EXPLORING THE ASSESSMENT OF CONCENTRATION IN EU MERGER CONTROL OF THE BANKING INDUSTRY

Haoqian CHEN

Renmin University of China Law School No.59 Zhongguancun Street, Haidian District Beijing, 100872, **P. R. CHINA** &

Yi Liao

J. D. candidate in University of Hong Kong

ABSTRACT

In the legal framework of EU merger regulation, the substantive investigation has three main sectors, product market, geographic market and competitive assessment. But some deficiencies in current framework can be found. The objective of this paper is to identify these deficiencies and propose how to improve the legal status quo in banking industry.

Keywords: Competition law, EU merger control, banking industry.

INTRODUCTION

Prior to the financial crisis in 2008, the high level of concentration in banking industry resulted by the mergers and acquisitions (M&A) across the Member States of European had already raised substantial competition concerns.¹ In the wake of financial crisis, the number of M&A deals is increasing significantly due to the incentive to preserve business² and it is claimed that the competition law should circumvent the financial services, such as the banking or insurance industry, based on the concept 'failing firm defence' and 'too big to fail'.³ However, the stance of EU has not changed since in the *Zuchner* case⁴ the application of Treaty in the Functioning of the European Union (TFEU) Article 101 and 102 (ex Article 81 and 82 EC Treaty) into the financial services was confirmed. European Merger Regulation⁵ applicable to cross-boarder mergers was promulgated in order to control mergers that distort competition⁶.

In the legal framework of EU merger regulation, the substantive investigation has three main sectors, product market, geographic market and competitive assessment.⁷ But some

² See the news 'Mergers and acquisitions reach highest volumes since the financial crisis' on City A.M., 22 December 2014, available at <u>http://www.cityam.com/206134/mergers-and-acquisitions-reached-highest-value-financial-crisis-2014</u>, also see Dmitry Marchan, Analyzing How Financial Crisis Has Changed M&A Deals, Baker & McKenzie, available at <u>http://www.bakermckenzie.com/ARRussiaAnalyzingFinancialCrisisMA/</u>.

³ 'Too big to fail' means the financial institutions are extremely important for the society and thus their failure or insolvency will bring devastating effect to the whole society. For further information about 'too big to fail', see Andrew Ross Sorkin. (2009). Too big to fail: Inside the battle to save Wall Street'. Allen Lane, Gary H. Stern and Ron J.Feldman. (2004). Too big to fail: The hazards of bank bailouts'. Brookings Publishing.

⁴ Case C-172/80 Zuchner v. Bayerische Vereinsbamk AG [1981] ECR 2021,2030

¹See the European Commission, Report on the retail banking sector Inquiry, 31/01/2007, at p. 97, available at: <u>http://ec.europa.eu/competition/sectors/financial services/inquiries/sec 2007 106.pdf</u>. In this report, the Herfindahl-Hirschman Index (HHI) was introduced to measure the level of concentration. The average HHI value in EU is approximately 5800 over 2000 which is the typical threshold of not raising competition issues.

⁵ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the ECMR) 2004]OJ L24, 1-22

⁶ *Ibid*, L 24/3. para. 24.

⁷ See examples, Commission Decision of 18/04/2011 declaring a concentration to be compatible with the common market (Case No COMP/M.6164 - BARCLAYS BANK / EGG CREDIT CARD ASSETS) according to Council

deficiencies in current framework can be found. The objective of this paper is to identify these deficiencies and propose how to improve the legal status quo in banking industry.

The following parts start with examination of whether identification of the relevant geographical market in banking industry is too strict by analyzing some EC cases. The third part analyzes the peculiarity of identification of relevant market in the banking industry and strives to apply a method to identify the relevant market into the banking sector. In the fourth part, the current mechanism of competitive assessment of concentration used by the Commission will be improved and introduce a new index to make the assessment more intuitive. Two exemptions of banking merger doctrines in the wake of financial crisis are discussed in the fifth part.

Whether identification of the relevant geographical market in banking industry is too strict?

In respect of geographical market, the European Commission has decided not to oppose the mergers and acquisitions where the relevant geographical market is national at scope, ⁸such as Barclays Bank / Egg Credit Card Assets⁹ case where it was alleged that 'the geographic market for both payment card issuing and card-based consumer credit is national¹⁰ or substantive within a single Member State, such as *Fortis/BCP* case¹¹ case where it is deemed to be national when most products remain national notwithstanding the Europeanization selling of other products.¹² The Commission even allows the M&A deals in the presence of the tendency towards inter-community or international market. such as Volkswagen/Offset/Crescent/LeasePlan/LV case, ¹³, Banco Santander/Abbey National case, ¹⁴ and Banco Santander/Abbey case.¹⁵ The narrow approach only to focus on M&A deals that overtly exceed the national scope reduces the possibility of the application of competition law, thereby permitting many M&A deals which are likely to distort competition in the European market. Such approach is counterproductive¹⁶ because concentrations in the national scope are precursors of future cross-boarder M&A deals and potentially

⁹ Case No COMP/M.6164

Regulation (EC) No 139/2004, Commission Decision of 05/09/2011 declaring a concentration to be compatible with the common market (Case No COMP/M.6244 - BNP PARIBAS / FORTIS COMMERCIAL FINANCE HOLDING) according to Council Regulation (EC) No 139/2004.

