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台灣保險業因應 IFRS 而改變會計政策之探討

A Study on Accounting Policy Changes in Adaptation to

IFRS by Insurers in Taiwan

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論文審定書



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A Study on Accounting Policy Changes in Adaptation
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本論文係梁濟安 (r03722034) 在國立臺灣大學會計學系、
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此外，我想特別談到我的室友，雖然這段期間我的室友同樣在寫自己的論文，但她總願意撥出一點時間來聽我的煩惱，而我也在能力所及的範圍內幫助她，兩人度過苦思論文內容與互相鼓勵申請交換的日子。

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中文摘要



本研究檢視台灣保險公司於 2011 年與 2012 年對大量持有至到期日金融資產予以重分類(重分類至備供出售金融資產)的誘因，並分析台灣保險公司於 2013 年與 2014 年對投資性不動產改採公允價值模式的成因，本研究提出並預測金融資產重分類與投資性不動產衡量基礎之改變與保險公司監理資本（風險資本額）以及政治成本（總資產）有關聯之假說。

主要實證結果如下：風險資本額與金融資產重分類事件未發現有顯著關聯，但是保險公司規模與金融資產重分類具有正向顯著關聯。其次，風險資本額高於 250% 的保險公司及保險公司為壽險公司，這兩項因素顯著降低保險公司改採公允價值衡量投資性不動產之誘因；然而，規模（政治成本）較大之保險公司傾向採用公允價值衡量投資性不動產。總而言之，實證結果部分支持保險公司會計政策之變動可能受幾項企業特質所影響。

關鍵字：會計政策變動、投資性不動產、金融資產重分類

ABSTRACT



This study examines the causes of insurers' choice to reclassify HTM financial assets to AFS financial assets and to use fair value to measure investment properties. My examination exploits the reclassification event during 2011 and 2012 as well as the adoption of fair value method of investment properties in 2013 and 2014 in Taiwan. I hypothesize that the regulatory capital (risk-based capital ratios, RBC ratios) and political costs (firm size) are related with the scale of preceding accounting policies changes.

First, I fail to find that the regulatory capital ratio is associated with the reclassification decisions but that the insurer size is positively related with reclassification scale. With respect to measurement of IP, I document that insurers with RBC above 250% and life insurers are cautious in using fair value to measure IP; however, insurers with greater total assets (political costs) tend to use fair value method to value IP. Overall, my results reveal the possible determinants of accounting choices changes.

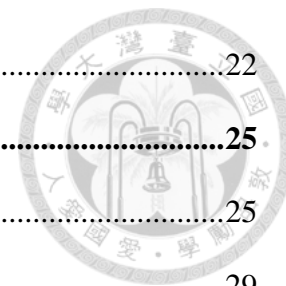
Keywords: Accounting policy changes; Investment properties; Reclassification of financial assets

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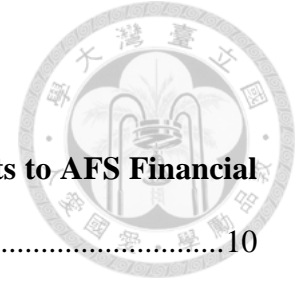


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Chapter 1 Introduction



This study examines the relation between accounting choices and the regulatory capital as well as political costs of insurers in Taiwan. Three distinctive features of the insurance industry setting motivate this study. First, the reclassification of HTM financial assets in 2011 and 2012 allows the study on relatively unusual accounting choices. Second, the recently-adopted IFRS provides a unique setting in which firms have to choose whether to measure investment properties (hereby IP) at fair value. Third, insurers are under supervision from Financial Supervisory Commission (hereby FSC) and this setting allows me to inspect the influence of regulatory costs.

My first research objective is to study the relation between regulatory capital and the preceding accounting choices. Prior studies examine the association between regulatory capital and the reclassification after financial crisis (Bischof, Brüggemann and Daske 2012) and initial adoption of SFAS No. 115 (Hodder, Kohlbeck and McAnally 2002). In addition, the measurement of IP at fair value is of interest to IP companies (Quagli and Avallone 2010) and insurers in Taiwan (Lin 2014). However, few studies investigate the impact RBC ratio have on the preceding accounting choices, and thus I aim to fill this void.

My second research objective is to examine the association between political costs (firm size) and accounting choices of insurers. Prior research suggest that political costs reduce the possibility of adoption of accounting choice due to intention to avoid political attention caused by increased profits (Quagli and Avallone 2010; Watts and Zimmerman 1978). However, insurers attract political attention if they do not achieve regulatory capital requirements. The preceding accounting policies both influence equity, the denominator of RBC ratio, and I intend to extend the discussions of political costs

theory when it is applied to insurance industry.

My study makes several contributions to the literatures on the adoption of fair value of IP, on the reclassification of financial assets and on the association between accounting choices and regulatory capital as well as political costs. First, I document that political costs (firm size) instead of RBC ratio is associated with the reclassification decisions. Next, I find that RBC ratio (firm size) is negatively (positively) related with the valuation difference scale of IP. Finally, my results complement the literatures on accounting choices of insurance industry by documenting that regulatory capital and political costs influence the scale of accounting policies.

Chapter 2 provides an overview of the backgrounds of the accounting policy, reclassification of financial assets as well as the measurement of IP. Chapter 3 reviews prior literatures and develops my hypotheses. Chapter 4 describes the sample and empirical models. Chapter 5 presents my empirical findings. Chapter 6 concludes.

Chapter 2 Institutional Background



2.1 Organization and Operation

Insurers in Taiwan are relatively different from those of other countries. Though these firms might set companies in Taiwan, their owners might be from different countries, such as Japan, France, and the U.K. These foreign firms are branches or independent companies,¹ while the local insurers are either independent companies or subsidiaries under financial holding companies, known as FHC.

The origin of such FHC-held insurers is traced back to early 2000s, when the Taiwanese government encouraged financial institutions to merge to reach economies of scale and to enjoy benefits of cross selling, and hence led to 15 FHCs nowadays.² Those insurance companies, which have the most prominent premium revenues, are usually FHC-held insurers, such as Fubon Life Insurance from Fubon FHC and Cathay Life Insurance from Cathay FHC.³

2.2 Risk-based Capital (RBC) Ratio

Risk-based capital (RBC) ratio is one of the indicators to oversee the solvency of insurance companies in Taiwan. According to *Regulations Governing Capital Adequacy of Insurance Companies*, it divides adjusted net capital⁴ by risk-based capital,⁵ a

¹Regulations for Establishment and Administration of Foreign Insurance Enterprises

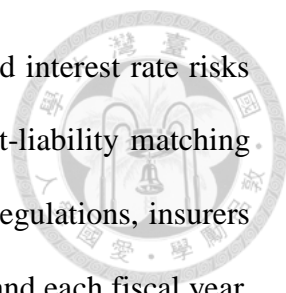
²For more details of financial institutions in Taiwan, please refer to

<http://www.cbc.gov.tw/ct.asp?xItem=26986&ctNode=778&mp=2>

³Cathay Life Insurance earned NT\$645,192 million in revenue, while Fubon Life Insurance had NT\$474,417 million in revenue in 2015.

⁴Owner's equity recognized and other adjustment items prescribed by the competent authority

⁵Such capital as is calculated on the basis of the risks that an insurance company may incur from its actual



formula that takes into consideration asset risks, insurance risks, and interest rate risks of life insurers as well as credit risks, underwriting risks and asset-liability matching risks of liability insurers. In Article 9 of the previously-mentioned regulations, insurers in Taiwan must disclose their capital adequacy ratio every half year and each fiscal year. Nevertheless, the capital adequacy ratios related to the first half of 2015 and the previous year may be disclosed as one of the five levels.⁶ RBC ratio is vital to insurers in Taiwan because it decides how much as well as what they can invest and whether they will be received by government.

