Banking Integration in EU: Lessons for the Opening and Reform of the Chinese Banking System
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Abstract:
The EU has advanced on the financial market integration for more than one decade and provides a good field for bank M&A, banking opening, reform and global financial integration research. This paper is just aimed to draw some lessons from the EU banking integration experience for the opening and reform of China banking system.

We first clarify the types and levels of different financial services integration. And to measure the progress and degree of financial services integration, we use both price and quantity based indicators to measure the integration development.

Then the barriers and effects of the integration are analyzed. Specifically this paper points out that the efficiency issue should be the most important consideration in the integration process. The relationship between structure, competition and efficiency is the real point in realizing the benefits of integration. Thus the market structure, consolidation, efficiency types, risks and stability issues are touched together with the EU banking integration progress.

In the third part of this paper, EU experience is drawn for the banking industry opening, reform and M&A in China. Just as the competition enhanced in the EU banking integration progress, banks in China are also facing fierce competition pressure and other problems. Many banks sell some shares to foreign investor or going publicly listed. Their main aims are raising adequate capital, increasing management level, and improve risk management ability. But are these aims guaranteed or promised by their competitive behaviors? So this paper recommends focusing on those efficiency concepts and cultivating the synthetic measures or strategies to help banks improve efficiency, such as cost, revenue, profit efficiency and risk diversification efficiency.

In conclusion the EU financial service integration procedure, banks have to spend more of their resources to competition and efficiency improvement. So when China reform and open its banking system, banks should closely relate their behaviors with efficiency improvement. And use some middle term targets to monitor the progress and make sure the behaviors are in line with the end objects, such as market efficiency and customer benefits. Only then could we establish a high efficient and healthy banking system.

Keywords: Financial Integration, Competition Behavior, Financial Efficiency, Bank Regulation, Bank Management
European financial integration is an important issue in both economic theoretical and empirical research, as theories and history suggest that the integration and development of financial markets are likely to contribute to economic growth by removing frictions and barriers to trade or transaction, and by allocating capital more efficiently. It is sure The European financial landscape has changed significantly over the past decade, especially since 2000, EU financial markets have been characterized by a deepening of liquidity and by an expansion in the range of financing techniques and products. For example Market-based financing has gained in importance, fuelled by a demand for market-based investments and the emergence of a population of institutional investors to service that demand. A number of profound structural factors have been driving these changes, such as globalization, financial innovation in products and institutions, technology, market openness, the relentless competition and continuous search for consolidation-based efficiency gains. Further, these changes have been facilitated by the introduction of the euro and ongoing action to remove policy impediments to the EU single financial market.

In China, since the entrance of WTO, the reform of Chinese state-owned banks and the building of health financial system have speed up; regulatory and other public policies are also implemented to solve the NPL problem and improve the competitive ability of Chinese financial institutions. But this reform is obviously difficult and need more check points to make sure the progress is in the anticipated line. So we could gain benefits from analyzing the EU financial integration experience and drawing some useful lessons for the situation in China.

Section One  EU Banking Industry Integration Review
1.1 Financial service integration: types and measurements

The market for a given set of financial instruments and/or services is fully integrated if all potential market participants with the same relevant characteristics: (1) face a single set of rules when they decide to deal with those financial instruments and/or services; (2) have equal access to the above-mentioned set of financial instruments and/or services; and (3) are treated equally when they are active in the market.

That is to say: Financial markets are integrated when the law of one price holds, which states that assets generating identical cash flows command the same return, regardless of the domicile of the issuer and of the asset holder.

1.1.1 Types and Levels of Financial Service Integration

Depending on the scope and depth of integration, we could into several types: scale integration, scope integration, geography integration, and business operation integration.

<table>
<thead>
<tr>
<th>Simple Type of Integration</th>
<th>Example</th>
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<tbody>
<tr>
<td>Scale integration</td>
<td>M&amp;As of similar organizations</td>
</tr>
<tr>
<td>Scope integration</td>
<td>M&amp;As among commercial banks, investment banks, and insurers</td>
</tr>
<tr>
<td>Geographic integration</td>
<td>Cross-regional M&amp;As of regional providers</td>
</tr>
<tr>
<td>International integration</td>
<td>Cross-border M&amp;As of organizations of national providers</td>
</tr>
<tr>
<td>Horizontal integration of distribution systems</td>
<td>Offer “one-stop shopping” for multiple services in a single location</td>
</tr>
<tr>
<td>Vertical integration of production systems</td>
<td>Shift from independent agents to direct distribution of services</td>
</tr>
</tbody>
</table>

1.1.2 The Financial Market Integration Measurement Indicators

For understanding the integration procedure well, it is important to assess (1) the current level of integration in different financial markets and, (2) whether integration is progressing, stable or regressing, and
then to judge (3) whether the integration is realizing the benefits it promised. To measure the current state of financial integration, we would use some categories of integration indicators and find out all frictions and barriers to financial integration.

