

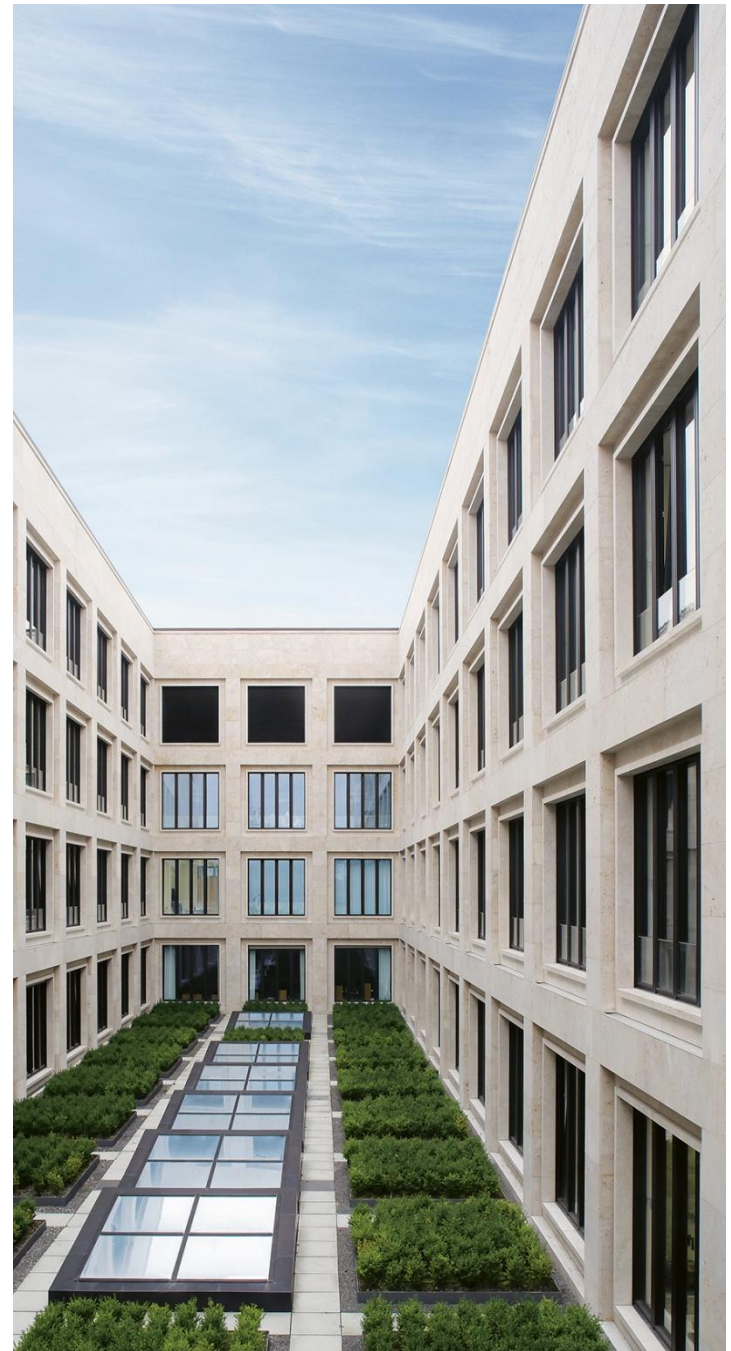


International Center for
Insurance Regulation

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Interconnectedness between Banking and Insurance

Frankfurt, September 5, 2013



Global Insurance Supervision:

- **Not possible without taking interconnectedness in the financial area into account**
- **Interconnectedness an important issue in the discussion on systemic risk**

**Long-term goal: not only Global Insurance Supervision,
but Global Financial Services Supervision**

Interconnectedness between Banking and Insurance

Agenda

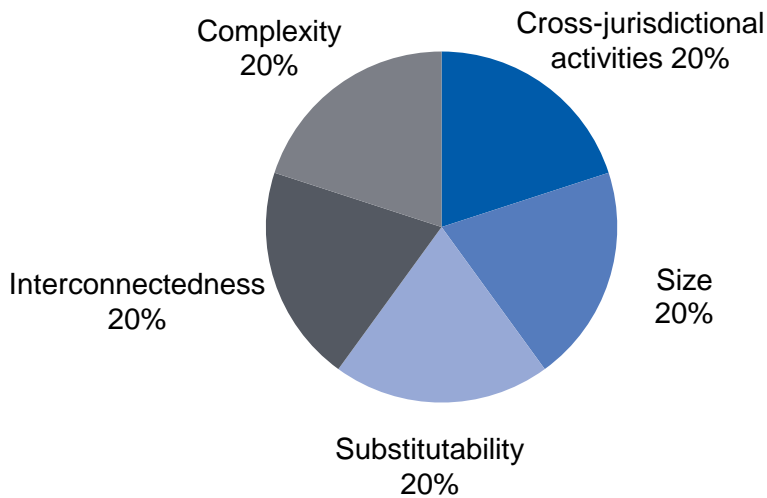
1. Introduction
2. Regulatory Issues
 - Basel Accords vs. Insurance Regulation
 - Bail-in Debt
3. Research



