

The Evolution of Credit Bureaus in Asia-Pacific

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Abstract: Credit Bureau: the magic wand that all the financial institutions in the U.S. and may be a few other developed countries use to remain afloat in today's tough competitive environment of lending and making money. In the U.S., the credit bureaus, also known as credit reporting agencies (CRAs), collect information on bill payments, loan repayments, availability of credit, monthly debt and other types of information from merchants, lenders, landlords, etc., and then sell the report to businesses so that they can carry out credit assessment, to decide whether a credit risk is good or bad and also the interest rate to charge. Having gone through an evolution process for more than 170 years (in the 1830's, third-party credit reporting agencies the precursors of credit bureaus were established), the bureaus in the U.S. are currently extremely advanced and sophisticated. However, bureau evolution is a relatively recent phenomenon when it comes to the Asia-Pacific. Since the level of economic development differs significantly between countries in Asia-Pacific, so is the case with the bureaus. Their levels of maturity may be said to span the range between an unborn child and a mature adult (almost at the same stage as the U.S.) in this part of the world. It is interesting to watch this evolution process and be a witness to history in the making.

Available literature either considers the Credit bureau evolution process in less developed countries or has its specific focus on South Korea or China, however there is nothing freely available to-date, which relates to the stages of growth of credit bureaus focusing on all Asia-Pacific countries, except market research reports [36]. This paper aims to discuss this evolution process of the credit bureaus in the Asia-Pacific including India. In addition it is clear from the literature that the US, UK and Latin America have complete understanding of the merit of the Bureaus, both from the perspective of the consumer and the lender. However, in the Asian front the bureaus started with Asian financial crisis. In many countries both the consumers and the lenders look at the bureaus with scepticism. The consumers perceive this as an intrusion of privacy whereas the competitors perceive this as a mechanism for intrusion of the portfolio and not as a facility to achieve better rates to obtain credit or achieve better growth in the portfolio. However Asia cannot afford to have a slow evolution process, which the US could, since we are in the 21st century and the financial industry has to adjust to the growth in technology. This paper aims to draw the attention of the Asian audience to the benefits of organized bureaus for the financial sector, the general economy and the consumers.

Keywords: Consumer Banking, Credit Bureau, Credit Reporting Agency, Consumer Reporting Agency, Credit Reference Agency, Credit Report, Asymmetric Information

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INTRODUCTION

The Asian financial crisis during the late 1990s led to an urgent call for credit information sharing among financial institutions in many countries in the Asia-Pacific region. After the crisis, several local and foreign-based credit bureaus were created, with the countries' central banks being the key drivers. In fact bureaus in many Asia-Pacific countries, are partially or fully owned by the governments.

However there are a few countries (Japan, South Korea and Taiwan) where the bureaus have been emerging as a part of natural financial growth and sophistication process. It can be seen from the developmental process of the bureaus in these countries that they are not very structured and in some cases fragmented. Learning from the experience of the USA (which is highly mature and has 170 years of history behind it) one should make an attempt to reach the ideal end state bypassing all intermediate steps and not repeat previous mistakes and clearly understand the do's and don'ts of this process. This will not only provide the state of the art structure to the bureau so that the financial industry, national economy and the consumers all benefit from it, but also ensures that the resources to achieve the success of the bureau are properly utilized.

For example there is a view that there should be multiple bureau providers in an economy to ensure competition and create cost advantage for the users. However where consumers as well as financial institutions do not have complete understanding of the benefits of bureaus, this could lead to disaster. Typically in such scenarios, the infrastructure will be poor and not standardized. Hence reliable and complete data capture process, which is the fundamental component of the success of a bureau, will be hampered. Due to multiple bureaus the financial picture of the consumers will be fragmented. Hence both consumers as well as financial institutions will be sceptical about participating in the whole process leading to the delayed success of bureau.

Hence ideally for the initiation of the bureau, the government leadership (to ensure consumer protection) together with active participation of the financial institutions (for proper formulation of the information sharing process) should be the model. Also initially there should be a single and not multiple institutions. Later on, of course, to avoid monopolistic environment one can opt for multiple suppliers. But in Asia-Pacific, not all countries are sufficiently large to support this. Fortunately in most of the Asia-Pacific countries, government is playing an active role in setting up the bureau. In addition, besides setting up the bureaus, lots of efforts have to be spent on the education and awareness front both for the financial institutions and the consumers. Currently, a reasonable amount of educational effort is going on but most of it is focused on the education front of the bureau owners and financial institutions. But a lot more can be done, and not enough effort have been spent on the consumer education. As discussed in Jappelli and Pagano ([1], [2] and [3]) information sharing is the key to success resulting in proper business growth, right access to cheap loans for the consumers and inexpensive bureau information retrieval. The only way to achieve this is to remove fear from all users and that can be only achieved by proper education process. However there is a theory that full information sharing may be less efficient than one designed to preserve some level of asymmetric information. A detailed discussion on this topic is available in [22].

This paper basically provides a broad overview of the status and structure of the bureaus in the countries of the Asia-Pacific. It also provides an extensive overview of the work that has been done in terms of understanding the bureaus across the globe. The countries in this region are so diverse in nature, in terms of their level of development, economy and social culture that there cannot be a "one size fits all" kind of solution. However the discussions and references in this document will be of help in choosing the path, which is most appropriate for a particular country.

CREDIT BUREAUS AND CREDIT REPORT

A Credit Reference Agency or Credit Bureau (Credit Reporting Agency in the USA) is an organization that collects and collates personal financial data on individuals, from financial institutions with which they have a relationship [4]. The data is aggregated and the resulting information (in the form of credit reports) is made available on request to contributing companies for the purposes of credit assessment and credit scoring.

A credit report is an accumulation of information about how you pay your bills and repay loans, how much credit you have available, what your monthly debts are, and other types of information that can help a potential lender decide whether you are a good credit risk or a bad credit risk [5]. The report itself does not say whether you are a good or bad credit risk – it provides lenders with the data, which allows them to take the decision themselves. Lenders make their decisions based on their risk-reward trade-off. Having all the information helps them ensure that they are making the right decision with regards to the assessment of the borrower's creditworthiness. Basically, the credit report would reflect the reputation collateral of that customer in some sense [6].