The first broad category of measures includes price-based measures, which measure discrepancies in prices or returns on assets caused by the geographic origin of the assets. This constitutes a direct check of the law of one price, which in turn must hold if financial integration is complete.

The second category of integration measures is quantity-based measures, which we consider in order to quantify the effects of frictions faced by the demand for and supply of investment opportunities.

Other broad categories of measures include news-based measures, which are designed to distinguish the information effects from other frictions or barriers. Also indicators of integration could be based on household or firm choices, and legal institutional differences. Also these kinds of indicators could be used to measure the integration level of different markets. Normally including money market, bank credit market, bond market (government and corporate) and equity market. In this paper we focus on the indicators of banking integration.

- **Price-based Measures Of Banking Integration**

  Bank interest rate levels reflect both macro and microeconomic factors. The macro factors refer to market interest rate levels while the micro factors relate more to banks’ pricing behavior and market power. Normally we could distinguish between four lending rates, they are short-term loans to enterprises, medium- and long-term loans to enterprises, and loans to households for consumer loans and mortgage loans.

  **Cross-Sectional Interest Rate Standard Dispersion**

  The cross-sectional dispersion measure would be informative with respect to the degree of integration. As the price of capital, interest rate dispersion should decrease as integration across markets increases. We could see from the figure that since 1999, which is the first years of Stage Three of the EMU and exchange rate risk within the euro area is removed, the dispersion seems to have decreased for medium- and long-term loans to enterprises and for mortgage loans, while remaining at roughly the same level or even increasing in the case of short-term loans to enterprises and loans for consumer credit.

  **Banks’ MARGINS**

  Cabral et al (2002) provides a way to disentangle the impact of macro and microeconomic factors on interest rate that is to calculate the spreads between bank interest rates and comparable market rates. Convergence of these margins over time could be seen as signaling greater integration, while a decline in the level can be interpreted as a sign of increased competition.

  The following figures show high variability of the dispersion of margins at the beginning of the nineties and stabilization since 1999 for lending rates to enterprises, and consumer credit rates, while margins on mortgage rates have strongly converged since the late of the nineties.
The data is since the beginning of the nineties, excluding Greece from the calculations.

**Quantity-based Measure Of Banking Integration**

As seeing from the figure, loans made by banks located in the euro area to borrowers in other euro area countries, in other EU countries and in other non-EU countries as a percentage of domestic loans has increased steadily. For inter-bank loans, however, the increase is considerably larger. And as a result of substitution effect, it shows a decline in cross-border inter-bank loans outside the euro area.
1.2 EU Banking Market Integration Development

1.2.1 Remaining Barriers

Since the integration is still in progress and has not fully realized. There are still general factors representing barriers to market entry. For instance, "natural barriers" like different cultures, language or different consumer preferences are of high relevance. In some regions or markets those natural obstacles like language or consumer preferences noticeably hinder market access more than those often referred reasons, such as market infrastructure or market attractiveness. Also there are "politically induced barriers" like different national tax-legislation or different regulations (BUCH, 2001). And tax legislation and regulations specific to each country represent a most important obstacles for all foreign entering banks. Since natural barriers may be more difficult to change, politically induced barriers could be removed by political decisions to increase the potential of future integration and consumer benefits. Therefore, politically induced barriers are discussed in more wide fields.

Figure 7 Relevance of different barriers to market access in regard to retail bank products

The importance of different barriers is measured by using a scale from 10 (highly relevant) to 1 (no relevance at all). Source: Questioning of Leading Pan-European Banking Groups (2001).
1.2.2 EU Financial Integration Status

- Financial integration is progressing
  
  Progress is not the same in all market segments, for direct cross-border activity mainly takes place in big volume markets. Direct cross-border offer of retail financial products remains less developed as reasons can be seen from the above barriers.

