RT04/20-21 19 January 2021

1. Introduction

- 1.1 Insurance fraud generally involves policyholders knowingly providing false information on an application or exaggerating injuries/losses when making insurance claims. Insurance fraud is a major concern not only for insurers who bear the cost of fraudulent claim payout, but also for honest policyholders who see those costs passed onto them in the form of higher premiums. According to Insurance Europe, ¹ the insurance industry is proactive in fighting insurance fraud in various ways through: (a) dedicated investigative groups; (b) co-operation with law enforcement agencies; (c) a central database for information exchange; (d) a mechanism for reporting of fraudulent claims; and (e) the use of data analytics to detect insurance fraud. In Hong Kong, there are also calls from the industry for improving the way in which a legally aid person can choose his or her representative lawyer when making personal injury claim, thereby discouraging champerty activities.²
- 1.2 At the request of Hon CHAN Kin-por, the Research Office has completed a research task on anti-insurance fraud measures in the **United Kingdom** ("UK") and the **United States** ("US"). They have implemented multi-faceted systems with the implementation of anti-insurance fraud measures similar to those stated by Insurance Europe. In addition, the UK and the US have enacted specific insurance laws to regulate fraudulent insurance claims.
- The research task also studies other places in view of the salient features of their anti-insurance fraud measures. These include (a) **Japan** with information exchange systems for insurers to share information related to fraudulent insurance claims; (b) **Singapore** characterized by a tip-off scheme for reporting of fraudulent claims and a legal aid scheme different from that of Hong Kong; and (c) **India** making use of predictive modelling to produce fraud-tendency scores for suspicious cases. Relevant documents for the research task are set out in an information pack with findings outlined below and in **Appendices I-V**.

Under the existing system, legal aid applicants are allowed to choose the representative lawyers on their own from the Legal Aid Panel. Recovery agents might take advantage of this loophole to talk the victims who are injured in industrial or traffic accidents into applying for legal aid on the one hand, and then choosing their lawyers to represent the victims on the other, so that they can carry out champerty activities with the huge resources obtained from legal aid.



¹ Insurance Europe, which is based in Brussels, is the European insurance and reinsurance federation.

2. Regulatory and administrative framework

- 2.1 In Hong Kong, there is currently no specific legislation regulating fraudulent insurance claims (Appendix I). They are prosecuted as other fraud-related offences such as money laundering under the Theft Ordinance (Cap. 210) and/or the Crimes Ordinance (Cap. 200). In comparison, the UK has enacted specific insurance legislation with a focus on the remedies available to insurers for handling misrepresentation, non-disclosure and fraud by the insured. In the US, insurance is not regulated at the federal level. According to the Insurance Information Institute, ³ all states have prompted to enact insurance laws to some degree, after realizing that it is easier to prosecute cases of insurance fraud in states where they are identified as a specific crime in the penal code, and where insurance fraud is defined along with its penalties.
- 2.2 The anti-insurance fraud work has been shared between the industry association and the police force in Hong Kong.⁴ In contrast, the UK and the US have established dedicated organizations and investigative groups for prevention and combating of insurance fraud. For example, the Association of British Insurers ("ABI") funded the establishment of the Insurance Fraud Bureau ("IFB") as a central hub for sharing insurance fraud data and intelligence. It also funds the Insurance Fraud Enforcement Department, a bespoke unit within the City of London Police wholly dedicated to combating insurance fraud.
- On publicity and consumer education, all the places studied focus on raising insurance consumer awareness about serious consequence of committing insurance fraud. The UK has also strived to address the issue at root, with ABI and IFB commissioning behavioural science research to encourage insurance customers towards greater honesty, with a view to changing their behaviours and attitudes to fraud.⁵

The Institute is an industry-funded consumer education organization in the US which aims to improve public understanding of insurance.

⁴ The Hong Kong Federation of Insurers ("HKFI") leads and advises the industry on anti-insurance fraud initiatives, and the Commercial Crime Bureau of the Hong Kong Police conducts targeted investigation of suspected fraudulent claims referred by HKFI.

The research encourages honesty when insurance customers completing their application forms by inserting behavioural science-inspired messages in front of questions that they may lie or exaggerate in response to, in order to get a better deal for them. One example of the messages is "did you know 95% of insurance customers complete their application accurately and honestly – it is good to be one of them."