⁸ In many cases, the market has been considered domestic in scope. See examples, for retail banking, see Decision M.4844, Fortis/ABN AMRO ASSETS, Recital N. 16. For corporate banking, see Case No COMP/M.3894, Unicredito/HVB, Commission Decision of 18 October 2005. For card issuing and processing, see Cases No COMP/M. 4844, Fortis/ABM AMRO ASSETS, Recitals N. 42 through 60 and 87, and Case COMP/M.3740, Barclays Bank/Föreningssparbanken/JV, Commission Decision of 2 June 2005, Recital N. 16. For factoring, see Case No COMP/M.2577, GE Capital/Heller Financial., Commission Decision of 23 October 2001, Recitals N. 9 through 11 and 17.

¹⁰ Ibid, para. 17

¹¹ Case No COMP/M. 3556. Notification of 08/12/04 pursuant to Article 4 of Council Regulation No 139/20041

¹² *Ibid*, para.22.

¹³ Case No COMP/M.3090, para. 16. Notification of 24/05/2004 pursuant to Article 4 of Council Regulation No 139/2004.

¹⁴ Case No COMP/M.5384, para. 72,73. Notification of 29 October 2008 pursuant to Article 4 of Council Regulation No 139/2004.

¹⁵ Case No COMP/M.3547, para. 18,19. National Notification of 13/08/2004 pursuant to Article 4 of Council Regulation No 139/2004.

¹⁶ Andrea Lista. (2012). EU Competition Law and the Financial Services Sector, informa law from Rouledge.

substantively influential in the competition of the internal market.¹⁷ Additionally, many banks have foreign affiliates and thus the advantages obtained by the M&A deals within national scope ostensibly may be shifted to foreign affiliates by cross-boarder capital flow or other ways, which results in the effect of cross-Community on competition.¹⁸ As a consequence, the local authorities may not impose enough control on the cross-boarder cash flow and the MA deals that have high risk of posing threat to cross-Community competition shall be regulated by a higher level of authority, the Commission, instead of the local authorities. One possible approach to improve such situation can be to sufficiently apply the Article 102 TFEU into the M&A deals confined within the territory of one single member state and consider the potential impact. The scope of the EU Merger Regulation is 'all concentrations with a Community dimension¹⁹ The fundamental requirement of the Community dimension is 'worldwide' or 'Community-wide' regardless of the minimum threshold requirements on turnover of concerned undertaking.²⁰ The Article 102 TFEU is an alternative instrument to regulate mergers when the EU Merger Regulation cannot be adopted. The Article 102 TFEU can apply if abuse of dominant market power impedes competition in the internal market. Abuse that may potentially impede competition can also fall into the scope of EU competition law.²¹ But can the Commission or European Court use the assessment of abusing dominant market power to evaluate the concentrations?²² The answer is positive. In United Brands v. *Commission*²³, the 'dominance' concept was used for merger regulation.²⁴ However, it is hard to ensure that promoting competition is definitely right. Because based on Structur-Conduct-Performace (SCP) paradigm, on the one hand, competition in the banking sector can improve bank efficiency²⁵ but on the other hand, competition may also have a negative effect on bank performance due to losses linked to excessive risk-taking behavior.²⁶

The feasibility and peculiarity of Identification of the relevant product market in banking industry

A relevant product market stipulated in the Guidelines is defined as comprising 'all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use'.²⁷ The Commission's approach to identification of the relevant product market is the SSNIP ('small but significant non-transitory increase in price') test involving analyzing demand-side substitution²⁸ and supply-side²⁹ substitution. The rationale of SSNIP is to examine whether

¹⁷ See The Financial Services M&A Review, 2005, Price Waterhouse Coopers, at p,24.

¹⁸ Franklin Allen, Thorsten Beck, Elena Carletti, Philip R. Lane, Dirk Schoenmaker and Wolf Wagner. (2011). Cross-Border Banking in Europe: Implications for Financial Stability and Macroeconomic Policies, Centre for Economic Policy Research, p. 17-29.

¹⁹ See EU Merger Regulation Article 1, para.1.

²⁰ *Ibid*, Article, para. 2, 3.

²¹ See Case T-219/99 British Airways plc v. Commission [2004] 4 CMLR 1008, at point 293 of the judgment.

²² Andrea Lista. (2012). EU Competition Law and the Financial Services Sector, informa law from Rouledge.

²³ Case 27/76 United Brands Company and United Brands Continental BV v Commission [1978] ECR 207. See also Case 85/76 Hoffmann-La Roche Co AG v Commission [1979] ECR 461.

²⁴ Jonathan Faull and Ali Nokpay,. (2007). The EC Law of Competition, OUP, p. 469.

²⁵ See Bain, J.S., 1951. Relation of the profit rate to industry concentration: American manufacturing, 1936– 1940. Q. J. Econ. 65, 293–324.

²⁶ See Lapteacru, I., Nys, E., 2011. Impact of competition on bank efficiency: the case of Eastern and Central Europe. Rev. Économique 62, 313–330.