  Delivery of many products to the end-investor continues to be organized through local distribution networks (branches or local intermediaries). Thus establishment-based trade is relatively widespread, contributing to the emergence of a number of groups or entities with significant presence in other EU-countries than the home country.

- Banking market somewhat slowed down
  
  The convergence process of national bank lending rates has trended downwards, before the introduction of the euro and boosted by the euro. But from 2001 the convergence seems to have slowed for most of the markets both for the euro area and EU15.

Figure 8 Convergence in bank lending rates: short term loans to corporations

![Graph showing convergence in bank lending rates](image)

Source: ECB and Commission Services

Convergence of interest rates may be observed independently of any significant increase in cross-border lending. For the convergence of rates could certainly be due to perceived contestability of the markets: the threat of entry by partner country institutions may be sufficient to force incumbent banks to set competitive interest rates. Alternatively, competition between local incumbents may be sufficient to force all operators in the local market to pass-through the benefits of the lower cost of capital in the wholesale markets. The remaining dispersion in euro area bank lending rates is chiefly linked to the local character of some lending activity.

Section Two  EU banking Market structure, competition, efficiency and stability in the integration

While it is generally agreed that deepening financial integration is beneficial on the whole, it is also conceivable that it may have less positive effects. For example, too much consolidation in a market segment might hinder competition. As a consequence, it is extremely important to monitor and understand the process of
financial market integration. In addition, insofar as policymakers and private agents see good reasons to promote further integration, it is important to measure accurately the competition and efficiency effects of integration in various segments of the market so that we may identify areas where further initiatives are particularly needed.

2.1 Market Structure

Banking sector of EU countries is characterized by high concentration, such as share of the five largest institutions in total banking sector assets and Herfindahl index. However, concentration remained relatively low in Germany, Italy, Luxembourg and UK. The capacity is also still high in some countries.

Table 2 Herfindahl index for CIs’ total assets and share of the 5 largest CIs in total assets (index ranging from 0 to 10,000 and in percent)

<table>
<thead>
<tr>
<th>Herfindahl Index for CIs</th>
<th>Share of the 5 largest CIs in total assets</th>
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<tbody>
<tr>
<td></td>
<td>2001</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.587</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.263</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.119</td>
</tr>
<tr>
<td>Germany</td>
<td>1.183</td>
</tr>
<tr>
<td>Estonia</td>
<td>4.067</td>
</tr>
<tr>
<td>Greece</td>
<td>1.113</td>
</tr>
<tr>
<td>Spain</td>
<td>551</td>
</tr>
<tr>
<td>France</td>
<td>606</td>
</tr>
<tr>
<td>Ireland</td>
<td>512</td>
</tr>
<tr>
<td>Italy</td>
<td>260</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1.364</td>
</tr>
<tr>
<td>Latvia</td>
<td>1.053</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2.593</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>275</td>
</tr>
<tr>
<td>Hungary</td>
<td>892</td>
</tr>
<tr>
<td>Malta</td>
<td>2.163</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.762</td>
</tr>
<tr>
<td>Austria</td>
<td>561</td>
</tr>
<tr>
<td>Poland</td>
<td>821</td>
</tr>
<tr>
<td>Portugal</td>
<td>991</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1.582</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1.205</td>
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<tr>
<td>Finland</td>
<td>2.240</td>
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<tr>
<td>Sweden</td>
<td>760</td>
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<tr>
<td>United Kingdom</td>
<td>282</td>
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<tr>
<td>EU12</td>
<td>544</td>
</tr>
<tr>
<td>unweighted average</td>
<td>885</td>
</tr>
<tr>
<td>EU25</td>
<td>566</td>
</tr>
<tr>
<td>unweighted average</td>
<td>1.185</td>
</tr>
</tbody>
</table>

Source: ECB.
Note: Aggregate concentration figures display both weighted and unweighted averages.
2.2 Competition and Consolidation

The potential impact of integration on competition structures is dual: Integration means a better match of supply and demand on an enlarged scale; While at the same time integration also driver for a consolidation process.

Three patterns of competitive structures have been identified. They coexist in the different market segments and evolve as the integration process proceeds. Three patterns of competition structures are emerging: Competition within national markets; Multi-domestic competition with cross-border entities; Competition on an EU basis.

