## Playing the Shadowy World of Emerging Market Shadow Banking

INSTITUTE FOR EMERGING MARKET STUDIES (IEMS) MOSCOW SCHOOL OF MANAGEMENT SKOLKOVO

> IEMS Emerging Market Brief Vol. 14-02, April 2014

IEMS EMERGING MARKET BRIEF // APRIL, 2014

### Contents

### I. Introduction

II. What And Where Is Shadow-Banking?

III. Where are the Profits for Emerging Market Banking?

IV. Buffing Up a Shadow Banking Shop

V. Getting Ready for Post-Crisis Lawmaking

VI. Conclusion

Author: Dr. Bryane Michael, Senior Research Fellow

> Editor-in-Chief: Alexey Kalinin, Director

	2
	4
Financial Institutions in Shadow	
	12
	22
	28
	34

## Introduction

Shadow banking has become an important topic among bankers and policymakers. Valued at roughly 100% of world GDP, these transactions have caught policymakers' attention, due to their contribution to global finance. Under the more mundane (and technically correct) epitaph, these non-bank financial transactions represent about \$67 trillion in credit to many well-deserving projects in emerging markets. Recent discussion has centered on how politicians and international organizations like the Financial Stability Board can regulate shadow banking. No one has written about how business people and financiers should conduct shadow banking. What opportunities exist in emerging markets for shadow banking services? How can entrepreneurs use shadow banking to help themselves (by earning profits), while providing socially beneficial credit?

In this report, we argue that non-bank financial institutions (corporate treasury officers, investment advisors, independent broker-dealers, insurance companies and trade finance groups) can increase their revenues by offering credit through under-regulated emerging market shadow banking sectors. Usually, such shadow banking consists of taking groups of loans, packaging them into securities which funnel loan payments to investors, and dividing up these securities into groups (called tranches), which provide the risk and return that various client groups desire. Non-bank organizations operating in the emerging markets that we call the Emerging Dozen can probably expand their assets under management by \$1 trillion if they capitalize on this growing area of banking.

Uncharacteristically of a policy brief, we must state several caveats in advance. Recent media attention has demonized shadow banking, in some cases (particularly in the USA) quite rightly. In this report, we do not take a normative view on the concept (arguing whether such banking is good or bad). We also do not consider the wider implications of this type of banking on the larger economy, or the

Disclaimer: This paper describes a set of policies and practices used in several economies and the potential for adopting these in certain emerging markets. Nothing in this paper represents advice to retail or other investors.

extent to which regulators should control it. We rather focus our analysis on the ways in which shadow banking can benefit entrepreneurial individuals and businesses in emerging markets. Credit from such "non-bank financial institutions", as they are often referred to, can help relieve serious credit constraints in many of the economies we have analyzed. We have therefore chosen to focus on how entrepreneurial individuals and companies can provide low-cost credit, offer investors the returns such credit generates, and still make a profit.

Shadow banking occurs when individuals and institutions (usually not legally incorporated or regulated as banks) give credit, collect interest and pass these interest payments on to investors. When a company like the Indian Housing Development Finance Corporation provides housing loans outside of the framework of the Banking Regulation Act and/or Banking Companies Act, that's shadow banking. So is when an insurance company like the Chinese Ping An Insurance resells its policies to others who want to collect monthly premiums from insurance buyers. When a bank like JP Morgan buys trade finance notes in France, bundles them into packages based on their risk and sells slices of those packages in Malta, that's shadow finance. Or when you (the reader) buy pension fund shares that invest in something that looks like a bond and pays like a bond, but in reality gets its money from housing loans, car loans and credit card debt, you too have entered the realms of shadow banking.

The size and range of China's shadow banking markets provide a useful illustration for aspiring shadow bankers in other emerging markets. A range of business loans made outside of the formal Chinese banking system have

### Figure 1: How Does Shadow Banking Work?



Buildings, trade and other economic activity receives funding that banks won't provide. These loans get securitized and sold as "shares" to investors — so it's not banking.

NAMEDRE







We chose this shadow banking example as the Wall Street Journal reports extensively on the CITIC case.

Source: Wall Street Journal and the author's analysis.

## What And Where Is Shadow-Banking?

Figure 1 uses the example of CITIC (the abbreviation derived from the company's former name - China International Trust and Investment Corporation). CITIC might fund a port operation that a typical bank manager may deem too risky. CITIC Trust (many shadow banks organize themselves as trusts) will often borrow money from "normal" banks to fund the loan, or may seek funding from hedge funds, wealthy individuals and other investors. These investors will receive "shares" in the port as collateral (known as collateralized obligations). These investors also receive a higher than market return for assuming such risks. The securitized loan (and the collateral collected for the loan) can pass to a hedge fund, an institutional investor, or indeed anyone else.

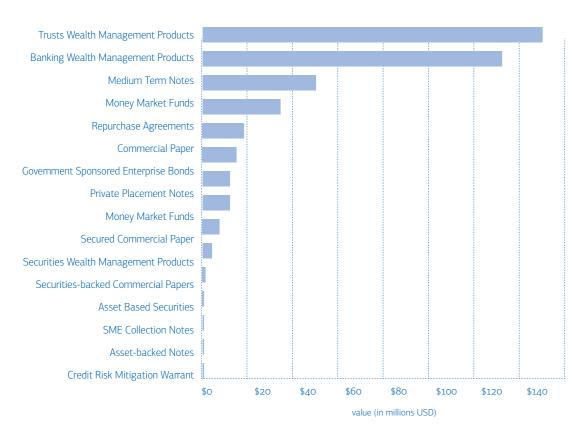
erest payments from very risky loans terest payments in RMB

CITIC "borrows" from numerous investors who want to invest in securities which pay interest in the very short term (money market funds) etc. The money is paid in "tranches" (shown in different colors above).

CCB might use CITIC securities in their bunded projects and/ or they may lend directly to CITIC Trust. They may also resell to places like China Hedge.

replaced some of the usual loan applications submitted to Chinese high street banks. As shown in Figure 2, wealth management products have served as the preferred method of bringing money to speculative business ventures, amounting to over \$240 million. These products avoid regulatory scrutiny and bring in large amounts of cash, because they are sold only to high net worth individuals with over \$1 million in assets. Pieces of risky projects have also been divided and sold as short-term tradable promissory notes (called commercial paper), money market funds, and the other types of lending shown in Figure 1. Special kinds of loans, known as repurchase agreements, usually provide shadow bankers with a key means of lending. In China's case (and in many OECD member countries), repurchase agreements serve as one of the key methods of lending (and borrowing). In the Middle Kingdom, such repurchase agreements, whereby a lender "buys" for a short time a borrower's assets with the contractual requirement that the seller buy back the asset at a slightly higher price, represents about 8% of China's shadow banking market. Some shadow banking instruments, like asset-based securities, have not quite caught on.

### Figure 2: Shadow Banks Use a Range of Methods to Provide Finance in China

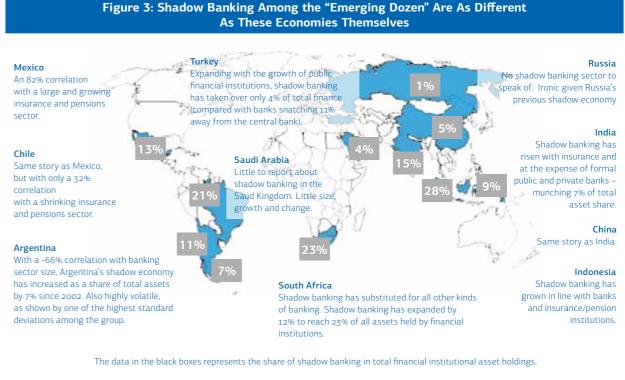


The data in the figure show the value of different shadow banking financing mechanisms in China as of May 2013.

Source: Jianjun Li (2013).