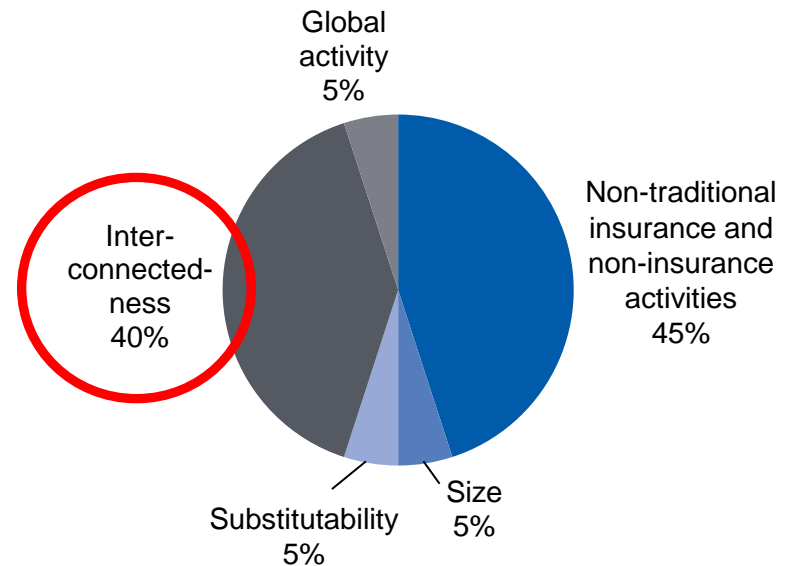
Introduction

Can insurance companies be systemically important?

The Basel Committee's assessment methodology identifies five categories to measure **banks'** systemic importance



The IAIS' assessment methodology identifies five categories to measure **insurers'** relative systemic importance



The potential for systemic risk in insurance may become relevant when insurers significantly deviate from the traditional insurance business model and/or become highly interconnected with the banking industry

Interconnectedness dimensions: Bonds and equity capital

Europe

In 2011, insurers held around 12% of all banking-sector liabilities to non-banks¹

Germany

Estimated proportion of insurers' assets invested in bank bonds, bank loans and bank deposits is between 39% and 43%²

Bank bonds represent an important part of insurers' asset portfolios

(1) Deutsche Bank Research (2011)

(2) Kaserer (2011)

On the one hand: **natural connection**

- Long duration of life insurers' liabilities
- Long duration of bank loans
- Present duration mismatch in both sectors can be mitigated by issuing and holding long duration bank bonds

On the other hand: **contagion risk**

- The default of bank bonds held by insurers leads to a decline in insurers' asset values
- Additional danger if bank bond defaults originate in events that also directly affect insurers.
E.g.: The default of sovereign debt held by insurers (on average 28% in 2011) affects insurers' balance sheets directly and indirectly via bank bonds
- Financial conglomerate:
Reputational risk due to financial distress in the other sector

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Regulatory approaches for banking and insurance: Interconnectedness between banking and insurance not taken into account

Example: Basel Accords and Solvency II

Basel II / III

- Requires banks to establish more stable, long-term sources of funding 
- Financing Instruments will only be recognized as Tier 1 and Tier 2 if they include **loss-absorbing components**. 

Solvency II

- Motivates insurers to close the duration gap (via interest rate risk module)
- However, capital requirements for corporate/bank bonds become more stringent as maturity periods increase and **credit ratings deteriorate** (spread risk module constraint) 

Interdependencies and overall effects on, e.g., loan supply?