2.2.1 Competition Within National Markets

Integration taking place in other parts of the financial sector may, however, encourage consolidation and exert upward pressure on concentration levels of the concerned market segment, thus resulting in the creation of national champions. This is typically the case for the EU retail banking sector.
2.2.2 Multi-domestic Competition with Cross-border Entities

In a second structure, customers are confined to their national markets, which are dominated by a few, large companies. Yet, under these circumstances, some are part of pan-European groups. Although consolidation is taking place at the domestic level, it chiefly happens on a cross-border basis through acquisitions, resulting in significantly increased concentration levels at pan-EU level. From a company perspective, an important share of business takes place in countries other than the home country. From a customer point of view, choice does not improve as no cross-border provision of services is taking place.

2.2.3 Competition on an EU-wide basis

The third competitive structure is the one traditionally associated to a fully integrated market. It is characterized by the presence of companies operating in several EU countries, either through branches or directly via cross-border provision of services. New entrants from outside can easily acquire a significant market share, indicating the openness of the market to new entrants.

2.2.4 Consolidation Behavior

The data shows that the number of credit institutions in the EU has been declining since 1997, and in 2004 it dropped by a further 2.8%. In 2004 the total number of EU credit institutions stood at 8,374. Mergers & Acquisitions activity has been declining since 1999, and this trend continued in 2004 and the first half of 2005. This suggests that consolidation is proceeding, albeit at a decelerating pace. This decline can be explained mainly by a slowdown in domestic M&A activity. By contrast, cross-border M&As have increased relative to the period 1993-1998, both in absolute and relative terms, accounting for about 30% of the number and 24% of the value of all deals in the more recent period, up from 20% in the earlier period (Figure 10).
2.3 Market Efficiency

Integration is expected to deliver benefits in terms of: Economies of scale and scope; Better risk allocation; Innovation and more choices.

In EU financial market, overall efficiency has improved (as profitability and cost-to-income ratio shows), even in less integrated segments; the integration process spurred innovation in all segments, but with a more different scenario. Banking market gains some middle level efficiency improvement and innovation, while still has some higher market power.

Economies of scale, scope and cost efficiency. Total costs, as a share of total assets, still declined for all bank categories. Developments varied among the components of total costs. For example, service providers can realize efficiency gains at a rather early stage of the integration process through the process of back-office integration. While the share of staff costs declined only marginally, and this left banks relying on administrative and other costs to reduce their total costs. This may imply limited scope for future cost-efficiency gains. As banks in the euro area have relied rather heavily on cost-cutting to support profitability over the last few years, the exhaustion of this source of profitability may exert pressure on results.
in the future.

**Figure 10** Number and value of banking sector M&As in EU-15

![Number and value of banking sector M&As in EU-15](image)

Source: Thomson Financial SDC.
Note: 2005 figures are annualised. Cross-border M&A refers to transactions in EU-15 involving a non-domestic acquirer. Outward M&A refers to non-EU acquisitions of EU-15 banks (only up to 2005Q1). The number of deals is shown on the left-hand scale. Value of deals is represented as stacked lines on the right-hand scale, but is missing for a number of deals.

**Figure 11** Profitability and cost-to-income ratios of euro area banks

![Profitability and cost-to-income ratios of euro area banks](image)

Source: Banking Supervision Committee.

**Figure 12** EU Financial Integration Efficiency Spectrum

![EU Financial Integration Efficiency Spectrum](image)

Source: DG Internal Market
**Product availability and risk efficiency.** Under integration, the resulting wider pool of participants will increase the variety of the risk profiles and facilitate the risk diversification, resulting in a possible prices reduction when compared with the smaller pre-existing markets. This improves not only corporate profitability but also enhances product availability.

For instance, the development of integrated money markets allows banks to have a more efficient and cheaper liquidity management, and thus has consequences for the price of domestic risk management service. Risk could thus be diversified at lower prices and in a larger market.

**Innovation and dynamic efficiency.** Market integration is expected to foster innovation, not only in terms of new methods or tools to improve existing products but also in terms of new products and services. For instance, the initial fixed costs implied by the developments of new and more efficient infrastructures are more easily distributed among a larger number of participants. Therefore, such developments clearly require that markets reach a “critical size”, in order for them to enhance market efficiency and foster demand for existing, as well as new, services and products. For the market capacity is once a key issue in comparing the competitive advantages of Europe with US. So increased liquidity, coupled with wider possibilities of risk diversification, also opens up new opportunities for investments in less standardized products, such as structure finance, which help London gain its strength in global financial center competition.