Some emerging markets clearly represent opportunities for aspiring shadow bankers. In the USA and Hong Kong, shadow banks manage roughly 40% of the total share of financial assets in their respective financial systems. In advanced economies like Korea, the UK and the Euro zone, shadow banks manage about 30% (on average) on the financial system's assets. However, a number of countries with large financial systems possess far less developed shadow banking sectors. These economies, representing most non-OECD G20 members, have shadow banking systems which

manage a much lower proportion of their financial systems' assets. These developing countries represent either a best practice in banking regulation, or a missed opportunity, depending on how you look at it. Given that the Indonesian, Mexican and Indian economies have



Source: The data is taken from Financial Stability Board (2013) and incorporates an author's analysis.

# Argentina, Brazil, Chile, China, India, Indonesia, Mexico, Russia, Saudi Arabia, Singapore, South Africa and Turkey, represent shadow banking sectors with over \$3.5 trillion in assets (about the GDP of Germany)

developed far more slowly than the American and Korean ones, we tend to think the latter. Under-developed shadow banking sectors in these countries represent a missed opportunity.

How big are shadow banking sectors in some of the largest emerging markets? Figure 3 illustrates the size and development of shadow

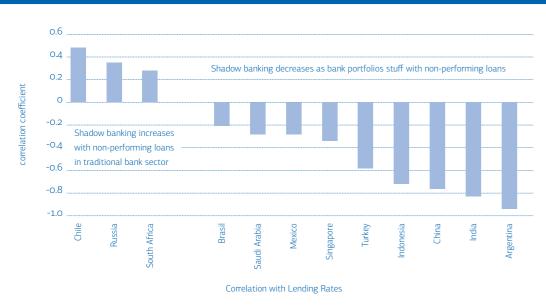
banking in the group of economies we call the Emerging Dozen. These countries - Argentina, Brazil, Chile, China, India, Indonesia, Mexico, Russia, Saudi Arabia, Singapore, South Africa and Turkey, represent shadow banking sectors with over \$3.5 trillion in assets (about the GDP of Germany). Some shadow banking sectors (e.g. in Argentina) have grown quickly. Others, such as that of Mexico, have grown slowly. If these emerging markets had the same proportion of shadow bank-controlled financial assets as those of the OECD member countries, and if such banking complemented, rather than substituted for, regular banking, shadow banking would add an extra \$1 trillion in financial assets in the Emerging Dozen countries.

### What causes the growth of shadow banking in the Emerging Dozen?

Does shadow banking increase as the quality of traditional bank lending worsens?

As shown in Figure 4, in some countries (such as Chile, Russia and Saudi Arabia) shadow banking grows as the percentage of non-performing loans on traditional banks' balance sheets increases. In the other Emerging Dozen countries, shadow banking activity (as a percent of financial sector activity) decreases as more non-performing loans appear on banks' books. In Argentina, India and China, increases in non-performing loans have very strongly correlated with decreases in shadow banking. Shadow banking thus might serve as a complement to traditional banking in some countries, and as a substitute in others. We cannot know for sure, as regulation may play a role. However, we do know that from 2002 to 2011, a 1% decrease in the proportion of non-performing loans on Argentinian banks' balance sheets corresponded with a 0.4% increase in the proportion of shadow banking assets (relative to total). The 8% decrease in the proportion of non-performing loans on Indian





The graph shows the correlation from 2002 to 2011 of the proportion of banks' non-performing loans to gross lending with the percent of financial system assets employed by shadow banking.

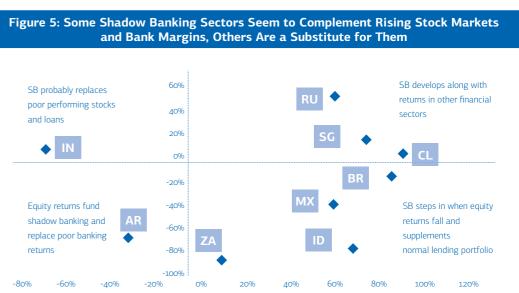
Source: World Bank for non-performing loans (2013) and FSB for size of shadow banking sector (2013).

balance sheets corresponded almost perfectly with the 8% increase in the proportion of shadow banking assets (relative to total). Yet, in Russia, shadow banking peaked around the middle of the decade, while the proportion of non-performing bank loans bottomed out. By the end of the decade, though, the trend reversed. This suggests that shadow banking (in the absence of a strong regulatory response to the data) serves as a complement to traditional

banking in some countries (e.g. South Africa), and as a substitute in others (e.g. the rest of the Emerging Dozen).

Other data supports the hypothesis that shadow banking tends to complement traditional banking activity in some countries, and be a substitute for it in others.

Figure 5 shows the relationship between the growth of shadow banking, changes in equity prices, and changes in lending rates



The data in the graph shows the bivariate correlation (correlation between two variables) between the proportion of "other non-bank financial institution" assets relative to the total financial sector assets' two variables. On the y-axis we show correlations with the S&P equity market index rates of return for each market. On the x-axis, we show the correlation with average annual lending rates in each market from 2002 to 2011.

### Individuals and companies looking to offer trade credit-based finance may find Argentina and China the best candidates for prospecting for clients

among the Emerging Dozen economies. In India, rising equity returns have correlated with increased amounts of shadow banking assets. Higher lending rates, though, have correlated with less shadow banking activity on the subcontinent. In Mexico, shadow banking asset volumes seem to follow the opposite pattern. Higher proportions of shadow banking have corresponded with falling equity prices and rising lending rates. One possible

interpretation of these trends (among many) might be that investors who lose money on La Bolsa seek to make up for lost returns through shadow banking and to supplement a generally growing lending portfolio (or industry).

What have we learned about the profit opportunities in each market for current and aspiring shadow bankers?

Figure 6 ranks the attractiveness of various Emerging Dozen countries, based on the shadow banker's particular objective. For example, individuals and companies looking to offer trade credit-based finance may find Argentina and China the best candidates for prospecting for clients. On the other hand, they may find only niche markets, or more expensive-toservice markets in South Africa and Chile.

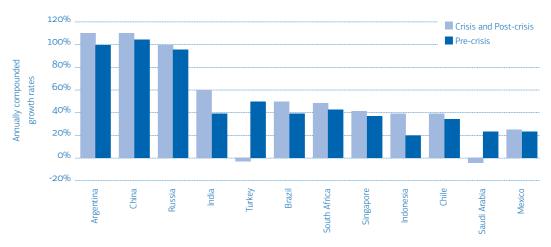
Figure 7 shows the growth rates of shadow banking, defined as financial assets managed by "other financial intermediaries". Argentina's shadow banking sector has grown fastest, and from a relatively low base. China's shadow banking sector has grown at about the same rate, also from a low base. However, given the magnitude of the Chinese economy, such growth has triggered fears among many global financial market participants. Shadow banking sectors, in economies like Mexico, Saudi Arabia and Chile, have grown far more slowly. In the post-crisis period, Turkish and Saudi Arabian shadow bank assets have contracted. Pessimistic

aspiring shadow bankers may see this fact as a sign of saturation and low growth prospects in these markets. Optimistic ones may view it as a sign of market opportunity. Low growth in post-crisis shadow banking may reflect a slow uptake of securities providing important nonbank funding.

The statistics suggest that institutions engaging in shadow banking in the Emerging Dozen may profit greatly from their work in the upcoming years. Non-OECD G-20 countries (the group we call the Emerging Dozen) possess only 7% of the world's shadow banking assets. These economies are also under shadow banked (for lack of a better term). Such low levels of shadow banking in emerging markets contrasts with the EU and USA, which each have shadow banking assets of \$22 trillion (or about twothird's of global GDP). Assets managed by "other non-bank financial institutions" in the post-crisis period (after 2007) have contracted by about 5% in the US and increased a meager 5% in the EU. In Indonesia, India and Brazil, such growth rates have exceeded 10% per year from 2007 to 2011. Investors who held shares of these non-banks would have profited greatly.