²⁷ See *supra* note 9, para. 7, also see Case T-114/02 BaByliss v. Commission [2003] E.C.R. II-1279.

²⁸ Commission notice on the definition of the Relevant Market for the purposes of Community competition law Official Journal C 372, 09.12.1997, para. 15.

customers will switch to other products which are possibly substitution when increasing the price of identified products.³⁰ In other words, the more the substitutability of the products is, the more possible the products are regarded part of the same market. But Lista contends that whether customers would open the business accounts if they cannot open the saving accounts.³¹ If so, the two kinds of products are interchangeable and thus belong to the same market.³² Lista blurs the premise that is to increase the price of one kind of product rather than absolutely block the access of the product. The underlying economic methodology of SSNIP test is HM-test (Hypothetical Monopolist).

The HM-test³³ first introduced as the SSNIP test in the US Merger Guidelines has been frequently used by the Commission,³⁴ examining whether customers would switch to potentially substitutable products in response to the 'small but significant non-transitory increase in price' (by 5 to 10 per cent).³⁵ If the products of the hypothetical monopolist are unprofitable due to the customers' switch to the substitutes, these products are included in the relevant market.³⁶ The test would be applied iteratively until the hypothetical monopolist would find the products profitable.³⁷

However, the HM-test may fail when it is used to assess the banking merger cases. First, the 5%-10% increase of price may be not suitable to some financial services or products because it would not result in substantial effect in customer's behavior when the price of the hypothetical products is relatively low, such as transfer deposit fee in retail banking and it would result in too many changes in price when the price is significantly high, such as M&A advice or IPO advice, where the appropriate price change is expected to be lower than 5%. Therefore, the test may vary depending on the significance of products' price in different industries instead of being applied rigidly³⁸ although the Commission remains the current terms.³⁹ Second, because the questions on questionnaires are hypothetical and out of the scope of people's ordinary experience, the interviewee may not understand the questions properly or neglect some consideration that would be taken account in real cases.⁴⁰

³⁴ See an example as Case COMP/M.2947 Verbund/ Energie Allianz, [2004] O. J. L92/91.

²⁹ *Ibid,* para. 22.

³⁰ See Alistair Lindsay. (2006). The EC Merger Regulation : Substantive Issues, Sweet & Maxwell, p. 101.

³¹ See *supra* note 44, p. 194.

³² Ibid.

³³ See discussion about HM-test: Mario Monti, Market Definition as a cornerstone of EU Competition Policy, speech of October 5, 2001, available at <u>www.europa.eu.int/comm/competition/speeches/index_2001.html</u>: G. Werden. (1992) Four Suggestions on Market Delineation, Antitrust Bulletin; Harris & J. Simons. (1989). Focusing Market Definition: How much Substitution Is Necessary? , Research in Law and Economics; M. Baumann & P. Godek. (1995). Could and Would Understood: Critical Elasticties and the Merger Guidelines, Antitrust Bulletin; F. Johnson. (1989). Market Definition under the Merger Guidelines : Critical Demand Elasticities, Research in Law and Economics.

³⁵ See Doris Hildebrand. (2009). The Role of Economic Analysis in the EC Competition Rules, 3rd edition, Kluwer Law International, p. 407.

³⁶ Ibid.

³⁷ Ibid.

³⁸ The flexible price increase was adopted in a US case. Marathon Oil v Mobil Corp 530 F. Supp315 (N.D. Ohio 1981), affirmed, 669 F. 2d 378. See also the US Horizontal Merger Guidelines, 1992, para. 1.11, available at <u>www.usdoj.gov/atr/public/guidelines/hmg.htm</u>; the International Competition Network, Report on Merger Guidelines and Market Definition, available at

http://www.internationalcompetitionnetwork.org/uploads/library/doc562.pdf.

³⁹ See *supra* note 9.

⁴⁰ American Bar Association. (1997). Comments of the Sections of Antitrust Law and International Law and Practice of the American Bar Association.

But in banking industry, the Commission usually considers differentiated fields of banking service, characteristics of products, barriers and switching cost apart from SSNIP test to identify the relevant market.

Peculiarity of Identification of the relevant product market in banking industry Field of banking service

The Commission consistently divides the banking industry into four main parts⁴¹: (1) retail banking that provides services for private individuals,⁴² (2) corporate banking that provides services for corporates,⁴³ (3) investment banking that provides service related to M&A, IPO (initial public offering) and new issues of stocks and bonds⁴⁴ and (4) financial market services that comprise services such as trading in securities, bonds and derivatives as well as foreign exchange and money market instruments.⁴⁵ Generally, the products provided by the four sectors have clear boundary and are regarded as separate markets. But there may be overlapping financial products between these different banking sectors so further investigation on characteristics of specific products in each banking sector is necessary.

Product characteristics

The Commission assesses the interchangeability by differentiating the characteristics of products, normally putting forward to the separation of product markets. In *Bank Austria/Creditanstalt*,⁴⁶ factoring and leasing constitute separate markets due to the difference of characteristics.

