



Centre for Information Integrity &  
Information Systems Assurance

# **What did we learn from the SEC's voluntary XBRL filing program: a critical review of the research**

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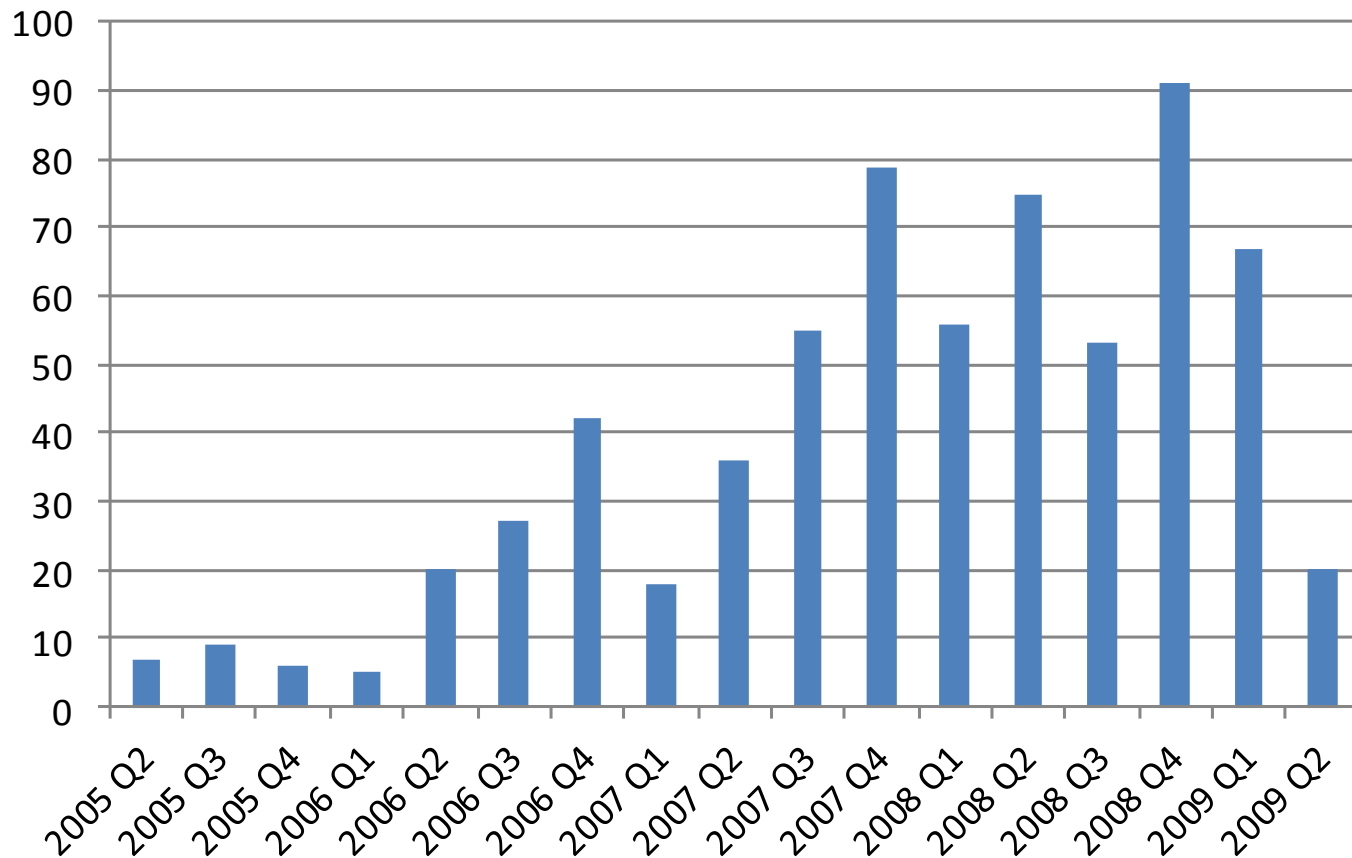
Academic Track

# Background

- XBRL is a reporting and disclosure technology
- Reporting and disclosure technologies can be voluntary or mandatory
- SEC initiated its voluntary filing program (VFP) on the EDGAR System on March 16, 2005
- The VFP ended with the commencement of mandatory filing program using XBRL on April 13, 2009

# Background

**The Number of XBRL Reports Furnished  
under the VFP (by quarter)**



<b>Country of Incorporation</b>	<b>Number of Companies</b>	<b>Number of Filings</b>
<b>Brazil</b>	3	19
<b>Canada</b>	2	4
<b>Cayman Islands</b>	1	12
<b>India</b>	2	21
<b>Israel</b>	1	5
<b>Japan</b>	1	1
<b>Netherlands</b>	1	1
<b>Singapore</b>	1	1
<b>Switzerland</b>	1	1
<b>UK</b>	1	2
<b>Total Foreign</b>	14	67
<b>USA</b>	116	538
<b>Total before income funds</b>	130	605
<b>Income Funds</b>		
<b>USA</b>	33	59
<b>Grand Total</b>	163	664

# Motivation and Prior Research

Many studies (30) have been conducted during or about the VFP

1. Reasons for Voluntary Adoption (7 studies)
2. Characteristics of Companies (3 studies)
3. Impact of XBRL (5 studies)
4. Quality of the XBRL Standard (5 studies)
5. Characteristics of XBRL-Tagged Data (3 studies)
6. Assurance Standards and Procedures (4 studies)
7. Transition from Voluntary to Mandatory (3 studies)

Encompasses published articles and working papers obtained from the Social Sciences Research Network (SSRN), conference submissions and a variety of other sources.