Figure 6: The Scorecard - Deepening Shadow Banking Activity Depends on Objective in Each Market			
Indicator	Top 2 best markets	Bottom 2 markets	
Market size	Mexico, Argentina	South Africa, China	
Real estate based lending	Argentina, Saudi Arabia	Indonesia, Singapore	
Trade credit and leasing	Argentina, China	South Africa, Chile	
Insurance and pensions	Russia, Turkey	Argentina, Brazil	
Take advantage of traditional banking non- performing loans	Chile and Russia	Argentina, India	
Shelter against falling equity prices	South Africa, Indonesia	Russia, Chile	
Shelter against falling bank margins	India, Argentina	Chile, Brazil	
Protection against payables stress*	China, Turkey	Brazil, Chile	
Source: authors (each ranking based on data presented in the various figures in this brief).			





Average value added from 2006 to 2011 to GDP

The data in the Figure shows the compound annual average growth rates of the assets held by 'other financial intermediaries." The pre-crisis period goes from 2003 to 2007. The crisis and post-crisis period covers 2007 to 2011.

Source: FSB (2013).

## 

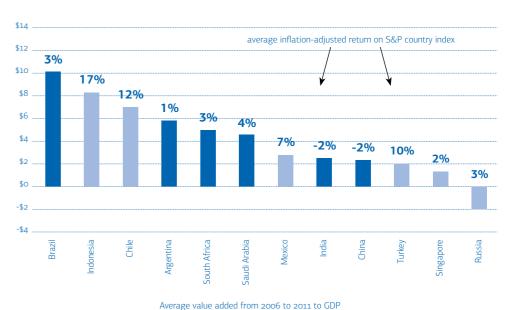
## Where are the Profits for Emerging Market **Financial Institutions** in Shadow Banking?

Profits come from saving borrowing costs and earning risk premia

Profits come from risk premia and cheaper capital, as shadow bankers can collect money from investors, rather than depositors.

Figure 8 shows the returns to investors who put money into an example portfolio of collateralized lending. In this example, investors who place the equivalent of \$100 in Brazilian reais in collateralized lending would have earned \$39 worth of real in interest. In contrast, a similar investment would have earned only about 3% (or \$3 worth of return on a \$100 investment after taking inflation into account) if invested on the Brazilian stock market. In Brazil, Argentina, South Africa, Saudi Arabia, India and China, investors who bought the collateralized lending that we present as a

### Figure 8: Brazil and Indonesia Seem the Most Promising Shadow Banking Markets



The data in the Figure shows the return on \$100 invested (in local currency) in a portfolio of securitized lending we have constructed for illustrative purposes. In our example, the shadow banker sells a bundle of lending of which 60% earns the inflation-adjusted prime rate, 25% earns the prime rate plus 2 % and 15% of the portfolio earns prime plus 5%. The country data represented by dotted bars means that shadow banking outperformed equity investment.

Source: World Bank and the author's calculatiions.

ion-adjusted one-y return on \$100

simple example would have earned more (after adjusting for inflation) than by investing on the domestic stock market. In Indonesia and Chile, investors would have earned relatively good returns (in excess of 5%) in shadow banking and "normal" equity investment.

Unlike in traditional lending, investors in shadow banking assets who buy collateralized loans can see their investment rise. The price of asset-based securities, collateralized debt obligations, packages of longer-term repurchase agreements and so forth, like all prices, depend on supply and demand. Shadow banking, despite the "banking" moniker, looks like, acts like, and earns like equity far more than loans. Shadow banks do not publish information about the market prices of their securitized and packaged loans. However, to the extent that shadow banking assets behave like equities, the spreads

on shadow bank lending often far exceed the profits from tradition banking.

The likely profitability of shadow banking varies by country. Figure 9 shows data that illustrates the potential returns to offering shares in a risky project, rather than just lending money. We cannot observe these profits directly. However, we can use data on returns to assets and returns to equity to guess what these profits might be. In recent years, Turkish shadow bankers securitizing projects would have earned a 43% rate of return on assets yielding only 5% (assuming they collateralized and sold loans on projects reflecting the broader equity market). In Saudi Arabia, South Africa and Brazil, potential shadow bankers would also have earned more than 20% on their assets by selling stakes in them as if they were equity. Only in Brazil would regular bankers (those

## In recent years, Turkish shadow bankers securitizing projects would have earned a 43% rate of return on assets yielding only 5%

taking deposits and lending them out) have earned more than shadow bankers earning equity-equivalent rates. Brazil's eye-popping spreads reflect strong measures to assuage inflation across the Federation. Naturally, shadow bank loans do not always replicate the returns available to equity. However, if these loans pay out what they earn (a concept economists know as the "marginal returns to capital"), the returns to shadow bank lending and equity shouldn't be far from one another.

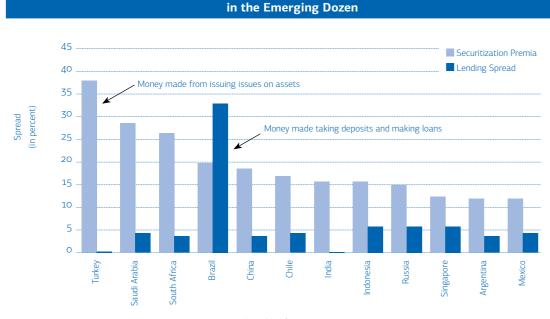


Figure 9: Shadow Banking Is Far More Lucrative Than Traditional Banking

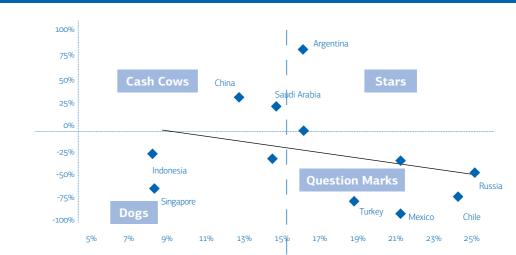
### Average value added from 2006 to 2011 to GDP

The data in the Figure shows the difference between returns on equity and returns on assets (which we call the securitisation premium). We also show the difference between the deposit and lending rate (shown as the lending spread). The data shown is for 2011, or is the latest available

Source: World Bank (2013).

Shadow bankers save money and earn higher returns than traditional bankers in several ways. Firstly, shadow bankers do not, in theory, need to borrow money to relend. They can simply pass on loans to investors in the loan-derived securities. Conversely, shadow bankers simply need to pass on the money collected from investors to "borrowers" and take a commission. Secondly, shadow bankers can take these commissions without exposure to the risks underlying these loans. If borrowers do not repay these "off balance sheet" securities, the investors, not the shadow banker, suffer. Thirdly, and very importantly, shadow bankers do not need to incur all the costs of complying with banking regulations. These shadow bankers need to keep large amounts of money known as "reserve capital". They do not need to assess accurately the riskiness of the underlying loans, as it is the investor who needs to worry about that. These shadow banks do not need to report information to their local

### Figure 10: Large Real Spenders have Slowed and Smaller Ones Have Accelerated Spending on Real Estate, Financial Intermediation and other business activities



The data in the Figure shows the size and change in real estate and financial intermediation value added from 2006 to 2011 in a range of countries. We have divided the graph into four quadrants, following the Boston Consulting Group matrix. We chose 2006 as the start year to smooth out the effects of the US-led global financial crisis.

Source: World Bank (2013).

regulators about the value of "lending", as these transactions remain off their balance sheets.

Shadow banking can be underpinned by non-project lending

Shadow banks can do more than securitize packages of project-based lending and resell them as tranches of equity-like securities. Shadow banking can help to expand funds available for residential and commercial mortgage-based lending. Such mortgage-backed investment led infamously to the US sub-prime mortgage crisis. However, not all loans, particularly in the Emerging Dozen, need securitize sub-prime mortgages. Growing real estate markets in many of the Emerging Dozen countries will generate more than enough demand for high-grade mortgage-backed securities.

