

# Content

<b>Foreword .....</b>	<b>III</b>
<b>Content .....</b>	<b>V</b>
<b>Chapter 1</b>	
Debts, financial cycles and systemic risks .....	1
1.1 Introduction .....	1
1.2 Low interest-rate environment and prospects of Japanisation .....	3
1.3 Risks stemming from low interest rate environment .....	7
1.4 Debts and savings after the GFC .....	11
1.5 Conclusions .....	13
<b>Chapter 2</b>	
Detecting credit cycle and setting countercyclical capital buffer .....	15
2.1 Introduction .....	15
2.2 CCyB essence and the BIS/ESRB guidelines .....	16
2.3 Key indicators for the CCyB rate setting .....	23
2.4 Deciding upon the CCyB rate .....	25
2.5 Deciding upon the release of the CCyB .....	30
2.6 Conclusion .....	31
<b>Chapter 3</b>	
A liquidity risk stress–testing framework with Basel liquidity standards .....	32
3.1 Introduction .....	32
3.2 Related literature .....	34
3.3 The concept of the approach .....	34
3.4 Application of the model to selected Czech banks .....	41
3.5 Conclusion .....	45
Appendix .....	47
<b>Chapter 4</b>	
Monetary policy after the 2007-2009 global financial crisis in the context of systemic risk .....	48
4.1 Introduction .....	49
4.2 The basic principles of monetary policy before the GFC .....	50
4.3 The impact of the GFC on monetary policy .....	51
4.4 The effectiveness of unconventional monetary policy in the selected countries .....	53
4.5 Systemic risk in the context of current monetary policy .....	57
4.6 Conclusion .....	58
<b>Chapter 5</b>	
Foreign exchange market contagion in Central European countries .....	60
5.1 Introduction .....	60
5.2 Contagion and extreme value theory .....	61
5.3 Exchange rate developments and crisis episodes in CEE .....	64

5.4 Loss absorbency in resolution as a major potential threat .....	67
5.5 Empirical findings .....	70
5.5.1 Unit root tests.....	70
5.5.2 Cointegration .....	71
5.5.3 Extreme value theory .....	73
5.6 Conclusion .....	74

## **Chapter 6**

Risks associated with the transition to fixed exchange rate regimes .....	75
6.1 Introduction .....	75
6.2 Literature review.....	76
6.3 Fixed exchange rate and currency crisis .....	78
6.4 Currency crisis in ERM II – empirical experience.....	81
6.5 Theoretical models of currency crisis and their relevance in relation to ERM II .....	84
6.6 Risk of currency crisis in ERM II .....	87
6.7 Involving the Czech koruna into ERM II.....	90
6.8 Conclusion .....	92

## **Chapter 7**

Measuring credit risk based on CDS and bond spreads.....	94
7.1 Introduction .....	94
7.2 Development of CDS.....	96
7.3 Model of implied ratings.....	97
7.4 Comparison of selected countries .....	101
7.5 Conclusion .....	106

## **Chapter 8**

Insurance linked securities and their future research .....	107
8.1 Introduction .....	107
8.2 Valuation of ILS .....	112
8.2.1 Calculations on 3D tree.....	113
8.2.1.1 Results on 3D tree.....	114
8.2.2 Simulation on 3D Tree.....	115
8.3. Valuation using 2 scenario model .....	116
8.3.1 “Cyclone” Style Catastrophic Process .....	116
8.3.2 “Earthquake” Style Catastrophic Process .....	117
8.3.3 Earthquake + cyclone style components.....	118
8.4 Possibilities of the future research .....	119
8.5 Conclusion .....	120

## **Chapter 9**

Insurance and systemic risk .....	121
9.1 Introduction .....	121
9.2 Reasons for the varying resistance of banks and insurance companies to cyclical fluctuations.....	121
9.2.1 Methodological differences .....	121

9.2.2 Differences in the character of business risks, consequences for the reduction of systemic risk by the insurance sector .....	123
9.2.3 Differences in information asymmetry .....	126
9.3 The effectiveness of special built-in stabilizers to stabilize the economy of the insurance business and reduce the possible transfer of systemic risk.....	127
9.4 Current changes in the tax deductibility of a built-in stabilizer of insurance technical reserves in the current Czech environment .....	129
9.5 Conclusions .....	130
<b>List of Abbreviations .....</b>	<b>131</b>
<b>References .....</b>	<b>133</b>
<b>List of tables .....</b>	<b>150</b>
<b>List of figures .....</b>	<b>151</b>
<b>Summary .....</b>	<b>153</b>