3. Databases for information exchange and mechanism for reporting fraudulent claims

- 3.1 All the places studied have respectively set up a central database to fight fraud. In Hong Kong, HKFI has set up a database to record all claims made on policies (Appendix II). Meanwhile, the UK, the US and Japan have established their dedicated anti-fraud databases keeping detailed data on proven fraudsters and/or fraudulent claims. The UK allows exemptions to its data protection law for sharing of sensitive personal data by anti-fraud organizations.⁶
- 3.2 On reporting of fraudulent claim cases, the UK has put in place an insurance cheatline to help and encourage people to report suspected or known frauds anonymously (Appendix III). Likewise, people in the US and Singapore can report suspected fraudulent cases online, and they can receive monetary rewards for information leading to an arrest and conviction. There is no similar reporting mechanism and reward system for tip-off in Hong Kong.

4. Use of data analytics to detect insurance fraud

4.1 Insurers are increasingly making use of advanced data analytical software for fraud detection. Hong Kong has adopted anomaly detection and blockchain technologies to help identify fraudulent insurance cases (Appendix IV). Other places studied have also made use of other data analytics such as social network analysis, text mining and predictive modelling.

5. Champerty and legal aid

In Hong Kong, an aided person can nominate a lawyer on the Legal Aid Panel to represent him or her if the Director of Legal Aid does not take up his or her case. There have been concerns that such arrangement under the legal aid system may indirectly encourage champerty, which is illegal and punishable in Hong Kong. Unlike the case of Hong Kong, an aided person in Singapore will be assigned a lawyer (Assigned Solicitor) by the Legal Aid Bureau. He or she must provide good reason if wishing his or her case to be assigned to a specific Assigned Solicitor before the Bureau will accede to the request (Appendix V).

⁶ Under the Data Protection Act of the UK, organizations cannot generally process sensitive personal data without the "explicit consent" of individuals to whom the information relates. However, an exception to this rule applies if the processing involves the disclosure of sensitive personal data by an anti-fraud organization or otherwise in accordance with any arrangements made by such an organization.

	Hong Kong	United Kingdom	United States
Regulatory and adminis	trative framework		
Any specific legislation regulating insurance fraud	 No. Prosecuted as a fraud-related crime that might involve "theft", "fraud" or "obtaining property by deception" under the Theft Ordinance (Cap. 210), and/or the offence of "conspiracy to defraud" under the Crimes Ordinance (Cap. 200). 	 Yes. Insurance Act 2015 sets out remedies available to insurers for dealing with misrepresentation, non-disclosure and fraud by the insured. Remedies include cancellation of the policy and forfeit of the premiums paid by the insured. 	 Yes. In the US, insurance is not regulated at the federal level. All states have prompted to enact their own specific insurance fraud statutes to define fraudulent acts and set penalties.
Dedicated body to lead the anti-fraud work	The Hong Kong Federation of Insurers ("HKFI") leads and advises the insurance industry on measures to prevent and combat insurance-related fraud.	 Insurance Fraud Bureau ("IFB"), a not-for-profit company funded by the Association of British Insurers ("ABI"), acts as a central hub for sharing insurance fraud data and intelligence. 	National Insurance Crime Bureau ("NICB") — a not-for-profit organization created by the insurance industry — is dedicated to preventing and detecting insurance fraud through data analytics, investigations, training, legislative advocacy, and promotion of public awareness.
Law-enforcement agency	The Commercial Crime Bureau of the Hong Kong Police conducts targeted investigation of suspected fraudulent claims referred by HKFI.	 ABI funds the Insurance Fraud Enforcement Department ("IFED"), a bespoke unit within the City of London Police wholly dedicated to combating insurance fraud. 	Most states combat insurance fraud through the establishment of specific insurance fraud bureaus to investigate and prosecute insurance-related crime.
Provision of specialized anti-fraud training	 The Government has put in place the Financial Incentive Scheme for Professional Training to subsidize insurance organizations in organizing training courses on topical areas in insurance (including fraud management). HKFI conducts seminars and webinars to keep its members alert to any new criminal methods/tactics to scam insurers. 	 IFB and IFED run specialist workshops for counter-fraud staff. Many insurance companies additionally run training schemes at induction and throughout employees' careers. 	 Insurers have created a National Fraud Academy to educate and train fraud investigators. The Academy offers online courses under the leadership of NICB. Some insurance companies develop specific training programmes for their claims staff.
Publicity and consumer education	The Government has made use of the Internet and traditional media (such as the press, television and radio) to raise insurance consumer awareness about serious consequence of committing insurance frauds.	 ABI and IFB have commissioned behavioural science research which aims to encourage insurance customers to behave honestly, with a view to changing behaviour and attitude to fraud. A national advertising campaign called "Stop the Scams" has been launched by IFB which features animated scam warnings rolled out across social media. 	 The Coalition Against Insurance Fraud, a national alliance of insurance companies, consumers and government agencies, combats insurance fraud through public advocacy and consumer education. The Coalition has made use of its website and other social media platforms to distribute information to policyholders about what constitutes insurance fraud, as well as spelling out the consequences.