Liikanen proposal

- Resurrecting market discipline in banking via funding:

Mandatory issuance of bail-in debt

- In financial distress, these bonds can be converted into equity (CoCo bonds)
- They must be priced accordingly (high coupon compensates for high expected loss)
- Bondholders must be **non-banks**

Liikanen proposal

- Bail-in debt as complement not substitute to more equity capital
- Risk is shifted to whom?
 - Life insurance companies
 - Pension funds
 - Hedge funds

- **Are life insurers natural holders of CoCo-Bank Bonds?**
 - Life insurers less exposed to short-time customer reactions than banks (bank run versus insurance run)
 - Compensation of insurers via high spread that must be accumulated in a “catastrophe reserve”
 - Thus, after e.g. 15 years, a complete default could be financed via the additional spread
- **Assessment**
 - Life insurers’ task is to provide safety for their policyholders, not for banks
 - How do policyholders participate?
 - However, if the terms are appropriate, why not invest in bail-in-bonds?
 - Especially relevant in the present low-interest rate phase
 - Effects must be thoroughly studied

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Recent research on systemic risk and interconnectedness in banking and insurance

- Chen, Cummins, Viswanathan and Weiss (2013) „Systemic risk and the interconnectedness between Banks and Insurers: An Econometric Analysis“, forthcoming, Journal of Risk and Insurance

Findings:

- Banks create significant systemic risk for insurers but not vice versa
- Insurers seem to be the victims of systemic risk rather than instigators

Recent research on systemic risk and interconnectedness in banking and insurance

- Slijkerman, Schoenmaker and de Vries (2013) „Systemic risk and diversification across European banks and insurers“, Journal of Banking & Finance, Vol. 37, pp. 773-785

Findings:

- Significant downside-risk dependence between banking and insurance sectors
- They conclude that the probability of a crash is lower if European banks diversify across other sectors (→ bail-in debt)

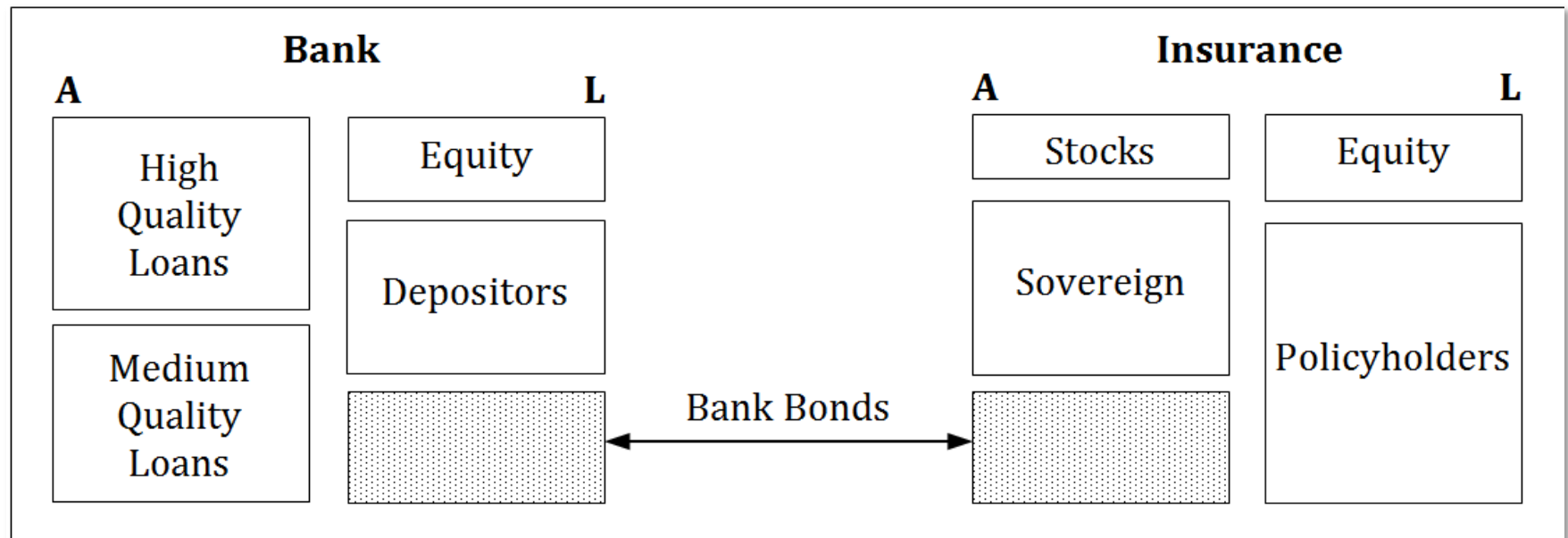


“Optimal Risk Policies for Interconnected Banks and Insurers in the Presence of Solvency Regulation“

- Regulatory effects on the interconnectedness of banking and insurance
- Shareholder value perspective of both banks and insurers
- “Drivers” of the model: customer reactions
 - Depositors on the banking side
 - Policyholders on the insurance side

“Optimal Risk Policies for Interconnected Banks and Insurers in the Presence of Solvency Regulation“

- Effect of Basel II / III and Solvency II on asset allocation in both sectors and interconnectedness via bank bonds



“Optimal Risk Policies for Interconnected Banks and Insurers in the Presence of Solvency Regulation“

