

Introduction

Frédéric Déléze

Introduction

- **Energy** is the leading economic sector of Kazakhstan:
 - Production of **crude oil** and **natural gas condensate** counts for more than 50% of the country's export.
 - Major producer of mineral and metals:
 - * Ferrochrome, manganese, potassium, uranium, iron, coal, . . .
- Falling oil prices and the effects of the Ukrainian crisis push the central bank to devalue the currency by more than 40% in 2014-2015.
 - Real estate crisis
 - Bank recapitalisation
- Modernisation of the banking sector:
 - National pension fund (corporate and government bonds)

Main risks faced by Kazakh financial institutions:

- Credit Risk
 - currency devaluation triggered a real estate crisis and soaring bad loans:
 - * How to evaluate, mitigate and monitor credit risk
 - Estimation of probability of default
 - Exposure computations
 - Credit Derivatives
- Interest Rate risk

- Asset Liability management
 - * Bond immunization
- Commodity price and currency risks
 - How to hedge oil
 - How to hedge KZT/USD without derivatives

Agenda

- Introduction to credit risk and credit derivatives
- Introduction to interest rate risk
- Discussion / Practical examples:
 - Credit / Counterparty credit risk:
 - * Assessing the probability of default of a counterparty
 - Market risk:
 - * Interest rate: Asset-Liability management: Bond immunization
 - * FX rate: How to hedge KZT / USD without derivatives
 - * Commodities: How to hedge oil price with derivatives
- Presentation of Razor Risk

Credit Risk and Credit Derivatives

<http://35.180.63.47/creditRisk.html>

Credit Risk (practical examples / discussion)

<http://35.180.63.47/creditRiskExamples.html>

Interest Rate Risk

<http://35.180.63.47/interestRateRisk.html>

Market Risk (practical examples)

- Interest rate: Bond immunization <http://35.180.63.47/bondimmunization.xlm>
- Commodity hedging <http://35.180.63.47/commodity.xlsx>
- FX hedging <http://35.180.63.47/kzt.xlsx>