Recognition versus Disclosure and Audit Fees and Costs:
Evidence from Pension Accounting in Japan

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Research Background

- Pension accounting in Japan
  - Pre-Statement No. 26
    - Certain items of pension liabilities and assets were not recognized in financial statements but were disclosed in the notes.
      - Actuarial gains and losses
      - Prior pension costs
  - Post-Statement No. 26
    - The delayed recognition of these items are abolished.
    - Firms' pension status is recognized as a liability or an asset on their balance sheets.

✓Using Japanese pension accounting rules, we can investigate recognition vs. disclosure of pension information.

Research Background

- Previous studies investigate whether capital market participants process disclosed and recognized items differently (e.g., Davis-Friday et al., 1999; Yu, 2013).
- One of the factors in investors' differential treatments between recognition and disclosure is due to the reliability of accounting information (e.g., Schipper, 2007).
  - A decrease in measurement errors
  - An increase in scrutiny of managers and auditors

✓Prior research fails to clearly report that auditors expend more effort for recognized items relative to disclosed items.

Research Background

- Prior studies examine the relations between recognized vs. disclosed items and audit fees (e.g., Goncharov et al., 2014; Krishnan and Sengupta, 2011).
  - Goncharov et al. (2014) report that audit fees are higher for recognition firms than disclosure firms.
  - Krishnan and Sengupta (2011) find that recognized and disclosed items have similar associations with audit fees.

✓Using audit fee data alone cannot determine whether audit fee increases are attributable to additional audit effort or a higher risk premium.

Research Background

- Audit data in Japan
  - In addition to audit fees, firms must disclose the number of audit team members based on their professional qualifications in annual securities reports.
    - Signing partner
    - Certified public accountants (CPAs)
    - Junior CPAs
    - Other professional staff

✓Previous studies employ the number of audit team members to measure audit costs, namely audit effort (e.g., Fukukawa, 2011; Kim and Fukukawa, 2013).

Research Background

- Using audit fee and cost data, only one recent study analyzes the effects of recognized vs. disclosed items on auditors' decisions (Kusano and Sakuma, 2019).
  - They reveal differences in the relations between recognized vs. disclosed finance lease obligations and audit fees.
  - However, they find that recognized and disclosed finance leases have similar associations with audit costs.

✓Little is known about whether auditors scrutinize recognized amounts more closely than disclosed financial information.

Research Question

- Purpose of our study
  - Using defined benefit (DB) pension plans, we explore whether auditors are more likely to scrutinize recognized amounts than disclosed financial information.

- Contribution of our study
  - ✓We extend the prior literature by investigating the effects of recognition vs. disclosure on auditors.
  - ✓We extend and complement the prior research by providing evidence that auditors expend more audit effort for recognized items relative to disclosed items.

Hypothesis Development

- Hypothesis 1:

  Disclosed pension liabilities in the pre-Statement No. 26 period have positive associations with audit fees/costs.

- Hypothesis 2:

  Disclosed pension liabilities exhibit weaker associations with audit fees/costs than do recognized previously off-balance sheet pension liabilities.

- Hypothesis 3:

  The differences in the associations between disclosed versus recognized pension liabilities and audit fees/costs are pronounced for firms with a large pension plan deficit.

Regression Model

$$Fee = \alpha_0 + \alpha_1 PL\_on + \alpha_2 PL\_off + \alpha_3 PL\_on \times Post + \alpha_4 PL\_off \times Post + \sum_j \alpha_j Controls + \sum_k \alpha_k Industry + \sum_l \alpha_l Year + \varepsilon$$

$$Cost = \beta_0 + \beta_1 PL\_on + \beta_2 PL\_off + \beta_3 PL\_on \times Post + \beta_4 PL\_off \times Post + \sum_j \beta_j Controls + \sum_k \beta_k Industry + \sum_l \beta_l Year + \varepsilon$$

Sample Selection

- Sample
  - Firms that prepare consolidated F/S using Japanese GAAP are listed on stock exchanges in Japan.
  - Banks, securities firms, and insurance are excluded.
  - The firms' fiscal year ends on March 31.
  - The accounting period does not change during the fiscal year.
  - Firms with joint auditors are excluded.
  - Firms sponsor DB pension plans.