First, RBC ratio determines the fund utilization of an insurer. For example, if an insurer would like to conduct the investment in hedge funds, convertible and warrant bonds issued by the companies with BBB+ to BB+ or other comparatively risky investments, the insurer's RBC ratio should be at least 250% or between 200% and 250% and the insurer gets an AA equivalent credit rating or above. Financial Supervisory Commission (hereafter FSC) takes stricter measure when RBC ratio of an insurer falls below certain threshold.

Next, following the definition of regulations, I discuss about the consequences of inadequate capital, significantly inadequate capital and seriously inadequate capital, which are defined in *Regulations Governing Capital Adequacy of Insurance Companies*.⁷ Regarding inadequate capital, FSC orders the insurer to propose a plan for

business operations

⁶“more than 300%”, “more than 250% and less than 300%”, “more than 200% and less than 250%”, “more than 150% and less than 200%”, and “less than 150%”.

⁷Inadequate capital means that the capital adequacy ratio of an insurance company is more than 150% but less than 200%; significantly inadequate capital stands for the capital adequacy ratio that is between 50% and 150%; seriously inadequate capital is the capital adequacy ratio that is less than 50% or the net worth

capital increase, to cease selling insurance products or restrict it to launch new insurance products and to restrict the scope of fund utilization.⁸With respect to significantly inadequate capital, besides the measures set forth in the preceding sentence, FSC requires the insurer to dismiss responsible person of the insurance enterprise, to dispose of the assets specified, and to take other necessary measures.⁹

Regarding seriously inadequate capital, the troubled insurer is not only confronted with pressures from policyholders but also mandated by FSC to increase capital. If the insurer fails to complete the plan for capital increase or the corrective action plan within the specific period required by FSC, FSC shall assume receivership over the insurance enterprise, order the enterprise to suspend and wind up business, or liquidate the enterprise.¹⁰ Even though FSC takes over the insurer with seriously inadequate capital, it is the stabilization funds supported by contributions from each insurer that assure the rights of the policyholders.¹¹ In the last decade, FSC has taken over 5 insurance companies, including Walsun Insurance, Global Life, CY Life, Singfor Life and Kuo Hua Life.

RBC ratio not only supervises the behaviors of insurers but also serves as a potent stimulus. FSC changed the risk coefficient of RBC several times in the last few years to help insurers adjust to ever-changing world. For instance, to encourage insurers to

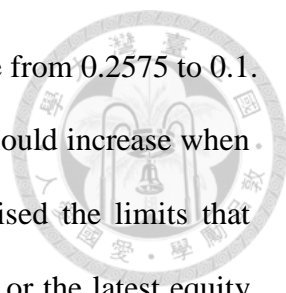
of the insurance company is less than zero.

⁸Item 1 to Item 3 of subparagraph 1 of paragraph 1 of Article 143-6 of Insurance Act

⁹Subparagraph 3 of Paragraph 1 of Article 146-3 of Regulations Governing Capital Adequacy of Insurance Companies

¹⁰Subparagraph 1 of Paragraph 3 of Article 149 of Regulations Governing Capital Adequacy of Insurance Companies

¹¹Article 143-3 of Regulations Governing Capital Adequacy of Insurance Companies



invest oversea, FSC lowered the risk coefficient of foreign real estate from 0.2575 to 0.1. That is, ceteris Paribas, by decreasing the denominator, RBC ratio would increase when insurers invest more on foreign real estate. What's more, FSC raised the limits that valuation difference of IP may be included from 30% of net capital or the latest equity to 50% of those in 2011. In 2014, FSC decreased the risk coefficient of foreign IP from 0.2575 to 0.1. FSC further raised the valuation difference of IP that insurers may be included in adjusted net capital from 50% to 85% (75%) if they use fair value method (other methods) to measure IP for every transaction. However, the sum cannot exceed 50% of equity capital or that of paid-in capital.¹² With these measures, *The 2014 Taiwan's Life Insurance Industry Market Overview* suggests that foreign investment accounted for NTD 8.27 trillion or 50.24% among the fund utilization category in 2014.

2.3 Investment Policies and Challenges of Insurers in Taiwan

Unlike foreign insurers that seldom invest in IP and long term bonds, the local life insurers devote most of their capital to bonds and Investment Properties (IP) to receive stable cash flows, interest revenue and rental revenue. *The 2014 Taiwan's Life Insurance Industry Market Overview* published by Taiwan Insurance Institute states that the industry's fund allocation in property investment reached NTD 1,089.8 billion, 6.62% of their total fund utilization. What's more, as it is harder for insurers to yield revenues in Taiwan, they seek foreign investments with higher returns. In the same report, it suggests that foreign investment accounted for NTD 8.27 trillion or 50.24% among the

¹²Translated from press release on 2011-10-27, on 2012-11-22 and on 2014-6-10 on Insurance Bureau Websites

fund utilization category in 2014. In contrast to life insurers, property liability insurers allocated NTD 44.13 billion (NTD 31.09 billion) or 20.3% (14.3%) of their available funds toward foreign investments (property investments) according to *The 2014 Taiwan's Property Liability Insurance Industry Market Overview*.

The reason why these life insurers allocate large proportion to the preceding investments is that they sold a lot of endowment with interest rate typically 6.5% or even 10% during 1980s and 1990s. In the article written by Steve Miles and Don Shapiro from Society of Actuaries, around year 2000, life insurers continued to collect the premiums of their products using high interest rates. However, the interest rates slumped and caused huge pressure on these firms because they could not find investments that yield the same returns, but they are still required to pay claims with comparably high interest rates.¹³ The difference between the reserves and the investment returns is called “negative spread”. To overcome this problem, locally-owned life insurers have adopted aggressive asset allocation strategies, as reflected in their substantial exposure to overseas investment, real estate and other high-risk assets.¹⁴

2.4 Related Accounting Standards

Taiwan has adopted IFRS in 2013 but has modified several standards for this highly-regulated industry. In this section, I explain the differences related to this study.

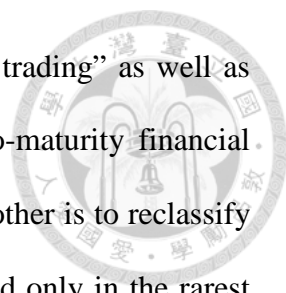
2.4.1 Reclassification of Financial assets

There are two types of reclassification transactions that took place in Taiwan. One

¹³Taiwan's Low Interest Rate Showdown, Issue No.49, December 2009 by Steve Miles and Don Shapiro from Society of Actuaries

¹⁴For more details, please refer to

<http://www.asiainsurancereview.com/News/View-NewsLetter-Article?id=32756&Type=eDaily>



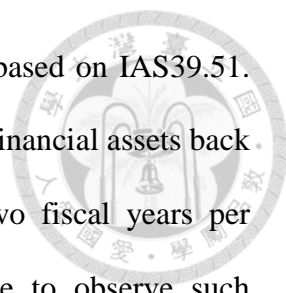
is the reclassification from “non-derivative financial asset held for trading” as well as available-for-sale financial assets (AFS financial assets) to held-to-maturity financial assets (HTM financial assets) or “loans and receivables”, while the other is to reclassify HTM financial assets to AFS financial assets. The former is allowed only in the rarest situation described in IAS39.50. During financial crisis in 2008, both IASB and FASB approved the abandonment of fair value recognition for selected financial assets (Bischof, Brüggemann and Daske 2012).¹⁵ In Taiwan, only Nanshan Life and Taiwan Life Insurance reclassified their AFS FINANCIAL ASSETS to HTM FINANCIAL ASSETS in 2011.

