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Challenges and Opportunities of the Credit Union

Movements in China, Hong Kong and Taiwan

Che-cheong Poon

February 2012

經濟及金融學系

Working Paper Series

Department of Economics and Finance

Hong Kong Shue Yan University

Working Paper Series
February 2012

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ISBN: 978-988-18445-3-8
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Dr. Shu-kam Lee
Working Paper Coordinator
Department of Economics and Finance
Hong Kong Shue Yan University
10 Wai Tsui Crescent
Braemar Hill Road
North Point
Hong Kong
Fax: 2806-8044
Tel: 2806-5121 (Mr. Jeffery Chan)
Email: sklee@hksyu.edu

Challenges and Opportunities of the Credit Union Movements in China, Hong Kong and Taiwan

Abstract

Recently, microfinance has become one of the most important mechanisms for providing financial services to low income households, and credit unions have been considered to be the major microfinance institutions in many developed as well as developing economies. This paper will seek to identify and explain the characteristics of the credit union industry in China, Taiwan, and Hong Kong. It begins by providing an historical account of the Chinese low income households' credit needs and their alternative means of weathering financial crises, the objective of this section is to capture the evolutionary features of the informal financial system in the Chinese economy. Sections 2 to 4 will discuss the credit union industry in China, Taiwan, and Hong Kong respectively, the focus of the discussions is on the supply and demand for microcredit. The final section will be devoted to the analysis of the common and distinct features of the credit union industry of these three economies after the recent global financial, and recommend ways to develop a comprehensive microfinance system suitable for Chinese people in the hope to reduce poverty and promote employment.

1 Introduction

Ever since the emergence of the money economy, a great variety of financing methods have been devised to enable money to flow from savers to dis-savers in order to enhance their economic benefits. In the Chinese community, there are three types of financing methods. The first is self-financing that refers to the use of current income and accumulated savings to meet some periodic consumption expenditure or to acquire working capital for small businesses. Then there is internal financing which refers to borrowing from relatives and friends to finance consumption over spells of economic difficulties or to capture good investment opportunities. Finally, there is external financing which some people use when they wish to raise large amounts of money to

finance huge business projects. In such cases people may borrow from commercial banks, or issue stock certificates or bonds on the market. Low-income people must use up all of their current income and, have no margin of savings to improve their methods of production, so self-financing is not an option for them, and external financing is also not available to them since they cannot get access to the financial markets. They could obtain credit from external suppliers, such as pawnshops and money lenders, but such sources are not included in this analysis because they are not financial intermediaries.

Turvey, Kong & Huo (2010) pointed out that informal lending among friends and relatives was a popular financing method in China's agricultural communities. A comprehensive survey of the credit needs of villages in China conducted by Zhao (2011, pp 83-87) shows that a large number of informal loans were arranged to finance personal consumption. These were mostly derived from relatives and friends, were interest-free, did not require collateral interest and had open-ended repayment arrangements. However, when a larger sum of money is needed, it is difficult to borrow from one individual and to repay the loan in a short time. Thus various types of loan societies, which are groups of people organised for collective saving and lending, were formed to meet these needs, in a mutually supportive way.

According to Fei (1939, pp267-274) and Mok & Wu (1972), Yao Hui (or Yi Hui)¹ was a traditional Chinese money-lending society. Its modern variants have been named variously as Piao Hui (in Singapore), Chin Hui or Chit Fund (in Hong Kong), and He Hui or mutual help society (in Taiwan). Such a society (Hui) is organised on the initiative of the person who needs financial help in cases such as unexpected expenditures for a funeral, a wedding or family sickness. The members meet several times a year. At these meetings, each participant subscribes a share. The total subscriptions by the members are collected by one of the members who can use the money to finance the activities for which the finance is required. The members take it in turn to collect the sum. The first collector is the organiser, and from the very beginning, he is a debtor to the society. He repays his loan bit by bit during the whole course of the loan period, plus a certain amount of interest. The last collector is only a depositor. At the end of the loan period he collects the sum of his deposit and the interest it has earned. The members switch from being depositors to debtors as their turn comes to collect the sum. The order of collection is determined either by contract, by lot or by auction. Over time, the Hui evolved, so that most of the members in the Hui were perfect strangers who joined in mainly to earn interest or to borrow money rather than to help relatives and friends. The

¹ Hui means club or society. In this paper it refers to money-loan society.

Hui was very popular in China (before the establishment of the PRC in 1949), Taiwan, Hong Kong and Southeast Asia in the last century. For instance, there were thousands of members in a single Hui in 1970 in Hong Kong.

As the membership and loan amounts increased, there was a tendency for more and more Hui members to use the borrowed funds to finance risky ventures or financial speculation, and this resulted in an increasing number of cases of loan delinquency and default. Since the Hui had become too commercial and were no longer simply a platform for providing loans to poor people who needed the money to meet some urgent expense, and also because the frequency of Hui insolvency had increased tremendously, Hong Kong and Taiwan introduced some restrictions on the expansion of Hui in 1972 (Chit-Fund Businesses ((Prohibition)) Ordinance, 1972) and 2000 (Civil Law of ROC 2000) respectively to protect the Hui members. As a result, the Hui business has been declining since then.