The information that usually makes up the credit report include:

- **Personal identifying information.** Example: Name, Addresses (current and previous), National Identification Number, Telephone Number, Date of Birth, Current and Previous Employers. This information helps the lenders on customer identification and verification.
- **Credit History.** Example: Payment history with banks and finance companies and information on all accounts of the customer – when it was opened, what type of account, loan amount and the monthly payment amount.
- **Public records.** Example: Tax liens, Court judgements and bankruptcies.
- **Report inquiries.** Example: Number of credit granters who have received a copy of the customer's credit report.

It is clear from the above descriptor that there are a few things which are absolutely crucial for the success of the bureau: (1) the information capture has to be correct, accurate and consistent (2) financial institutions should focus on data mining so that they can translate this data to knowledge to benefit both themselves and consumers. It is also clear that if the information were fragmented then objective no. 2 would not be successfully achieved.

A recent paper by Luoto, McIntosh and Wydick [7] discusses in details, the screening effect (beneficial for lender) and incentive effect (beneficial for borrower) that is a natural outcome of a successful bureau. A sophisticated bureau should have the negative data (creation of public blacklist) as well as the positive data (white list). Note that in countries like India and China, which are on rapid growth path, everyday millions of customers (also predominantly young unlike in developed countries) are joining the middle-class. Many of them are becoming exposed to consumerism and are a perfect target for organised lending. While their temptation for consumer goods and the availability of credit will boost the economy, it will also increase their vulnerability, as taking loan is no longer a social taboo. Naturally all the financial institutions in these markets are trying for the rapid growth of their businesses by focusing on these newly emerging segments; however if growth does not take place in a prudent manner, soon we will be plunging into a financial crisis in these markets, as was the case in the past in some Asian countries. Unfortunately, there is lot of resistance in these markets to participation in the bureau, which basically can be attributed to the unfamiliarity with bureau mechanism and the extra work and data capture discipline required for the process. Most financial institutions (especially the traditional local banks) perceive this as a process where they will end up losing their customers. Customers perceive this as “loss of privacy”. However in reality, by participating in the bureau, banks can actually pick and choose and grow their market in an organized

and prudent manner. Especially for the Consumer Finance or Microfinance segments where there is lot of growth potential in developing markets, this is the only way.

LITERATURE SURVEY

An extensive literature search resulted in the following findings:

The majority of articles in the area of credit bureau research are on US Credit Bureaus, European Credit Bureaus and Latin America Credit Bureaus, primarily due to the fact that these regions have long ago realized the importance of good data capture and translating data into knowledge for the business use. Having a better level of development and infrastructure facilitated healthy business competition, which necessitated development of bureau and the corresponding research for further growth. In addition, US and Europe having a long tradition of research culture, many researchers from academia had the awareness of credit bureau related issues and access to funding from organizations such as the World Bank and U.S. Agency for International Development (USAID).

A list of the research work done on credit bureaus is provided in the reference section. Other than these articles, there is only one book [9] available on credit bureaus. However, with the recent development of the Asia-Pacific credit bureaus, the book is somewhat outdated. However, a market research report [36] published by Icon Group International and refreshed every year provides the World Outlook for Credit Bureaus.

Research on Asia-Pacific credit bureaus is slowly emerging though the coverage is not that extensive yet. For example, articles [10] and [11] mostly concentrate on Thailand and South Korea credit bureaus. This could very well be an outcome of the fact that the Asian financial crisis domino effect had started in Thailand and the recent credit crunch experienced by South Korea. The article [11] provides excellent coverage on the South Korean bureau, the market and general risk management practices. It also covers the activities of the bureau score providers (Experian and FICO) in that market. Countries like Singapore, Australia and Hong Kong also have been discussed with limited coverage. The paper by Jentzch [12] provides comprehensive coverage on China and how the credit bureau is shaping up in that country.

The next few sections basically describe in brief the status of credit bureaus in various Asia-Pacific countries. Due to limitations on the size of this article, only brief descriptions have been provided and an effort has been made to avoid overlaps with articles on similar topics.

CONSUMER CREDIT BUREAUS IN ASIA-PACIFIC REGION

Australia

Baycorp Advantage, Australia's major consumer credit bureau has a diversified client base of banks, specialist financial services, telecommunications, retailers, mortgage specialists and insurance companies. The historical dominance of Baycorp in the consumer credit bureau arena has enabled sustained investments in a well-integrated technology platform that has captured a high proportion of the industry volumes.

However, the information model only allows for negative information, a function of tight credit information legislation.

The bureau was formed in December 2001 after the merger of Baycorp and Data Advantage. The former was a New Zealand information provider with history dating back more than 45 years and the latter was one of the credit reporting agencies in Australia established in 1967.

The Australian experience highlights the potential impact of restrictive regulation. Despite the presence of sophisticated domestic and international lenders and historically strong credit risk management practices, the Australian market forfeits much of the benefits of bureau services. As a result, the Australian market has produced a relatively stable and low risk delinquency record at the expense of pricing flexibility, product choice, product innovations, risk-adjusted credit returns and restricted access to credit for lower income consumer segments that would boost the country's economy further. This is due to the limitation inherent in using negative data only.

Recently the private credit bureau market has seen progressively more entrants, e.g. D&B Australia. D&B launched their new consumer credit service (DBCC) in September 2002. They positioned their services as totally of different kind compared to the existing services available in Australia and New Zealand, by transferring best practices from other parts of the world. This basically boils down to moving to a "positive" environment from "only negative environment". It has been corroborated in their recent (August, 2005) press release that Australia is shifting towards Fair Positive System. Since protection of privacy is the major argument given against "positive bureau", the counter-argument given by D&B is "Fair positive consumer credit reporting would respect and protect the privacy of consumers, improve the quality of the consumer credit risk assessment and contribute to the growth of the Australian economy". However it is still in the concept stage due to a very vocal consumer lobby, which is concerned about the Privacy laws.

This move is definitely in the right direction for Australia, since the merit of total transparency in sharing positive and negative data has been proven over and over again in other developed economies ([1], [2] and [3]). However D&B has positioned the new system as "Fair" rather than "Full". The fair system strives to achieve a balance between weaknesses of the negative system and the concerns about a full positive system while still bringing an increased level of transparency and accountability to the credit process. One of the most powerful tools, bureau score based on both positive and negative data should be the next industrial product that the financial industry should be expecting from this initiative.

In terms of co-ordinated approach towards bureau, major banks along with Baycorp and D&B have set up a body: Australian Retail Credit Committee (ARCC). The purpose of this body is to standardize the definition of "default" across products/industry and have a code of conduct for Banks/other institutions to follow the reporting guidelines consistently, where there are some gaps at this point. In addition, since the individual identification in Australia is through a variety of means, the other weakness in the existing bureau is around ability to carry out identity match on bureau records, having multiple records for the same individual due to different identity tags. D&B being the late entrant to

the system is trying to generate more advanced database, which handles these issues effectively enabling banks to achieve better match rate.