	Hong Kong	United Kingdom	United States	Japan
Databases for informati	on exchange			
Establishment of a central database to detect insurance fraud	 The Insurance Fraud Prevention Claims Database ("IFPCD") established by HKFI. IFPCD was launched in 2018 and is now used by 34 HKFI member companies. 	 The Insurance Fraud Register ("IFR") funded by ABI members and operated by IFB. IFR came into place at end-2013 and is now available to over 300 insurers who are members of ABI. 	 Databases created and managed by the Data Analytics Department of NICB. Insurance companies can access NICB's databases in real time to make search on any party of interest, claim and policy, among others. 	Information exchange systems operated by the General Insurance Association of Japan ("GIAJ").
Coverage of the database(s)	 IFPCD currently covers motor vehicle, health and personal accident insurance. It will be developed to cover travel and life insurance at a later stage. Participating insurers can upload the following information to IFPCD: (a) policy information (e.g. policy number); (b) claims information (e.g. date of accident/treatment); (c) personal data (e.g. name, date of birth and ID number); and (d) third party data (e.g. healthcare provider, repair shop, etc.). 	 IFR is available to ABI member insurers for any type of insurance products. IFR is the industry-wide database of proven fraudsters and records details of frauds in all types of insurance and at all stages in the insurance process. Identities of individuals who have been detected acting fraudulently towards insurers, whether in the process of applying for or renewing insurance cover, or when making a claim, will be added to IFR by the insurers. 	 NICB's Aggregated Medical Database: (a) aggregate medical bill data from NICB member companies; and (b) apply fraud conditions to aggregated data and identify suspect medical providers. NICB's Member Questionable Claim Dashboard supports analyses of aggregate questionable claims information submitted by member companies. NICB's ForeWARN database allows member companies to search whether a party has committed fraud in the past and obtain additional information to develop fraudulent patterns and trends. 	GIAJ's "Claims history and fraudulent claim information exchange system" covers all lines of insurance business, allowing insurers to share information on claims history and fraudulent claims.
Salient features	Through the artificial intelligence ("AI") technology, IFPCD analyses claims information to detect possible claims anomalies and alert participating insurers to these anomalies.	 IFR allows insurers to share information on known cases of frauds. This is made possible by the exemption granted under the Data Protection Act for sharing of sensitive personal data by anti-fraud organizations. IFB members can also access the National SIRA database, which tracks fraud and financial crimes.¹ Over 160 organizations (including banks, insurers and retailers) nationally contribute daily to the database. 	With the use of predictive analytics, NICB's databases identify fraudulent claims early in the process through the issue of ForeWARN Alerts, Questionable Claims and MedAWARE Alerts.	GIAJ's information exchange systems include the one that allow insurers to share information provided by the public regarding fraudulent insurance claims.

¹ Insurers can benefit from the data sharing as fraud is not just limited to insurance. Many who are caught engaging in insurance fraud may also have a record of fraud/financial crime elsewhere.



