

# Contents

<b>1</b>	<b>Introduction</b>	1
	References	9
<b>2</b>	<b>Lack of Insurance and Its Effect on Maritime Liability Law:</b>	
	<b>A Historical Evaluation</b>	11
2.1	Introduction	11
2.2	Alternative Risk Management Strategies in the Absence of Insurance	12
2.2.1	Risk-Avoidance	12
2.2.2	Risk-Control	13
2.2.3	Risk-Retention	14
2.2.4	Risk-Transfer	14
2.3	Lack of Insurance and Under-Development of Liability Law	19
2.3.1	Increasing Need for Marine Liability Insurance	20
2.3.2	P&I Clubs to Meet the Increasing Need for Liability Insurance	24
2.3.3	History of Cargo and Oil Pollution Liability Regimes	27
2.4	Conclusion	32
	References	32
<b>3</b>	<b>Insurance and Limitation of Ship Owners' Liability:</b>	
	<b>An Economic Analysis</b>	35
3.1	Introduction	35
3.2	Nature of the Problem	36
3.2.1	True Purpose of Liability Law: Deterrence	37
3.2.2	Limitation of Liability Affects Deterrence	41
3.3	Economic Analysis of the Problem	41
3.3.1	Nature of Economic Analysis	41
3.3.2	Descriptive Analysis of Limitation of Liability	42
3.3.3	Normative Analysis of Limitation of Liability	44

3.4	Limitation of Liability and Insurance Arguments . . . . .	49
3.4.1	Insurance Arguments in Specific Maritime Liability Conventions . . . . .	51
3.4.2	Rebuttal of Insurance Arguments . . . . .	68
3.4.3	The Reality of Marine Liability Insurance Market . . . . .	71
3.5	Abolition of Limitation of Liability and Its Consequences . . . . .	74
3.5.1	Confusion Between Insurability and Unpredictability . . . . .	75
3.5.2	Unlimited Liability and the Cost of Litigation . . . . .	76
3.5.3	Unlimited Liability and the Price of Consumer Goods . . . . .	77
3.5.4	Social Desirability of Maritime Liability Laws . . . . .	77
3.5.5	The Impossible Test to Break Limitation . . . . .	78
3.6	Conclusion . . . . .	80
	References . . . . .	81
<b>4</b>	<b>Insurance Through General Average: Its Justifications and Effects on Optimal Care and on Social Costs . . . . .</b>	<b>83</b>
4.1	Introduction . . . . .	83
4.2	Nature and Practice of General Average . . . . .	84
4.2.1	Meaning and Nature . . . . .	84
4.2.2	Modern Practice of General Average . . . . .	85
4.2.3	Function of General Average as Insurance . . . . .	86
4.3	Justifications of General Average . . . . .	87
4.3.1	Justification of General Average in the Past . . . . .	87
4.3.2	Possible Justification of General Average Today . . . . .	88
4.4	Effects of General Average on Optimal Care and on Social Cost . . . . .	90
4.4.1	Possible Distortion of Incentives Towards Optimal Care . . . . .	90
4.4.2	Possible Social Costs Arising from General Average . . . . .	95
4.4.3	Abolition of General Average . . . . .	98
4.5	Conclusion . . . . .	101
	References . . . . .	101
<b>5</b>	<b>Maritime Cargo Liability Law in Light of Insurance Realities . . . . .</b>	<b>103</b>
5.1	Introduction . . . . .	103
5.2	Cargo Liability Regimes in Brief . . . . .	104
5.3	Economic Analysis of Liability Rules . . . . .	106
5.4	Economic Analysis of Cargo Liability Regimes . . . . .	107
5.4.1	Function of Liability Rules: Deterrence . . . . .	107
5.4.2	Function of Liability Rules: Compensation or Insurance . . . . .	116
5.5	Evidence of Widespread Insurance Practice . . . . .	127
5.6	Conclusion . . . . .	127
	References . . . . .	128

<b>6</b>	<b>Role of Insurance in Providing Adequate Compensation for Oil Pollution Damage and in Reducing Oil Pollution Incidents . . . . .</b>	<b>131</b>
6.1	Introduction . . . . .	131
6.2	Oil Pollution Liability Regime in Brief . . . . .	133
6.3	Adequate Compensation by Various Insurance Arrangements . . . . .	136
6.3.1	Compulsory Insurance . . . . .	136
6.3.2	Direct Action Against Insurers . . . . .	140
6.3.3	Arguments for Direct Action and Compulsory Insurance . . . . .	142
6.3.4	Capacity of Insurance Market . . . . .	143
6.3.5	Certificate of Insurance . . . . .	143
6.3.6	Insurance Through the IOPC Fund . . . . .	144
6.3.7	Insurance Through the Supplementary Fund . . . . .	148
6.3.8	Insurance from National Oil Pollution Funds . . . . .	150
6.4	Limitation of Liability: An Impediment to Deterrence . . . . .	152
6.5	Decrease of Accidental Oil Spills: Possible Reasons . . . . .	153
6.5.1	The Role of Insurance in the Decrease of Oil Pollution . . . . .	154
6.5.2	Higher Limit of Liability . . . . .	157
6.5.3	Strict Liability for Oil Pollution Damage . . . . .	157
6.5.4	Improved Design and Construction of Tankers . . . . .	159
6.5.5	Strong Port-State Control . . . . .	163
6.6	Conclusion . . . . .	167
	References . . . . .	168
<b>7</b>	<b>Incentive Effect of Liability Rules in the Presence of Liability Insurance . . . . .</b>	<b>171</b>
7.1	Introduction . . . . .	171
7.2	Liability Law and Liability Insurance . . . . .	173
7.2.1	No Liability or Liability Insurance in a Perfect World . . . . .	173
7.2.2	Liability and Liability Insurance in the Real World . . . . .	174
7.2.3	Failure of Liability Law to Induce Optimal Care . . . . .	175
7.3	Why Liability Insurance May Lead to Better Care? . . . . .	176
7.3.1	Insurers Possess Better Information on Optimal Care . . . . .	176
7.3.2	Various Legal Mechanisms at the Disposal of Insurers . . . . .	180
7.3.3	Insurance Mechanisms to Create Strong Incentives . . . . .	184
7.3.4	Negligence in the Presence of Insurance May Be More Costly . . . . .	194
7.3.5	Additional Reasons Insurance May Lead to Better Care . . . . .	197

7.4 Empirical Evidence . . . . .	200
7.4.1 Marine Insurance . . . . .	200
7.4.2 Non-marine Insurance . . . . .	201
7.5 Conclusion . . . . .	201
References . . . . .	202
<b>8 Conclusion . . . . .</b>	<b>205</b>
<b>Index . . . . .</b>	<b>207</b>