

Towards an XBRL-enabled Corporate Governance
Reporting Taxonomy - An empirical study

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Table of Contents

1. Research Questions/ Hypotheses
2. Literature Review
3. Research Methodology
4. Data Collection and Analysis
5. Data Results
6. Directions for future research



Introduction

- “Foundation of any structure in Corporate Governance is disclosure. Openness is the basis of public confidence in the corporate system and funds will flow to centers of economic activity that inspire trust”
- This quote from Sir Adrian Cadbury, who developed the British Corporate Governance Code (Cadbury Report) underpins the importance of disclosure and transparency with regard to Corporate Governance
- Disclosure about Corporate Governance is so far not the dominant empirical research topic in Corporate Governance (Reference CGIR Study 2012), however for financial institutions, which becomes increasingly regulated it becomes a management issue, as banks face the dilemma that higher transparency is correlated with increasing costs while margins are decreasing
- XBRL [eXtensible Business Reporting Language] is seen as one of the seven cutting edge technologies expected to have a large impact on business and to revolutionize corporate transparency (The Futurist 2003)
- This thesis intends to revoke the question if XBRL can help to increase transparency with regard to Corporate Governance Reporting and if a standardized XBRL-enabled taxonomy can be developed summarizing important CGR disclosures on an international level



Research Questions/ Hypotheses

Q1: What are the components of a CGR taxonomy for a foreign private issuer (NYSE) operating in the financial service sector?

H1: Due to globalization the CGR taxonomy for a foreign private issuers in the financial service sector will converge within the global financial service sector industry. .

Research Objectives

R1: To develop a taxonomy, which allows a comprehensive analysis of the spectrum of the Corporate Governance Reporting of Financial Institutions

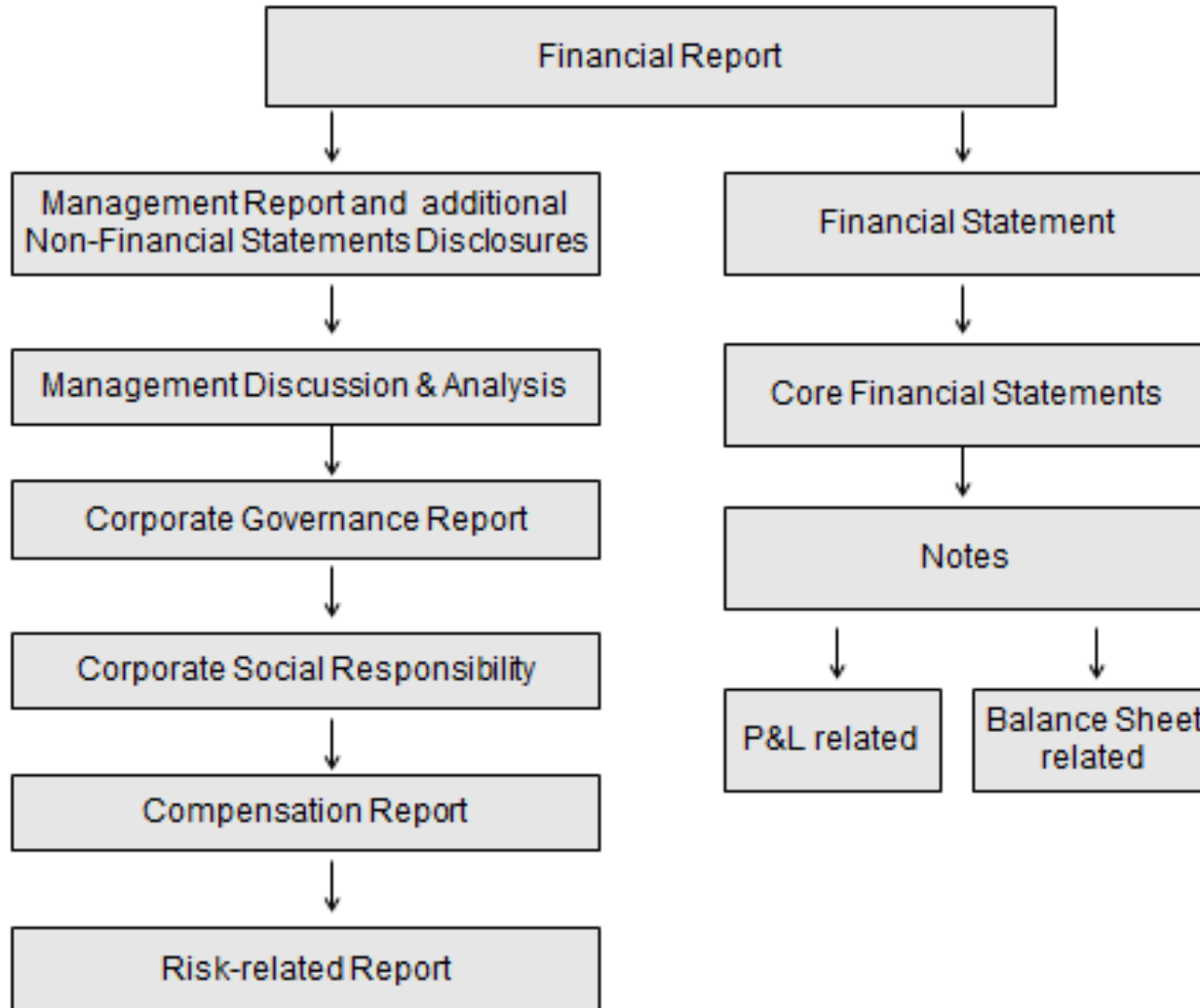
R2: To identify a set of determinants for Corporate Governance Reporting..



