
GEORGE MASON UNIVERSITY SCHOOL OF LAW
JOURNAL OF INTERNATIONAL
COMMERCIAL LAW



ARTICLES

CHINA'S SHADOW BANKING INDUSTRY AND IMPACT ON
CAPITAL MARKETS: IGNORING THE LESSONS OF THE PAST

Dr. Avnita Lakhani

ANTITRUST AGENCIES: WATCHDOGS OR REGULATORS?

Dr. Giovanna Massorotto

NOTES

THE PRIVATIZATION OF ANTARCTICA:
THE PATH TO PEACE AND WEALTH

Taylor Hoverman

**JOURNAL OF INTERNATIONAL
COMMERCIAL LAW**

VOLUME 7

FALL ISSUE

NUMBER 1

CONTENTS

ARTICLES

CHINA'S SHADOW BANKING INDUSTRY AND IMPACT ON CAPITAL
MARKETS: IGNORING THE LESSONS OF THE PAST

Dr. Avnita Lakhani 1

ANTITRUST AGENCIES: WATCHDOGS OR REGULATORS?

Dr. Giovanna Massorotto 39

NOTE

THE PRIVATIZATION OF ANTARCTICA:
THE PATH TO PEACE AND WEALTH

Taylor Hoverman 57

**JOURNAL OF INTERNATIONAL
COMMERCIAL LAW**

VOLUME 7

FALL ISSUE

NUMBER 1

Editor-in-Chief

TAYLOR HOVERMAN

Executive Editor

LUCY MECKLEY

Managing Editor

KATHERINE MCCLASKEY

Symposium Editor

GABRIELLE PETERS

Senior Articles Editor

REBECCA EUBANK

Articles Editor

CHRISTINE CONNELL

Senior Research Editor

TERRICA CARRINGTON

Associate Editor

BRYAN BURACK

Notes Editors

ALEX JENSEN

ARUN SHOME

Research Editor

BRIAN MOTTL

Candidate Members

SAMARTH BAROT

ANNA GLEYSSTEEN

RACHEL KIM

TANYA SECOR

GREG CAFFAS

BRIAN JEFFRIES

SARAH MARKS

NICK SMITH

STEPHEN VEIT

TYLER DEL ROSARIO

ABDUL KHAN-TAREEN

ETHAN MEREDITH

ANDREW STROBO

Faculty Advisor

JEREMY RABKIN

Cite as 7 GEO. MASON J. INT'L COM. L. ____ (2015)

The *George Mason Journal of International Commercial Law* is published three times per year. The *George Mason Journal of International Commercial Law* can be contacted as follows:

George Mason Journal of International Commercial Law
3301 N. Fairfax Drive, Arlington, VA 22201
<http://www.georgemasonjicl.org/>

The *George Mason Journal of International Commercial Law* is a traditional student-edited legal periodical at the George Mason University School of Law in Arlington, Virginia. Providing international scholars and practitioners a forum to exchange, develop, and publish innovative ideas, the *Journal* is uniquely situated to address the legal issues affecting international commerce. The *Journal* publishes scholarly, concise, and practical material from leading scholars and practitioners to provide a source of authority and analysis for the advancement of uniformity in the law underlying international commerce.

Subscriptions: Single issues are available for download online at <http://www.georgemasonjicl.org>. Print versions are available by request to the Managing Editor at the mail address listed above or by email at: gmsljicl@gmail.com. Single issues may be purchased for \$15 per copy for domestic and \$18 for foreign subscribers.

Submissions: The Editors welcome submissions of unsolicited manuscripts. The *George Mason Journal of International Commercial Law* seeks to publish articles and essays making a significant, original contribution to the fields concerning international commerce. Footnotes should follow the form prescribed in *The Bluebook: A Uniform System of Citation* (20th ed. 2015). Articles must be both well written and completely argued at the time of submission. Manuscripts and editorial correspondence should be addressed to Senior Articles Editor, *George Mason Journal of International Commercial Law*, at the address listed above or by email at: gmsljicl@gmail.com.

CHINA'S SHADOW BANKING INDUSTRY AND IMPACT ON CAPITAL MARKETS: IGNORING THE LESSONS OF THE PAST

Dr. Avnita Lakhani*

I. INTRODUCTION

It is a consistent message by those on the inside as well as outside China's capital markets and banking industry that in the seventeen years since the National People's Standing Committee adopted the Securities Law of the People's Republic of China 1998¹ and established the Shanghai and Shenzhen securities exchanges,² Chinese securities have exceeded expectations and now comprise over 50% of GDP.³ Throughout this growth, the private sector (and most specifically entrepreneurs) continue to struggle in terms of getting enough capital through state channels to expand, innovate, and grow their businesses. This situation became even more exasperated following the global financial crisis of 2007-2008.⁴ The impact of the global financial crisis on China seems to have triggered, or at least, entrenched the establishment of 'shadow' capital markets, particularly in the form of shadow banking.⁵ While shadow banking existed in some forms

* Dr. Avnita Lakhani is Assistant Professor at City University of Hong Kong School of Law. The article was conceived while serving as Visiting Scholar (Summer 2014) at the Centre

¹ Bjorn Sorenson, *Is a Growing China a Threat to the United States IP Market Dominance? Comparative Securities Laws and Competition in the Market for Markets*, 4 AM. U BUS. L. BRIEF 22, 25 (2008); *See also*, *Securities Law of the People's Republic of China* (1998), http://www.npc.gov.cn/englishnpc/Law/2007-12/11/content_1383569.htm.

² Sorenson, *supra* note 1, at 5. The Shanghai securities exchange was established in December 1990, while the Shenzhen securities exchange was established in June 1991. For point of reference, the Hong Kong Stock Exchange was established in 1891 and is considered Asia's second largest stock exchange behind Tokyo Stock Exchange.

³ Sorenson, *supra* note 1, at 6; *See also*, Nisha Gopalan, *China Crimps Hong Kong IPOs: Regulator Steers New Listings to Mainland*, WALL ST. J., <http://online.wsj.com/news/articles/SB117682868664772772> (discussing the push by Chinese regulators to list on the Shanghai and Shenzhen Stock Exchanges and delay listings on the Hong Kong Stock Exchange).

⁴ There seems to be some dispute as to when the global financial crisis actually happened. *See* THE FIN. CRISIS INQUIRY COMMISSION, *THE FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE CAUSES OF THE FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES* (Jan. 2011); Peter Coy, *Shedding Light on Shadow Banking*, BLOOMBERG BUS. WEEK (Nov. 19, 2012), <http://www.businessweek.com/articles/2012-11-19/five-steps-to-fix-shadow-banking> (referring to 2008-2009 as the period of the global financial crisis, a period characterized as the worst since the Great Depression that "was ripping the world apart").

⁵ Patrick Fang, *Deadly Loans: Why China's 'Shadow' Capital Market Persists*, TEALEAFNATION (July 31, 2013), <http://www.tealeafnation.com/2013/07/private-financing-or-illegal-fundraising-chinese-entrepreneurs-seeking-capital-face-dangers>.

prior to the global financial crisis across the world,⁶ the fact that it continues to exist today in, arguably, the world's second largest economy is cause for concern. China's shadow capital markets have attracted attention and criticism in the wake of several high profile cases. On July 13, 2013, Zeng Chengjie, a Chinese businessman and real-estate developer from Hunan province was executed by lethal injection for illegal fundraising⁷ and financial fraud.⁸ Similarly in January 2012, Wu Ying, a successful businesswoman from Zhejiang province, was sentenced to death for crimes consisting of a combination of loansharking⁹ and Ponzi schemes directed mostly at wealthy individuals and families.¹⁰ In April 2012, the China's Supreme People's Court overturned Wu Ying's death sentence and remanded the case back to the Zhejiang province for resentencing. In May 2012, Wu Ying received a two-year reprieve, which will undoubtedly be commuted to life in prison.¹¹

These two cases highlight both the continued existence of shadow banking in China, as well as the delicate balance that regulators and courts must strike in dealing with a growing shadow banking industry. As Lena Komileva, Chief Economist in London, points out, "Bringing shadow banking out of the shadows recognizes the systemic importance of nonbank finance for the health of the global economy,...[b]ut regulators need to apply a surgical scalpel, not an axe." On the contrary, as late as May 2014, reports indicate that Liu Shiyu, Deputy Governor of the People's Bank of China, argued for even tougher rules to reign in shadow banking in

⁶ See THE FIN. CRISIS INQUIRY COMMISSION, *supra* note 4.

⁷ According to news reports, the illegal fundraising involved Zeng resorting to private lending channels to raise capital for his business because of the difficulties that Chinese entrepreneurs face in securing money through state-owned banks. See Fang, *supra* note 5.

⁸ Rachel Lu, *China's Madoff Executed Without Notifying Family, Internet in Uproar*, TEALEAFNATION (July 13, 2013), <http://www.tealeafnation.com/2013/07/chinas-madeoff-executed-without-notifying-family>.

⁹ Loansharking in the form of pawnbrokers or private lending institutions (i.e., non-governmental) fall within the definition of shadow banking in China; Fang, *supra* note 5.

¹⁰ Fang, *supra* note 5.

¹¹ See David Wertime, *Netizens: "Power of Weibo", Not the Law Saved Wu Ying's Life*, TEALEAFNATION (May 22, 2012), <http://www.tealeafnation.com/2012/05/netizens-power-of-weibo-not-the-law-saved-wu-yings-life/> (detailing the extent to which public outrage at Wu Ying's death sentence and social media commentary likely affected the overturning of the death sentence and subsequent resentencing).

China,¹² an industry whose “unchecked growth has helped drive up borrowing costs and threatens to undermine the financial system.”¹³

This article seeks to examine the nature of shadow banking in China and its impact on capital markets to determine whether China's intended reforms to curb the negative influences of shadow banking ignore the lessons of the past or pave the way for a new way of managing the rise of shadow banking options globally. Part I provides an introduction to the article. Part II defines the scope of shadow banking as it is generally understood, as well as definitions that specifically apply to China. Part III takes a brief look at the link between shadow banking and capital markets. Part IV considers the evolution of shadow banking and its impact on capital markets. Part V provides a detailed analysis of what some argue is China's shadow banking problem, while Part VI seeks to articulate China's proposed reforms for handling the shadow banking problem. Part VII analyses whether China's proposed reforms are likely to succeed, how consistent these proposed reforms are with those adopted by other countries, which reforms scholars believe are necessary to effectively manage the negative consequences of shadow banking, and most importantly, its impact on capital markets. This section also provides additional recommendations that China can adopt to deal with shadow banking. Finally, Part VIII concludes with a call to action in balancing the positive impact of shadow banking and its contributions to healthy capital markets with the structural reforms, oversight, transparency, disclosure, and education necessary to ensure that shadow banking in the world's second largest economy does not turn into another financial tsunami at the expense of consumers and investors.

II. DEFINITION AND SCOPE OF SHADOW BANKING

A myriad of definitions of shadow banking¹⁴ exist. To a certain extent, it is important to understand these definitions in order to assess whether there is a true problem, not just in China but around the world, with respect to this ‘alternate banking universe’¹⁵ or, as one blogger astutely called it, the ‘Alternative Capital Market Sector.’ In 2007, investment manager and

¹² Xin Zhou & Jun Luo, *China Central Banker Calls for Tougher Rules on Shadow Banking*, BLOOMBERG NEWS (May 10, 2014), <http://www.bloomberg.com/news/2014-05-10/china-central-banker-calls-for-tougher-rules-on-shadow-financing.html>.

¹³ *Id.*

¹⁴ Note: Shadow banking is also known as a ‘parallel banking system’ in some literature.

¹⁵ Coy, *supra* note 4 (referring to the graphic on the alternate banking universe data compiled by Bloomberg Businessweek for the period of 2005 – 2011).

economist Paul A. McCulley, generally regarded as having coined the term 'shadow banking system,' described it as "the whole alphabet soup of levered up non-bank investment conduits, vehicles, and structures."¹⁶ McCulley recognized that shadow banking systems can lead to bank runs causing systemic risk in the financial systems because shadow banking, at that time, relied almost purely on uninsured commercial paper as opposed to government-backed insured deposits.¹⁷

In 2010, the Federal Reserve of New York defined shadow banks¹⁸ as "financial intermediaries that conduct maturity, credit, and liquidity transformation without access to central bank liquidity or public sector guarantees."¹⁹ Investopedia defines shadow banks as consisting of "the financial intermediaries involved in facilitating the creation of credit across the global financial system, but whose members are not subject to regulatory oversight. The shadow banking system also refers to unregulated activities by regulated institutions."²⁰ The January 2011 United States Financial Crisis Inquiry Commission's Final Report on the causes of the financial and economic crisis in the United States defines shadow banking as including "commercial paper and other short-term borrowing (banker's acceptance), repo, net securities loaned, liabilities of asset-backed securities issuers, and money market mutual fund assets."²¹

In his August 2011 seminal working paper on the shadow banking system and its origins, Professor Gerding defined shadow banking as "a web of financial instruments (asset-backed securities, credit derivatives, money market mutual funds, repurchase agreements) that connected commercial and household borrowers to investors in capital markets."²²

¹⁶ Paul A. McCulley, *PIMCO Global Central Bank Focus: Teton Reflections*, PIMCO (Sept. 2007), <https://www.pimco.com/insights/economic-and-market-commentary/global-central-bank-focus/teton-reflections>.

¹⁷ *Id.*

¹⁸ Zoltan Pozsar et al, *Shadow Banking*, FED. RESERVE BANK OF N.Y. (2010), http://www.newyorkfed.org/research/staff_reports/sr458.pdf (stating "The seeds of the shadow banking system were sown nearly 80 years ago, with the creation the government-sponsored enterprises (GSE), which are comprised of the FHLB system (1932), Fannie Mae (1938), and Freddie Mac (1970)," and where Fannie Mae and Freddie Mac were the "cradles of the originate-to-distribute model of securitized credit intermediation.").

¹⁹ *Id.*

²⁰ *Shadow Banking System*, INVESTOPEDIA, <http://www.investopedia.com/terms/s/shadow-banking-system.asp#axzz1jwYgKow1>.

²¹ THE FIN. CRISIS INQUIRY COMMISSION, *supra* note 4, at 32.

²² Eric F. Gerding, *The Shadow Banking System and Its Legal Origins* (Jan. 24, 2012) (unpublished manuscript) (available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1990816).

Professor Gerding defined the shadow banking sector as having six key characteristics: “1) financial as well as non-financial institutions that serve in a critical intermediation role; 2) pooling of financial risks and assets; 3) ‘structuring,’ or the unbundling and re-bundling of cash streams and risks from financial assets; 4) maturity transformation; 5) the creation of assets with theoretically low risk and high liquidity that have many of the features of ‘money’; and 6) opacity.”²³

In September 2012, Ghosh *et al.*, in their World Bank article, defined shadow banking as comprising “a set of activities, markets, contracts, and institutions that operate partially (or fully) outside the traditional commercial banking sector and as such, are either lightly regulated or not regulated at all.”²⁴ According to Ghosh *et al.*, the distinguishing feature of shadow banking is its ability to ‘decompose the process of credit intermediation’²⁵ through a single entity or multiple entities. In November 2012, Coy described it as “any kind of lending that’s not done by banks that take insured deposits...matches savers with borrowers in ways that conventional banks can’t.”²⁶ Finally, the definition most used and understood is one provided by the Financial Stability Board, which defines shadow banking as “the system of credit intermediation that involves entities and activities outside the regular banking system.”²⁷ It is important to note that these activities can be either wholly or partially outside the regular banking system since even commercial banks today have some level

²³ *Id.* at 6-7.

²⁴ Swati Ghosh, Ines Gonzalez del Mazo, & İnci Ötker-Robe, *Chasing the Shadows: How Significant Is Shadow Banking in Emerging Markets?* 88 THE WORLD BANK: ECON. PREMISE, 1-7 (Sept. 2012).

²⁵ *Id.*

²⁶ Coy, *supra* note 4.

²⁷ *Shadow Banking: Scoping the Issues*, FIN. STABILITY BOARD 2 (Apr. 12, 2011), http://www.financialstabilityboard.org/publications/r_110412a.pdf; *Cf. China in Transition: Shadow Banking in China: Current Situation and Challenges*, RES. INST. OF ECON., TRADE AND INDUSTRY (Aug. 6, 2013), <http://www.rieti.go.jp/en/china/13080601.html> (discussing the People’s Bank of China’s *China Financial Stability Report 2013*, which was published in May 2013. RIETI states that in this May 2013 PBOC report, “the People’s Bank of China described the scope of shadow banking in China as follows: Due to its own financial market, financial system and regulatory framework, ‘shadow banking’ as defined internationally has yet to exist in China. However, many institutions running banking businesses but not in the name of banks are attracting attention. *In light of the definition widely used overseas and the actual situation in China, shadow banking in China can be used to refer to credit intermediation involving entities and activities outside of the regular banking system, with the functions of liquidity and credit transformation, which could potentially cause systemic risks or regulatory arbitrage.*” [emphasis added]).

of shadow banking activities because of their interactions with non-financial institutions, leading some to conclude that “it is all shadow banking.”²⁸

With respect to China, there is no clear definition of ‘shadow banking,’ though China, in some respects, prefers to use a narrow definition that “only covers banks’ wealth management products and trust companies’ trust products.”²⁹ According to Li, non-bank financial institutions such as trust companies, brokerage firms, financial guarantors, small lenders, off-balance sheets, and informal bank lending all fall within China’s view of shadow banking because all of them generally involve regulatory arbitrage and have the potential to increase systemic risk.³⁰ According to Hirn, “the Chinese language equivalent [of the term], 影子银行 (yingzi yinghang), sounds far less negative to the wide range of Chinese savers and corporations that participate in it” than the generally pejorative view of shadow banking most Westerners and Europeans hold. Baidu, China’s equivalent of Google, describes shadow banking as consisting of “a commercial bank’s financial product sales... and a variety of non-bank financial institutions selling class credit products, such as trust companies selling trust products.”³¹

Despite its featured role in the global subprime mortgage financial crisis,³² shadow banking appears to be here to stay. One reason for this is the variety of forms it can take. In the U.S. and Europe, as well as other more developed nations, a shadow banking transaction can take the form of asset-backed commercial paper (ABCP) conduits,³³ limited-purpose finance

²⁸ See generally Jonathan Macey, *It’s All Shadow Banking Actually*, 21 REV. BANKING & FIN. L. 593 (2012) (arguing that there is no real difference between traditional banking and shadow banking).

²⁹ Zhang Ming, *Shadow Banking in China: Definition, Causes, Risks and Countermeasures*, INT’L ECON. REV., 3, INST. OF WORLD ECON. & POL., CASS (2013).

³⁰ Cindy Li, *Shadow Banking in China: Expanding Scale, Evolving Structure*, FED. RES. BANK OF SAN FRANCISCO (Apr. 2013), <http://www.frbsf.org/banking/publications/asia-focus/2013/april/shadow-banking-china-scale-structure/>.

³¹ *Shadow Banking (financial concept)*, Baidu Encyclopedia, <http://baike.baidu.com/subview/1873646/10198808.htm>. (Note that this is the translated version of the original content. From the content on this site, it appears that the term ‘shadow banking’ is seen as similar to the general definitions used by FSB and other authors; however, it does not have the same negative connotations.)

³² See, e.g., Alexander Goodenough, *Dodd-Frank: Regulating Systemic Risk in the Offshore Shadow Banking Industry*, 3 GEO. MASON J. INT’L COM. L. 137 (2011) 146-47 (stating that “while the shadow banking sector did not itself cause the financial crisis in 2007, it did exacerbate the crisis.”); Ghosh et al., *supra* note 24, at 1-2 (stating that “[a]fter all, the global financial crisis originated in the shadow banking sector in 2008.”).

³³ Pozsar et al., *supra* note 18.

companies, credit hedge funds,³⁴ money market mutual funds, securities lenders, government-sponsored enterprises,³⁵ collateralised special investment vehicles (SIVs) in the form of private-label securitizations such as mortgage backed securities (MBS),³⁶ collateralized debt obligations (CDOs),³⁷ credit default swap agreements (CDS),³⁸ repurchase agreements (“repo”),³⁹ off-balance financing,⁴⁰ special purpose vehicles (SPV), derivatives, and special purpose entities (SPE) in the form of structured investment vehicles,⁴¹ and the increased use of agency real estate investment trusts (REITs), leveraged finance, and reinsurance in the United States.⁴²

In China, the basic functions of credit intermediation are very “bank centric,” with heavy reliance on its state-owned banks.⁴³ According to Suzuki, China’s shadow banking transactions are akin to activities of direct finance⁴⁴ and can take the form of “typical bank financial sector services and products, in particular loan pools, entrusted loan projects, and bank-trust cooperation loan financial products.”⁴⁵ In addition, trust financing, wealth management products (WPDs), peer-to-peer business lending, equipment-lease financing, accounts receivable factoring, property development trusts, and bankers’ acceptance notes (BANs) are all high on

³⁴ *Id.*

³⁵ *Id.*

³⁶ Kristin N. Johnson, *Macroprudential Regulation: A Sustainable Approach to Regulating Financial Markets*, 2013 U. ILL. L. REV. 881, 907-08 (2013).

³⁷ *Id.* at 908-09.

³⁸ *Id.*; Macey, *supra* note 28, at 597-98.

³⁹ Macey, *supra* note 28, at 595.

⁴⁰ *Id.* at 595-96.

⁴¹ *Id.*

⁴² Tobias Adrian, Adam B. Ashcraft, & Nicola Cetorelli, *Federal Bank of New York Staff Report No. 638: Shadow Bank Monitoring* 16 (Sept. 2013), http://www.newyorkfed.org/research/staff_reports/sr638.pdf.

⁴³ Aidan Yao, *China: Debunking the Shadow Banking System*, AXA INV. MANAGERS, (Apr. 3, 2104), http://at.e-fundresearch.com/files/140403investment_research_en.pdf.

⁴⁴ Yasushi Suzuki, *Making Sense of the Rise of China’s Shadow Banking*, 5 J. ECON. & SUSTAINABLE DEV. 35, 35-36 (2014), <http://www.iiste.org/Journals/index.php/JEDS/article/view/10274> (defining direct finance versus indirect finance in relation to understanding China’s shadow banking system: *Direct finance* is defined as “a system in which the ultimate investors including households directly absorb the risk of default by purchasing primary securities (notes, stocks, corporate bonds, commercial papers etc.) issued by firms through the capital and securities market.” *Indirect finance* is defined as “a system in which financial institutions basically absorb the borrowers’ default risk by playing the role of intermediaries between households and firms where they lend to firms using the funds collected from households as deposits.”); *Id.*

⁴⁵ BAIDU ENCYCLOPEDIA, *supra* note 31.

the list of alternative lending practices used in China outside the traditional state-owned banking system.⁴⁶

Regardless of which definition one would prefer to adopt or which form of shadow banking transaction one refers to, the result is the same. The size and scope of the shadow banking industry and its seemingly endless mandate for regulatory arbitrage has been described by some as ‘the elephant in the room’,⁴⁷ ‘astounding’,⁴⁸ ‘ripping the world apart’,⁴⁹ ‘a huge force’,⁵⁰ ‘unfathomable’,⁵¹ and ‘weapons of mass destruction’.⁵² What is, perhaps, even more disturbing is the difficulty of trying to precisely estimate the size of this parallel capital market’s industry even as regulators attempt to control the potential systemic risks.

In early 2007, then CEO of the Federal Reserve Bank of New York, Timothy Geithner⁵³ indicated that assets in the shadow banking sector were valued at approximately USD \$10.5 trillion⁵⁴ while the traditional banking system’s total assets were at USD \$10 trillion.⁵⁵ In March 2008, a Federal

⁴⁶ Karine Hirn, *The Good and Bad of Chinese Shadow Banking* EAST CAPITAL (Mar. 6, 2014), <http://eastcapital.com/Look-East/Experts/Karine-Hirn1/The-good-and-bad-of-Chinese-shadow-banking/>; Alec Liu, *China’s Shadow Currency Addition is Inflating ‘the Mother of All Bubbles’*, MOTHERBOARD.VICE.COM BLOG (Dec. 17, 2013), http://motherboard.vice.com/en_uk/blog/chinas-shadow-currency-addition-is-inflating-the-mother-of-all-bubbles.

⁴⁷ Liu, *supra* note 46 (quoting Anne Stevenson-Yang of J Capital Research, “This is true in two ways: banks are reliant on the shadow institutions to supply their liquidity, and shadow institutions get a lot of their capital from the banks.”).