However, the decline in the Chinese money-loan societies (Hui) provided an opportunity for the development of credit unions since the late 1960s in Hong Kong and Taiwan, and eventually the credit union movement extended to China in the 1980s. Croteau (1963, p.164) pointed out that the individual household faces a monopolistic or imperfect financial market. It has little or no bargaining power, and it receives only the going interest rate for its savings. The market for instalment loans is still disorganised and characterised by high interest charges that are often concealed and unclear. Thus there is a strong incentive for households to unite in a credit union. Jack Dublin in his book (1971, p.9), *Credit Unions: theory and practice*, gave the following definition: A credit union is a cooperative, designed to provide its members with an efficient, inexpensive saving-and-loan service. This definition has provided a clear description of the essence of credit unions. More specifically, credit unions differ from the traditional commercial banks in four ways. (1) A different purpose: The primary purpose of credit unions is to meet the common needs of their members, whereas that of banks is to maximise shareholders' profit; (2) A different control structure: Credit unions use the one-member-one-vote system, not the one-vote-per-share system used by banks. This helps the credit union to serve the common need rather than the individual need, and is a way to ensure that people, not capital, control the organisation; (3) A different allocation of profit: Credit unions share any profits among their member-owners on the basis of how much they use the credit union services, and not on how many shares they hold as is the case in banks. Credit unions also tend to invest their profits in improving their service to members and promoting the well-being of their communities; and (4) A different remuneration

system: Unlike the directors of banks who are entitled to director's fees, interest and remuneration, credit union directors are not allowed by law to receive any remuneration from the credit union. Although many different names for and forms of credit union are used in different parts of the world, credit unions do share the common principle of people helping people.

Beginning in Germany with Schulze-Delitzsch and Raiffeisen in the mid-nineteenth century, the credit union movement then spread to other parts of Europe, to Canada in 1901, to the United States in 1908, and then to Australia in 1946. Following World War II, credit unions were developed in many parts of the world. The credit union idea had spread to Asia already in 1938. It started first in the Philippines and then gradually spread to other Asian countries, including Hong Kong and Taiwan. Led by the Catholic Jesuit Society, the credit union movement in Hong Kong and Taiwan started to develop after the conference hosted by the Committee for the Development of Socio-economic Life in Asia (SELA) which was held in Bangkok in May 1963. Since then, the credit union concept has been quickly accepted among the middle and lower income groups. Forty-six years after the establishment of the first credit union in Hong Kong (the St. Francis Credit Union) and Taiwan (the Sacred Heart Credit Union) in 1964, there were 44 credit unions with 74,086 members in Hong Kong and 336 credit unions (in 15 Chapters²) with 203,767 members in Taiwan in 2010.

Recently microfinance has become one of the most important mechanisms for providing financial services to low income households, and credit unions have been considered to be the major microfinance institutions in many developed as well as developing economies. In this paper, efforts are made to identify and explain the characteristics of the credit union industry in China, Hong Kong and Taiwan. Since the credit union movement in China is in its nascent stage, the first step will be to look at the current situation of the launching and introduction of credit unions there. The succeeding sections will discuss the credit union industry in Hong Kong and Taiwan focusing on a discussion of the supply and demand for microcredit during different phases of the business cycle in order to identify the common and particular features of the credit union industry in these two economies after the Asian financial crisis³. Recommendations will then be presented on ways to develop a comprehensive microfinance system suitable for Chinese people in the hope of contributing to the reduction of poverty and the promotion of employment.

² Chapter is a Credit Union jargon referring to a group of credit unions in a specific geographical area.

³ The East Asian Financial Crisis (or Currency Turmoil) started in Thailand with the collapse of the Thai baht in July 1997 and quickly spread to the rest of the region in 1998.

2 The Credit union movement in China

In 1923 a new credit institution, the rural credit co-operative (RCC), appeared in north China, and by 1933 there were 952 co-operatives in Hopei with 23,753 members. These loaned around 90,000 yuan to their members to buy capital goods and repair homes (Myers 1970, p245). This cooperative credit system was not an organisation run by the villagers themselves but a means for them to borrow money from the national bank at low interest rates (Fei 1939, pp 280). Although it was a well-intentioned measure by the government to stabilise rural finance through a cooperative credit system, it failed to yield the expected results because the government was unable to afford the credit required, and because of the mal-administration of the system. Shortly after the establishment of the People's Republic of China (PRC) in 1949, rural credit co-operatives (RCCs) were introduced in 1951 and developed very quickly (Zhao 2011, p.11), According to the China Statistical Information and Consultancy Centre (1990), by 1955 rural credit co-operatives had been set up in almost all townships in China , with a total number of more than 150,000 throughout the country, and RMB160 million in paid-up shares, RMB200 million in savings deposits and RMB190 million in loans. Thus, in addition to combating usury in the countryside and promoting financial stability, rural credit co-operatives have been the core of the rural financial system since then except for the episode of the people's commune movement in 1958 during which rural credit unions were merged with the township-level branches of the Agricultural Bank and were placed under the jurisdiction of the commune. The rural credit unions underwent a major reform 38 years later, in 1996, to separate them from the Agricultural Bank, and to restore their status as independent cooperative financial institutions.

On the other hand, the urban credit co-operatives were started later than their rural counterparts. After the establishment of the first urban credit co-operatives in Zhumadian City of Henan Province in 1979, urban credit unions developed as a new form of financial institution and experienced fast growth in the 1980s and early 1990s. In contrast to the 1996 rural credit unions reform, which aimed at restoring the cooperative nature of the rural credit unions, the 1995 restructuring of the urban credit unions was intended to reform them as commercial banks. In 2000, according to Zuo (2001), the People's Bank of China ordered all urban credit unions to choose between three alternatives: to be acquired by the city's commercial banks, to be acquired by joint equity commercial banks, or to merge with rural credit unions. In effect, this would leave no room for the

existence of cooperative financial institutions in urban areas. Table 1 shows clearly the effect of the replacement of urban credit co-operatives by city commercial banks and the low profitability of rural credit co-operatives compared to other financial institutions in China.

