



AMERICAN
INSURANCE
ASSOCIATION

Testimony of Stephen Simchak
before the
United States International Trade Commission
hearing on

**“Global Digital Trade I: Market Opportunities and Key Foreign Trade
Restrictions” (Investigation No. 332-561)**

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Thank you for the honor of testifying today. My name is Steve Simchak and I serve as Director, International Affairs at the American Insurance Association. Having celebrated its 150th year in 2016, AIA is the leading property-casualty insurance trade organization, representing approximately 320 insurers that write more than \$125 billion in premiums each year. AIA member companies offer all types of property - casualty insurance, including personal and commercial auto insurance, commercial property and liability coverage, specialty, workers' compensation, homeowners' insurance, medical malpractice coverage, and product liability insurance. AIA member insurance groups make up some of the most globally-active insurers, having operations in more than 70 countries and serving customers in more than 170 countries and territories.

The International Trade Commission (ITC) has always been at the forefront of confronting important services trade concerns, and digital trade issues are no exception. We appreciate greatly the attention that the ITC has put on property and casualty insurance trade issues over the years, including in its 2009 study *Property and Casualty Insurance Services: Competitive Conditions in Foreign Markets*. That study highlighted the importance of international trade for AIA's members and other insurers, and pointed out the great promise that greater liberalization in insurance trade holds. It was in that investigation that the ITC concluded that U.S. exports would increase by 48% if all of the examined countries were to fully liberalize cross-border property-casualty insurance exports, and that U.S.-owned affiliates could increase sales by 28%

if all examined countries fully liberalized affiliate sales restrictions. That liberalization, the ITC concluded, would lead to job growth here in the U.S., and those jobs would likely pay above average wages.

The business of insurance is also the business of data analytics. The remarkable advances that our colleagues in the information technology sector have made in connectivity, mobility, cloud computing, big data analytics, and social networking have also advanced the insurance industry. I believe that the insurance industry provides an excellent real-world example of how technology, digital trade and data flows increase the efficiency and competitiveness of U.S. companies around the globe. That is the good news. The bad news is that increasing digital protectionism in other markets is preventing U.S. insurers and other U.S. industries from fully using the benefits that digital trade provides.

In my testimony, I will explain how the use of technology and data analytics have benefitted consumers and insurers, and why access to data from around the world is important for the industry's data analytics processes. I will describe how technology has led to more efficient and safer storage of data. I will also address the ways in which data analytics and data management systems are being threatened by a disturbing and growing trend of foreign governments around the globe forcing the localization of data. Finally, I will explain why the insurance industry believes that all new trade agreements must include strong, binding commitments that protect insurers from data protectionism.

Digital distribution of insurance

Internet distribution of insurance is one example of how technological innovation is changing the insurance industry. Personal lines are increasingly being sold and policies managed online and on mobile phones. Mobile distribution of insurance products is already having a positive impact on financial inclusion strategies, which I will explain in more depth shortly. U.S. insurers and policyholders are very used to purchasing and managing insurance online, but that is not the case in many other markets. However, with spreading internet access around the world, there are greater opportunities for internet insurance sales. For example, in 2015 in China, \$12 billion USD was paid in premiums from online sales of insurance. Though that figure represents only seven percent of total premiums in China, it is fifty-two percent higher than in 2014.¹ That remarkable growth in online sales of insurance in China reflects trends across the developing world.²

¹ The Geneva Association, "Harnessing Technology to Narrow the Insurance Protection Gap", December 2016. p. 15

² *Ibid*

Data analytics and insurance

At the core of the business of insurance is data analytics, which we define as the process of inspecting, cleaning, transforming, and modelling data with the goal of discovering useful information, suggesting conclusions, and supporting decision making.³ Insurance has always been a data analytics business, even from the first century BC when ancient Greeks attempted to calculate what it would cost to make a sea merchant whole if it was *his* cargo that was jettisoned from a ship in inclement weather. It was still a data analytics business in the 17th century AD when the modern insurance industry grew out of the Great Fire of London, and British merchant shipping companies and potential underwriters haggled over what the right payment would be to cover the risk of a lost ship. Today, it has become even more of a data analytics business, as modern technology has created real time access and analysis from growing data sources from around the world. We are in the midst of remarkable changes in the industry. The amount of data that potentially is available and the power of computing are growing, which is having a profound effect on the insurance industry.

