

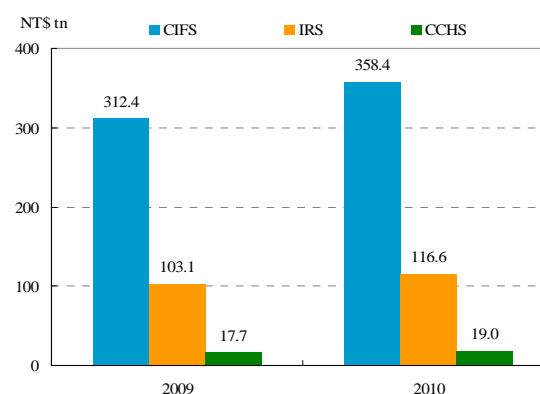
4.3 Financial infrastructure

4.3.1 Payment and settlement systems

Overview of systemically important payment systems

In 2010, the total transaction value of the three systemically important payment systems (SIPs)⁸¹ processing domestic interbank payments increased by NT\$60.8 trillion from the previous year to NT\$494 trillion. Among them, the CBC Interbank Funds-Transfer System (CIFS) was the most important and handled the final settlement of interbank funds transfers. In 2010, the transaction value of the CIFS reached NT\$358.4 trillion, and accounted for 72.6% of the total (Chart 4.51).

Chart 4.51 Transaction value of the three SIPs



Source: CBC.

Coping with the centenary bug problem in financial information systems

All financial information systems in Taiwan met the potential centenary bug problem of rolling over to three-digit year numbers when Taiwan entered into the 100th year of the republic on 1 January 2011. To ensure the smooth rollover of financial information systems, the FSC, the CBC and the Bureau of Agricultural Finance of the Council of Agriculture urged all financial institutions and clearing system operators to take prudent measures and carry out advanced testing. The FSC also assigned the Financial Information Service Co., LTD. (FISC) to monitor the proper operations and potential problems of the information systems in all financial institutions when entering into 2011. Due to the high level of preparedness, all financial information systems functioned well when the rollover time came.

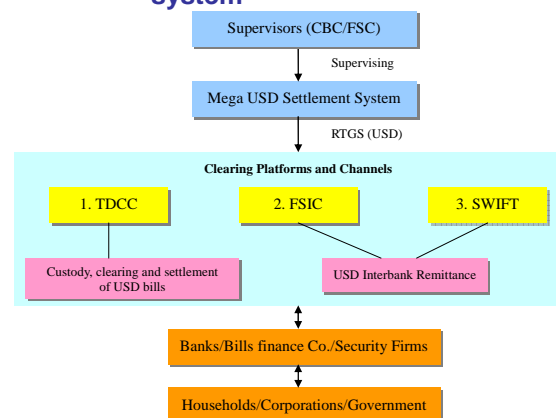
Establishing a domestic US dollar clearing and settlement system

The institutional framework

⁸¹ The three SIPs include the CBC Interbank Funds-Transfer System (CIFS), the Interbank Remittance System (IRS) and the Check Clearing House System (CCHS).

To establish a domestic US dollar bills market, the CBC approved the Bills Finance Association to set up a domestic US dollar bills clearing and settlement system in 2007. This new system, similar to the NT dollar bills clearing and settlement system, designates the Taiwan Depository & Clearing Corporation (TDCC) to take responsibility for custody, clearing and settlement of US dollar bills and employs a delivery versus payment (DVP) mechanism. Additionally, dishonored US dollar commercial paper is encompassed in the “Dishonored Check Record Information” system run by the Taiwan Clearing House.

Chart 4.52 The operational framework of the USD clearing and settlement system



Source: Mega International Commercial Bank.

In 2008, the Bankers Association further designated Mega International Commercial Bank (Mega Bank) as the sole domestic US dollar settlement bank. The US dollar settlement system, established and operated by Mega Bank, adopts an RTGS mechanism which is similar to the NT dollar interbank settlement system. Aside from settlement services for US dollar bills transactions, it also provides US dollar interbank remittance services (Chart 4.52).