Figure 10 shows the size of real estate and financial intermediation services (as a percentage of GDP), and the change in these

### Average value added from 2006 to 2011 to GDP

sectors from 2006 to 2011. Some countries, such as Russia and Chile, have high spending amounts on real estate and financial intermediation (over 20% of GDP). However, since 2006, such spending has decreased in these countries by over 50%. Given their size but rapid decline in value, we label these countries as question marks with regards to their being generators of real estate-based shadow bank lending. In countries like Argentina and Saudi Arabia, their large real estate and financial intermediation markets have grown rapidly. If past trends point to future performance, these countries will provide important shadow banking opportunities. We show the other markets and provide labels from the Boston Consulting Group growth-share matrix to provide the reader with a sense of the real estate-based shadow banking opportunities available in these markets.

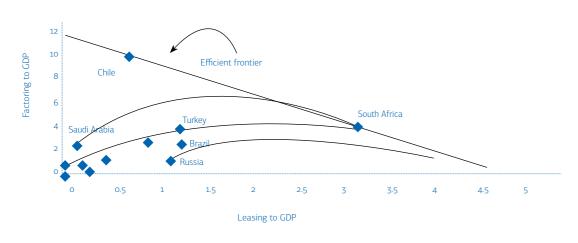
Trade finance represents another area where shadow banking can make a significant impact on funding profitable commerce. Shadow banks can help extend money to companies needing

## Shadow bankers looking to develop corporate debt markets should concentrate on Turkey and South Africa

loans while they wait for customers to pay their invoices (a process called factoring). Shadow banks can also help buy assets which companies or other parties lease. Shadow banks help to write, buy, and resell the loans that underpin these two important activities.

Figure 11 shows that many Emerging Dozen countries engage in far less factoring (buying debts that traders are owed by customers) and leasing than their best-in-class (or at least largest-in-class) peers. In it, we show each the countries' latest factoring-to-GDP and leasingto-GDP ratios. We also draw several "expansion paths", which show the way that these ratios could increase as each country's companies employ more trade credit and leasing. If past





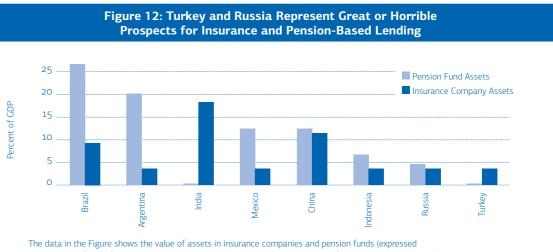
The data in the Figure shows leasing-to-GDP ratios compared with factoring-to-GDP ratios. We show expansion paths based on the predicted non-linear relationship between leasing-to-GDP and factoring-to-GDP at various levels of each variable

Source: World Bank (2013).

trends reflect future performance, shadow bankers in countries like Saudi Arabia will greatly expand finance for leasing. Interestingly, Emerging Dozen companies seem far less interested in factoring (selling their invoices this month for money which they will receive next month). Such trends, if they continue into the future, make the securitization of invoice-collateralized loans far less important.

Insurers and pension companies amass large amounts of lendable funds in the form of premiums paid for policies. For example, Ping An collected about \$33 million in premiums, but only paid out \$20 million in claims in 2012. The company can invest the extra, or lend to policyholders and non-policyholders alike.

Figure 12 shows the amount of pension and insurance assets in many of the Emerging Dozen countries (expressed as a percent of GDP for comparability). Insurers and pensions in countries like Brazil and Argentina represent large opportunities for shadow banking. Insurers can sell off the risks underpinned by these insurance policies (a process known as reinsurance), or lend out some of the extra money they do not need to remain sufficiently



as a percent of GDP) for 2011, or the latest year available. Insurance and pension funds receive regular contributions which these companies might lend to individuals and companies

Source: World Bank (2012).

### Countries that resist implementing FSB recommendations will be able to attract shadow banking activities from abroad

capitalized and liquid. Countries like Turkey and Russia also represent an opportunity for shadow banking, albeit for a different reason. These countries have large pension and insurance markets to develop. The sooner shadow banks start thinking about reselling these pension and insurance policies, the deeper they can make these markets.

What types of assets should shadow bankers invest in?

Which types of shadow banking transactions are likely to generate profits for investors in shadow banking services? Generally, more complex methods of splitting risk and farming out debt payments result in higher returns.

Figure 13 shows the returns on various types of shadow banking-related financing, compiled from a range of sources. As no benchmark rates exist for these types of finance, the rates of return shown can only approximate the returns on these kinds of funding. Yet, to the extent these returns reflect reality, the various types of collateralized lending actually outperform short-term, word-ofhonor lending. At first glance, this seems puzzling. Why would collateralized lending pay higher returns? It is the complex organization of such lending that draws these returns. Investors in assetbased securities gain advantages from lower regulatory costs, focus on targeted risks, and often tax advantages to boot.

If shadow bankers arranged lending to the ten highest risk companies employing each of the seven indicators we use, they would (under our simplifying assumptions) earn \$2.2 billion in revenues

> Some types of shadow banking assets clearly correspond differently to different clients' needs. Figure 14 illustrates how different types of shadow banking products can correspond to

Figure 13: "Synthetic" Lending Offers Far Higher Rates of Return than Plain Shadow Banking Instruments			
Instrument	US value	Return*	Description
Repurchase agreements	\$2.8t	5%	A financial or "normal" business wants to borrow money. The company "loans out" a high quality asset (like government bonds) and buys it back at the prevailing market rates (or better).
Money market mutual funds	\$2.6t	2%	Investors can buy groups of debt issued by banks and companies. Such debt usually comes due quickly (less than 3 months). Interest rate will depend on borrower's riskiness. Simple – and so not very lucrative.
Collateralised debt obligations	1.8t	5%	Most what we have talked in this brief. An intermediary buys up banks' and companies' debt and repackages such debt as new securities. Investors buy these securities (in tranches depending their riskiness).
Non-Agency Mortgage-based securities	64ob	6%	Same as above – except the mortgages represent the under- lying debt. Most readers will recognise these are culprits in the US "sub-prime" mortgage lending crisis. In theory, if the mortgages don't rate as sub-prime, this represents a sustain- able method of mortgage finance.
Asset-backed securities	64ob	5.2%	A misnomer – these are loans on credit cards, student debt, car loans and so forth. These work the same way as the examples we gave previously.
Securities lending	55ob	1.5%	The holder of stock or other securities lends out parts of their portfolio in exchange of a payment. Simple – and so not very lucrative.
Asset-based commercial paper	\$28ob	3%	A company issues short-term debt and promises to repay or lose some collateral (like a machine or land). Simple and so not very lucrative.

Sources: Deloitte Shadow Banking Index for 2012). The asset returns we report reflect our best judgment reporting the historical returns of publicly-traded index and products.

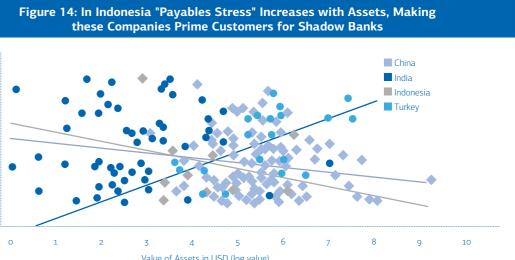
Amounts rounded to nearest significant digit.