Point to note that even though Australia being one of the advanced countries in terms infrastructure and development and reasonably long bureau history still has not reached the ideal state of bureau.

China

In the past, Chinese banks had no loan services targeting individuals and thus there was really no need for private credit records. Without the necessary information to determine a loan applicant's creditworthiness, banks have been forced to set exacting requirements for individual credit loans that have scared off many potential customers. Lacking credit facilities, many would-be consumers have had to put off their desired purchases, thus holding back the national economy.

In order to effectively establish the consumer credit market in China, China's central bank – People's Bank of China (PBC) has started an initiative to establish a credit information system in the country.

At some point, China's banking infrastructure was rather fragmented and quite a lot of computerization and integration needed to be done to set up a credit bureau. For example, the interoperability of all types of bankcards (inclusive of debit cards, 'quasi credit cards'/charge cards and credit cards) was poor; card from one bank could not often be used in a Point of Sales (POS) or Automated Teller Machine (ATM) operated by another bank and indeed in some cases, cards issued by one bank in say Beijing, could not even be used in the same bank's machines in, say Shanghai. This situation has improved significantly over past five years.

China Union Pay (CUP) was officially incorporated on 26 March, 2002 to establish the interoperability of payment cards in China and to establish a domestic only acceptance marque, the 'yinglian ka', which it is anticipated will both increase the penetration of payment cards in China and help the Chinese card issuers to resist the temptation to adopt the international marques of MasterCard and Visa for their Chinese cards. The Shanghai-based China Union Pay will strive to realize the vision of "touring China or even the world with a single card". It has started providing a nationwide negative file in 2004.

The People's Bank of China took a calculated phased approach to setting up the credit information system instead of the big bang approach due to the banking industry environment. Example in year 2000, the China Construction Bank (CCB), one of the country's four largest state-owned commercial banks, is expected to link all the bank's computer networks together, so that all of CCB's credit records can be accessed nationwide within the bank.

Shanghai was selected for the pilot project, of the credit information system by People's Bank of China. Beijing and Shenzhen were also being considered for the pilot project. But they were not chosen because the market conditions in the two cities were not considered to be mature enough for such a test. Shanghai Credit Information Services, Co. Ltd (CIS) was established in July 1999 and the personal credit information system was launched in July 2000. Shanghai's initiative had paved the way for the practice in the other major Chinese cities and will eventually lead to a complete interconnected nationwide system. CIS also provides credit bureau scores.

Personal credit information systems in seven Chinese cities (Beijing, Chongqing, Shenzhen, Xian, Nanning, Mianyang and Huzhou) were connected in December 2004 to pave the way for the launch of a nationwide system planned for 2005. The system was expanded further in July 2005 by linking the personal credit information system in eight provinces and municipalities (Beijing, Zhejiang, Guangdong, Chongqing, Shanxi, Guangxi, Sichuan and Hunan).

The other key initiatives that the People's Bank of China are promoting: (1) credit management authority, (2) National Credit Standardization and (3) Regulations on credit information systems.

People's Bank of China has been preparing to establish the country's first credit management authority, the State Credit Bureau. Experian will provide technical support and consulting services on the construction of the database and relevant data management for the central bank.

National Credit Standardization Group has been launched in Beijing on 30th June 2005. Its aim is to build a credit standardization system by 2008. The new standardization systems deals with hundreds of basic terms for credit, different credit grades, and rules for expression and forms.

Generally speaking, privacy perhaps remains a largely foreign concept for many Chinese. Individual's privacy has not been a serious concern in China. This is due to:

- Long social tradition of ranking the collective above individuals, an influence of Confucius' teachings;
- Strict control by the Government which practises close scrutiny of the citizens and keeps meticulous records about them; and
- Typically crowded living environment so that private space is basically something of a luxury and is therefore not generally expected

Thus, the personal credit information systems in China include or plan to include the following:

- Customer identity (e.g. name, identification number, home address)
- Academic performance
- Library book returns information
- Computer rentals
- Book loans
- Loan information (e.g. lender, amount, term, payment record)
- Credit card information (e.g. issue, credit line)
- Insurance information
- Telecommunications information
- Utilities information
- Credit from non-banking sector
- Tax records
- Court judgements

However, this may change as on 15 March 2005 the central bank has circulated the draft regulation on the management of a nationwide personal credit database to solicit public opinion. Regulations on credit information systems already exist in some of China's cities like Shanghai and Shenzhen.

As mentioned earlier, China has been covered in detail, in the paper by Jentzsch [12].

It is clear that China has a clear game plan regarding the right direction to achieve full credit bureau as rapidly as possible in a country where one has as modern city as Shanghai at one end and absolutely rural areas at the other extreme. They have adopted a bottom up approach, which probably is the right approach for a country as diverse and big (population 1,306,313,812) as China. China having a very high rate of non-performing (>45%) loans and a rapidly growing middle-class, relatively recently introduced to consumerism after a long history of communist restraint has a very high chance of going into economic downturn if the correct brakes are not applied to the overheated economy. Forming the full bureau and its proper usage is going to be a key strategy for this economy.

Guam

Credit Bureau of the Pacific (an Equifax system affiliate), is the largest credit reporting agency in the state of Hawaii servicing banks, finance companies, credit unions, auto dealerships and other credit granting organizations throughout the Pacific Rim (including Guam, Saipan and the South Pacific Region).

It was established in 1982. It provides Beacon Score (from Equifax). Its products and solutions are used to grant loans, sell cars, hire new employees and check on new tenants for a rental unit.

Basically Guam does not have any separate identity as far as the bureau is concerned. Given its small size (population 168,564), there is no justification for having an independent system for this US dependency.

Hong Kong

Hong Kong is one of the countries where a credit bureau was formed to manage the financial crisis. TransUnion Information Services Limited, formerly Credit Information Services Limited (CIS), was established in 1982. In the early eighties, finance houses were suffering major losses from deceit in collateral financing. Maintaining a centralized database was deemed necessary to limit double/multiple financing by sharing information among credit providers. For this purpose, CIS was formed by twelve finance houses, which were the main players in the vehicle and equipment financing market. These houses initially started collecting and sharing purchase and leasing information. Thus the first centralized database was established in Hong Kong.