⁴⁸ Macey, *supra* note 28, at 594.

⁴⁹ Coy, *supra* note 4.

⁵⁰ *Id.*

⁵¹ Sheridan Prasso, *Shadow Banking*, BLOOMBERG.COM QUICK TAKE (Apr. 16, 2014), <http://www.bloomberg.com/quicktake/shadow-banking/> (stating “[t]he scale of it is almost unfathomable: \$70 trillion worldwide.”).

⁵² *See Buffett Warns on Investment ‘Time Bomb’*, BBC NEWS (Mar. 4, 2003), <http://news.bbc.co.uk/1/hi/2817995.stm> (Warren Buffet stating that “derivatives are financial weapons of mass destruction”). As a note, derivatives came out of the shadow banking system.

⁵³ Mr. Timothy Geithner served as United States Secretary of the Treasury from 2009 – 2013.

⁵⁴ Timothy F. Geithner, President and Chief Exec. Officer, Fed. Reserve Bank of N.Y., Remarks at The Economic Club of New York: Reducing Systemic Risk in a Dynamic Financial System (June 9, 2008), *available at* <http://www.newyorkfed.org/newsevents/speeches/2008/tfg080609.html> (calculating the USD \$10.5 trillion on the basis of an asset size of \$2.2 trillion in asset backed commercial paper conduits, structured investment vehicles, auction rate preferred securities, tender option bonds and variable rate demand notes, \$2.5 trillion in “assets financed overnight in triparty repo,” \$1.8 trillion for assets held in hedge funds, and \$4 trillion on the “combined balance sheets of the then five major investment banks.”).

⁵⁵ Macey, *supra* note 28, at 594; Geithner, *supra* note 54.

Reserve Bank of New York Staff Report estimated that the gross size of the shadow banking liabilities was nearly USD \$20 trillion in 2007, as compared with traditional banking liabilities in 2007, which were only USD \$14 trillion.⁵⁶ A Reuters report estimated that this figure grew to three times as much – USD \$60 trillion – by December 2011,⁵⁷ while the Financial Stability Board estimated that the shadow banking industry had already reached USD \$60 trillion in size in 2010⁵⁸ and grew to USD \$71 trillion in 2012,⁵⁹ representing over 25-30% of the total financial system.⁶⁰ In October 2012, McKinsey and Company reported that “[s]hadow banking already accounts for 15 to 18% of the global capital market and investment banking revenue pool, and is set to grow by 5 to 10% a year,”⁶¹ unless tempered by regulations and additional oversights. With respect to China, while there are difficulties in getting exact measurements, ratings agency Moody’s estimated the value of China’s shadow banking sector at “USD \$4.8 trillion in 2012, more than half of the country’s gross domestic product,”⁶² with even “narrowly conservative estimate[s] [indicating that]...the sector grew by 1.9 trillion yuan over the first four months of this year [2013] to reach at least 22.4 trillion yuan at the end of April [2013].”⁶³ The Federal Reserve Bank of San Francisco’s Asia Report seemed to confirm this, stating that the shadow banking industry in China was valued,

⁵⁶ Zoltan Pozsar et al., *Shadow Banking*, FED. RESERVE BANK OF N.Y.: STAFF REPORT NO. 458 (2010), http://www.newyorkfed.org/research/staff_reports/sr458.pdf.

⁵⁷ Stephen L. Schwarcz, *Regulating Shadow Banking*, 31 REV. BANKING & FIN. L. 619, 620 (2011-12) (citing Philip Halstrick, *Tighter Bank Rules Give Fillip to Shadow Banks*, REUTERS (Dec. 20, 2011, 4:17 AM), <http://uk.reuters.com/article/2011/12/20/uk-regulation-shadow-banking-idUKLNE7BJ00T20111220>) (indicating that the shadow banking sector is a \$60 trillion industry composed of in part, “money market funds, special investment vehicles, securitisation and securities lending.”).

⁵⁸ Li, *supra* note 30 (citing the FSB’s estimates that, around the world, the value of shadow banking assets had reached USD \$67 trillion or 111% of global GDP).

⁵⁹ Prasso, *supra* note 51.

⁶⁰ Ghosh et al., *supra* note 24, at 2.

⁶¹ McKinsey & Company, *The Triple Transformation: Achieving a Sustainable Business Model 2ND* MCKINSEY ANN. REV. ON THE BANKING INDUSTRY 24 (2012), http://www.mckinsey.com/client_service/financial_services/profiles/~media/mckinsey/dotcom/client_service/financial%20services/latest%20thinking/reports/the_triple_transformation_achieving_a_sustainable_business_model.ashx. (defining shadow banking as including “advisory, issuances, underwriting, market making and prop trading by nonbank players”); *Id.*

⁶² *China’s Shadow Banking Sector Valued at \$5.4 Trillion*, THE STRAITS TIMES (May 13, 2014), <http://www.straitstimes.com/news/business/economy/story/chinas-shadow-banking-sector-valued-54-trillion-20140513#sthash.g5udWSNj.dpuf>.

⁶³ Tom Holland, *Illuminating Confessions from a Shadow Banker*, SOUTH CHINA MORNING POST, (May 15, 2013), <http://www.scmp.com/business/article/1237823/illuminating-confessions-shadow-banker> (discussing the Moody’s/CEIC estimates of the growth of China’s shadow market credit business between 2010 and 2013, with trust companies and company-to-company lending particularly on the rise).

at the upper band, at USD \$4.8 trillion (RMB 30 trillion), about 57% of GDP or 31% of total bank assets.⁶⁴ However in 2014, the Chinese Academy of Social Sciences put the value lower at USD \$4.4 trillion (Singapore \$5.4 trillion or 27 trillion yuan),⁶⁵ “equivalent to nearly one fifth of the domestic banking sector's total assets.”⁶⁶

More specifically, China has seen a significant rise in the area of shadow financing. The off-balance sheets and underground lending activities have more than tripled from RMB 3 trillion since 2007.⁶⁷ In addition, non-bank loans increased from 8.7% of total loans in 2002 to nearly 79.7% in 2010 and are still rising despite efforts to curb shadow lending practices for fear of systemic risk in China's financial system.⁶⁸ Furthermore, 2012-2013 estimates on the sale of wealth management products in China showed that the “value of these investments...had surged to 9.1 trillion yuan (USD \$1.5 trillion) — almost the size of the Australian economy.”⁶⁹ In fact, government efforts to regulate the shadow banking and lending sectors only appear to have fueled the fire among businesspeople and investors, as some private estimates put China's shadow financing activities as being valued “from RMB 8.5 trillion (USD \$1.33 trillion) to RMB 10 trillion (USD \$1.6 trillion), with an estimated annual fund flow of approximately RMB 2 trillion or 5% of GDP.”⁷⁰

The figures from China, as a developing economy, are staggering, yet on the overall scale of shadow banking activity in the Asia-Pacific region and amongst developing economies, the figures are currently quite small. For example, China's shadow banking activities are the smallest among a select group of emerging markets and developing economies (EMDEs),⁷¹ which include Thailand, Philippines, Indonesia, Bulgaria, Romania, and Croatia. Among these select countries studied by Ghosh *et al.* and based on 2010 FSAPs, central bank data, and other regulatory data, the authors found that Thailand's shadow banking industry was nearly 40% of the total

⁶⁴ Li, *supra* note 30.

⁶⁵ THE STRAITS TIMES, *supra* note 62.

⁶⁶ *Id.*

⁶⁷ Ghosh *et al.*, *supra* note 24, at 4.

⁶⁸ *Id.*

⁶⁹ Prasso, *supra* note 51.

⁷⁰ Ghosh *et al.*, *supra* note 24, at 4-5 (citing Monan Zhang, *China's Shadow Banking System Poses Grave Risks*, THIRD WORLD RESURGENCE (Oct. 2011), <http://www.twn.my/title2/resurgence/2011/254/econ1.htm>). Ghosh also cites to the People's Bank of China estimates, which are much lower at “20 percent of China's total outstanding loans, or RMB 3.4 trillion (US\$531 billion)”, though still a sizable chunk of total assets; *Id.*

⁷¹ Ghosh *et al.*, *supra* note 24, at 4-5 (using the term to discuss the impact of shadow banking in several emerging markets and developing economies.).

financial sector assets (i.e., the highest among all countries studied) while China's was only slightly above 10% along the same period (i.e., the lowest among all countries studied).⁷² This is further echoed in the 2013 Financial Stability Board's report on the implementation of G20/FSB recommendations with a focus on China, where it was recognized that shadow banking in China is "different from other jurisdictions in funding channels, investment modes, and business structures" and that the "size and complexity of shadow banking in China is relatively low."⁷³ However, recognizing this does not mean that there is no cause for concern. Similar to the overwhelming criticisms and concerns raised against the United States, the world's largest economy, in the wake of the Lehman Brother's collapse and subsequent financial crisis, the world can ill afford a similar scenario in the world's second largest economy caused by over-reliance on an unstable shadow banking and shadow financing sector and its links to global capital markets.

III. SHADOW BANKING'S LINK TO CAPITAL MARKETS

As discussed above, it is well recognized that while shadow banking did not, by itself, cause the global financial crisis, these unregulated, risky, non-government-backed financial transactions created a significant ripple effect, which exacerbated a fragile financial system by hiding systemic risk issues behind a cloak of available and liquid assets. As mentioned above, bankers, investors, customers, and the general public recognized these transactions as part of an alternative banking universe, a parallel banking system, or even an alternative capital market, which provided them with higher returns than the regular banking system, albeit with higher risks. This can effectively undermine a stable global capital market.

Daniel Defoe once said, "Trade in general is built upon, and supported by two essential and principal foundations, viz., Money and Credit, as the Sun and Moon alternatively enlighten and invigorate the world, so these two essentials maintain and preserve our trade."⁷⁴ Capital can best be described as money, or excess money, that can be used to create more

⁷² Ghosh et al., *supra* note 24, at 4, Figure 1.

⁷³ Financial Stability Board, *2013 IMN Survey of National Progress in the Implementation of G20/FSB Recommendations 2* (2013), http://www.financialstabilityboard.org/implementation_monitoring/china_2013.pdf (hereinafter *Fin. Stability Bd.*).

⁷⁴ Daniel Defoe, *A TRUE COLLECTION OF THE WRITINGS OF THE AUTHOR OF THE TRUE BORN ENGLISH-MAN: CORRECTED BY HIMSELF* (1703) 255 (2000) (taken from the Google Digitized eBook). The language is transposed to modern-day English. Defoe was, among other things, an English trader, writer and journalist, now famous for his novel, *Robinson Crusoe*, first published in 1719.

wealth or be reinvested. According to Chisolm, capital markets are “meeting places where those who require additional capital seek out others who wish to invest their excess.”⁷⁵ These can be in the form of long-term debt or equity-backed securities. Capital markets include equity markets (stock) and debt markets (bonds). Capital markets can be categorized into primary and secondary markets. Primary markets serve as “a market for creating and originating new financial instruments.”⁷⁶ Secondary markets are used for trading existing financial instruments and products.⁷⁷ We, as the general public, are all users and suppliers of capital in one way or another. Commercial banks generally serve as the main financial intermediaries (thus the term financial intermediation or credit intermediation) by, for example, lending money and assuming a credit risk.⁷⁸ In the modern world, banks increasingly “create loans and then ‘package’ them up and sell them off in the form of bond issues”⁷⁹ using a process called securitization. When bond investors purchase these bond issues, they assume the credit risk. Shadow banks rely on credit markets for funding. According to Gerding, the relationship between investors in capital markets and the shadow banking system can best be described as follows:

Investors in capital markets are purchasing instruments that essentially lend or provide credit to households and firms. The shadow banking system represents a hybrid; it plays the role of bank, yet harnesses capital markets. The connection to capital markets provides both a means to spread risk (and earn reward), but also subjects the system to a new set of risks, including market risk.⁸⁰

Prior to the modern financial system, in the United States, for example, the Glass-Steagall Act of 1933 made a firm distinction and established a strict demarcation line between commercial banking and

⁷⁵ ANDREW CHISOLM, AN INTRODUCTION TO CAPITAL MARKETS: PRODUCTS, STRATEGIES, PARTICIPANTS 1 (John Wiley & Sons, Ltd, 2002). While these meeting places can be physical meeting places, they are now increasing virtual or online meeting places. Note: Capital markets are distinct from money markets, which are aimed at more short-term loans and financing.

⁷⁶ *Id.* at 2.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ Gerding, *supra* note 22, at 6 (citing Hennie van Gruening & Sonja Bajovic Bratanovic, ANALYZING AND MANAGING BANKING RISK: FRAMEWORK FOR ASSESSING CORPORATE GOVERNANCE AND FINANCIAL RISK 111 (2003)).

investment banking.⁸¹ Under this distinction, commercial banks “took in [customer] deposits and made commercial loans,...assumed credit or default risk, and contained this risk by carefully evaluating the creditworthiness of borrowers and by managing a diversified portfolio of loans.”⁸² Investment firms, in contrast, served in more of an underwriting capacity and underwrote the risk. Investment banks underwrote “new issues of securities and dealt in shares and bonds in the secondary markets.”⁸³ Gradually, these demarcation lines were removed through subsequent legislation⁸⁴ under the guise of financial deregulation. These changes improved competition for commercial banks, facilitated the need for financial innovation, and investors’ expectation of higher returns which traditional commercial banks were not able to provide or guarantee due to strict regulations.⁸⁵

According to Omarova, one of the results of the Gramm-Leach-Bliley Act of 1999 on the financial services industry was that it created a number of opportunities for banks and financial holding companies (FHCs) to move into markets that were previously inaccessible and to expand existing businesses and product lines.⁸⁶ As a result, there was an unprecedented growth in the latter part of the twentieth century and early twenty-first century in certain financial markets, including securitization and structured finance products, derivatives, securities lending, and repurchase markets (repo).⁸⁷ According to Omarova and supported by the U.S. Financial Crisis Inquiry Commission, these new products and markets “formed the so-called shadow banking system, which became integral to the operation of the formal banking system, but remained largely outside regulators’ reach.”⁸⁸

⁸¹ A similar distinction existed in the UK and was eventually removed.

⁸² Chisolm, *supra* note 75, at 2.

⁸³ *Id.*

⁸⁴ In the United States, the key legislation is the Gramm-Leach-Bliley Act of 1999, which effectively removed the prohibition on the separation of commercial banks and investment banks. See Saule T. Omarova, *From Gramm-Leach-Bliley to Dodd-Frank: The Unfulfilled Promise of Section 23A of the Federal Reserve Act*, 89 N.C. L. REV. 1683 (2011).

⁸⁵ See, e.g., Mary Jo Wetmore, *Banking and Commerce: Are They Different? Should They Be Separated?*, 57 GEO. WASH. L. REV. 994 (1989); John Krainer, *The Separation of Banking and Commerce*, FRBSF ECON. REV. 15 (2000), <http://www.frbsf.org/economic-research/publications/2000/article2-4.pdf>; Omarova, *supra* note 84, at 1683.

⁸⁶ Omarova, *supra* note 84, at 1717.

⁸⁷ *Id.* (citing Arthur E. Wilmarth, Jr., *The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis*, 41 CONN. L. REV. 963, 988-94 (2009) (examining the rise of securitization, structured products, and derivatives).

⁸⁸ *Id.* (citing FIN. CRISIS INQUIRY COMMISSION, PRELIMINARY STAFF REPORT: SHADOW BANKING AND THE FINANCIAL CRISIS 7 (May 4, 2010), available at http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/2010-0505-Shadow-Banking.pdf (last viewed July 12, 2014)).

These activities remained hidden from regulatory reach and created unprecedented leverage in the financial system, as well as unsustainable risk, eventually leading to shadow banking being “one of the key causes of the global financial crisis from 2007 to 2009”⁸⁹ when the U.S. subprime mortgage markets suddenly collapsed.

IV. IMPACT OF SHADOW BANKING

While the shadow banking system⁹⁰ and shadow capital markets are recognized as rouge players in the financial services industry,⁹¹ the existence of shadow banking is not without benefits, especially for emerging markets and developing economies such as China, despite the fact that China is considered the second largest economy.

Shadow banking institutions perform some of the same functions as traditional commercial banks including credit intermediation, pooling, and structuring,⁹² thereby allowing investors to have more options to diversify their investment portfolios. While Claessens and Ratnovski argue that the distinguishing feature of shadow banking is that it requires a private or

⁸⁹ *Id.* at notes 136-37; H. COMM. ON FINANCIAL SERV., PUBLIC POLICY ISSUES RAISED BY THE REPORT OF THE LEHMAN BANKRUPTCY EXAMINER 13-15 (Hearing before the Comm. on Financial Serv., U.S. H. of Rep., 111th Cong., Apr. 20, 2010), <http://financialservices.house.gov/media/file/hearings/111/printed%20hearings/111-124.pdf> (Statement of the Honorable Timothy F. Geithner, Secretary, United States Department of the Treasury, who stated that the financial system was pushed to the brink of collapse due in large part because large financial institutions allowed the creation and existence of the shadow banking system (parallel financial system), which grew exponentially yet “lacked the basic protections and constraints necessary to protect the economy from classic financial failures,” eventually causing a “breakdown in the basic, most fundamental checks and balances in the system” in the lead-up to the global financial crisis.).

⁹⁰ Johnson, *supra* note 36, at 883 (describing the shadow banking system as composed of shadow banking instruments (“new class of unregulated or lightly regulated financial products”) and shadow banking institutions (“unregulated or lightly regulated businesses that perform banking functions”)).

⁹¹ *See, e.g.*, Peter S. Goodman, *Rule No. 1: Make Money by Avoiding Rules*, N.Y. TIMES (May 23, 2010), http://www.nytimes.com/2010/05/23/weekinreview/23goodman.html?_r=0 (stating that the shadow banking system was “beyond the edges of regulation” and “created the illusion that risk was being responsibly managed; in crucial cases, they actually intensified the dangers”); Paul Krugman, *Bubbles and Banks*, N.Y. TIMES (Jan. 7, 2010), <http://www.nytimes.com/2010/01/08/opinion/08krugman.html> (noting that “regulators failed to expand the rules to cover the growing ‘shadow’ banking system, consisting of institutions like Lehman Brothers that performed bank-like functions even though they didn’t offer conventional bank deposits.”).

⁹² Johnson, *supra* note 36, at 907.

public 'backstop' in order to operate,⁹³ Ghosh *et al.* state that the defining and distinguishing feature of shadow banking is that "it decomposes the process of credit intermediation into a sequence of [seven] discrete operation[s]."⁹⁴ The function of credit intermediation allows shadow banks to create credit substitutes, which allows market participants to "transfer credit and default risk on debt instruments to counterparties."⁹⁵ By doing so, credit intermediation "transforms the economics of traditional credit products by altering the maturity, credit quality, and liquidity of the product,"⁹⁶ thereby redistributing risk but also raising systemic risk.⁹⁷ Furthermore, Johnson points out, financial products that originate from the shadow banking system "facilitate price discovery for illiquid credit products, enhance liquidity, and reduce the price for hedging risk." This allows for greater distribution of exposure to credit risk among market participants.⁹⁸ The principle of credit intermediation is most readily seen in the form of securitization⁹⁹ of products and services, which reduces risk by "distributing the effect of a borrower's default on its debt obligations across a group of investors."¹⁰⁰

In their study of shadow banking in emerging markets and developing economies (EMDEs), Ghosh *et al.* found that financial intermediation through non-bank channels (i.e., shadow banking system) provided numerous benefits to these countries. For example, in countries such as China, shadow banks complimented the real economy by providing

⁹³ Stijn Claessens & Lev Ratnovski, *International Monetary Fund: What is Shadow Banking* (Feb. 2014), <https://www.imf.org/external/pubs/ft/wp/2014/wp1425.pdf> (describing shadow banking as "all financial activities, except traditional banking, which require a private or public backstop to operate." Claessens and Ratnovski argue that it is this need for a backstop which separate shadow banking activities from traditional intermediated capital market activities, such as custodians and hedge funds. However, other scholars include hedge funds and leasing and finance companies as part of shadow banking.).

⁹⁴ Ghosh, *supra* note 24, at 1.

⁹⁵ Johnson, *supra* note 36, at 906.

⁹⁶ *Id.* at n.157; Goodenough, *supra* note 32, at 141-44 (discussing the benefits of taxation and minimal regulations for shadow banking institutions in offshore financial centers); *See also* Gerding, *supra* note 22, at 2 (describing credit intermediation as consisting of three levels of transformation: *maturity* transformation, *credit* transformation and *liquidity* transformation).

⁹⁷ Ghosh *et al.*, *supra* note 24, at 1.

⁹⁸ Johnson, *supra* note 36, at 906.

⁹⁹ Gerding, *supra* note 22, at 11 (referring to securitization as "the central artery of the shadow banking system" and defining securitization as "...allow[ing] a lender to sell loans to an investment vehicle and thus trade highly illiquid assets for cash.").

¹⁰⁰ *See* Johnson, *supra* note 36, at 908 (The argument that this would actually reduce systemic risk was illusory and proved to be untrue as events show and as was reported through the U.S. Financial Crisis Inquiry Commission's 2011 Final Report on the Causes of the Financial and Economic Crisis in the United States); *See also* Gerding, *supra* note 22, at 11-15 (discussing the benefits of securitization).

alternatives to bank deposits for large investors¹⁰¹ who could not get a high rate of return at traditional banks or where “traditional banking and market channels become temporarily impaired.”¹⁰² In addition, shadow banks provide alternative funding for the real economy, especially in China, where a small number of state-owned banks control the economy and existing regulations prevent entrepreneurs, small and medium-sized businesses (SMEs), and on-going businesses from securing funding to build or expand their enterprises quickly.¹⁰³ Finally, Ghosh *et al.* found that shadow banks can help “facilitate credit extension to certain markets as well as provide risk diversification.”¹⁰⁴

While the alleged benefits of shadow banking seemed to support the needs of banks, entrepreneurs, businesspeople, investors, and even capital markets, one of the biggest and most recurring concerns in maintaining stability in the financial markets is preventing systemic risk. Advocates of shadow banking argued that systemic risk was ‘contained’ but were subsequently proved wrong. In fact, the lack of appropriate regulations and oversight governing shadow banking combined with the same level of financial risks taken as compared with traditional banks means that shadow banking poses even greater system risk.¹⁰⁵ According to Johnson, there is general agreement among scholars that systemic risk can be:

- (i) an economic shock such as market or institutional failure that triggers (through a panic or otherwise) either (X) the failure of a chain of markets or institutions or (Y) a chain of significant losses to

¹⁰¹ Ghosh *et al.*, *supra* note 24, at 2-3.

¹⁰² *See id.*; *See also* Evan Oxhorn, *Consumer Finance and Financial Repression in China*, 7 E. ASIA L. REV. 397, 402-07 (2012) (arguing that China’s “highly financially repressive regime,” due in part to China’s banking sector which is dominated by state-owned banks that control 77% of consumer deposits threatens to perpetuate weak credit markets and ultimately leads SMEs and entrepreneurs to more shadow banking transactions which are risky and sometimes, deadly).

¹⁰³ *See* Steven L. Schwarcz, *Shadow Banking, Financial Risk, and Regulation in China and Other Developing Countries*, THE GLOBAL ECON. GOVERNANCE PROGRAMME (GEG) WORKING PAPER 2013/83 2 (July 2013), www.globaleconomicgovernance.org/sites/geg/files/Schwarcz_GEG%20WP%202013_83.pdf (discussing the importance of shadow banking in China as a source of funding for SMEs and start-up companies because China’s state-owned banks do not extend credit to these groups and focus primarily on “lending to large Chinese companies and investing abroad”); Fang, *supra* note 5 (discussing how desperate private enterprises have turned to and thus fostered a huge “shadow” capital market because “China’s banking system does not allocate capital fairly”); Hirn, *supra* note 46.

¹⁰⁴ Ghosh *et al.*, *supra* note 24, at 2-3.

