability insurance. Raising risk awareness with

¹¹ <http://wenshu.court.gov.cn/Index>

Increasing need for extended warranty insurance is driven by NEVs.

regard to intellectual property will also help the domestic market to expand. In addition, the US-China trade war and other trends towards protectionism may change the international IP business landscape as more cross-border patent disputes could arise, creating an increased demand for insurance.

In China, extended warranty is considered a liability insurance product which can only be sold by insurance companies. The product has been available in the market for more than a decade, but there have been new developments recently.

The stock of new energy vehicles (NEVs) in China is the world's largest, with cumulative sales of almost 3 million units through 2018¹². With an average yoy growth of 60%¹³, it will change the landscape for the automobile industry and automobile extended warranty insurance (EWI). The three core technologies of NEV- battery, electric motor and electronic control - make risk assessment of extended warranty for NEVs way different than for traditional automobiles. Specific EWI products for NEVs are booming.

Extended warranty insurance for other products such as home appliances or electronics are also growing fast, mainly due to changes in the distribution channels moving towards E-commerce.

Advancement of technology is impacting the insurance industry in various ways

Technology is changing buying and selling behaviours in the insurance industry.

As technology has changed the way people shop and how companies market and distribute their products and services, so the insurance industry has inevitably been impacted. There are four online-only insurance companies in China market, while major traditional insurers have also established online insurance departments. Online selling, AI technology used in risk analysis and pricing, and automatic claim handling help to improve the operational efficiency of insurance companies. Motor, consumer finance, short-term medical expense and liability are the main insurance product lines that online insurance is focusing on.

In parallel, an online intermediary industry is also developing. In addition to traditional brokers and agents exploring business opportunities online, price comparison websites are a new trend. Competition will be more transparent and insureds' cost will further reduce.

New liability insurance products are grown from the development of e-commerce.

E-commerce in China grew by 11.7% with a total transaction value of RMB 29.16 trillion in 2017¹⁴. As consumers increasingly buy online, disputes between manufactures, delivery companies and customers are rising sharply. More liability insurance products are being designed to manage these disputes. Examples include return shipping expense insurance, delivery service liability, and account security insurance, to name but three.

Other liability products including flight delay insurance and extended warranty insurance for home appliances/electronics are seeing high growth since they are relatively simple and easier to sell online.

¹² Source: China Automobile Association

¹³ Source: China Automobile Association

¹⁴ <E-commerce research>, Ministry of Commerce

Market trends

More liability opportunities could be expected due to the advancement of technologies in many industries.

Data science will enable analysis and modelling in liability.

The risk landscapes of many industries are changing because of advancements in technology. For example, automation is increasingly used in many industries, which will turn traditional property/motor risks into liability risks (e.g. product liability risk, engineer PI). Emerging industries such as drones and 3-D printing are also creating new liability insurance needs and opportunities.

Liability-related data was relatively difficult to analyse because of its unstructured characteristics and accessibility (less personal data, more commercial data). For instance, insurers' claims data is usually aggregated without breakdown and categorisation; court verdicts are scattered and not formatted for analysis, etc. However now, with data/text mining and machine learning capability, the industry is able to pool certain data from different resources, tag and categorise them for analysis and modelling. This will further increase both the accuracy of liability product pricing and the possibility for product innovation.

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