However, it is by no means inevitable. Taking deposits in retail banking as an example, in *Nordbanken / Postgirot*,⁴⁷ the substitutability of different types of deposits including saving accounts, transaction accounts and time deposits were investigated from supply-side and demand-side. The Commission claimed that the segments are considered as in the same product market because of the high degree of interchangeability,⁴⁸ notwithstanding the characteristics distinction.

Barriers and switching cost

Barriers or costs associated with the switch of one kinds of products to another kinds of products considered as possible substitutes is an indicator that the two products are in separate markets.⁴⁹ In *Credit Agricole/ Societe Generale Asset Management*,⁵⁰ obstacles to the effective substitution between active and passive asset management result from high entry and management fees. Switching between them requires the necessary skills, technologies

⁴¹ See cases COMP/M.1910 – Merita/Nordbanken/Unidanmark, para. 7; COMP/M.117 - Fortis AG/Generale Bank, para 11-12; COMP/M.3894 - Unicredito/HVB, para. 8; COMP/M.850 - Fortis/MeesPierson, para. 8; and COMP/M.2225 - Fortis/ ASR, para.8.

⁴² See case COMP/M.2567 - Nordbanken/Postgirot.

⁴³ Ibid.

⁴⁴ See case COMP/M. 3894 - Unicredito/HVB.

⁴⁵ See case COMP/M.873 – Bank Austria/Creditanstalt.

⁴⁶ See case COMP/M.873 – Bank Austria/Creditanstalt.

⁴⁷ See case COMP/M.2567 - Nordbanken/Postgirot.

⁴⁸ *Ibid*, para. 9.

⁴⁹ See Porter. (1998). Competitive Advantage, The Free Press, p. 278.

⁵⁰ Case No COMP/M.5728 - Credit Agricole/ Societe Generale Asset Management

After

and economic scales in passive asset management that all cost significant money.⁵¹ Therefore, the two products are not substitutable.

The applicability of Price Correlation Test into the identification of the relevant market in the banking sector

In traditional markets, products and services are labeled with difference prices and companies compete with each other and enlarge market shares through adjusting prices. But in the banking sector, some services or products may not have clear prices. For example, banks provide saving deposit and loan services with interests and lending rates instead of prices. To some extent, the interests and lending rates have the same functions as prices. High interests attract more people to save money and comparatively low lending rates also attract people to borrow money. This part will regard the lending rate as the price of products to examine the applicability of Price Correlation Test into the identification of the relevant market in the banking sector.

Price correlation test is a quantitative method different from another method adopted by the Commission, questionnaires, a qualitative method. In banking mergers, the Commission rarely use such quantitative method other than the methods discussed above. This part will examine the applicability of Price Correlation Test into the identification of the relevant market in the banking sector. The basis of this test is that the prices of products in the same product market tend to move in the same direction.⁵² The correlation coefficient (Pearson's correlation coefficient) can be operated by the following formula:

$$r = r_{xy} = \frac{\sum_{i=1}^{n} (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^{n} (x_i - \bar{x})^2} \sqrt{\sum_{i=1}^{n} (y_i - \bar{y})^2}}$$

rearranging, it becomes this formula:

$$r = r_{xy} = \frac{n \sum x_i y_i - \sum x_i \sum y_i}{\sqrt{n \sum x_i^2 - (\sum x_i)^2} \sqrt{n \sum y_i^2 - (\sum y_i)^2}}.$$

where r is the Pearson's correlation coefficient x_i and y_i are the variables, the prices of tested products and n is the number of values. The coefficient ranges from -1 to +1, where +1 represents that the prices move in the same direction and -1 represents that the prices move in the opposite direction.⁵³ In the assessment of relevant product market, any value above +0.8 means the products form the same market.

Due to the peculiarity of some bank products, such as deposits or lending, the interest rates and lending rates can function as prices of products to affect the customer's behavior.

⁵² See Bishop & Walker. (2002). The Economics of EC Competition Law, 2nd edition, Sweet & Maxwell; Geroski, P. A (1998). Thinking Creatively about Markets, International Journal of Industrial Organization, 16(6), 677-695; Ivaldi *et al.* (2003). The Economics of Unilateral Effects, Interim Report for DG Competition, p. 97.

⁵¹ See Case COMP/M.5580 Blackrock/BGI.

⁵³ See supra note 56, p111.

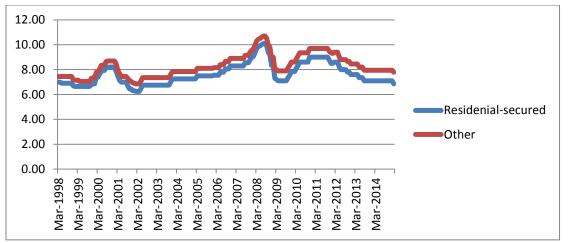


Figure1 Movement in the Residential-secured and other lending rates between 1998 and 2015.