¹⁰⁵ *Id.* at 2.

financial institutions, (ii) resulting in increases in the cost of capital or decreases in its availability, often evidenced by substantial financial-market price volatility.¹⁰⁶

Systemic risk is of significant concern to regulators and policy-makers because of the interconnected nature of the banking industry and now, the whole financial services system. Systemic risk can also be viewed from the perspective of endogenous risk or exogenous risk. Endogenous risks are “systemic risks resulting from a financial institution’s own risk management decisions”¹⁰⁷ while exogenous risks are systemic risks which come about by “the risk management decisions of other actors in the financial markets”.¹⁰⁸

Shadow banking raises concerns of systemic risk because it is unregulated and, through its attempts at regulatory arbitrage to externalize the risks associated with its activities, may create new classes of risk which traditional regulations are not equipped to handle.¹⁰⁹ As highlighted above, the process of credit intermediation used by shadow banking institutions involves several discrete steps in which it is very likely that investors acting in each of these steps are only concerned about the risk which that particular transaction poses to them and are much less concerned about the broader implications of the risk of that transaction on “creditors, counter-parties, or other third parties.”¹¹⁰ Furthermore, while traditional banks are just as subject to systemic risk, the issue with shadow banking is that it is so inextricably linked with traditional commercial banking¹¹¹ that, because they were unregulated transactions and not subject to disclosure or oversight, traditional banks “did not publicly disclose the risks that they

¹⁰⁶ Johnson, *supra* note 36, at 884 (quoting Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193, 198-204 (2008)); *See also* VIRAL V. ACHARYA ET AL., REGULATING SYSTEMIC RISK, IN RESTORING FINANCIAL STABILITY: HOW TO REPAIR A FAILED SYSTEM 284-89 (2009); E.P. DAVIS, DEBT, FINANCIAL FRAGILITY, AND SYSTEMIC RISK 117 (1992) (defining systemic risk as “a disturbance in financial markets which entails unanticipated changes in prices and quantities in credit or asset markets, which lead to a danger of failure of financial firms, which in turn threatens to spread so as to disrupt the payments mechanism and capacity of the financial system to allocate capital.”).

¹⁰⁷ Johnson, *supra* note 36, at 915.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.* at 884-85 (discussing the need for macroprudential regulations to address systemic risk in the wake of the failure of prudential regulations to address the changing business model of shadow banking as compared with traditional banks).

¹¹⁰ Goodenough, *supra* note 32, at 144-46.

¹¹¹ *See, e.g.*, The Financial Crisis Inquiry Report, *supra* note 4 (stating that “Shadow banks and commercial banks were co-dependent competitors. Their new activities were very profitable and, it turned out, very risky.”).

were taking, since those risks were often concealed in off-balance sheet¹¹² shadow banking entities,”¹¹³ some of which consisted of offshore financial centers (OFCs), which were not subject to standard taxation or regulatory restrictions. As discussed above, while proponents of shadow banking thought that systemic risk was contained in the concept of risk diversification, the reality was that what was once thought of as financial innovation in the form of shadow banking products turned into an illusion that negatively impacted real lives and real financial markets around the world.

V. CHINA'S SHADOW BANKING PROBLEM

By all presently available information, as compared with most major advanced economies and developing economies, the size of China's shadow banking system is relatively small,¹¹⁴ leading some to conclude that any shadow banking troubles are “years away” if they arise at all.¹¹⁵ For example, according to the Financial Stability Board, worldwide shadow banking assets were valued at USD \$67 trillion in 2011 (about the equivalent of 111% of the aggregated global GDP of all jurisdictions or one-half of all banking system assets).¹¹⁶ During that same period, China's shadow banking sector was valued, at the upper band levels in 2012, at roughly RMB 30 trillion (USD \$4.8 trillion or 57% of Chinese GDP or 31% of total Chinese bank assets).¹¹⁷ Just one year later, Standard & Poor's credit rating agency stated that “shadow banking accounted for 22.9 trillion yuan of credit (USD \$3.7 trillion or 34 % of the total loans in the banking sector and 44% of China's GDP).¹¹⁸ In May 2014, the Institute of Finance and Banking under the Chinese Academy of Social Sciences (CASS) valued China's shadow banking sector slightly lower at USD \$4.4 trillion (27 trillion yuan or one-fifth of the domestic banking sector's total assets).¹¹⁹

¹¹² See, e.g., Macey, *supra* note 28, at 595-96 (discussing the nature and impact of “off-balance financing” within the world of shadow banking).

¹¹³ Goodenough, *supra* note 32, at 147.

¹¹⁴ Yao, *supra* note 43 (stating that “...the size of the overall system is still small compared to those in developed countries.”); Li, *supra* note 30 (stating that “...the relative size of China's shadow banking system is still small as compared to advanced economies.”).

¹¹⁵ Wang Xiaotian, *Shadow Banking Troubles 'Years Away'*, CHINADAILY USA (Mar. 29, 2013), http://usa.chinadaily.com.cn/business/2013-03/29/content_16356263.htm.

¹¹⁶ Li, *supra* note 30 (citing among other sources, FIN. STABILITY BOARD, GLOBAL SHADOW BANKING MONITORING REPORT 2012 (Nov. 18, 2012), http://www.financialstabilityboard.org/publications/r_121118c.pdf).

¹¹⁷ Li, *supra* note 30.

¹¹⁸ Xiaotian, *supra* note 115.

¹¹⁹ THE STRAITS TIMES, *supra* note 62.

This is higher than CASS's prior year estimates, as reported by RIETI, in which the shadow banking sector was valued at "16.9 trillion yuan (equivalent to 36 % of GDP) as of the end of March 2013."¹²⁰

More recently in June 2014, Standard & Poor reported that "China's corporate debt raced ahead of the U.S. by more than USD \$1 trillion in 2013 to USD \$14.2 trillion,"¹²¹ with "one-quarter to one-third of the debt originat[ing] from China's shadow banking sector." By most reported and unreported accounts, it is expected that China's shadow banking sector will continue to grow, perhaps exponentially, thus raising the potential of systemic risk. This expected continued rise of shadow banking transactions in China coupled with the already high rates of shadow banking in other emerging markets and developing countries does not bode well for the global market. According to reports, in December 2013, Bank of England Governor, Mark Carney, warned that "the global financial crisis is rotating from West to East, with shadow banking excesses in emerging markets now posing the biggest threat to the international economy,"¹²² with the greatest threat to global financial stability coming from the "huge amounts of assets in the informal banking sector in China."¹²³ However, because China's banking system is ultimately controlled by the state, predictions indicate that any "post-bubble credit purge is likely to play out in a different way, with less risk of a dramatic crisis..."¹²⁴ There also appears to be, at the same time, a growing recognition that China's shadow banking system is not as complex as that of the advanced economies and, because it is largely state-controlled, the ramifications of a growing credit market may not be as serious as some predict.¹²⁵

¹²⁰ Suzuki, *supra* note 44, at 35 (citing RIETI (RESEARCH INSTITUTE OF ECONOMY, TRADE AND INDUSTRY), CHINA IN TRANSITION: SHADOW BANKING IN CHINA: CURRENT SITUATION AND CHALLENGES (Aug. 6, 2013), <http://www.rieti.go.jp/en/china/13080601.html>).

¹²¹ Dan Kedmey, *This Chart Shows How China Just Surpassed the US*, TIME (June 17, 2014), <http://time.com/2886946/china-corporate-debt/> (highlighting China's growing appetite for debt as well as risk as compared with its peers).

¹²² *Id.* The report points out that "[t]he pace of credit growth [in China] over the five-year period [late 2008 to December 2013] exceeds the extremes seen before Japan's Nikkei bubble burst in 1990, or before the onset of the U.S. housing crash in 2007." The pace of growth, as reported here, states that China's credit system has grown from \$9 trillion in late 2008 to \$24 trillion, "equivalent to adding the entire U.S. commercial banking system."

¹²³ *Id.* (stating that "Mr. Carney did not name any particular country but analysts said he was clearly referring to China, where a surge in off-books banking over the past year has accounted for roughly half of all credit growth.").

¹²⁴ *Id.*

¹²⁵ See, e.g., Suzuki, *supra* note 44, at 35-41 (stating that "...the emergence of systemic risk in accordance with the expansion of shadow banking in China does not seem to be a strong possibility, partly because even if the turmoil in the shadow banking occurs, commercial banks

China's shadow banking system consists of three main components, namely: 1) savings instruments such as wealth management products (WMPs)¹²⁶ that are equivalent to money market funds; 2) credit intermediation by non-bank financial institutions; and 3) informal, private lending in the form of underground credit markets.¹²⁷

According to some analysts, wealth management products (WMPs) are quite the phenomena in China,¹²⁸ with many investors making the shift from deposits in traditional banks to WMPs, hoping to secure higher returns than the low deposit interest rates at state-owned banks.¹²⁹ WMPs are generally managed by trusts that are part of state-owned firms. According to Hirn, WMPs and trust assets are not safe, even if sold by commercial banks.¹³⁰ Despite this, WMPs and trust financing have seen an exponential rise in China, having gone from a trust assets valuation of 3 trillion RMB in 2010 to between 10-15 trillion RMB in March 2014,¹³¹ despite the

typically are not responsible for compensating customer losses so far as an effective firewall between commercial banking and shadow banking is constructed.”)

¹²⁶ Yao, *supra* note 43, at 1.

¹²⁷ See also Li, *supra* note 30, at 2 (stating that “In contrast [to the United States], China’s shadow banking system includes direct credit extension by nonbank financial institutions (especially trust companies and brokerage firms) and informal securitization through the pooling of proceeds from wealth management products provided by banks.”).

¹²⁸ See, e.g., Yao, *supra* note 43, at 3.

¹²⁹ *Id.*; Hirn, *supra* note 46; Liyan Qi, *China Unveils Measures to Regulate Banks’ Wealth-Management Products*, WALL ST. J. (July 11, 2014), <http://online.wsj.com/articles/china-unveils-measures-to-regulate-banks-wealth-management-products-1405079528> (stating that as of the end of May 2014, “the weighted average yield of these products [WMPs] was 4.13% ... [while] China’s banks can offer up to 3.3% for one-year deposits.”).

¹³⁰ *Id.* Cf. Yukon Huang, *Alarmists Overstate China’s Shadow Banking Threat*, FIN. TIMES (July 17, 2014), <http://www.ft.com/cms/s/0/71d11ed0-0da3-11e4-815f-00144feabdc0.html#axzz3A4Mt2ud> (arguing that analysts are over-exaggerating the issues with China’s shadow banking industry and size of WMPs, and that the two activities of trust companies and banks’ wealth management products account “for 36 per cent of GDP or about 15% of bank assets,” lower than what has been estimated.)

¹³¹ Hirn, *supra* note 46; see also Qi, *supra* note 129 (As of the end of May 2014, “[o]ver 400 banks have a total of 13.97 trillion yuan (\$2.25 trillion) in outstanding wealth-management products ... creating wealth of more than 450 billion yuan for their investors.”); cf. Li, *supra* note 30 (“[a]ccording to the China Banking Regulatory Commission (CBRC), total outstanding WMPs issued by banking institutions reached RMB 7.1 trillion (USD 1.1 trillion) at year-end 2012, a 55% increase from 2011”). Comparatively speaking, sales of WMPs have increased and continue to do so.

government's crackdown attempts on WMPs¹³² as part of its overall strategy to reign in shadow banking transactions. The major concern with WMPs as direct finance products is that should these products fail, the consumer bears the whole of the risk and loses the investment.¹³³ In addition, Hirn points out that the underlying collateral is not valued using appropriate and reliable risk management procedures.¹³⁴ Furthermore, trust financing is generally made in more long-term projects, such as industrial, infrastructure, or real estate projects "that by nature are of a longer term than the maturity of products sold for 1, 2, or 3 years..rais[ing] the question of what happens when trust products mature if the underlying assets or investor confidence deteriorates."¹³⁵

With respect to credit intermediation activities¹³⁶ in the form of adopting securitization products and processes, China's banks operates under a 'bank-trust cooperation model' whereby

banks channel funds to trusts¹³⁷ via entrusted loans; trusts make high-yield loans to risky or small borrowers that have difficulty directly obtaining bank credit. By engaging in this type of cooperation, banks are able to "outsource" part of their lending business to trust companies and move these loans off their balance sheets.¹³⁸

According to Li, in 2010, the bank-trust cooperation arrangement accounted for two-thirds of trust assets and, despite tighter regulations, such arrangements represented nearly 27% of trust assets by the end of 2012. In

¹³² See, e.g., Sara Hsu, *China's Regulation of Wealth Management Products*, DIPLOMAT (May 15, 2014), <http://thediplomat.com/2014/05/chinas-regulation-of-wealth-management-products/>; Qi, *supra* note 129.

¹³³ Hsu, *supra* note 132.

¹³⁴ Hirn, *supra* note 46; see also Li, *supra* note 30, at 2 ("The underlying assets include liquid, relatively safe investments, such as money market and bond funds, *but can also include illiquid, risky credit-related assets*, including SME loans, real estate loans, and local government financing vehicle (LGFV) loans. Asset-backed WMPs closely resemble collateralized debt obligations (CDOs) in structure, and can be viewed as informal securitization. Investors are usually not able to identify assets underlying each individual asset-backed WMP.") (emphasis added).

¹³⁵ Hirn, *supra* note 46.

¹³⁶ See, e.g., Yao, *supra* note 43.

¹³⁷ See Prasso, *supra* note 51 (discussing the threat to stability in a "loosely-regulated \$2 trillion trust industry, made up of 68 companies that sell high-yield investments to wealthy customers," frequently through banks, that are often based on risky loans to such industries as energy and property. Furthermore, approximately "\$835 billion worth of trust products matured in 2014, 50% more than the year before.").

¹³⁸ Li, *supra* note 30, at 3.

their September 2012 report, *Ghosh et al.* indicated that there did not appear to be an aggregate estimate as to the size of non-bank financial intermediation in EMDEs, including China, but thought it was a growing aspect of the total shadow banking system as compared with the relative size of the total financial system of the country.¹³⁹ In April 2013, Li's report confirmed that shadow banking credit is usually extended through trust companies,¹⁴⁰ which engage a variety of activities including lending,¹⁴¹ asset management, real estate investment, and private equity investment.¹⁴¹ At the end of 2012, for example, loans represented 43% (the largest) of trusts' assets under management (AUM),¹⁴² in which "newly extended trust loans increased more than five-fold in 2012, representing 8% of total social financing¹⁴³ (a measure of total credit extended to the real sector)."¹⁴⁴ Using the total social financing indicator, the People's Bank of China (PBOC) found that "the share of non-bank credit intermediation surged from less than 10% of the system in 2008 to almost 40% in 2013."¹⁴⁵ While some might argue that there is little cause for concern because credit intermediation is handled by state-owned banks and thus there is some form of protection, the reality is that this very "bank centric" intermediation

¹³⁹ Ghosh et al., *supra* note 24, at 2.

¹⁴⁰ Li, *supra* note 30, at 3; *see also* Huang, *supra* note 130 (discussing concerns over the activities of trust companies since they are "prohibited from taking deposits but can make high-interest but riskier loans," but also dismissing some of these concerns as either "outdated" or "overstated").

¹⁴¹ Li, *supra* note 30, at 3.

¹⁴² *Id.* at 4. While this seems significant, it is important to note that as far as distribution to industry is concerned, Li's report shows that only 27% of this is allocated to industrial and commercial businesses.

¹⁴³ *See, e.g.*, Ghosh et al., *supra* note 24, at 4 (discussing the PBOC's creation of the total social financing indicator "to track loans, entrusted loans, and other bank-intermediated credit products that are often not captured on their balance sheet" but also that since then, new products have emerged to directly avoid detection even from TSF indicators, reinforcing the rather murky situation that China faces in fully managing the shadow banking system); Anthony Chan, *Shadow Banking Darkens China Policy Outlook*, ALLIANCE BERNSTEIN BLOG ON INVESTING (Mar. 11, 2013), <http://blog.alliancebernstein.com/index.php/2013/03/11/shadow-banking-darkens-china-policy-outlook/> (discussing how the PBOC created the "total social financing" indicator for measuring and managing the rise of the shadow banking system). *See also* Reuters, *FACTBOX-What is China's Total Social Financing Indicator?*, CHI. TRIB. (Nov. 13, 2012), http://articles.chicagotribune.com/2012-11-13/news/sns-rt-china-tsf-factbox13e8m24an-20121112_1_central-bank-yuan-loans-interest-rates.

¹⁴⁴ Li, *supra* note 30, at 4.

¹⁴⁵ Yao, *supra* note 43.

creates a huge distortion in the perception of risks associated with many savings and credit products.”¹⁴⁶

The final piece of China's shadow banking system puzzle, the informal, underground lending market, has been in existence for hundreds of years. According to Yao, these activities primarily involve small-business lenders, pawn shops, and underground lending markets.¹⁴⁷ But the informal lending market is “the most opaque and riskiest part of the system and typically involves the highest interest rates.”¹⁴⁸ SMEs, entrepreneurs, and the like gravitate towards these underground lending markets precisely because Chinese state-owned banks “are not extending as much credit to SMEs, focusing instead on lending to large Chinese companies and also investing abroad.”¹⁴⁹ The smaller players in China's economy are less attractive to the roughly only seven large banks.

According to Ghosh *et al.*, off-balance sheet and underground lending is estimated to “have more than tripled by end-2010, from RMB 3 trillion in 2007.”¹⁵⁰ According to Li's report, as of May 2011, the informal lending market was reported to be approximately RMB 3.4 trillion (USD \$540 billion).¹⁵¹ However, another report estimated the size of the market at RMB 4 trillion (USD \$635 billion) in 2011.¹⁵² These figures represent the exorbitant cost of borrowing in underground lending markets such as Wenzhou where interest rates can reach up to 100% annually. There are several ways in which banks get involved in the underground lending market, such as through letters of credit for commodities imports, short-term loans for domestic traders, discounted bills, group guarantees,

¹⁴⁶ *Id.* (arguing that China needs to correct this “risk misperception” by making “an ultimate choice between giving more leeway to banks in the intermediation process (‘Europeanization’ of shadow banking) or guiding the system towards the capital markets (‘Americanisation’)”). To date, it seems China wants to go its own way using the total social financing indicator as its own guide.

¹⁴⁷ Yao, *supra* note 43. Note that in some emerging markets, these private lenders are akin to loan-shark operations offering capital but at excessive, even extortionate, interest rates.

¹⁴⁸ *Id.* at 2 (citing Wenzhou as an example of an established place for private lending because “interest rates on short-term loans have been running above 20% per annum in recent years”). See also Li, *supra* note 30, at 4 (“[T]he cost of borrowing in the Wenzhou underground lending market ranged between 21-25% from mid-2011 to mid-2012. Other surveys indicate that borrowers in urgent need of liquidity sometimes face annualized interest rates approaching 100%.”)

¹⁴⁹ STEVEN L. SCHWARCZ, SHADOW BANKING, FINANCIAL RISK, AND REGULATION IN CHINA AND OTHER DEVELOPING COUNTRIES 2 (Global Economic Governance Program, University of Oxford 2013).

¹⁵⁰ Ghosh *et al.*, *supra* note 24, at 4.

¹⁵¹ Li, *supra* note 30, at 4 (citing Jinfeng Shi, *The People's Bank of China Conducts Research on Informal Lending*, 21 CENTURY BUSINESS HERALD (Oct. 21, 2011)).

¹⁵² *Id.* (referring to a report by CITIC Securities).

residential mortgages, and the latest trend, bankers' acceptance notes (BANs),¹⁵³ also referred to as bankers' acceptance bills. According to Liu, the sheer pace at which BANs are being issued¹⁵⁴ is a troubling sign, leading Liu to conclude that BANs "may end up being the mortgage-backed securities of China."¹⁵⁵ With each of these three major pieces of China's shadow banking system, the key concerns appear to revolve around disclosure, risk perception, risk management, potential systemic deficiencies, over or under regulation, political interests, and saving face. As of January 2013, the amount of informal lending (i.e., shadow lending) exceeds China's formal lending transactions, which may be genuine cause for concern.¹⁵⁶

The next section discusses some of the proposed reforms that China is undertaking to reign in its' shadow banking sector with the caveat that many believe there is no issue at all in this regard since China's political and economic system, even with respect to shadow banking, is different from that of the United States or Europe in the wake of the U.S. subprime mortgage crisis that led to the global financial crisis. Nevertheless, recent measures taken by China seem to indicate that it does recognize the potential systemic issues underlying its shadow banking system.

VI. CHINA'S PROPOSED REFORMS FOR MANAGING SHADOW BANKING

In the above sections, this article highlights why shadow banking has become problematic. Some of these reasons include the potential for having excess leverage due to significant securities lending transactions, the transmission of systemic risk where shadow banking may lead to "modern-style bank runs,"¹⁵⁷ and regulatory arbitrage via the circumvention of regulations at a cost to the financial industry and more specifically, to consumers. In China, the primary concerns center around the increased direct and indirect linkages between banks and the shadow banking industry, particularly since the banks are state-owned. In addition, trust financing is seen as creating increased market, credit, maturity, and liquidity

¹⁵³ Liu, *supra* note 46 (providing a detailed analysis of BANs and their effect specifically within the shadow banking system and on China's financial system in general).

¹⁵⁴ *Id.* ("...issuance of BANs has more than doubled to 1.6 trillion yuan (\$261 billion) in the first four months of 2013 from just 636 billion yuan a year ago...")

¹⁵⁵ *Id.* (stating "[w]hen you're using BANs to build ghost towns, there's no one around to pay the rent", a reference to the many, now well-known "ghost towns" in China, such as Ordo, where homes for 1.5 million residents are said to have been sold, but are actually empty.)

¹⁵⁶ See Chan, *supra* note 143.

¹⁵⁷ Ghosh et al., *supra* note 24, at 3.

risks in the event of a marked slowdown in the economy that affects the primary areas of focus for trust financing and investment.¹⁵⁸

With respect to China, it has already been noted that the shadow banking industry is relatively small as compared to even other East Asian nations. Despite this, China is also a fast developing nation and constitutes the second largest economy. Therefore, China must address the potential issues caused by shadow banking at a pace perhaps faster than should be expected for other developing economies. China's State Council recognizes that the country's capital markets have not reached a high level of maturity.¹⁵⁹ This lack of maturity directly affects the degree to which shadow banking activities are likely to continue. In recent years, while recognizing the important role of shadow lending in the Chinese economy, China has proposed measures to curb shadow banking activities which, according to JPMorgan Chase and Co.'s 2014 statistics, are estimated at 46.7 trillion yuan (USD \$7.5 trillion).¹⁶⁰ This is a significant increase as compared with 2012, when a Standard & Poor's credit analyst estimated that China's shadow banking sector "accounted for 22.9 trillion yuan (USD \$3.7 trillion) of credit in China...equivalent to 34% of the total loans in the banking sector and comprises 44% of China's GDP in 2012."¹⁶¹

In its 2013 State Council report, China recognized the need to conduct structural transformations with respect to its financial and monetary policies by setting out ten guidelines for financial markets restructuring.¹⁶² At least one of these key reforms is aimed at "legalization of privately-run banks and the regulation of private lending markets"¹⁶³ This seems consistent with Chan's remarks that "[m]ore often, China tends to be blunt and abrupt when cracking down on imbalances."¹⁶⁴ Whether these "blunt and abrupt" approaches will succeed remains to be seen, since recent efforts to curb shadow banking without the requisite political and structural reforms

¹⁵⁸ See, e.g., *id.* at 5.

¹⁵⁹ Zhou & Luo, *supra* note 12.

¹⁶⁰ *Id.*

¹⁶¹ Wang, *supra* note 115.

¹⁶² *State Council on the Financial Support for Economic Adjustment and Structural Transformation and Upgrading of Guidance* (July 1, 2013), www.gov.cn/zwqk/2013-07/05/content_244084.htm.

¹⁶³ Fang, *supra* note 5 (highlighting one of the key areas of reform in the China's 2013 State Council Report); See also Zhou & Luo, *supra* note 12 (discussing China State Council's recognition that China's capital markets are still "immature...organizational and systematic problems still exist.").

¹⁶⁴ Anthony Chan, *Shadow Banking Darkens China Policy Outlook*, THE ALLIANCE BERSTEIN BLOG ON INVESTING (Mar. 11, 2013), blog.alliancebernstein.com.

seemed to only cause the informal lending market to go further underground.

Both before the 2013 State Council report and following it, a series of circulars and regulations were issued by the China Banking Regulatory Commission (CBRC). As early as June 2006, China started to regulate and create greater oversight over wealth management products, resulting in the creation of Qualified Domestic Institutional Investor (QDII) products, which failed to capture the interest of investors.¹⁶⁵ In the May 2009 CBRC Notice, the CBRC started to require that commercial banks submit reports on wealth management products at least ten days before they were to be offered to the general public.¹⁶⁶ The CBRC's July 2009 CBRC Notice restricted banks from using the proceeds of sales from wealth management products to re-invest in secondary markets and required banks to conduct risk assessment and engage in risk diversification.¹⁶⁷ Under the August 2010 Notice, there were restrictions on the percentage of cooperation (not to exceed 30% of all financing) between banks and trust companies, aimed at reducing the risky practice of banks conducting off-balance sheet activities (limited to one year).¹⁶⁸ The August 2011 Notice imposed greater transparency and disclosure requirements on banks with respect to the risks associated with wealth management products and making sure consumers were made aware of such risks and related consumer rights.