Three years later, the database was expanded to collect negative default data to further enhance credit risk control for shareholders and members. The importance of a centralized database become more recognized as the HK finance industry flourished because of the growth of economy in the late eighties due to the development of unsecured credit, especially in the credit card business. The shareholders' list expanded from 12 to 16 shareholders with the joining of credit card issuers and banks. Gradually, the TransUnion Information Services Limited came to be perceived as a backbone of the development of the Hong Kong credit industry. Following the introduction in June 2003 of the revised Privacy Code, TransUnion started the sharing of positive data in August the same year. However, this is restricted only to new loan applications' credit report. Starting June 2005, the positive data was allowed for portfolio reviews.

In an extremely competitive and fast-paced market, both credit providers and consumers were increasingly sophisticated. The Board saw the need to develop the company into a world-class credit bureau to meet new demands in the coming decade. In January 1999, TransUnion International Corporation became the new shareholder of the company. The acquisition of a majority stake by TransUnion was made possible by the sale of shares by 10 of the 16 shareholders. In January 2003, the company name was officially changed to TransUnion Information Services Limited.

Other than South Korea and Australia, Hong Kong is one of the first countries in the Asia-Pacific to have made industry bureau score, developed by TransUnion, available. TU released its first bureau score (Bureau Bankruptcy Score) based on negative data only few years ago. In June 2005, TU has also released a new bureau score with positive data. As it can be seen, that Hong Kong is approaching the US kind of environment, at a very fast pace.

India

The Indian Cooperation Committee (ICC), the de facto industry forum for the local card industry, was started in 1989 and is piloted by 25 MasterCard International's member-banks. The ICC Negative File

Project was the first initiative of its kind launched in January 1999. It is the first organized attempt at setting up a bureau (negative) in India. The member banks of ICC provide a database of delinquent cardholders, which is managed by Satyam Credit Information Services.

Credit Information Bureau (India) Ltd., (CIBIL) was set up by State Bank of India in association with HDFC in August 2000, with equity participation of 40 per cent each and two foreign technology partners viz., M/s. Dun & Bradstreet Information Services (India) Pvt. Ltd., and TransUnion International Inc., U.S.A. sharing the remaining 20 per cent equity stake. It was created in recognition of the evolving needs of a maturing financial market. According to the Reserve Bank of India (Central Bank of India) 2004-2005 policy declaration, the diversified ownership was recommended. Accordingly SBI and HDFC have divested their equity stake in favour of significant data providers with representation from all categories of credit grantors. ICICI Bank, Punjab National Bank, Bank of India, Central Bank of India, Union Bank of India, Bank of Baroda, Citibank, HSBC and Sundaram Finance now own shares in CIBIL. CIBIL has been formally launched in May 2004. CIBIL gathers both positive and negative information and serves both commercial and consumer interests.

There are challenges that CIBIL will need to overcome as it goes along:

- Accurate Information – Banks in India have inadequate electronic data capture, and inadequate networking and computerization magnifies the data-collection difficulties
- National Identification – India does not have an official national identification registry and this would make bureau matching difficult
- Reporting Frequency – Due to the sheer size of India's many nationalized banks, with branches in almost every state, data collection becomes exceedingly cumbersome
- Confidentiality – Data security is another issue of concern to information providers. Proprietary information can be abused.
- Consumer Awareness – Consumers in India do not have any experience at all regarding to bureau

Again it is clear that like China, India also has a clear game plan regarding the right direction to achieve a full credit bureau; however their approach is completely different. Unlike China, India has adopted a top down approach. India is second to China in population (1,080,264,388) and the largest democracy in the world. Both India and China are considered the most rapidly growing large economies in the world and both have similar problems.

India has a large consumer market of almost 300 million. Consumer finance has grown at a compounded rate of 29% in 3 years as of Q3, 2004. Organized consumer lending has increased by 40% in recent years. Markets for credit cards, mortgages, auto and two-wheeler loans are rapidly growing. Nearly 10 million cards have been issued in India. The growth in retail loan is also evident. Despite these growth signals, deeper market penetration is clearly possible, with consumer loans now accounting for only 3% of GDP [13].

Another sector, which has a huge growth potential as far as organised lending is concerned, is the agricultural sector. Some of the big players, for whom traditional banking is not the core competence, have started targeting this market. Farmers (who are predominantly not educated) being the target segment, lenders must take a cautious step, to avoid fraud and abuse of the system. This segment simply cannot be ignored since agriculture still constitutes a substantial part of India's GDP. On the other hand the young Indians, increasingly better educated, mainly lead the consumer culture in India. Hence, though there is tremendous growth potential, there is also inherent danger of rapid growth of nonperforming loans, unless, the growth is controlled by having an organized bureau. From the recent policy implementations, it is clear that Government is well aware of this and is steering the financial sector in the right direction. However, success of bureau will only be possible when the traditional financial institutions along with the foreign institutions fully comprehend, appreciate and participate in this activity by providing clean and accurate data and engage in data mining activity to leverage the information available from bureau. Both India and China being very large, there should not be any fear of losing a share of the pie by sharing of information, since the size of the pie is growing exponentially by the day.

In another 1-2 years time it will be very clear how the bureaus have shaped up in these two countries, though the two are following completely different paths. In India's case TU is providing the technical expertise whereas in China's case as mentioned earlier it is Experian.

Indonesia

Led by Bank Indonesia (BI), the central bank of Indonesia, the banking sector in Indonesia is going to go through a reform process in next 5 years. This will strengthen the banking sector by consolidation (Nusa Dua Declaration), prudent banking and supervision and also compliance with Basel II standards. To help this process there are plans and talks of establishing a credit bureau in Indonesia to centralize data on borrowers, with the help of International Finance Corporation (IFC), a member of World Bank group [14]. After China, India, EU and the US, the world's fifth most populous (241,973,879) nation is poised for growth in next few years due to current government's "pro-growth, pro-poor, pro-employment" economic program. The currency which was previously extremely volatile has been relatively stable since mid-2002 after reaching a record low in June 1998. Naturally, this will lead to growth of the financial lending sector. As has been highlighted several times in this article, growth is accompanied by vulnerability. Indonesia also faces problems similar to China and India in terms of data capture, infrastructure and lack of sophistication in the banking sector. Hence to achieve a healthy growth, formation of a bureau is the inevitable choice.