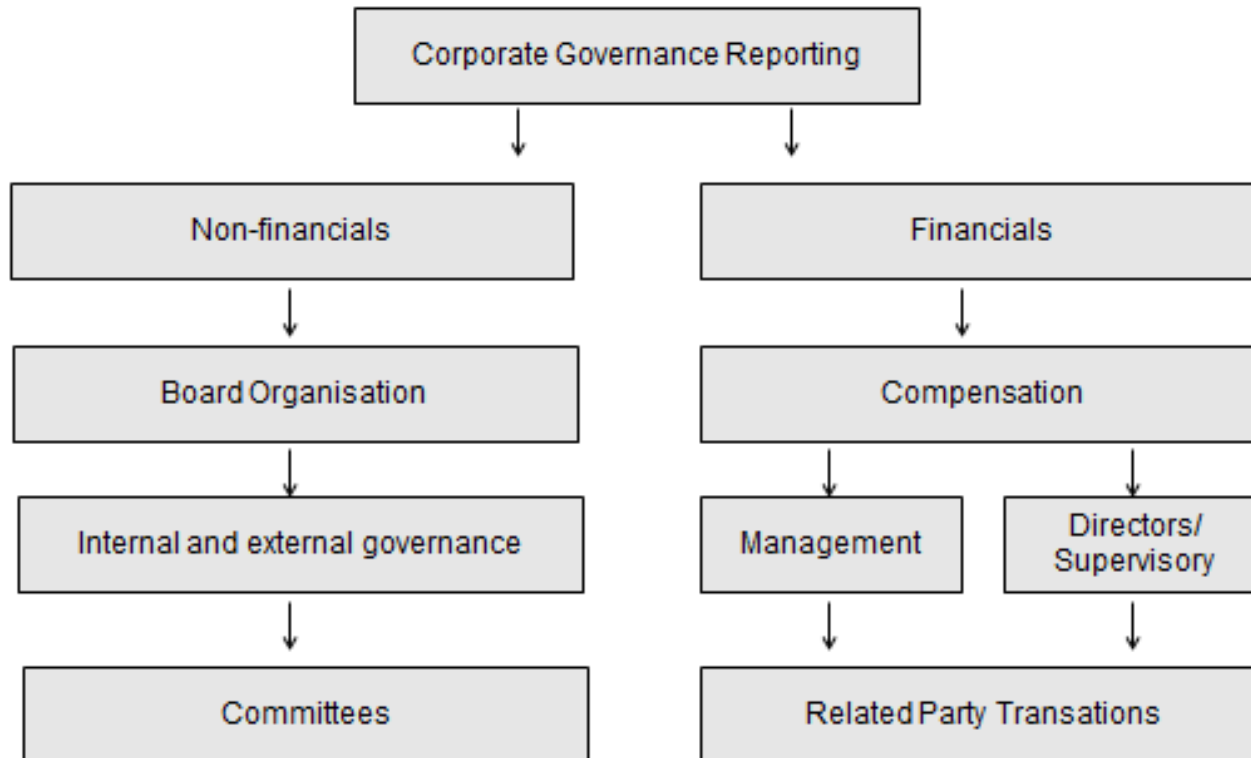
Definitions cover a wide spectrum

- The different definitions cover a wide spectrum, which will be elaborated in the following section:
 - Shareholder vs. stakeholder approach
 - Anglo-Saxon vs. continental European
 - Accountability and transparency
 - Power and influence
 - Management style and management system
 - View of the world