Current operations and benefits

The US dollar bills market was launched on 6 December 2010. In the initial stage, only commercial paper (CP) and asset-backed commercial paper (ABCP) were traded in the market, with CP being the dominant one. To meet the settlement needs of the new market, the Mega US dollar settlement system came online at the same time and 44 financial institutions participated in the system. From 6 December 2010 to the end of January 2011, US dollar commercial paper issuances amounted to US\$110 million and the trading volume of the secondary market was US\$550 million, while the accumulated amount of US dollar interbank remittances reached US\$20.96 billion.

Through the new US dollar bills market, domestic firms with qualified credit ratings can issue US dollar commercial paper to meet their US dollar financing needs for business. Moreover, US dollar interbank remittance services provide the banking industry with a facility to transfer US dollar funds from one bank to another on the same day. It not only shortens the US dollar payment process and allows real-time settlement of domestic interbank

US dollar transfers as a result of improved fund management efficiency but also reduces the interbank remittance fees that used to be charged by foreign correspondent banks.

4.3.2 The CBC gradually raised policy rates and enhanced targeted prudential supervision on housing loans

In view of rising market interest rates and property prices due to the accelerating domestic economic recovery, together with heightened inflationary pressures, the CBC has raised policy rates four times since June 2010 (Table 4.3) and taken a series of targeted prudential measures on housing loans since October 2009. The prudential measures included actively urging banks to closely monitor the risks in housing loans and promulgating the regulations governing the extension of housing loans in specific areas (Box 4). These regulations are aimed at assisting financial institutions to avoid providing funds to speculators in the real estate market and encouraging financial institutions to adopt prudent credit risk management.

Table 4.3 CBC policy rate adjustments

Effective date	Discount rate	The rate on accommodations with collateral	The rate on accommodations without collateral
1 April 2011	1.750	2.125	4.000
31 Dec. 2010	1.625	2.000	3.875
1 Oct. 2010	1.500	1.875	3.750
25 June 2010	1.375	1.750	3.625
19 Feb. 2009	1.250	1.625	3.500

Source: CBC.

4.3.3 The expiration of the interim blanket guarantee for deposits at the end of 2010

In the wake of the deepening international financial crisis, the financial system in Taiwan was temporarily in turmoil in 2008 Q4. To enhance depositors' confidence and stabilize the financial system, the government announced the temporary measure of a blanket deposit guarantee in October 2008, which was effective until the end of 2009, accompanied by a package of measures to strengthen financial supervision and regulations. Afterwards, considering the prolonged instability of the global and local economy in 2009, and extensions of the blanket deposit guarantee schemes adopted by several neighboring Asian countries, the government announced in October 2009 an extension of the blanket deposit guarantee to the end of 2010.

The blanket deposit guarantee effectively stabilized depositor confidence and further improved financial stability during this crucial period. As the local economy gradually recovered and the asset quality and profitability of domestic financial institutions also improved substantially in 2010, the government decided to exit from the blanket deposit

guarantee scheme and resume a system of limited deposit insurance coverage according to schedule. To ensure financial stability while exiting the blanket deposit guarantee, the government adopted several measures. These included the FSC working out and implementing the exit strategy, the CBC intensively monitoring the liquidity of financial institutions, and the CDIC strengthening public awareness, through the press and media, of the exit of the blanket deposit guarantee and the content of the new limited deposit insurance scheme (Box 6). With the cooperation and coordination of the supervisory authorities, Taiwan returned to a limited deposit insurance scheme beginning from 1 January 2011 while maintaining the proper functioning of financial systems.

4.3.4 Cross-strait financial interactions continued to proceed

Three Cross-Strait Financial Supervisory Memorandums of Understanding (MOUs) governing banking, insurance, as well as securities and futures were signed by the FSC and Mainland China's regulatory commissions on 16 November 2009 and entered into force on 16 January 2010. Moreover, on 16 March 2010, the FSC amended three regulations governing permission of companies conducting banking, insurance, and securities and futures business to engage in cross-strait commerce and investment activities. Since then, cross-strait financial interactions have progressed further, including: (1) the financial services industry early harvest provisions of the Cross-Straits Economic Cooperation Framework Agreement (ECFA) became effective on 1 January 2011, which offered domestic financial institutions favorable conditions when entering Mainland Chinese financial market; and (2) the FSC issued the Regulatory Principles for Investments in Mainland China's Enterprises by Banks, Financial Holding Companies and Their Affiliated Enterprises, which permits and assists domestic banks and financial holding companies to establish a business presence in Mainland China under the principles of prudent and gradual relaxation of investment restrictions.

