

[Home](#) > [The "Dematerialized" Insurance](#) > Chapter

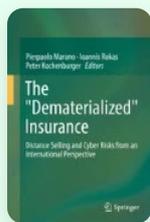
E-commerce and Distribution of Insurance Products: A Few Suggestions for an Appropriate Regulatory Infrastructure

| Chapter | First Online: 04 August 2016

| pp 39–58 | [Cite this chapter](#)

 [Save chapter](#)

[View saved research](#) >



The "Dematerialized" Insurance

[Hsin-Chun Wang Ph.D.](#) 

 974 Accesses

Abstract

After the global financial crisis caused by sub-prime mortgage market, electronic commerce in insurance becomes one of the essential components for insurers to improve their competitiveness and performance. In terms of cost-efficiencies in operation and acquisition, it is evident that electronic commerce has already and constantly changed the traditional distribution channels in several no-life insurance markets. Among these markets, the Internet provides a new channel for distributions for insurers particularly in auto insurance products. While a new

distributional channel seems to reduce transaction costs between consumers and insurers, risks consequently will cause new challenges to global insurance market. How to develop an appropriate level of regulation is essential to promote this transaction method and to ensure the interests of consumers.

This Article addresses insurance regulation governing electronic commerce and analyses various developed regulatory models and their frameworks. In terms of prudential regulation, it is suggested that operational risk arising from E-commerce should be incorporated into solvency regulation. In encountering with risks caused by electronic transactions, an insurer should be required to hold adequacy of capital and maintain a certain level of risk management. In relation to market conduct regulation, this Article intends to apply behavioural theory to re-examine the current information-based insurance regulation.

 This is a preview of subscription content, [log in via an institution](#)  to check access.

Access this chapter

[Log in via an institution](#) 

Subscribe and save

Springer+

from €37.37 /Month

- Starting from 10 chapters or articles per month
- Access and download chapters and articles from more than 300k books and 2,500 journals
- Cancel anytime

[View plans](#) 

Buy Now

 **Chapter**

EUR 29.95

Price includes VAT (Poland)

 **eBook**

EUR 117.69

Price includes VAT (Poland)

- Available as PDF
- Read on any device

- Instant download
- Own it forever

Buy Chapter →

- Available as EPUB and PDF
- Read on any device

- Instant download
- Own it forever

Buy eBook →

^ **Softcover Book** **EUR 149.79**
Price includes VAT (Poland)

- Compact, lightweight edition
- Dispatched in 3 to 5 business days
- Free shipping worldwide - [see info](#)

Buy Softcover Book →

^ **Hardcover Book** **EUR 149.79**
Price includes VAT (Poland)

- Durable hardcover edition
- Dispatched in 3 to 5 business days
- Free shipping worldwide - [see info](#)

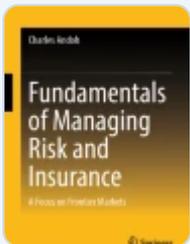
Buy Hardcover Book →

Tax calculation will be finalised at checkout

Purchases are for personal use only

[Institutional subscriptions](#) →

Similar content being viewed by others



Insurance Markets and Competition

Chapter | © 2026



The role of distribution channels in market discipline for the life insurance industry

Article | 04 June 2020



Impact of Insur-Tech on the Premium Performance of Insurance Business

Article | 03 January 2024

Explore related subjects

Discover the latest articles, books and news in related subjects, suggested using machine learning.

[Drug Regulation](#)

[E-Business](#)

[e-Commerce and e-Business](#)

[Insurance](#)

[Regulatory networks](#)

[Risk Management](#)

[Consumer Credit Regulation and Financial Protection](#)

Notes

1. See CAPGEMINI ([2012](#)), p. 7.
2. *Ibid.*, p. 10.
3. *Ibid.*
4. *Ibid.*, p. 11.
5. When E-commerce has improved the transaction costs, the Internet and mobile devices have become important tools for insurers to acquire new businesses in several countries, such as Canada, France, India, the Netherlands, Spain, and the US. *Ibid.*, pp. 11-19.
6. See International Association of Insurance Supervisors ([2002](#)), pp. 4-10.
7. The debate concerning the choice between a single regulator and a twin-peak structure has existed in the UK prior to the 1997 reform. See Taylor ([2009-2010](#)), p. 78.
8. See Financial Services Authority ([2012](#)), p. 11.