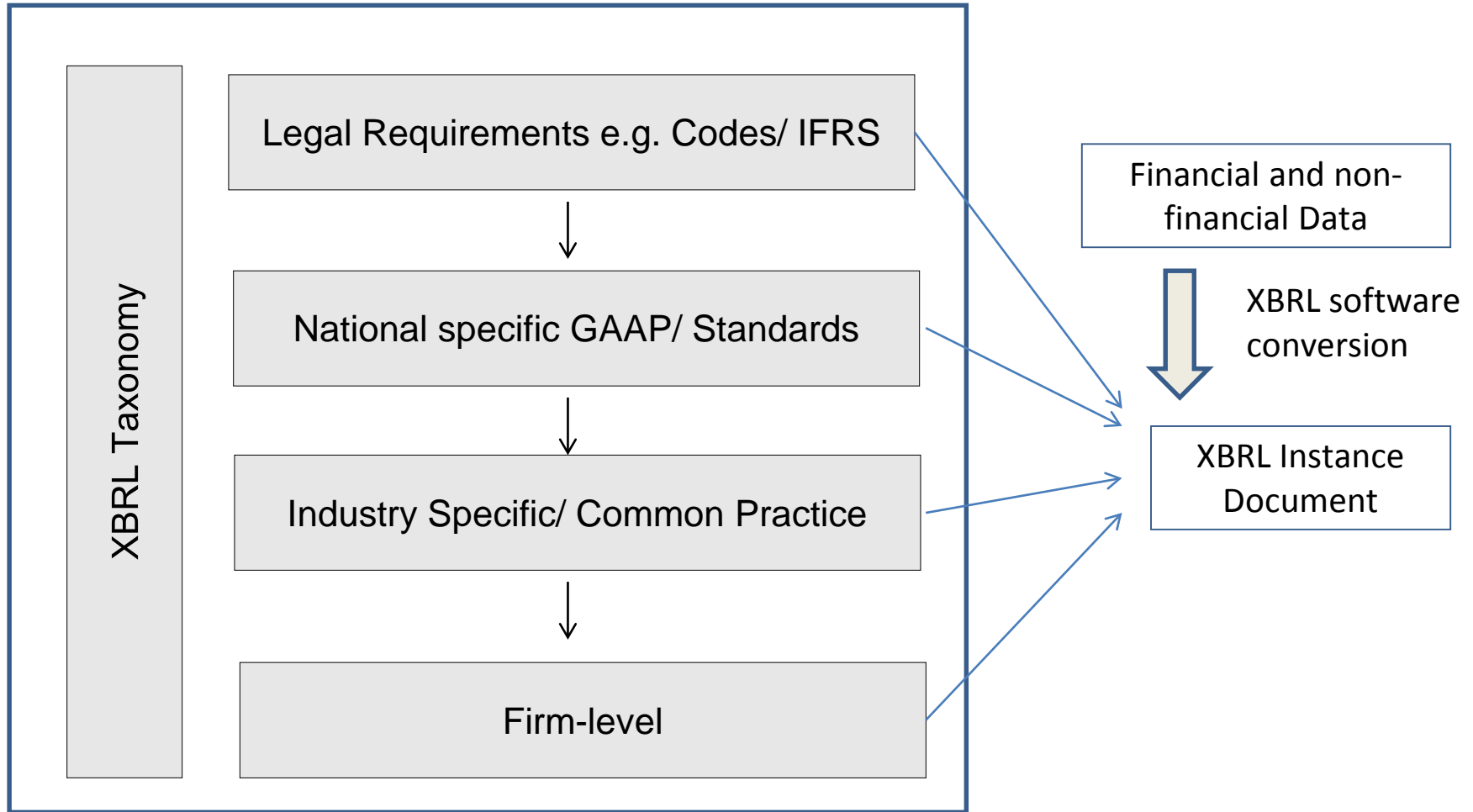
Components of Financial Reporting



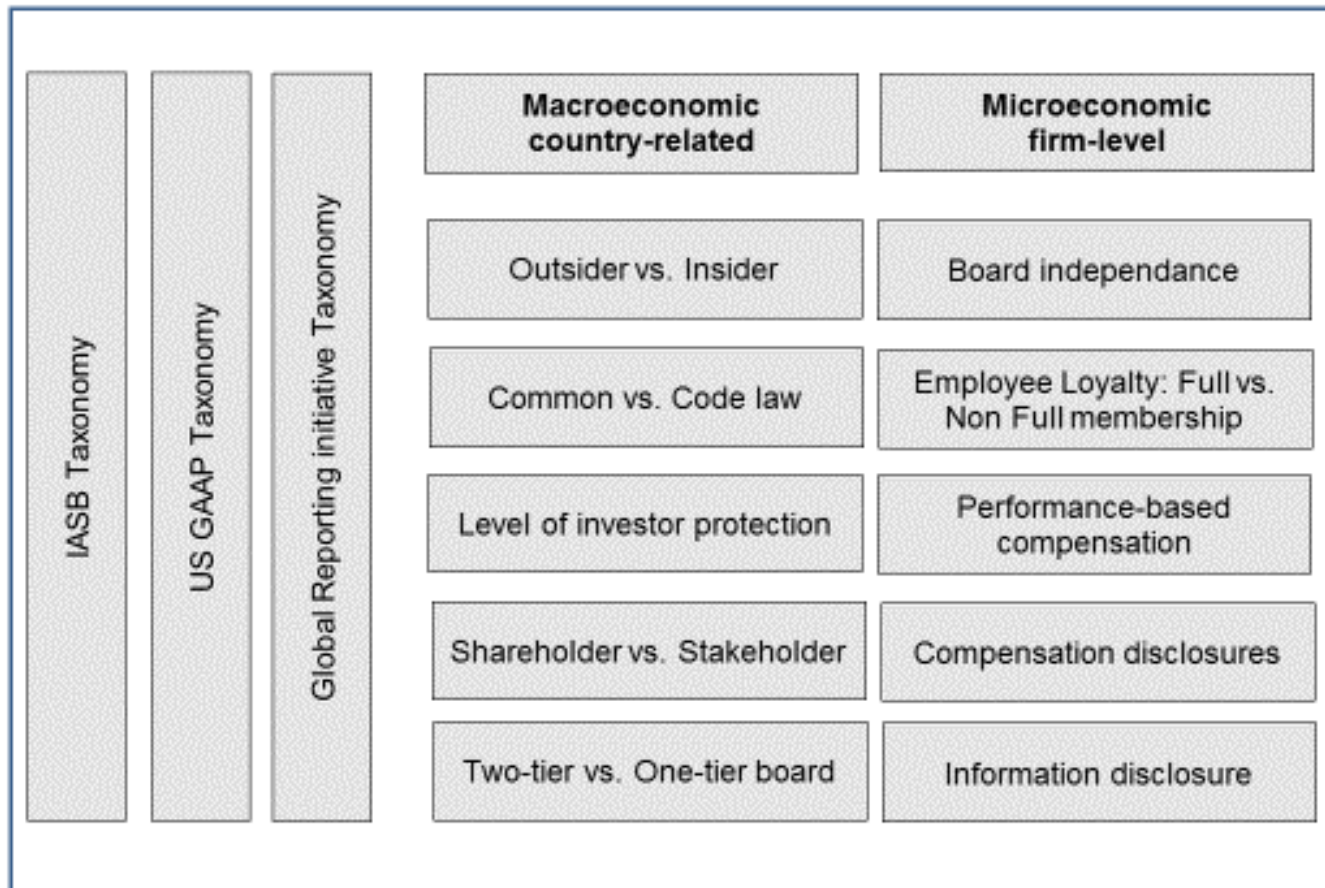
Components of Corporate Governance Reporting



Definition of key terms



Different determinants of Taxonomies



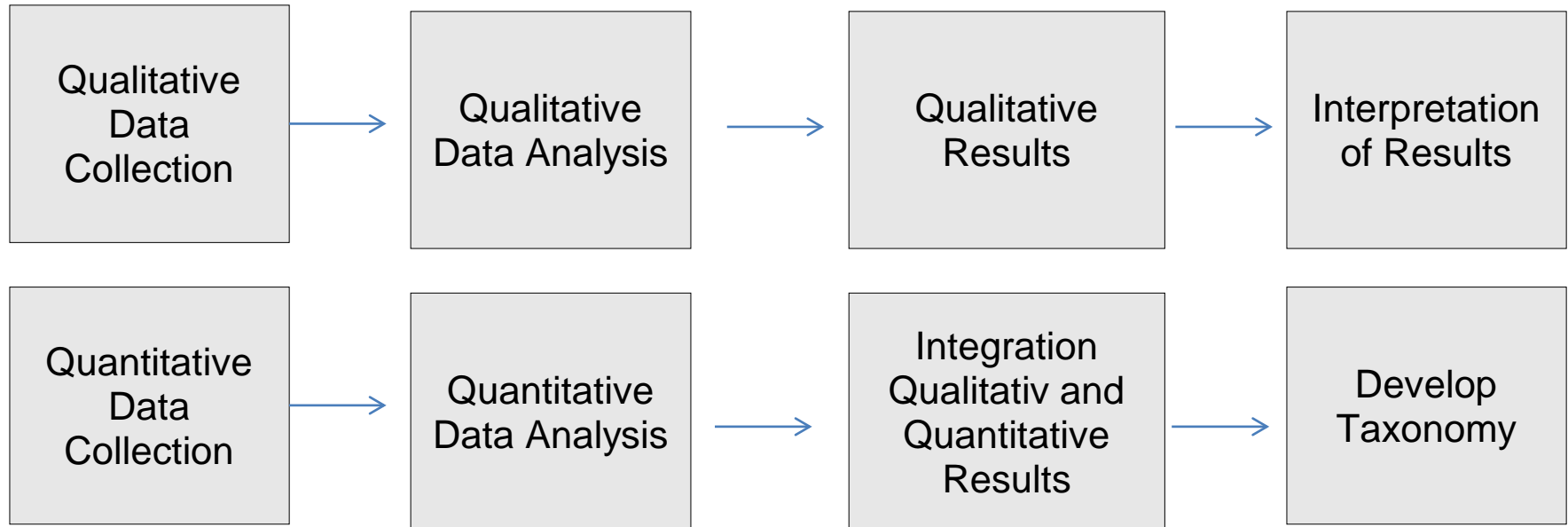
Research Gaps



- Definitional problems persist, as there is often no real distinction made in the literature between voluntary disclosures and those that are mandatory
- Secondly, analysis of the factors affecting disclosure decisions tends to focus primarily on the capital market effects of disclosures, from an accounting perspective, while relatively few studies focus on the actual content of the disclosures
- Information disclosure studies tend to consider either required or voluntary forms of disclosure, but rarely both forms simultaneously
- According to the researcher's knowledge, a taxonomy satisfying the needs of multinational FPI in the financial service sector is not documented within the academic literature.
- Theory on governance remains to be developed, so that the existing theory has limitations in explaining corporate governance mechanisms, including the CGR reporting of global corporations
- Development of further taxonomies
- An enterprise taxonomy requires a classification into a hierarchical structure, and the most widely used is the polyhierarchical structure