BI currently maintains a credit registry termed the Debtor Information System. It was established in 1988 and the minimum loan size of 50 million Rupiah is the criteria for credit registry inclusion. BI has plans to include all loans below 50 million Rupiah (including credit cards) by December 2005. More than 2,400 commercial bank offices have registered for this service and it will register information of 1 million borrowers. However, in due course, it plans to include data for 20 million borrowers.

The Credit Cards Association (AKKI) will also be launching the negative file database very soon. AKKI projects a 20% growth of credit card holding this year and this process will put a control mechanism in the growth of the unwanted loans.

It is clear that Indonesia is also moving towards both positive and negative bureaus. However, it is definitely way behind China and India in terms of progress. It would be desirable to accelerate the process so that the financial industry, the economy and the consumers can reap the benefit of mature bureau as soon as possible. Also due to the lack of infrastructure and good data capture process; fraud is a serious problem in Indonesia. Effort is required to curb the growth of fraud, which is necessary for the growth of the organized lending sector. Credit bureau is going to help achieving this to a great extent.

Japan

Japan, the world's second-largest economy and the 11th largest in terms of population (127,417,244), has been a sophisticated manufacturing (heavy industry) led economy for quite sometime. However, the last decade of 20th century saw a mere 1.5% average GDP growth for Japan. Though the manufacturing sector of Japan was highly industrialized and sophisticated, the banking sector was quite different. Towards the end of the last century, Japanese banks were among the largest yet least profitable banks in the world. Hence the banking industry had to go through an enormous transformation process (Japanese Big Bang, April 1998). This deregulation process (as in the US) allowed large bank customers to quickly shift from bank financing to capital market funding. Result of this was an immense banking crisis in Japanese economy. The beginning of this century has seen the revival of both the banking sector and the Japanese economy. Starting in 2003, the economy has turned around. This year the economy expanded at a 5.3 percent annual pace in the first quarter, with more than half the growth coming from consumer spending. Hence as in the US-economy, credit

bureaus in Japan also have to play a major role because that is the most efficient way to control the bad loans, which has been an issue in Japan for quite some time.

Together with the banking industry reform (which had originally started in the early 1980's) the credit bureaus for each industry were also formed in Japan as part of a natural evolution process (as in the US) in a developed economy. The fundamental objective behind this was the desire to minimize the loan losses of the registered members. Some of the bureaus started as early as 1976. Competition between credit granters, intensified in the 1980's as the consumer credit market developed and expanded. High interest rates, excessive lending, unfair debt collection methods, suicides and personal bankruptcies due to the oppressive collection methods became social problems. In 1983, the law regulating money lending, the so-called Law Concerning Regulation for Loan Business", was enacted. The Capital Subscription Law was revised and the upper limit on interest rates on loans was reduced. The law concerning regulation of Loan Business requires that prior to concluding loan contracts without security or guaranty, lenders must investigate applicants to a sufficient extent using credit data available at credit bureaus, and must avoid extending loans that exceed the capacity of borrowers to repay. It is clear that, Japan had experienced a financial crisis of the sort that affected Thailand or South Korea relatively recently, much earlier and reacted accordingly.

The setup date and coverage of Japan's existing five credit bureaus is detailed below:

1. Japan Information Center Corporation (JIC or Zenjoren)
This is the center of thirty-three credit bureaus established in different regions of Japan by the consumer finance business industry. The Japan Information Center bundles up the credit database, manages and operates it. Most of the members are consumer finance companies. It was started in 1976.
2. Japan Banking Personal Credit Information Center (or Zenginkyo)
This center belongs to the Japan Bankers Association and was established in 1988 by the banking industry. It is the only non-profit organization among the five credit bureaus in Japan.
3. Credit Information Center Corporation (CIC)
This credit bureau was established by the credit card sector in 1984.
4. Central Communication Bureau Corporation (CCB)
Companies with foreign capital established this credit bureau in 1979. Members are banks, credit companies and consumer finance companies ie. a cross-sector credit bureau.
5. Tera Net Corporation
This credit bureau was established in October 1999 by thirty-three credit bureaus that established JIC. Members are sales credit companies, credit card companies, department stores and credit companies affiliated with manufacturers.

An interesting business model is adopted by the Japanese credit bureaus to ensure efficient data processing management and to make sufficient money to improve their facilities. If the credit bureaus gain more than a certain amount of profit, they reduce the fee, which they set for inquiries, in order to return the excess profit to their members.

Japan Information Center (JIC), Japan Banking Personal Credit Information Center and Credit Information Center (CIC) have jointly set up a credit information network (CRIN) in 1987 to exchange negative data such as delays in repayments at each center so that members in other industries have access to the negative data.

NPL (non-performing loans) has been a serious problem for Japan and a lot research has been done around this topic. As per a press release, as of 2003, non-performing loans amount to 26% of Japan's GDP. A logical next step for Japan credit bureau would be to have an industry bureau score so that

the information of all 5 bureaus can be leveraged and these can be tackled more efficiently. Clearly there are challenges since combining this information is not easy and it may not even be feasible. One needs to understand the Japan credit bureaus in depth to achieve a better efficiency in the system.

However in 2000, FICO with the partnership of Fujitsu FIP launched Japan's first Web-based credit decisioning service which intended to provide "Scoring + Decision support" services for consumer credit granters in Japan. However this service was terminated. In 2002, FICO developed a new Web-based credit scoring service for Japanese small business credit grantors through partnership with The Japan Research Institute. The scoring model used in the services was developed as consortium models. Currently around 15 banks use this service. Also recently JCB, Japan the largest credit card issuer and acquirer in Japan, has selected Experian-Scorex's Credit Risk Decisioning Solution. It is clear that the industrial scoring solution is making its mark directly or indirectly in the Japan's financial world. However, there is no bureau score available at this moment and there exists tremendous scope for further progress in this direction.

Malaysia

The Credit Bureau is a unit established by Bank Negara Malaysia under the Central Bank of Malaysia Act 1958. One of the functions of Bank Negara Malaysia is to regulate and supervise financial institutions to ensure that the financial system of the country is sound and stable. As such, the Bank promotes prudent credit policies and professionalism among the financial institutions, including the adoption of best business practices in credit risk management. According to their website, one way of doing this, is by providing credit bureau services to the financial institutions so that they can make faster and better informed lending decisions. This institution has a clear understanding of the merit of positive and negative bureaus and they take considerable effort to educate both general public and the users of the bureau. The bureau has been in operation since 1982. However, positive information sharing was launched only very recently in 2002 at the same time as in Singapore. However in terms of the structure and the depth of information, it is one of the best in the region. It collects only credit information of borrowers including private individuals, businesses (sole proprietors and partnerships), companies, and even Government entities. The Credit Bureau does not hold any information on deposits or the investment portfolio of any individual or corporation.