In December 2011, Tse reported on the Chinese government's response to the growing shadow financing market, estimated by the People's Bank of China to be "over 20% of the country's total outstanding loans, amounting to a whopping RMB 3.38 trillion (USD \$531 billion)."¹⁶⁹ At that time, Beijing's response was to not support the legitimacy of private lending as integral to SMEs but to "establish a monitoring system for private lending" and to "crack down on banks by requiring them to include in their reserve requirement ratio letters of credit and deposits for bank acceptance bills."¹⁷⁰ Tse quoted an official of the People's Bank of China as stating that "government departments will perfect relevant rules and laws to guide the activities of private lending and build multi-level credit

¹⁶⁵ Hsu, *supra* note 132.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ Cindy Tse, *Shadow Financing Poses Hidden Risks to China's Financial Sector*, CHINA BRIEFING (Dec. 1, 2011), <http://www.china-briefing.com/news/2011/12/01/shadow-banking-poses-hidden-risks-to-chinas-financial-sector.html>.

¹⁷⁰ *Id.*

markets.”¹⁷¹ While rules were established for the maximum interest rates that private lenders can charge, there is no indication that such rules are enforced.

Around the same time that China announced its plans discussed above for managing the growing shadow banking sector, the International Monetary Fund (IMF) issued its own Financial System Stability Assessment for the People's Republic of China.¹⁷² In this November 2011 report, the IMF, while praising that “China's regulatory and supervisory framework...reveals a high degree of adherence to international standard,”¹⁷³ also recognized supervisory “blind spots.”¹⁷⁴ The IMF recommended China clarify and make more transparent the “regulatory policies applying to shadow banking and their interconnections”¹⁷⁵ through a “more structured oversight, regulatory, and supervisory approach...needed to prevent and to manage systemic risks via cross-market products and institutional structures.”¹⁷⁶

In their September 2012 report, Ghosh *et al.* discussed additional reforms that China undertook to address the shadow banking sector. One of these initiatives included legitimizing shadow banks, to the extent possible, by establishing a pilot financial reform zone in Wenzhou in April 2012. The pilot enterprise, located in Zhejiang province, is called the Wenzhou Private Lending Registration Service Center and is designed “to regulate the private financing market and promote transparency.”¹⁷⁷ The Center offers loans at an interest rate of 1.2 to 1.3% compared to the underground lending rate of 3 to 5%, which caused many SME loan holders to go into bankruptcy due to poor management.¹⁷⁸ However by August 2012, many were still waiting to see the real benefits of these reforms rather than a greater proliferation of more private lending institutions.¹⁷⁹ In addition, as discussed by Ghosh *et al.* with reference to Barclays Capital's October 2011 emerging markets

¹⁷¹ *Id.*

¹⁷² IMF, *People's Republic of China: Financial System Stability Assessment: IMF Country Report No. 11/321* (Nov. 2011), available at www.imf.org/external/pubs/ft/scr/2011/cr11321.pdf.

¹⁷³ *Id.* at 39.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* at 24.

¹⁷⁶ *Id.*

¹⁷⁷ Xinhua, *China's Wenzhou Expects Substantial Financial Reforms* (Jan. 2, 2013), <http://english.people.com.cn/90778/8075830>; Yu Ran & Wang Hongyi, *Wenzhou Credit Crisis "Inevitable" with Unchecked Private Lending*, XINHUANET (Oct. 14, 2011), http://news.xinhuanet.com/english2010/china/2011-10/14/c_131191372.htm

¹⁷⁸ *Id.*

¹⁷⁹ Chen Zhe & Ye Jingyu, *Wenzhou Reforms Stall*, ECON. OBSERVER (Aug. 9, 2012), <http://www.eeo.com.cn/ens/2012/0809/231564.shtml>.

report, the China Banking Regulatory Commission (CBRC) introduced several guidelines and directives between 2008 – 2011 aimed at regulating the bank-trust cooperation agreements that are at the heart of trust financing, a key component of China's shadow banking portfolio.¹⁸⁰

In the CBRC's December 2012 Notice, banks were advised to scrutinize third-party wealth management products, such as insurance products, and submit reports to the CBRC.¹⁸¹ Despite these foregoing notices, the sale of wealth management products surged. The March 2013 Notice by the CBRC was aimed at "reducing the holdings of non-standard debt assets (NSDAs), those that are not traded on interbank markets or securities exchanges, including trust and entrusted loans...to 35% of wealth management products and within 4% of total assets"¹⁸² In December 2013, China's State Council issued Circular 107, which "required banks to separate funds of wealth management products from banks' own funds."¹⁸³ It also put the regulation of WMPs under the People's Bank of China; though further formal regulations were never drafted, there were further efforts underway to submit proposals for shadow banking regulations to the next National People's Congress' (NPC) meeting. Instead at the NPC meeting, Premier Li Keqiang stated China's intent to implement the Basel III accord guidelines for regulating the shadow banking industry.¹⁸⁴ Finally, a January 2014 CBRC Circular Notice stressed the importance, presumably again, of the need for commercial banks to separate the wealth management business from the deposit business and to ensure that customers are aware of the risk inherent in wealth management products.

In essence, it appears that China and the CBRC proposed three primary groups of reforms aimed at curtailing the growing shadow banking sector. First, the CBRC imposed tougher regulations around wealth management products sold by trust schemes and trust companies. Wealth management products (WMP) are investment products sold by banks and

¹⁸⁰ Barclays Capital, *China: Is Shadow Banking Another Subprime Debt?* 11-13 (Oct. 25, 2011), <http://www.economia.unam.mx/deschimex/cechimex/chmxExtras/documentos/catedra/catedra2013/cursointensivo/Programacion/S7/BarclaysShadowBanking.pdf>; *See also* Ghosh et al., *supra* note 24, at 5 (also arguing that despite these measures, China and the other EDMs studied, "need to expand their capital markets to provide alternative but safe sources of funding...")

¹⁸¹ Hsu, *supra* note 132.

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ *Id.*

secured by bonds, stocks, loans, or other types of debt instruments.¹⁸⁵ WMP managers consist of commercial banks, trust companies, securities investment firms, futures management firms, and insurance asset management firms to name a few.¹⁸⁶ In short, those who manage WMPs run wide and deep across the entire commercial and financial service sectors. Wealth management products can yield profits, but if banks run into default, the customer is the only party who bears the risk and loses the investment if the WMP defaults. The CBRC's rules limited the amount of investment that commercial banks could make in WMPs to the maximum of "35% of total wealth management products issued by banks or 4% of banks' total assets",¹⁸⁷ especially in non-standardization credit assets such as loans, entrusted loans, and bankers' acceptance notes.¹⁸⁸ In addition, WMPs must be submitted to the CBRC for review at least ten days before being issued.

A second major area of reform is increased supervision of and oversight over shadow banking activities, such as trust companies. One method is "tightening the approval process for [trust] companies seeking to enter new businesses and offer new products."¹⁸⁹ In addition and since 2011, the People's Bank of China (PBOC) includes entrusted loans as part of their total social financing statistics, as well as part of their established statistics on micro-credit companies.¹⁹⁰ The PBOC introduced the concept of "total social financing" in 2011 in response to the rapid growth of lending activities that occur outside the banking system.¹⁹¹ For example, according to the PBOC's "total social financing" data in 2013, "the share of non-bank credit intermediation surged from less than 10% of the system in 2008 to almost 40% in 2013."¹⁹²

The total social financing indicator is meant to track off-balance sheet transactions (i.e., those that take place outside the formal banking system) such as loans, entrusted loans, and other bank-intermediated credit products

¹⁸⁵ *Id.*

¹⁸⁶ Xusheng Yang, *Inside China: Taming Shadow Banking* (May 23, 2013) (on file with the author).

¹⁸⁷ *Id.*; Wang, *supra* note 115.

¹⁸⁸ *Fin. Stability Bd.*, *supra* note 73, at 2; Zhou & Luo, *supra* note 12; Yang, *supra* note 186.

¹⁸⁹ Zhou & Luo, *supra* note 12; *See also* Shen Yan & Jonathan Standing, *China Regulator Says to Tighten Supervision Over Shadow Banking*, (June 6, 2014), <http://www.reuters.com/article/2014/06/06/china-banks-regulator-idUSL3N0ON0LX20140606>.

¹⁹⁰ *Fin. Stability Bd.*, *supra* note 73, at 2.

¹⁹¹ Ghosh et al., *supra* note 24, at 4.

¹⁹² Yao, *supra* note 43; *See also* THE STRAITS TIMES, *supra* note 62.

that are not handled through traditional commercial banking channels.¹⁹³ However, due to a lack of total transparency, it is not clear that this concept captures all such non-bank disintermediation transactions or is accurate at any given point in time in terms of controlling or accurately measuring China's shadow banking activities. The increased supervision and oversight also entails greater transparency and disclosure about the risks of wealth management products and greater communications about the rights of consumers in purchasing WMPs.¹⁹⁴ In addition, according to the FSB's 2013 report on the implementation of the G20 recommendations, China plans to increase risk monitoring and risk assessment of shadow banking activities as well as engage in "conducting on-site assessments on the resilience of financial institutions and stress testing on 17 major commercial banks."¹⁹⁵

Finally as indicated above, there are proposed efforts to reign in shadow banking under the Basel III accord guidelines.¹⁹⁶ In general, McKinsey & Company's October 2012 report discussed the trend towards "unprecedented regulatory change" in the banking industry, driven by the Basel 2.5 and Basel III frameworks to which all G20 countries, including China, are likely to be bound.¹⁹⁷ While Basel II addressed issues such as internal ratings and market risk and securitization,¹⁹⁸ Basel III was born out of the need for regulatory reforms in the banking industry to address the issues arising directly out of the 2007-2008 financial crisis.¹⁹⁹ Basel III is aimed at "redefining core Tier I capital, restructuring bank liabilities and risk management, and providing additional stability through capital buffer

¹⁹³ Yan & Standing, *supra* note 189; *See also* Yao, *supra* note 43; Reuters, *supra* note 143.

¹⁹⁴ Hsu, *supra* note 132; *Fin. Stability Bd.*, *supra* note 73, at 2; *See also* Jing Jiang, *Shadow Banking in China: Battling the Darkness*, THE ECONOMIST (May 10, 2014), www.economist.com (discussing greater accounting requirements for trust companies and limited dealings with commercial banks) (on file with the author).

¹⁹⁵ *Fin. Stability Bd.*, *supra* note 73, at 22.

¹⁹⁶ Hsu, *supra* note 132.

¹⁹⁷ MCKINSEY & CO., *supra* note 61 (discussing the PBOC's 'total social financing' indicator).

¹⁹⁸ Sarah Padgett, *The Negative Impact of Basel III on Small Business Financing*, 8 OHIO ST. ENTREPRENEURIAL BUS. L. J. 183, 184 (2013) (also noting that The Basel Accords are named after the Basel Committee on Banking Supervision, composed of banking and prudential regulators from over 25 countries); Cf Ranjit Lall, *Why Basel II Failed, and Why Any Basel III Is Doomed* 24 (Global Econ. Governance Programme, Working Paper No. 2009/52, 2009).

¹⁹⁹ *Id.*

requirements.”²⁰⁰ More importantly, whereas Basel II and prior accords focused more on micro prudential regulations aimed at assessing the health and viability of the financial system’s component parts, Basel III incorporates macro prudential standards aimed at ensuring the long term sustainability and viability of the financial system as a whole.²⁰¹ Presumably, if China aims to control shadow banking activities through the Basel III accord guidelines, such efforts may prove less effective than expected since Basel III does not cover or affect non-bank financial institutions.²⁰² On the contrary, since the adoption of Basel III, “the shadow banking sector has grown larger than before the financial crisis.”²⁰³ As Padgett points out, despite Basel III’s attempt to secure the future of the banking industry in a holistic way, “large banks will continue to rely heavily on credit and lending practices, rather than deposits, as a major source of revenue.”²⁰⁴ These credit and lending practices will, most assuredly, include large shadow banking transactions, whether in China or elsewhere given the globalized financial system. Because shadow banks, by definition, are considered to be non-bank financial institutions, they do not need to comply with capital buffer requirements, strict disclosure requirements, or the stringent regulatory standards to which banks must comply. Ultimately, Basel III may do more harm than good and, as argued by Padgett, Basel III regulations will not significantly affect large banks who will dominate the SME lending market, but it may push small banks to the sidelines in terms of the market for SME lending.²⁰⁵

VII. EFFECTIVENESS OF CHINA’S PROPOSED REFORMS AND FUTURE RECOMMENDATIONS

Given these proposed reforms, this section analyses the extent to which China’s reform attempts will cure the shadow banking dilemma and seeks to offer further recommendations on addressing shadow banking. By all reliable reports, shadow banking existed even in the wake of the global financial crisis, creating a significant crisis in the global capital markets. China’s shadow banking industry is not the first nor will it be the last. By most accounts, China’s proposed reforms to curb shadow banking could be best seen as a tier one preliminary response in terms of severity and effectiveness. While some early 2014 reports indicate that China’s shadow

²⁰⁰ *Id.*; See also Jerome Walker et al., *Reconciling the Dodd-Frank and Basel Committee Capital Requirements*, 129 *BANKING L.J.* 627, 631 (2012).

²⁰¹ Padgett, *supra* note 198, at 184.

²⁰² *Id.* at 203.

²⁰³ *Id.*

²⁰⁴ *Id.* at 206.

²⁰⁵ *Id.*

banking activity slowed in the first quarter of 2014,²⁰⁶ other reports indicate that shadow banking is simply morphing to create other products aimed at regulatory arbitrage.²⁰⁷

With respect to regulating trust companies and wealth management products, increased regulations seem to have inspired more innovation in terms of financial products. For example, existing regulations do not cover security houses. As a result, brokers from securities firms take “loans regulated by banks to back ‘wealth management products’ that they sell to investors themselves”²⁰⁸ or these brokers “act as intermediaries and allow trusts to do the same.”²⁰⁹ Another example is the creation of trust beneficiary rights (TBRs) products. TBRs are another way to get around the restrictions on cooperation between banks and trust companies. With TBRs, “a bank sets up a firm to buy loans from a trust; it then sells the rights to income from those loans to the bank, creating a TBR; the bank can then sell the TBRs to another bank.”²¹⁰ The result is a transaction that evades minimal loan-to-deposit ratio rules and capital requirements while giving the perception of offering safe lending investments on risky corporate loans.²¹¹ A third example is the rise of what is now seen as peer-to-peer lending where small entrepreneurs, unable to secure loans from official banks, are starting to “guarantee one another’s debts, forming a web of entanglements”²¹² that creates guarantors of guarantors. This is a dangerous state of affairs as China’s economy cools and the property market shows signs of slowing down.

This level of bypassing trust and wealth management product (WMP) regulations is further exacerbated by the way in which CBRC and other regulators look at WMPs. The WMP business is regarded as an asset management business and is “not regulated as a bank under the Commercial Bank Law.”²¹³ WMPs are not regulated under Securities Law since they are considered “a type of informal securitization with issuance backed by

²⁰⁶ Michael Cole, *Growth of China’s Shadow Banks Slows by 36% in Q1*, MINGTIANDI (Apr. 24, 2014), <http://www.mingtiandi.com/real-estate/china-real-estate-research-policy/growth-of-chinas-shadow-banks-slows-by-36-in-q1/> (citing “worried customers, declining returns, and competition from online funds”).

²⁰⁷ Jiang, *supra* note 194.

²⁰⁸ *Id.*

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ *Id.*

²¹² *Id.*

²¹³ Yang, *supra* note 186.

undisclosed, off-balance sheet and asset pools.”²¹⁴ While a WMP is formed similar to a public fund, it is not subject to the Securities Investment Fund Law.²¹⁵ Finally, WMPs are not subject to Trust Law even though they are sold and administered by trust companies and the WMP creates a trust relationship where bank depositors entrust their capital to banks for their management.²¹⁶ This disintegrated set of principles, administrative functions, and fragmented laws creates an enormous web of risk, especially for the millions of consumers who continue to purchase WMPs and other disintermediated financial products.

If China is to learn from the lessons of the past, including those of the United States and the global financial crisis, the lesson is that more regulation is not necessarily the answer.²¹⁷ In addition, more regulation without equally robust reforms in both structural and political organizations will only push the shadow banking industry further underground. As highlighted by the Financial Crisis Inquiry Commission of the United States, it was tight regulation of commercial banks²¹⁸ that led to financial innovation and the emergence of the shadow banking industry.²¹⁹ The competition between traditional banks and the shadow banking system combined with investment banks that operated freely within the capital markets without regulatory oversight led to increased lobbying by both regulators and traditional banks to push the U.S. Congress “to slowly but steadily remove[d] long-standing restrictions,”²²⁰ which had been put into place after the financial crisis of 1929 and the Great Depression” to prevent another financial meltdown.²²¹ This slow and steady financial regulation reform allowed commercial banks to compete freely with shadow banks and investment banks in the capital markets and brought years of prosperity, but it also revealed a lack of comprehensive insight into the financial system’s vulnerabilities combined with an inappropriate government crisis response tool-kit.²²² According to the Commission’s findings, it was the combination

²¹⁴ *Id.*

²¹⁵ *Id.*

²¹⁶ *See id.* One can clearly see how this could be a recipe for disaster in terms of consumer knowledge and consumer protection liability yet China does not appear to have strong consumer protection legislation as compared with, for example, Hong Kong.

²¹⁷ *Id.* (echoing the sentiment that China should not create more regulations around shadow banking before conducting a comprehensive review of existing legislation).

²¹⁸ *See* THE FIN. CRISIS INQUIRY COMMISSION, *supra* note 4, at 26-27. It is noted that the United States did not and does not now have the same level of state-owned banks that control the economy.

²¹⁹ *Id.*

²²⁰ *Id.* at 28.

²²¹ *Id.* at 27.

²²² *See id.* at 27 (quoting then Federal Reserve Chairman, Ben Bernanke).

of deregulation of the large commercial banks, proliferation of the shadow banking industry, fundamental changes in the mortgage industry in terms of the proliferation of new mortgage products and subprime lending, and the use of structured finance, securitization vehicles and derivatives that led to the global financial crisis.²²³ One could argue that China's current situation is not too far afield from the set of dynamics that caused the global financial crisis in the United States. As such, China can learn many lessons from the past. Moving forward, China can and should take greater, concrete, and measurable steps towards alleviating the concerns of the Financial Stability Board (FSB), the Basel Committee on Banking Supervision (Basel accords), as well as its G20 partners and regional economic partners.

First, as recommended by Yang, China should avoid further restrictive regulations that increase or give the perception of financial repression by first conducting "a comprehensive review of the existing national laws" to find ways in which existing laws may accommodate disclosure and transparency requirements for shadow banking activities. As Professor Macey argues, in terms of operation, benefits to the economy, and economic substance, "there is no difference between the shadow banking system and the traditional banking system."²²⁴ By removing the stigma and bringing shadow banking "out of the shadows", non-bank financing and bank financing can co-exist and, perhaps, complement each other in a way that helps China achieve its goal of a deep and versatile capital market.

Second, China would benefit from greater political and structural reforms that produce what Oxhorn refers to as "meaningful liberalization of China's consumer finance system."²²⁵ As deduced from the above sections, proliferation of shadow banking activities is due to the lack of efficient and effective flow of capital and capital allocation to individuals, SMEs, and entrepreneurs charged with leading China's efforts to be a strong consumer market and global player. China cannot hope to achieve this goal in a sustainable manner without understanding that its state-owned enterprises (SOEs) and state-owned banks (SOBs) as well as local governments need to be able to stand independently and not be subsidized through the current system of customers' bank deposits.²²⁶ China's civil society is making progress at the same pace as the globalization of both capital markets and labor markets. This demands a suitable political and financial infrastructure

²²³ *Id.* at 27-28.

²²⁴ Macey, *supra* note 28, at 593.

²²⁵ Oxhorn, *supra* note 102, at 397-98.

²²⁶ *Id.* at 408 ("Essentially, the SOBs, the SOEs, and local governments are all subsidized through consumer deposits.")

foundation. If its people are not able to innovate, capitalize, profit from, save, and reinvest at the same pace of competition as their counterparts in developed and developing nations, they will resort to more innovative yet perhaps more risky ways to achieve these goals, whether through shadow banking or other means.

Third, China should continue efforts aimed at implementing macro prudential standards as envisioned by the FSB's G20 recommendations. As compared with micro prudential regulation, which regulates exposure to endogenous shocks²²⁷ and "seeks to prevent excessive risk taking by regulating leverage,"²²⁸ macro prudential regulations focus on the health of the financial system as a whole, with a focus also on exogenous risk (i.e., "the risk management decisions of other actors in financial markets").²²⁹ In fact, as argued by Professor Schwarcz, failure or occurrence of systemic risk is likely inevitable in complex financial systems such that adopting regulatory *ex post* approaches may be more realistic and feasible.²³⁰ Under such an approach, the goal is to contain the transmission and limit the consequences of such failures by "ensuring liquidity to systemically important firms and markets and by privatizing sources of liquidity in order to help internalize externalities and motivate private-sector monitoring."²³¹ One way to do this, argues Professor Shwarcz, is to set up a liquidity support industry, consisting of presumably private professional liquidity providers that can assess the financial transactions more carefully to determine whether they are worthwhile and economically feasible as well as provide liquidity to important firms.²³² This is a bold recommendation that China could possibly undertake as long as the necessary structural reforms and external oversight mechanisms are in place to support it. This reform would likely require a cultural shift in terms of the role of external, non-partisan advisers and external members in assessing the viability of internal financial matters.

²²⁷ Johnson, *supra* note 36, at 914 (defining endogenous shocks (risks) as "a financial institution's own risk management decisions," such as insolvency).

²²⁸ *Id.* at 884.

²²⁹ *Id.* at 914 (discussing the need for macroprudential regulations to deal with shadow banking); See also Avinash Persaud, *Macro-prudential Regulation: Fixing Fundamental Market (and Regulatory) Failures*, THE WORLD BANK GROUP [WBG] (July 2009), <http://siteresources.worldbank.org/EXTFINANCIALSECTOR/Resources/282884-1303327122200/Note6.pdf> (stating that more regulation is not necessarily the solution but what is needed is "better regulation...with greater macroprudential orientation").

²³⁰ Schwarcz, *supra* note 103, at 7.

²³¹ *Id.* at 7-8.

²³² *Id.* at 8; See also Xiao Gang, *Regulating Shadow Banking*, CHINA DAILY 8 (Oct. 12, 2012), http://www.chinadaily.com.cn/opinion/2012-10/12/content_15812305.htm ("China's shadow banking is contributing to a growing liquidity risk in the financial markets...").

China should also heed the lessons of the past and implement a robust consumer education and consumer protection scheme beyond regulatory disclosure and transparency requirements. This scheme should specifically target non-bank intermediation products in order to avoid the proliferation of systemic risk. This need to implement consumer education and consumer protection now is necessary despite reports that such systemic risks are decades away from impacting the economy or may never happen. For example, in the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) “creates new statutory firewalls separating deposit-taking institutions from other market players and other risky players”²³³ such as commercial banking and derivatives. In addition to disclosure requirements designed to reduce information asymmetry between buyers and sellers, China could take more proactive steps to design and implement a dispute resolution system that will register and effectively deal with consumer complaints of non-bank and bank-related investment products or shadow banking activities. As pointed out by Professor Reiss, specifically with respect to shadow mortgage banking, “consumer protection should always be front and center in discussions of shadow mortgage banking regulations...and it is essential to the legitimacy and functioning of the financial system overall.”²³⁴

Finally, China should tackle potential structural reforms in relation to state-owned banks (SOBs). China’s SOBs control over 77% of consumer deposits.²³⁵ At the same time, there is no effective deposit protection scheme similar to the FDIC in the United States. In addition, the PBOC allows extraordinarily low interest rates on deposits as compared with other institutions such as trust companies and investment houses and imposes high interest rates on loans to consumers but subsidizes low interest rates to state owned enterprises (SOEs) and local governments.²³⁶ This model is not sustainable for the long-term if China intends to tackle shadow banking or even leverage the positive benefits of shadow banking to build its own robust capital markets. Therefore, China must take steps to reform the relationship between SOBs, SOEs, the local government, and consumers with respect to the effective and efficient flow of capital and the role of customer deposits. If China’s banks follow the way of the United States and continue to rely on more lending and credit activities to make money rather

²³³ Omarova, *supra* note 84, at 1685.