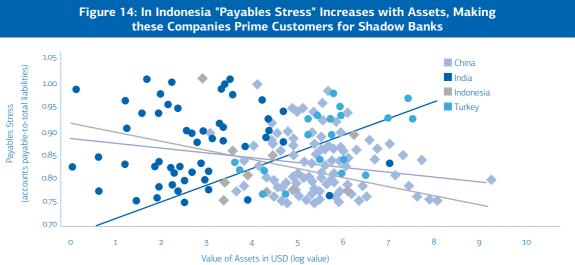
eturns taken from industry sources

differing companies' requirements. In it, we present a "payables stress" indicator. The indicator shows the proportion of total liabilities coming due usually within a month (and usually for operating expenses paid for on shortterm credit). Three trends in the data point to differing needs (and thus differing ways of profiting from shadow banking aimed at these customers). Firstly, Indonesian companies under

high payables stress have more assets to secure these short-term debts than their Indian peers (there are more black dots on the right side of the graph, whereas we see more brown triangles on the left). Secondly, bigger companies (in asset terms) experience less payables stress in China and India. The downward sloping lines labeled China and India in the graph show this negative relationship. In Indonesia, companies with more assets experienced more payables stress (at least in 2011). Indonesian companies thus represent a better market for shadow bankers. Demand for shadow banking services resulting from payables stress also corresponds with the assets available to collateralize shadow bank borrowing. Thirdly,

data to identify likely future customers. Figure 15 shows the names of the companies represented in the previous graph with the highest levels of payables stress. If shadow bankers arranged lending to the ten highest risk companies employing each of the seven indicators we use, they would (under our simplifying assumptions) earn \$2.2 billion in revenues.





The data in the Figure shows "payables stress" (defined as accounts payable divided by total liabilities compared with the log value of companies' assets. Accounts payable usually represents payments due in a month. Therefore, our payables stress measure looks at the extent to which these companies require short-term finance (often characteristic of shadow banking). We show companies with payables stress levels at about 0.75.

Source: WRDS (2013)

### Investors in asset-based securities gain advantages from lower regulatory costs, focus on targeted risks, and often tax advantages to boot

Indian companies, for the same asset holdings, have higher levels of payables stress than China or India. These stresses imply that demand for shadow banking in India likely outstrips demand in China or Indonesia (at least for payables finance).

Shadow bankers can use payables stress

### IEMS EMERGING MARKET BRIEF // APRIL, 2014

Figure 15: Using Company Data to Prospect for Shadow Banking Customers		
Demand for Shadow Banking Indicator*	Top 10 Companies	Revenues**
Payables stress	Suning Commerce Group (CN) 9.3b, Reunert (ZA) \$6.1b, Blue Label Telecoms (ZA) 4.9b, Dongfeng Automobile (CN) \$3b,	
(accounts payable-to-total liabilities)	Wuhu Port Storage & Trans (CN) \$2.6b, Combined Motor (ZA) \$2.5b, Xiamen King Long Motor (CN) \$2.1b, BYD Electronic Intl (CN) \$1.9b, Protek (RU) \$1.8b, M Video (RU) \$1.8b.	\$108m
Collection stress	BTG Pactual Group (BR) \$67.4b, Quinenco (CL) \$50.1b, Saudi Kayan Petrochemical (SA), \$12.5b, United Aircraft (RU), \$8.2b,	
Receivables-to-revenue	Gafisa SA (BR) \$5.7b, Yazicilar Holding (TR) \$5.5b, Mendes Jr. Construction (BR) \$5.5b, China First Heavy Industry (CN) \$5.3b, Sinovel Wind Group (CN) \$5.4b, Energy Transmission Alliance (BR) \$3.9b.	\$510M
Quick interest stress	Cemex (MX) \$44b, National Steelmaking Company(BR) \$28.1b, Fibria Celulose (BR), \$16.7b, Cosan (BR), \$13.3b,	\$471m
Interest payments to current liabilities	OGX Petroleum (BR) \$85.9b, All-America Latino Logistics (BR) \$8.5b, Videocon Industries (ID) \$8.4b, United Aircraft (RU) \$8.2b, Hyperbrands (BR) \$8.0b.	
Debt load	China National Building Materials (CN) \$24.5b, CIA Mining Energy (BR) \$22.4b, Mobile Telecommunication Company	
Debt-to-total liabilities	(SA) \$7.1b, UOL Group (SG) \$6.8b, GAFISA (BR) \$5.7b, COSCO (SG) \$5.6b, Xinren Aluminium (SG) \$4.3b, Chely- abinsk Pipe Rolling (RU) \$4.2b, Sunvic Chemical (SG) \$4.1b	\$265m
Cash-out-risk	Consciencefood (SG), \$48b, OGX Petroleum (BR) \$8.6b, NMDC (ID) \$5.7b, National Petrochemical (SA) \$5.3b,	
Cash-to-current liabilities	Southwest Securities (CN) \$2.8b, Saudi Arabian Fertilizers (SA) \$2.5b, Jinduicheng Molybdenum (CN) \$2.3b, Aneka Tamang (ID) \$1.7b, Changtian Plastic & Chemical (SG) \$900m, Shenzhen Yantian Port (CN) \$838m.	\$153m
Short interest stress	Quinenco (CL) \$50.1b, Companhia Siderurgica Nacion (Br) \$28.1b, China Yangtze Power (CN) \$24.5b, Powergrid (In)	
Interest to accounts payable	\$20.2b, China Longyuan Power Group (CN) \$14b, Nhpc (In) \$12.9b, Telekomunikasi Indonesia (ID) \$11.8b, Cesp- Cia Energetica Sao Paul (Br) \$10.9b. All America Latina Logistica (BR) \$8.5b, Reliance Power (IN) \$8.4b, United Aircraft Corp Jsc (RU) \$8.2b.	\$568m
Receivables stress	Indofood Agri Resources (SG) \$26b, Bumitama Agri (SG) \$5.2b, Samko Timber (SG) \$1b, Global Palm Resources (SG)	ta of m
Accounts receivable to accounts payable	\$970m, Consciencefood (SG) \$480m, Gazprom (RU) \$370m, Petrobras-Petroleum (BR) \$360m, Petrochina (CN) \$300m, China Petroleum and Chemical (CN) \$180m, Vale (BR) \$140m.	\$106m

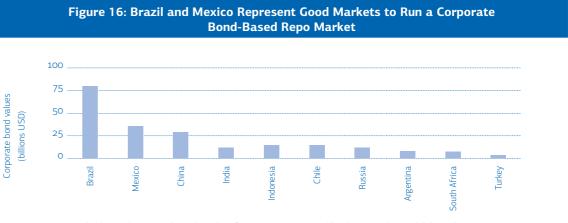
\* Ranges for the following indicators: payable stress (1 to 0.75), collection stress (1 to 100), quick interest stress (0.25 to 2), debt load (1 to 0.33), cash-out risk (0.05 to1.0), short-interest stress (100 to 2),
\*\* Revenues assume that these stressed companies borrow 30% of the value of their assets and the shadow bank "underwriter" earns a 1% commission on such borrowing (irregardless of whether the company pays 2% or 12% in interest payments) and receivables stress between 10-100.

IEMS EMERGING MARKET BRIEF // APRIL, 2014

What can the "non-bank, other financial institutions" in the Emerging Dozen (which we have been calling shadow banks) do to bolster the size of their sales of securities? These firms will want to raise the number of loans written and consolidated, as well as increase the interest rates paid on those loans and the volume of securities derived from them (that's why they are called derivatives). They will also want to increase demand for those "derived" securities, thereby increasing their price and yield. Shadow banks can work with a number of partners and potential clients in order to expand the market for shadow banking.

Work with Large Creditworthy Companies to Issue Bonds

Most of the shadow banking sector, particularly in emerging markets, thrives using high-grade bonds as collateral. In repurchase agreements (or repos), borrowers "sell" high-grade bonds for a couple of days to lenders and buy them back at a higher price that reflects prevailing interest rates. In Russia, 26% of all repurchase agreements use bonds as collateral. In other countries the proportion varies. Typically in



The data in the Figure shows the value of private non-guaranteed bonds outstanding and disbursed in 2011, current US dollars.

Source: World Bank (2013).

