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Implementation Costs of IFRS 9 for Non-financial Firms: Evidence from China

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Background

- **IFRS 9 and the new CAS 22**
  - In 2014, IASB replaced IAS 39 with IFRS 9 *Financial Instruments*
  - Some changes include:
    - Model to estimate credit losses
    - Classification and measurement requirements for financial instruments
  - In 2017, the Chinese Ministry of Finance replaced the original CAS 22 with the new CAS 22 *Recognition and Measurement of Financial Instruments*
    - New CAS 22 is identical to IFRS 9
    - Effective January 2018 for all Chinese firms listed domestically and overseas (e.g., A shares and H shares)
    - Effective January 2019 for all Chinese firms listed only domestically (e.g., A shares) except insurance corporations who can wait until new insurance accounting standard effective.

Some Changes in the New CAS 22

- **Fair value measurement**
  - Fair value through profit and loss (FVTPL)
  - Fair value through other comprehensive income (FVTOCI), only dividend income recognized in P&L
  - Eliminates “cost exception”
- **The Expected Credit Loss (ECL) model**
  - Must recognize expected credit losses every year
  - Intends to have companies recognize inevitable losses in timely manner

Motivation of Current Study

- **Potential benefits of the new CAS 22**
  - Original CAS 22 relied on determining holding intent to classify financial assets
  - New CAS 22 reduces judgment and discretion
  - Reducing audit risk and earnings management
- **Potential challenges of the new CAS 22**
  - Eliminating “cost exception” creates challenges for FVM
  - FVTPL is associated with earnings volatility
  - Gain or loss other than dividend income on FVTOCI cannot be recognized in P&L
  - Challenges in determining default risk and credit risk
  - Increasing audit risk and earnings management
- **The efficacy of the new CAS 22 is unclear**
- **Studying IFRS 9 using the new CAS 22**

Research Question

- **Are there implementation costs of IFRS 9 for non-financial firms?**
  - "An entity is required to incorporate reasonable and supportable information… if obtaining it does not involve undue cost or effort."
  - New standard likely has different impacts on financial and non-financial firms
    - Financial firms, especially banks, are not permitted to hold equity investments in non-financial firms in China
    - Likely costs for financial firms: increased bank reserves and bank credit costs, and reduced bank profits
  - Direct implementation cost: higher audit fees
  - Indirect implementation cost: prematurely dispose of equity investments such as available for sale (AFS)
  - Provides early evidence of the efficacy of the new standard

Contributions

- **Finds evidence that accounting standards on financial instruments alter corporate and auditor behavior**
  - The announcement of the new CAS 22 incentivizes firms to dispose of AFS investments early
  - Increased audit fees following the implementation of the new standard
  - Suggests the new standard still needs improvement
- **Highlights the importance of understanding the implementation costs of accounting standards**
  - Earlier literature focuses on new accounting standards as a whole, (e.g., IFRS adoption)
  - We study a single accounting issue related to financial instruments
  - Corporations listed in mainland China alone, new CAS22 effective from 2019. New revenue accounting standard is effective from 2020. So we can test CAS22 implementation cost more straightforward. Most of other countries IFRS 9 and IFRS 15 both are effective from 2018.
- **Policy implications**

Contributions

- **Finds evidence that accounting standards on financial instruments alter corporate and auditor behavior**
- **Highlights the importance of understanding the implementation costs of accounting standards**
- **Policy implications**
  - Necessary to recognize the difficulty in acquiring FV for share investment which market is not active.
  - Implementation costs for non-financial firms may be lower if “cost exception” is not fully eliminated
  - The switch from ICL to ECL model makes little impact on the impairment reserve but at a large cost
  - Implementation costs for non-financial firms may be lower if ECL model is not mandated
  - Global implications, not China-specific

Literature and Hypothesis 1

- **Companies alter behavior to prevent new accounting standards from negatively impacting the bottom line and earnings volatility**
  - Pension assets (Amir et al. 2010)
  - Employee stock option vesting (Balsam et al. 2008; Choudhary et al. 2009)
  - Payout ratio (Chen and Gavious 2016).
- **Prematurely disposal of AFS (indirect implementation cost)**

Literature and Hypothesis 1

- Companies alter behavior to prevent new accounting standards from negatively impacting the bottom line and earnings volatility
- **Prematurely disposal of AFS (indirect implementation cost)**
  - Equity investments measured at FVTPL
    - Create undesired earnings volatility
  - Those not held for trading, such as AFS, can be irrevocably elected at initial recognition as FVTOCI
    - Remove a powerful source of earnings and potentially an earnings management channel (Ye et al. 2009)
  - If sold under the original CAS 22, gains and losses can be recorded into P&L

H1: ***The disposal of AFS equity investments will increase following the announcement of the new CAS 22.***

Literature and Hypothesis 2

- **New accounting regulations are often accompanied by increased implementation costs reflected in audit premiums**
  - Mandatory IFRS adoption leads to an increase in audit fees (Choi et al. 2018; DeGeorge et al. 2013; Griffin et al. 2009; Kim et al. 2012)
  - IFRS 9 is perceived very costly to companies (Maria and Bogdan 2019)
- **Higher audit fees (direct implementation cost)**