Since 2010, Taiwan's financial institutions have been actively setting up branches and taking equity stakes in Mainland China's financial institutions, and Mainland China's financial institutions also have started to establish representative offices in Taiwan. To maintain domestic financial stability and economic soundness, when expanding business in Mainland China, Taiwan's financial institutions have to comply with exposure limits ordered by the FSC and, at the same time, uphold prudential controls toward the business risks that might emerge from accessing the Mainland China market.

The financial services industry early harvest provisions of the ECFA came into effect

The final agreement of the ECFA was signed during the 5th round of the Straits Exchange Foundation (SEF) and the Association for Relations Across the Taiwan Straits (ARATS) talks on 29 June 2010 and was approved by the Legislative Yuan on 17 August 2010. Furthermore, the financial services industry early harvest provisions of the ECFA took effect on 1 January 2011 and provide advantageous conditions for domestic institutions to set up branches in Mainland China and offer better financial services to Taiwanese firms there.

Table 4.4 Financial services industry early harvest provisions of the ECFA

Items	Financial Sectors	Specific Commitments
Commitments of the Taiwan side on liberalization of financial services sector	Banking and other financial services (excluding securities, futures and insurance)	The banks in Mainland China which have been permitted to incorporate representative offices in Taiwan and whose representative offices have so incorporated for one full year may apply for incorporation of branches in Taiwan.
Commitments of the Mainland China side on liberalization of financial services sector	Banking and related services	<ol style="list-style-type: none"> 1. For Taiwan's banks to set up wholly owned banks or branches (not branches affiliated to a wholly owned bank) in the Mainland China with reference to the Regulation on Administration of Foreign-funded Banks, they shall have representative offices in Mainland China for more than one year before application. 2. For the operating branches of Taiwan's banks in Mainland China to apply to conduct RMB business, they shall have been operating in Mainland China for more than two years and been profitable in the preceding year before application. 3. For the operating branches of Taiwan's banks in Mainland China to apply to conduct RMB business for Taiwan's corporations in Mainland China, they shall have been operating in Mainland China for more than one year and been profitable in the preceding year. 4. The operating branches of Taiwan's banks in Mainland China may set up special agencies providing financial services to small businesses, the specific requirements of which shall follow the relevant rules in Mainland China. 5. Fast tracks shall be established for Taiwan's banks applying to set up branches (not branches affiliated to wholly owned banks) in central and western, as well as northeastern regions of Mainland China. 6. In conducting profitability assessment on the branches of Taiwan's banks in Mainland China, the relevant authorities shall take into account the overall performance of the Taiwanese bank under assessment.
	Insurance and related services	Groups formed by Taiwan's insurance companies through integration or strategic mergers shall be allowed to apply for entry into Mainland China's insurance market with reference

		to market access conditions for foreign-funded insurance companies: (1) total assets held by the group of over US\$5 billion; (2) Taiwanese insurance companies in the group, any of which has been established for more than 30 years; and (3) a representative office established in Mainland China for over two years by any one of the group.
	Securities, futures and related services	<ol style="list-style-type: none"> 1. Proper facility shall be provided to qualified Taiwan-funded financial institutions applying for qualification of Qualified Foreign Institutional Investor (QFII) in Mainland China. 2. Taiwan's Stock Exchanges and Futures Exchanges shall be included as soon as possible in the list of overseas exchanges recognized by Mainland China for qualified domestic institutional investors (QDII) to invest in financial derivatives; and 3. Relevant procedures shall be simplified for Taiwan's securities practitioners applying for and obtaining qualifications and certificates of practice in Mainland China.

Source: ECFA website.