### 2.4 Market Stability

The increased scale of financial institutions implies that many national markets have become vulnerable to a few, systemic institutions; also though the resulting cross-border and cross-sector inter-linkages normally contribute to an efficient distribution and allocation of risk across the EU but may propagate financial contagion across sectors and countries. So financial stability concerns soon become an issue of European interest.

**Scale developments and too big to fail.** In recent years, the EU financial sector has been through a strong consolidation phase which has changed the structure of the financial system towards larger and more complex financial institutions and group structures. A growing number of financial institutions have attained a critical size, allowing them to monitor their risks with more advanced tools in a more efficient way. At the same time, the stability of the EU national markets has become increasingly dependent on a few systemic institutions.

**Conglomeration and cross-sector linkages.** One of the most striking developments in European financial markets in recent years is the emergence of a tier of complex groups and conglomerates as European financial institutions have implemented broader diversification strategies to evolve away from the traditional banking/insurance split, which also makes cross-sector risk or crisis contagion possible. These strategies have involved the creation of financial conglomerates spanning a combination of banking, insurance, investment services and collective portfolio management. As a weighted average, financial conglomerates account for approximately 30% of the deposits and 20% of premium income in EU15 Member States. These years, cross-sector links have been reinforced in recent years through the development of instruments for credit risk transfer and hedging.

**Cross-border linkages.** As integration progressing, cross-border linkages are high in financial markets. These well-developed risk transmission channels at pan-European level normally contribute to the efficient distribution of risks, which has a stabilizing impact. However, the transmission channels are also potential vehicles of cross-border risk contagion. Financial linkages and Ownership linkages both contribute to constitute risk transmission channels cross border.
2.5 Monetary Policy Transmission Effects

Monetary Policy is transmitted through the interest rate and the credit channel. These transmission channels operate via the costs and sources of finance and the balance sheet position of non-financial corporations, households and financial intermediaries. It is surely the monetary transmission channels have changed with the integration of banking industry.

Section Three  Lessons for Banking Reform and Opening in China

Financial integration contributes to the economy in two way, they are increasing the accumulation of input factors and improving the resources allocation efficiency. As we know the degree of financial development can be measured in terms of different components, namely the size, the structure and the efficiency of the financial sector. Using size we measure the depth of financial intermediation. Using structural indicators we try to know the competition behavior and the allocation of resources. Using efficiency indicators we could find the competition results and whether the benefits have realized.

But the transmission system among the above frame is not naturally guaranteed. And one of point we have concluded from the progress of EU banking integration is that contestability is more important than structure. From structure changes, we should pay more attention to the competition behaviors observed in the market development. And then whether the competition has realized the efficiency improvement objectives, such as in cost efficiency, profit efficiency, risk management efficiency and dynamic innovation efficiency.
3.1 Exploring Into the Black Box of SCP Model to Determine Bank Competition

This issue of competition is of important interest for banking opening and reform in China, as this process has been motivated by the opinion that its benefits through the reduction of monopoly rents and the increase of cost efficiency would exceed its potential losses. Indeed, an increase in banking competition may weaken financial stability, as there is a financial interdependence between banks due notably to interbank deposits and loans. Furthermore, a heightened competition may incite banks to take excessive risks when granting loans, resulting in a higher probability of bankruptcy (e.g. Besanko and Thakor (1993)). It is therefore important to provide evidence regarding the efficiency gains expected from the increasing competition to check if benefits of banking competition really exceed costs.

The literature on the measurement of competition can be divided into two major streams. The structural approach to model competition embraces the Structure-Conduct-Performance (SCP) paradigm and the efficiency hypothesis. The SCP investigates whether a highly concentrated market causes collusive behavior among larger banks resulting in superior market performance, whereas the efficiency hypothesis tests whether it is the efficiency of larger banks that enhances their performance.

As response to the theoretical and empirical deficiencies of the structural models, non-structural models of competitive behavior have been developed namely the Iwata model, the Bresnahan model, and the Panzar and Rosse (P-R) model. Thus, the degree of competition in the banking system should be measured with respect to the actual behavior of banks. And the actual behavior should be related not only to banking market structure, but also to entry barriers (Besanko and Thakor 1992), including on foreign ownership, and the severity of activity restrictions, as those can limit the degree of intra-industry competition. Furthermore, the degree of competition from other forms of financial intermediation (capital markets, non-bank financial institutions, insurance companies) will play a role in determining banking system competitiveness.