9. See Bailey ([2012](#)), p. 1.
10. See Prudential Regulation Authority, Bank of England ([2013](#)), p. 9.
11. This assessment is to identify and analyse “an insurer’s potential to affect adversely the PRA’s objectives by failing, coming under stress, or by the way it carries on its business”. As a result, the PRA divides financial deposit takers, designated investment firms and insurers into five categories of impact based on the capacity to affect the UK financial system. *Ibid.*, pp. 19–20.
12. This element mainly focuses on the assessment of the macro-prudential environment and system-wide risks, such as interest rates and longevity risk. *Ibid.*, p. 20.
13. The PRA examines the sustainability and vulnerability of an insurer’s business model. Under this assessment, the PRA analyses an insurer’s “profitability, risk appetite, performance targets and underlying assumptions, and an insurer’s own forecasts and their plausibility”. In doing so, the PRA can determine the capacity of the insurer to mitigate risks. *Ibid.*, p. 20.
14. These objectives were also the main task of the FSA before the establishment of the FCR. See Financial Conduct Authority ([2013](#)), pp. 15–32.
15. These conduct risks described in the FCA business plan in 2013 are as follows: “Firms do not design products or services that respond to real consumer needs or are in consumers’ long-term interests; distribution channels do not promote transparency for consumers on financial products and services; Over-reliance on, and inadequate oversight of, payment and product technologies; Poor understanding of risk and return, combined with the search for yield or income, lead consumers to take on more risks than is appropriate”. See *above footnote 14*, pp. 15–22.

16. *See above footnote 6, pp. 9–10.*
17. From this issues paper, it proposed that many new issues should be dealt with, such as the identification of the consumer, security of electronic documents and signatures, notification of contract-related information, the format and style of presentation to meet the requirements, proof of coverage for the policyholder, electronic payment acceptability and record retention. *See International Association of Insurance Supervisors ([2004](#)), pp. 5–6.*
18. *See above footnote 6, p. 8.*
19. *See above footnote 6, p. 9.*
20. Due to fault in the process of information flows, both parties may have disputes over the insurance products. For example, the insurance provisions and conditions are ambiguous on the website. *See above footnote 6, p. 7.*
21. *See above footnote 6, p. 5.*
22. For others concerning strategic risks, *see above footnote 6, pp. 5–6.*
23. *See above footnote 6, p. 6.*
24. For example, operational risks are treated as one of three main elements of the Solvency Capital Requirement in the Solvency II. However, the standard formula calculation is roughly based on an insurer's business volume rather than an insurer's risk profile. For life insurance contracts, "the calculation of the capital requirement for operational risk should take account of the amount of annual expenses incurred in respect of those insurance obligations". For other insurance contracts, it should "take account of the volume of those operations, in terms of earned premiums and technical

provisions....” article 107 of Solvency II Level 1 Text, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:335:0001:0155:en:PDF>.

25. Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce) [2000] OJ L178/1.
26. Directive 1999/93/EC on a Community framework for electronic signatures [1999] OJ L 13/12.
27. Directive 2002/65/EC concerning the distance marketing of consumer financial services and amending Council Directive 90/619/EEC and Directives 97/7/EC and 98/27/EC, [2002] OJ L 271/16.
28. *See* European Commission ([2000](#)).
29. *Ibid.*
30. Art. 8 (1)(2) of Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') [2000] OJ L178/11-12. *See also* European Commission (Internal Market DG) ([2002](#)), p. 2.
31. [Lennartz \(2010\)](#), p. 1; *see also* Flanagan ([2012](#)), p. 11.
32. While the ECD governed all the financial services, the DMD only governs the retail financial sector. Flanagan ([2012](#)), p. 25.
33. Art. 3, para. 1 of Directive 2002/65/EC concerning the distance marketing of

consumer financial services and amending Council Directive 90/619/EEC and Directives 97/7/EC and 98/27/EC, [2002] OJ L 271/16.