Regulatory principles for the banking industry to invest in Mainland China

In order to help the domestic banking industry accelerate their moves to establish a presence in Mainland China and provide their customers with a more complete range of financial services, the FSC promulgated in December 2010, and amended in March 2011, the Regulatory Principles for Investments in Mainland China Enterprises by Banks, Financial Holding Companies, and Their Affiliated Enterprises.⁸² Its important contents include the following:

- Establishing restrictions on the types and numbers of investee firms and the investment amount, which are summarized in Table 4.5.
- Stipulating caps on the total investment amounts by banking industry in Mainland China:
 - When banks or their overseas banking subsidiaries enter the Mainland China market by establishing branches or subsidiary banks or taking equity stakes in Mainland China's banks, or subsidiaries more than 50% owned by any bank investing in Mainland China, the total of the investment and cumulative appropriation of operating capital in Mainland China shall not exceed 15% of the bank's net worth at the time of application.

⁸² To ease the limit, the FSC amended the Principles on 16 March 2011. Key points of the amendments include the following: (1) a provision that limited investment to only one financial services firm in Mainland China was repealed; (2) banks and financial holding companies are required to work with subsidiaries that invest in Mainland China to ensure that they establish a risk management mechanism for the financial services firms in which they invest, that such risk exposures be incorporated into the figures for total risk exposures of the bank or financial holding company, and that such mechanisms be reported to the board of directors of the bank or financial holding company for approval; and (3) at the time of application, the applicant must submit documentation on its risk management mechanism and the corporate group's method for controlling total risk exposure to Mainland China.

- The total investment amounts in Mainland China held by financial holding companies and their affiliates may not exceed 10% of the net worth of financial holding companies at the time of application.

Table 4.5 Summary of the regulatory principles for investments in Mainland China's enterprises by the banking industry

Investor	Investee firms	Investment restrictions
Financial holding companies, banks and overseas subsidiaries	Financial institutions	1. Limited to only one institution. 2. Subsidiaries that are more than 50% owned by banks or affiliates of financial holding companies, unless in accordance with relevant laws, are forbidden from investing in financial institutions in Mainland China.
Subsidiaries 100% owned by banks or financial holding companies	Financial leasing companies and other finance-related industries (except for financial institutions) that have been approved	1. Not limited to one financial services firm. 2. Shareholding ratio should be no less than 25% of the total voting shares of the investee firm.
Subsidiaries 100% owned by industrial banks	Venture capital, financial leasing companies and other finance-related industries (except for financial institutions) that have been approved	1. Not limited to one financial services firm. 2. Shareholding ratio should be no less than 25% of the total voting shares of the investee firm.
Subsidiaries with more than 50% of their shares owned by a bank	Other industries	Shareholding ratio should be no more than 5% of the total paid-in capital or issued stock of the investee firm.
Subsidiaries of financial holding companies	Other industries	Shareholding ratio should be no more than 15% of the total paid-in capital or issued stock of the investee firm.

Source: FSC.

Cross-Strait interaction of financial institutions

After the signing and implementation of the ECFA and the newly-issued regulations governing business and investment activities between Taiwan and Mainland China, several domestic financial institutions have already established branches in Mainland China or taken equity stakes in Mainland China's financial institutions, and four Mainland China's banks have set up representative offices in Taiwan (Table 4.6). The two-way interaction across the Taiwan Strait is entering a new stage.

Table 4.6 Cross-Strait interaction of financial institutions

Financial Sectors	Taiwan's financial institutions	Mainland China's financial institutions
Banking	<ol style="list-style-type: none"> 1. Nine banks were approved by the FSC to establish branches in Mainland China. Six of them have commenced business already, while the other three are applying for the approval of Mainland China's authorities. 2. Six banks have set up representative offices in Mainland China. 	Four banks were approved by the FSC to establish representative offices in Taiwan.
Insurance	Seven insurance companies were approved by the FSC to take equity stakes in Mainland China's insurance companies, while five of them have already obtained equity stakes.	
Securities and futures	<ol style="list-style-type: none"> 1. Thirteen firms have set up 28 representative offices in Mainland China. 2. Two securities investment trust companies were approved by the FSC to establish branches in the Mainland China, and one was approved to create a joint venture with a Mainland China's securities company. 3. Seven securities investment trust companies applied to Mainland China's authority for qualified QFII status. Three of them have gotten approval, and one of the three has further gotten official approval of investment quota. 	Eleven firms approved by Mainland China's authorities have registered as qualified domestic institutional investors (QDII) to invest in Taiwan.