As for the latter reclassification, once a firm reclassifies or sells more than insignificant (in relation to total HTM financial assets) amount before maturity, it has to reclassify all of its HTM financial assets to AFS financial assets based on IAS39.51 and thus is under punishment provisions defined in IAS39.9. In other words, the company is not able to reclassify the preceding HTM financial assets back to AFS financial assets for the current financial year and for the next 2 fiscal years. The differences between HTM financial assets and AFS financial assets are recorded as part of other comprehensive income (OCI) and thus might have a huge impact on equity.¹⁶

In Taiwan, the local insurers put much effort on finding appropriate long term bonds to meet government requirement and to strike a balance between their assets and liabilities. In 2011 and 2012, 7 local insurers, including Cathay Life Insurance and FG Life in 2011, as well as Fubon Life, Mercuries Life, China Life Insurance, TLG Insurance, and Taiwan Life Ins. in 2012, reclassified all of their HTM financial assets to

¹⁵IAS39.BC11E, IAS39.BC104A to IAS39.BC104E and IAS39.50 of IASB as well as FAS115 of FASB

¹⁶ IAS39.54 and IAS39.55 (b)



AFS financial assets as a result of a change in intention or ability based on IAS39.51. Thus, they were not allowed to reclassify these AFS financial assets back to HTM financial assets during the current and the following two fiscal years per “punishment provisions” defined in IAS39.9. Although it is rare to observe such behaviors in the world, FSC did not forbid such reclassifications during those 2 years. After the reclassification came to surface, FSC kept a keen eye on such issues and officially declared that these firms would not be able to do so in the future.

In addition to the controversial HTM financial assets reclassification, insurers in Taiwan have invested more on “bonds without active markets” (B w/o AM). In Table 2, as HTM financial assets of these companies had been zero since reclassification, the amount stably grew during the “punishment period”. The classification of financial assets in Taiwan differs from that of IAS34. The former has one unique category, “bonds without active markets”. This item is not defined in the original IAS39 or even the latest IFRS9, but is calculated, like HTM financial assets, using the effective interest method. What’s more, “bonds without active markets” are not limited to strict selling rules of AFS financial assets or HTM financial assets but rather flexible to derecognize. However, this accounting item will disappear from the financial reports when IFRS9 is implemented.



Table 1 Sample Insurers That Reclassified HTM Financial Assets to AFS Financial Assets

Insurers	Time	HTM	OCI_t	OCI_t/Equity_{t-1}
Cathay Life	2011/12/31	590,599	34,000*	30%
FG Life		36,952	9,800	118%
China Life Insurance	2012/12/31	384,760	21,000*	64%
Fubon Life	2012/8/31	191,943	25,000*	25%
Mercuries Life	2012/10/31	161,480	8,487	71%
Taiwan Life Ins.		64,113	3,729	41%
TLG Insurance	2012/12/31	200	2	0.03%

The reclassification amounts and OCI are both in million NTD. * denotes that the

source of OCI comes from newspaper instead of financial reports of these firms. N/A

means that there is no such information in the related sources.

Table 2 Comparisons between Carrying Amounts of HTM Financial Assets and Those of "Bonds without Active Markets"

Time	China Life Insurance		Taiwan Life Ins.		Mercuries Life		Cathay Life		FG Life		Fubon Life		TLG Insurance	
	HTM	B w/o AM	HTM	B w/o AM	HTM	B w/o AM	HTM	B w/o AM	HTM	B w/o AM	HTM	B w/o AM	HTM	B w/o AM
Sep-11	360.97	92.07	36.69	0.10	0.27	0.02	590.62	493.71	39.52	65.50	193.66	282.60	0.07	0.00
Dec-11	379.65	97.49	36.76	0.10	0.21	0.03	0.00	510.03	0.00	64.30	191.06	266.15	0.17	0.00
Mar-12	388.89	97.90	48.08	0.09	0.19	0.06	0.00	583.00	0.00	73.48	190.63	294.56	0.15	0.00
Jun-12	401.86	106.40	58.69	0.09	0.18	70.29	0.00	719.56	0.00	80.43	187.46	298.42	0.20	0.00
Sep-12	407.31	127.45	59.46	0.10	0.17	78.92	0.00	762.01	0.00	78.14	0.00	325.02	0.20	0.00
Dec-12	0.00	158.12	0.00	0.10	0.00	97.65	0.00	816.90	0.00	84.39	0.00	317.89	0.00	0.00
Mar-13	0.00	209.51	0.00	0.10	0.00	118.41	0.00	871.16	0.00	92.04	0.00	339.09	0.00	0.00
Jun-13	0.00	239.62	0.00	0.16	0.00	139.46	0.00	871.67	0.00	112.64	0.00	342.37	0.00	0.00
Sep-13	0.00	267.15	0.00	0.17	0.00	176.14	0.00	961.78	0.00	114.82	0.00	352.74	0.00	0.00
Dec-13	0.00	290.88	0.00	0.19	0.00	210.23	1.62	1,023.35	0.00	120.17	0.00	359.65	0.00	0.00
Mar-14	0.00	329.96	0.00	0.20	0.00	218.80	6.13	1,052.69	8.26	123.16	0.00	399.48	0.00	0.00
Jun-14	0.00	349.23	0.00	0.23	0.00	222.40	9.44	1,027.85	10.15	124.19	0.00	408.80	0.00	0.00
Sep-14	0.00	402.40	0.00	0.24	0.00	262.87	21.78	1,090.79	9.27	133.74	0.00	465.47	0.00	0.00
Dec-14	0.00	440.01	0.00	0.27	0.00	284.26	25.94	1,256.57	8.48	141.83	0.00	544.19	0.00	0.05
Mar-15	9.45	429.38	29.99	0.27	0.01	290.98	34.22	1,356.14	7.88	146.26	9.21	555.46	0.03	0.05
Jun-15	15.40	455.28	29.98	0.28	0.02	305.73	26.24	1,429.09	7.88	154.45	19.95	618.57	0.03	0.05
Sep-15	32.75	499.37	29.12	0.30	0.03	335.49	26.23	1,732.88	6.90	170.43	25.17	783.19	0.03	0.05
Dec-15	42.12	504.14	28.98	0.29	0.03	331.19	24.73	1,842.96	6.71	170.62	25.17	881.39	0.03	0.05



Table 2 (Continued)

The carrying amounts here are accumulated on a yearly basis and are in billion NT dollars. That is to say, the carrying amounts of Q of a year are the total amounts from season 1 to season 4. B w/o AM stands for “bonds without active markets”.

The earliest reclassification can be traced back to year 2011 season 4, when Cathay Life and FG Life first did so.

2.4.2 IAS 40 in Taiwan

For insurers, based on *Regulations Governing the Preparation of Financial Reports by Insurance Companies (amended on 2012/2/7)*, the insurance companies in Taiwan could use the deemed cost exemption (i.e. historical cost, revaluation value under GAAP or fair value) to measure IP on 2012/1/1.

As for the following measurement, all the insurers could use was historical cost method, which required insurers to depreciate IP and disclose fair value in the financial reports every fiscal year. These insurers usually held great amounts of IP. In 2013, the top 3 firms that held the greatest amounts of IP were Cathay FHC (NTD 215 billions), Shinkong FHC (NTD 124 billions) and Fubon FHC (NTD 93 billions) (Lin 2014). Although they hold such huge amounts of IP, the insurers could not recognize the appreciation profits of IP because FSC did not allow them to use fair value method. After the release of *Regulations Governing the Preparation of Financial Reports by Securities Issuers* on 2014/1/10 and on 2014/8/13, firms in Taiwan, including life insurers, can measure their IP at fair value if they meet the criteria.

In Table 3, 7 of the sample insurers used fair value to measure IP on transition day. Cathay Life had the greatest valuation difference while SK Insurance had the smallest. On the other hand only 4 life insurance companies officially adopted fair value method to measure IP since 2014.¹⁷

¹⁷I exclude Nanshan Life Insurance due to acquisition event.