# Objectives

- Discuss the principal findings of research on the VFP
- identify important limitations of the research
- Identify promising avenues for future study

Name of the Study	Independent Variables	Dependent Variables	Research Methodology	Main Findings	Limitations

# Reasons for Voluntary Adoption

(studies presented in chronological order)

1. Troshani, I., and S. Rao. 2007. Drivers and inhibitors to XBRL adoption: a qualitative approach to build a theory in under-researched areas. *International Journal of E-Business Research*
2. Pinsker, R. 2007. A theoretical framework for examining the corporate adoption decision involving XBRL as a continuous disclosure reporting technology. In *New Dimensions of Business Reporting and XBRL*, edited by R. Debreceny, C. Felden, and M. Piechocki
3. Pinsker, R. 2008. An Empirical Examination of Competing Theories to Explain Continuous Disclosure Technology Adoption Intentions Using XBRL as the Example Technology *International Journal of Digital Accounting Research*
4. Pinsker, R., and S. Li. 2008. Costs and Benefits of XBRL Adoption: Early Evidence. *Communications of the ACM*
5. Choi, V., G. H. Grant, and A. D. Luzi. 2008. Insights from the SEC's XBRL Voluntary Filing Program. *The CPA Journal*
6. Bonson, E., V. Cortijo, and T. Escobar. 2009b. A Delphi Investigation to Explain the Voluntary Adoption of XBRL. *The International Journal of Digital Accounting Research*
7. Henderson, D. L., S. D. Sheetz, and B. S. Trinkle. 2011. Understanding the Intention to Adopt XBRL: An Environmental Perspective. Working paper, Virginia Polytechnic Institute & State University, and Mississippi State University

# Characteristics of Companies in VFP

(studies presented in chronological order)

1. Premuroso, R.F., and S. Bhattacharya. 2008. Do early and voluntary filers of financial information in XBRL format signal superior corporate governance and operating performance? *International Journal of Accounting Information Systems*
2. Callaghan, J., and R. Nehmer. 2009. Financial and governance characteristics of voluntary XBRL adopters in the United States. *International Journal of Disclosure and Governance*
3. Ragothaman, S. 2011. Voluntary XBRL Adopters and Firm Characteristics. Working Paper, For Presentation at the 5th University of Kansas International XBRL Conference



# Impact of XBRL

(studies presented in chronological order)

1. Pinsker, R., and P. Wheeler. 2009. Nonprofessional investors ' perceptions of the efficiency and effectiveness of XBRL-enabled financial statement analysis and of firms providing XBRL-formatted information. International Journal of Disclosure and Governance
2. Efendi, J., M. Smith, and J. Wong. 2009. Longitudinal Analysis of Voluntary Adoption of XBRL on Financial Reporting. Working Paper, University of Texas at Arlington, Texas A&M University, and University of Nevada, Reno
3. Efendi, J., J. D. Park, and C. Subramaniam. 2010. Do XBRL Reports Have Incremental Information Content? – An Empirical Analysis. Working Paper, University of Texas – Arlington, and Towson University
4. Kaya, D. 2011. The Influence of Firm-Specific Characteristics on the Extent of Voluntary Disclosure in XBRL: Empirical Analysis of SEC Filings. Working Paper, University of Erlangen-Nuremberg
5. Janvrin, D. J., R. E. Pinsker, and M. Mascha. 2001. XBRL-Enabled, Excel or PDF? The Effects of Exclusive Technology Choice on the Analysis of Financial. Working paper, Iowa State University, Florida Atlantic University, and Marquette University

# Quality of XBRL Standards

(studies presented in chronological order)

1. Cong, Y. 2008. Relationship between Industry Characteristics of Firms and their Financial Statement Presentation Formats: An Empirical Study in the United States. *International Journal of Management*
2. Bonson, E., V. Cortijo, and T. Escobar. 2009c. Towards the global adoption of XBRL using International Financial Reporting Standards (IFRS). *International Journal of Accounting Information Systems*
3. Zhu, H., and L. Fu. 2009. Quality of Data Standards: Empirical Findings from XBRL. Working Paper, Old Dominion University
4. Zhu , H., and H. Wu. 2010a. Assessing Quality of Data Standards: Framework and Illustration Using XBRL GAAP Taxonomy. *Communications in Computer and Information Science*
5. Zhu , H., and H. Wu. 2010b. Quality of XBRL US GAAP Taxonomy: Empirical Evaluation using SEC Filings. Working paper, Old Dominion University