Note: Data are until 22 March 2011.

Source: FSC.

4.3.5 Taiwan's Financial Industry should be well prepared to adopt the upcoming IFRS 9

On 14 May 2009, the FSC announced the full adoption of the International Financial Reporting Standards (IFRS) via a two-phase process⁸³ starting from the beginning of 2013. Some standards including IFRS 9 "Financial Instruments," IAS 19 "Employee Benefits," IAS 40 "Investment Property" and IAS 1 "Presentation of Financial Statements" will have

⁸³ In phase I, listed companies and financial institutions supervised by the FSC, except for credit cooperatives, credit card companies, and insurance intermediaries, will be required to adopt the IFRS starting from 2013, with optional early adoption starting from 2012 when approved by the FSC. In phase II, unlisted public companies, credit cooperatives and credit card companies will be required to adopt the IFRS starting from 2015, with optional early adoption starting from 2013.

significant influences on Taiwan's financial industry. Among them, the impact of the IFRS 9 will be the most critical.

On 12 November 2009, the IASB published the IFRS 9. Its implementation will be divided into three phases. The first phase, with regard to new standards for classification and measurement of financial assets and financial liabilities, as well as derecognition of financial instruments, is finalized and will be effective from 1 January 2013. The second phase for impairment of financial assets measured at amortized cost and the third phase for hedge accounting are still in the draft stage and are expected to be finalized in the third quarter of 2011. As Taiwan's financial industries will adopt the IFRS 9 in the future, its impacts will not only be on finance and accounting, information systems, remuneration practices, investor relationships, taxation, regulations and other legal matters, but also on financial conditions, profitability and capital charges of financial institutions. In particular, the impacts of the second phase, switching from the current "incurred loss model" to the "expected loss model," will be most significant. Therefore, financial institutions shall be well-advised to prepare early and evaluate the potential impacts so as to develop effective measures in response to the implementation of the IFRS 9 (Box 7).

Box 6**Measures in response to the exit of the blanket deposit insurance scheme**

When the global financial crisis erupted in 2008, numerous countries expanded their deposit insurance coverage in order to diminish potential systemic risks. The Taiwanese government also announced a temporary measure of a blanket deposit guarantee in October 2008, which was effective until the end of 2009. This measure effectively restored the confidence of depositors and stabilized the local financial system. However, considering the prolonged instability of the global and local economies and financial systems in 2009 and the extensions of the blanket deposit guarantee schemes adopted by various neighboring Asian countries, the government announced in October 2009 an extension of the blanket deposit guarantee to the end of 2010.

To ensure the stability of the financial system when exiting from the blanket deposit guarantee scheme, the related authorities reached, after deliberate discussions, an agreement that the FSC was responsible for working out and implementing exit strategies, and that the CBC and the CDIC would take preventive measures to eliminate any potential emergent liquidity problems of financial institutions and to enhance public awareness of the exit of the blanket deposit guarantee.

1. Measures adopted by the FSC

The FSC devised and implemented the exit strategy of the blanket deposit guarantee scheme as follows:

- The FSC established a supervisory working group, with members from the FSC, the CBC, the MOF, the CDIC and related authorities, in July 2010 to periodically review the progress of the exit strategy implementation and to monitor the asset quality, liquidity and changes in the deposits and loans outstanding of individual banks.
- The CDIC proposed a package of measures to address the potential impacts of the exit of the blanket deposit insurance scheme in April 2010, which was reviewed by the related authorities and was approved by the Executive Yuan. Moreover, on 12 August 2010, the FSC, the MOF and the CBC jointly announced that the maximum deposit insurance coverage amount would be raised to NT\$3 million starting from 1 January 2011. This policy resulted in an increase in the ratio of deposit accounts fully covered by deposit insurance to 98.6%.
- The FSC approved the Revised Implementation Scheme for the Deposit Insurance Risk-based Premium System on 24 November 2010, which raised the deposit insurance premium rates for insured banks and credit cooperatives and modified the risk grades,

in order to accelerate the accumulation of deposit insurance funds and to enhance the risk bearing capability of the CDIC.