3.2 Bank Reform and Opening Lessons from EU Experience

The sheer size of banks makes success of reform imperative, since China entered WTO, solid progress has been made in improving bank supervision and regulation, reducing NPLs, increasing the capital adequacy ratios,
governance system reform, performance targets and risk management guidelines for banks.

Focus on the relationship between structure, competition behaviour and efficiency, while not too much debate only on the structure. Just as mentioned above, we should look into the black box of the opening and reform procedure and increase transparency in the decision, and then it will be more reasonable to have a discussion and debate platform. For example, to foreign banks, normally they could choose from several entering strategies: Direct cross-border sales; Branches and subsidiaries; Mergers and acquisitions. When foreign banks buy the shares of state-owned banks, many disputes arouse on how much the price is reasonable. We may take their share buying activity as a way to change the structure of the banking industry in China, and one of the backing reason to sell ownership is that state-owned banks could improve their efficiency through foreign advanced management skills and experiences. But how could the black box between structure and efficiency be explained and guaranteed is not communicated to people. So the discussion or dispute on the state-owned banks shares selling is much more due to the absence of transparency, not only the absolute price level. As profit is determined by many issues, even profit could not be singly used to prove the correctness of the selected reform or opening measures. Theory also suggests that performance measures, such as the size of the banking margins or profitability, do not necessarily indicate the competitiveness of a banking system. These measures are influenced by a number of factors, such as a country's macro-performance and stability, the form and degree of taxation of financial intermediation, the quality of country's information and judicial systems, and bank specific factors, such as scale of operations and risk preferences. As such, these measures can be poor indicators of the degree of competition.

**Time-bound restructuring plans.** EU and other international experiences show time-bound plans critical to success of bank reform. Such as in the reform of Chinese state-owned banks, government gives banks a mandate to operate on a commercial basis with modern corporate governance. Stipulating commercial focus, like independent boards of directors, sound internal control and risk management, comprehensive external audits, foreign strategic investors and recapitalization, insulate them from central and local political influence. Also the government and supervision institutions are reforming important market infrastructures, like strengthening supervision and regulation, modernize tax regime (Allow banks to deduct specific loss provisions, reduce or eliminate business tax), improve legal system, facilitating measures to deal with interest rate and exchange rate liberalization and other innovation encouraging activities, etc.

**How to judge relationship banking and overcapacity in banking.** From EU experience, we know that the implementation by the bank of a customer relationship to gain some information on the borrower is a necessary measure for banks to reduce the problems related to information asymmetries. This should not be confused with the Guanxi Lending. It is true that the ownership structure of domestic banks often leads to lending practices that are far from sound. Local governments and shareholders of non-financial companies often control domestic banks. Opening the domestic financial sector to foreign competition helps to mitigate these conflicts of interests and bring Sounder Lending Practices, advanced operation and management abilities. Also, banking activities require sunk costs, as banking markets have high barriers to exit. These barriers come from the need to implement a customer relationship through a network of branches, but also from the fact that a loan portfolio is a rather illiquid asset as the potential buyers are not able to know its real value. Sunk costs have been observed to lead to excess capacities on EU banking markets (Davis and Salo 1998). Therefore, these overcapacities of banking markets are endogenous barriers to the entry of new competitors. And this overcapacity should not be simply related to low efficiency problem.

**Pay attention to risk and stability issue brought by competition.** Just as regulatory and strategic risks are among the most mentioned risks faced by euro area banks in the integration. Chinese banks should also pay
much more attention to the regulatory and strategic risks when making reform and opening. And competition may in some circumstances transited to performance pressure, make banks to loosen the credit approval standards.

Figure 15 sources of risk for euro area banks

(2005, % bank answers per score)

![Bar chart showing sources of risk for euro area banks.]

Sources: Banking Supervision Committee and ECB calculations.
Note: Data not available for Irish banks.

Figure 16 Changes in credit standard applied to the approval of loans or credit line to households for house purchase

![Line chart showing changes in credit standards.]

Factors contributing to tightening credit standards:
- Expectations regarding general economic activity
- Housing market prospects
- Competition from other banks

Source: ECB Bank Lending Survey.
3.3 Different Regulation Environment, Competition Behavior and Strategic Management, Shanghai Market Case

Due to different competitive advantages and regulatory environment, domestic and foreign banks in Shanghai (which is the most open region in financial sector of China) show quite different behavior and performance. Also we could find many other reasons behind the difference between domestic banks and foreign ones, such as different business strategy, risk management framework, performance pressure, and incentive system.