34. E.g., the identity and the main business, the representative of the supplier, any professional other than the supplier, the trade register and the relevant supervisory authority. *Ibid.*, art. 3 para. 1(1).
35. E.g., the main characteristics of the financial service, the total price to be paid by the consumer, relevant notice concerning special risks, notice of possibility relating to taxes or costs, limitations of period for which the information provided is valid, the arrangements for payment and performance and any costs of using the means of distance communication. *Ibid.*, art. 3 para. 1(2).
36. E.g., the existence or absence of a right of withdrawal , and where the right of withdrawal exists, its duration, and the condition for exercising, the minimum duration of the distant contract, information on any rights the parties may have to terminate the contract, practical instructions for exercising the right of withdrawal, the Member State or States whose laws are taken by the supplier as a basis, any contractual clause on law or competent court and languages used in the contract. *Ibid.*, art. 3 para. 1(3).
37. E.g., out-of-court complaint and redress mechanism, the existence of guarantee funds or other compensation arrangements. *Ibid.*, art. 3 para. 1(4).
38. *Ibid.*, art. 5.
39. *Ibid.*, art. 6.
40. *Ibid.*, art. 7.
41. Financial Consumer Authority, Conduct of Business Sourcebook (COBS),

42. Financial Consumer Authority, *ICOBS Insurance: Conduct of Business Sourcebook (ICOBS)*, <http://fshandbook.info/FS/html/handbook/ICOBS/3/2>.
43. New York State Insurance Department ([2000](#)) cited from Canadian Council of Insurance Regulators ([2012](#)), p. 12.
44. *See* Uniform Law Commission (1999).
45. E.g., Tennessee, Maryland, and Alaska. *See* Insurance Advocate ([2013](#)).
46. *Ibid.*
47. *Ibid.*
48. For example, it is estimated that nearly 3.1 million auto insurance policies were purchased through the Internet in 2012. *See* Insurance Information Institute ([2014](#)).
49. *See* Canadian Council of Insurance Regulators ([2012](#)).
50. *Ibid.*, pp. 12-14.
51. UNCITRAL, *Model Law on Electronic Commerce* (1996).
52. Uniform Law Conference of Canada ([1999](#)).
53. *Ibid.*

54. Canadian Consumer Measures Committee ([2004](#)), p. 1.
55. *Ibid.*, pp. 5-13.
56. However, Canada Electronic Commerce Committee (ECC) in Canada Council of Insurance Regulators (CCIR) released several research papers addressing the issues concerning E-commerce in the insurance sector. The final position paper which intends to communicate with stakeholders has been published in November 2013. This paper indicates that it is possible to have more specific regulations governing insurance business in E-commerce in the future. *See* Canada Electronic Commerce Committee (ECC) in Canada Council of Insurance Regulators (CCIR) ([2013](#)).
57. Xinhuanet News ([2013](#)).
58. China Insurance Regulatory Commission ([2014](#)).
59. China Insurance Regulatory Commission ([2014](#)), *para* 2(1)-(5).
60. *Ibid.*, *para* 3.
61. *Ibid.*, *para* 4-5.
62. *Ibid.*, *para* 6.
63. *Ibid.*, *para* 9-11.
64. CaixinOnline ([2014](#)).