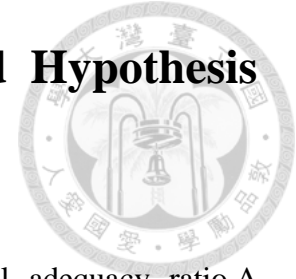


Table 3 Sample Insurers That Use Fair Value to Measure IP

Firm Name	Time	Valuation Difference (NTD millions)
Cathay Life		73,762
FG Life		866
Fubon Life		3,899
Mercuries Life	2013/12/31	1,317
Shin Kong Life		32,936
SK Insurance		270
Taiwan Life Ins.		626
<hr/>		
Cathay Life		133,097
China Life Insurance	2014/12/31	8,394
Fubon Ins.		5,741
Fubon Life		23,502

The valuation differences are in NTD millions. In addition, in 2013, though insurers were able to measure IP at fair value on transition day, they were required to measure IP in cost method and thus had to depreciate IP. The valuation differences in 2013 already take depreciation into consideration. On the other hand, in 2014, FSC loosened the rules for insurers to choose fair value model and thus the valuation difference in 2014 do not have to calculate depreciation expense.

Chapter 3 Prior Literature Review and Hypothesis Development



In this section, I describe political costs theory and capital adequacy ratio. A substantial body of prior literature has studied the economic determinants of accounting choices (Watts and Zimmerman 1978; Hagerman and Zmijewski 1979; Zmijewski and Hagerman 1981). They point out several factors, such as political costs, which affect accounting choices by firms. These studies suggest that larger firms (i.e. firms with more total assets) decrease profits to avoid higher visibility and increased political costs by lobbying for favorable accounting policies or against unfavorable ones. Though few studies include financial institutions (i.e. banks and insurers), I discuss about the political cost theory when it is applied to insurance companies.

Besides net profits, regulatory capital and equity influence the visibility and pressures of insurers. For example, Petroni (1992) documents that financially distressed insurers underestimate liability reserves (i.e. indirectly overestimate equity) when they are under political attention. Insurance industry is highly regulated and thus under government interventions if it fails to achieve capital requirements. The preceding descriptions mean that interest parties, including government and policy holders, judge insurers not only by profits but also by regulatory capital. The intervention pressures (i.e. political costs) are related with equity and RBC ratio. If an insurer has high regulatory capital, few consider it to be insolvent. On the other hand, when RBC ratio falls below 200%, the concerns from interest parties cause huge pressures on insurers. In other words, insurers increase or maintain adequacy capital ratio to decrease political costs.

Finally, I choose two accounting policies recently adopted by insurance companies in Taiwan to explore the association between them and insurers' incentives to adopt

them. The accounting policies are “reclassification from HTM financial assets to AFS financial assets” and “measurement of IP”.

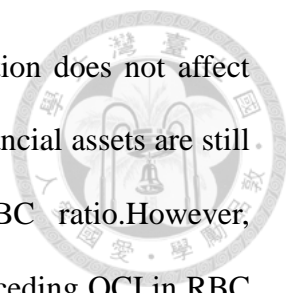
3.1 Reclassification of HTM Financial Assets to AFS Financial Assets

3.1.1 Regulatory Capital and Reclassification of Financial Assets

Regarding financial assets accounting policy choices, prior research studies the association between earnings and the accounting choices or that between regulatory capital and the accounting choices. For example, Jordan, Clark and Smith (2011) find that insurance companies manipulate earnings through selling AFS financial assets. Property liability insurance companies make decisions based on either liquidity of assets or volatility in earnings for initial recognition (Godwin, Petroni and Wahlen 1998). Hodder, Kohlbeck and McAnally (2002) find that banks consider regulatory risk when adopting SFAS No. 115.

Bischof et al. (2012) study different reclassification after financial crisis in 2008 (i.e. reclassification from “non-derivative financial asset held for trading” as well as AFS financial assets to HTM financial assets or “loans and receivables”) and find that capital adequacy ratio is economically related with the reclassification behaviors of banks. They suggest that the possibilities of reclassification increase when the regulatory capital ratio of an insurer is closer to the minimum requirement. However, few studies examine “reclassification from HTM financial assets to AFS financial assets”. The “reclassification from HTM financial assets to AFS financial assets” during 2011 and 2012 in Taiwan provides a chance to study this issue further.

Even though the reclassification increases OCI and equity according to IAS 39, it does not necessarily improve RBC ratio of an insurer. If the government does not allow



the changes to be included in adjusted net capital, the reclassification does not affect RBC ratio. On the other hand, after the reclassification, the AFS financial assets are still included in denominator of RBC ratio and might affect RBC ratio. However, government does not specify whether an insurer can include the preceding OCI in RBC ratio. Even if OCI from reclassification can be included in RBC ratio, the maximum OCI that an insurer can include in adjusted net capital is not specified.¹⁸ In other words, the reclassification has an impact on RBC ratio but it is not possible to state that the reclassification differences improve or worsen RBC ratio.

Hypothesis 1a:

RBC ratio is associated with the reclassification scale of insurers in Taiwan.

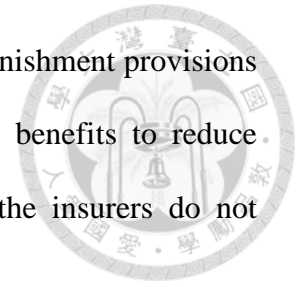
3.1.2 Political Costs and Reclassification of Financial Assets

The political costs theory states that larger firms are more likely to face political exposure than smaller firms because government and interest parties keep an eye on their profits (Watts and Zimmerman 1978). Applied to insurers and the reclassification event in 2011 and 2012, this suggests that larger insurers are more likely than smaller ones to reclassify HTM financial assets due to intention to decrease political attention. Since the reclassification does not influence net income but increases OCI and equity,¹⁹ an insurer can persuade government and other interest parties that it is in good financial condition without attracting more attention. Next, once an insurer reclassifies

¹⁸The government does not provide detailed calculations of RBC ratio during this period so it is not possible to evaluate the direct influence that reclassification has on RBC ratio.

¹⁹I only mention equity because the reclassification does not necessarily increase regulatory capital but does increase OCI in equity. What's more, interest parties, such as policy holders, can only retrieve financial reports and what level of RBC ratio that an insurer falls in so equity might be the only detailed source other than regulatory capital that they can rely on.

not insignificant amounts of HTM financial assets, it is under the punishment provisions defined in IAS 39. The reclassification behaviors imply that the benefits to reduce political costs outweigh the costs of punishment provisions, or the insurers do not reclassify HTM financial assets.



Hypothesis 1b:

Larger insurers reclassify more HTM financial assets to AFS financial assets.

3.2 IP Measurement Policy

3.2.1 Regulatory Capital and IP measurement Policy

Though few studies explore the association between RBC ratio and the measurement of IP, the formula of capital adequacy ratio provides an aspect to this issue. The government changed the valuation difference that an insurer can include in RBC ratio in 2011 and 2012. This means that the government indirectly encourages the fair value model of IP of subsequent measurement before the official implementation of IAS 40. Muller, Riedl and Sellhorn (2008) suggest that the permission or command to use fair value model from government before adopting IFRS are positively related with adoption of fair value model. That is to say, the changes to formula of RBC ratio are the permission from government and imply the association between regulatory capital and measurement of IP. Even though the insurers have to achieve certain requirements,²⁰ they might want to measure IP at fair value to improve their RBC ratio and have access to foreign investments with higher returns.

Hypothesis 2a:

RBC ratio is positively associated with the scale of valuation differences in IP.

²⁰Insurance companies in Taiwan have to prove that they have recognized enough insurance liability reserves to measure IP at fair value, or they will need to recognize more liability reserves.

3.2.2 Political Costs and Measurement of IP

Prior research use profits to determine the political pressures from interest parties and the influence on measurement of IP. Quagli and Avallone (2010) find that larger companies do not choose fair value model due to intention to reduce profits (i.e. company visibility). In addition, Liao (2009) finds that the insurers in Taiwan take earnings, tax and the volatility of income into consideration. However, equity and RBC ratio affect the political pressures of insurers as well. For instance, Petroni (1992) finds that financially distressed insurers underestimate liability reserves (i.e. indirectly overestimate equity) instead of profits when they are under political attention.