- After consulting with the CBC and related authorities, the FSC proposed the revision of the Deposit Insurance Act to cover the interest of domestic currency deposits as well as the principal and interest of foreign exchange deposits in the scope of the deposit insurance scheme. This proposal was finalized and became effective on 29 December 2010.

2. Measures adopted by the CBC

The CBC was mainly in charge of the emergency liquidity assistance program of the exit strategy and actively participated in the aforementioned supervisory working group. Key measures adopted by the CBC are summarized as follows:

- Closely monitored the potential deposit movements induced by the exit of the blanket deposit insurance scheme within the banking industry, as well as actively oversaw the liquidity of banks and bills finance companies and provided the banking industry with sufficient liquidity, according to the Central Bank of the Republic of China (Taiwan) Act, so as to maintain financial stability.
- Required banks to report the ratios of the sum of large-amount deposits to total deposits in May 2010 in order to analyze the potential impact of the prospective movements of large-amount deposits within the banking industry.

Furthermore, on 25 September 2008, the CBC announced expansion of the scope of Repo facility operations, which included the expansion of eligible counterparties to cover securities firms and insurance companies, the extension of the term of the facility to within 180 days from 30 days, and the allowance of financial institutions to apply for the CBC's approval for Repo facility operations if they have emergent funding demands, in addition to the operations announced by the CBC.

3. Measures adopted by the CDIC

To ensure the smooth transition from the blanket coverage to the new limited insurance scheme, the CDIC held several local and international seminars in 2010 to call public attention to the reform of the deposit insurance scheme and to remind insured banks to enhance liquidity management improve business risk control and hold adequate capital.

In addition, starting from August 2010, the CDIC strengthened public awareness through mass media, posters in banks' premises and seminars on the exit of the blanket deposit guarantee and the introduction of the new limited deposit insurance scheme.

Box 7**Impacts of the IFRS 9 on Taiwan's financial industry and necessary measures*****1. Main content of the International Financial Reporting Standards (IFRS) 9***

On 12 November 2009, the International Accounting Standards Board (IASB) issued the IFRS 9 “Financial Instruments.” The implementation of this standard is divided into three main phases and will replace IAS 39, referring to Taiwan’s SFAS 34 “Financial Instruments: Recognition and Measurement.” The first phase, covering the new standards for classification and measurement of financial assets, financial liabilities and derecognition of financial instruments, is finalized and will be effective from 1 January 2013. The second phase for impairment of financial assets measured at amortized cost and the third phase for hedge accounting are still in the draft stage and are expected to be finalized in the third quarter of 2011. This box introduces the contents of the first and second phases that will have significant impacts on financial institutions and lists the main differences between the IFRS 9 and Taiwan’s SFAS 34 in Table B7.1.

1.1 The first phase: classification and measurement of financial assets

The IFRS 9 divides financial assets into two classifications, those measured at amortized cost and those measured at fair value. It is quite different from the accounting treatment in Taiwan’s SFAS 34, which breaks down all financial assets into five different classifications. If satisfying both the “business model” test and the “contractual cash flow characteristics” test¹ at initial recognition, a financial instrument must be measured at amortized cost and assess impairment losses subsequently. Otherwise, it must be measured at fair value. In addition, if a hybrid contract contains a host that is within the scope of the IFRS 9, embedded derivatives will no longer be separated from the host contract. Instead, the entire hybrid contract is assessed and measured as a whole at amortized cost or at fair value.

1.2 The second phase: exposure draft for impairment of financial assets measured at amortized cost

From January 2011, the banking sector in Taiwan has recognized impairment losses using the “incurred loss model” stated in the third amendment to Taiwan’s SFAS 34. When there is any objective evidence of impairment for financial assets, banks need to determine whether any impairment losses should be recognized and set provisions.² This approach is the same as IAS 39.

