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)
<table>
<thead>
<tr>
<th>Country of Incorporation</th>
<th>Number of Companies</th>
<th>Number of Filings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Canada</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Cayman Islands</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>India</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Israel</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Japan</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>UK</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Foreign</strong></td>
<td><strong>14</strong></td>
<td><strong>67</strong></td>
</tr>
<tr>
<td><strong>USA</strong></td>
<td><strong>116</strong></td>
<td><strong>538</strong></td>
</tr>
<tr>
<td><strong>Total before income funds</strong></td>
<td><strong>130</strong></td>
<td><strong>605</strong></td>
</tr>
<tr>
<td><strong>Income Funds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>USA</strong></td>
<td><strong>33</strong></td>
<td><strong>59</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>163</strong></td>
<td><strong>664</strong></td>
</tr>
</tbody>
</table>
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
Reasons for Voluntary Adoption
(studies presented in chronological order)


Characteristics of Companies in VFP
(studies presented in chronological order)


Impact of XBRL
(studies presented in chronological order)


Quality of XBRL Standards
(studies presented in chronological order)


Characteristics of XBRL-Tagged Data
(studies presented in chronological order)


Assurance Standards and Procedures (studies presented in chronological order)


Transition from Voluntary to Mandatory
(studies presented in chronological order)


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)
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Hypothesized Sign</th>
<th>Estimated Sign</th>
<th>Estimated Coefficient Value</th>
<th>Z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSDACC</td>
<td>-</td>
<td>+</td>
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<td>0.58</td>
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<td>ANALYST</td>
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<tr>
<td>AUDITOR</td>
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<td>CURR</td>
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<td>+</td>
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<td>GOV</td>
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<td>+</td>
<td>0.853439</td>
<td>5.54*</td>
</tr>
<tr>
<td>LEVER</td>
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<td>-</td>
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</tr>
<tr>
<td>MANFOR</td>
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<td>1.323198</td>
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</tr>
<tr>
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<td>+</td>
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<td>2.36*</td>
</tr>
<tr>
<td>ROA</td>
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<td>+</td>
<td>5.124399</td>
<td>1.66</td>
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<tr>
<td>Control Variables</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>ANQUART</td>
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<td>-</td>
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<td>COUNTRY</td>
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<td>+</td>
<td>5.597215</td>
<td>4.29*</td>
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<tr>
<td>SIZE</td>
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<td></td>
<td>0.000008</td>
<td>3.33*</td>
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</tbody>
</table>

*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