- Database
  - Financial Statement data: *Nikkei NEEDS Financial QUEST*
  - Audit data: hand-collection from annual securities reports

Sample Selection

- Sample Period
  - Pre-Statement No. 26: 2009–2013
  - Post-Statement No. 26: 2014–2018
  - ✓We mitigate the effects of the demise of ChuoAoyama and the introduction of the internal control audits under the J-SOX.

- Final Sample
  - 15,297 firm-year observations
    - Pre-Statement No. 26: 7,985 firm-year observations
    - Post-Statement No. 26: 7,312 firm-year observations
  - ✓Observations of continuous variables are trimmed by year at the top and bottom 1%.

Main Results: H1–H2

		(1)	(2)
		Audit Fees	Audit Costs
	Expected Sign	Coefficient (t-value)	Coefficient (t-value)
PL_on	+	0.4071*	0.3853
		(1.8304)	(1.4567)
PL_off	+	-0.2897	0.9732*
		(-0.6671)	(1.8914)
PL_on × Post	+	0.6192***	0.6206**
		(3.4528)	(2.1096)
PL_off × Post	+	0.4029	2.3571**
		(0.4930)	(2.1125)
Control Variables		Yes	Yes
Industry Dummy		Yes	Yes
Year Dummy		Yes	Yes
N		15,297	15,297
Adj. R^2		0.7679	0.4176

Notes: *t* statistics are based on robust standard errors clustered at the firm level and are reported in parentheses. ***, **, and * indicate that the coefficient estimate is significant at the 0.01, 0.05, and 0.1 levels using a two-tailed t test, respectively.

Main Results: H3 (Audit Fees)

		(1)	(2)
		Small	Large
	Expected Sign	Coefficient (t-value)	Coefficient (t-value)
PL_on	+	0.7310*	0.2987
		(1.8772)	(0.9999)
PL_off	+	-0.1735	-0.4700
		(-0.2966)	(-0.7653)
PL_on × Post	+	1.1417**	0.8291***
		(2.5055)	(3.1070)
PL_off × Post	+	-0.3407	1.2028
		(-0.3156)	(0.9006)
Control Variables		Yes	Yes
Industry Dummy		Yes	Yes
Year Dummy		Yes	Yes
N		7,650	7,647
Adj. R^2		0.7836	0.7409

Notes: *t* statistics are based on robust standard errors clustered at the firm level and are reported in parentheses. ***, **, and * indicate that the coefficient estimate is significant at the 0.01, 0.05, and 0.1 levels using a two-tailed t test, respectively.

Main Results: H3 (Audit Costs)

		(1)	(2)
		Small	Large
	Expected Sign	Coefficient (t-value)	Coefficient (t-value)
PL_on	+	0.3225	0.5539
		(0.6794)	(1.5098)
PL_off	+	1.3829*	0.2303
		(1.9256)	(0.3226)
PL_on × Post	+	1.1493*	0.5591
		(1.7536)	(1.3142)
PL_off × Post	+	1.8230	2.9152*
		(1.2483)	(1.6746)
Control Variables		Yes	Yes
Industry Dummy		Yes	Yes
Year Dummy		Yes	Yes
N		7,650	7,647
Adj. R^2		0.4219	0.4049

Notes: *t* statistics are based on robust standard errors clustered at the firm level and are reported in parentheses. ***, **, and * indicate that the coefficient estimate is significant at the 0.01, 0.05, and 0.1 levels using a two-tailed t test, respectively.

Summary & Interpretation

- Audit fees are not different between recognized and disclosed pension liabilities, but audit costs are higher for recognized pension liabilities than for disclosed pension liabilities.
- For firms with a large pension plan deficit, auditors process disclosed pension liabilities differently from recognized previously off-balance sheet pension liabilities in determining audit costs.

✓Our results suggest that auditors expend greater audit effort for recognized amounts relative to disclosed financial information.