Greater access to data from around the world has benefits throughout the operations of insurance groups and at each stage of the life cycle of an insurance product. During the marketing and education phase, greater access to data and utilization of data analytics allow insurance groups to understand the risk profiles and risk mitigation needs of individuals, families and businesses in a particular continent, region, country, city, or neighborhood. Improved data analytics can allow greater tailoring of packages of insurance products for consumers, and can help insurers better analyze a customer's needs to ensure that they are purchasing the right products. Data analytics may also be used in processes that automatically compare different products for consumers and "robo advisor" processes can explain an insurer's views on the suitability of a range of products for a particular consumer immediately with limited or no human interface.

The increase in access to data from around the world allows for better predictive analytics, allowing the insurer to more accurately price a product to match the consumer's risk profile, which can save money for the policyholder and lead to a better claims ratio for the insurer. Advanced real-time data analytics can also allow the industry to predict events. Insurance data analytics can not only help predict weather events and natural catastrophes, but also how likely someone's car is to be stolen in a given month or whether a person is about to suffer a health ailment – all based on real time data. Furthermore, the use of improved data analytics allows insurers to identify new types of emerging risks that we may not be aware of today.

³ International Association of Insurance Associations, "FinTech Developments in the Insurance Industry", 21 February 2017

On the back end, greater access to data and utilization of data analytics can dramatically reduce administrative costs. Claims settlement, acquisition and administration currently are enormously expensive, taking up about thirty-three cents out of every dollar a policyholder pays to an insurer.⁴ Providing real-time access to data and improved data analytics technology greatly increases efficiency in those processes, reducing the cost of administering a policy for the insurer and reducing the cost of a policy for policyholders. When claims are made, improved data analytics driven by access to larger pools of data aids insurers in identifying fraudulent claims, as well. Furthermore, digitization allows for a smoother and quicker claims process for policyholders, who may be aided by claims apps on their phones. Superior data analytics can also improve the quality and reduce the costs of audits, particularly in the areas of risk assessments, controls testing, substantive and analytical procedures and gathering of audit evidence.⁵

Significant data comes from public sources or non-personal sources, but personal data also plays a significant role in the revolution of data analytics that we are currently experiencing. As we are all aware from television commercials advertising voluntary automobile telematics devices, insurers are turning to the “internet of things” (IoT) - from cars to buildings to refrigerators - to collect more and higher-quality data. Telematics involves telecommunications, sensors and computing power to allow the sending, receiving, storing and processing of data. This improved and wider access to data not only helps insurers improve their business processes, it has a tangible impact on policyholders. When policyholders voluntarily provide more data on their behaviors through telematics, insurers and policyholders can interact more frequently and insurers can take a more active role in encouraging behaviors that mitigate risky behavior.

Data analytics and the developments I have discussed are part of a larger evolution in what we call “InsureTech”, our insurance specific piece of “FinTech”. Though the insurance sector has not seen as much investment in InsureTech as have banks and other financial services’ technologies, investment in InsureTech is increasing at an impressive clip. According to KPMG, in 2014, technology companies that were primarily focused on insurance technologies received less than \$800 million in funding. However, in 2015 that number jumped by more than three times, as insurance-focused technology companies received approximately \$2.5 billion.⁶

⁴ The Geneva Association, “Harnessing Technology to Narrow the Insurance Protection Gap”, December 2016. p. 7

⁵ International Association of Insurance Supervisors (IAIS) comments on IAASB’s paper “Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics”, 3 February, 2017

⁶ IAIS, “FinTech Developments in the Insurance Industry”, 21 February 2017, p. 13

Using digital trade and data analytics to reach the under-insured and uninsured

The revolution in insurance data analytics stretches beyond the U.S. and the developed world, where insurance penetration is quite high. AIA and our industry partners have a strong commitment to financial inclusion, which for us means looking for ways to create access to insurance for those who are uninsured or under-insured.