Research Approach

Exploratory Design: Taxonomy Development Model (Creswell (2006))



- First phase: Qualitative – Two researcher test the compliance of the sample with a Corporate Governance Code“Guidance on Good Practices in Corporate Governance Disclosure” issued by the United Nations
- Second phase: Quantitative Word-frequency and Principal Component analysis (Factor Analysis)
- Mixed method: improve theoretical creativity through the use of numerous critical evaluation prodecures (Clarke 2004)
- Complexity of real word by combing different methods (Mingers and Gill , 1997)

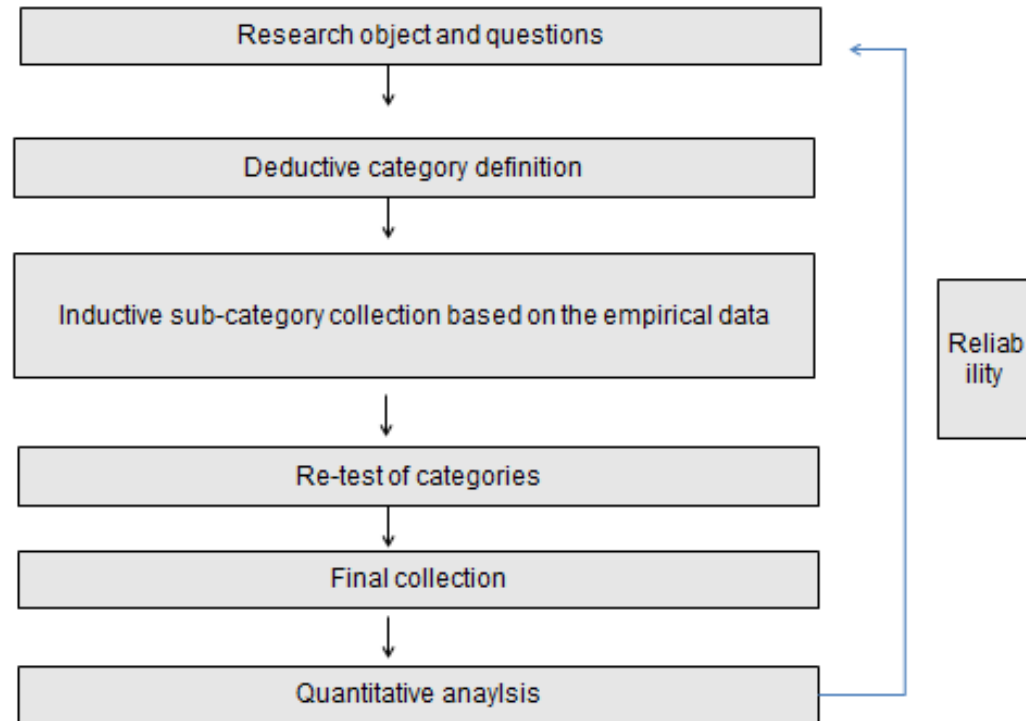
Research Paradigm



- Taxonomy for Corporate Governance Reporting of Financial Institutions is developed with the claim to become practical usable
- Requirements related to validity and reliability of the findings are very high, which a multi-method approach supports.
- Quantitative research method is applied to achieve generalizable findings
- Mixed-method approach has the advantages that the same phenomenon is studied with different methods and the findings are generated even with different design choices.
- Grounded on primary data analyzing annual reports from Financial Institutions.
- Findings and results are limited to listed companies, in which corporate governance issues due to the separation of management and ownership

Deductive-Inductive development (Mayring, 2005)

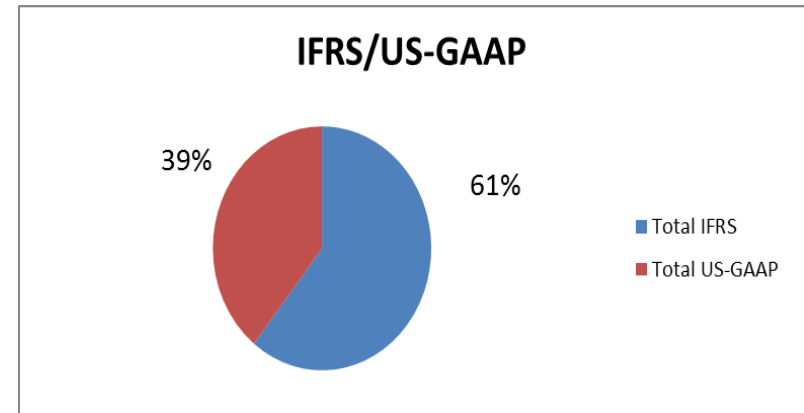
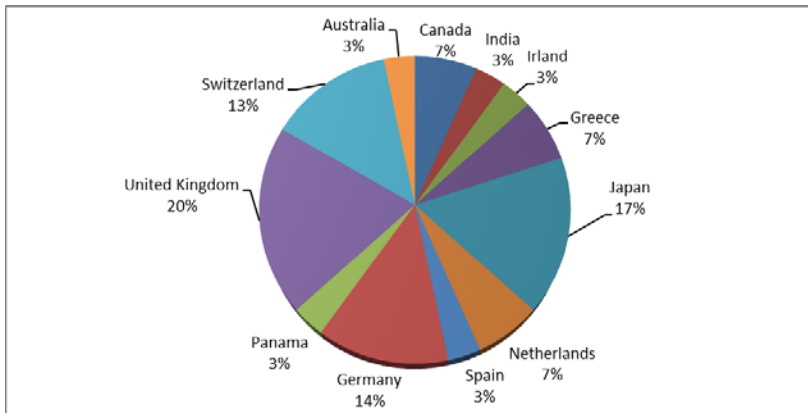
- Content analysis (CA):
“inferring the signification of the discourse through detailed analysis of the words used, their frequency and their association” (Thietart, 2001)
- Analysis of Corporate Governance Codes
- Compliance with GPCGD
- Factor analysis: Main categories and Sub-categories



Data Collection: Sample

- Sample is based on 30 foreign private issuers listed on the New York Stock Exchange comprising of financial institutions and insurance entities.