The research was carried out on the example of Reserve Bank of Australia (RBA), comparing the movement of the Residential-secured and others lending rates between 1998 and 2015. In Figure 1, the lending rates movement of the analyzed products in the period between 1998 and 2015 can be seen.⁵⁴ The similar trends of lending rates can be noticed. Figure 2 shows the descriptive statistics data about the movement of the Residential-secured and others lending rates, whereas Figure 3 shows the operation results of 'r' which represents the Pearson's correlation coefficient.

	u	Minimum	Maximum	Mean	Std. Variance		
Residential- secured	203	6.25	10.1	7.64	0.871373	0.75929	
Others	203	6.85	10.7	8.28	0.897439	0.805396	
Valid n	203						

Figure 2: The descriptive statistics of the data about the movement of the Residential-secured and others lending rates between 1998 and 2015

	R. Others
R. Pearson Correlation	1 0.989628
Sig.(2-tailed)	.000
n	203 203
Others Pearson Correlation	0.989628 1
Sig.(2-tailed)	.000
n	203 203

Progressive Academic Publishing, UK

⁵⁴ The Statistics is available at <u>http://www.rba.gov.au/statistics/tables/</u>.

Figure 3: the correlation the movement of the Residential-secured and others lending rates between 1998 and 2015

In Figure 3, the value of r is 0.989623, above +0.8, demonstrating that there is a closed correlation between the residential-secured and other lending rates and thus they constitute the same product market.

Competitive assessment of concentration Characteristic of the banking sector in the assessment of concentration

Banks, unlike ordinary companies, have some different features in the framework of concentration assessment, such as categorization, competition effect, market entry, and likelihood of entry. In banking sector, most mergers are categorized as horizontal guideline because there are no suppliers that provide goods to banks. According to the Article 2(3) ECMR:

'A concentration which would significantly impede effective competition, in the common market or in a substantial part of it, in particular as a result of the creation or strengthening of a dominant position, shall be declared incompatible with the common market.'

Extracting from this article, the Commission assesses concentration based on a hierarchical two-level test. The requirement of 'the creation or strengthening of a dominant position' is the first-level assessment. But only satisfying this condition does not suffice to decide the merger is incompatible with the common market. ⁵⁵ The concentration must also amount to the second-level requirement, significant impediment to effective competition. If it dose not 'significantly impede effective competition', the Commission may clear the merger (even if the merger parties are dominant).⁵⁶

The ECMR new guidelines also categorize two kinds of effect brought by horizontal mergers, coordinated effects and non-coordinated effects. The motivation of mergers in the banking sector is to increase economies of scale, especially market power.⁵⁷ Mergers in the banking sector do not change the nature of competition but rather only increase market power and thus the effect of the mergers belongs to non-coordinated effects. Market entry, in the banking sector, is normally higher than that of ordinary companies in traditional markets. Considerations of the difficulty of market entry are provided in the Chapter 8 of the official

⁵⁵ See Edurne Navarro, Andrés Font, Jaime Folguera and Juan Briones, Merger Control in the EU. (OUP,2005), p.146; Jonathan Faull and Ali Nokpay,. (2007). The EC Law of Competition, OUP, p.472; Doris Hildebrand. (2009). The Role of Economic Analysis in the EC Competition Rules, 3rd edition, Kluwer Law International, p. 471. Also see Case T-358/94, Air France v. Commission, 12.12.1996, (1996) II ECR 2019; Case T-221/95, Endemol v. Commission, 28.4.1999, (1999) II ECR 1299, para. 169; Case T-310/01, Schneider v. Commission, 22.10.2002, (2002) II ECR 4071; Case IV/M308, Kali+ Salz/MDKT/Treuhand [1994] OJ L186/38

⁵⁶ See Case IV/M053 Aérospatiale/Alenia/De Havilland [1991] OJ L334/42, Case IV/M794 Coca-Cola Enterprise/Amalagmated Beverages Great Britian [1997] OJ L218/15; Case IV/M856 British Telecom/MCI [1997] OJ L336/1; Case IV/M076 Lyonnaise des Eaux-Dumez/Brochier (1991); Case IV/M877 Boeing/McDonnell Douglas [1997] OJ L336/16; Case IV/M017 Mitsubishi/Ucar (1991); Case COMP/JV46 Callahan Invest/Kabel Nordrhein-Westfalen (2000). See also the Commission's commentary, Report on Competition Policy 1991 (Vol XXI) Annex III 394.

⁵⁷ See Lin D, Barth J, Jahera J, Yost K. Cross-Border Bank Mergers and Acquisitions: What Factors Pull and Push Banks Together?. Review Of Pacific Basin Financial Markets And Policies [serial online]. December 2013;16(4):1-23. And Lanine, G and R Vennet (2007). Microeconomic determinants of acquisitions of Eastern European banks by Western European banks. Economics of Tran- sition, 15(2), 285–308.

forms for standard merger notifications (Form CO) including the total costs of entry, legal or regulatory entry barriers and the importance of economies of scale for the production of products in the affected markets.⁵⁸ Starting a bank has high capital requirement and also needs the permission of local governments so new bank entrances are relatively modest. The likelihood of entry means the possibility that entry or potential entry constrains the behavior of incumbents post-merger.⁵⁹ Entry in banking industry is likely more difficult because banks often provide long-term contracts to their consumer in order to protect their market share. The costs of failed entry of banks are high, which results in less possibility of entry.