Table 1. Total assets and profitability of selected financial institutions in China

	Financial institution	2007	2010
Total assets (RMB100million)	All Banking Institutions ⁴	531,160	953,053
	City Commercial Banks	33,405	78,526
	Urban Credit Co-operatives	1,312	22
	Rural Credit Co-operatives	43,434	63,911
Profit after tax (A) (RMB100million)	All Banking Institutions	4,467.3	8990.9
	City Commercial Banks	248.1	769.8
	Urban Credit Co-operatives	7.7	0.1
	Rural Credit Co-operatives	193.4	232.9
Total owners' equity (B) (RMB100million)	All Banking Institutions	30,396	58,322
	City Commercial Banks	1,883	4,822
	Urban Credit Co-operatives	64	2
	Rural Credit Co-operatives	1,867	2,793
Profitability = (A/B)×100%	All Banking Institutions	14.7%	15.4%
	City Commercial Banks	13.2%	16.0%
	Urban Credit Co-operatives	12.0%	5%
	Rural Credit Co-operatives	10.4%	8.3%

Sources: Calculated from China Banking Regulatory Commission Annual Report 2010 PP152, 154, and 156.

In addition to the traditional credit co-operatives, the government in 2007 with the hope of promoting micro-financial services in the rural sector established a new system called rural mutual co-operatives (RMC). “The Interim Provisions on the Administration of Rural Mutual Co-operatives “ which was enacted in January 2007 defines a rural mutual co-operative as a community-based mutual banking financial institution which is jointly funded by the farmers of a township (town), administrative village, and small rural enterprises. It was also stipulated that a rural mutual co-operative must be managed in a democratic manner by its members, with the aim of providing services to them and help in areas of common interest to them. According to the “Notice

⁴ Banking institutions included Policy banks & the CDB, large commercial banks, joint-stock commercial banks, city commercial banks, rural commercial banks, rural co-operative banks, urban credit co-operatives, rural credit cooperatives, non-bank financial institutions, foreign banks, and new-type rural financial institutions & postal savings banks.

on the Implementation of the General Working Plan for New-Type Rural Financial Institutions (2009-2011)”, issued on July 23, 2009, the China Banking Regulatory Commission CBRC planned to establish 161 rural mutual cooperatives within 3 years. However, only 37 rural mutual co-operatives were in place by the end of 2010, and it would seem to be very difficult to achieve the target of 161. The unsatisfactory outcome of this initiative may be mainly due to the deviation from the co-operative philosophy of “not for profit, not for charity, but for service” and a shortage of trained personnel. Although rural credit co-operatives, urban credit co-operatives, and the rural mutual co-operatives have all been providing credit services to those who did not have a bank account, they are not genuine credit unions. It was not until the late 1980s that the China Association for NGO Co-operation⁵, with help from the Credit Union League of Hong Kong, established China’s first genuine credit union in a village of Linyi in the southeast of Shandong province.

The World Council of Credit Unions (WOCCU) started a special project that launched the credit union movement of China in 1983. The National Credit Union Federation of Korea, the Credit Union League of the Republic of China, the Credit Union League of Hong Kong and the Singapore Credit Co-operative League have borne the weight of promoting the credit union movement in China. Because of the proximity of these promoters, credit unions have made the most progress in some North Eastern Provinces, such as Heilongjiang, Shandong, Lijiang, Fujian and Hainan. According to Edmonson (1995), China at that time had been the most difficult country for the WOCCU to start credit unions in. The main obstacles encountered were language, culture, geography, government opposition and shortage of money. Because the central government had not endorsed credit unions, the promotional work was done at the local level. In spite of these difficulties, however, the promotion has gradually been extended to other Provinces such as Guizhou, Yunan , Shanxi and. Guangdong.

Among the various issues related to the sannong problems⁶, rural finance is vitally important. Since the late 1990s, the policy environment for the development of rural microfinancing has become more and more relaxed, and the Chinese government’s promotion of the new-types of rural financial institutions, including village or township banks, lending companies and rural mutual co-operatives, are laying down good foundations for the development of credit unions. Numerous

⁵ The China Association for NGO Co-operation (CANGO) is a non-profit membership organization operating nationwide. CANGO was founded in 1992 and registered with the Ministry of Civil Affairs in 1993.

⁶ The sannong problems or the three agricultural problems refer to the problems of peasantry, rural areas and agriculture in China.