65. E.g., Canadian Code of Practice for Consumer Protection in Electronic Commerce.
66. *See above footnote 31.*
67. *See* Baldwin and Cave ([1999](#)), p. 12.
68. *See* Llewellyn ([1999](#)), p. 35.
69. *Ibid.*, p. 22.
70. It is observed that the characteristics of financial products are different from other goods and services. For instance, “it may be a long time before the consumer is aware of the value and faults of a financial product”. This can usually be found in the disputes arising from insurance contracts in the event of accident of insured or damage of insured properties. *Ibid.*, pp. 37–38.
71. *Ibid.*, p. 35.
72. *See* Dalley ([2006](#)–2007), p. 1113.
73. *See above footnote 67*, p. 12.
74. *Ibid.*, p. 49.
75. For heuristic biases, *see generally* Tversky and Kahneman ([1974](#)), pp. 1124–1131; with regard to information regime in the financial market regulation, *see* Packin (2013), pp. 449–452; for the behavioral approach to securities regulation, *see* Choi and Pritchard ([2003](#)–2004), pp. 7–20; for financial market

regulation, see *Avgouleas* ([2009](#)), pp. 31–34; Juurikkala ([2012–2013](#)), pp. 38–50.

76. *See above footnote 72, p. 1114.*

77. *Ibid.*

78. “In many situations, people make estimates by starting from an initial value that is adjusted to yield the answer. The initial value, or starting point, may be suggested by the formulation of the problem, or it may be the result of a particular computation. In either case, adjustments are typically insufficient. That is, different starting points yield different estimates, which are biased toward the initial values.” *See above footnote 72, p. 1128, quoted by George et al. ([2000](#)), pp. 195–196.*

79. Lin (2010–2011), p. 345. *See generally* Rabin ([1998](#)), pp. 26–29.

80. *See above footnote 72, p. 1115.*

81. *Ibid.*

82. *See above footnote 72, p. 1116.*

83. *See above footnote 68, p. 33.*

84. *See* Erta et al. ([2013](#)), p. 24.

85. *See above footnote 67, p. 49.*

86. *See above footnote 84*, pp. 13-24.
87. These four ways include “1. Provide Information; 2. Change Choice Environment; 3. Control Product Distribution; 4. Control Products”. *Ibid.*, pp. 42-43.
88. *See above footnote 56*, p. 5.
89. E.g., the main characteristics of the product; terms, exclusions and conditions of that product; the total premium and other charges that the consumer may have to pay; options and coverage. *Ibid.*, p. 7.
90. Unlicensed entities must not “provide advice; hold themselves out as licensed insurers or firms; or post insurance publications, which could mislead a consumer into thinking they are an insurance provider”, *ibid.*, p. 12.

References

Journal Articles

Choi SJ, Pritchard AC (2003-2004) Behavioral economics and the SEC. *Stan Law Rev* 56(1):7-20

[Google Scholar](#)

Dalley PJ (2006-2007) The use and misuse of disclosure as a regulation system. *Florida State Univ Law Rev* 34(1089):1113

[Google Scholar](#)

George GF, Duffy K, Ahuja M (2000) Countering the anchoring and adjustment bias with decision support systems. *Decis Support Syst* 29:195-196.

[http://citeseerx.ist.psu.edu/viewdoc/download?](http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.21.3329&rep=rep1&type=pdf)

[doi=10.1.1.21.3329&rep=rep1&type=pdf](http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.21.3329&rep=rep1&type=pdf)

[Article](#) [Google Scholar](#)

Juurikkala O (2012-2013) The behavioral paradox: why investor irrationality calls for lighter and simpler financial regulation. *Fordham J Corp Financ Law* 18(33):38-50

[Google Scholar](#)

Lin Tom CW (1998) A behavioral framework for securities risk. *Seattle Univ Law Rev* 34:325, 345

[Google Scholar](#)

Packin NG (2012-2013) It's (not) all about the money: using behavioral economics to improve regulation of risk management in financial institutions. *Univ Pan J Bus Law* 15:419, 449-452

[Google Scholar](#)

Rabin M (1998) Psychology and economics. *J Econ Lit* 36:11-46

[Google Scholar](#)

Taylor MW (2009-2010) The road from twin peaks and the way back. *Conn Ins Law J* 16:61, 78

[Google Scholar](#)

Tversky A, Kahneman D (1974) Judgment under uncertainty: heuristics and biases. *Science (New Series)* 185(4157):1124-1131. <http://www.jstor.org/sici?sici=0036->