Measuring IP at fair value raises not only profits but also equity and RBC ratio after FSC raised the limits that the valuation difference of IP can be included in RBC ratio in recent years. If insurers with large quantities of total assets and IP measure IP at fair value, the profits and RBC ratio increase. Though the rise in profits draws political attention from interest parties, the rise in regulatory capital can prove that the insurer is in good condition and hence lowers the pressures. What's more, insurers in Taiwan have relatively large amounts of liabilities (i.e. highly leveraged) yet limited investment options. When an insurer raises RBC ratio above 250% by using fair value to measure IP, ceteris Paribas, it can have access to foreign investments and riskier financial assets to improve investment returns. Taken together, even if the accounting choice raises profits and related political attention, the large insurers choose to measure IP at fair value to increase RBC ratio and decrease overall political costs.

Hypothesis 2a:

Larger insurers measure more IP at fair value.

Chapter 4 Research Design

4.1 Sample Selection and Variable Definitions



All variable definitions are summarized in Table 5. My sample is drawn from IFRS Finance-New Accounting Principle in Taiwan Economics Journal (TEJ) database. The annual data are prepared using either ROC General Accepted Accounting Principles (GAAP) before 2012 or International Financial Reporting Standard (IFRS) after 2013.

First, my analysis is based on insurers that are publicly traded and those that are non-publicly traded. I include non-publicly traded ones in my sample considering the relatively small sample size. Data for HTM financial assets reclassification is collected for the years 2010 to 2012 while that for IP is collected for the years 2012 to 2014. After I identify 54 insurance companies from TEJ, to make sure that insurers changed their accounting policies for the long term, I delete 5 insurance companies, including Walsun Insurance, Global Life, CY Life, Singfor Life and Kuo Hua Life, which have been received by FSC due to deficit or significantly inadequate capital. These companies had been already in bad conditions for years and might be different from average insurers.

Next, to focus the sample on only those observations involving related accounting policies, I exclude HTM financial assets or IP that equal to zero during the sample period. This screening process ensures that these insurance companies implement related accounting policies. I drop 23 additional insurers without the preceding desired accounting items. This screen process yields 50 firm-year observations for H1 and 50 firm-year observations for H2.

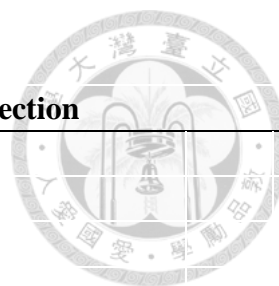


Table 4 Sample Selection Processes
Reclassification of HTM Financial Assets Sample Selection

TEJ Database (January 2010- December 2012)	
IFRS_Tej Consolidated First Financial_Insurance(Acc)-4	54
Less firms under government receivership	(5)
Less firms that did not hold HTM financial assets during this period	(23)
Less firm under acquisition deal	(1)
Final Reclassification of Held-to-maturity Financial assets Sample	<u>25</u>

Measurement of Investment Properties Sample Selection

TEJ Database (January 2012- December 2014)	
IFRS_Tej Consolidated First Financial_Insurance(Acc)-4	54
Less firms under government receivership	(5)
Less firms that did not hold investment properties during this period	(23)
Less firm under acquisition deal	(1)
Final Measurement of Investment Property Sample	<u>25</u>

I perform similar selection procedures in both sample sets. Each final sample set consists of 25 insurance companies for every financial year. First, my analysis is based on insurers that are publicly traded and that are non-publicly traded. Next, I delete 5 insurance companies, including Walsun Insurance, Global Life, CY Life, Singfor Life and Kuo Hua Life, which have been received by FSC due to deficit. In addition, to focus only on examples involving related accounting policies, I exclude HTM financial assets or IP that equal to zero during the sample period. Finally, I delete Nanshan Life from both of the sample sets due to acquisition event after the financial crisis.



4.2 Empirical Models

In my first set of analyses, I run the following OLS regressions to provide evidence on the determinants of reclassification scale of HTM financial assets:

$$(RECE_t)HTMC_t = \beta_0 + \beta_1RBC_{t-1} + \beta_2TA_{t-1} + \beta_3LEVERAGE_{t-1} + \beta_4LIFE + \beta_5FHC + \beta_6ROA_{t-1} + \varepsilon \dots\dots\dots (1)$$

In the second set of tests, I analyze the association between regulatory capital and accounting policy of IP:

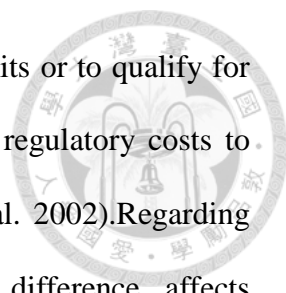
$$IPCHANGE_t = \beta_0 + \beta_1RBC_{t-1} + \beta_2TA_{t-1} + \beta_3LEVERAGE_{t-1} + \beta_4LIFE + \beta_5FHC + \beta_6ROA_{t-1} + \varepsilon\dots\dots\dots(2)$$

I estimate two different specifications with regard to equation (1). In the first specification, I use *HTMC_t*, which is the reclassification amount of HTM financial assets scaled by equity in year t-1. In the second specification, I use the other dependent variable *RECE_t*, which equals the difference between carrying amounts of HTM financial assets and fair value scaled by equity in year t-1. The dependent variable *IPCHANGE_t* is changes in IP when switched to fair value model in year t scaled by equity in year t-1.²¹The independent variables consist of both an insurer’s incentives and costs (regulatory costs, pressures from interest parties and financial performance) associated with the reclassification event as well as impact on measurement of IP.

I identify regulatory capital using RBC ratio to test H1a and H2a. One of the main explanatory variables *RBC_{t-1}* is an indicator variable that equals 1 if RBC ratio of an insurance company is above 250%.²²Though the minimum requirement of RBC is

²¹ I ignore the tax effects and only include the depreciation expense of IP.

²²The capital adequacy ratios related to sample period may be disclosed as one of the five levels: 300% and above, 250% to 300%, 200% to 250%, 150% to 200% and 150% and below.



200%, insurers need to reach 250% of RBC to raise investment limits or to qualify for wider range of investments. This captures the firm's incentives and regulatory costs to adopt accounting policy (e.g., Bischof et al. 2012 and Holder et al. 2002). Regarding reclassification of HTM financial assets, the reclassification difference affects regulatory capital but does not have specific rules. That's why I do not predict the sign of β_1 in equation (1). On the other hand, after FSC changed the formula of RBC ratio, insurer can include more valuation difference of IP in adjusted net capital and improve RBC ratio. Hence, I predict that the sign of β_1 is positive in equation (2).

Next, I use TA_{t-1} , measured as the log of total assets in year t, to proxy for political costs (e.g. Watts and Zimmerman 1978) and investment pressures (e.g., Muller et al. 2008). Total assets of insurers in Taiwan are usually above NTD 100 billion (see Table 6 and Table 7) due to relatively high leverage ratios and thus under pressures of stable investment returns as well as inspections from interest parties. Both of the accounting choices in this study increase equity and RBC ratio. With enhanced equity and RBC ratio, the insurers can invest in wider ranges of investments, persuade the interest parties that they are in good financial condition, and thus decrease political attention. As a result, I expect that β_2 is positive in both of the equations.

I include $LEVERAGE_{t-1}$, $LIFE$, FHC and ROA_{t-1} as control variables. First, I include $LEVERAGE_{t-1}$ to control the possible effects on accounting policy decisions (e.g., Jordan et al. 2011). Next, $LIFE$ and FHC are both indicator variables that capture the specific firm characteristics of insurers in Taiwan. The former captures the investment activeness of life insurers, while the latter represents the possible synergy effects among financial holding companies. Finally, ROA_{t-1} , net income in year t scaled by total assets, controls for the association between profitability and capital (e.g., Collins, Shackelford and Wahlen 1995).