**Competition under different regulatory environment.** Foreign financial institutions undertake different regulatory and macro economic policies adjusting obligations with domestic banks. For example in 2004 and 2005, due to the macro economy adjusting, in Shanghai area loans of domestic banks only increased 9.3% in 2005, while the growth of foreign financial institutions is 32.8%, much higher and show no negative effects of the adjusting. Thus the market share of foreign financial institutions in loan market increased 4.4% and reached 11.9%, a big jump. And in foreign currency loan market, the share is as high as 54.8%.

Table 5 Market share of foreign financial institutions in Shanghai (2001–2005)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan market</td>
<td>9.4</td>
<td>7.7</td>
<td>7.5</td>
<td>10.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Deposit market</td>
<td>2.5</td>
<td>2.7</td>
<td>3.4</td>
<td>4.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Asset share</td>
<td>—</td>
<td>—</td>
<td>10.1</td>
<td>12.2</td>
<td>12.8</td>
</tr>
</tbody>
</table>

Source: People’s Bank of China Shanghai Headquarter
Figure 18 compare of loan growth between domestic and foreign financial institutions in Shanghai (2004.1-2005.11)

Source: People’s Bank of China Shanghai Headquarter

**Different loan behavior.** The loan of domestic banks is more concentrated in real estate and infrastructure with government background, while foreign banks diversify loan in many manufacturing industries. This obviously shows the advantages of domestic and foreign banks in different fields, and different risk management abilities or preferences. As foreign banks have more loans in foreign currency and multi-national companies, their loan margin is lower than domestic banks. DeYoung and Nolle (1996) have argued that foreign banks sometimes are relatively less profitable, because they value growth above profitability in the beginning period of entrance.

Table 6 compare of NPL ratio and loan margin between foreign and domestic financial institutions

<table>
<thead>
<tr>
<th></th>
<th>Foreign</th>
<th>Domestic</th>
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<tbody>
<tr>
<td></td>
<td>2005</td>
<td>2004</td>
</tr>
<tr>
<td>NPL ratio</td>
<td>0.59</td>
<td>0.79</td>
</tr>
<tr>
<td>Margin on loans</td>
<td>1.18</td>
<td>1.08</td>
</tr>
</tbody>
</table>

**Strong advantages of foreign banks in foreign currency business.** The deposit and loans of foreign financial institutions increased faster than domestic ones. With the enlargement of opening fields and levels, foreign financial institutions put much more resources in the RMB business, in Shanghai foreign financial institutions increased 44.4% and 42.9% in deposits and loans amount in 2005. Foreign financial institutions especially have competitive advantages in foreign currency business, in 2005 the increase of foreign currency deposits and loans have occupied 97% and 91% of total increase in Shanghai area.

**Opening and reform bring innovation and competition.** Also the regulatory authorities speed up the financial innovation progress, with more innovative products in used in market, such as commercial paper, asset securitization, the financial structure of corporations has improved. Also with the products of forward and swap, the interest rate and currency risks are more possible to hedge.

Table 7 Financing structure of non-financial institutions in Shanghai, 2000-2005

<table>
<thead>
<tr>
<th></th>
<th>Financing amount (100 million RMB)</th>
<th>share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loans</td>
<td>Bonds</td>
</tr>
<tr>
<td>2000</td>
<td>545.2</td>
<td>36.5</td>
</tr>
<tr>
<td>2001</td>
<td>1221.3</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>1767.5</td>
<td>25.0</td>
</tr>
</tbody>
</table>
In simple conclusion, when we reform and open the banking industry, we need focus more on the competition behaviors and make sure they improve the quality and availability of financial services in the domestic financial market, and enabling the application of more modern banking skills and technology. Also we should serve to stimulate the development of the underlying bank supervisory and legal framework, as the regulation competition quite critical in the integrating financial world.

References:
3. Carsten Eppendorfer, Rainer Beckmann, Markus Neimke, Januar 2002, Market Access Strategies in the EU Banking Sector--Obstacles and Benefits towards an integrated European Retail Market, Ruhr-University of Bochum
5. ECB, December 2005, Financial Stability Review
6. ECB, September 2005, Indicators of Financial Integration in the Euro Area
12. Peter Geih, Lucie Pfaff, China’s Banking System: Before and After WTO Membership, Minnesota State University, College of Mount Saint Vincent 2005