## IV Buffing Up a Shadow Banking Shop

Politicians in the Emerging Dozen countries should be ready to stall the implementation of FSB reforms. Stalling tactics, if combined with shadow bank-friendly policies, could attract large amounts of capital to these countries' banks and non-banks

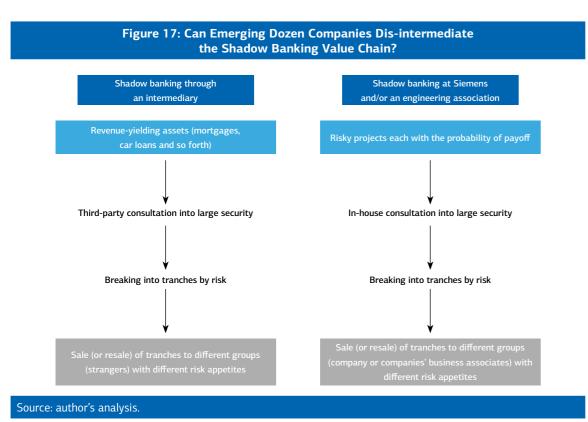
> OECD countries, companies use government bonds because they are safer. The extensive use of government debt in shadow banking transactions has encouraged analysts like the US Treasury Department expert, Zoltan Pozsar, to encourage the US government to create more Treasury bills as a way to expand the base for shadow banking. However, in many Emerging Dozen countries, companies may trust other large companies far more than the government for repayment. Companies, rather than governments, in the Emerging Dozen should issue more short-term promissory loans.

Shadow banks can encourage larger, creditworthy and reliable companies to issue more short-term loans. Such loans, known as commercial paper and short-term notes, can serve as the base of a growing (yet stable) shadow banking sector.

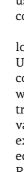
Figure 16 shows the size of these lending markets in many of the Emerging Dozen. Brazil and Mexico has, in absolute terms, the largest markets for such lending. Turkey, South Africa and Argentina have the smallest markets. On the one hand, shadow bankers looking to capitalize on relatively deep markets in corporate debt to securitize short-term lending should focus on Brazil and Mexico. On the other hand, shadow bankers looking to develop corporate debt markets should concentrate on Turkey and South Africa.

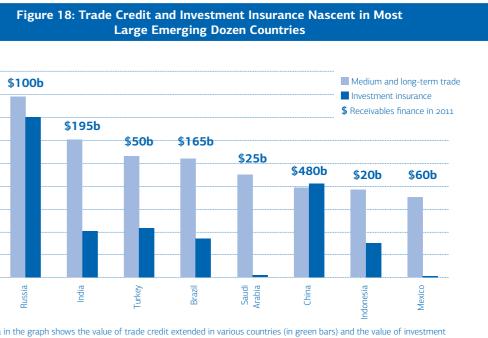
In Brazil, Argentina, South Africa, Saudi Arabia, India and China, investors who bought the collateralized lending that we present as a simple example would have earned more (after adjusting for inflation) than by investing on the domestic stock market

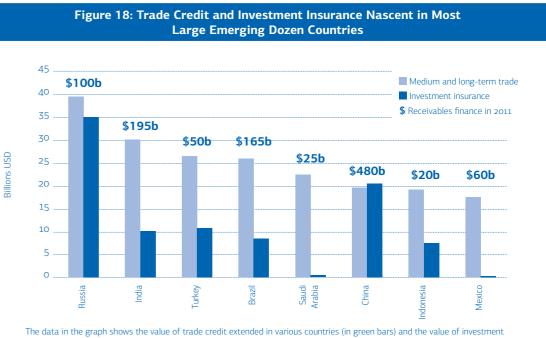
> Companies can engage in the same kind of securitization that shadow banks do. Figure 17 compares the traditional shadow banking value chain with a similar value chain



potentially constructed by large Emerging Dozen conglomerates. In the traditional shadow banking process, shadow bankers collect risky loans (or any revenue-generating asset) into bundles. They split these bundles into tranches (divided by the risks of the assets in each tranche) and sell off these tranches to investors who want them. Why can't companies do this directly? A large conglomerate can borrow money to fund literally hundreds of its projects through shadow banking. The company's finance department can set up a corporation and transfer the loans onto the balance sheet of the newly created corporation (sometimes called a "special purpose vehicle"). The special purpose company can issue shares and use the proceeds to pay back the bank loans. From then on, the company's shadow banked company can issue dividends, using the money generated from the loans.







insurance (in black bars). In most countries, the value of investment insurance (the dreaded credit default swaps) do not even equal the meager trade credit offered. We also show in gray boxes the value of end-of-year receivables in 2011. Receivables show the money owed to the company, whereas trade credit shows money the company owes). Receivables represent the total receivables reported by companies in 2011 converted into USD at the average annual exchange rate.

ource: Berne Union for trade credit and investment insurance (2012) and the WRDS Compustat for receivables data (2013).

### Extend more credit for trade

Shadow banks looking to increase their volumes of lending should consider expanding into trade credit. Money producers, sellers and shippers who need to deliver goods before they receive payments from their customers use trade credit. Yet, in many Emerging Dozen countries, traders sorely lack such funding.

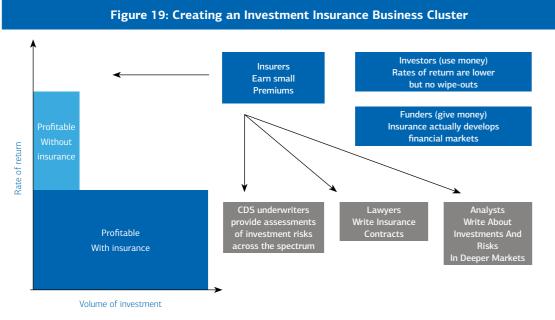
Figure 18 shows the value of medium and long-term trade finance, reported by the Berne Union (a collection of finance and insurance companies). In the Emerging Dozen countries where we could obtain data, the volume of this trade credit appears microscopic relative to the value of trade these countries do. In Russia, for example, medium and long-term trade finance equated to \$40 billion in 2011 - roughly 8% of Russia's trade with the EU alone. Other large

economies like India, Brazil and even China have extremely small volumes of such medium and long-term trade finance (we could not obtain data for short-term finance).

Two other trends in the trade finance data point to opportunities for shadow bankers. Firstly, receivables finance exceeds traderelated payables finance. In other words, Indian companies (and the other countries, to the extent that this data is comparable) give far more trade credit to their partners than they receive from their banks. From the chart we can see that in 2011, Indian companies gave \$195 billion, compared with the \$30 billion they received in medium and long-term trade credit. These companies can easily securitize these pools of receivables in the same way we have described above. Secondly, aspiring shadow bankers can write insurance on investment losses coming from their shadow banking practices, or other people's investment activity. Figure 18 shows less than \$10 billion in investment insurance

(where banks collect insurance premiums and make payments in case their investments lose money). Investment insurance, which helps reduce the risk of extending trade credit, can help increase shadow banks' profits, stabilize these countries' notoriously chaotic investment environment and deepen credit markets.

Figure 19 shows the way that deeper insurance investment activities can develop a range of banking-related activities. Investment insurance reduces returns, as investors must pay insurance premiums. However, such insurance makes a wide range of very risky investments potentially profitable. The data seems to support the view that deeper markets for investment insurance (at least for insurance related to sovereign bond default) correlates with deeper markets for corporate counsel, analysts, and different types of investments. According to IMF data, by the end of 2012, credit default swaps on Brazilian sovereign debt equaled \$156 billion. These amounts



CDS stands for credit default swap (a term meaning investment insurance). The specific sector-wide costs and benefits of investment insurance depend on the specific projects and market risks under consideration.

Source: The author's (based on observations from the USA). Based on Porter's model of cluster development.

compare with \$109 billion for Russia. Most of this insurance is written (underwritten) outside of these countries. The demand for credit default swaps (sovereign debt investment insurance) relates, for the large part, to the actual risk of the underlying bonds, as much as it does to the funds available to hedge risks related to these bonds. However, the business cluster view of investment insurance that we argue in this report seems to hold. Countries that develop deeper and more liquid markets in investment insurance tend to have a broad range of services, which support all kinds of banking (including shadow banking).

### Expand (but don't over-extend) real estate lending

America's sub-prime mortgage crisis has resulted in a strong dislike for mortgage-backed assets worldwide. Such views are unfortunate. Securitization of real estate helps spread risk and increase the funds available to families and investors who can best use such real estate.