	Hong Kong	United Kingdom	United States	Singapore	
Mechanism for reporti	Mechanism for reporting fraudulent claims				
Dedicated reporting mechanism	 The Commercial Crime Bureau of the Hong Kong Police receives referral of suspected insurance fraud cases from the insurance companies through HKFI. Members of the public can report directly to the Hong Kong Police through the hotline of Crime Wing Information Centre. 	 The UK encourages and helps people to report suspected or known fraud anonymously through IFB's Cheatline. The cheatline is a confidential way for anyone to report insurance fraud by a hotline or filling a form on IFB's website. 	 The National Association of Insurance Commissioners ("NAIC")¹ has developed a central online platform – the Online Fraud Reporting System ("OFRS") – for people to report suspected fraud. Consumers and insurers can electronically report suspected insurance fraud through OFRS to the appropriate insurance fraud bureaus in their states. 	The General Insurance Association of Singapore ("GIA") introduced the GIA Insurance Fraud Tip-off ("GIFT") scheme in 2019 to help and encourage people to report suspected fraudulent claim cases. Informants can report their cases, together with supporting evidence, online through GIA's website.	
Any rewards for the tip-off	• Nil.	• Nil.	 Yes. In some states such as Florida and New Jersey, individuals reporting suspected insurance fraud are eligible for rewards up to US\$25,000 (HK\$193,850) for information leading to arrest and conviction. 	Yes. GIA's GIFT scheme rewards individuals up to \$\$10,000 (HK\$57,600) for reporting fraud cases leading to successful prosecution and conviction of offenders.	

¹ In the US, NAIC is a voluntary organization of the chief insurance regulatory officials of the 50 states, the District of Columbia and five US territories.

	Hong Kong	United Kingdom	United States	India
Use of data analytics to	detect insurance fraud			
Examples of data analytics adopted to detect insurance fraud	 Anomaly detection – HKFI's IFPCD uses big data and AI technology to alert participating insurers to possible claims anomalies, especially those involving multiple claims and syndicates. The AI algorithm looks at various types of information/data to arrive at a score of how confident a claim could be fraudulent. Blockchain technology – HKFI has also developed Motor Insurance DLT-based¹ Authentication System, which makes use of blockchain technology to enable the easy verification of motor insurance documents so as to prevent fraud and spot fake documents produced by scammers. 	 Social network analytics – insurers track various social media accounts and other websites and then apply data analytics to identify relationship among people, groups and organizations. The use of social network analytics helps insurers to identify linkage of a claimant with fraudulent activities or group. For example, a claim for alleged back injuries was rejected when Facebook images showed the claimant performing gymnastics and training for a charity run. 	 Predictive modelling – NICB's database helps identify likely cases of insurance fraud before claims are made. The potential for predicting vulnerabilities in a claim's process is appealing to insurers, as they can act to prevent rather than to solve fraud. Blockchain technology – employed by some insurers to (a) eliminate double-booking or processing multiple claims from the same accidents; and (b) establish authenticity of documents by reducing counterfeiting. Text mining – some insurers make use of text analytics to identify fraud patterns in unstructured data, such as medical reports, loss adjusters' notes, emails and accident descriptions. 	 Predictive modelling – the Insurance Information Bureau of India is working on a predictive modelling that helps insurance companies detect complex fraud patterns by using data-mining and programmes that produce fraud-tendency scores for suspicious cases. According to a study on predictive modelling, time required to identity fraudulent claim and refer the claim to fraud experts can be shortened by three times with the use of predictive modelling. Yet, establishing predictive model based on rare events² may also lead to inaccurate results.

DLT refers to Distributed Ledger Technology. It is essentially a technology which supports networks of databases that enable users to create, disseminate and store information in a secure and efficient manner.

Rare events are defined as events that occur very infrequently, i.e. their frequency ranges from 0.1% to less than 10%.

	Hong Kong	United Kingdom	United States	Singapore
Champerty and legal ai	d			
Champerty	Illegal in Hong Kong and is punishable by a fine and up to seven years' imprisonment under Section 101I of the Criminal Procedure Ordinance (Cap. 221).	Conditional fee agreements ¹ are allowed for personal injury matters in the UK.	Contingency fee agreements ¹ are allowed for personal injury matters in the US.	Singapore opened its doors to third-party funding in early 2017, but only for international arbitration and related proceedings. Before that, third parties were prohibited from funding an unconnected party's litigation under the doctrine of champerty.
Legal aid for personal injury claims	 An aided person can choose his or her own lawyer whose name is on the Legal Aid Panel. The insurance industry is concerned that such right may indirectly encourage champerty activities. In 2013, the Legal Aid Department introduced a declaration system, under which an aided person must declare that his or her nomination of lawyer is entirely his or her own choice and that he or she has not agreed to share damages/costs with others including lawyers nominated, the lawyers' employee, agent or claims agent. 	There is no legal aid available for personal injury cases.	The Sixth Amendment to the US Constitution expressly provides a right to counsel in criminal cases, but it is silent as to any similar right in civil cases. Contingency fee agreement is, thus, a primary financial arrangement in personal injury litigation.	In Singapore, an aided person will be assigned a lawyer (Assigned Solicitor) by the Legal Aid Bureau if his or her application for legal aid is successful. He or she must provide good reason if wishing his or her case to be assigned to a specific Assigned Solicitor before the Bureau will accede to the request.