Table 5 Variable Definitions

Variables	Definition
Dependent Variables	
<i>HTMC_t</i>	the reclassification amounts of HTM financial assets scaled by equity in year t-1;
<i>RECE_t</i>	the difference between the fair value and the carrying amounts of HTM financial assets scaled by equity in year t-1;
<i>IPCHANGE_t</i>	change in investment properties when switched to fair value method scaled by equity in year t-1;
Independent Variables	
<i>RBC_{t-1}</i>	1 if RBC ratio of an insurance company is above 250% in year t-1;
<i>TA_{t-1}</i>	log of total assets (in thousands of NTD);
<i>LEVERAGE_{t-1}</i>	liabilities scaled by total assets;
<i>LIFE</i>	1 if an insurer is a life insurer;
<i>FHC</i>	1 if an insurer is a subsidiary of a financial holding company (FHC); and
<i>ROA_{t-1}</i>	net income in year t-1 scaled by total assets in year t-1.

All financial statement variables are measured on 12/31 of the certified financial year.

Chapter 5 Empirical Results



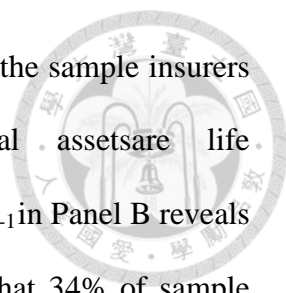
5.1 Descriptive Statistics

Table 6 presents descriptive statistics for the variables used in Equation (1) for “reclassification from HTM financial assets to AFS financial assets during the years 2011 and 2012”, while Table 7 presents those for the variables used in Equation (2) for measurement method of IP in the years 2013 and 2014. Further, I separate the sample firms in each of the table with the study events and present the descriptive statistics of these firms. In addition, 19 sample insurers are in both of the sample sets.²³

Panel A of Table 6 reveals that 52 percent of the sample insurers during years 2011 and 2012 have their RBC ratio above 250%. That is to say, at least half of the sample insurers are qualified not only for the minimum requirement but also for the threshold to better foreign investments. TA_{t-1} reveals that, after transformation, sample insurers hold at least NTD 200 million and at most around NTD 6 trillion. However, according to panel B in the same table, only 2 of 7 sample firms that reclassified financial assets do not comply with the investment threshold and they have average total assets significantly different from those of other sample firms that did not reclassify HTM financial assets to AFS financial assets. In the same panel, it reveals that the political costs of those insurers which reclassified HTM financial assets are significantly bigger than those who did not.

$LEVERAGE_{t-1}$ in Table 6 indicates that most of sample insurers in Taiwan hold liabilities equal to at least 70% of total assets. Even the median of $LEVERAGE_{t-1}$ is above 90% of total assets considering that an average of 60% of insurers is life insurers

²³See Appendix 1 for further details.



according to *LIFE*. Panel B in the same table also shows that all of the sample insurers that reclassified HTM financial assets to AFS financial assets are life insurers. Regarding other details in Panel B, the mean of $LEVERAGE_{t-1}$ in Panel B reveals that the sample firms are highly leveraged. Panel A also reveals that 34% of sample firms are held by FHC. However, Panel A states that half of these sample insurers have their ROA_{t-1} below 1%. Some sample insurers even suffered from negative returns down to -0.13%. ROA_{t-1} of firms that did not reclassify financial assets is significantly greater than that of insurers that did not, indicating that the former performed better than the latter during the sample periods.

Table 7 uncovers some interesting results of the variables in Equation (2) and Panel B shows that means among the variables are significantly different. Panel A of Table 7 reports that the sample insurers which have their RBC above 250% account for 74 percent. In addition, the firms that use fair value method have significantly greater total assets than the others at the 0.01 levels, and an average of 52 percent of sample insurers is life insurers and 81.8% of the sample (i.e. 9 of 11) firms that measured IP with fair value are life insurers. What's more, the former is significantly more leveraged than the latter at the 0.05 levels. Panel A also reveals that 36 percent of sample firms are held by FHC. Finally, the financial performance indicator, ROA_{t-1} , ranges widely for the sample insurers of equation 3. Regarding further analysis in Panel B, it reveals that the political costs of those insurers which use fair value to measure IP are significantly bigger than those who do not. In the same panel, the financial performance of the sample firms that use fair value method is significantly smaller than that of the other firms.

**Table 6 Reclassification from HTM Financial Assets to AFS Financial Assets
Sample Insurers That Did and Did Not Reclassify Financial Assets**

Variable	Obs	Mean	Std.	Min	25th	50th	75th	Max
RBC_{t-1}	50	0.520	0.505	0.000	0.000	1.000	1.000	1.000
TA_{t-1}	50	17.953	2.343	11.928	16.534	18.182	19.579	21.914
$LEVERAGE_{t-1}$	50	0.849	0.152	0.362	0.734	0.915	0.964	0.992
$LIFE$	50	0.600	0.495	0.000	0.000	1.000	1.000	1.000
FHC	50	0.340	0.479	0.000	0.000	0.000	1.000	1.000
ROA_{t-1}	50	0.011	0.024	-0.042	0.000	0.005	0.024	0.084

Sample Insurers Comparisons

Variables	Reclassified			Did Not Reclassified			Differences t-statistics
	Obs	Mean	Std.	Obs	Mean	Std.	
RBC_{t-1}	7	0.286	0.488	43	0.558	0.502	-1.364
TA_{t-1}	7	19.642	2.293	43	17.677	2.259	2.110 *
$LEVERAGE_{t-1}$	7	0.951	0.034	43	0.833	0.158	4.353 ***
$LIFE$	7	1.000	0.000	43	0.535	0.505	6.043 ***
FHC	7	0.286	0.488	43	0.349	0.482	-0.318
ROA_{t-1}	7	0.005	0.005	43	0.012	0.025	-1.765 *

Panel A reports descriptive statistics for "regression of reclassification from HTM financial assets to AFS financial assets" in the years 2011 and 2012 while panel B reports comparisons between sample firms that reclassified financial assets and the others that did not in the years 2011 and 2012.

***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels for two-tailed t-statistics, respectively.

All variable definitions are provided in Table 5.

Table 7 Measurement of Investment Properties during 2013 and 2014

Panel A: Sample Insurers That Did and Did Not Use Fair Value to Measure IP

Variables	Obs	Mean	Std.	Min	25th	50th	75th	Max
<i>RBC</i> _{t-1}	50	0.740	0.443	0.000	0.250	1.000	1.000	1.000
<i>TA</i> _{t-1}	50	18.455	1.845	16.235	16.613	18.358	19.839	22.157
<i>LEVERAGE</i> _{t-1}	50	0.812	0.154	0.432	0.667	0.863	0.955	0.989
<i>LIFE</i>	50	0.520	0.505	0.000	0.000	1.000	1.000	1.000
<i>FHC</i>	50	0.360	0.485	0.000	0.000	0.000	1.000	1.000
<i>ROA</i> _{t-1}	50	0.022	0.027	-0.013	0.003	0.012	0.038	0.158

Panel B: Sample Insurers that Used Fair Method to Measure IP

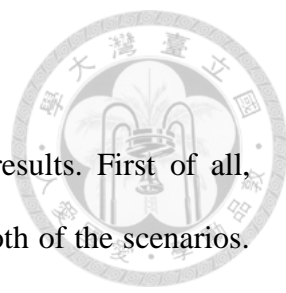
Variables	Fair Value			Other Methods			Differences
	Obs	Mean	Std.	Obs	Mean	Std.	t-statistics
<i>RBC</i> _{t-1}	11	0.455	0.522	39	0.821	0.389	-2.161 **
<i>TA</i> _{t-1}	11	20.369	1.637	39	17.916	1.525	4.454 ***
<i>LEVERAGE</i> _{t-1}	11	0.898	0.110	39	0.788	0.157	2.645 **
<i>LIFE</i>	11	0.818	0.405	39	0.436	0.502	2.616 **
<i>FHC</i>	11	0.636	0.505	39	0.282	0.456	2.100 *
<i>ROA</i> _{t-1}	11	0.011	0.013	39	0.024	0.029	-2.134 **

Panel A reports descriptive statistics for equation (2) in the years 2013 and 2014 while panel B reports comparisons between sample firms that switched to fair value and the other sample firms that did not in the years 2013 and 2014.