Country distribution vs. Accounting GAAP



Bank of Chile, Barclays; BVA Argentina; Macro Argentina; Brookfields, Bancolombia; Deutsche Bank, Doral, UBS, HSBC, Inyuan, ING. Orix, KB South Korea; China Life Insu., Lloyds, Maiden, Mitsubishi; National Bank of Greece, Nomura; Noah Cina; National Westminster, Chile Pension, RBS, Santander, Shinhan Korea; Sumitomo, Westpac, Woori South Korea

Data Sampling – Generalizability



Bank	Country	M cap, US\$b, 25/01/2013
1 Industrial & Commercial bank of China(ICBC)	China	233.6
2 China Construction Bank	China	207.6
3 HSBC Holdings	UK	202.4
4 Wells Fargo & Co	US	200.2
5 JP Morgan Chase & Co	US	187.6
6 Agricultural Bank of China	China	142.9
7 Citigroup	US	141.8
8 Bank of America	US	133.2
9 Bank of China	China	130.0
10 Commonwealth Bank of Australia	Australia	122.3
11 Westpac Banking Corporation	Australia	108.5
12 Mitsubishi UFJ Financial Group (MUFJ)	Japan	96.37
13 Australia and New Zealand Banking (ANZ)	Australia	90.37
14 Royal Bank of Canada	Canada	87.17
15 National Australia Bank	Australia	82.38
16 Itau Unibanco	Brazil	77.37
17 Banco Santander	Spain	75.79
18 Toronto-Dominion Bank	Canada	75.67
19 American Express	US	75.57
20 Sberbank of Russia	Russia	71.45
21 Banco Bradesco	Brazil	71.00
22 BNP Paribas	France	68.83
23 Bank of Nova Scotia (Scotiabank)	Canada	68.83
24 Goldman Sachs Group	US	68.00
25 UBS AG	Switzerland	67.88
26 Sumitomo Mitsui Financial	Japan	66.85
27 US Bancorp	US	62.03
28 Standard Chartered	UK	60.46
29 Lloyds Banking Group	UK	59.89
30 Bank of Communications	China	57.28
31 Barclays Plc	UK	57.03
32 BBVA	Spain	53.40
33 Mizuho Financial Group	Japan	53.15
34 Royal Bank of Scotland Group *	UK	53.11
35 Nordea Bank	Sweden	47.94
36 Deutsche Bank AG	Germany	46.61
37 China Minsheng Banking Corp (CMBC)	China	44.02
38 Credit Suisse Group	Switzerland	43.44
39 Morgan Stanley	US	43.44
40 China Merchants Bank	China	43.11
41 Bank of Montreal (BMO)	Canada	40.86
42 Industrial Bank Co	China	37.52
43 BOC Hong Kong	Hong Kong	36.37
44 Banco do Brasil	Brazil	35.90
45 PNC Financial Services	US	35.87

H1: Global Convergence

World's Largest Banks 2013 (60)

\$ 4215 bn. Market Cap

Sample \$ 1100

Representation 25%

Source: DB Research



Data Analysis: Qualitative

- Testing the compliance of the sample with the “Guidance on Good Practices in Corporate Governance Disclosure”(GPCGD) issued by the United Nations
- Two dedicated tester tested the compliance based on a defined codebook.
- The GPCGD was systematically sentence by sentence searched for recommendations with key words “may” “could” and mandatory recommendations with keywords “should” or “must”.
- As a result altogether 75 code disclosures could be identified. of which 69 are mandatory and 6 are recommendations.
- Coding review was performed by two independent researcher based on coding instruction, as recommended by Stemler (2001)
- Results have been tested for intercoder reliability.



Data Results: Qualitative

- Based on the codebook a scoring is performed

• Categories	Mean	Var.
• Financial Disclosures	0,901	0,007
• Non-Financial Disclosures	0,693	0,022
• General Meetings	0,967	0,004
• Timing and Means of Disclosures	0,815	0,008
• Good Practices for compliance	0,783	0,012
• Total	0,815	0,008



Data Analysis: Quantitative

- Large Data Set 30 Companies X 300 Factors x Classes
- Correlation Matrix/ Communalities
- Preparation of data
- Classification and Structuring Methods: Break-down large data sets based on proximity
- Choosing an classification and structuring algorithm
 - Cluster analysis
 - Fusion Index/ Dendogram
 - Factor analysis
 - Principal Component takes variance into account
 - Common Specific