Literature and Hypothesis 2

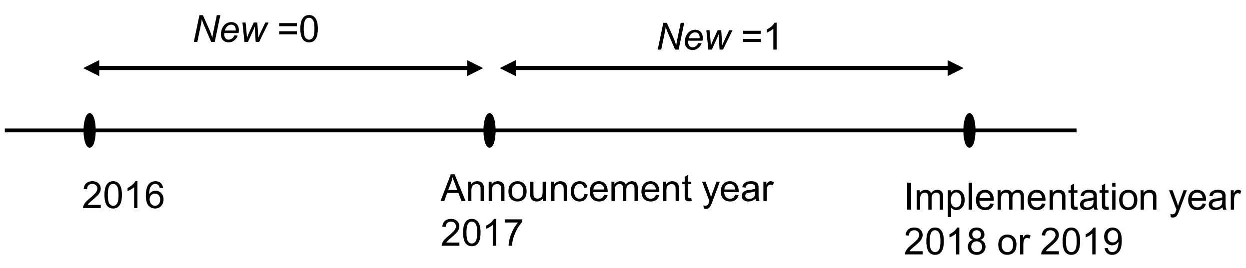
- New accounting regulations are often accompanied by increased implementation costs reflected in audit premiums
- **Higher audit fees (direct implementation cost)**
  - Increased effort and judgment to verify fair value estimates (Ettredge et al. 2014; Goncharov et al. 2014; Miah 2019).
    - All equity investments be measured at fair value without “cost exception”
    - 94.7% of sample firms hold equity in unlisted companies with a lack of quoted price in the active market
  - Increased workload and audit risk related to the ECL model
    - More effort needed to understand and verify the parameters managers provided
    - ECL estimation creates opportunity for earnings management

H2: Audit fees will increase following the implementation of the new CAS 22.

Research Design

- **H1:**

$$AFS_{it} = \beta_0 + \beta_1 New_t + \sum \beta_k\, Control_{it} + Firm\ FE + Industy\ FE + \varepsilon_{it}$$

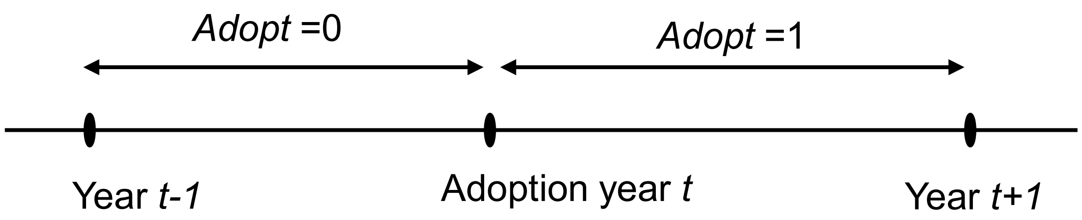


	No. of firm-years	No. of firms
All CSMAR observations from 2016		
through the last year with an AFS account	10,093	3,600
Less: loss firms	-225	-16
Less: financial institutions	-41	-10
Less: new IPOs	-2,106	-693
Less: missing control variables	-1,235	-236
Observations with available data	6,486	2,645

Research Design

- **H2:**

$$Audit\ Fee_{it} = \beta_0 + \beta_1 Adopt_{it} + \sum \beta_k\ Control_{it} + Firm\ FE + Industy\ FE + \varepsilon_{it}$$



	No. of firm-years	No. of firms
All CSMAR observations one year before and one year after the new CAS 22 adoption	7,579	3,819
Less: loss firms	-288	-41
Less: financial institutions	41	17
Less: new IPOs	-1,147	-479
Less: missing control variables	-1,061	-361
Observations with available data	5,042	2,921

Empirical Results

- **H1:**
  - Companies reduce their AFS balance after the new CAS 22 is announced
  - Suggests selling AFS in anticipation of the new standard
  - Evidence of indirect implementation cost

	(1)	(2)
	AFS	*AFS*
New	-0.612***	-0.620***
	(0.159)	(0.153)
Assets		2.644***
		(0.129)
Lev		-2.333***
		(0.885)
ROE		-3.537**
		(1.648)
SOE		-0.340
		(0.321)
Growth		-0.015
		(0.017)
Constant	13.598***	-43.592***
	(1.231)	(2.932)
Industry FE	Yes	Yes
Year FE	Yes	Yes
N	6,486	6,486
R-squared	0.054	0.172

Empirical Results

- **H2:**
  - Audit fees increase as a result of the implementation of the new CAS 22
  - Evidence of direct implementation cost

	(1) *Audit Fee*	(2) *Audit Fee*
Adopt	1.556***	0.633***
	(0.074)	(0.053)
Constant	15.508***	6.090***
	(0.141)	(0.234)
Controls	No	Yes
Industry FE	Yes	Yes
Year FE	Yes	Yes
N	5,042	5,042
R-squared	0.233	0.657