²³⁴ David Reiss, *Consumer Protection Out of the Shadows of Shadow Banking: The Role of the Consumer Financial Protection Bureau*, 7 BROOK. J. CORP., FIN. & COM. L., 131, 144 (2012); *See also* Schwarcz, *supra* note 57, at 621.

²³⁵ Oxhorn, *supra* note 102, at 407.

²³⁶ *Id.* at 408.

than strictly on consumer deposits, then it makes sense to offer customers some deposit protection and/or higher deposit interest rates to incentivize customers to obtain loans or credit from their traditional banks rather than having to resort to non-bank and perhaps predatory shadow lending institutions that may only undermine the productivity and stability of the financial system.

VIII. CONCLUSION

Shadow banking, whether in China or elsewhere, presents both emerging risks and potential opportunities with respect to evolving capital markets. For China, this article examines the evolution of shadow banking and its impact on capital markets, analyzes China's shadow banking problem and proposed reforms, assesses the feasibility and effectiveness of China's proposed reforms, and makes recommendations on combating the proliferation of shadow banking activities in China. These recommendations may well apply to other neighboring countries whose shadow banking section rivals that of China. One thing is certain: the world can ill afford another devastating financial tsunami at the expense of consumers, investors, and the global capital markets. Therefore, it is important for China, as a strong global and regional economic partner, to heed the lessons of the past and forge a domestic financial system that meets the demands of a 21st century globalized world. At the moment, there are doubts as to whether China has controlled or can control the negative impacts of shadow banking activities. One chief economist at a Chinese brokerage house commented, "Shadow banking in China looks like a cat-and-mouse game."²³⁷ From all accounts at present, the mouse seems to be winning.

²³⁷ Jiang, *supra* note 194 (quoting a chief economist and also stating "Every time regulators curb one form of non-bank lending, another begins to grow.")

ANTITRUST AGENCIES: WATCHDOGS OR REGULATORS?

Giovanna Massarotto*

I. INTRODUCTION

Over the years in the United States and Europe, consent decrees have become an invaluable tool for enforcing antitrust law. The consent decree represents a settlement between the U.S. antitrust agency and investigated companies in ongoing antitrust proceedings, which is executed in a decision by a judge—the so-called *decree*. As of 2014, almost all civil antitrust lawsuits filed by the U.S. government are settled by consent decrees.¹ Namely, through an antitrust agreement that does not identify an antitrust violation but rather imposes behavioral or structural remedies to regulate markets in response to the specific antitrust concerns.

In Europe, a similar settlement to resolve antitrust cases is called a *commitment decision*.² Under Article 9(1) of Reg. 1/2003,

* Teaching Fellow of Competition Law at Bocconi University, Milan; Ph.D. at Bocconi University, Milan. Email: giovanna.massarotto@unibocconi.it. The first draft of this paper has been presented in Inaugural WINIR Conference, 11-14 September 2014, at the Old Royal Naval College, Greenwich, London (UK).

¹ Douglas Ginsburg & Joshua Wright, *Antitrust Settlements: The Culture of Consent*, F.T.C. (Feb. 28, 2013), <http://www.ftc.gov/public-statements/2013/02/antitrust-settlements-culture-consent> (“By the 1950s, 87 percent of all civil antitrust cases brought by the Division were settled by consent decrees. By the 1980s, 97 percent of civil cases filed by the Division resulted in a consent decree, and that percentage remained relatively constant at 93 percent in the 1990s. This trend has continued, with the Division resolving nearly its entire antitrust civil enforcement docket by consent decree from 2004 to present. The Federal Trade Commission has experienced a similar increase in the use of consent decrees as a proportion of enforcement activity. FTC consent decrees more than tripled in number from 1992 to 1995. Since 1995, the FTC has settled 93 percent of its competition cases.”); Andrea Berger Kalodner, *Consent Decrees as an Antitrust Enforcement Device*, 23 ANTITRUST BILL. 277, 277 (1978); Steven Salop & Lawrence White, *Economic Analysis of Private Antitrust Litigation*, 26 J. REPRINTS ANTITRUST L. & ECON. 11 (1966).

² Richard Whish, *Commitment Decisions Under Article 9 of the EC Modernization: Some Unanswered Questions*, LIBER AMICORUM IN HONOUR OF SVEN NORBERG 555 (Bruylant, 2006) (Noting how the previous EU regulation n. 17/62 did not provide the chance to settle an antitrust case on the grounds of commitments proposed by investigated companies. Whish noted that “[d]espite this there were a number of cases in which the Commission did close its file on the basis of offered by the parties, some of which were clearly of great significance: among the best-known were IBM, Microsoft (licensing agreements); Interbrew, IRI/ Nielsen, and Digital. A competition authority must decide how to make the best use of the intervention that leads to the termination of conduct that appears to be anti-competitive, coupled with commitments by undertakings as to future behavior that are placed in the public domain and that are given effective publicity, can be very (cost) effective way of establishing important points of principle and educative the broader business and legal communities.”).

“[w]here the Commission intends to adopt a decision requiring that an infringement be brought to an end and the undertakings concerned offer commitments to meet the concerns expressed to them by the Commission in its preliminary assessment, the Commission may by decision make those commitments binding on the undertakings.”³

Consent decrees or commitment decisions allow antitrust agencies to impose behavioral or structural remedies on the investigated firms. Such firms are normally dominant market players (or firms with significant market power), and remedies identified by the consent decree/commitment decision have in principle the clear intent to address antitrust concerns. The effects of such remedies on markets are critical and, in many aspects, similar to the rules imposed by regulators. By forcing dominant market players to change their behavior in procompetitive terms, antitrust agencies forthwith change market dynamics of the affected markets. Thus, antitrust agencies' and regulators' roles could overlap, causing antitrust law to emerge as “an alternative to regulation.”⁴

Moreover, the possible regulator's role assumed by antitrust agencies questions the ability and legitimacy of antitrust agencies to determine the appropriate rules of markets. In particular, it questions whether antitrust agencies are the best authority to impose such rules. Although in the U.S. the regulatory effects of consent decrees are undisputed, in the European Union the regulatory effects of consent decrees are still controversial. In particular, each Member State's antitrust agency diverges from regulators, and each one plays a different role in the markets. Antitrust agencies are in charge of monitoring competition and enforcing antitrust law, whereas the regulator oversees a specific industry sector providing suitable rules for increasing the industry's efficiency. Therefore, the regulatory effects of consent decrees and commitment decisions—explored here—are particularly challenged in Europe.⁵

³ Council Regulation (EC) No 1/2003 of 16 December 2002 on the Implementation of Rules on Competition Laid Down in Article 81 and 82 of the Treaty, O.J., 4.1.2003, at 1-25. See also J. Temple Lang, *Commitment Decisions and Settlements with Antitrust Authorities and Private Parties Under European Antitrust Law*, INT'L ANTITRUST L. & POL'Y: FORDHAM CORP. L. 265 (2005).

⁴ Philip J. Weiser, *The Relationship of Antitrust and Regulation in a Deregulatory Era*, 4 ANTITRUST BILL 549, 550 (2005).

⁵ Niamh Dunne, *Commitment Decisions in EU Competition Law*, 10 J. COMPETITION L. & ECON. 399 (2014).

In Part II of the article, I describe the U.S. and European antitrust agencies, identifying the structure, power, and competence of each agency. In Part III, I analyze consent decrees and commitment decisions. I show the ability of those decrees or decisions to regulate markets and the main issues involved, including the regulatory role assumed by antitrust agencies. To assess the concrete effects of this antitrust tool in a traditionally regulated industry (such as the telecommunications industry), I analyze a well-known antitrust case settled by a consent decree, the AT&T case.⁶ Through the analysis of the AT&T case, I examine the regulatory effects of consent decrees and the crucial role of antitrust agencies in regulated industries. Finally in Part IV, I draw conclusions on the “the regulatory effects of the consent decrees”⁷ and the ability and legitimacy of antitrust agencies or judges to identify the correct rules of markets. Further, I emphasize the main differences between commitment decisions/consent decrees and prohibition decisions, briefly analyzing and comparing some recent antitrust decisions made in the European payment sector. Finally, I conclude my article with some reflections on the new role assumed by antitrust agencies, which has shifted from watchdog to regulator of markets, evaluating whether and on what conditions the adoption of consent decrees or commitment decisions to enforce antitrust law was and will continue to be appropriate.

II. ANTITRUST AGENCIES – THE EU AND THE U.S. ANTITRUST BODIES

Historically, antitrust agencies enforce antitrust law and are called watchdogs. However, in the United States, the Federal Trade Commission Act (“FTC Act”)⁸ explicitly recognizes the regulatory powers of the Federal Trade Commission, one of the U.S. antitrust agencies. Conversely, European antitrust agencies only oversee markets to protect competition among firms and increase consumer welfare; regulatory powers are left to regulators. But what happens when most of the antitrust cases are settled by consent decrees/commitment decisions, by which antitrust agencies impose behavioral remedies on dominant market players? Before dealing with this issue, I briefly explain the history, structure, powers, and competence of the U.S. and European antitrust agencies, the protagonists of this study.

⁶ U.S. v. American Tel. & Tel. Co., 552 F.Supp. 131 (1982).

⁷ A. Douglas Melamed, *Antitrust: The New Regulation*, 10 ANTITRUST 13, 15 (1996). (“[A]ntitrust has evolved in recent years, subtly and almost imperceptible, toward a new form of regulation.”) See also, Michael L. Weiner, *Antitrust and the Rise of the Regulatory Consent Decree*, 10 ANTITRUST 4, 4 (1996) (“Today, recent consent decrees can be categorized into three groups: those that explain core legal rulings, those that actually establish new legal standards, and those that regulate the competitive behavior of parties that come under their scrutiny.”); *Id.*

⁸ 15 U.S.C. §§ 41-58 (1914).

A. *U.S. Antitrust Agencies – DOJ and FTC*

In 1890, the first antitrust law was issued in the United States, the Sherman Act.⁹ In 1903, under President Theodore Roosevelt and Attorney General Philander Knox, there was only one Assistant of the Attorney General, who was in charge of all antitrust lawsuits.¹⁰ In 1933, the Department of Justice Antitrust Division (“DOJ”) was established under President Franklin D. Roosevelt and Attorney General Homer S. Cummings to deal with the increase of antitrust cases.¹¹ The Antitrust Division of DOJ includes an Assistant to the Attorney General, appointed by the President of the United States and confirmed by the Senate, who supervises the entire Division, and five Deputy Assistants. These Deputy Assistants are of equal rank and in charge of managing and supervising the five departments of the DOJ, which include: Civil Enforcement, Regulatory Matters, International Enforcement, Economic Analysis, and Criminal Enforcement.¹²

The Antitrust Division is mainly in charge of enforcing federal civil and criminal antitrust law, as well as regulations that protect competition, by preventing restrictions and market monopolization. Further, in the antitrust field, the DOJ drafts and submits regulatory proposals to Congress for improving antitrust regulation and competition.¹³ In the United States, there is another antitrust agency that is in charge of protecting competition—the Federal Trade Commission (“FTC”). While the Antitrust Division of the DOJ constitutes a judicial department, the FTC is an

⁹ In 1890, the United States enacted the Sherman Antitrust Act, which was the first antitrust law in not only the United States, but the world. The Act was named after its author, John Sherman, a Republican Senator of Ohio, and was signed by former President Benjamin Harrison. *See, e.g.*, THOMAS K. MCCRAW, *CREATING MODERN CAPITALISM, HOW ENTREPRENEURS, COMPANIES, AND COUNTRIES TRIUMPHED IN THREE INDUSTRIAL REVOLUTIONS* 328 (1997).

¹⁰ *See, e.g.*, U.S. DEP’T OF JUST., *ANTITRUST DIVISION, ANTITRUST DIVISION MANUAL 2* (5th ed. 2014). The role of the *Assistant Attorney General for Antitrust* (AAG-AT) still exists and leads the entire Antitrust Division, namely the DOJ Antitrust Division. This Assistant Attorney is appointed by the President of the United States and reports antitrust cases to the *Associate Attorney General*.

¹¹ *See, e.g.*, U.S. DEP’T. OF JUST., *MISSION* (2015), www.justice.gov/atr/about/mission.html; YMKE HOFHUIS, *COMPETITION LAW IN WESTERN EUROPE AND THE USA*, (Dec. 2008). *See also* DEP’T. OF JUST., *ANTITRUST DIVISION MANUAL* (2014), available at <http://www.justice.gov/atr/public/divisionmanual/index.html>.

¹² U.S DEP’T OF JUST., *Chapter I-Organization and Functions of the Antitrust Division*, *ANTITRUST DIVISION MANUAL 2* (2015).

¹³ *See* AM. B. ASS’N SEC. OF ANTITRUST L., *DOJ CIV. ANTITRUST PRAC. & PROC. MANUAL 2* (2012).

independent administrative authority endowed with regulatory functions¹⁴ and subjected to Congress's control. The Federal Trade Commission was established by the Federal Trade Commission Act in 1914,¹⁵ the same act that such agency is in charge of monitoring. Section 5 of the Federal Trade Commission Act establishes that this authority must prevent "unfair or deceptive acts or practices in or affecting commerce"¹⁶ and impose remedies for consumers' damages.¹⁷ Moreover, the FTC enforces the Clayton and Robinson-Patman Acts and has concurrent jurisdiction with DOJ on merger issues.¹⁸

Five commissioners, appointed by the President of the United States for a period of seven years, constitute the FTC. Among these five commissioners, the President of the United States appoints the FTC's Chairman, who has the broadest powers. The FTC is organized in three bureaus—the Bureau of Competition, the Bureau of Consumer Protection, and the Bureau of Economics. The FTC "is a bipartisan federal agency with a unique dual mission to protect consumers and promote competition."¹⁹ The FTC monitors firms and their business practices to ensure workable competition in markets and to protect consumers from unfair and anticompetitive practices. The FTC challenges anticompetitive conducts.

The FTC also has regulatory powers. Under Section 18 of the FTC Act, the FTC can promulgate trade regulation rules that apply to "unfair or deceptive acts or practices."²⁰ There are several competing jurisdictions between DOJ and the FTC, as well as constant communication and collaboration between the agencies, which is crucial to protect competition

¹⁴ The FCC has the following powers: (i) issuing rules to regulate commerce; (ii) suing companies that seem to violate civil and antitrust law monitored by the FTC; (iii) compensating consumers by suing who violated antitrust and consumer regulation; (iv) issuing and imposing restricted orders or injunctions to violators. *See, e.g.*, AM. B. ASS'N SEC. OF ANTITRUST L., ANTITRUST L. DEV. 655 (7th ed. 2012); D. BRODER, U.S. ANTITRUST LAW AND ENFORCEMENT, A PRACTICE INTRODUCTION (2d ed. 2012); HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY - THE LAW OF COMPETITION AND ITS PRACTICE 694 (1980); *About the FTC*, FED. TRADE COMMISSION, <http://www.ftc.gov/ftc/about.shtm>.

¹⁵ Federal Trade Commission Act, 15 U.S.C. §§ 41-58, available at <http://www.law.cornell.edu/uscode/text/15/41> <http://www.law.cornell.edu/uscode/text/15/41>.

¹⁶ *Id.* at § 45 (a).

¹⁷ *See* FTC v. Sperry & Hutchinson Co., 405 U.S. 233, 239-44 (1972); FTC v. R.F. Keppel & Bro., 291 U.S. 304, 310-12 (1934). *See also* Federal Trade Commission Act Amendments of 1994, available at <http://www.gpo.gov/fdsys/pkg/BILLS-103hr2243enr/pdf/BILLS-103hr2243enr.pdf>.

¹⁸ The FTC and DOJ are also responsible for enacting and applying rules on the mergers notifications provided by the Hart-Scott-Rodino Antitrust Improvements Act of 1976, 15 U.S.C. § 18a (1976). *See* D. BRODER, *supra* note 13, at 2.

¹⁹ *What We Do*, FED. TRADE COMMISSION, <http://www.ftc.gov/about-ftc/what-we-do> (last visited Aug. 22, 2014).

²⁰ *Id.*

and consumer welfare. For example, when DOJ and the FTC investigate the same case, they decide on a common approach to their investigations, depending on the availability of staff and the examination of experts.

B. EU Antitrust Agencies – The European Commission and NCAs

In Europe, two different levels of jurisdiction exist: national and supra-national. In 1957, the Treaty of Rome²¹ provided the first European antitrust provisions, challenging cartels (Art. 85) and the abuse of dominant positions (Art. 86). Under Article 87 of the Treaty, parties are required to implement the antitrust provisions of the Treaty “[w]ithin three years of the entry into force of this Treaty the Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament, adopt any appropriate regulations or directives to give effect to the principles set out in Articles 85 and 86.”²² In 1962, Regulation 17/62 was published as a reply to Article 87 of the Treaty. Regulation 17/62 implemented the principles stated in Articles 85 and 86, establishing a system to ensure “that competition shall not be distorted in the common market”²³ and securing a uniform application of Articles 85 and 86 in the Member States.²⁴ Specifically, the Regulation empowered the European Commission (“Commission”) to apply Articles 85 and 86, establishing that “upon application or upon its own initiative, [if the Commission found] that there is infringement of Article 85 or Article 86 of the Treaty, it may by decision require the undertakings or associations of undertakings concerned to bring such infringement to an end.”²⁵ Thus, the Commission was the body responsible for the application of the European competition provisions.

In 2003, with the enactment of Regulation (EC) 1/2003, Regulation 17/62 was repealed. One of the main pillars of Regulation 1/2003 is the set of provisions that empowered National Competition Authorities (NCAs) and courts to apply Articles 101 and 102 of the Treaty to protect

²¹ Treaty of Rome art. 3, Mar. 25, 1957, 998 U.N.T.S. 11 (stating that competition shall not be distorted in the common market.).

²² *Id.* at art. 87.

²³ Council Regulation 17/62 of Feb. 6, 1962, First Regulation Implementing Articles 85 & 86 of the Treaty, 87 O.J. (013) (EC).

²⁴ *Application of Articles 101 and 102 TFEU (formerly Articles 81 and 82 of the EC Treaty)*, EUR-LEX. http://europa.eu/legislation_summaries/competition/firms/126092_en.htm (last visited Aug. 25, 2014).

²⁵ Commission Regulation No. 17/62, art. 3.

competition.²⁶ National courts, in addition to NCAs, can apply these provisions to protect the individual rights that the Treaty recognized.²⁷

Regulation 1/2003 also increased the Commission's powers. It enabled the Commission to adopt behavioral and structural remedies in the context of infringement decisions (Art. 7). Moreover, Article 9 granted the Commission the power to adopt a commitment decision, namely a settlement that includes legally binding commitments, to resolve an antitrust proceeding. Conversely, Article 3(3) of Regulation 17/62 only allowed the Commission to terminate antitrust violations by recommendations, which were not legally binding and were rarely used.²⁸

In sum, although the Commission does not have direct regulatory powers, it can indirectly implement commitment decisions (Art. 9) or remedies (Art. 7), by imposing behavioral or structural remedies on markets, thereby enabling the Commission to regulate markets.

III. THE REGULATION EFFECTS OF CONSENT DECREES AND COMMITMENT DECISIONS—THE CHANGED ROLE OF ANTITRUST AGENCIES

Through consent decrees or commitment decisions, the U.S. and European antitrust agencies may settle significant antitrust cases, and as a result, these methods have become critical tools for enforcing antitrust law. Consequently, the role of antitrust agencies has become less clear. The widespread use of consent decrees or commitment decisions enables antitrust agencies to regulate the parties' day-to-day business conduct, creating a set of rules to affected markets. Antitrust agencies do not only interpret or simply apply the law; they also provide the rules and standards that govern behavior.

Justice Breyer explained that regulation and antitrust strive for similar goals: low and economically efficient prices, innovation, and efficient production methods.²⁹ Historically, regulation seeks to achieve these goals

²⁶ Céline Gauer, Lars Kjolbye, Dorothe Dalheimer, Eddy De Smijter, Dominik Schnichels & Maija Laurila, *Regulation 1/2003 and the Modernization Package Fully Applicable Since 1 May 2004*, 2 COMPETITION POL'Y NEWSL. 1, 2 (2004).

²⁷ Antitrust, European Commission, Overview (Aug. 16, 2012), available at http://ec.europa.eu/competition/antitrust/overview_en.html.

²⁸ Alan Riley, *EC Antitrust Modernization: The Commission Does Very Nicely—Thank you! Part One: Regulation 1 and the Notification Burden*, 11 E.C.L.R. 604, 607 (2003).

²⁹ Philip J. Weiser, *The Relationship of Antitrust and Regulation in a Deregulatory Era*, 50 THE ANTITRUST BULLETIN 549, 550-51 (2005). ("Traditionally, regulation and antitrust served distinct functions on a series of doctrines primary jurisdiction, implied immunity, state action to maintain largely separate sphere of authority. In the wake of recent deregulatory initiatives, however, regulation has begun to serve a parallel function to antitrust (i.e.,

directly, while antitrust law seeks to achieve them indirectly. By settling antitrust cases through consent decrees, antitrust agencies assume the typical regulator role for imposing behavioral or structural remedies. Antitrust law appears as an alternative to regulation. In sum, antitrust agencies, through consent decrees, can achieve, both directly and indirectly, the above-mentioned goals.

Professor Harry First recognized that, due to the increasing use of consent decrees, “[a]ntitrust has come to be seen more as policy and less as law.”³⁰ “Here the Legislature, “invades the territory of another”³¹—the Judiciary.”

Having recognized the regulatory effects of consent decrees and commitment decisions, the following questions should be addressed: Are antitrust agencies legitimately regulating markets through consent decrees or commitment decisions? If they are, are such indirect regulatory powers appropriate? By analyzing the well-known AT&T case, I reflect on the regulatory role assumed by the DOJ and Judge Greene, weighing its positive and negative effects on markets.

A. *The AT&T Case*

The AT&T case involves three different agreements enshrined in judgments over the past hundred years.³² The most important one was the 1982 consent decree.³³ The antitrust lawsuit began in 1974 and was settled by the consent decree, which was the first of two major regulatory interventions in the U.S. telecommunications industry.³⁴ By analyzing the

facilitating competition as opposed to replacing it), raising the question of whether the traditional policy of separation should continue.”)

³⁰ Harry First, *Is Antitrust Law?*, 10 ANTITRUST 9 (1996).

³¹ Brian M. Hoffstadt, *Retaking the Field: The Constitutional Constraints on Federal Legislation that Displaces Consent Decrees*, 77 WASH. U. L. Q. 53, 58-59 (1999).

³² RICHARD A. EPSTEIN, ANTITRUST CONSENT DECREES, IN THEORY AND PRACTICE 54 (The AEI Press, 2007) (“The most important set of consent decrees ever concluded dealt with regulation and eventual breakup of the former Bell System.”).

³³ *See id.*; *See e.g.*, BARRY G COLE, AFTER THE BREAKUP: ASSESSING THE NEW POST-AT&T DIVESTITURE ERA 59 (Columbia Univ. Press, 1991) (“The lawsuit survived through two judges, three national administrations, four Congresses, and five Attorneys General before it was finally settled in 1982.”).

³⁴ *See, e.g.*, Damien Geradin & J. Gregory Sidak, *European and American Approaches to Antitrust Remedies and the Institutional Design of Regulation in Telecommunications*, in HANDBOOK OF TELECOMMUNICATIONS ECON.: TECH. EVOLUTION & THE INTERNET 517-553 (M.Cave, S. K. Majumdar & I. Vogelsang eds., 2005) (“If a single firm is the object of the antitrust case, and if it is prominent enough in its industry (we will avoid using the loaded term

AT&T consent decree of 1982, I show both the regulatory and efficiency effects from using this antitrust tool. I assess whether the social costs of this regulation decision (designed in 1982 by Judge Greene, the DOJ, and AT&T) exceed its benefits and whether the terms of that decree maximized economic welfare. Through this analysis, I evaluate whether or not regulatory powers of antitrust agencies are appropriate and whether they should be promoted or restricted.