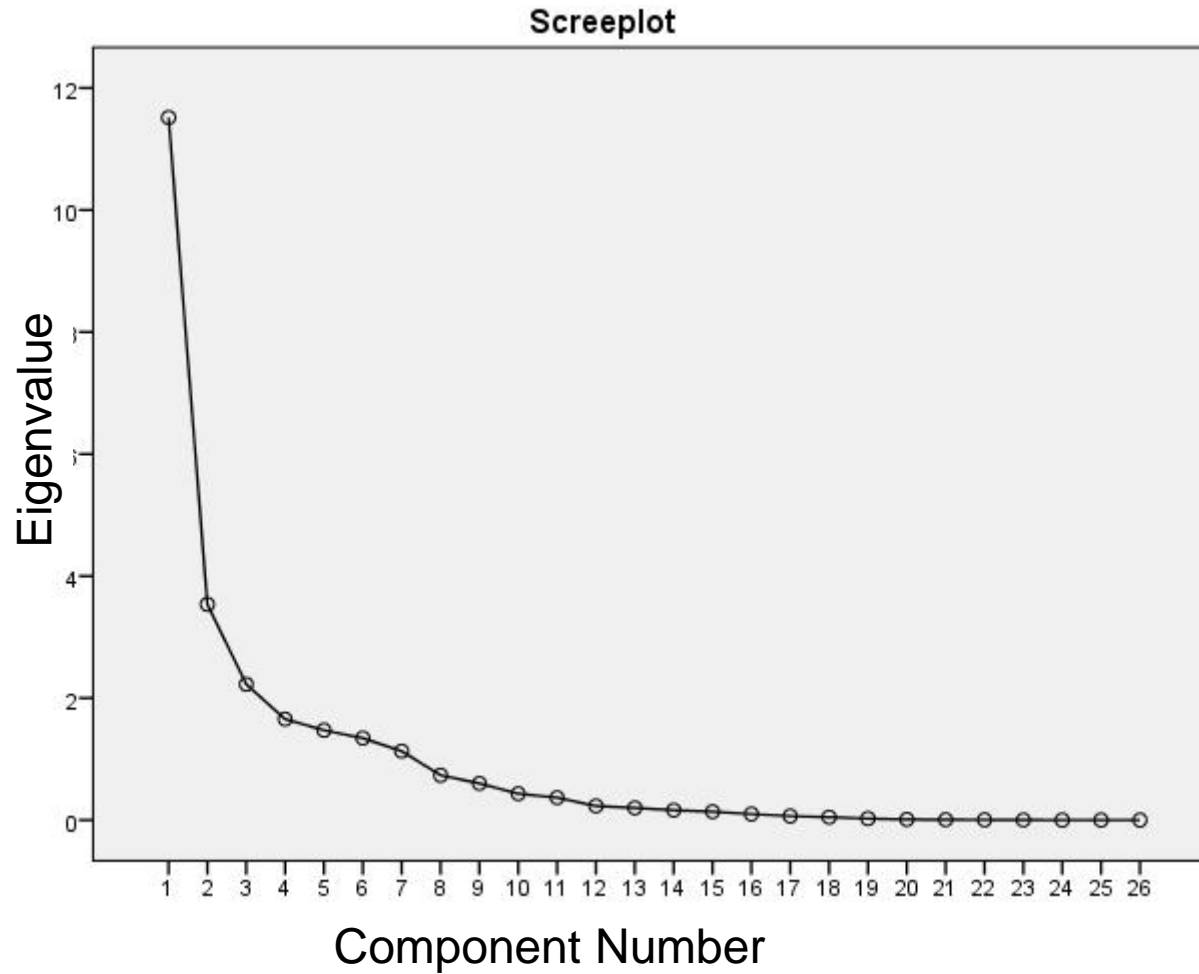


Data Results

- Extraction: Corporate Governance Disclosures: CG report, Item 16G and Additional key word search
- Length-adjusted word frequency using NVivo
- Cluster analysis vs. Factor analysis
- Factorial technique using SPSS: 26 Factors
- Visual inspection of the Scree plot showed that a five component solution was desirable (change in the plot)
- In a second round 5 components were extracted
- Each component has an Eigenvalue $>1,0$ the five components explained 78% of the variance; Components to a Varimax rotation to increase interpretability of findings
- Verification of suitability of data Kaiser-Meyer-Olkin Measure is >0.6



Data Results



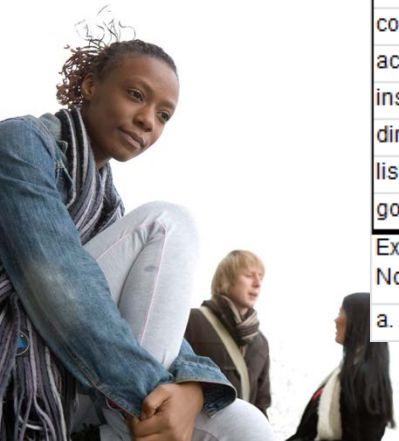
Data Results



Exploratory Factor Analysis: Component Matrix					
Description	Component				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Internal Governance/ Board Organization	Shareholder Protection	Audit and Accounting	External Governance	Compliance
Eigenvalue	11,515	3,536	2,226	1,655	1,472
% Var Expl.	44,29	13,601	8,563	6,364	5,662
% Cum. Var. Expl.	44,29	57,89	66,453	72,818	78,479
boards	,441			,664	-,101
committees	,493	,625	,115	,215	,331
shareholding	,247	-,473	,460	,490	-,285
reports	,864	-,124			
codes	,944	-,261			
executives	,519	,278	-,255	,454	,202
recommends	,941	-,264	-,106		
audit	,349		,781		,311
financial	,961	-,208			
remuneration	,574	-,490	,378	,414	-,220
independent	,517	,722	,332		
principles			-,308	-,185	,893
risk		,706		,328	-,492
control	,136	,241	,339	-,430	,268
review		-,134	,238		,370
chairman	,186	,126	,717	-,128	-,279
policy	,770	-,205			-,153
compensation	,662			,219	,353
accounting	-,141	-,163	,954		
institution	,742	,199	-,223	-,253	
directors	,635	,643	-,136		
lists	,464	,688			-,416
governments	,654	,432			,106

Extraction method: Analysis Principal Components, Rotation Method: Varimax with Kaiser-Normalisation

a. 5 Components extracted,Extraction covered in 13 iterations



Taxonomy

		XBRL Specification/ Meta Data			
		Reporting Elements Σ	Disclosure Format	Reference	Classification
Financial	IASB/ U.S. GAAP XBRL Taxonomy	4000	Text- Figure- Instant/ Duration	IFRS/ US GAAP	Mandatory Voluntary
Non- Financial	Internal Governance/ Board Organization	20	Text	ISAR	Mandatory Voluntary
	External Governance	7	Text	ISAR	Mandatory
	Audit/ Accounting	8	Text	ISAR	Mandatory
	Compliance	2	Text	ISAR	Mandatory
	Shareholder Protection	16	Text	ISAR	Mandatory



Directions for future Research

1) Impact of XBRL on content of information

- Does the XBRL Filing has a reverse impact on the External Disclosures
- Will standardsetting consider Taxonomy considerations

2) Better Data better decision

- What is the impact of XBRL Filings on Decision making of Investors
- What comes next – Data Point Model/ Data Sets