The credit information collected by the Credit Bureau is sourced from more than 50 financial institutions in Malaysia. These financial institutions include all licensed commercial banks, Islamic banks, finance companies, merchant banks and several other financial institutions. In addition, reference information on the particulars of borrowers is sourced from the National Registration Department (Jabatan Pendaftaran Negara) and the Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia) for the purpose of verification of particulars provided by financial institutions. The data providers on a regular basis update the data.

For each and every borrower, the financial institutions are required to report to the Credit Bureau the following types of data:

- Personal particulars of borrower such as name, identification number, address, etc.
- Credit account details such as type of credit facilities, credit limit, outstanding balance, conduct of account and legal action status, if any.

The types of credit reports that can be obtained from the Credit Bureau are as follows:

- Summary Credit Report – Information on the total credit exposure of a borrower
- Detailed Credit Report – Information on specific outstanding credit facilities and new credit applications of a borrower
- Motor Vehicle Report – Information of motor vehicles which are used as collateral for credit facilities
- Customer Supplementary Information Report – Information on the addresses, telephone numbers, employers' names and occupations of the customer for the last three years

Currently, there is a proposal from Bank Negara Malaysia to also include written-off, written-down and partial written-off accounts' information in the credit bureau report.

In addition to consumer bureau, Info Credit D&B (Malaysia) provide commercial credit reports, receivables management and consultancy services in Malaysia. Baycorp Advantage has a substantial shareholding in Infocredit D&B Pte Limited - a joint venture between Infocredit Holdings Pte Limited and Dun and Bradstreet (Malaysia) Pte. Limited. For the consumer credit bureau, Baycorp also provided the technical support.

As mentioned earlier that the approach this country has taken in terms of bureau is one of the best in the region. However, it is not clear at this point that this infrastructure can be fully leveraged, since Bank Negara will not allow the development of industry bureau score at this stage.

Philippines

Currently, there is no official credit bureau in Philippines per se but a negative file database is in existence, which is shared and used by member banks of Bankers Association of Philippines. However, database matching is done manually since Philippines do not have a National Identification System.

The first reading on the Draft Senate Bill "An Act Establishing a Credit Information Bureau System" was done on 30th May 2005 [15]. Bangko Sentral ng Pilipinas (BSP), the Philippines central bank will set up an internal unit to collect credit-related information from and distribute credit reports to its regulated sector (i.e. banks, their affiliates and subsidiaries) in the interim period which the legislation is being put in place.

In the final state, the credit bureau will have both positive and negative information with the purpose of (1) improving the overall availability of credit especially to small borrowers, (2) lowering the cost of credit to responsible debtors and (3) reducing excessive dependence on collateral to secure credit facilities – this is particularly applicable to small and medium enterprises (SMEs). All these will spur economic activity in the country. Insurance policy information will also be reported by the credit bureau.

BSP will also be authorized to own not more than 49% of the shares in the proposed bureau.

Visa International expects that credit card purchase in Philippines will grow almost 20% this year. At present only 5% of the consumer expenditure is done through credit, debit or pre-paid card and 95% through cash and checks. As more and more people have access to financial instruments, it is important to increase the awareness of the various products and their pitfalls among the consumers. An effective credit bureau will help improve this awareness and also put necessary brakes on the organized lending sector by reducing the costs of loans, minimizing loan delinquency and credit risks.

Singapore

Credit Bureau (Singapore) Pte Ltd (CBS) is Singapore's first Consumer Credit Bureau. This is an initiative driven by The Association of Banks in Singapore (ABS) and is a joint venture between ABS and DBIS Holdings Pte. Ltd. The Consumer Credit Bureau was set up to move in line with the vision of the Monetary Authority of Singapore, which is to help credit providers make better lending decisions quickly and more objectively and thus let the financial institutions of Singapore enhance their risk management capability. It went live in October 2002.

The information found in the credit report include:

- Basic personal profile details

- Records of all credit checks made on the customer
- Latest 12 months repayment trend showing the promptness of payments relative to their due dates (No Amounts displayed)
- Records of default, if any
- Bankruptcy record, if any

Following information is excluded:

- Credit limit(s)
- Amount of loan(s) granted
- Monthly repayment(s) required
- Actual amount(s) repaid each month
- Salary of the customer
- Amount(s) deposited with the bank
- Value of assets mortgaged
- Net worth of individual
- Investment(s) made through the bank or financial institution

Though Singapore and Malaysia, two neighbouring countries launched their bureau information sharing process almost simultaneously, as far as the structure and the depth of information is concerned, Malaysia is definitely far superior. For Singapore, lack of depth of the information poses the risk of lack of predictability and usefulness of the data. One of the reasons could be that Singapore being a very small country, the customer pool (population 4,425,720) is limited and hence there is a protectionist attitude of the participating financial institutions, which prevents them from sharing too much information. As history has proven again and again, the more transparent the information sharing in the bureau the more beneficial it is for the lenders, borrowers and the economy. It will be interesting to see whether Singapore bureau evolves to a stage where it possesses more depth and holistic structure. For Singapore, though bureau data is available, no industry bureau score is available at this moment. Currently under CBS umbrella, Trans Union is assisting Baycorp Advantage in the score development, which will be released soon. Independently DP-FICO collaboration is working towards another score development here. Fortunately unlike Malaysia, there is no restriction on the score development process in this country.

Singapore also has another consumer credit bureau called CreditScan that was launched in 2003. CreditScan specializes in collecting and selling negative information to retailers, hospitals, utilities, non-bank card companies and others.

South Korea

The seed of formation of some kind of credit bureau dates way back to 1928 in Korea. The KFB was established in November 1928 as the Kyongsong Bankers' Club. Eleven participating banks conceived it, as an organization that would expedite communications and promote cooperation among all members. In September 1948, the organization was renamed Seoul Bankers' Club.

In April 1975, the Seoul Bankers' Club was reorganized and changed its name to the Seoul Bankers' Association. In November 1975, the Seoul Bankers' Association became a de facto national organization when it assumed the functions and offices of the regional bankers' clubs and changed its name to the Korean Bankers' Association.

The functions of the Regional Bankers' Association of Korea, which was formed in September 1973, were absorbed into the Korean Bankers' Association in January 1981.