[Google Scholar](#)

Book & Book Chapter

Avgouleas E (2009) The global financial crisis, behavioural finance and financial regulation: in search of a new orthodoxy. *J Corp Law Stud* 9(23):31–34

[Google Scholar](#)

Baldwin R, Cave M (1999) Understanding regulation-theory, strategy and practice. Oxford University Press, Oxford, p 12

[Google Scholar](#)

Online Documents & Articles

Bailey A (2012) The prudential regulatory authority, quarterly bulletin 2012 Q4. http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/qb120405_pre.pdf

CaixinOnline (2014) Insurance firms stop online sales, as regulator takes long look, (Wang Shenlu). <http://english.caixin.com/2014-08-29/100723029.html>. Accessed 29 Aug 2014

Canadian Consumer Measures Committee (2004) Canadian Code of Practice for Consumer Protection in Electronic Commerce. [http://cmcweb.ca/eic/site/cmc-cmc.nsf/vwapj/EcommPrinciples2003_e.pdf/\\$FILE/EcommPrinciples2003_e.pdf](http://cmcweb.ca/eic/site/cmc-cmc.nsf/vwapj/EcommPrinciples2003_e.pdf/$FILE/EcommPrinciples2003_e.pdf)

Canadian Council of Insurance Regulators (CCIR) (2012) Electronic Commerce in Insurance Products. http://www.ccir-ccrra.org/en/init/Elec_Commerce/ECC%20issues%20paper%20EN.pdf

Canadian Council of Insurance Regulators (CCIR) (2013) Final Position Paper- Electronic Commerce in Insurance Products. http://www.ccir-ccrra.org/en/init/Elec_Commerce/ECC_finalized_position_paper_EN.pdf

CAPGEMINI (2012) 2012 World insurance report.

http://www.capgemini.com/resource-file-access/resource/pdf/World_Insurance_Report_2012.pdf

China Insurance Regulatory Commission (2014) Call for advice for insurance regulation of life insurers concerning life online insurance.

<http://www.circ.gov.cn/web/site0/tab5208/info3913089.htm>

Erta K, Hunt S, Iscenko Z, Brambley W (2013) Applying behavioural economics at the financial conduct authority, p. 24, Occasional Paper No. 1, Financial Conduct Authority, <http://www.fca.org.uk/static/documents/occasional-papers/occasional-paper-1.pdf>

European Commission (2000) Electronic Commerce: commission welcomes final adoption of legal framework directive, IP/00/442, 04/05/2000,

http://europa.eu/rapid/press-release_IP-00-442_en.htm?locale=zh

European Commission (Internal Market DG) (2002) Electronic-commerce and Insurance (Discussion paper for the working group), MARKT/2522/02-EN Rev.1

Orig. http://ec.europa.eu/internal_market/insurance/docs/markt-2522/markt-2522-02-rev1_en.pdf

Financial Conduct Authority (2013) FCA Business Plan 2013/14.

<http://www.fca.org.uk/static/documents/business-plan/bp-2013-14.pdf>

Financial Services Authority (2012) FSA Annual Report 2012/13.

<http://www.fca.org.uk/static/documents/annual-report/fsa-annual-report-12-13.pdf>

Flanagan A (2012) E-Commerce: the Regulation of Insurance in the Age of the Internet,

<https://qmro.qmul.ac.uk/jspui/bitstream/123456789/3207/2/FLANAGANE-Commerce2012POST.doc> (Note: This is the author's version of a chapter

subsequently published as Flanagan, A. (2012). E-Commerce: The Regulation of Insurance in the Age of the Internet. In Edward Elgar Publishing, Inc., Research Handbook on International Insurance Law and Regulation)

Insurance Advocate (2013) E-Commerce: Is the Insurance Industry Really Ready for Electronic Transactions? Issue: 2013:08-19, <http://www.insurance-advocate.com/E-Commerce-Is-the-Insurance-Industry-Really-Ready-for-Electronic-Transactions-c1546.html>