Not used



Theories on Corporate Governance

Chapter: 2.2.1
Principal-Agent
theory

Chapter: 2.2.2
Transaction-Cost
theory

Chapter: 2.2.3
Stewardship
theory

Chapter: 2.2.4
Property-rights

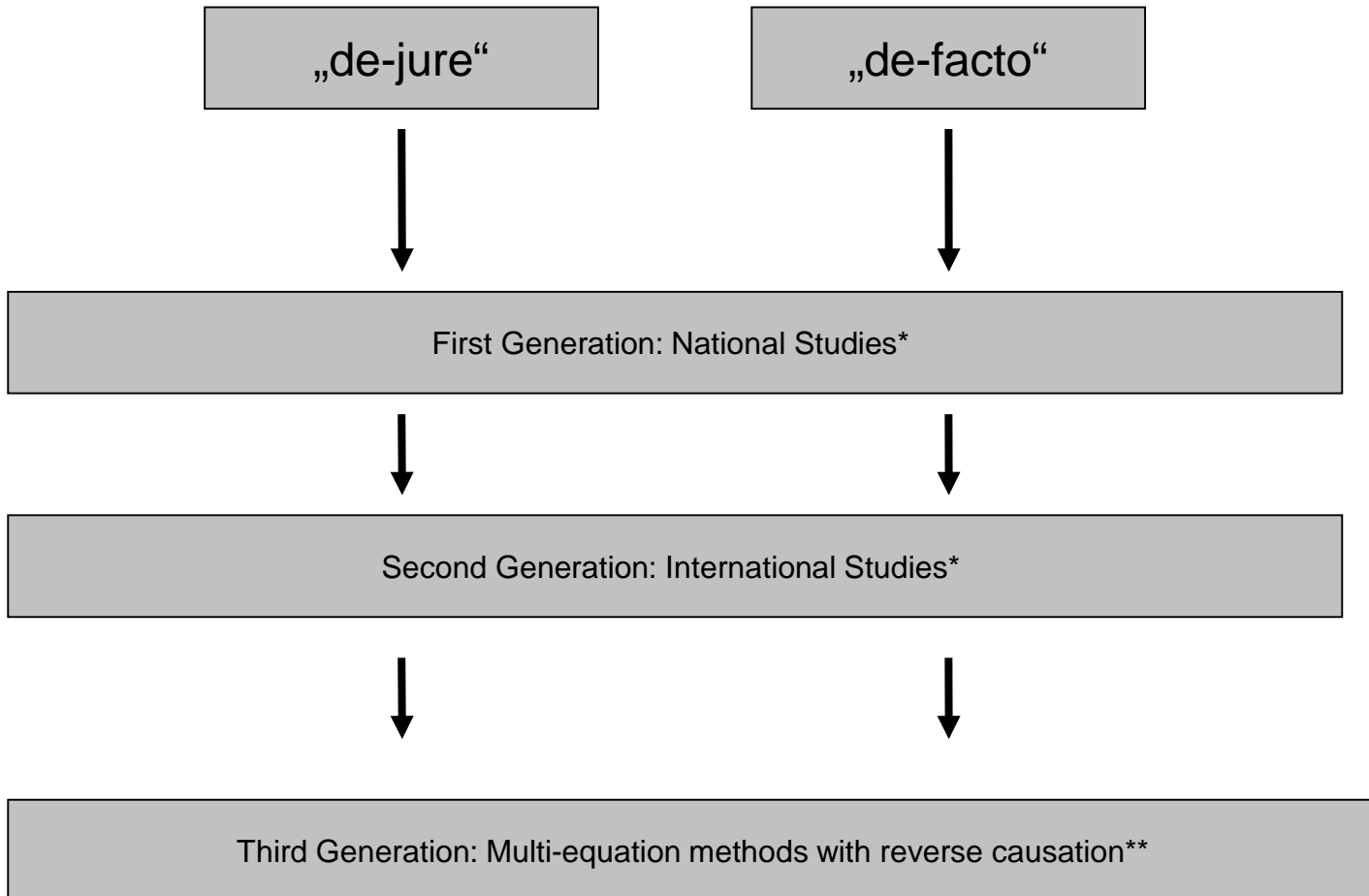
Chapter: 2.2.5
Stakeholder

Chapter: 2.2.6
Institutional theory

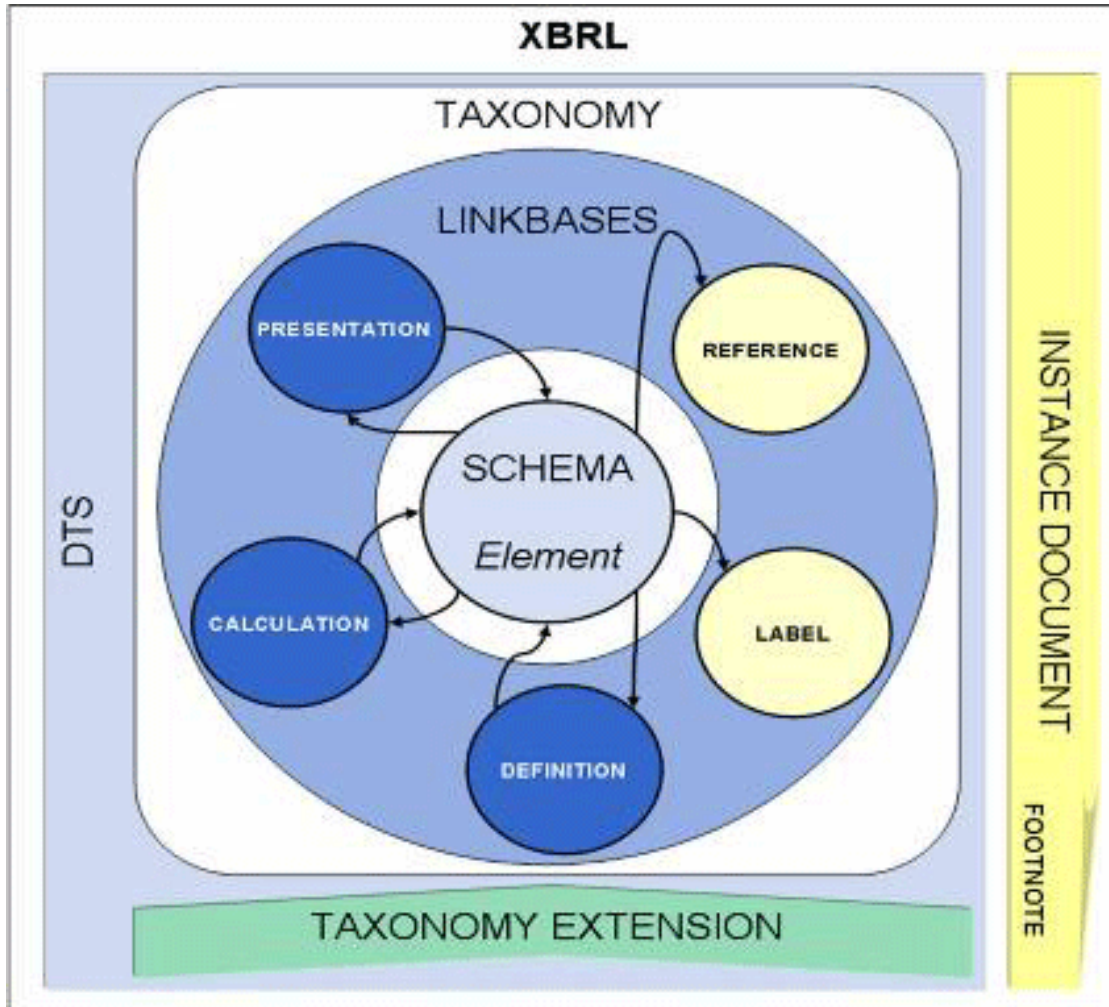
Synopsis of of Corporate Governance theories

	PAT	Stakeholder	Stewardship	Property-rights	TAC	Institutionalism
Objectives	shareholders (principal) and management (agent)/ minimise agency costs reduce inform. asymmetries	Consideration of all stakeholders: Employees, customers, suppliers, shareholders, debtors etc.	Management is motivated extrinsic to work in the best interest of the company	Allocation of rights of ownerships/ Transfer of Property-rights from the owner to the managers	Identify internal mechanisms to minimise transactions costs	institutional Norms and values/ external
Main Issues/ assumption	Continuous conflict between self interest of managers and shareholder only shareholder orientation	Fulfillment of the demand of the diverse group of stakeholders:	Empowering internal structures	Agreement on contracts/ Opportunistic behaviour /complex within large corporations with diverse stakeholders	System of contractual relationships	Listed companies compete for capital and corporate governance is important to institutional investors.
Role/ Impact on Reporting/ Scope	Disclosures mainly for shareholders/ information provision Discipline market control/ Narrow	Holistic implementation of quantitative and qualitative disclosures/ very broad	Focus is on internal collaboration between board of directors and supervisor board and the managers!	Disclosures about Property-rights transfers including contracts between management and stakeholders	transparent reporting can help to reduce search and information costs for the investors	Corporations need to adopt their disclosures to the institutional requirements
Authors/ Year	Jensen and Meckling (1970)	Freeman (1980s)	Donaldson (1990)	Furuboth (1972)	Williamson (1975)	Scott (1995)