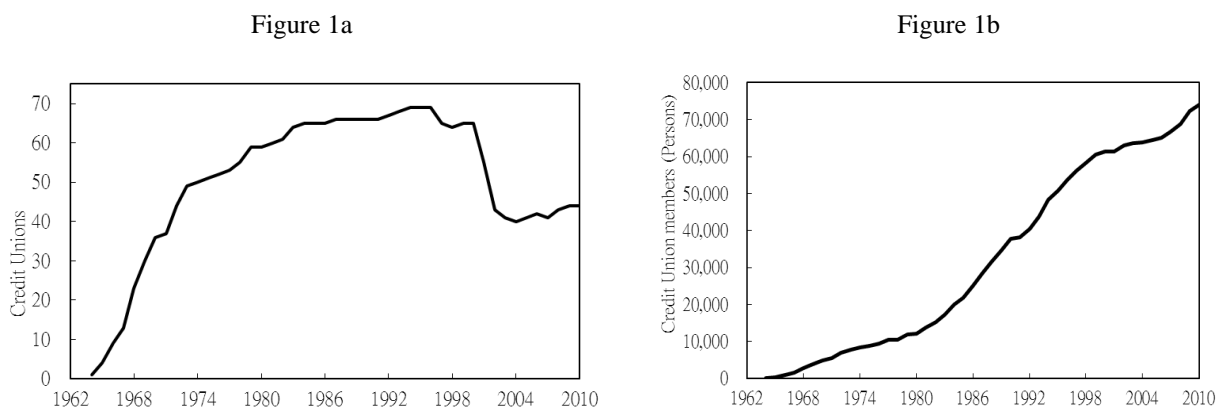
efforts have been made over the past two decades by WOCCU and the Association of Asian Confederations of Credit Unions (ACCU) in this respect, and eventually the Chinese government established a legal framework to allow for the existence of credit unions at the end of 2006. In addition, the launch and introduction of the Credit Union Microfinance Innovation (CUMI) Training Manual was organised by the Center for International Business Ethics, the ACCU, and the China Credit Research Center of Peking University on July 21, 2010 to promote the credit union purposes and values (So, 2011), and this made a significant contribution to the credit union movement in China. Judging from the strong desire of the Chinese government to establish a self-help microfinance system, including rejuvenating the credit co-operatives, to address the poverty alleviation issue on the one hand, and the desire of the WOCCU and ACCU to include China in their lists of member countries on the other, we have good reasons to expect a substantial development of credit unions in China.

3 Development of the credit union industry in Hong Kong and Taiwan

As mentioned earlier in Section 1, the Catholic Jesuit Society introduced the credit union movement to Hong Kong and Taiwan in 1963. In Hong Kong, the first credit union, the St Francis Credit Union, was established in 1964. The Credit Unions Ordinance of 1968 was passed on 6 November, but did not come into effect until 22 February 1970 with the appointment of the first Registrar of Credit Unions. In practice, the Registrar has been the Director of the Agriculture and Fisheries Department who also supervised many other co-operative societies. As stated in the Registrar General's annual report (1985-86) that it was government policy to consolidate the present development of cooperative and credit union movements as instruments to improve the economic and social condition of the community.

Figure 1a tracks the credit union movement in Hong Kong since 1964. The pilot period from 1964, when the first credit union was formed, to the end of 1968 when the credit union law was introduced can be considered the first stage of the movement. The second stage was the take-off period from 1969 to 1973, due mainly to the enactment of the Credit Union Ordinance and the realisation of the need for thrift and credit services among the middle and lower income groups. The period from 1974 onwards was the third stage, characterised by a significant drop in the number of credit unions because some of them were wound up or merged.

Figure 1 Time plot of the number of credit unions and credit union members in Hong Kong: 1964-2010



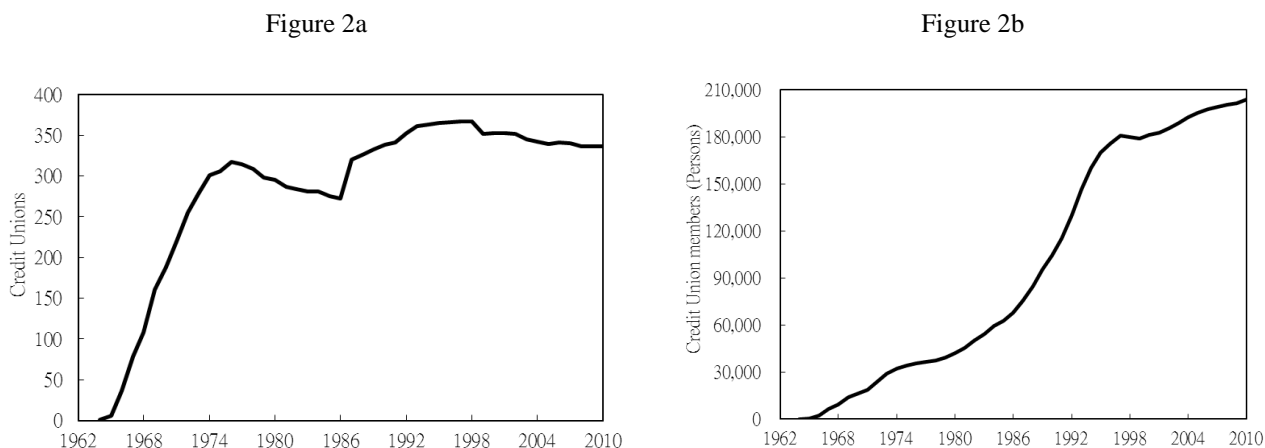
Sources: 1964-1970 data were extracted from Hong Kong Annual Report 1968-70 and unpublished records held in the CULHK; 1971-1987 data were extracted from Hong Kong Agriculture, Fisheries and Conservation Department Annual Reports; 1987-2010 data were extracted from the CULHK Annual Reports.

Over the last 40 years since the Credit Union Ordinance was enacted in 1970, with the advocacy of credit union leaders and full support from credit union members in Hong Kong, the total membership of the 41 credit unions climbed from 5,486 at the end of March 1971, with a penetration rate of 0.34 per cent and total savings of HK\$863,550, to a total membership of 65,024 in the 44 credit unions at the end of 2010, with total savings of HK\$6,726,372,575, which represents an average annual rate of change of 25.83 per cent.