I do not think that it is hyperbole to say that technological advancement, including in data analytics and digital trade, potentially has marked the biggest step forward in financial inclusion in history. Like never before, the industry is discovering ways to provide insurance protection to those who previously had no access to insurance all around the globe, aided by better technology and better data. The most significant opportunities in that regard are in personal insurance lines, such as auto insurance and homeowners insurance. I would recommend to the Commission a recent study by my colleagues Kai-Uwe Schanz and Fabian Sommerrock at the Geneva Association, an insurance think tank, entitled “Harnessing Technology to Narrow the Insurance Protection Gap”. That study concluded that, due to access to an ever-larger pool of data from around the world, “[i]n the digital age, traditional information asymmetries in insurance are likely to disappear, with both insurers and policyholders benefitting from much improved information at much lower cost.”⁷ Intriguingly, the Geneva Association also envisions that increasing access to data from around the world “might be harnessed to kick-start new types of insurance that are currently not feasible due to informational constraints and create new markets for risks that are currently underinsured or uninsured.”⁸

The technology-enabled opportunities in financial inclusion have given rise to innovative partnerships in the industry such as Blue Marble Microinsurance, a consortium of eight insurance companies that operate a social enterprise with the purpose of extending insurance protection to the emerging middle class. Blue Marble, the name of which refers to the globe, incubates and implements microninsurance ventures, for example data hubs or mobile technology that can be extended around the world, making it financially viable to reach consumers in smaller or less-developed markets. Right now, Blue Marble is in the pilot stage of a project in Zimbabwe through which it is providing drought protection to smallholder maize farmers. That venture is bringing together data scientists and agronomists to design a proprietary index to make the microinsurance product viable. By using point-sensor technology to measure rainfall and plant health across seasons, Blue Marble’s data-rich index will provide higher-resolution parametric insurance coverage for Zimbabwe’s maize farmers. This is just a pilot program – you can imagine the implications of what they are developing around the world. But a key to making these types of innovative insurance programs viable is real-time access to growing pools of data.

⁷ The Geneva Association, “Harnessing Technology to Narrow the Insurance Protection Gap”, December 2016. p. 7

⁸ *Ibid*

Data infrastructure benefits

There is no single way in which insurers utilize the freedom to structure information technology systems since the data and computing needs vary by company, but depending on the size of the insurance group and the number of markets in which they operate, companies may have a single primary data center, a networks of a few regional data centers, or a small network of data centers that focus on specific lines of insurance or tasks within the insurance group. Some insurance groups prefer to own their own data centers, while others partner with IT service providers that store the insurer's data, or some mixture of the two. One insurance company described its data management system as a "private cloud".

Though there are many different methods for setting up and maintaining their information technology systems, in my discussions with insurance groups they have tended to emphasize similar benefits from the flexibility of tailoring data systems to meet their unique needs as opposed to managing data by government fiat. Insurers report that having a centralized data strategy allows them to increase data security by having greater control over the data storage environment. One company representative told AIA that fundamentally, controlling five environments is easier than controlling twenty-five environments, each subject to different government mandates. Related, insurance groups report that centralized data strategies can help insurers with disaster recovery, as backing up data and restoring it in a disaster is easier within a centralized data strategy than with a decentralized, local model where a separate backup and restore process needs to be designed and deployed in each location according to differing regulatory and geographic demands. Similar to the aforementioned security benefits, centralized data strategies may be easier to operate and maintain as associated processes can be limited to a few teams. One insurer reported to AIA that upskilling resources, licensing technology tools and utilities, and providing adequate support and maintenance becomes significantly more complex and expensive in a decentralized system.

Existing and emerging restrictions on data flows, storage and processing

The explosion in the availability of data has led to various regulatory approaches from governments spurred by different motivations that range from legitimate concerns like privacy, law enforcement and national security, to illegitimate motivations that can be described as bare protectionism. For example, the European Union is in the process of implementing its General Data Protection Regulation (GDPR) in response to concerns about privacy. The GDPR will create expansive rights with regard to personal data, including access and correction of personal data, an explicit "right to be forgotten", a right to object to data processing, and the right to be informed when data security is breached. Furthermore, financial institutions are excluded from the protections of the "Privacy Shield" agreement between the U.S. and EU. While privacy, law

enforcement and national security concerns are legitimate, governments should also consider the unintended consequences of measures put in place to address these concerns and whether the legitimate needs of government can and should be met through less-restrictive measures through which governments can fulfill their duties to citizens without limiting innovation.