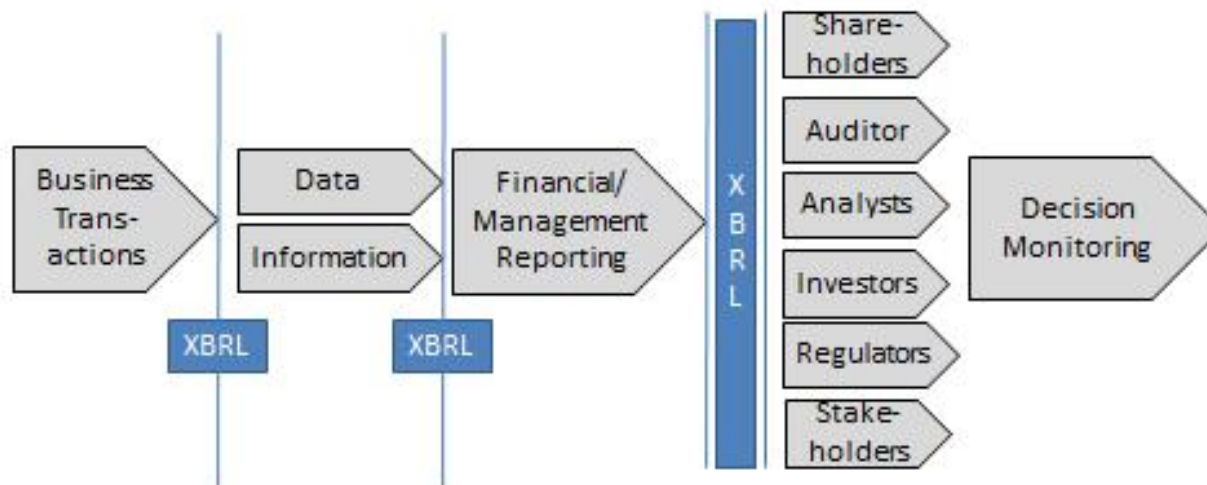
Classification of empirical literature



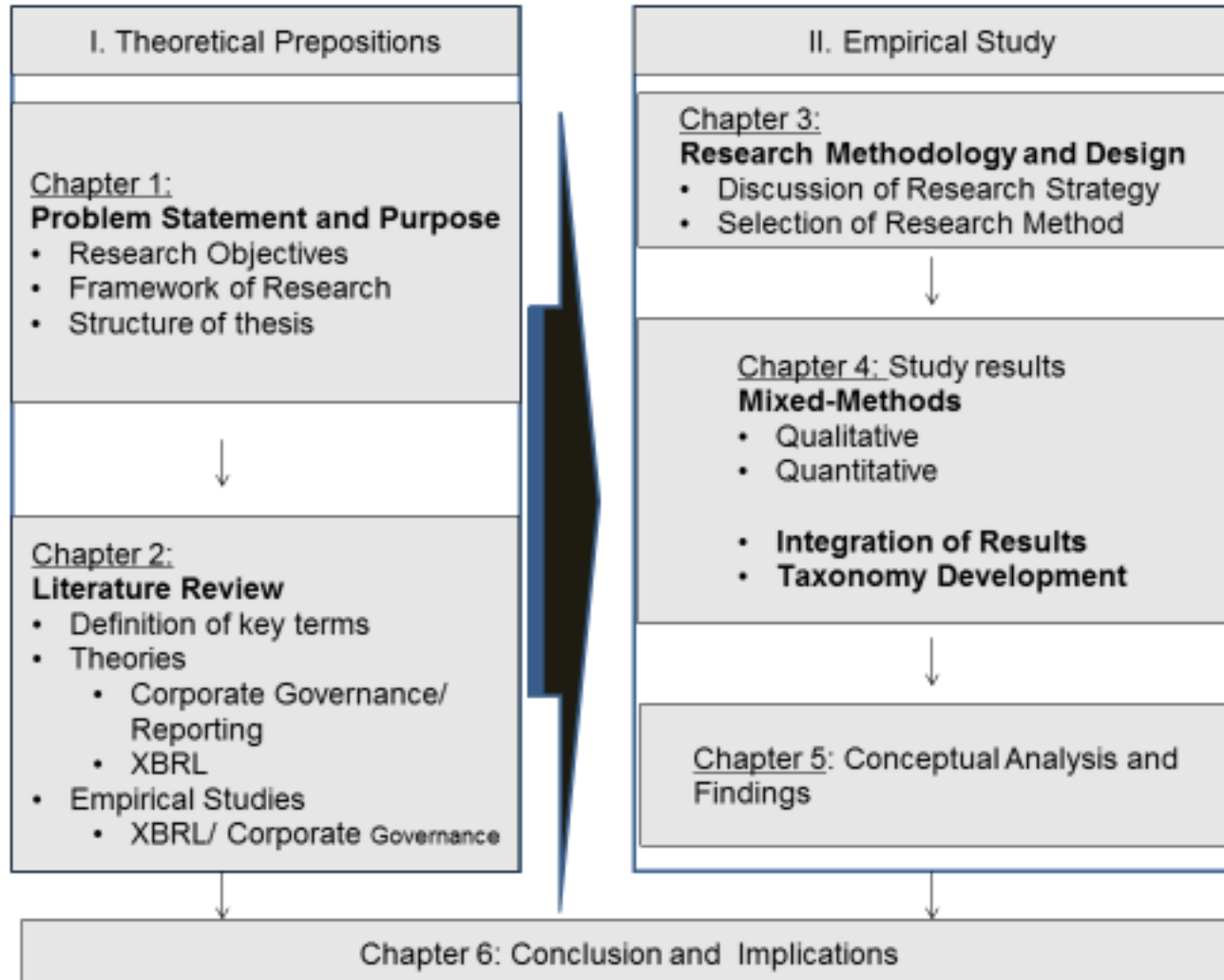
XBRL Financial Reporting Framework



The Effect of XBRL on the Financial Supply Chain



Overview of Structure of thesis



Deduction vs. Induction

Method	Deductive research method	Inductive research method
<u>General</u> <u>Objective</u> <u>Paradigms</u>	Starts with general theory and use empirical results for falsification Test theory and hypothesis Positivism	Starts with empirical studies and generates theories Gain an understanding of the meaning and develop theory Interpretivism
<u>Specifications</u>	<ul style="list-style-type: none">• Moves from theory to data• Falsification and discarding• Small numbers of samples• Abstract concepts are translated to measurable indicators• Quantitative data• Used mainly for natural science• Apply theory in the real world	<ul style="list-style-type: none">• No Requirement of a predetermined theory• Enables subjective reasoning• Large number of samples• Qualitative data• Used often in Management Research• Moves from description to explanation