The Possibility Index of Significantly impede effective competition (PISIEC)

The Commission has many considerations by both qualitative and quantitative methods, such as HHI test, when assessing the market concentration and market share levels. Thus the Commission needs to make a decision case by case without an intuitional reference. This paper strive to create an index to make the assessment of concentration more intuitional and quantitative, called the Possibility Index of Significantly impede effective competition (PISIEC) of which operation function is shown in Figure 4.

 $Y (sum) = Y_1 + Y_2 + Y_3 + Y_4$

$$\begin{split} Y_{1=} \begin{cases} 2 \ (\sum_{i=1}^{n} Xi \geq 50) \\ 1 \ (40 \leq \sum_{i=1}^{n} Xi < 50 \\ 0 \ (\sum_{i=1}^{n} Xi < 40) \\ 2 \ (\sum_{i=1}^{m} Xi^{2} \geq 2000) \\ 1 \ (1000 \leq \sum_{i=1}^{m} Xi^{2} < 2000) \\ 0 \ (\sum_{i=1}^{m} Xi^{2} < 1000) \\ Y_{3=} \\ \begin{cases} 0 \ (Delta < 250 \ and \ (\sum_{i=1}^{n} Xi)^{2} + \sum_{i=m-n}^{m-n} Xi^{2} < 2000 \ or \ Delta < 200 \ and \\ (\sum_{i=1}^{n} Xi)^{2} + \sum_{i=m-n}^{m-n} Xi^{2} > 2000 \\ 1 \ (Above \ condition \ and \ expection \ circumstance^{60}) \\ (\sum_{i=1}^{n} Xi)^{2} + \sum_{i=m-n}^{m-n} Xi^{2} - \sum_{i=1}^{m} Xi^{2} \end{bmatrix} \\ Y_{4} = \begin{cases} 2 \ (\sum_{i=1}^{n} Xi - 25 > Xc) \\ 1 \ (\sum_{i=1}^{n} Xi - 25 \leq Xc) \\ 0 \ (\sum_{i=1}^{n} Xi < Xc) \end{cases} \end{split}$$

In the above functions, Y(sum) stands for the PISIEC and $X_1, X_2,...X_n$ mean the market share, X_n %, of the 'n' companies to merger in the identified market where are total 'm'

(b) one or more merging parties are important innovators in ways not reflected in market shares;

⁵⁸ Section 8 of Form CO.

⁵⁹ See Doris Hildebrand, supra note35, p. 481.

⁶⁰ Exception circumstance where special circumstances such as, for instance, one or more of the following factors are present:

⁽a) a merger involves a potential entrant or a recent entrant with a small market share;

⁽c) there are significant cross-shareholdings among the market participants(25);

⁽d) one of the merging firms is a maverick firm with a high likelihood of disrupting coordinated conduct;

⁽e) indications of past or ongoing coordination, or facilitating practices, are present;

companies represented by X_m . X_c represents the company that own the largest market share except the merger companies. Based on the above operation, higher Y(sum) indicates that merger companies are more likely to significantly impede effective competition.

Whether two exemption doctrines arising in the wake of financial crisis are justified in banking industry

Failing firm defence

During the financial crisis, the banking industry across Europe was faced with financial distress and under such circumstance competition authorities may clear the mergers by invoking either two criteria, 'failing firm defence' ⁶¹ or 'too big to fail' despite the risk of distortion of competition.

The failing firm defence, embodied in the merger guidelines, ⁶² means the anticompetitive M&A deals can be permitted when the acquired firm or one (or both) of the merging firms will fail or are failing.⁶³ The doctrine originated from the United States,⁶⁴ the *International Shoe Co. v. FTC* case, ⁶⁵ has two conceptual underpinnings: the 'private interest rationale' and the 'economic rationale'.⁶⁶

'The private interest rationale refers to protection of shareholders, creditors, employees and other interests by clearing the mergers that would maintain the asset of the failing firm,⁶⁷ indicating greater consequence of private interests than competition.⁶⁸ But lessening

⁶¹ The defence has been invoked in many cases. See cases include: European Commission, Case IV/M.053 Aerospatiale- Alenia/de Havilland (1991) OJ L 334/42; European Commission, Case IV/M.774, Saint-Gobain/Wacker-Chemie/NOM (1997) OJ L 247/1; European Commission, Case IV/M.890—Blokker/Toys 'R' Us (1998) OJ L 316/1; European Commission, Case IV/M.993—Bertelsmann/Kirch/Premiere (1999) OJ L 053/1; European Commission, Case IV M.1221 Rewe/Meinl (1999) OJ L 274/1; European Commission, Case COMP/M.2810 Deloitte & Touche/Andersen UK; European Commission, Case COMP/M.2824 Ernst & Young/Andersen Germany (2002); European Commission, Case COMP/M.2816 Ernst & Young/Andersen France (2002).

⁶² Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ 2004 C 031 (Guidelines).

⁶³ See Vincenzo Baccaro. (2004). Failing Firm Defence and Lack of Causality: Doctrine and Practice in Europe of Two Closely Related Concepts', 25 European Competition Law Review 1, at 11. Also see Phillip E. Areeda and Herbert Hovenkamp. (2009). Antitrust Law: An Analysis of Antitrust Principles and Their Application, 3rd edition, p. 273.