- **First findings and outlook**

- Customer sensitivity to default risk as well as regulatory rules that influence interconnectedness are crucial for overall riskiness
- Industry-specific regulatory safety levels and risk measurement lead – in their interplay – to different levels of contagion risk between banks and insurers
- Identify combinations of regulatory safety targets leading to beneficial or detrimental outcomes (for customers and / or owners)

Backup



Liste der system relevanten Banken

Citigroup

Deutsche Bank

HSBC

JP Morgan Chase

Barclays

BNP Paribas

Bank of America

Bank of New York Mellon

Credit Suisse

Goldman Sachs

Mitsubishi UFJ FG

Morgan Stanley

Royal Bank of Scotland

UBS

Bank of China

BBVA

Groupe BPCE

Group Crédit Agricole

ING Bank

Mizuho FG

Nordea

Santander

Société Générale

Standard Chartered

State Street

Sumitomo Mitsui FG

Unicredit Group

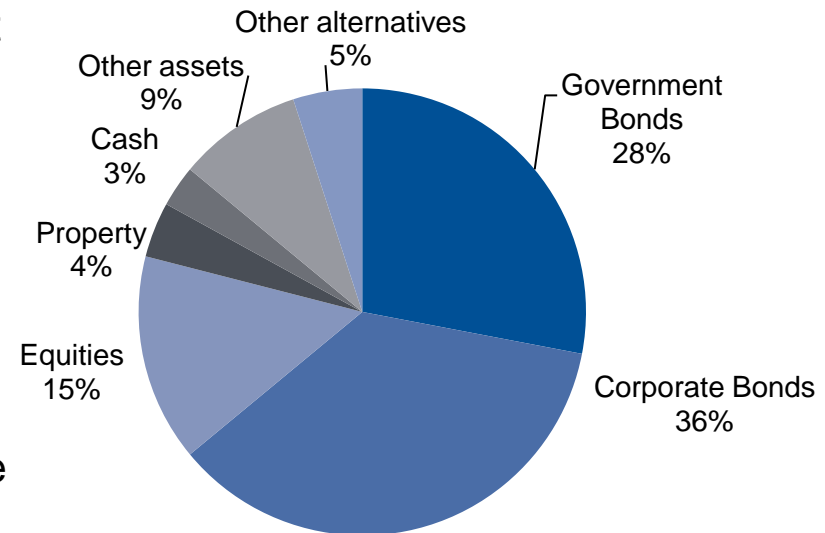
Wells Fargo

On the one hand natural connection

- The duration of insurers' liabilities is longer than that of their assets.
- The duration of banks' assets is longer than that of their liabilities.
- Duration problem for both sectors can be mitigated

On the other hand contagion risk

- The default of bank bonds held by insurers leads to a decline in insurers' asset values.
- Additional danger if bank bond defaults originate in events that also affect insurers directly, e.g.:
The default of sovereign debt held by insurers



➔ The reciprocal effects have to be considered. Default of sovereign debt held by insurers affects insurers' balance sheet directly and indirectly via bank bonds.

Global Systemically Important Institutes

28 G-SIBs:

Citigroup State Street HSBC ING Bank
Deutsche Bank Barclays Credit Suisse
Santander JP Morgan Chase Wells Fargo
Bank of America Bank of New York Mellon
BNP Paribas Mizuho FG
Bank of China Goldman Sachs
Mitsubishi UFJ FG Nordea
Société Générale Royal Bank of Scotland
UBS Standard Chartered BBVA Morgan Stanley
Unicredit Group Groupe BPCE Group Crédit Agricole
Sumitomo Mitsui FG

9 G-SIIs:

- Allianz SE
- American International Group, Inc.
- Assicurazioni Generali S.p.A.
- Aviva plc
- Axa S.A.
- MetLife, Inc.
- Ping An Insurance (Group) Company of China, Ltd.
- Prudential Financial, Inc.
- Prudential plc

28 G-SI Banks

Citigroup State Street HSBC ING Bank
Deutsche Bank Barclays Credit Suisse
Santander JP Morgan Chase Wells Fargo
Bank of America Bank of New York Mellon
BNP Paribas Goldman Sachs Mizuho FG
Bank of China UFJ FG Nordea
Mitsubishi UFJ FG Royal Bank of Scotland
Société Générale BBVA Morgan Stanley
UBS Standard Chartered Group Crédit Agricole
Unicredit Group Groupe BPCE
Sumitomo Mitsui FG

9 G-SI Insurers

Assicurazioni Generali S.p.A.
American International Group, Inc.
Allianz SE Aviva plc
Ping An Insurance (Group) Company of China, Ltd
Prudential plc
Axa S.A. Prudential Financial, Inc.
MetLife, Inc.