In Taiwan, the first credit union, the Sacred Heart Credit Union, was also established in 1964. At that time there were only 63 members with total savings of NT\$24,005. In 2010, the credit union industry had 15 Chapters⁷ and 336 credit unions, and had total savings of NT\$19,197,228,853, which represents an average annual rate of change of 34 per cent over the past 46 years. From Figure 2a, it can be seen that the number of credit unions experienced a rapid growth period from 1964 to 1975. This represents the pilot and take-off periods of the credit union movement. The period of 1976 to 1997 was the legislative and institutional period, the main feature of which was the strengthening of the structure of the credit union system. Although there were a number of credit unions that merged or were wound up, the total number of credit unions showed a steady growth in this period. However, since 1997 there has been a gradual decline in the number of credit unions.

⁷ Chapter is a local union which is composed by primary credit unions located in the same area as the bridge between the league and primary credit unions. There are 15 Chapters located in 15 counties of 4 areas (north, south, east and middle) to assist conducting various social activities and training programs for members and leaders as well as promoting the new credit unions establishment and businesses run by league.

Figure 2 Time plot of the number of credit unions and credit union members in Taiwan: 1964-2010



Sources: Plotted from statistics extracted from the CULROC Annual Reports, various years.

Savings in credit unions are called “shares” (each of which is HK\$5 in Hong Kong and NT\$100 in Taiwan), and in practice a “share” may be withdrawn on demand (see Credit Union Act, 2000 and Credit Union Ordinance, 2002). To encourage thrift through savings, and thus to provide loans and other services, a fair rate of interest is paid on savings, within the capability of the credit union. “Dividends” on credit union shares are treated as ordinary interest income, and the calculation of the dividend is based on the 12-month share balance of the member during each financial year of the individual credit unions. The Board of Directors recommends a rate of dividend and once the members have accepted this at the Annual General Meeting, the dividend will be paid directly into the account of each member. The Hong Kong Credit Unions Ordinance specifies that the rate of dividend should not exceed 6 per cent per annum, but there is no such restriction in Taiwan.

In addition to its aim of promoting thrift among its members and to receiving their savings, another object of a credit union is to make loans to the members for provident or productive purposes. A credit union loans have some very special features: they are insured at no direct cost to the eligible member, repayment protection insurance is available as an optional extra, there are no hidden fees or transaction charges, repayments are calculated on the reducing balance of the loan (this means smaller interest repayments as a loan is repaid), repayment terms are arranged to suit a member’s particular circumstances and members incur no penalty or additional charges if they repay the loan earlier than planned or make larger repayments than agreed.

Most of the credit union loans were requested for provident purposes, including house renovation, education, vacations abroad, emergency medical treatment, funeral costs and purchases of durable consumer goods. In addition, some big credit unions do provide loans for specific purposes (usually larger loan amounts and interest rate concessions), such as for tax payments, purchase of an apartment or new vehicle, decoration of a newly purchased apartment, repayment of other loans and funeral expenses for close relatives of the member. According to the Hong Kong Credit Union Ordinance, the interest rate on any loan made by a credit union to a member cannot exceed 1 per cent per month on the total of the unpaid balance of any such loan plus charges (if any) made by the credit union for making the loan; but there is no such requirement in Taiwan.

It is interesting to note that the time path of the number of credit union members in both Taiwan and Hong Kong follow the pattern of a total product curve showing diminishing marginal returns (that is, like the left side of a normal curve). As can be seen from Figures 1b and 2b, it is clear that the growth of credit unions in these two economies is approaching a stagnant state in recent years. According to WOCCU (2011), the penetration rate⁸ of Taiwan and Hong Kong in 2010 was 1.4 per cent and 1.2 per cent respectively, compared with 15.7 per cent in Korea, 6.2 per cent in Singapore (not to mention 43.9 per cent in the United States and 70.7 per cent in Ireland). So Hong Kong and Taiwan still have plenty of room to increase the popularity of credit unions among people at the grassroots.

4 The characteristics and performance of credit union savings and loans in Hong Kong and Taiwan

As shown in Tables 2 and 3, the amount of credit union savings and loans in Hong Kong have increased from HK\$182.25 million and HK\$79.42 million in 1987 to HK\$6726.37 million and HK\$575.63 million in 2010 respectively. However, the volatility of credit union savings and loans as measured by their coefficient of variation⁹ (97 per cent and 48 per cent respectively) were ranked highest among the listed variables. These observations provide good evidence that the credit union industry in Hong Kong has to face the problem of an external drain of funds occasionally, and thus Hong Kong credit unions have to keep a higher reserve-to-deposit ratio than do licensed banks

⁸ According to WOCCU, penetration rate is calculated by dividing the total number of reported credit union members by the economically active population age 15-64 years old.

⁹ Coefficient of variation $CV = \frac{SD}{\bar{X}} \times 100\%$

in order to achieve a sound liquidity position. In Taiwan, the amount of credit union savings and loans increased from NT\$2931.55 million and NT\$2788.21 million in 1987 to NT\$21,803.59 million and NT\$13,031 million in 2010 respectively. To compare its 59.77 per cent loan-to-savings ratio compared with Hong Kong's 8.56 per cent loan-to-savings ratio in 2010, we can conclude that the financial situation of the Taiwan credit union industry was much healthier than the credit union industry in Hong Kong.