In the early 1980's, the need for a new organization to raise the competitiveness of the banking industry became increasingly apparent amid the rapid change in the banking industry and the growing recognition that a more proactive organization was needed to promote the interests of the banking

community and better serve the public. These developments led to the creation of the Korea Federation of Banks on May 9, 1984.

The KFB took over credit information management services from the Korea Clearing and Credit Reporting Center in June 1986. On November 11, 1997, the Ministry of Finance and Economy officially designated KFB as the central credit information aggregation agency and granted it the authority to collect and maintain credit information from all financial institutions in accordance with the Utilization and Protection of Credit Information Act.

The Credit Finance Association (CREFIA) was established on 30th March 1998. It was formerly called The Korea Non-Bank Financing Association (KNFA) or normally known as Multiple Cards Inquiry System (MCIS) Credit Bureau.

Korea Information Service (KIS) launched Korea's first credit bureau, KIS CB, in February 2002 and started its first credit bureau service in May 2002 in terms of providing credit alert service. National Information & Credit Evaluation, Inc (NICE) followed shortly afterwards, starting its first credit bureau service in November 2002. The same month KIS started their KIS CB Score service. Since 2003, TU (TransUnion) has been their technical partner for enhancing their bureau model building/usage capability.

Korea Credit Bureau (KCB) is slated to launch in October 2005 and will provide a comprehensive positive credit information service.

Lastly, there is also a credit information sharing agreement between the five big credit card companies (commonly known in Korea as the "Big 5") whereby they would share credit information among themselves. They are Samsung Card Co. Ltd, LG Card, Kookmin Bank, Korea Exchange Bank and BC Cards (a consortium of commercial banks).

As can be seen from the above description, much activity has been going on for a long time in South Korea in terms of bureau formation. However it is fairly fragmented. Hence the benefit of the proper usage of bureau in terms of comprehensive positive information sharing has not been observed in this economy. The South Korean economy suffered from the effects of the collapse of the "plastic bubble" in 2003. Both Visa International and MasterCard International carried out comprehensive research on the consumer debt growth phenomenon in South Korea and how it could have been prevented. Their articles [11] and [16], published in Q3 2004, in particular [11], discusses in great detail what went wrong.

The countries that are way behind South Korea in terms bureau formation should learn from the South Korean experience and ensure that same mistakes are not repeated.

It appears that South Korean bureau industry is getting organized in terms of getting better leverage from the information available. NICE has established partnership with Experian to enable them to provide advanced bureau based scoring products, application fraud prevention service etc. South Korean consumer market is huge with a population of 48,640,671 and GDP exceeding \$680 billion in 2004, up 532 folds compared to the early years after the liberation from Japan in 1945. Together with the growth of the GDP, household debt is rising and constitutes a significant percentage of the GDP. If the household debt is not properly managed with the efficient use of bureau, there is reason for serious concern.

Taiwan

Almost exactly as in South Korea, the Taipei Bankers Association established the Joint Credit Information Center of the Taipei Bankers Association on March 20, 1975 to ensure close contacts between the members in credit investigations. This was in compliance of instructions set forth in a

joint letter, issued by the MOF and the Central Bank, entitled the "Guidelines on Reform of Banking Services," which stipulated that "credit investigations should be strengthened by establishing a joint credit information center for banks." As a result, the center was directly supervised by the MOF and the Central Bank.

During the subsequent 17 years, the center's services were steadily expanded due to continuous implementation of innovations and also due to demands arising from the evolving outside business environment. The center's personnel structure, systems and regulations have also undergone various adjustments and revisions over the years. In view of its expanded services, growing business scale, and of the need to undertake computerized operations, the center, with the approval of MOF, reorganized into the Joint Credit Information Center on May 20, 1992, thereby taking over the existing services of the JCIC and of the Taipei Bankers Association.

The JCIC was founded with the objectives of creating a nationwide credit information databank, enhancing the credit investigation function of Taiwan's financial institutions, promoting the development of credit investigation skills, providing credit records as well as operating and financial information concerning firms and companies, securing credit transactions and promoting the sound development of Taiwan's credit information system. In addition, the JCIC also protects the rights and interests of relevant parties, promotes credit education, and is dedicated to collecting, storing, exchanging, maintaining and updating credit information, so as to enhance financial credit information, provide such information for inquiries and utilization by member institutions, improve credit assessment, strengthen credit management, secure credits, and promote operating efficiency.

Up until January 2002, the JCIC had a total of 251 member institutions consisting of 53 domestic banks, 18 Taiwanese branches of foreign banks, 3 investment trust companies, 15 bills financing companies, 4 securities financing companies, 33 credit cooperatives, 66 fishers' and farmers' associations, 14 life insurance companies, and 10 other financial institutions. They consolidate relevant credit information from all member institutions into a credit information databank, which is made available to members in order to share credit information and reduce credit risks.

The Joint Credit Information Center (JCIC) provides information on individual loans, including bank lines and balance, as well as delinquent status (overdue for 180 days) of all borrower's loans (including credit cards) to all banks in Taiwan. The JCIC is an established island-wide online credit bureau, and is a regular source of credit information for member banks. Under Taiwan's system, banks are obliged to report information, and the database is updated monthly.

The JCIC credit bureau went live in 1993. Over time, more information was included in the credit bureau. In June 1994, information on dishonoured checks was made available. Credit information on credit card holders and contracted merchants was made available in September 1994 and started to compile information related to loans secured by stocks and granted by financial institutions in May 1999.

The information depth currently available from JCIC is quite good and there has been constant effort to improve this. However, there is no industry bureau score available at this moment. JCIC did develop its own bureau scores several years ago. However the score though powerful was not well received in the industry due to two reasons 1) high cost and; 2) it depended heavily on major derogatory information which banks were taking care of already with their own underwriting criteria. Hence it did not add any incremental value. It would be interesting to see the industry bureau score developed from this data, highlighting not only negative but also positive information; it is expected to be reasonably powerful since the data quality and depth, both are quite good, having gone through a long enhancement process.

Obviously in the absence of the industry bureau score, the Taiwan bureau is not leveraged to the fullest. Taiwan's GDP has been predicted to grow by 3.74 % for 2005, lower than the 4.05 % figure that was previously predicted for the year. According to industry observers, the global economy has

turned sluggish since the last quarter of 2004, mainly as a result of rising bank interest rates. At the same time, the crude oil prices have not declined to reflect the slowing economy, creating a further drag on economic growth. According to latest press release, public debt estimate is 30.5% of GDP. The industry non-performing loans trends are on the rise. It is to the benefit of the economy, consumers and the financial institutions if the bureau is taken to the next level and leveraged to the fullest.