# Characteristics of XBRL-Tagged Data

(studies presented in chronological order)

1. Boritz, J. E., and W. G. No. 2008. The SEC's XBRL Voluntary Filing Program on EDGAR: A Case for Quality Assurance. *Current Issues in Auditing*
2. Chou, K.-H., and C. J. Chang. 2008. The Validity of XBRL Voluntary Filing Documents and Issues on Extension Taxonomies on the SEC EDGAR System. Working Paper, National Pingtung Institute of Commerce, and San Diego State University
3. Bartley, J., A. Chen, and E. Taylor. 2011. A Comparison of XBRL Filings to Corporate 10-Ks - Evidence from the Voluntary Filing Program. *Journal of Information Systems*

# Assurance Standards and Procedures (studies presented in chronological order)

1. Gunn, J. 2007. XBRL: Opportunities and challenges in enhancing financial reporting and assurance processes. *Current Issues in Auditing*
2. Plumlee, R. D., and M. A. Plumlee. 2008. Assurance on XBRL for Financial Reporting. *Accounting Horizons*
3. Boritz, J. E., and W. G. No. 2009. Assurance on XBRL-Related Documents: The Case of United Technologies Corporation. *Journal of Information Systems*
4. Srivastava, R. P., and A. Kogan. 2010. Assurance on XBRL instance document: A conceptual framework of assertions. *International Journal of Accounting Information Systems*

# Transition from Voluntary to Mandatory

(studies presented in chronological order)

1. Debreceeny, R. S., S. Farewell, M. Piechocki, C. Felden, and A. Graning. 2010. Does it add up? Early evidence on the data quality of XBRL filings to the SEC.  
Journal of Accounting and Public Policy
2. Du, H., M. A. Vasarhelyi, and X. Zheng. 2011. XBRL Mandate: Thousands of Filing Errors and So What? Working paper, 2011 KU-XBRL Conference
3. Roohani, S., and X. Zheng. 2011. Determinants of the deficiency of XBRL mandatory filings. Working paper, Bryant University

# Limitations

- Firms self-selected themselves into the program driven by economic, political, technical or other considerations;
- VFP omits other XBRL adopters who have not furnished XBRL statements under the VFP
- Rigor of methodology and the robustness of findings in some of the unpublished papers have not been verified by the peer review process
- Empirical studies have limitations such as
  - Small sample sizes
  - Problems with matching design
  - Omission of key factors such as analyst following, earnings quality, voluntary disclosure propensity
  - Conflicting findings (corporate governance)

# Suggestions for Future Research

- Reasons for participating in VFP
  - Arm twisting by SEC?
  - Did SEC obtain the results it wanted from the VFP?
  - Did firms achieve the results they anticipated?

# Suggestions for Future Research

- Firm-specific characteristics of voluntary filers
  - Earnings quality (propensity to disclose)
  - Management forecasts (propensity to disclose)
  - Analysts (demand for disclosure)



Variable Name	Hypothesized Sign	Estimated Sign	Estimated Coefficient Value	Z-value
ABSDACC	-	+	0.046140	0.58
ANALYST	+	+	0.005138	1.75
AUDITOR	+	-	-6.116741	-1.69
CURR	+	+	0.016104	0.09
GOV	+	+	0.853439	5.54*
LEVER	+	-	-0.012321	-0.59
MANFOR	+	+	1.323198	2.94*
RDEV	+	+	0.002921	2.36*
ROA	+	+	5.124399	1.66
Control Variables				
ANQUART	+/-	-	-0.535647	-0.67
COUNTRY	+	+	5.597215	4.29*
SIZE	+	+	0.000008	3.33*

\* - significant at better than a 1% significance level  
 \*\* - significant at better than a 5% significance level

# Suggestions for Future Research

- Impact of XBRL
  - Do users value XBRL-tagged information?
  - How do/can users use tagged information in analysis?
  - Impact of note tagging on disclosure quality?
  - Do market effects in VFP translate into MFP?

# Suggestions for Future Research

- Data quality standards and tagging quality
  - Closed vs. extensible comparability
  - iXBRL
  - Are XBRL documents more accurate than third-party data? XBRL vs. Compustat
  - IFRS vs. US GAAP taxonomies and mapping issues

# Suggestions for Future Research

- Quality assurance standards
  - Outsourcing vs. in-house
  - Role of AUPs in error reduction and learning
  - Quality assurance in embedded vs. bolt on
  - Quality assurance approaches in different jurisdictions
  - Assurance framework(s) and technology infrastructure for data level assurance

# Suggestions for Future Research

- Transition and beyond
  - Did participation in VFP lead to learning for post VFP?
  - Did existence of VFP lead to other benefits in concurrent and post benefit periods?
  - How can the repository of XBRL reports be employed in academic research, business decision making, regulation, and other purposes?

# Contribution

- The study contributes to voluntary disclosure, accounting standards adoption, and IT literature
  - This paper summarizes and assesses prior research on XBRL VFP
  - Identifies limitations of prior research
  - Suggests research opportunities

Q&A