Under the incurred loss model, impairment losses are recognized only when there is objective evidence of impairment or a loss event. However, it is criticized in the regard that interest revenue is overstated in the periods before a loss event occurs and an impairment allowance is recognized too little and too late under this model. Addressing this, the IASB issued the exposure draft “Financial Instruments: Amortized Cost and Impairment” (the original edition) on 5 November 2009, which proposed an expected loss model for financial assets measured at amortized cost and considered initial expected credit losses as part of effective interest rate determinants. However, the expected loss model proposed in the original was considered too complicated and was not easy to implement. Hence, the IASB and the FASB jointly published a supplement to the IASB’s original edition on 31 January 2011, which improves the impairment accounting for financial assets managed in an open portfolio, such as bank loans. This supplement retains the fundamental concept of expected credit losses proposed in the original but excludes expected credit losses from the determinants of the effective interest rate, the same as IAS 39. This revised draft is expected to be finalized in the third quarter of 2011.

Table B7.1 The main differences between the IFRS 9 and Taiwan’s SFAS 34

Items	Taiwan’s SFAS 34	IFRS 9
Classification of financial assets	Five classifications: 1. Fair value through profit or loss 2. Available-for-sale 3. Loan and receivable 4. Held-to-maturity 5. Cost less impairment	Two classifications: 1. Fair value through profit or loss 2. Amortized cost
Impairment of financial assets	Incurred loss model	Expected loss model
Unquoted equity instruments	Measured at cost	Measured at fair value
Hybrid instruments	Need to judge if embedded derivatives are closely related to the host financial asset.	If a hybrid contract contains a host that is within the scope of the IFRS 9, embedded derivatives will no longer be separated from the host contract. Instead, the hybrid contract is assessed as a whole.
Reclassifications	Allowed to reclassify assets under several circumstances.	Allowed to reclassify assets only when an entity changes its business model.

Source: CBC.

2. Impacts of the IFRS 9 on the financial industry in Taiwan

The IFRS 9 significantly changes the classification of financial assets. It is expected to have significant impacts on the financial industry, including: (1) how to implement the

two aforementioned tests to determine whether financial assets are measured at amortized cost or not; (2) how to establish the fair value model for unquoted equity instruments which used to be measured at cost under IAS 39; and (3) what the impacts of new classification of financial assets on capital adequacy will be.

As for the expected loss model of the second phase, it is quite different from the current incurred loss model and requires significant changes of finance systems by enterprises. Especially for financial institutions, the implementation cost will be significant and a transition period for implementation will be needed. Therefore, financial institutions may face the following challenges and impacts, including: (1) how to develop a system to estimate future cash flows and credit losses over the life of a financial asset or group of financial assets; (2) how to collect or obtain historical loss data or credit rating information for assets with similar credit risk characteristics; and (3) how to interact with regulatory requirements, especially Basel III capital requirements.

3. Necessary measures for financial institutions

The conversion to the IFRS will substantially impact not only finance and accounting, but also information systems, remuneration practices, investor relationships, as well as taxation, regulations and other legal matters. For the financial industry, the first significant impact is on information systems. In order to reduce the modifying cost for information systems, all departments within a financial institution should take enough time to adopt user acceptance tests before the new information system is in place. Secondly, though the IFRS 9 simplified the classification of financial assets, it will require more judgments when it is applied. Hence, all related departments within a financial institution should review the types of financial assets they hold and classify them according to the new classification models. Moreover, the IFRS is very different from the current accounting treatment in Taiwan and is expected to impact the financial positions, incomes and capital charges of financial institutions. Financial institutions should prepare early by evaluating the potential impacts, developing effective responsive measures and communicating with senior managers and investors in order to mitigate potential impacts.

Notes: 1. If the objective of the entity's business model is to hold the financial asset to collect the contractual cash flows, rather than to sell the instrument prior to its contractual maturity to realize its fair value changes, it satisfies the "business model" test. If the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, it satisfies the "contractual cash flow characteristics" test.

2. In accordance with current provision regulations, banks were required to break down all assets into five categories and set aside provisions with different reserve ratios of 0.5%, 2%, 10%, 50% and 100%, respectively. Although the banking sector adopted the “incurred loss model” to recognize impairment allowances from January 2011, the supervisory requirement is still effective as a minimum regulatory standard.