⁶⁴ Paredes, T. (1996). Turning the Failing Firm Defense into a Success: A Proposal to Revise the Horizontal Merger Guidelines, Yale Journal On Regulation, (1), 347.

⁶⁵ 280 U,S, 291, 297-98 (1930)

⁶⁶ The third rationale was also proposed that permitting failing firms to merge can decrease investment risk and facilitate entry, thereby promoting competition. See, e.g., Areeda and Herbert Hovenkamp. (1980). Antitrust Law: An Analysis of Antitrust Principles and Their Application, at 105-06; Richard E. Low. (1969). The Failing Company DoctrineRevisited, 38 FORDHAM L. REv. 23, 31; Irene R. Diamant, Note. (1979). The Failing Company Doctrine Since General Dynamics: More Than Excess Baggage, 47 FORDHAM L. REv. at 887. However, no courts relied on this rationale.

⁶⁷ Troy Paredes. (1996). Turning the Failing Firm Defense Into a Success: A proposal to Revise the Horizontal Merger Guidelines, The Yale Journal on Regulation, Vol. 13:347.

⁶⁸ See, e.g., United States v. General Dynamics Corp., 415 U.S. 486, 507 (1974); United States v. Black & Decker Mfg. Co., 430 F. Supp. 729, 777-78 (D. Md. 1976); Blum, supra note 23, at 84; Campbell, supra note 9, at 256; Richard A. Wiley. (1961). The "FailingCompany": A Real Defense in Horizontal Merger Cases, 41 B.U. L. REV. 493, 511.

competition for private interests contradicts the purpose of section **7** of the Clayton Act.⁶⁹ In the *International Shoe* case, the underlying presumption of the clearance is that the merger was not anticompetitive.⁷⁰ It is unreasonable to pursue the private interests at the cost of undermining competition.⁷¹

The economic rationale asserts that the exit of the failing firm will lead to the decrease of competitors, thereby potentially reducing the market output and raising higher prices. The competition structure will be undermined equally regardless of whether the merger is cleared or prohibited.⁷² However, the merger of the failing firm is not necessarily equally or less anticompetitive than the exit.⁷³ The outcome of comparing the anticompetitive effect on the market between the merger and exist varies with the particular circumstances of each case. The rationale neglects the uncertainty of the actual anticompetitive effect and has a wrong presumption that the merger of the failing firm does not distort competition.⁷⁴

Although the rationale has some flaws, the failing firm defence was initially accepted in the *Kali und Salz*⁷⁵ decision. When the European Commission evaluates the undertakings, the mergers which may be detrimental to competition need to satisfy three cumulative requirements enshrined in the Guidelines⁷⁶ to exempt from prohibition.⁷⁷ Then the three requirements evolved into four requirements refined in *BASF/Eurodiol/Pantochim*⁷⁸. When the Commission assessed the competitive structure resulting from the concentration, they found that 'the exit of the assets and production capacities of Eurodiol and Pantochim would cause a significant capacity shortage for products which are already offered on the market under very tight capacity constraints.' However, if the companies who provides products of which production capacity are limited in the market can be cleared in this aspect, does it mean the Commission gives these companies intangible advantages over other companies in the same market? Thus, the Commission should not only see the fact of the reduction of production capacities but also the reasons for which only these companies can have the production capacities and whether other companies can get access to the production capacities to fulfill the vacancy.

⁶⁹ See *supra* note 14.

⁷⁰ International Shoe, 280 U.S. at 312-13.

⁷¹ American Press Ass'n v. United States, 245 Fed. 91 (7th Cir. 1917). In this case, the court considered private interests only in the absence of anticompetitive threat.

⁷² Philip Marsden and Ioannis Kokkoris. (2010). The Role of Competition and State Aid Policy in Financial and Monetary Law, Journal of International Economic Law 13(3), 875-892.

⁷³ Troy Paredes, *supra*, note 14, at 363.

⁷⁴ The failing firm presumption is reflected in many cases. See, e.g., Brown Shoe Co. v. United States, 370 U.S. 294, 319 (1962); Michigan Citizens for an Independent Press v. Thornburgh, 868 F.2d 1285, 1288 (D.C. Cir. 1989), aff'd, 493 U.S. 38 (1989); United States v. Maryland & Virginia Milk Producers Ass'n, 167 F. Supp.799, 808 (D.D.C. 1958), Baxter, supra note 1, at 250; and also see G.E. Hale & Rosemary D. Hale. (1964). Failing Firms and the Merger Provisionsofthe Antitrust Laws, 52 KY. L.J. 597, 597-98.

⁷⁵ See Case IV/M308 *Kali und Salz/MdK/Treuhand* (1994) OJ L 186/30.

⁷⁶ Guidelines, above note 9, para. 90.

⁷⁷ The three cumulative requirement are: First, the allegedly failing firm would in the near future be forced out of the market because of financial difficulties if not taken over by another undertaking. Second, there is no less anti-competitive alternative purchase than the notified merger. Third, in the absence of a merger, the assets of the failing firm would inevitably exit the market.