A conditional or contingency fee agreement is commonly known as "no win, no fee" agreement. It can be described as a legal funding agreement between a legal practitioner and his or her client to the effect that the legal practitioner will charge no fees if the client's court case is conducted unsuccessfully.

References

Global

- 1. AXA. (2016) AXA's Behavioural Fraud Report 2016. Available from: https://www.axa.co.uk/contentassets/4a476aed40ff44e0b3b449c9d03783 c5/axa-behavioural-fraud-fraud-report_final.pdf/ [Accessed January 2021].
- 2. CB Insights. (2018) *How Blockchain Is Disrupting Insurance*. Available from: https://woa.community/inspire/knowledge-hub/knowledge-hub-post/2018/11/20/How-Blockchain-Is-Disrupting-Insurance [Accessed January 2021].
- 3. Cognizant. (2015) *Using Advanced Analytics to Combat P&C Claims Fraud*. Available from: https://www.cognizant.com/perspectives/using-advanced-analytics-to-combat-pc-claims-fraud#four [Accessed January 2021].
- 4. Insurance Europe. (2019) *Insurance fraud: not a victimless crime*. Available from: https://www.insuranceeurope.eu/sites/default/files/attachments/Insurance%20fraud%20-%20not%20a%20victimless%20crime_0.pdf [Accessed January 2021].
- 5. International Association of Insurance Supervisors. (2020) *Issues Paper on the Use of Big Data Analytics in Insurance*. Available from: https://www.iaisweb.org/file/89244/issues-paper-on-use-of-big-data-analytics-in-insurance [Accessed January 2021].
- 6. Policygenius. (2020) *Types of life insurance fraud*. Available from: https://www.policygenius.com/life-insurance/types-of-life-insurance-fraud/ [Accessed January 2021].
- 7. The Street. (2019) 6 Types of Insurance Fraud to Watch Out For. Available from: https://www.thestreet.com/lifestyle/types-of-insurance-fraud [Accessed January 2021].

8. United Nations Office on Drugs and Crime. (2016) *Global Study on Legal Aid*. Available from: https://www.unodc.org/documents/justice-and-prison-reform/LegalAid/GSLA_-_Country_Profiles.pdf [Accessed January 2021].

Hong Kong

- 9. Anti-corruption Digest. (2018) *Hong Kong to use blockchain versus motor insurance fraud.* Available from: https://anticorruptiondigest.com/2018/12/26/hong-kong-to-use-blockchain-versus-motor-insurance-fraud/#axzz6hhMcnosl [Accessed January 2021].
- 10. *Crimes Ordinance (Cap. 200)*. (2020) Available from: https://www.elegislation.gov.hk/hk/cap200 [Accessed January 2021].
- 11. Department of Justice. (2014) *Abolition of the common law offence of champerty*. LC Paper No. CB(4)486/13-14(04). Available from: https://www.legco.gov.hk/yr13-14/english/panels/ajls/papers/aj0325cb4-486-4-e.pdf [Accessed January 2021].
- 12. Financial Services and the Treasury Bureau. (2019) *Development of Financial Technologies*. LC Paper No. CB(1)760/18-19(04). Available from: https://www.legco.gov.hk/yr18-19/english/panels/fa/papers/fa20190401cb1-760-4-e.pdf [Accessed January 2021].
- 13. GovHK. (2020) *LCQ8: Insurance premiums for taxis.* Available from: https://www.info.gov.hk/gia/general/202002/26/P2020022600360.htm [Accessed January 2021].
- 14. Home Affairs Bureau and Legal Aid Department. (2015) *Provision of legal aid and assignments of lawyers to legally aided persons by the Legal Aid Department*. LC Paper No. CB(4)658/14-15(03). Available from: https://www.legco.gov.hk/yr14-15/english/panels/ajls/papers/ajls20150323cb4-658-3-e.pdf [Accessed January 2021].
- 15. Hong Kong Lawyer. (2016) *The UK Insurance Act 2015 and Its Impact on the Hong Kong Insurance Market.* Available from: http://www.hk-lawyer.org/content/uk-insurance-act-2015-and-its-impact-hong-kong-insurance-market [Accessed January 2021].