1. AT&T – The Facts

In February 1885, the American Telephone and Telegraph Company was established for providing electric telegraph lines connecting “each and every city, town, or place in said state, and each and every other of the United States, and in Canada and Mexico.”³⁵ The American Bell Telephone Company’s subsidiary, AT&T, provided long-distance telephone lines to interconnect local exchange areas of the Bell companies. Three submarkets: long distance, local distance, and telecommunications equipment composed the U.S. telecommunications industry.³⁶ Historically, AT&T operated in all three markets. Until 1984, AT&T’s Bell System included: AT&T Long Lines; local subsidiaries (22 Bell System Operating Companies); and Western Electric, Bell Laboratories, and American Bell, who provided

‘dominant’), then the consent decree becomes the de facto asymmetric regulation of the entire industry. The most obvious example is the Modification of Final Judgment, 17 by which the federal judiciary governed the telecommunications industry after the antitrust breakup of the Bell System in January 1982 until Congress enacted the Telecommunications Act in February 1996. A more recent example, of course, is the Microsoft case.”); *See also* Brian M. Hoffstadt, *Retaking the Field: The Constitutional Constraints on Federal Legislation that Displaces Consent Decrees*, 77 WASH. U. L. Q. 53 (1999) (“[A]t the time Telecommunication Act became law, the major participants in the telephone industry were already governed by a series of consent decree administered by the District Court of the District of Columbia: the AT&T Consent Decree regulated the participation of AT&T’s and its Bell operating companies in various telecommunications markets.”); Christopher S. Yoo, *The Enduring Lessons of the Breakup of AT&T: a Twenty-Five Year Retrospective*, 61 FED. COMM. L.J. 1 (2009) (“The breakup of AT&T represents an ideal starting point for examining the major threads of telecommunications policy that have emerged over the past quarter century.”); *See also* Kenneth A. Nickolai, *The AT&T Divestiture: for Whom will the Bell Tool?*, 10 WM. MITCHELL L. REV. 507 (1984) (“The breakup of The American Telephone & Telegraph Company (AT&T) has caused a revolution in the structures used to provide telecommunications service to American families and business.”)

³⁵ Harry M. Shooshan III, *DISCONNECTING BELL-THE IMPACT OF THE AT&T DIVESTITURE* 9 (Pergamon Press, 1984).

³⁶ FED. TRADE COMMISSION, *MEASUREMENTS OF MARKET POWER IN LONG DISTANCE TELECOMMUNICATIONS* (Apr. 1995), available at <http://www.ftc.gov/be/econrpt/232316.pdf>.

telecommunications equipment for AT&T's local and long-distance companies.³⁷

The well-known antitrust case—*U.S. v. AT&T* (1982)—was based on the assumption that the local loop (the telephone local access line) constituted a *bottleneck facility*. According to the complaint, the defendants: “[were] violating the antitrust laws by various monopolistic practices . . . [and] as a consequence of these practices (1) defendants have achieved and . . . maintain[ed] a monopoly of telecommunications service and equipment; (2) competition in these areas ha[d] been restrained; and (3) purchasers of telecommunications service and equipment ha[d] been denied the benefits of a free and competitive market.”³⁸

On January 1, 1984, the Bell System died. A new AT&T and seven regional Bell operating companies (collectively, the “RBOCs”) replaced the Bell System.³⁹ The decree, known as the Modification of Final Judgment (“MFJ”), ordered AT&T to divest its local entities.⁴⁰ Specifically, AT&T divested itself of the wholly owned Bell operating companies (“BOCs”), which were regrouped within seven new regional companies, each with its own geographic base.⁴¹ The MFJ precluded the new RBOCs from providing long-distance service. By doing so, AT&T continued to be active in the long-distance and manufacturing units from its remaining BOCs.

2. Effects of the MFJ on the Telecommunications Industry

The AT&T case divided scholars over the procompetitive effects of the antitrust and regulatory intervention of the MFJ. For example, according to Robert W. Crandall, AT&T's divestiture was not necessary, and it created “a vertically fragmented industry structure that is not sustainable

³⁷See, e.g., KEVIN G. WILSON, DEREGULATING TELECOMMUNICATIONS: U.S. AND CANADIAN TELECOMMUNICATIONS, 1840-1997 145 (2000).

³⁸*U.S. v. AT&T*, 461 F. Supp. 1314, 1318 (1978).

³⁹Bret Swanson, *Lessons from the AT&T Breakup, 30 Years Later*, TECHPOLICYDAILY.COM (Jan. 3, 2014, 6:00 AM), <http://www.techpolicydaily.com/communications/lessons-att-break-30-years-later/>.

⁴⁰*U.S. v. Am. Tel. & Tel. Co.*, 552 F. Supp. 131, 226-34 (D.D.C. 1982), *aff'd sub nom. Maryland v. U.S.*, 460 U.S. 1001 (1983). The settlement was a “modification” of an earlier “final judgment” in the sense that it modified a consent decree into which AT&T and the government had entered in 1956.

⁴¹See e.g., Charles L. Brown, *A Personal Introduction*, in DISCONNECTING BELL-THE IMPACT OF THE AT&T DIVESTITURE 5 (Harry M. Shooshan, III, ed., 1984); Paul W. MacAvoy & Kenneth Robinson, *Winning By Losing: The AT&T Settlement and Its Impact on Telecommunications*, 1 YALE J. ON REG. 1, 17 (1983).

today.”⁴² Therefore, the mandate of sharing the local telephone network required by the MFJ would not promote competition in telecommunication services. Similarly, Gregory J. Sidak observed that in the telecommunications industry, technologies change continuously and rapidly, and structure relief would not only be unnecessary, but also unworkable.⁴³ Richard A. Epstein considered the AT&T case “the most vivid illustration of a consent decree gone wrong.”⁴⁴ However, it is undisputed that the AT&T antitrust consent decree changed the entire telecommunications industry, imposing competition in a previously monopolistic market.

In my opinion, despite several critics, some positive effects of the MFJ on the telecommunications industry are evident. The MFJ gave a strong stimulus to the telecommunications market.⁴⁵ The breakup of AT&T marked the end of the regulated *de facto* monopoly era in the telecommunications industry,⁴⁶ and AT&T’s market share significantly decreased. The DOJ antitrust intervention, formalized by Judge Greene’s decree, is analogous to a surgery that takes place in an emergency room. Although it may not be the best solution, it is time-sensitive and perhaps the only way to break up the AT&T monopoly that had previously prevailed at least fifty years. The Federal Communications Commission (“FCC”) recognized that in a dynamic industry like the telecommunications industry, competition is more suitable than a natural monopoly. Competition increases both the size of telecommunications markets and consumer welfare, encouraging firms to develop better quality products at lower prices.

Therefore, the primary role of regulators, like the FCC in the telecommunications industry, is to promote and increase the competition of markets. This regulatory role appears similar to the role of antitrust agencies. Therefore, an overlap of authority between the regulator and antitrust agencies is undisputed. The direct effect of the AT&T divestiture was increased competition in the long distance and information services

⁴² Robert W. Crandall, *The Remedy for the ‘Bottleneck Monopoly’ in Telecom: Isolate It, Share It, or Ignore It?*, 72 U. CHI. L. REV. 3, 4 (2005).

⁴³ Jerry A. Hausman & Gregory J. Sidak, *A Consumer-Welfare Approach to the Mandatory Unbundling of Telecommunications Networks*, 109 YALE L. J. 417, 428-29 (1999).

⁴⁴ Richard A. Epstein, *The AT&T Consent Decree: In Praise of Interconnection Only*, 61 FED. COMM’N. L.J. 149, 149 (2009).

⁴⁵ See MacAvoy & Robinson, *supra* note 41, at 2.

⁴⁶ Regulation of the U.S. telecommunications market was marked by two important antitrust lawsuits that the U.S. Department of Justice brought against AT&T: the AT&T case filed in 1949 and the second one in 1974.

markets.⁴⁷ The prices of long distance calls decreased significantly.⁴⁸ The FCC observed that the cost of a long distance call from 1984 to 2006 “dropped from 32 cents per minute to 7 cents per minute,” meaning that between 1984 and 2006, their prices declined more than 85 percent.⁴⁹ Furthermore, in 1984, AT&T held a market share of approximately 90 percent,⁵⁰ which fell to 47.9 percent⁵¹ by 1996 and to 24 percent by 2011. In 2011, Verizon held a market share of approximately 12.1 percent.⁵²

Although AT&T's market share decreased, FCC's 1995 studies recognized that AT&T's “output has increased by two-thirds over 1984 levels.”⁵³ Thus, since AT&T's divestiture, industry output, measured by the number of calling minutes, has nearly tripled. Further, Roger G. Noll and Susan R. Smart analyzed the annual rate of Change for Various Price (“CPI”) for telephone services.⁵⁴ Noll and Smart observed that “[t]he primary effect of divestiture and federal deregulation was reduced prices for customer equipment and for services that were becoming competitive.”⁵⁵

In short, the most important indicators of degree of competition, *e.g.* price and market share, show that the antitrust intervention increased competition in the long distance market.⁵⁶ Conversely, AT&T's local telephone companies provided about three-quarters of the nation's local

⁴⁷ Nicholas Economides, *The Telecommunications Act of 1996 and Its Impact*, 11 JAPAN & THE WORLD ECON. 455, 456 (1999).

⁴⁸ *Id.* at 459.

⁴⁹ FED. TRADE COMM'N, TREND IN TELEPHONE INDUSTRY - INDUSTRY ANALYSIS AND TECHNOLOGY DIVISION WIRELINE COMPETITION BUREAU 13-1, https://apps.fcc.gov/edocs_public/attachmatch/DOC-284932A1.pdf (specifying that “[t]he average price of 7 cents per minute represents a mix of international calling [10 cents per minute] and domestic interstate calling [6 cents per minute]”).

⁵⁰ See FED. TRADE COMM'N, STATISTICS OF COMMUNICATIONS COMMON CARRIERS Table 1.5 (1996), <http://www.fcc.gov/reports/statistics-communications-common-carriers-1996> (considering market share based on revenues of long distance carriers only).

⁵¹ *Id.* at 8; Jerry Hausman & Howard Shelanski, *Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies*, 16 YALE J. ON REG. 19, 23 (1999) (noting that the Commission after the 1984 break-up of AT&T started to reduce long-distance rates and make cost recovery more efficient).

⁵² *Long Distance Telecom Market Share in the U.S. in 2011, By Service Provider*, STATISTA, <http://www.statista.com/statistics/214202/us-long-distance-telecom-market-shares-by-provider/>.

⁵³ FED. TRADE COMM'N, MEASUREMENTS OF MARKET POWER IN LONG DISTANCE TELECOMMUNICATIONS 4 (Apr. 1995), <http://www.ftc.gov/be/econrpt/232316.pdf>.

⁵⁴ G. Noll & Susan R. Smart, *Pricing of Telephone Services*, in BARRY G COLE; EPSTEIN, *supra* note 32, at 187-88.

⁵⁵ G. Noll & Susan R. Smart, *supra* note 54.

⁵⁶ J. GREGORY SIDAK & DANIEL F. SPULBER, DEREGULATORY TAKINGS AND REGULATORY CONTRACT, THE COMPETITIVE TRANSFORMATION OF NETWORK INDUSTRIES IN THE UNITED STATES 37 (Cambridge University Press, 1997).

telephone service and almost all-interstate long distance service. However, the transition of the local market towards effective competition will not be as easy or as quick as in the long distance market, due to the nature of the product and the associated economics. Herbert Hovenkamp recognized that there was “still a great deal of regulation of local service.”⁵⁷ In 1984, the AT&T breakup opened competition in the long distance market but maintained a regulated monopoly in the local telephone market. Here, the Telecommunications Act of 1996 was enacted to promote competition in local exchange markets.

That Telecommunications Act was the United States’ reaction to ongoing rapid technology changes. It completely deregulated the telecommunications industry by envisioning one competitive open market for local and long distance, wireless, and cable services. In sum, the telecommunications industry is a representative industry to analyze the complementary role of antitrust agencies in regulated markets.

B. Antitrust Agencies, Regulatory Agencies or Both?

Having analyzed the AT&T case, one can more easily reflect on the consequences of similar structural consent decrees and the regulatory role assumed by antitrust agencies in markets. The benefits of the MFJ seem to exceed its costs. However, markets constantly change, and remedies must be implemented on a case-by-case basis. In the telecommunications industry, the current trend is toward consolidation.⁵⁸ Market remedies need to be adapted to the specific needs of the market, which are always different. But is antitrust intervention appropriate in regulated markets where a regulator already exists?

Regulation is complementary to competition. As Glen O. Robinson observed, “competition and regulation are like bread and butter.”⁵⁹ The regulator’s or legislator’s intervention may sometimes be slower than the antitrust intervention. The latter is able to change the market dynamics

⁵⁷ Herbert Hovenkamp, *Antitrust and Regulatory Enterprise*, COLUM. BUS. L. REV. 335, 355 (2004) (noting that the FCC and state regulatory agencies traditionally regulated local access prices on a rate-of-return basis).

⁵⁸ See, e.g., Jim Chen, *The Echoes of Forgotten Footfalls: Telecommunications Mergers at the Dawn of the Digital Millennium*, 43 HOUS. L. REV. 1311 (2007).

⁵⁹ See also, Herbert Hovenkamp, *Antitrust and the Regulatory Enterprise*; G. Noll & Susan R. Smart, *supra* note 54, at 336 (“This cyclical history inclines people to view antitrust and regulation as competing models for determining the appropriate scope of state intervention in the micro- economy. At the margin they certainly are competing, because we are never certain about where the boundary lies. However, a better way to view the two enterprises is as complementary products. We live in a world in which the great majority of markets clear at efficient, or something close to efficient, levels of output.”).

through a structural or behavioral consent decree; whereas the FCC or others regulators need to impose rules that involve the entire market, implying more steps and a longer procedure.

Timing in markets, especially in dynamic markets such as the telecommunications market, is critical. A rapid and tailored solution to correct a market failure is preferable to a delayed regulation or a set of laws enacted by the legislature. The European Commission recognized the ability of commitment decisions to ensure a flexible alternative to rapidly restore competition, especially in fast-moving digital markets.⁶⁰ In antitrust enforcement, two possible scenarios exist. In the first scenario, antitrust agencies have no regulatory powers; thus, they can only impose sanctions to counter antitrust violations. In this case, antitrust intervention seems static and repetitive. In the second scenario, antitrust agencies can find a compromise with the companies being investigated, gaining efficiency through temporal and monetary transactions costs. This second scenario seems more flexible and respectful of market changes.

In sum, efficiency and consumer welfare seem to be better preserved by increasing collaboration among antitrust and regulatory agencies. Antitrust agencies can impose a quick structural or behavioral remedy in regulated markets, while benefiting from the unique expertise of regulators in each markets. Working together, both bodies should be able to achieve the most procompetitive result. Reaching a competitive outcome is important, but it can be costly when two agencies strive to achieve the same result.

C. How to Diverge Commitment Decisions/Consent Decrees from Prohibition Decisions

As the AT&T case shows, antitrust agencies can impose market rules in place of a regulator. But what are the concrete differences between commitment decisions/consent decrees and prohibition decisions? To clarify this distinction, I analyze some recent antitrust decisions. In Europe, the recent decisions on the payment sector are fitting to show such differences. In this sector, the Commission opened several investigations, all of which ended with both commitment decisions and prohibition decisions.

⁶⁰ European Commission, *Report on Competition Policy* 12, COM (Jul. 7, 2013). (“Commitment decisions such as the one used in the e-books case . . . can obviate the need for lengthy proceedings and enable the Commission to obtain concrete results for consumers.”).

In particular, in September 2003 and June 2006, the European Commission sent two Statement of Objections on intra-European Economic Area (EEA) interchange fees, also known as multilateral interchange fees (“MIFs”), to Mastercard Europe SPRL and Mastercard International Inc.⁶¹ The MIF is an interbank payment that concerns each transaction realized with a payment card. Mastercard, for example, adopted a business model for MIFs, which established a mechanism that effectively identified a minimum price merchants had to pay for accepting Mastercard cards. In practice, Mastercard’s MIF is a charge imposed per payment at merchant outlets. Similarly, in April 2009, the Commission sent a Statement of Objection to Visa Europe Limited, Visa Inc., and Visa International Services Association. In this proceeding, the antitrust issue also concerned the MIF applied by Visa and the assumption that such interchange fee could harm competition between merchants’ banks.⁶²

Although the antitrust issue in both cases was almost identical, the antitrust decision adopted by the enforcement agencies differed. In Mastercard’s proceeding, the Commission identified an antitrust violation in adopting MIFs for cross-border payment card transactions; therefore, prohibiting Mastercard MIFs. The Court of Justice in September 2014 upheld the Commission’s Mastercard decision.⁶³ Conversely in Visa’s proceeding, the Commission made Visa’s commitments legally binding. Similar to the Mastercard case, in the Visa proceeding, the Commission was concerned about “i) [r]ules on ‘cross-border acquiring’ in the Visa system that limit the possibility for a merchant to benefit from better conditions offered by banks established elsewhere in the internal market. . . ii) All inter-bank fees set by Visa for transactions with consumer credit cards in the EEA.”⁶⁴ The Commission identified these concerns and made the commitments legally binding in December 2010, establishing that: i) Visa must allow from 1 January 2015 acquirers “to apply a reduced cross-border inter-bank fee (0.3% for credit and 0.2% for debit transactions) for cross

⁶¹ European Competition Network, ECN Subgroup Banking and Payments, *Information Paper on Competition Enforcement in the Payments Sector* 12, COM (Mar. 2012).

⁶² European Commission Press Release MEMO/19/151, Antitrust: Commission Sends Statement of Objections to Visa (Dec. 8, 2010), http://europa.eu/rapid/press-release_MEMO-09-151_en.htm?locale=en.

⁶³ European Commission Press Release MEMO/14/528, Antitrust: Commission Welcomes Court Judgment Confirming that MasterCard’s Payment Card Interchange Fees are Anti-competitive (Sep. 11, 2014), http://europa.eu/rapid/press-release_MEMO-14-528_en.htm [hereinafter *MEMO/14/528*].

⁶⁴ European Commission Press Release IP/14/197, Antitrust: Commission Makes Visa Europe’s Commitments to Cut Inter-bank Fees and to Facilitate Cross-border Competition Legally Binding (Feb. 26, 2014), http://europa.eu/rapid/press-release_IP-14-197_en.htm.

border clients;”⁶⁵ ii) “Visa Europe agrees to cap its credit card MIFs at 0.3% for all consumer credit card transactions in the EEA where Visa Europe sets the rate.”⁶⁶ Finally with regard to transparency, Visa offered to “simplify its inter-bank fee structure and make the invoicing of card acceptance services more transparent to merchants.”⁶⁷

In sum, in the Mastercard case, after having investigated for four years, the European Commission concluded that Mastercard violated Article 81 of the Treaty (namely Art. 101 of the TFUE) and ordered it “to withdraw its intra-EEA cross-border MIFs within six months, or to adopt a MIF that fulfilled Article 101(3) TFEU Mastercard to apply its MIFs.”⁶⁸ In the Visa case, the Commission accepted Visa’s commitments, according to which Visa would reduce cross-border inter-bank fees and cap its credit card MIFs. The differences between the two antitrust decisions are evident. The duration of the Mastercard EU antitrust proceeding was longer than that of Visa and ended with a discovery of an antitrust violation. This implied that Mastercard could no longer apply its MIF and that its clients, and competitors who were harmed by such MIFs could claim damages for this antitrust violation. In addition to the claims produced for damages and bad advertising, the Mastercard decision represents a precedent, according to which imposing MIFs for cross-border payment card transactions is illegal.

In contrast, no antitrust violation was found in Visa’s proceeding. According to Recital 13 of Regulation 1/2003, “[co]mmitment decisions should find that there are no longer grounds for action by the Commission without concluding whether or not there has been or still is an infringement.”⁶⁹ Thus, Visa could continue to apply MIFs, respecting the terms of the commitment decisions. In contrast to the Mastercard prohibition decision, Visa’s commitment decision does not constitute a precedent, but only a settlement by which Visa agreed to take specific actions without admitting fault or guilt for the antitrust concerns that led to the Commission’s investigation.

Further, in July 2013, the European Commission proposed to the European Parliament and Council to implement European legislation that would cap, similar to the terms of Visa’s decision, the level of interchange

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ MEMO/14/528, *supra* note 63.

⁶⁹ Wouter P. J. Wils, *The Use of Settlements in Public Antitrust Enforcement: Objectives and Principles*, 2008 EUR. COMPETITION L. ANN. 27, 31 (2008).

fees payable by merchants.⁷⁰ On December 17, 2014, the European Parliament and Council reached a political agreement on this Commission Proposal for a Regulation to cap inter-bank fees for card-based payments. Hence, in the Visa proceeding, the commitment decision seems to anticipate legislator intervention. The same Commission's proposal on interchange fees legislation appears to be a result of the decision of the Visa case. Thus, the latter antitrust decision again shows the concrete regulatory effect of a commitment decision, as well as the main difference between such decision and the prohibition decision. Commitment decisions regulate the market, whereas prohibition decisions create case law.

IV. CONCLUSION

The U.S. AT&T consent decree and the EU Visa commitment decision are only a couple of examples of how antitrust agencies can compete or, more precisely, collaborate with the regulator to impose rules on markets.

Consent decrees and commitment decisions are important antitrust devices that compete with prohibition decisions in drawing antitrust policy and in defining antitrust agency roles. Is the widespread use of consent decrees and commitment decisions appropriate in antitrust enforcement? Similar to a doctor in an emergency room, antitrust enforcement needs a tool to rapidly intervene to correct market failures, especially in dynamic markets where time is crucial. As with individuals suffering a health crisis, quick care is needed, and waiting is not opportune. Especially in Europe, commitment decisions often represent a painkiller. Commitment decisions and consent decrees can address the problem superficially, like a painkiller that alleviates symptoms but does not fight the disease.

The Visa case shows that the Visa commitment decision only anticipated a regulated intervention that the European legislature implemented in the payment market. However, sometimes this antitrust tool not only anticipates but completely changes the dynamics of the market and the antitrust agency's role. For example, the AT&T consent decree marked the end of a natural monopoly. The Telecommunications Act of 1996 dealt with different competition concerns in the telecommunications industry and was complementary to the AT&T antitrust decision.

The consent decree represents a flexible regulatory tool to quickly repair a market failure; it represents, especially in Europe, a painkiller on a

⁷⁰ European Commission Press Release IP/13/730, New Rules on Payment Services for the Benefit of Consumers and Retailers (Jul. 24, 2013), http://europa.eu/rapid/press-release_IP-13-730_en.htm?locale=en.

real set of rules. Although consent decrees changed antitrust agencies' traditional role, enforcing antitrust law through consent decrees and commitment decisions may be the correct course of action. Endowing antitrust agencies with this flexible antitrust tool appears appropriate and consistent with antitrust purposes and the markets' needs: increased flexibility, efficiency, and consumer welfare. Flexibility is a key word in competitive markets. However, it is important to bear in mind that when a market is diagnosed with a more critical disease, one should not continue to waste time with painkillers.

**THE PRIVATIZATION OF ANTARCTICA:
THE PATH TO PEACE AND WEALTH**

*Taylor Hoverman**

Historically, it has been understood that Antarctica is a useless, barren wasteland that presents little value other than for scientific research. While Antarctica is still a celebrated destination for scientific study, modern-day technological and scientific advances have thrust Antarctica to the top of the radar of world leaders. Many countries are beginning to recognize the great value in natural resources, particularly mineral resources, that lie in Antarctica, and as a result, many have made increasing attempts to become signatories to the Antarctic Treaty, which governs Antarctica. Signatories are invited to attend Consultative Meetings, where Parties to the Treaty exchange information and discuss matters of common interest pertaining to Antarctica.¹ As the world population expands, a time will inevitably arrive when the scarcity of natural resources will drive countries to exploit Antarctica's natural resources, particularly oil due to its value. While this may seem a distant occurrence, this process has already begun in the Arctic with Russia petitioning the United Nations, for the second time, claiming control of a large territory in the Arctic.² To symbolize this claim, Russia dropped "a canister containing the Russian flag on the ocean floor from a small submarine at the north pole" in 2007 and has already begun militarizing the region.³ Aside from territory near the North Pole and a border dispute between the United States and Canada in the Beaufort Sea,

* George Mason University School of Law, Juris Doctor Candidate, May 2016; Clemson University, B.A. Economics, *cum laude*, 2012. I would like to thank Ethan, my family, and my friends for their love and support. I'd also like to thank the incredibly gifted faculty at Clemson University and George Mason University School of Law for providing me with such a remarkable educational experience.