Thailand

The major news in Thailand, as far as the bureau is concerned right now, is “the merger”. The Memorandum of Understanding on the merger of Thai Credit Bureau (TCB) and Central Credit Information Services (CCIS) was signed on August 19, 2004. National Credit Bureau (NCB) was formed and started credit bureau services in June 2005. The objectives of the merger are to help these organizations reduce redundant work, combine their credit information files into one source for more complete information and tighter risk management.

Both these credit bureaus started services about the same time in early 2000. However, the Credit Information Business Act was only drafted by the Central Bank in early 2000 and went into effect March 14, 2003. Legal issues regarding the existing operation of these credit bureaus arose and the members, board of directors and management of both credit bureaus resigned en masse. Hence, both credit bureaus were suspended for 3 months during Q2 2003 and clarification sought from the Credit Information Protection Committee (the entity that has the authority to control and monitor credit information business under the Credit Information Business Act). Representatives from the World Bank, the US Consumer Data Industry Association (CDIA) and US credit bureau experts met up with Thai officials and conducted a series of roundtable discussions to share the US and international experiences on credit bureaus [17]. In June 2003, both credit bureaus re-opened for business.

Post merger, the major challenge for the bureau is to capture consistent, clean and integrated information. Since many contributing banks are new to this exercise, much effort is required for clean data capture. Once this phase is over, the Thailand bureau can think of industry bureau scoring solution to take it to the next level. In Thailand post currency crisis, the economy had picked up significantly; however in 2004, the economic growth slowed partly as a result of drought, avian flu and rising oil prices, to a rather strong 6.1%. For 2005, the forecast had been lowered to 5.6%, due to global growth slowdown. But the natural disaster Tsunami (26 December, 2004) has hit Thailand very badly and has had an adverse effect on the economy. However, the government is working hard to overcome the difficulty and the GDP growth is expected to edge up to 5.8% and 6.0% in 2006 and 2007 respectively. Since Thailand is among the growth economies in Asia, in many ways it is like China, India and Indonesia. Many young consumers are becoming affluent and getting hooked to consumerism and organised lending. If proper care is not taken and the financial institutions fail to do prudent lending, we may expect a plastic bubble similar to what happened in South Korea.

Vietnam

In Vietnam, the Credit Information Centre (CIC) started operation as part of the Credit Department of the State Bank of Vietnam (SBV), the central bank of Vietnam and became an independent unit in 1999. Its functions include collection, analysis, forecast, process and provision of information on enterprises as well as other information related to monetary and banking operations to the SBV, Credit Institutions, foreign and domestic organizations and individuals.

The State Bank of Vietnam announced on 13 September 2004 that businesses (besides commercial banks) could request the SBV to furnish credit information about other businesses.

Commercial Bureau/Score Service Providers

In the U.S. the three major credit-reporting agencies are Equifax, Experian and TransUnion and on the scoring front it is FICO, which is the most dominant player. As they are the most experienced service providers in the world, naturally they would also be the major players in the Asia-Pacific. The following table lists the coverage of commercial service providers in various countries in this region.

Countries	Commercial Service Providers
Australia	Baycorp; D&B
China	Experian
Guam	Equifax
Hong Kong	TransUnion
India	D&B; TransUnion
Indonesia	N.A.
Japan	FICO, Experian
Malaysia	D&B; Baycorp
Philippines	N.A.
Singapore	D&B, Baycorp, TransUnion
South Korea	TransUnion; Experian
Taiwan	N.A.
Thailand	TransUnion
Vietnam	N.A.

The authors have provided the information, which is currently available to them. The authors apologize for the omission of any institution, which has been excluded inadvertently from the list.

Lessons from the US Credit Bureau Experience

Needless to say that in today's world, the US consumer lending market cannot function without leveraging the credit bureau. In the past, enough research has been done, to prove the merit of using the credit bureaus to grow the consumer business in the US. Many of them are listed in the reference section. The article by Baron and Staten [32] is one of the recent papers, in which this has been discussed in great detail. According to the authors [32], the US has the most complete credit files on the largest percentage of its adult population of any country. This is not surprising, given their bureau development history, which is by far the longest in the world. The US market can be naturally used as the useful benchmark. This paper is a useful reference to understand the implication of the absence of positive credit information. This also discusses in details how the availability of detailed credit histories had spurred entry and dramatic price competition in that market.

However, while one must learn from the positive impacts of the bureau in the US, the countries of Asia must also be aware of the current consumer debt situation in the US. According to a press release in January 2004, consumer debt rose to \$1.98 trillion in October 2003, up from \$1.5 trillion 3 years ago and constitutes a significant portion of the national GDP. This translates into average credit card and car loan debt of \$18,700 per US household excluding mortgage loans. The vulnerability of these loans has increased as millions of jobs have been destroyed recently due to various reasons. The US has the highest standard of living in the world and many Americans have lifestyle beyond their means due to easy availability of credit. The US is also another extreme example where debt burden has become unmanageable for many families and individuals and this has happened due to over-leveraging by the organized lending sector. Many countries in the Asia-Pacific cannot afford to have this kind of situation because neither are their economies as robust as the US nor are their consumers familiar with the pros and cons of the organized lending. Financial institutions as well as consumers should be provided with enough education so that at the end, we do not arrive at a situation where everybody is a loser.

Conclusions

It is clear from the above discussion that currently, there is enormous amount of work to be done in the bureau front in the countries in this article. The main focus should be on good data capture, good data mining, education for both lenders and consumers; and proper legal framework to avoid any abuse of the system. Many a times, financial institutions as well as bureau owners fail to understand the importance of participation and providing correct data. As more and more institutions contribute, it brings the cost down for bureau retrieval. Except for South Korea, credit bureau retrieval cost is currently an issue in most countries. If one obtains clean and comprehensive data from the bureau, it is only possible then to leverage it optimally. The faster the process, the quicker is the development of industry bureau score. Since very soon the financial institutions have to be Basel II compliant, the industry bureau score can be of great help in that aspect also providing a blanket solution. The countries where the bureau information is fragmented, effort should be made to streamline and standardize the entire process and remove all the duplicating data capture effort. To summarize, in today's world, as the boundaries between the nations are becoming blurred and the competition within and between countries is becoming fierce, one needs to be efficient in all front including financial sector. For this, it is crucial that bureau formation and leveraging is optimal. It is one area where lot of focus has to be given since developing an optimally efficient bureau can be a great challenge.

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