Additionally, in many cases restrictions are not driven by legitimate concerns, but are instead driven by protectionist motives. Whatever the reason for restrictions on data flows and storage, forced data localization disrupts the processes that are essential to the operations of U.S. insurance groups with operations in other markets, decreases efficiency, increases cost, reduces the benefits of improved data analytics, and in some cases may weaken data security. I have heard from companies that the cost associated with setting up a data storage system in some markets can be the difference between establishing a sustainable presence in a developing economy and deciding not to enter a market at all. Restrictions of this nature can come in various forms, and generally include restrictions on the ability of insurers to move data across borders and requirements that data from that jurisdiction be stored on servers in that jurisdiction. Onerous approval processes for moving data across borders can limit the benefits of data analytics. The type of data affected can vary, from personal data to business data to employee data to all data.

These restrictions are not unique to any region or continent, and unfortunately their adoption is spreading. I would like to highlight some of the most significant existing and potential restrictions for the Commission.

Australia places restrictions on the ability of insurers to move eHealth records outside of the country, process or handle the information relating to the records outside of Australia, and requires local data centers for the personally controlled eHealth record system. No electronic health information can be held or processed outside of Australia by a third party.

Brazil is considering legislation that would limit the ability of insurers and reinsurers to provide services in the Brazilian market. The government may require express consent for processing personal data, and may impose high standards of liability on data processors. In addition, Brazil may implement requirements on data transfer that would restrict the ability of companies to move data in and out of the country for processing.

Brunei requires that personal data be stored on servers within the country.

In **China**, data residency laws require that companies store data that they collect on servers located in China. In addition, draft regulations would require that insurance companies in China give preference to indigenous software, hardware, and encryption tools. We believe that those policies would disrupt global data storage and analytics programs, and could make data security programs less secure.

Greece requires that data generated and stored on physical media must be kept within the country.

Indonesia's local data center requirements are set to become effective on October 12, despite multiple entreaties from industry and other governments asking the Indonesian Government to reconsider or provide more time for implementation.

Malaysia restricts the cross-border movement of personal data unless the recipient jurisdiction has been previously approved by the Malaysian Government or the individual consents to the data transfer. **Mauritius** similarly requires a lengthy approval process for companies to move data outside of the country.

Nigeria requires that businesses store all data on Nigerian citizens in Nigeria, and imposes local content requirements for software and services.

Russia has some of the most severe data localization requirements. Companies that operate in Russia that "process" data on Russian citizens must use only databases located within the territory of Russia.

The situation in **South Korea** regarding data flows has improved following direct engagement from the U.S. Government, but the financial services regulator can still restrict the ability of financial services companies to move data outside the country and on the use of outsourcing.

Tanzania ordered all financial institutions in the country to maintain either their primary data center or a secondary data center in the country.

Vietnam has local server requirements, under which companies must locate at least one server in Vietnam in order to create a website or supply content services on mobile phones.

The implications for international trade policy are clear. U.S. insurance companies need strong commitments to protect their ability to move, store and process data in the location of their choice, and need strong enforcement of those commitments when other governments attempt to force the localization of data. Many commitments have been made at the WTO that implicate the forced localization of data, and it is worth considering whether trade enforcement is viable based on existing commitments.⁹ However, considering that immense challenges that forced data localization in foreign markets is posing to U.S. insurance companies, we believe that it is essential that all future U.S. trade agreements include additional strong, binding commitments on financial services data flows. Last year the financial services industry and the U.S. Government entered into a productive dialogue about how and why the forced localization of financial services data needed to be addressed in U.S. trade agreements. Through months of dialogue, the industry was able to assuage the concerns of regulators about how the industry can and does move, store and process data, and was able to explain why their government responsibilities and the data needs of financial firms are not mutually exclusive. As was demonstrated last year, the financial services industry views the inclusion of those commitments as important for any new trade agreement to be considered high standard.

Thank you for the honor of testifying today.

⁹Attorney Daniel Crosby wrote a very intriguing analysis of the WTO compliance of several forms of forced data localization in his March 2016 policy brief "Analysis of Data Localization Measures Under WTO Services Trade Rules and Commitments".