¹ *ATS – Meetings*, SECRETARIAT OF THE ANTARCTIC TREATY, http://www.ats.aq/devAS/ats_meetings.aspx?lang=e.

² Jayalakshmi K., *Russia Submits Claim over Arctic and North Pole to UN Citing Scientific Proof*, INT'L BUS. TIMES (Aug. 8, 2015), <http://www.ibtimes.co.uk/russia-submits-claim-over-arctic-north-pole-un-citing-scientific-proof-1514616>.

³ *Foreign Ministry Says It Has Submitted Bid to UN for More Than 463,000 Sq Miles of Sea Shelf as Competition for Oil and Gas Resources Heats Up*, THE GUARDIAN (Aug. 4, 2015), <http://www.theguardian.com/world/2015/aug/04/russia-lays-claim-to-vast-areas-of-arctic-seabed>.

most major territorial claims in the Arctic are settled.⁴ This is not the case in Antarctica, where all territorial claims are in dispute.⁵

The Antarctic Treaty currently lacks enforcement mechanisms.⁶ If the recent events in the Arctic are any indication of the future in Antarctica, peaceful cooperation among nations will be unattainable if the Antarctic Treaty cannot develop an efficient enforcement mechanism to implement the provisions contained within the Treaty itself. Without an enforcement mechanism, property rights have little or no legitimacy, leading to conflict as a result of competing territorial claims.

Property rights are legal rights created by a government body to establish how individuals can control, benefit from, and transfer property.⁷ Property rights must be clearly defined, enforceable, and transferable.⁸ Otherwise, “cooperation becomes more costly and markets operate less effectively to allocate resources to their most highly-valued uses.”⁹ On every continent besides Antarctica, property rights are enforced through the local judicial system and its governing laws. Because Antarctica does not have a government system, it is governed by the Antarctic Treaty System, which consists of all Antarctic agreements regulating relations among countries with respect to Antarctica.¹⁰ In light of the inevitable increased interest in Antarctica, the Antarctic Treaty System should privatize Antarctic territories in order to promote the peaceful negotiation and delegation of Antarctic territories for non-scientific exploitation. Through a system of privatization, property rights will be clearly defined, enforceable, and transferable, which will lead to diplomatic coordination among the parties to the Treaty as well as the Antarctic territories realizing their highest value.

Part I of this Comment will provide background information regarding the history of the Antarctic Treaty System and how it has developed since

⁴ David Runnalls, *Next Steps in Arctic Governance*, COUNCIL ON FOREIGN REL. (May 14, 2014), http://www.cfr.org/councilofcouncils/global_memos/p32983.

⁵ *Chapter II: United States Antarctic Policy*, NAT'L SCI. FOUND., <http://www.nsf.gov/pubs/1996/nstc96rp/chii.htm> (last visited Sept. 12, 2015).

⁶ Colin Deihl, *Antarctica: An International Laboratory*, 18 B.C. ENVTL. AFF. L. REV. 423, 436 (1991).

⁷ Armen Alchian, *Property Rights*, LIBR. OF ECON. AND LIBERTY: THE CONCISE ENCYCLOPEDIA OF ECON. (2008), <http://www.econlib.org/library/Enc/PropertyRights.html>.

⁸ *Lesson 7: Property Rights: Is the Environment Different?*, FOUND. FOR TEACHING ECON., <http://www.fte.org/teacher-resources/lesson-plans/eflessons/lesson-7-property-rights-is-the-environment-different/>.

⁹ *Id.*

¹⁰ *Antarctic Treaty System*, THE SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH, <http://www.scar.org/antarctic-treaty-system>.

its establishment. Part II will analyze the problems inherent within the Antarctic Treaty System as a result of a lack of clearly defined, enforceable property rights due to the absence of an enforcement mechanism. Part III will advocate for the privatization of Antarctica as a means of ensuring peaceful coordination among the parties to the Treaty, as well as a means of promoting the most efficient use of the land by distributing the Antarctic territories according to their highest valued use.

I. BACKGROUND INFORMATION

Antarctica is governed by many international agreements – the three most relevant to this analysis being the Antarctic Treaty, the Protocol on Environmental Protection to the Antarctic Treaty, and the United Nations Convention on the Law of the Sea.¹¹ Both the Antarctic Treaty and the Protocol on Environmental Protection are part of the Antarctic Treaty System.¹² A summary of these three international agreements follows.

A. *The Antarctic Treaty*¹³

The Antarctic Treaty is an international treaty created on December 1, 1959 in order to provide a legal framework for Antarctica (and the entire region beyond 60° South latitude including all ice shelves and islands).¹⁴ Twelve countries – Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, the Union of South Africa, the Soviet Union, the United Kingdom, and the United States – were active in Antarctic science at the time and decided to meet and discuss Antarctica and the legal, political, and scientific status of the ungoverned, unclaimed continent.¹⁵ Based on this meeting, the twelve countries determined their objectives for Antarctica and created the Antarctic Treaty to reflect and protect those objectives.

The Treaty preserves the region for peace and scientific purposes, demilitarizes Antarctica “to establish it as a zone free of nuclear tests and

¹¹ Joseph Ward, *Black Gold in a White Wilderness & Antarctic Oil: The Past, Present, and Potential of a Region in Need of Sovereign Environmental Stewardship*. FL. ST. U. J. OF LAND USE & ENVTL LAW (1998), <http://www.law.fsu.edu/journals/landuse/Vol132/WARDTXT.HTM>.

¹² *ATS – Related Agreements*, SECRETARIAT OF THE ANTARCTIC TREATY, http://www.ats.aq/e/ats_related.htm.

¹³ Antarctic Treaty, adopted Dec. 1, 1959, in force June 23, 1961, 402 U.N.T.S. 71.

¹⁴ *Id.*; *The Antarctic Treaty*, NATIONAL SCIENCE FOUNDATION: DIRECTORATE FOR GEOSCIENCES (GEO), <http://www.nsf.gov/geo/plr/antarct/anttrty.jsp>.

¹⁵ *Id.*

the disposal of radioactive waste,”¹⁶ promotes the utilization of Antarctica for scientific discovery, promotes international cooperation in regards to activities in Antarctica, sets aside disputes over territorial sovereignty, encourages environmental stewardship, and requires the countries to the Treaty to annually exchange information about the activities taking place in Antarctica.¹⁷ Overall, “[t]he primary purpose of the Antarctic Treaty is to ensure ‘in the interests of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.’”¹⁸ The Treaty remains in force indefinitely.¹⁹

As of April 2010, seventeen additional countries – Brazil, Bulgaria, China, the Czech Republic, Ecuador, Finland, Germany, India, Italy, the Netherlands, Peru, Poland, South Korea, Spain, Sweden, Ukraine, and Uruguay – have achieved consultative status by acceding to the Antarctic Treaty.²⁰ These countries also conduct substantial scientific research in Antarctica.²¹ An additional twenty-one countries have since acceded to the Antarctic Treaty: Austria, Belarus, Canada, Colombia, Cuba, North Korea, Denmark, Estonia, Greece, Guatemala, Hungary, Malaysia, Monaco, Pakistan, Papua New Guinea, Portugal, Romania, Slovakia, Switzerland, Turkey, and Venezuela.²² These twenty-one countries are able to attend consultative meetings as observers.²³ Evidently, the Antarctic Treaty has achieved broad acceptance, with the governments of fifty countries containing about two-thirds of the world’s human population recognizing the Treaty.²⁴ It is clear that Antarctica’s abundant natural resources are becoming of increasing international interest as more countries continue to commit to the Antarctic Treaty.

Since the Antarctic Treaty was entered into force in 1961, the Antarctic Treaty Consultative Meeting (“ATCM”) has been held every other year; although the meetings have been held more frequently

¹⁶ GEORGE FAREBROTHER, FREEDOM FROM NUCLEAR WEAPONS THROUGH LEGAL ACCOUNTABILITY AND GOOD FAITH: CONFERENCE REPORT 16 (George Farebrother ed., 2007).

¹⁷ *The Antarctic Treaty – Background Information*, BRITISH ANTARCTIC SURVEY, http://www.antarctica.ac.uk/about_antarctica/geopolitical/treaty/; Antarctic Treaty, *supra* note 13.

¹⁸ *Antarctic Treaty System*, *supra* note 10.

¹⁹ *The Antarctic Treaty – Background Information*, *supra* note 17.

²⁰ *The Antarctic Treaty*, *supra* note 14.

²¹ *Id.*

²² *Id.*

²³ *Id.*

²⁴ *Id.*

(annually) since 1993.²⁵ The Committee for Environmental Protection (“CEP”), established by the Protocol on Environmental Protection, “meets concurrently with the ATCM to address matters relating to environmental protection and management and [to] provide advice to the ATCM. Besides the regular ATCM and CEP meetings, the Consultative Parties also convene occasional Special Antarctic Treaty Consultative Meetings and Meetings of Experts to address specific subjects.”²⁶

The consultative meetings have generated recommendations regarding the operation of the Treaty, including a requirement that the Treaty become binding on the parties to the Treaty when ratified by the participating governments.²⁷ Consultative status, essentially voting status, is open to every country that conducts significant research and therefore demonstrates a commitment to Antarctica.²⁸ Additional meetings have led to the adoption of over three hundred recommendations and separately negotiated international agreements including “environmental protection measures for expeditions, stations, and visitors; waste-management provisions; a ban on mining; [the] establishment of specifically protected areas; and agreements for the protection of seals and other marine living resources.”²⁹ Only three of these international agreements are still in use: the Convention for the Conservation of Antarctic Seals (1972), the Convention on the Conservation of Antarctic Marine Living Resources (1980), and the Protocol on Environmental Protection to the Antarctic Treaty (1991).³⁰ These three international agreements along with the original Antarctic Treaty govern all Antarctic activity.³¹ This combination of agreements is collectively known as the Antarctic Treaty System.³²

B. The Antarctic Treaty System

The Antarctic Treaty System is the collective compilation of all Antarctic agreements used for the purpose of regulating relations among countries with respect to Antarctica.³³ The Antarctic Treaty System as a whole includes the Antarctic Treaty, the recommendations adopted at the Antarctic Treaty Consultative meetings, the Protocol on Environmental

²⁵ *Id.*; *ATS – Meetings*, *supra* note 1.

²⁶ *Antarctic Treaty System*, *supra* note 10.

²⁷ *The Antarctic Treaty*, *supra* note 14.

²⁸ *The Antarctic Treaty – Background Information*, *supra* note 17.

²⁹ *Id.*; *The Antarctic Treaty*, U.S. ANTARCTIC PROGRAM,

<http://www.usap.gov/theAntarcticTreaty/>.

³⁰ *The Antarctic Treaty – Background Information*, *supra* note 17.

³¹ *Id.*

³² *Id.*

³³ *Antarctic Treaty System*, *supra* note 10.

Protection to the Antarctic Treaty, the Convention for the Conservation of Antarctic Seals, and the Convention for the Conservation of Antarctic Marine Living Resources.³⁴ The Antarctic Treaty System also includes results from the Meetings of Experts, the decisions produced at Special Consultative Meetings, and reflects the work of the Scientific Committee on Antarctic Research on all aspects of the Antarctic Treaty System.³⁵ The U.S. State Department claims the treaties listed above,

were adopted or taken when a need for them was perceived. The practice has been essentially pragmatic, and it was not until the conclusion of the Protocol on Environmental Protection that there was a systematic attempt to provide a code for the regulation of all Antarctic activities other than those covered by the two separate conventions dealing with the conservation of seals and marine living resources.³⁶

C. *United Nations Convention on the Law of the Sea (UNCLOS)*³⁷

The United Nations Convention on the Law of the Sea (UNCLOS) greatly impacts the Antarctic region.³⁸ UNCLOS was signed in December of 1982 and took force in November of 1994.³⁹ UNCLOS establishes limits for the contiguous zone, the continental shelf, the Exclusive Economic Zones (“EEZs”), and the territorial sea. The areas outside of these boundaries are jointly owned by the global community and are considered the “common heritage of mankind.”⁴⁰ These areas outside of national jurisdiction boundaries consist of the seabed, ocean floor, and subsoil.⁴¹ Putting these resources into common property to be managed by society rather than by individuals is problematic. As Ward points out,

³⁴ *Id.*; Antarctic Treaty, *supra* note 13; Protocol on Environmental Protection to the Antarctic Treaty art. 25.5, adopted Oct. 4, 1991, in force Jan. 14, 1998, 30 I.L.M. 1455 [hereinafter Madrid Protocol]; Convention for the Conservation of Antarctic Marine Living Resources, adopted May 20, 1980, in force Apr. 7, 1982, 1329 U.N.T.S. 47 [hereinafter CCAMLR]; Convention for the Conservation of Antarctic Seals, June 1, 1972, 1080 U.N.T.S. 175 [hereinafter Antarctic Seals Convention].

U.S. DEP'T. OF ST., HANDBOOK OF THE ANTARCTIC TREATY SYSTEM I (Harlan K. Cohen, 9th ed. 2001) <http://www.state.gov/documents/organization/15272.pdf>.

³⁶ *Id.*

³⁷ United Nations Convention of the Law of the Sea, adopted Dec. 10, 1982, in force Nov. 16, 1994, 1833 U.N.T.S. 397 [hereinafter UNCLOS].

³⁸ See Ward, *supra* note 11.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

[t]he underlying problem of UNCLOS is that if no claim of sovereignty is recognized in Antarctica, there can be no basis for establishing territorial seas, EEZs, or continental shelves. In the absence of valid territorial claims to Antarctica, the continental shelf would assume the status of the deep sea-bed, and thus be deemed common property. This has far-reaching consequences because UNCLOS' broad definition of the continental shelf was intended to put most sea-bed resources, including oil, under coastal state jurisdiction.⁴²

Both the Antarctic Treaty and UNCLOS share faults in terms of property rights, specifically mineral rights. Ward criticizes the two agreements:

Both the Antarctic Treaty and UNCLOS lack sufficient attention to the issue of sovereignty and jurisdiction over Antarctica and the Southern Ocean. However, the fundamental failing of the current regime more accurately resides in the Protocol [on Environmental Protection's] minerals prohibition, which fails to resolve the sovereignty dilemma and lacks adequate environmental protection measures. These significant shortcomings must be remedied if Antarctic oil exploration is to avoid becoming a blackened "gold rush" with the attendant dangers that conflicting territorial claims could produce amidst such chaos.⁴³

D. Minerals in Antarctica

Thanks to its relative accessibility, the continental shelf is considered to hold the greatest potential for oil exploitation in Antarctica.⁴⁴ Ward notes,

[o]ne estimate postulates that fifty billion barrels of oil, an amount roughly equivalent to Alaska's entire estimated reserves, lies under the Weddell and Ross Seas alone...One estimate goes so far as to put potential deposits as high as 203 billion barrels.⁴⁵

⁴² *Id.*

⁴³ *Id.*

⁴⁴ See Ward, *supra* note 11.

⁴⁵ *Id.*

This is staggering in light of the fact that the total historic domestic United States production to date is under 200 billion barrels...The real question thus becomes not whether oil deposits exist, but whether they will be found, and if discovered, whether they can be economically extracted.⁴⁶

A study found there are still four to ten undiscovered supergiant oil fields in the world.⁴⁷ Supergiant oil fields are fields that contain at least five billion barrels of oil.⁴⁸ Experts predict that because Antarctica has been explored much less than the rest of the planet, it is likely that at least one supergiant oil field is located in Antarctica.⁴⁹

Oil companies have begun to show more interest in Antarctica attempting to obtain permits for oil exploration and exploring the waters surrounding Antarctica.⁵⁰ In 1991, both consultative and non-consultative parties to the Antarctica Treaty System signed the Protocol on Environmental Protection ("Protocol"), an agreement to protect the Antarctic environment by imposing a ban on all mineral exploration or exploitation in Antarctica for at least a fifty-year period.⁵¹ The Protocol entered into force in 1998 with a provision prohibiting amendments to the agreement during the fifty-year period.⁵² In 2048, the fifty-year period will conclude, and the Protocol will open for review.⁵³ Until then, under Article 25.5 of the Protocol, the "Protocol can only be modified by unanimous agreement of all Consultative Parties to the Antarctic Treaty. In addition, the prohibition on mineral resource activities cannot be removed unless a binding legal regime on Antarctic mineral resource activities is in force."⁵⁴ However, "[a]t the insistence of the USA, the Protocol contains a 'walkaway' clause,"⁵⁵ which allows "any signatory nation to withdraw from

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ Richard Nehring, *Giant Oil Fields and World Oil Resources*, RAND (June 1978), <http://www.rand.org/content/dam/rand/pubs/reports/2006/R2284.pdf>.

⁴⁹ Ward, *supra* note 11.

⁵⁰ *Id.*

⁵¹ *Id.*; Madrid Protocol, *supra* note 34; *The Protocol on Environmental Protection to the Antarctic Treaty*, SECRETARIAT OF THE ANTARCTIC TREATY, <http://ats.aq/e/ep.htm> [hereinafter Protocol].

⁵² *See* Protocol, *supra* note 51.

⁵³ *Id.*

⁵⁴ *Id.*; Madrid Protocol, *supra* note 34, at art. 25.5.

⁵⁵ J.D. Hansom & John Gordon, *ANTARCTIC ENVIRONMENTS AND RESOURCES: A GEOGRAPHICAL PERSPECTIVE* 285 (Routledge, 2013).

the mining moratorium agreement completely, after giving five years notice.”⁵⁶

This provision creates a possibility of rendering the ban on extracting mineral resources moot by giving five years notice.⁵⁷ If none of the signatories to the Protocol utilize this “walkaway” provision to overcome the ban on mineral resource activities, the opportunity for exploiting Antarctica’s minerals is not lost. In thirty-three years, the Protocol will expire, giving signatories to the agreement the opportunity to renegotiate terms of the Protocol.⁵⁸ As oil has continued to play a major role in the political landscape of the globe, the Protocol’s expiration and potential future negotiations could lead to conflict.

E. *Antarctic Claims Today*

Seven countries – Argentina, Australia, Chile, France, New Zealand, Norway, and the United Kingdom – claim territorial sovereignty, “supreme authority within a territory,”⁵⁹ over land in Antarctica.⁶⁰ Fifteen percent of the continent is still classified as open territory and is unclaimed.⁶¹ Several countries have neither recognized nor claimed sovereignty in Antarctica but have reserved the right to claim sovereignty in the future.⁶² In fact, there are already existing disagreements over specific plots of land in Antarctica.

⁵⁶ Andrew F. Neuman, Comment, *Closing the Frozen Treasure Chest: Antarctica’s New Environmental Protocol*, 3 FORDHAM ENVTL. L. REV. 57, 74 (2011) (citing Madrid Protocol art. 25, para. 5(a)). This paragraph states that:

“With respect to Article 7, the prohibition on Antarctic mineral resource activities contained therein shall continue unless there is in force a binding legal regime on Antarctic mineral resource activities that includes an agreed means for determining whether, and, if so, under which conditions, any such activities would be acceptable. This regime shall fully safeguard the interests of all States referred to in Article IV of the Antarctic Treaty and apply the principles thereof. Therefore, if a modification or amendment to Article 7 is proposed at a Review Conference referred to in paragraph 2 above, it shall include such a binding legal regime.”; Madrid Protocol art. 25, para. 5(b)). This paragraph states:

“If any such modification or amendment has not entered into force within 3 years of the date of its adoption, any Party may at any time thereafter notify to the Depository of its withdrawal from this Protocol, and such withdrawal shall take effect 2 years after receipt of the notification by the Depository.”).

⁵⁷ *Id.*

⁵⁸ Madrid Protocol, *supra* note 34; Protocol, *supra* note 51.

⁵⁹ *Sovereignty*, STAN. ENCYCLOPEDIA OF PHILOSOPHY, <http://plato.stanford.edu/entries/sovereignty/> (last updated June 8, 2010).

⁶⁰ NAT’L SCI. FOUND., *supra* note 5.

⁶¹ *The Antarctic Treaty and the Antarctic Treaty System*, NAT’L SCI. FOUND. (1996), <http://www.nsf.gov/pubs/1996/nstc96rp/apx1.htm>.

⁶² *Id.*

Argentina, Chile, and the United Kingdom's claims actually overlap one another in the Antarctic Peninsula.⁶³

The United States neither asserts a claim to any territory nor recognizes the claims of other countries. "At the same time, the United States has maintained a basis of claim, deriving originally from early U.S. expeditions of exploration and discovery in Antarctica."⁶⁴ United States' policy enforces the priority of maintaining an active presence in Antarctica, which includes year-round occupation of the U.S. research stations.⁶⁵ The National Science and Technology Council of the White House "believes that at the current level of investment, a strong...U.S. presence in Antarctica...is necessary to serve basic U.S. science interests, as well as U.S. interests in maintaining the international peace and stability and an effective system of governance established by the Antarctic Treaty."⁶⁶ Although the United States claims no territory, it operates the United States Antarctic Program from the permanent Amundsen-Scott South Pole Station located geographically at the South Pole, which is "of particular scientific and strategic importance...and at the point of intersection of territorial claims that the United States does not accept."⁶⁷

The United States and United Kingdom each have six research stations in Antarctica, while Japan, Germany, and Italy have five.⁶⁸ In February 2014, "[i]n a global race for resources, China expand[ed] its polar footprint" by revealing its fourth Antarctic research station and announcing the building of a fifth station.⁶⁹ China selected the site for the fifth research station in April 2015.⁷⁰ As we near 2048, the opening of the Protocol for review, it is not surprising that China is increasing their Antarctic presence. Following the unveiling of China's fourth research station, TIME reported, "[i]n recent years a global race for resources – the unexploited continent is the home to what might be the third-largest oil reserves in the world as well as abundant mineral deposits – has prompted various nations to stake a claim by building research bases."⁷¹

⁶³ *Id.*

⁶⁴ NAT'L SCI. FOUND., *supra* note 5.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ Michelle Arrouas, *China Unveils Fourth Research Station in Antarctica*, TIME (Feb. 10, 2014), <http://world.time.com/2014/02/10/china-antarctica-research-station/>.

⁶⁹ *Id.*

⁷⁰ Jane Perlez, *China, Pursuing Strategic Interests, Builds Presence in Antarctica*, N.Y. TIMES (May 3, 2015), http://www.nytimes.com/2015/05/04/world/asia/china-pursuing-strategic-interests-builds-presence-in-antarctica.html?_r=0.

⁷¹ Arrouas, *supra* note 68.

II. ANALYSIS

Before the U.S. Senate Committee on Foreign Relations in 1960, Phillip C. Jessup argued that the importance of the Antarctic Treaty “lie[s]...in the fact that it will permit the last great empty continent from becoming an international bone of contention, a scene of controversy and actual fighting.”⁷² Some have claimed that the Antarctic Treaty System is an unprecedented example of commendable international cooperation.⁷³ Gillian Triggs even titled her book *The Antarctic Treaty System: A Model of Legal Creativity and Cooperation*.⁷⁴ In her abstract, Triggs states that the Antarctic Treaty System “has proved to be one of the successes of twentieth century international law and diplomacy.”⁷⁵ Triggs further states that,

[f]or the last 50 years, a tenth of the Earth has been regulated peacefully and in the interest of scientific research. Negotiated during the cold war the treaty has ensured that potential conflict over the seven largely unrecognized and disputed claims to territorial sovereignty in Antarctic has been avoided.⁷⁶

Triggs claims this is just one of the many achievements that have resulted from the Antarctic Treaty System, stating that it has “become a model for regional environmental management founded upon agreed common values of cooperative scientific research and peaceful purposes.”⁷⁷ However, this statement may be premature. The true test of the strength and effectiveness of the Antarctic Treaty System will be the authority and control that the system exercises over countries once a country attempts to extract mineral resources from Antarctica.

It was previously thought that Antarctica was a barren wasteland void of value or resources. As Captain James Cook mistakenly said in 1777, “the world will derive no benefit [from Antarctica].”⁷⁸ Despite Captain Cook’s contributions to scientific exploration, time will show that a plethora of

⁷² Gillian Triggs, *The Antarctic Treaty System: A Model of Legal Creativity and Cooperation*, SCIENCE DIPLOMACY: ANTARCTICA, SCIENCE, AND THE GOVERNANCE OF INTERNATIONAL SPACES 40 (Paul Arthur Berkman et al. eds., 2011).