Figure 20 shows that the Emerging Dozen relies very little on credit finance for real

Figure 20: Real Estate Lending Desultory in Most of the Emerging Dozen				
	Residential lending to GDP	Loan-to-Income	Percent loans secucuritised	Insurance widely used
South Africa	33%	27%	limited	No
Mexico	10%	28%	10%	about 12%
India	7%	-	small	No
Turkey	5%	30%	-	-
Brazil	3%	33%	incipient	No
Indonesia	3%	33%	less than 1%	-
Russia	2%	30%	some (large banks)	Yes
Saudi Arabia	2%	27%	Some	Yes
Argentina	1%	-	very few	No
China	-	-	large	No
Singapore	-	-	0%	No
с <u>г</u> : с				

### Source: Financial Stability Board (2011)

"-" means we could not obtain these data.

n some cases, we have summarised ranges provided in the original by mid-point of the ranges. For example, we summarise the range of 10%-40% for Turkey's loan-to-income ratios as 30%.

estate purchases. On a share of GDP basis, South Africa leads the list with 33% of GDP in residential lending. In Argentina, less than 1% of the value of GDP goes out on it. If residential lending reflects commercial lending, this lack of it reflects an opportunity for financiers who can find new ways to get money to markets.

The data shows that real estate-backed shadow banking may very well represent an opportunity in the making. Firstly, except in South Africa and Mexico, residential lending in most of the Emerging Dozen remains at less than 10% of GDP. These ratios represent a far cry from the USA's 85% of GDP. With average loan-to-income ratios at around 30% across the Emerging Dozen, extensive sub-prime loan underwriting appears unlikely. Whilst the US probably went to one extreme in terms of securitizing, insuring and scaling up mortgage lending, most of the Emerging Dozen appears at the other extreme. In Saudi Arabia and Argentina, lending remains desultory. The extremely marginal numbers of securitized loans in these countries mean both less saving, as well as fewer investment opportunities in mortgage-related banking.

## Getting Ready for Post-Crisis Lawmaking

The USA's (and to a lesser extent, the EU's) experience has encouraged Emerging Dozen countries to copy their legislative restrictions on shadow banking. In some cases, in China in 2013, for instance, increased legislation containing the growth of its shadow banking markets may have made its general markets more stable. Yet, Brazilian, Indian, Turkish and Indonesian regulators do their credit markets a disservice when they copy supposed shadow banking-related legislative "best practice" from the USA and the EU. CEOs in the Emerging Dozen's finance corporations, trade associations, wealth management firms, and (for lack of a better term) bucket shops, will need to grab existing shadow banking opportunities before they disappear.

Use jurisdictions friendly to derivative-based finance

Regulators in many of the Emerging Dozen countries are seeking to clamp down on the trade in derivatives that form the heart of a shadow banking transaction. Collateralized debt obligations represent derivatives of the loans that underlie much of shadow banking.

Figure 21 provides numerical ratings for each jurisdiction's progress in implementing

Figure 21: Progress toward Over-the-Counter Derivative Market Reform (as of April 2013)					
	Central clearing	Exchange/	Reporting to TR	Capital	Margin
Argentina	4	4		6	
Brazil			5	4	
China	2	4	4		
India	4	3	5	4	3
Indonesia		5	5		
Mexico	1	1	1	5	
Russia	4	4	4	4	
Saudi Arabia	-	-	4	4	
Singapore	4	1	4	6	
South Africa	4	4	4	6	
Turkey	4		4		
Source: Financial Stability Board (2012).					

Financial Stability Board proposed reforms of their over-the-counter derivatives markets. Mexico and China have evaded much of the international trend toward requiring public disclosure and trading of derivative contracts. Brazil, Indonesia and Saudi Arabia do not even report on the extent to which they have progressedin adopting such rules. This data clearly points to an ambivalent view of regulatory reform aimed at over-the-counter derivatives trade in these countries. At first glance, then, these countries seem to be potentially friendly jurisdictions for writing, selling and reselling international shadow banking activity. Clearly, countries that resist implementing FSB recommendations will be able to attract shadow banking activities from abroad, thereby enriching their financial institutions which earn trade in shadow banking assets.

However, regulators are probably a long way from imposing tight restrictions on shadow banking in even seemingly cooperative Emerging Dozen countries.

Figure 22 provides a flavor of the language used by the Financial Stability Board's recommendations for reforming shadow banking across the G-20. All the recommendations (without exception) use language too vague to adopt. Recommendations aimed at "reviews" and "assessments" propose no change to the status quo. Recommendations to "assess" regulations about shadow banks' liquidity and capital requirements provide no guidance whatsoever. On the one hand, current and potential shadow bankers should worry about such vagueness (or to put it less charitably, vacuousness). Financial regulators in the Emerging Dozen have a history of erring on the side of over-regulation. The FSB's recommendations provide a regulatory impetus (without guidance) to national regulators like the China Banking Regulatory Commission, the Reserve Bank of India, and the Russian Federal Financial Markets Service. On the other hand, such vagueness probably means that regulators will need decades before arriving at suitably concrete regulations with which to implement these abstract principles.

The Emerging Dozen's non-bank financial institutions (shadow banks) should obtain as much profit as possible, before the window closes on shadow banking opportunities. We see a 3-4 year window of opportunity for shadow bankers exclusively operating in the Emerging Dozen. Firstly, EU and US-based financial institutions (particularly their non-bank kin) will need to comply with enhanced surveillance, capitalization and liquidity requirements, even though they operate in a foreign jurisdiction. Lax regulatory standards in the Emerging Dozen countries will not necessarily help them. They will therefore have incentives to level the playing field, by removing any competitive advantages Emerging Dozen companies have from such lax regulation. Secondly, EU and US regulators have only recently introduced the specific provisions

### Figure 22: Regulators Could Destroy Incipient Shadow Banking Sectors in the Emerging Dozen if Over-Zealously Interpreting Vaguely-Worded FSB Recommendations

Provision from FSB Recommendations	Impact	Likely Impact
1. "Include" shadow banking activities on banks' balance sheets	Low	Transparency usually helps markets – even if harms individual participants.
2. "Enhance" banks' limits on exposures to shadow banks	Medium	Such limits could restrict access to capital and/or clients for SB services.
3. "Review" shadow banks capital-adequacy requirements	High	Requiring these "conduits" to hold large amounts of capital would be disastrous.
4. "Restrict" banks' ability to bailout shadow banking operations	High	Great provision – as less risky operations should not subsidize more risky ones
5. "Enhance" reform of money market mutual funds	Low	Tough to know what exactly the FSB has in mind.
6. "Assess" regulations about shadow banks' liquidity and capital requirements	High	Shadow banks have personal as well as systemic interest in preventing capital-run outs and reusing collateral.
7. "Address" securitisation-related incentives like keeping part of risk and increasing transparency	High	This could spell disaster – as the shadow bank model revolves on the transfer of risks and preventing rivals from seeing how operation works.
8. "Assess carefully" repos and securities lending regulations	High	These form the backbone of shadow banking. Extra rulemaking would reduce liquidity in the current system (at least in the OECD part of the G20).
9. "Continue to improve" transparency and reporting of information.	High	Lack of reporting aimed at keeping rivalry away rather than regulators. Goal will be to inform, without destroying markets.
10 "Be rigourous" with underwriting standards	High	The days of passing sub-prime assets onto unsuspecting institutional investors are (or should be) over.
11. "Reduce" role of credit rating agencies	Medium	An excellent move from perspective of shadow bankers as well as regulators.

ource: Financial Stability Board (with scores by authors). ns in quotes from original text to illustrate the interpretation difficulties inherent in the FSB Guidelines

that implement the broad legislation passed by their legislatures (like Dodd-Frank). As both bankers and regulators know these regulations better, pressure to copy them in the Emerging Dozen will increase.