⁷⁸ Case COMP/M.2314 [2002] O.L. L132/45. In addition to the three criteria, according to the Court of Justice, a merger can be regarded as a rescue merger if the competitive structure resulting from the concentration would deteriorate in similar fashion even if the concentration did not proceed.

Too big to fail

Another consideration of lenient merger control is 'too big to fail' referring to the likely consequence of an economic disaster resulted by insolvency of big banks.⁷⁹ Most governments intervened in competition policy to support these big banks. ⁸⁰ In *Lloyds/HBOS(Halifax Bank of Scotland)*,⁸¹ the UK government initially intervened the assessment of mergers despite the fact that competitive might be lessened. The Secretary of the State decided to clear the merger by developing the Enterprise Act of 2002 before Office of Fair Trading (OFT) referred to the UK Competition Commission.⁸² The intervention of the Secretary of State is permitted only when the mergers give rise to public interests concerns, national security and media-related mergers pursuant to the Enterprise Act prior to the financial crisis.⁸³ Yet the Secretary introduced another public interest ground of enhancing the financial stability,⁸⁴ confirming the justification of 'too big to fail'. Unlike UK, No cases with respect to the doctrine have been reported at EU level, because most mergers are still considered within national scope.⁸⁵

However, the intrinsic basis of banking industry is trust. The fact that the failing big banks will receive financial assistance may make depositors and counterparties trust and incline to save money or trade with them making the banks which have already been big enough bigger and bigger.⁸⁶ People will save more money and trade more with them squeezing out the smaller banks in the market, which may form a vicious cycle and thus bring significant distortion of competition,⁸⁷ so 'too big to fail' should only used in exceptional circumstance.

The two doctrines as the main flexible consideration of exemption of merger control in the wake of financial crisis embody the balance between financial stability and competition that are both crucial for customer welfare.⁸⁸ If no such consideration arises, the normal

⁷⁹ Organisation for Economic Co-operation and Development (OECD), Competition and Financial Markets (2009).

⁸⁰ Ioannis Kokkoris. (2014). Competition vs. Financial Stability in the aftermath of the Crisis in the UK, the Antitrust Bulletin, Vol .59, No.1.

⁸¹ For information on the Lloyds/HBOS merger, see the Lloyds-TSB and HBOS Merger, Parliament, available at www.parliament.uk/briefing-papers/sn04907.pdf.

⁸² The OFT and Competition Commission ceased to exist and were replaced by Competition and Market Authority (CMA) from April 2014.

⁸³ Enterprise Act 2002, Section 42 and 58. See also See also Competition Commission and the Office of Fair Trading, Merger Assessment Guidelines (Sept. 2010), available at

http://www.oft.gov.uk/shared_oft/mergers/642749/OFT1254.pdf, and Office of Fair Trading, Mergers— Jurisdictional and Procedural Guidance ch. 9, available at

http://www.oft.gov.uk/shared_oft/mergers_ea02/oft527.pdf.

⁸⁴ Introduction and Roundtable 1 on Principles: Financial Sector Conditions and Competition Policy Summary Record of the discussion on Competition and Financial Markets, DAF/COMP/M(2009)1/ANN2 (Apr. 10, 2009), available at http://www.oecd.org/regreform/sectors/43046091.pdf.

⁸⁵ See Damien Gerard. (2009). EC Competition Law Enforcement at Grips with the Financial Crisis: Flexibility on the Means, Consistency in the Principles, Concurrences, No.1, p. 46-62.

⁸⁶ See Philip Molyneux, Banking Crises and the Macro-economic Context, in Bank Failures and Bank Insolvency Law in Economies in Transition 5–6 (Rosa M. Lastra & Henry Schiffman eds.,1999).

 ⁸⁷ Callum McCarthy, Roundtable 4 on Going Forward: Adaptation of Competition Rules, Processes and Institutions to Current Financial Sector Issues (Summary Record of the Discussion on Competition and Financial Markets, DAF/COMP/M(2009)1/ANN5, Apr. 10, 2009), available at

http://www.oecd.org/regreform/sectors/43046091.pdf.

⁸⁸ Damien Gerard. (2008). Managing the Financial Crisis in Europe: Why Competition Law is Part of the Solution, Not of the Problem, Global Competition Policy, Release One.

assessment of merger concentration will be used by European Commission in the framework of EU competition law.

CONCLUSION

Banks, financial institutions, are different from traditional companies and thus in the banking sector, the framework of the assessment of whether the MA deal is cleared is to some extend different from that in traditional markets. First, in terms of identification of the relevant geographical market, free cash flow between head offices and subsidiary banks should be taken into consideration so the potential risk of significantly impede the cross-boarder competition should be anticipated and prevented. Second, regarding to relevant market, the Commission tend to use some qualitative method to identify and the application of Price Correlation test into the identification of different kinds of lending is workable. Third, a simply structure of the PISIEC has been established but whether the PISIEC is effective need to be conducted further research and analysis. Finally, in the wake of financial crisis, the mergers of banks that may impede the competition significantly can still be permitted only if they satisfy either of the two exemption doctrines, 'too big to fail' and 'failing firm defense'.