Insurance Information Institute (2014) Buying Insurance: Evolving Distribution Channels, http://www.iii.org/issues_updates/buying-insurance-evolving-distribution-channels.html

International Association of Insurance Supervisors (2004) Principles on the Supervision of Insurance Activities on the Internet.
http://www.dgsfp.mineco.es/sector/documentos/IAIS/PRINCIPIOS%20INGLES/PRINCIPIO%204%20EN%20Principles_on_the_supervision_of_insurance_activities_on_the_internet.pdf

International Association of Insurance Supervisors, (2002) Risk to Insurers Posed by Electronic Commerce, Issues Paper, http://www.mirkin.ru/_docs/articles02-057.pdf

Lennartz Y(2010) Developments in the field of electronic communications, Norton Rose Fulbright,
http://www.nortonrosefulbright.com/knowledge/publications/31536/developments-in-the-field-of-electronic-communications#pg_hdr

Llewellyn D (1999) The Economic Rationale for Financial Regulation, Financial Services Authority Occasional Paper Series 01.

<http://www.fsa.gov.uk/pubs/occpapers/OP01.pdf>

New York State Insurance Department (2000) Insurance Transactions Over the Internet. <http://www.dfs.ny.gov/insurance/ogco2000/rg000362.htm>

Prudential Regulation Authority, Bank of England (2013) The Prudential Regulation Authority' Approach to insurance supervision.

http://www.bankofengland.co.uk/publications/Documents/prapproach/insuranceea_ppr1304.pdf

UNCITRAL, Model Law on Electronic Commerce (1996),

http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/1996Model.html

Uniform Law Commission, Electronic Act Summary,

<http://www.uniformlaws.org/ActSummary.aspx?title=Electronic%20Transactions%20Act>

Uniform Law Conference of Canada, (1999) Uniform Electronic Commerce Act Annotated 1999. <http://www.ulcc.ca/en/1999-winnipeg-mb/359-civil-section-documents/1138-1999-electronic-commerce-act-annotated>

Xinhuanet News (2013) China Gets First Online Insurance Firm, 2013/11/07,

http://news.xinhuanet.com/english/china/2013-11/07/c_132867133.htm

Author information

Authors and Affiliations

College of Law, National Taiwan University, Taipei, Taiwan

Hsin-Chun Wang Ph.D.

Queen Mary College, University of London, London, UK

Hsin-Chun Wang Ph.D.

Corresponding author

Correspondence to [Hsin-Chun Wang Ph.D.](#).

Editor information

Editors and Affiliations

Catholic University of the Sacred Heart, Faculty of Banking, Finance and Insurance Sciences, , Milan, Milano, Italy

Pierpaolo Marano

Department of Business Administration, Athens University of Economics and Business, Athens, Attiki, Greece

Ioannis Rokas

School of Law, University of Connecticut, , Hartford, Connecticut, USA

Peter Kochenburger

Rights and permissions

[Reprints and permissions](#)

Copyright information

© 2016 Springer International Publishing Switzerland

About this chapter

Cite this chapter

Wang, HC. (2016). E-commerce and Distribution of Insurance Products: A Few Suggestions for an Appropriate Regulatory Infrastructure. In: Marano, P., Rokas, I., Kochenburger, P. (eds) The "Dematerialized" Insurance. Springer, Cham. https://doi.org/10.1007/978-3-319-28410-1_2

[.RIS↓](#) [.ENW↓](#) [.BIB↓](#)

DOI	Published	Publisher Name
https://doi.org/10.1007/978-3-319-28410-1_2	04 August 2016	Springer, Cham
Print ISBN	Online ISBN	eBook Packages
978-3-319-28408-8	978-3-319-28410-1	Law and Criminology
		Law and Criminology_(R0)

Keywords

[Financial Service](#)

[Electronic Commerce](#)

[Insurance Contract](#)

[Insurance Product](#)

[Life Insurer](#)

These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves.

Publish with us

[Policies and ethics](#) 

Search

Search by keyword or author



Navigation

Find a journal

Publish with us

Track your research