Cross-Sectional Analyses

- **H1: disposing of AFS**
  - By state ownership
    - Higher pay-for-performance sensitivity (Jiang et al. 2014; Liu et al. 2014) to avoid FVTPL
    - More short-term focused (Huang and Li 2001) to avoid FVTPL
    - **Expect a higher rate of AFS disposals in SOEs**
  - By bond issuance
    - A greater incentive to maintain earnings stability (Zhu 2013; Lin et al 2020)
    - **Expect a higher rate of AFS disposals in firms with bond issuance**

DV=	*AFS*	*AFS*
New	-0.435^{**}	-0.541^{***}
	(0.197)	(0.168)
New × *SOE*	-0.506^{**}	
	(0.241)	
New × *Bond*		-0.762^{**}
		(0.385)
SOE	0.009	-0.332
	(0.361)	(0.322)
Bond		0.830^{*}
		(0.438)
Constant	-43.717^{***}	-43.075^{***}
	(2.933)	(3.018)
Controls	Yes	Yes
Industry FE	Yes	Yes
Year FE	Yes	Yes
N	6,486	6,486
R-squared	0.173	0.173

Cross-Sectional Analyses

- **H2: increase in audit fees**
  - By state ownership
    - Supervised by Party Organization and the Commission for Discipline Inspection (Chen and Lu 2014; Chen et al 2014)
    - Less stringent regulation, less significant punishments (Chen et al. 2012)
    - Higher internal control score (DIB database)
    - But more earnings smoothing (Liu et al. 2014)
    - **Expect smaller audit fee increases in SOEs**
  - By auditor size
  - By total amount of accounts affected by the new CAS 22

DV=	*Audit Fee*	*Audit Fee*	*Audit Fee*
New			0.604^{***}
			(0.054)
Adopt	0.654^{***}	0.503^{***}	
	(0.053)	(0.060)	
Adopt × SOE	-0.040^{***}		
	(0.012)		
Adopt × Top4		0.247^{***}	
		(0.038)	
Adopt × Range			0.148^{***}
			(0.047)
SOE	-0.090^{***}	-0.111^{***}	-0.110^{***}
	(0.020)	(0.018)	(0.019)
Top4	0.216^{***}	0.154^{***}	0.216^{***}
	(0.023)	(0.022)	(0.023)
Range			-0.233^{**}
			(0.112)
Constant	6.063^{***}	6.227^{***}	6.096^{***}
	(0.235)	(0.234)	(0.234)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
N	5,042	5,042	5,042
R-squared	0.658	0.660	0.658

Cross-Sectional Analyses

- **H2: increase in audit fees**
  - By state ownership
  - By auditor size
    - More reputable and more workload from FVM and ECL model
    - Provide guidance to smaller audit firms, more sensitive to a new standard
    - **Expect higher audit fee increases for larger audit firms**
  - By total amount of accounts affected by the new CAS 22
    - More added workload and challenges
    - *Range* = AFS recorded at cost under original CAS 22 measured one year before the new CAS 22 + Receivables + Debt instrument, scaled by total assets
    - **Expect higher audit fee increases for firms with larger amount**

DV=	*Audit Fee*	*Audit Fee*	*Audit Fee*
New			0.604^{***}
			(0.054)
Adopt	0.654^{***}	0.503^{***}	
	(0.053)	(0.060)	
Adopt × SOE	-0.040^{***}		
	(0.012)		
Adopt × Top4		0.247^{***}	
		(0.038)	
Adopt × Range			0.148^{***}
			(0.047)
SOE	-0.090^{***}	-0.111^{***}	-0.110^{***}
	(0.020)	(0.018)	(0.019)
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Range			-0.233^{**}
			(0.112)
Constant	6.063^{***}	6.227^{***}	6.096^{***}
	(0.235)	(0.234)	(0.234)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
N	5,042	5,042	5,042
R-squared	0.658	0.660	0.658

Robustness tests

- **H1**
  - AFS scaled by total assets
  - Subsample of SZSE firms
    - Must disclose total AFS purchases and sales, in addition to net balance
    - Net AFS sales indicator
    - Rule out FV changes in AFS balance driving the results
- **H2**
  - Audit fees adjusted by CPI
  - Exclude firms with financial violations
    - Rule out financial misconduct driving the results

Summary

- **Early evidence of implementation costs of IFRS 9 for non-financial firms examining an identical standard of the new CAS 22 in China**
  - Firms increase the amount of AFS sales after the new standard is announced
    - More pronounced for SOEs
    - And firms issuing corporate bonds
  - Higher audit fees after the new standard is implemented
    - More pronounced for non-SOEs
    - Bigger auditors
    - Firms with a higher total amount of accounts affected by the new CAS 22
- **IFRS 9 intending to address issues existing in the financial industry, but created unintended consequence for non-financial firms**
- **Policy implications**

Summary

- Early evidence of implementation costs of IFRS 9 for non-financial firms examining an identical standard of the new CAS 22 in China
- **IFRS 9 intending to address issues existing in the financial industry, but created unintended consequence for non-financial firms**
- **Policy implications**
  - Implementation costs for non-financial firms may be lower if “cost exception” is not fully eliminated
  - And if ECL model is not mandated
  - Global implications, not China-specific

Thank you!