- 16. Legal Aid Department. (2020) *Legal Aid Panel: Overview*. Available from: https://www.lad.gov.hk/eng/lap/overview.html [Accessed January 2021].
- Legal Aid Department. (Undated) Making representations Providing information to ensure public money is properly spent. Available from: https://www.lad.gov.hk/documents/ppr/publication/extra ct_36a.pdf [Accessed January 2021].
- 18. Official Record of Proceedings of the Legislative Council. (2015) 21 January. Available from: https://www.legco.gov.hk/yr14-15/english/counmtg/hansard/cm20150121-translate-e.pdf#nameddest=mbm02.pdf [Accessed January 2021].
- 19. Report of the Joint Subcommittee on Issues Relating to Insurance Coverage for the Transport Sector. (2012) Paper for the Panel on Transport and Panel Financial Affairs joint meeting on 10 July 2012. CB(2)2446/11-12. LC Paper No. Available from: https://www.legco.gov.hk/yr11-12/english/panels/icts/reports/ictscb2-2446-e.pdf [Accessed January 2021].
- 20. The Hong Kong Federation of Insurers. (2018) *Technology to Strengthen Insurance Fraud Detection to Safeguard the Interest of Policyholders*. Available from: https://www.hkfi.org.hk/ifpcd/en/news_30112018.html [Accessed January 2021].
- 21. The Hong Kong Federation of Insurers. (2018) *Technology to Strengthen Insurance Fraud Detection to Safeguard the Interest of Policyholders: FAQ.* Available from: https://www.hkfi.org.hk/ifpcd/en/news.html [Accessed January 2021].
- 22. *Theft Ordinance (Cap. 210).* (2017) Available from: https://www.elegis lation.gov.hk/hk/cap210 [Accessed January 2021].

India

23. Deloitte. (Undated) *Fraud in Insurance: Applications of Predictive Modelling*. Available from: http://www.actuariesindia.org/GI/2cigi/Claims &FraudAnalytics DebashishBanerjee.pdf [Accessed January 2021].

24. Verma, R. and Mani, S. R. (2013) *Using Analytics for Insurance Fraud Detection*. Available from: https://www.the-digital-insurer.com/wp-content/uploads/2013/12/53-insurance-fraud-detection.pdf [Accessed January 2021].

<u>Japan</u>

25. The General Insurance Association of Japan. (2020) *Fact Book 2019-2020: General Insurance in Japan*. Available from: https://www.sonpo.or.jp/en/publication/ue089i0000000sa-att/fb2020e.pdf [Accessed January 2021].

Singapore

- 26. Chan, G. K. Y. (2014) Champerty, Professional Legal Ethics and Access to Justice for Impecunious Clients: Law Society of Singapore v. Kurubalan S/O Manickam Rengaraju. *Singapore Journal of Legal Studies*, July, pp. 206-217. Available from: https://www.jstor.org/stable/24872240?seq=1 [Accessed January 2021].
- 27. General Insurance Association. (2019) General Insurance Association of Singapore (GIA) offers up to \$\$\\$10,000 cash reward to encourage individuals to step-up against insurance fraud. Available from: https://gia.org.sg/images/media-center/company-news/PressRelease_GIA-launches-S10000-reward-scheme.pdf [Accessed January 2021].
- 28. Legal Aid Bureau. (2019) *The Assigned Solicitor's Guide*. Available from: https://lab.mlaw.gov.sg/files/The-Assigned-Solicitor-Guide.pdf [Accessed January 2021].
- 29. Ministry of Law, Singapore. (2017) *Third Party Funding-Reinforcing Singapore as a Premier International Dispute Resolution Centre.* Available from: https://app.mlaw.gov.sg/files/NoteonCivilLawAmendment. pdf/ [Accessed January 2021].
- 30. Singapore Management University. (2004) *Re-Examining Public Policy:* A Case for Conditional Fees in Singapore? Available from: https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=1723&context= sol_research [Accessed January 2021].