***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels for two-tailed t-statistics, respectively.

All variable definitions are provided in Table 5.

5.2 Correlations



The correlations in Table 8 here present several interesting results. First of all, *LIFE* is highly correlated with TA_{t-1} , $LEVERAGE_{t-1}$ and ROA_{t-1} in both of the scenarios. Since life insurers in Taiwan usually hold a lot of endowment products and receive large amounts of cash. This leads to trillions of available funds of life insurers. With great amounts of money, they are able to invest in IP and other investments. In addition, because endowment products are main products of life insurers, they have higher leverage than property liability insurers.

Next, RBC_{t-1} is rather correlated with previously mentioned variables. It is laws that can explain the reasons behind this result. When capital of an insurer is under certain level, FSC will receive the insurer. Without good solvency condition, an insurer will not be able to perform under supervision, not to mention to operate smoothly. Finally, *FHC* variable seems to lack correlations with other variables.

Though the variables are significantly correlated with each other in Table 8, it does not lead to exact multicollinearity of the multivariate models. I will further explain this in the “Empirical Results and Analyses” section.



Table 8 Correlations

Panel A: Correlations of Reclassification of HTM Financial Assets to AFS Financial Assets

	RBC_{t-1}		TA_{t-1}		$LEVERAGE_{t-1}$		$LIFE$		FHC		ROA_{t-1}
RBC_{t-1}	1.000		-0.732 ***		-0.810 ***		-0.703 ***		-0.071		0.560 ***
TA_{t-1}	-0.704 ***	1.000		0.788 ***		0.758 ***		0.233		-0.447 ***	
$LEVERAGE_{t-1}$	-0.698 ***	0.848 ***	1.000			0.843 ***		-0.045		-0.648 ***	
$LIFE$	-0.703 ***	0.726 ***	0.824 ***	1.000				-0.103		-0.648 ***	
FHC	-0.071	0.267 *	0.064	-0.103	1.000			1.000		0.072	
ROA_{t-1}	0.489 ***	-0.428	-0.636	-0.622	0.054	1.000					

Panel B: Correlations of Measurement of IP

	RBC_{t-1}		TA_{t-1}		$LEVERAGE_{t-1}$		$LIFE$		FHC		ROA_{t-1}
RBC_{t-1}	1.000		-0.540 ***		-0.570 ***		-0.569 ***		-0.125		0.432 ***
TA_{t-1}	-0.540 ***	1.000		0.737 ***		0.876 ***		0.266 *		-0.605 ***	
$LEVERAGE_{t-1}$	-0.570 ***	0.737 ***	1.000			0.816 ***		-0.033		-0.647 ***	
$LIFE$	-0.569 ***	0.876 ***	0.816 ***	1.000				0.053		-0.656 ***	
FHC	-0.125	0.266 *	-0.033	0.053	1.000			1.000		-0.148	
ROA_{t-1}	0.432 ***	-0.605 ***	-0.647 ***	-0.656 ***	-0.148	1.000					

This table provides pairwise correlations for "reclassification from HTM financial assets to AFS financial assets during the years 2011-2012" and "measurement of IP during the years 2013-2014". Pearson correlations are in the lower triangle and Spearman correlations are in the upper triangle. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

5.3 Empirical Results and Analyses



5.3.1 Reclassification from HTM Financial Assets to AFS Financial Assets

Table 9 Regressions Results of Reclassification from HTM Financial Assets to AFS Financial Assets

Variables	Pred. Sign	<i>HTMREC</i>	<i>RECE</i>
Intercept	?	-8.938 * (-1.73)	-0.505 * (-1.83)
<i>RBC</i> _{t-1}	+/-	0.809 (0.68)	0.045 (0.70)
<i>TA</i> _{t-1}	+	0.762 * (2.01)	0.047 ** (2.30)
<i>LEVERAGE</i> _{t-1}	?	-4.434 (-0.69)	-0.333 (-0.97)
<i>LIFE</i>	+	0.182 (0.11)	0.010 (0.12)
<i>FHC</i>	+/-	-1.568 (-1.67)	-0.076 (-1.52)
<i>ROA</i> _{t-1}	+	-7.462 (-0.32)	-0.631 (-0.50)
Year fixed effects		Yes	Yes
n		50	50
Model p value		0.19	0.13
R ²		20.02%	22.36%
Adjusted R ²		6.69%	9.42%

Coefficients are presented with t-statistics in parentheses. ***, **, * denote significance at the 1 percent, 5 percent, and 10 percent levels, respectively, for the indicated one- or two-tailed tests.

After untabulated Variance Inflation Factor (VIF) tests, the VIF of TA in Equation (2) fall below the rule of thumb, 10. This means that collinearity problem do not exist in Equation (2). In addition, these regressions are not bothered by heteroscedasticity problems (untabulated analysis). Finally, I also add year fixed effects to the models. The variable definitions are in Table 5.

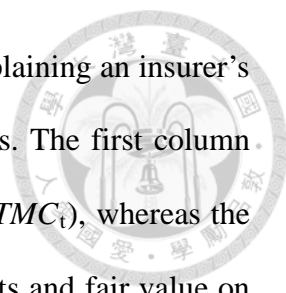


Table 9 presents the results of multivariate OLS regressions explaining an insurer's reclassification scale. The analyses differ in the dependent variables. The first column corresponds to the total reclassification of HTM financial assets ($HTMC_t$), whereas the other column is centered at the differences between carrying amounts and fair value on transition day ($RECE_t$). What's more, according to VIF tests (untabulated analysis), the centered VIF of these variables do not exceed rules of thumb (i.e. 6 to 10) so these models are not subject to multicollinearity problems. Judging from model p-value in Table 9, these variables lack explanatory powers when combined together to investigate the effects on reclassification in this study. However, there are some interesting results that I discuss about in the next paragraphs.

The regressions do not support my hypothesis 1a but support 1b. Beginning with RBC_{t-1} , it is insignificantly related with the reclassification results in Equation (1) and the results suggest that the regulatory capital of sample insurers do not influence the decisions and scale to reclassify HTM financial assets to AFS financial assets. This might have something to do with the relatively mild supervision during the sample period. Moreover, the reclassification of financial assets does not require insurers to achieve certain RBC ratio but limits them with "punishment provisions" defined in IAS 39.

Another explanatory variable, TA_{t-1} , takes the expected sign in all of the three columns and is statistically significant in all columns. All else equal, for each unit increase in TA_{t-1} , $HTMC$ ($RECE$) would increase 0.762 (0.047) for each dollar of equity. Considering the great amounts of HTM financial assets and the requirements to reclassify all of the HTM financial assets in compliance with IAS39.9, it is not surprising to see such results when HTM financial assets accounts for at least 20% of total assets of the sample insurers during 2011 and 2012 (untabulated analyses). This

supports the hypothesis that larger insurers reclassify more HTM financial assets. Taken together, the results suggest that incentives to reduce political costs influence the reclassification scale.

As for other control variables, $LEVERAGE_{t-1}$, $LIFE_{t-1}$, FHC_{t-1} and ROA_{t-1} take the expected sign and meet the results of prior research (Quagli et al. 2010 and Jordan et al. 2011). However, they are all statistically insignificant in the model. Of these variables, according to Collins et al. (1995), ROA_{t-1} should explain the accounting choices of these firms. One reason may be that the consequences of reclassification enter OCI instead of net income and the formula of ROA excludes OCI. Even though the reclassification from HTM financial assets to AFS financial assets takes place, it will not affect ROA as long as the insurers do not sell the reclassified HTM financial assets (i.e. AFS financial assets). What's more, the explaining power of this specific variable might be weakened by its significant correlations with TA_{t-1} (Table 8).