The calculated mean annual rates of changes (MRs) suggest at least four important points: first, the mean annual rates of changes in all of the listed variables dropped drastically after the financial crisis; second, an extraordinarily high mean annual rates of change in Hong Kong credit union savings before and after the Asian financial crisis (16.02 per cent to 18.06 per cent); third, while bank loans could manage 3-5 per cent mean annual rates of change after the Asian financial crisis ($MR_{1999-2010}$), credit union loans in Taiwan and Hong Kong recorded a very low or even a negative mean annual rate of change (0.17 per cent and -3.51 per cent respectively); and the final point is that, in Taiwan the MR of credit union savings was always greater than the MR of credit union loans no matter whether there was an upturn or downturn in the economy, but in Hong Kong, the MR of credit union loans was greater than the MR of credit union savings in the period 1987-1998 (25.18 per cent and 18.6 per cent respectively) , but in 1999-2010, the situation was reverted (-3.51 per cent and 16.2 per cent respectively) .

If we transform the figures listed in Tables 2 and 3 into annual rates of change, we will discover the annual rates of change in credit union loans in Hong Kong (HKCUL) are significantly correlated with the annual rates of change in consumer prices (HKCPI), total bank loans (HKBL), total bank deposits (HKBD), and bank lending interest rates (HKBLR). These significant correlation may be explain by two economic decisions made by credit union members: firstly, they tend to borrow more from the credit union when inflation is high because the negative real interest rate¹⁰ is beneficial to them; secondly, they tend to borrow more from the credit union when the bank lending rate is high because they can obtain their loans at lower cost. The same observations are also true in Taiwan. Although there were some relationship between the annual rates of change in credit union savings in both Hong Kong and Taiwan (HKCUS and TWCLS) with all other macroeconomic variables listed in Tables 2 and 3 before the Asian financial crisis, they did not have a significant relationship with them after the Asian financial crisis. This may be explained by the precautionary nature of credit union savings and the result of the practice of regular saving.

¹⁰ Since the maximum annual lending rate is fixed at 1 per cent per month, a higher inflation rate implies a lower real interest rate.

Table 2. Credit Union Savings, outstanding Loan Balances and Major Macroeconomic Variables in Hong Kong: 1987 – 2010

Year	HKGDP	HKBD	HKBL	HKCUS	HKCUL	HKBDR	HKBLR	HKCPI
1987	393,541	278,494	267,607	182.25	79.42	4.74	6.60	43.7
1988	465,245	313,969	358,716	108.12	102.94	5.40	7.91	47.2
1989	536,268	358,130	474,343	174.67	148.16	8.04	10.54	52.0
1990	598,650	421,560	542,902	212.58	178.83	8.17	10.46	57.3
1991	690,324	540,193	644,149	246.01	209.14	6.96	9.41	63.8
1992	805,082	602,773	719,741	343.82	276.90	4.57	7.32	69.9
1993	927,996	770,865	859,198	475.71	352.64	3.75	6.50	76.0
1994	1,047,470	896,330	1,006,569	569.36	439.11	5.18	7.26	82.7
1995	1,115,739	1,103,010	1,105,785	811.68	595.60	2.26	8.96	90.2
1996	1,229,481	1,346,774	1,302,327	980.82	677.61	5.19	8.52	95.9
1997	1,365,024	1,479,644	1,556,853	1,116.33	866.62	6.39	8.83	101.5
1998	1,292,764	1,602,123	1,521,714	1,131.80	939.18	8.31	9.94	104.4
1999	1,266,668	1,734,675	1,455,650	1,311.43	853.07	5.76	8.49	100.2
2000	1,317,650	1,834,354	1,502,489	1,421.52	882.95	5.40	9.22	96.5
2001	1,299,218	1,835,557	1,507,355	1,861.98	789.70	2.53	7.00	94.9
2002	1,277,314	1,803,988	1,490,679	2,667.00	725.76	0.74	5.11	92.0
2003	1,234,761	1,914,413	1,464,532	2,280.88	652.57	0.12	5.00	89.7
2004	1,291,923	2,005,942	1,581,493	4,101.27	569.44	0.27	5.02	89.3
2005	1,382,590	2,115,436	1,749,925	4,441.74	546.85	1.75	6.12	90.1
2006	1,475,357	2,550,758	1,870,410	4,597.70	592.63	3.02	7.90	92.0
2007	1,615,574	3,055,928	2,127,306	4,690.70	583.00	2.79	7.59	93.8
2008	1,677,011	3,012,983	2,293,348	5,010.90	658.00	0.97	5.39	97.8
2009	1,622,203	3,357,238	2,351,944	6,050.10	671.50	0.30	5.00	98.4
2010	1,748,090	3,607,063	2,784,510	6,726.37	575.63	0.16	5.00	100.7
MR 1987-2010	6.70%	11.78%	10.72%	16.99	8.99	n.a.	n.a.	3.70%
MR 1987-1998	11.42%	17.24%	17.12%	18.06	25.18	n.a.	n.a.	8.24%
MR 1999-2010	2.97	6.88	6.07	16.02	-3.51	n.a.	n.a.	0.05%

Notes:

HKGDP = GDP at current market prices in HK\$M

HKBLR = Best lending rate (period average)

HKBD = Total deposit from customers with licensed banks of which in HKD (HK\$M)

HKSDR = Bank Savings deposit interest rate (period average)

HKBL = Total loans and advances with licensed banks of which in HKD (HK\$M)

HkCUS = Credit Union Savings /Share Balances (HK\$M)

HKCPI = Composite Consumer Price Index (October 2009 - September 2010 = 100)

HKCUL = Credit Union Outstanding Loan Balances (HK\$M)

$$MR_{t-t+n} = \text{Mean annual rate of change} = \left(\sqrt[n]{\frac{X_{t+n}}{X_t}} - 1 \right) \times 100\%$$

Sources:

2010 Gross Domestic Product, Hong Kong Census and Statistics Department, 2011.

Hong Kong Annual Digest of Statistics, Hong Kong Census and Statistics Department, various editions.