31. Woodsford Litigation Funding. (2020) *Arbitration and Litigation Funding in Singapore and Hong Kong*. Available from: https://woodsfordlitigationfunding.com/asia/wp-content/uploads/sites/4/2020/06/Woodford-White-Paper-Asia Asia.pdf [Accessed January 2021].

The United Kingdom

- 32. Association of British Insurers. (2019) *Fraud Prevention and Detection: Collaboration is Key at All Levels*. Available from: https://www.abi.org.uk/news/blog-articles/2019/04/fraud-prevention-and-detection-collaboration-is-key-at-all-levels/?timeout=s [Accessed January 2021].
- 33. Association of British Insurers. (2021) Fraud. Available from: https://www.abi.org.uk/products-and-issues/topics-and-issues/fraud/ [Accessed January 2021].
- 34. Centre for Data Ethics and Innovation. (2019) *Snapshot Paper AI and Personal Insurance*. Available from: https://www.gov.uk/government/publications/cdei-publishes-its-first-series-of-three-snapshot-papers-ethical-issues-in-ai/snapshot-paper-ai-and-personal-insurance#fn:4 [Accessed January 2021].
- 35. City of London Police. (2021) *The Insurance Fraud Enforcement Department*. Available from: https://www.cityoflondon.police.uk/police-forces/city-of-london-police/areas/city-of-london/about-us/about-us/ifed/[Accessed January 2021].
- 36. Home Office. (2015) Data Sharing for the Prevention of Fraud. Available from: https://assets.publishing.service.gov.uk/government/uplo ads/system/uploads/attachment_data/file/415469/Data_Sharing_for_the __Prevention_of_Fraud_-_Code_of_Practice__web_.pdf [Accessed January 2021].
- 37. Insurance Fraud Bureau. (2021) *The Cheatline*. Available from: https://insurancefraudbureau.org/insurance-fraud/the-cheatline/ [Accessed January 2021].
- 38. Insurance Fraud Register. (2021a) *About the IFR*. Available from: https://www.theifr.org.uk/en/about/ [Accessed January 2021].

- 39. Insurance Fraud Register. (2021b) *Frequently Asked Questions*. Available from: https://www.theifr.org.uk/en/faqs/ [Accessed January 2021].
- 40. International Public Sector Fraud Forum. (2020) *Guide to Understanding the Total Impact of Fraud.* Available from: https://assets.publishing.service .gov.uk/government/uploads/system/uploads/attachment_data/file/8666 08/2377_The_Impact_of_Fraud_AW__4_.pdf [Accessed January 2021].
- 41. Legislation.gov.uk. (2015) *Insurance Act 2015 Chapter 4.* Available from: https://www.legislation.gov.uk/ukpga/2015/4/pdfs/ukpga_20150004_en. pdf [Accessed January 2021].
- 42. Ministry of Justice. (2020) *User Guide to Legal Aid Statistics, England and Wales*. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945413/user-guide-legal-aid-statistics-jul-sep-2020.pdf [Accessed January 2021].
- 43. NS Insurance. (2020) Behavioural science can reduce opportunistic insurance fraud, says Dectech. Available from: https://www.nsinsurance.com/news/behavioural-science-can-reduce-opportunistic-insurance-fraud-says-dectech/ [Accessed January 2021].
- 44. Pinsent Masons. (2012) *Insurance fraud register launched to aid crackdown on fake claims*. Available from: https://www.pinsentmasons.com/out-law/news/insurance-fraud-register-launched-to-aid-crackdown-on-fake-claims [Accessed January 2021].
- 45. The Financial Services Authority. (2006) *Firms' High-Level Management of Fraud Risk.* Available from: https://www.fca.org.uk/publication/archive/fsa-fraud-risk.pdf [Accessed January 2021].
- 46. Thomson Reuters. (2016) *Reforms to UK insurance law: overview of key changes*. Available from: https://uk.practicallaw.thomsonreuters.com/6-615-6445?transitionType=Default&contextData=(sc.Default)&firstPage=true [Accessed January 2021].

The United States

47. Accenture Insurance. (2019) *The New Faces of Insurance Fraud, with Matthew Smith (Podcast)*. Available from: https://insuranceblog.accenture.com/the-new-faces-of-insurance-fraud-with-matthew-smith-podcast [Accessed January 2021].