There are other possible factors to the reclassification of financial assets. One is that insurers in Taiwan also consider “bonds without active markets” to be substitutions of HTM financial assets. “Bonds without active markets” grew even before, during and after the “punishment period” (see Table 2) and the insurers might make the decisions based on how much “bonds without active markets” they can retain from markets. Another possible explanation is the change in interest rates. When the interest rates decrease, the market value of existing bonds rises. If an insurer predicts that the interest rates would remain low, it might change its intention and thus reclassify existing HTM financial assets to AFS financial assets in order to freely sell the bonds. However, since I do not include these factors into my regression, I can barely judge the impact on the reclassification decisions.

5.3.2 Measurement of Fair Value Method of IP



Table 10 Regressions Results of Measurement of Investment Property

Variables	Pred. Sign	$IPCHANGE_t$
Intercept	?	-1.121 *** (-3.76)
RBC_{t-1}	+	-0.081 * (-1.77)
TA_{t-1}	+	0.072 *** (3.47)
$LEVERAGE_{t-1}$?	-0.032 (-0.52)
$LIFE$	+	-0.181 *** (-2.99)
FHC	+/-	0.023 (0.89)
ROA_{t-1}	+	0.573 (1.41)
Robust standard error		Yes
Year fixed effects		Yes
n		50
Model p value		0.00
R^2		48.83%
Adjusted R^2		40.30%

Coefficients are presented with t-statistics in parentheses. ***, **, * denote significance at the 1 percent, 5 percent, and 10 percent levels, respectively, for the indicated one- or two-tailed tests.

In untabulated Lagrange multiplier test, this model is subjected to heteroscedasticity at a 10% level of significance so I also provide the result of Equation (3) after adjusting for standard error under the column, “after adjustment”. Finally, I also add year fixed effects to the models.

The variable definitions are in Table 5.

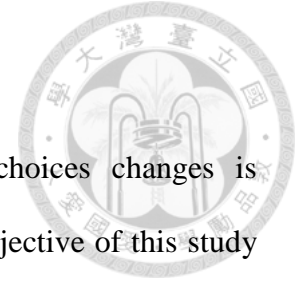
Table 10 presents the results of multivariate OLS regressions explaining what affects an insurer's choice to measure IP at fair value. The column focuses on changes to IP as well as equity (i.e. $IPCHANGE_t$). The model is valid according to the model p-value ($p < 0.01$).

The sign of β_1 differs from my H2a and indicates that the insurers are cautious when they have comparatively higher RBC ratio. The sample firms with RBC ratio above 250%, ceteris Paribus, have $IPCHANGE_t$ 8.4% less than the other firms that have RBC ratio below 250%. Insurers with their RBC ratio above 250% might not want to rush to use fair value even if the government allows them to measure IP at fair value through changes to the formula of RBC ratio. What's more, once an insurer uses fair value method to measure IP, it cannot return to historical cost method and this rule somehow explains the cautious behaviors of insurers.

TA_{t-1} , explanatory variable of H2b, is statistically significant and the results moderately support the hypothesis that the sample firms with larger total assets (i.e. political costs) measure more IP at fair value. For each unit increase in TA_{t-1} , all else being equal, $IPCHANGE_t$ would increase 7.2% for each dollar of equity. The larger the firm size, the more the change to equity is. This is consistent with the reasoning that insurers think that the political attention due to increase in equity and RBC ratio can offset that due to increase in profits.

The control variables are consistent with the prior results (Quagli et al. 2010) but *LIFE* indicates that life insurers have valuation differences 18.4% fewer than non-life insurers. The reasons are that life insurers put 35 times funds in IP than P/L insurers do according to the 2014 insurance market reports. Once they use fair value method, they have to measure all of the investment properties at fair value. This rule leads to the conservatism in the face of fair value method of IP.

Chapter 6 Conclusions



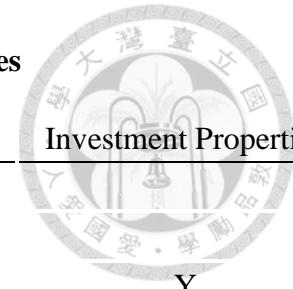
This paper explores how influence scale of accounting choices changes is explained by the regulatory capital and political costs. My main objective of this study is to investigate the insurers in Taiwan. I focus on the regulatory capital, RBC ratio, and firm size, a proxy for political costs. Though the prior research studies the determinants of the measurement of IP (Lin 2014), few studies discuss about the association between the regulatory capital as well as firm size and the preceding accounting policies in Taiwan. I extend prior research (Bischof et al. 2012; Watts and Zimmerman 1978; Hagerman and Zmijewski 1979; Zmijewski and Hagerman 1981; Petroni 1992) by documenting the association between the regulatory capital as well as political costs and accounting choices of insurance industry.

I fail to find that the regulatory capital ratio is associated with the reclassification decisions. This may be because this particular accounting choice might be better explained by other factors, such as growth in “bonds without active markets” or changes in interest rates, warranting further analysis in the future. With respect to measurement of IP, I document that insurers with RBC above 250% and life insurers are cautious in using fair value to measure IP.

In terms of political costs theory, the insurer size is positively related with reclassification scale and measurement of IP at fair value. This indicates that firms with more total assets (political costs) adopt the preceding accounting policies because these policies can help the insurers reduce political attention and avoid interventions.

This paper has some limitations. Because accounting policies do not change frequently, I am only able to obtain a small sample of 50 firm-year observations, restricting the generalizability of the main inferences.

Appendix 1 Translation of Insurance Companies



English	Chinese	Reclassification	Investment Properties
Allianz	安聯人壽	Y	
Asia Insurance TW	亞洲保險	Y	
BankTaiwan Life	臺銀人壽	Y	Y
Cathay Ins.	國泰產險	Y	
Cathay Life	國泰人壽	Y	Y
Central Reinsurance	中央再保險		Y
China Life Insurance	中國人壽	Y	Y
Chung Kuo Insurance	兆豐保險	Y	Y
CTBC Life	中信人壽	Y	Y
Federal Ins. Co.	美商聯邦產險	Y	
FGLife	遠雄人壽	Y	Y
First Insurance	第一保		Y
Fubon Ins.	富邦產險		Y
Fubon Life	富邦人壽	Y	Y
HonTai Life	宏泰人壽	Y	Y
Mercuries Life	三商美邦人壽	Y	Y
Mingtai Insurance	明台產險		Y
PCA Life	保誠人壽		Y
Prudential Life	保德信人壽	Y	Y
Shin Kong Life	新光人壽	Y	Y
SK Insurance	新光產險	Y	Y
South China Insu.	華南保險	Y	Y
Taian Insurance	泰安產險	Y	Y
Taiwan Life Ins.	台灣人壽	Y	Y
TFMI	台灣產物保險	Y	Y
TLG Insurance	台壽保產險	Y	
Tokio Marine Newa	新安東京海上	Y	Y
TransGlobe	全球人壽	Y	Y
Union Ins.	旺旺保險	Y	Y
Yuanta Life	元大人壽保險	Y	
Zurich Ins. TW	蘇黎世產險		Y
CY Life	朝陽人壽		
Global Life	國寶人壽		Under Receivership

Kuo Hua Life
Singfor Life
Walsun Insurance

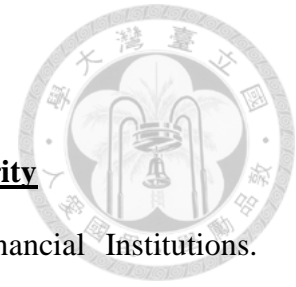
Appendix 1 (continued)

國華人壽
幸福人壽
華山保險

Under Receivership



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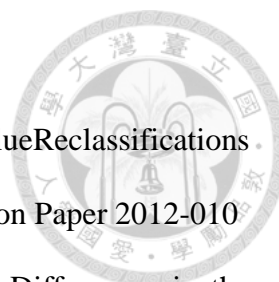
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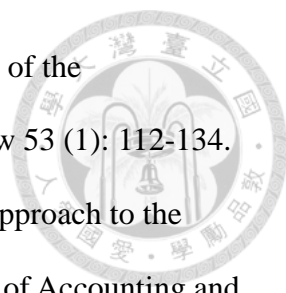
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