Hong Kong Monetary Authority Website at: <http://www.hkma.gov.hk/eng/market-data-and-statistics/>

Annual Report, Credit Union League of Hong Kong, various editions.

Table 3. Credit Union Savings, outstanding Loan Balances and Major Macroeconomic Variables in Taiwan: 1987 – 2010

Year	TWGDP	TWBD	TWBL	TWCUS	TWCUL	TWBDR	TWBLR	TWCPI
1987	3,291,857	3,964,400	2,304,800	2,931.55	2,788.21	5.00	6.75	68.84
1988	3,488,550	4,881,200	3,198,800	3,651.04	3,673.92	5.25	7.00	69.60
1989	4,003,227	5,865,800	4,155,100	4,401.25	4,753.76	9.50	10.38	71.78
1990	4,430,055	6,471,500	4,649,400	5,183.42	5,644.20	9.50	10.00	75.06
1991	4,958,220	7,576,500	5,694,900	6,080.07	6,621.17	8.26	8.65	77.97
1992	5,534,544	9,073,700	7,276,100	7,364.21	8,061.46	7.79	8.30	80.63
1993	6,110,101	10,454,400	8,439,000	8,794.76	9,888.25	7.59	8.03	84.36
1994	6,685,505	12,031,400	9,904,400	10,332.48	11,802.08	7.29	7.94	86.60
1995	7,277,545	13,130,900	10,802,800	11,642.20	13,350.20	6.73	7.67	90.56
1996	7,906,075	14,260,900	11,205,200	12,564.68	13,455.55	6.02	7.38	92.85
1997	8,574,784	15,421,300	12,510,200	13,994.43	13,493.05	6.03	7.50	93.09
1998	9,204,174	16,696,900	13,177,300	14,688.44	13,735.12	5.44	7.70	95.06
1999	9,649,049	18,064,200	13,760,100	15,152.39	12,787.47	5.03	7.67	95.20
2000	10,187,394	19,308,700	14,428,900	15,744.17	13,060.88	5.00	7.71	96.77
2001	9,930,387	20,160,700	14,036,600	15,985.87	12,574.77	2.41	7.38	95.14
2002	10,411,639	20,609,800	13,731,400	16,516.16	12,217.26	1.86	7.10	95.86
2003	10,696,257	21,746,900	14,332,900	17,079.88	11,503.61	1.40	3.43	95.81
2004	11,365,292	23,256,500	15,867,800	17,658.63	11,059.14	1.52	3.52	97.36
2005	11,740,279	24,709,500	17,158,300	18,192.84	10,919.04	1.99	3.85	99.51
2006	12,243,471	25,942,000	17,598,900	18,401.68	11,047.39	2.20	4.12	100.18
2007	12,910,511	26,208,800	18,021,700	18,490.38	11,090.93	2.62	4.31	103.52
2008	12,620,150	27,977,900	18,470,100	18,626.86	11,023.21	1.42	4.21	104.83
2009	12,477,182	29,555,900	18,607,500	18,856.19	10,411.28	0.89	2.56	104.57
2010	14,011,667	30,475,236	20,390,702	21,803.59	13,031.00	1.13	2.93	108.19
MR 1987-2010	6.50%	9.27%	9.94%	9.12%	6.93%	n.a.	n.a.	1.99%
MR 1987-1998	9.80%	13.96%	17.18%	15.78%	15.60%	n.a.	n.a.	2.98%
MR 1999-2010	3.45%	4.87%	3.64%	3.36%	0.17%	n.a.	n.a.	1.17%

Notes:

TWGDP = GDP at current market prices (NT\$M) TWBLR = Prime lending rate (period average)

TWBD = Total deposits from Individuals and Business units of which in NTD (NT\$M) TWSDR = Bank 1 year deposit interest rate (period average)

TWBL = Total loans and advances with major financial institutions of which in NTD (NT\$M) TWCUS = Credit Union Savings /Share Balances (NT\$M)

TWCPI = CPI = Consumer Price Index (2006 = 100) TWCUL = Credit Union Outstanding Loan Balances (NT\$M)

Sources:

National Statistics, R.O.C. (Taiwan) Website at:

<http://www.stat.gov.tw/public/data/dgbas03/bs3/inquire/cpispl.xls>

Central Bank of the Republic of China (Taiwan) Website at:

<http://www.cbc.gov.tw/public/Attachment/0112516294971.XLS>

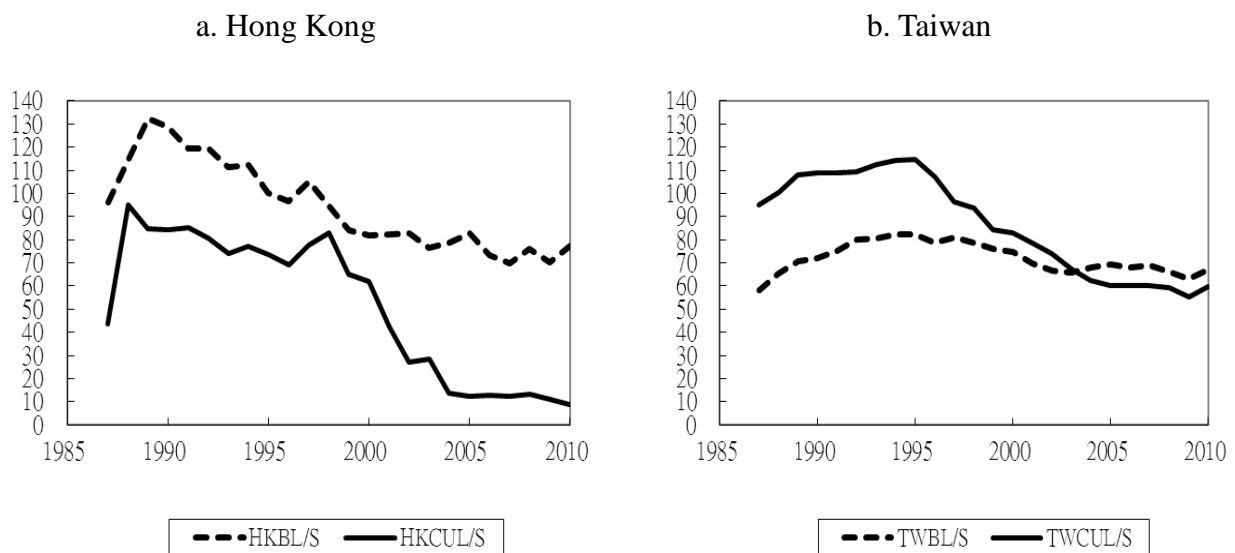
<http://www.cbc.gov.tw/public/data/economic/statistics/key/deposit-y.xls>

<http://www.cbc.gov.tw/public/data/economic/statistics/key/loan-y.xls>

Annual Report, Credit Union League of PRC, various editions.

Regarding outstanding loan balances, it is interesting to note that the credit union loans in Hong Kong registered a higher growth rate than did bank loans in the period of economic prosperity from 1987 to 1998. However, during the period 1999-2010 when the economy of Hong Kong was in recession as a result of the Asian Financial Crisis, the performance of credit union loans was actually worse than that in the banking sector. Although the situation in Taiwan has not been as significant as that recorded in Hong Kong, similar characteristics can also be observed. This is because most of the credit unions have fixed their maximum lending rate at 1 per cent per month. However, when the level of bank lending rates had to be adjusted upward during economic upturns, this made the cost of borrowing from credit unions lower than the cost of borrowing from banks. When a lower level of bank rates prevailed in times of recession, the effects were reversed.

Figure 3 Time Plots of the Loan-to-Savings Ratio (%) for Credit Unions and Banks: 1987-2010



Sources: see Tables 2 and 3

Figures 3a and 3b show downward trends in the credit union and banking industry's loan-to-savings curves, these trends were appeared earlier in Hong Kong than in Taiwan. It is clear that the banks' loan-to-saving deposits ratio (HKBL/S) was always much higher than that of the credit unions (HKCUL/S) because the Banking Law allows banks to search for sources of funds other than deposits through the inter-bank market and the debt market. We can also note that the discrepancy between HKBL/S and HKCUL/S has become larger and larger since 1998 after the Asian financial crisis. In Taiwan, however, the credit unions' loan-to-saving deposits ratio (TWCUL/S) was greater than the banks' loan-to-saving deposits ratio (TWBL/S) in 1987-2003, and from 2003 onwards,

TWBL/S has been greater than TWCUL/S. These changes may be due to the Taiwan banking industry was too late to recognize the importance of introducing microcredit services to the low-income groups.

In addition, the fact that people found no profitable investment opportunities in the financial markets during the recession and preferred to hold their speculative balance in the form of deposits with banks, created a force that pulled down the loan-to-savings ratio further. Judging from the fact that the time series of the loan-to-savings ratio of banks and credit unions were highly correlated ($r=0.86$ in Hong Kong and $r=0.65$ in Taiwan), it can be concluded that both credit unions and banks were facing the problem of how to transform their savings (deposits) liability to earning assets (loans) in times of recession. Because loans are the most profitable and least risky earning asset for both banks and credit unions, bankers and credit union directors have to pay more attention to promoting the loan market.

5 Concluding remarks

On the demand side, according to the principle of diminishing marginal returns to capital, the poorer borrowers should be willing to pay higher interest rates than richer borrowers; on the supply side, the credit suppliers need to consider the credit risk especially the adverse selection and moral hazard problems. Armendariz and Morduch, (2010, pp19-24) argue that the problems of market failure that exist in financial markets stemming from poor information, high transactions costs, and difficulties enforcing contracts can be solved by microfinance. Unlike other microfinance institutions that rely on outside capital, credit unions emphasize the mobilisation of member savings as their primary source of financing, and thus their members can really practice the self-help and mutual aid model of poverty alleviation.

Although China, Hong Kong and Taiwan are three economies at different stages of development, they need a more efficient and equitable mechanism to allocate funds among different classes of people. Because credit unions do not resort to exploitation between savers and borrowers, it can be expected that the market mechanism of the money loan market will function much more efficiently in the credit union industry than in the banking industry provided that the interest rate is determined by genuine market forces.

We believe credit union is the best way for poverty alleviation, but it is not a panacea. We understand that what credit unions can do is to mobilize the human resources of a country by giving individuals a method of solving their own problems. We foresee the credit union movements in China, Hong Kong and Taiwan will be further developed as long as the credit union recruit a team of volunteers who agree to dedicate their time and resources in service of their fellow members with zeal through the credit union ideas which basically are self-help, mutual aid, member-own and member control.

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Department of Economics and Finance
Hong Kong Shue Yan University