⁷³ *Id.* at 39-40.

⁷⁴ *Id.* at 39.

⁷⁵ *Id.*

⁷⁶ *Id.* at 40.

⁷⁷ *Id.*

⁷⁸ Ward, *supra* note 11.

valuable natural resources lie in Antarctica. As mentioned above, there are provisions prohibiting mineral exploitation in Antarctica, but scarce resources will entice countries to eventually extract minerals from Antarctica. Although seven nations have territorial claims under the Antarctic Treaty, the United States, along with most Antarctic Treaty Consultative Party nations, does not recognize these territorial claims.⁷⁹ Due to this conflict,

[t]he Antarctic Treaty “freezes” the positions of both claimants and non-claimants and thereby permits its Parties to undertake cooperative activities and agree on collective regulation of those activities, without prejudice to their legal positions. This conflict avoidance and conflict resolution mechanism is key to the political system of governance embodied in the Treaty.⁸⁰

However, as discussed above, Antarctica does not have its own sovereign government, so there is no authoritative body to enforce this conflict avoidance mechanism, or even more essential than that – to enforce property rights.

A. The Importance of Property Rights

In the *Library of Economics and Liberty*, Armen Alchian defines property rights as “one of the most fundamental requirements of a capitalist economic system.”⁸¹ More specifically, Alchian states,

[t]he definition, allocation, and protection of property rights comprise one of the most complex and difficult sets of issues that any society has to resolve, but one that must be resolved in some fashion. For the most part, social critics of “property” rights do not want to abolish those rights. Rather, they want to transfer them from private ownership to government ownership. Some transfers to public ownership (or control, which is similar) make an economy more effective. Others make it less effective. The worst

⁷⁹ NAT'L SCI. FOUND., *supra* note 5.

⁸⁰ *Id.*

⁸¹ Alchian, *supra* note 7.

outcome by far occurs when property rights really are abolished.⁸²

In the case of Antarctica, property rights are not abolished since something must exist in order to be abolished; however, property rights are nonexistent, which Alchian would likely agree also leads to the worst outcome. Alchian's excerpt refers to the conflict surrounding private versus government ownership. The crucial differentiation here is that Antarctica lacks a government body; therefore, the efficient allocation of resources requires private property rights.

Alchian also defines a property right as "the exclusive authority to determine how a resource is used."⁸³ This element of a legal property right is essential in analyzing the imminent exploitation of minerals in Antarctica because many countries will want the authority to determine how Antarctic territories will be allocated and utilized. Alchian notes that property rights have three attributes: the exclusivity of rights to choose the use of a resource, exclusivity of rights to the services of a resource, and rights to exchange the resource at mutually agreeable terms.⁸⁴ In regards to the exclusive rights to the services of a resource, Alchian provides an example of owning an apartment.⁸⁵ An apartment owner with complete property rights has the right to determine the use of the apartment.⁸⁶ The owner can live in the apartment, rent to a tenant of his or her choice, or use the apartment for any other peaceful use.⁸⁷ If the owner rents the apartment to a tenant and collects rent, the owner has the right to the rental income, the services of his or her resource.⁸⁸

Another essential element of property rights is transferability, or as Alchian describes it, the rights to exchange the resource at mutually agreeable terms.⁸⁹ Continuing with the example of an apartment owner, Alchian states,

a private property right includes the right to delegate, rent, or sell any portion of the rights by exchange or gift at whatever price the owner determines (provided someone is willing to pay that price). If I am not

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ Alchian, *supra* note 7.

⁸⁸ *Id.*

⁸⁹ *Id.*

allowed to buy some rights from you and you therefore are not allowed to sell rights to me, private property rights are reduced.⁹⁰

The ability to determine the use of, benefit from the services of, and transfer the rights of private property rights provides the owner of those rights with certainty and assurance. Certainty provides peace of mind. As Alchian described, “[w]ell-defined and well-protected property rights replace competition by violence with competition by peaceful means.”⁹¹ Have no doubt that countries around the globe will be competing for Antarctic territories.

B. Tragedy of the Commons

Antarctica is currently a common resource, which can result in a Tragedy of the Commons problem. The Tragedy of the Commons is an economic theory explaining that in regards to common resources, individuals acting rationally and independently according to their own self-interest results in behavior contrary to the whole group’s long-term best interests.⁹² Clemson University Professor Bruce Yandle describes the “commons problem” and how mankind has solved this problem.⁹³

There are resources that are there for the taking, and in a sense, that’s the way the world is, except for the fact that human beings have figured out a way to build some institutions that serve our purposes for rationing and helping us to survive and accumulate wealth...Any...kind of property...in a way, it’s up for grabs, were it not for institutions of property, rules of just conduct, [and] behavioral aspects that get introduced over long periods of time, so that we know what belongs to somebody else, and they know what is ours, and we respect each other’s property. The *tragedy* of the commons occurs when there is such overuse that the resource will no longer replenish itself.⁹⁴

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² Garrett Hardin, *The Tragedy of the Commons*, 162 *SCIENCE* 1243, 1243-48 (1968).

⁹³ Bruce Yandle, *The Tragedy of the Commons and the Implications for Environmental Regulations*, *ECON TALK* (Oct. 2007),

http://www.econtalk.org/archives/2007/10/yandle_on_the_t.html.

⁹⁴ *Id.* (emphasis added).

The “institutions of property” Professor Yandle refers to, or more specifically, a system of private property rights, can solve the Tragedy of the Commons problem, especially for natural resources.⁹⁵ A lack of well-established property rights can “generate numerous inefficiencies, specifically short-term (static) costs in overconsumption and misallocation of scarce resources, and long-term (dynamic) losses in inadequate capital and human investment in resource development.”⁹⁶ If territorial claims are unrecognized or unclear and several countries decide to move forward in their efforts to access the natural resources of Antarctica, it could lead to a mad rush of countries attempting to claim Antarctic minerals – trying to get their share of natural resources in Antarctica. If this becomes the case, then all countries will rush to obtain whatever percentage of the natural resources possible with no restraint for preservation, scientific discovery, or future generations. This will lead to the depletion of Antarctica’s natural resources at an inefficient rate. However, the Tragedy of the Commons problem can be avoided if property rights are clearly established and an enforcement mechanism is put in place that creates consequences for violators of the Treaty System.

C. *The Problem: Lack of An Enforcement Mechanism*

It has been widely recognized and discussed that the Antarctic Treaty System lacks an efficient enforcement mechanism; just as widely recognized is the clear need for one. As stated in an assessment by the Polar Research Board, “...the absence of agreed national jurisdiction in Antarctica requires a strong alternative enforcement mechanism.”⁹⁷

1. **No Antarctic Government Body**

Because Antarctica does not have its own government body, there is no form of central authority to establish and enforce property rights in Antarctica.⁹⁸ As discussed above, property rights are essential in order to

⁹⁵ *Id.*; Robert J. Smith, *Resolving the Tragedy of the Commons by Creating Private Property Rights in Wildlife*, 1 CATO J. 439 (1981).

⁹⁶ ALAN DEVLIN, *FUNDAMENTAL PRINCIPLES OF LAW AND ECONOMICS* 149 (Routledge, 2014).

⁹⁷ POLAR RESEARCH BD., *COMM’N ON PHYSICAL SCI.’S, MATH., AND RESOURCES, AND THE NAT’L RESEARCH COUNCIL, ANTARCTIC TREATY SYSTEM: AN ASSESSMENT: PROCEEDINGS OF A WORKSHOP HELD AT BEARDMORE SOUTH FIELD CAMP, ANTARCTICA* 301 (1986).

⁹⁸ *The Government of Antarctica and Antarctic Politics*, COOL ANTARCTICA, http://www.coolantarctica.com/Antarctica%20fact%20file/science/government_antarctica.php (last visited September 11, 2015).

provide parties with the necessary certainty to compete peacefully. Property rights also provide the certainty, predictability, and transparency needed to encourage the efficient use of resources and to incentivize parties to invest in those resources.⁹⁹ Conversely, a lack of property rights, “[c]ollective ownership, or poorly defined and weakly enforced private property rights, leads to perverse incentives with regard to the use of scarce resources and insecurity with regard to investment in the improvement of those resources...Without a clear notion of ‘mine’ and ‘thine,’ the institutional basis for exchange is lost.”¹⁰⁰ Antarctica’s lack of “institutional basis” or government body makes the enforcement of property rights difficult and susceptible to encroachment, potentially leading to inefficient uses of resources due to the need to dedicate limited resources to protecting property rights, as opposed to those resources being available for investment or improvement. Countries will need to use their limited resources to compete for and protect their claims to any territories.

Without any kind of enforcement mechanism in place to solve this precise issue, countries will be left to bargain on their own. Since there is no higher authority to force countries to negotiate peacefully, it may likely result in conflict, with more powerful countries using their resources and potentially combative power to claim territories. This cycle could result in the most powerful countries in the world fighting with one another to gain additional territories and resources. The disputes could prove endless, especially in the case of oil, given that it is a fluid and active resource that moves underground throughout time.¹⁰¹ This characteristic of oil invites powerful countries to disregard territorial claims and continue exploring Antarctic territories in order to obtain more oil with no regard for other countries’ property claims.

2. Antarctica for Peaceful Purposes Only

If countries turn to conflict and utilizing combative power, they will be violating the Antarctic Treaty System. Article I of the Antarctic Treaty

⁹⁹ Peter Boettke, *The Role of Private Property in a Free Society*, VA. VIEWPOINT (Apr. 2005), http://www.virginiainstitute.org/viewpoint/2005_04_2.html.

¹⁰⁰ *Id.*

¹⁰¹ *Fossil Energy Study Guide: Oil*, U.S. DEP’T OF ENERGY, www.fossil.energy.gov/education/energylessons/oil/MS_Oil_Studyguide_draft1.pdf (last visited Sept. 11, 2015).

System bans military activity and weapons testing anywhere in Antarctica.¹⁰² Article I states,

Article I – [Antarctica for peaceful purposes only]:

1. Antarctica shall be used for peaceful purposes only. There shall be prohibited, inter alia, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons.
2. The present Treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purposes.¹⁰³

Any country that resorts to using their militia as a source of power to obtain Antarctic territories will be in violation of Article I of the Antarctic Treaty System.¹⁰⁴ As resources become scarce, countries may pursue military action to ensure the successful exploitation of minerals in Antarctica. Since the Antarctic Treaty System lacks an efficient enforcement mechanism, there will not be any real consequences as a result of non-compliance and therefore no incentive for parties to comply. If the Antarctic Treaty System does not develop a valid enforcement mechanism before these actions occur, countries will begin to take action without regard for the pre-existing claims within the Antarctic Treaty System. This could lead to many conflicts between countries with potentially devastating consequences. If a country chooses to take this course of action, they will be in violation of the Antarctic Treaty System without consequences.

3. Article VII of the Protocol on Environmental Protection to the Antarctic Treaty – Prohibition of Mineral Resource Activities

Article VII of the Protocol on Environmental Protection to the Antarctic Treaty precludes countries from exploiting Antarctic minerals for non-scientific uses.¹⁰⁵ The provision states, “Article 7 – Prohibition of Mineral Resource Activities: Any activity relating to mineral resources,

¹⁰² *Protocol on Environmental Protection to the Antarctic Treaty*, BRITISH ANTARCTIC SURVEY, <https://www.bas.ac.uk/about/antarctica/environmental-protection/protocol-on-environmental-protection-to-the-antarctic-treaty-1991/> (last visited Sept. 15, 2015).

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

other than scientific research, shall be prohibited.”¹⁰⁶ Therefore, any country that attempts to exploit the mineral resources of Antarctica for any research other than scientific research will be in violation of Article VII of the Antarctic Treaty System.¹⁰⁷ As previously noted, this provision opens for review in 2048, and it seems countries are already preparing for the possibility of an amendment allowing for the exploitation of Antarctic minerals for non-scientific uses, like China’s recent efforts to launch its fourth and fifth research stations in Antarctica.¹⁰⁸

D. The Solution: The Privatization of Antarctica

Privatizing Antarctic territories would solve many of the issues discussed above by defining property rights and creating clear incentives for all parties. Establishing enforceable and transferable private property rights would create an institution capable of monitoring countries’ activities and successfully enforcing consequences onto non-conforming countries.

1. Enforcement Mechanisms in Other Treaties

The Law of the Sea is an example of an international treaty that has a successful enforcement mechanism in place. Under the Law of the Sea, enforcement powers can be exercised by international organizations or the States themselves.¹⁰⁹ The international legal system has mainly relied on the states that border water for enforcement measures.¹¹⁰ However, this solution will not work for the Antarctic Treaty System due to geographic differences and because the values at stake are very different in essence. Under the Law of the Sea, all countries have a common interest in successfully managing their common resource, the ocean, and minimizing maritime pollution, preserving maritime resources, and preventing contaminating spills among other concerns. Unfortunately, the unique geography of Antarctica prevents it from enjoying the benefits afforded by a judicial structure similar to that found in the Law of the Sea.

Antarctica is filled with an abundance of natural resources, which will be difficult to divide and share equally amongst all countries. Countries will want to make individual claims to these resources, so an enforcement mechanism like the one used in the Law of the Sea will not be efficient.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ See Arrouas, *supra* note 68; see also Perlez, *supra* note 70.

¹⁰⁹ Doris König, *The Enforcement of the International Law of the Sea by Coastal and Port States* (2002), http://www.zaoerv.de/62_2002/62_2002_1_a_1_16.pdf.

¹¹⁰ *Id.*

Because each country has their potential territory and resources at stake, fair, unbiased enforcement would be impossible. Overall, enforcement by individual countries will not be effective due to potential bias, self-interest, and politics.

2. Real Consequences

The best way to create an efficient enforcement mechanism is to create real consequences that can be felt immediately by any country that chooses to violate the Treaty. The Treaty System needs to create consequences that directly and negatively affect a country's access to Antarctica's natural resources. One way to accomplish this is to put those resources at stake. If any country violates the Treaty, their ability to claim Antarctic territories or resources should be at risk or eliminated.

3. The Process of Privatizing Antarctica

The privatization of Antarctica would prove to be the most efficient enforcement mechanism for creating clear, established, transferable property rights. Creating clear property rights through private ownership will also lead to the most efficient use of the territories since private owners internalize costs and therefore have an incentive to use their property more efficiently.¹¹¹ If property rights are not established and countries continue refusing to acknowledge the claims of other countries, some countries will begin to make advances toward the non-scientific exploitation of Antarctica under their own rules. This could have many negative consequences.

First, this could create conflicts between countries, leading to potentially disastrous consequences. Secondly, it could lead to countries racing to be the first country to obtain those minerals, leading to inefficient use of those resources. In a rush, countries may operate in a manner that is harmful to the Antarctic environment, use inefficient equipment or technology, or overexploit minerals that they would have reserved for future use with better-defined property rights.

By privatizing Antarctica, property rights become clear. With clear property rights, countries will have knowledge of and the ability to recognize the claims of the other countries. This could lead to the potential transfer of property rights, so that the territories are allocated to their highest valued user. Once countries know their territories are protected, they will be able to invest time, money, and energy into their territories,

¹¹¹ Devlin, *supra* note 96.

making it worthwhile to use the most efficient methods possible when extracting minerals from their territories.

a. Privatization: A Successful Solution

Once countries begin using Antarctica for non-scientific uses, the privatization of resources will be the best tool for avoiding conflict and finding equilibrium among all countries' interests. Those countries that highly value Antarctica's scientific preservation can reflect that through their bids and their utilization of their territories. The same goes for countries that highly value non-scientific uses like the exploitation of minerals. This proposed solution of privatizing common resources has been discussed by many scholars and implemented for many other common resources. For example, in his book, *Water Privatization*, Walter Block recommends privatizing oceans.¹¹² Walter Block states, "there are vast areas of human existence where private property rights play no role at all: oceans, seas, rivers and other bodies of water. But why should we expect that there would be any better results from such 'water socialism' than we have experienced from socialism on land?"¹¹³

This same phenomenon has been proposed for many different common resources, even fish populations. In *For a New Liberty*, Murray Rothbard proposes privatization of resources leading to aquaculture and increased populations of fish.¹¹⁴ He states,

[a]nyone can capture fish in the ocean, or extract its resources, but only on the run, only as hunters and gatherers. No one can farm the ocean, no one can engage in aquaculture. In this way we are deprived of the use of the immense fish and mineral resources of the seas...Even now there is a simple but effective technique that could be used for increasing fish productivity: parts of the ocean could be fenced off electronically, and through this readily available electronic fencing, fish could be segregated by size. By preventing big fish from eating smaller fish, the production of fish could...increase enormously.¹¹⁵

¹¹² Walter Block, *Water Privatization*, thelibertycaucus.com/wp-content/uploads/2014/01/waterprivate.pdf (last visited Sept. 11, 2015).

¹¹³ *Id.*

¹¹⁴ See MURRAY ROTHBARD, *FOR A NEW LIBERTY: THE LIBERTARIAN MANIFESTO* 314-15 (2nd ed. 2006).

¹¹⁵ *Id.*

Along the same lines, Mary Ruwart states in *Healing Our World*,

“[o]wners would also be more likely to invest in artificial reefs to bolster the fish population. Whalers could operate only with the permission of the owners, much as hunters must request permission to stalk deer on privately owned land. Ocean owners profit most by making sure that the valuable species in their region are not hunted to extinction.”¹¹⁶

Individual transferable quotas for fisheries are another example of the successful privatization of natural resources. These quotas are “allocated privilege[s] of landing a specified portion of the total annual fish catch in the form of quota shares.”¹¹⁷ In *Let's Homestead the Oceans*, Donald Leal argues that individual transferable quotas lead to more secure property rights and therefore, healthier, larger fish populations since fisherman are not overfishing as a result of the Tragedy of the Commons problem.¹¹⁸ Rǫgnvaldur Hannesson echoes this sentiment in his book, *The Privatization of the Oceans*, stating that “[a]nother and much argued advantage of private use rights that are secure for the long term is the incentive they provide for the rights holders to promote prudent management of fish stocks, simply because the value of their use rights depends critically on how well the stocks are managed.”¹¹⁹

This approach to managing common resources has also been suggested by Charles Scaliger for outer space exploration, arguing that space exploration would be leaps and bounds ahead of its current status if it were privatized rather than under government control.¹²⁰ In his article *The Promise of Privatized Space*, Scaliger states, “...now with the arrival of privatized space ventures, the power of the free market is finally being brought to bear on the Final Frontier.”¹²¹ He lists many examples from a venture to mine asteroids to the potential for space tourism.¹²²

¹¹⁶ MARY RUWART, *HEALING OUR WORLD: THE OTHER PIECE OF THE PUZZLE* 265 (1993).

¹¹⁷ EUGENE H. BUCK, CONG. RESEARCH SERV., RL 95-849, *INDIVIDUAL TRANSFERABLE QUOTAS IN FISHERY MANAGEMENT* 1 (1995).

¹¹⁸ Donald Leal, *Let's Homestead the Oceans*, PERC REPORTS, Sep. 2000, at 12-13.

¹¹⁹ ROGNVALDUR HANNESSON, *THE PRIVATIZATION OF THE OCEANS*, (2004).

¹²⁰ See Charles Scaliger, *The Promise of Privatized Space*, *THE NEW AM.*, (Sep. 2, 2012), <http://www.thenewamerican.com/tech/space/item/12692-the-promise-of-privatized-space>.

¹²¹ *Id.*

¹²² *See Id.*

Even the United States government is now looking to utilize private sector solutions to improve the United States Space Station.¹²³ The United States government has looked to involve the private sector for other uses as well: “In addition to launching entire satellites, government agencies are increasingly looking to take advantage of cost savings and more quickly take advantage of new technologies and potential new research discoveries by hitching a ride on private satellites.”¹²⁴ The commander of the Space and Missile Systems Center, Lieutenant General Ellen Pawlikowski, said, “We really see that commercial satellites will play a key role. It’s not a question of whether they will, it’s just how they will.”¹²⁵ Like oceans, outer space, and fisheries, the proposed privatization of Antarctica could lead to more efficient use of a common resource.

b. Distribution of Antarctic Territories

The best method for allocating Antarctic territories is to allow countries to bid on territories. Antarctica should be split up into two zones: one zone will continue to be preserved for scientific uses only, while the other zone will be designated for non-scientific uses. Of the zone designated for non-scientific use, the land will be divided into a number of squares that share identical measurements. Countries, not individuals nor corporations, will have the opportunity to submit bids for these territories. The highest bidders will be awarded Antarctic territories, limited to one territory per country.

It may be argued that this could lead to only the wealthiest countries having an opportunity to own land in Antarctica¹²⁶; however, that is not necessarily a negative consequence, nor is it a true consequence. First, exploiting minerals from Antarctica is a costly venture. Traveling to Antarctica is costly, time consuming, and difficult. Countries will need to send workers and equipment to exploit the minerals, as well as whatever materials are necessary to sustain life while in Antarctica. The entire process is extremely costly considering the “harsh climate, short work season, and thick ice [that make] the recovery of...resources very difficult.”¹²⁷ Therefore, it is optimal for a country that is interested in

¹²³ Adam Summers, *Space Privatization Update*, REASON FOUND., (Apr. 15, 2013), <http://reason.org/news/show/apr-2013-space-privatization>.

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ Deihl, *supra* note 6 at 436 (arguing that even the Antarctic Treaty in its current state “creates an exclusive club giving the wealthier nations control over Antarctica.”).

¹²⁷ Keith Randa & Rob Lonning, *Natural Resources in Antarctica*, GLOBAL CLASSROOM, <http://www.globalclassroom.org/antarct3.html>.

exploiting minerals to not own any Antarctic territory if it will not have the financial means to not only travel to Antarctica but to successfully exploit the minerals while they are there.

Although the wealthiest countries will have the necessary capital to bid on territory, some wealthy countries may not value Antarctic territories as much as others and as a result, will not be willing to submit a high enough bid for territories. On the other hand, some developing countries may place a much higher value on Antarctic territories and minerals, leading them to outbid the wealthier countries. It is also possible that some countries may value the scientific preservation of Antarctica so highly that they choose to submit a high bid to preserve their territory for scientific research and *not* exploit their territory's minerals.

Once countries have been awarded a territory by outbidding the others, they will own a transferable right and are free to bargain as they choose after that point. If a country begins to value Antarctic territory more or less, they can bargain for other territories to reflect that increased or decreased value. This will lead to Antarctica territory going to its highest valued use.

This division could occur in a manner similar to that of the partitioning of the Ottoman Empire following World War I ("WWI").¹²⁸ Following WWI, the League of Nations was established.¹²⁹ The League of Nations was the first international organization whose principal mission was to maintain world peace.¹³⁰ Following WWI and the partitioning of the Ottoman Empire, the League of Nations "established a mandate system for societies they deemed 'not yet able to stand by themselves under the strenuous conditions of the modern world'"¹³¹ to assist the "people of the former Ottoman Empire"¹³² through the League of Nations Charter. The United Nations could serve in a similar role to that of the now-defunct League of Nations by helping to partition Antarctica between the countries to the Antarctic Treaty System. Nations interested in obtaining territory in Antarctica could submit their bids directly to the United Nations, who would administer the establishment of property rights through the division of Antarctica. The United Nations could use the revenues raised from the

¹²⁸ Dan Simonds, *WWI & the Partition of the Ottoman Empire: Mandates as a Pretext for Imperial Domination*, BINGHAMTON UNIVERSITY, (May 16, 2007),

<https://www.binghamton.edu/history/resources/journal-of-history/simonds-ottoman.html>.

¹²⁹ *League of Nations*, HISTORY LEARNING SITE, <http://www.historylearningsite.co.uk/leagueofnations.htm>.

¹³⁰ *Id.*

¹³¹ Simonds, *supra* note 128.

¹³² *Id.*

sale of the Antarctic territories for research and development for the other Antarctic zone that was preserved for scientific uses.

III. CONCLUSION

In conclusion, privatization of Antarctica represents the best solution to alleviate the shortcomings associated with the Antarctic Treaty System, namely the lack of an efficient enforcement mechanism and property rights. The privatization of resources has been proposed as a beneficial solution for many other common resources, including but not limited to the privatization of oceans and outer space. Privatization establishes clearly defined, enforceable, and transferable property rights, which results in certainty and encourages investment. This will ensure that the aforementioned Antarctic territories realize their highest valued use by being awarded to the countries that are most willing to allocate the highest amount of effort and resources to maximize the value of their territories, that is to say, responsible exploitation.