- 48. Coalition Against Insurance Fraud. (2020) *Artificial Intelligence & Insurance Fraud*. Available from: https://insurancefraud.org/wp%2Dcontent/uploads/Artificial-Intelligence-and-Insurance-Fraud-2020.pdf [Accessed January 2021].
- 49. Cointelegraph. (2019) *Insurance Industry Eyes Blockchain as Top Firms Begin Tests*. Available from: https://cointelegraph.com/news/insurance-industry-eyes-blockchain-as-top-firms-begin-tests [Accessed January 2021].
- 50. Constitution Annotated. (Undated) *Constitution of the United States*. Available from: https://constitution.congress.gov/constitution/amendmen t-6/ [Accessed January 2021].
- 51. Cornell Law School. (2020) *Contingency Fee.* Available from: https://www.law.cornell.edu/wex/contingency_fee [Accessed January 2021].
- 52. Florida Department of Financial Services. (2021) *Tips and Rewards.* Available from: https://www.myfloridacfo.com/pressoffice/mostwanted/tips-rewards.aspx [Accessed January 2021].
- 53. govinfo. (2017) *Insurance Fraud in America: Current Issues Facing Industry and Consumers*. Available from: https://www.govinfo.gov/content/pkg/CH RG-115shrg34303/pdf/CHRG-115shrg34303.pdf [Accessed January 2021].
- 54. Insurance Information Institute. (2010) *Insurance Handbook A guide to insurance what it does and how it works.* Available from: https://www.iii.org/sites/default/files/docs/pdf/Insurance_Handbook_201 03.pdf [Accessed January 2021].
- 55. Insurance Information Institute. (2020) *Background on: Insurance fraud*. Available from: https://www.iii.org/article/background-on-insurance-fraud [Accessed January 2021].
- 56. Insurance Journal. (2005) *NAIC Launches Online Insurance Fraud Reporting*. Available from: https://www.insurancejournal.com/news/national/2005/0 1/28/50402.htm [Accessed January 2021].
- 57. Maryville University. (Undated) *Predictive Analytics in Insurance: Types, Tools and the Future.* Available from: https://online.maryville.edu/blog/predictive-analytics-in-insurance/ [Accessed January 2021].

- 58. National Association of Insurance Commissioners. (2020) *Blockchain Technology*. Available from: https://content.naic.org/cipr_topics/topic_blockchain_technology.htm [Accessed January 2021].
- 59. National Insurance Crime Bureau. (2012) *Membership Solutions*. Available from: https://docplayer.net/13617228-Membershipsolutions.html [Accessed January 2021].
- 60. National Insurance Crime Bureau. (2015) Annual Casualty Loss Reserve Seminar: Insurance Fraud and Crime What the NICB is doing to Combat Insurance Fraud. Available from: https://www.casact.org/education/CLRS/2015/presentations/ST-3.pdf [Accessed January 2021].
- 61. National Insurance Crime Bureau. (2018) Shift Technology and NICB Partner to Give Insurers an Early Advantage in Detecting and Combating Insurance Fraud. Available from: https://www.nicb.org/news/news-releases/shift-technology-and-nicb-partner-give-insurers-early-advantage-detecting-and [Accessed January 2021].
- 62. National Insurance Crime Bureau. (2020a) *Annual Report 2019*. Available from: https://www.nicb.org/annual-reports/annual-report-2019 [Accessed January 2021].
- 63. National Insurance Crime Bureau. (2020b) *LATIFPA Conference*. Available from: https://www.ldi.la.gov/docs/default-source/documents/ldi-convention/2020-presentations/fred-lohmann---reducing-fraud-in-auto-ins.pdf?sfvrsn=ef004f52_6 [Accessed January 2021].
- 64. National Legal Aid & Defender Association. (2021) What Is Legal Aid? Available from: http://www.nlada.org/tools-and-technical-assistance/civillegal-aid-resources/what-legal-aid [Accessed January 2021].
- 65. Office of the Attorney General, New Jersey. (2004) *Insurance Fraud Detection Reward Program*. Available from: https://www.nj.gov/oag/insurancefraud/pdfs/reward_program_rulesfinal.pdf [Accessed January 2021].
- 66. SAS. (2017) Simplifying Fraud Analytics: 10 Steps to Detect and Prevent Insurance Fraud. Available from: https://www.sas.com/en_au/whitepaper s/simplifying-fraud-analytics-105573.html [Accessed January 2021].