**Expand Shadow Banking** Activities Before New **Regulations Emerge** 

Rapid changes to the legislation governing shadow banking make competing in this market increasingly difficult. The FSB recommendations look relatively anodyne. However, new legislating in the EU and USA pose two problems for shadow bankers (and their would-be peers). Firstly, many shadow banking relationships "touch" the USA or EU in some way. A US or EU bank or national may sell loans packaged in Russia or Indonesia. An American or European institutional investor may purchase the securities collateralized with these Russian or Indonesian loans. Such "touches" expose these traditions to US and EU law. Secondly, regulators in the Emerging Dozen will eventually copy legislation in the USA and/or EU.

A simple example shows why regulators in Mexico and/or China might copy this regulation. Imagine hypothetically that a shadow banking group in the Turkish Finansbank acquires package loans from Bulgaria and then sells these securities to large American institutional investors operating in the Balkans. The US Dodd-Frank Act and the European Market Infrastructure Regulation require increased reporting on transactions of this nature. Does Finansbank need to report to the Bulgarian authorities? Do they need to clear these transactions at a Turkish clearing house? Or a US one? If regulators just copy, these problems could be reduced and that would drive down compliance costs for financial institutions operating across borders.

Which laws will most likely affect shadow banking in the Emerging Dozen in the upcoming years?

Figure 23 shows the major shadow bankingrelated lawmaking (at both the legislative and regulatory levels) in the EU. The USA has similar laws. These nine laws have already

### Countries that resist implementing FSB recommendations will be able to attract shadow banking activities from abroad

started to put the FSB's recommendations into practice, at least in the EU. Taken together, these laws will impact on shadow banking in three ways. Firstly, shadow banking will have to operate far more like traditional banking. Shadow bankers will need to hold far more capital and participate in some of the underlying risk. Secondly, these laws remove much of the "shadow" in shadow banking. Increased reporting and the use of centralized clearing means that shadow bankers can no longer transact business secretly. Thirdly, increased compliance costs will decrease shadow banking profitability. Shadow banking has grown to 100% of global GDP, because market players have had a strong profit motive to use shadow bank transactions. Increased compliance costs will raise the cost of borrowing, reduce shadow bank profit markets and thus decrease the amount of credit available.

Enhanced US and EU policymaking represents a temporary opportunity for Emerging Dozen companies and banks. The costs of shadow banking will rise, margins will fall and credit will contract in the USA and EU. The sellers of money will look for jurisdictions where they can still agglomerate loans, package them, and sell them cheaply and abundantly. Politicians in the Emerging Dozen countries should be ready to stall the implementation of FSB reforms. Stalling tactics, if combined with shadow bank-friendly policies, could attract large amounts of capital to these countries' banks and non-banks.

So far, emerging market politicians seem unable, or extremely unwilling, to loosen compliance burdens governing shadow banking and other financial services.

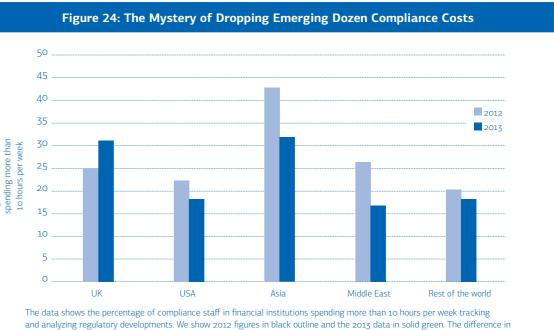
Figure 24 shows the percentage of compliance staff in the large financial institutions who spend 10 or more hours per week monitoring changes in the regulations affecting their companies' businesses. These compliance staff represent the lawyers, internal auditors, risk officers and other employees who advise on the ways in which new laws will affect their employers' banks, insurance companies, investment houses and similar enterprises. More compliance officials in Asia work over 10 hours than those in other jurisdictions. The Middle East and the rest of the world (the non-Anglo Saxon world) has compliance

Acronym	Legislation and Description	Effect on Shadow Banking	
	Alternative Investment Fund Managers' Directive	Do-it-yourself securitizers will have far mo over-sight, but still less than "respectable mutual fund and pension fund managers.	
AIFMD	Brings hedge fund managers and private equity managers stricter set of rules.		
	Capital Requirements Regulation		
CRR	Imposes minimum levels of capital for banks and non-banks. Levels determined by risks taken.	Shadow banks will likely fall under these capital requirements at some point.	
	Contingent Valuation Adjustment	Shadow banks likely to pood to consider the	
CVA	An adjustment to capital based on risks. Fi- nancial institutions must account for possible counterparty default.	Shadow banks likely to need to consider th effect of counterparty default when borrow ing and lending.	
	Debt Valuation Adjustment		
DVA	If we understood this correctly, if a financial institution loses money on its derivative trades, it should reflect those losses so its trading partners can react to extra risk posed by those losing investments.	Making counterparties value each other would reduce shadow banking activity – as much of this lending reflects risks normal banks won't take.	
	European Market Infrastructure Regulation	Would-be shadow bankers like Joe Zhang wi	
EMIR	Requires reporting of all bespoke derivatives and requires some to be cleared by central clearing house.	need to report selling shares of a small rice farm – and maybe even clear these shares i a clearing house instead of offering to inves tors who want these shares.	
	Markets in Financial Instruments Directive	Many of these provisions will seep into	
MiFID2	Organised in 5 pillars – greater reporting of bespore (called over-the-counter) derivatives, investor protector, transparency, governance, and operations in third-countries.	emerging market regulations in the upcom- ing years. While regulations still remain lax in many emerging markets, opportunities fo "regulatory arbitrage."	
	Prospectus Directive	The days of arranging a shadow banking	
PD2	Requires certain types of potential investors to receive a prospectus.	placement on a talk and a hand-shake will end across the world.	
	Swap Execution Facility	Private insurance contracts (the infamous	
SEFs	Swaps (exchanging different kinds of loans or getting insurance on some assets) must go through a clearing house.	credit default swaps) harder to organise. Another area for regulatory arbitrage.	

"intensities" at about the same level as jurisdictions where swathes of new financial regulations have come into force. Why do compliance staff in these supposedly less regulated jurisdictions work just as hard as in places where Dodd-Frank and the European Market Infrastructure Regulation have come into force? The data suggests that policymakers in the Emerging Dozen's geographical areas are failing to take advantage of the opportunities that the tightening of regulations in the OECD provides. Emerging Dozen countries seem to engage in too much, rather than too little, compliance.

And what about the risks of shadow banking? We would argue that businessmen don't need to worry about the systemic risk that their business poses to the economy. Regulators will clamp down on shadow banking everywhere, internationally. Yet credit remains a scarce commodity, in part thanks precisely to the shadow banking practices of the mid-2000s.

Current and potential shadow bankers in the Emerging Dozen should worry about their own bottom lines. Let professional regulators, whose job it is, worry about the big picture. The window of opportunity that might allow Emerging Dozen shadow banks to profit from rising regulation in the USA and EU will close soon enough.



bar size represents the change between the two years

Source: Thompson Reuters Cost of Compliance Survey (2012 and 2013).

## Politicians in the Emerging Dozen countries should be ready to stall the implementation of FSB reforms. Stalling tactics, combined with shadow bank-friendly policies, could attract large amounts of capital to these countries' banks and non-banks

## VI. Conclusion

Shadow banking represents an opportunity too good to last. Current legislative changes in many jurisdictions mean that the shadow banking opportunity won't last. How can current and would-be shadow bankers expand their lending in Emerging Dozen countries? In this report, we show that at least \$1 trillion in untapped opportunities remain. We also identify the markets in which shadow bankers can maximize their profits. The best markets depend on the type of shadow banking the reader wishes to engage in. Those interested in focusing on the largest potential market size for all types of shadow banking may wish to focus on Mexico and Argentina. Those interested in targeting markets lending in areas where borrowers often do not repay their traditional bank loans should focus on Chile and Russia. We provide fourteen other criteria that shadow bankers may use in deciding which market is best for them.

Shadow bankers can do a number of things to build portfolios. Firstly, they can work with large creditworthy companies to issue bonds. Such bonds often represent the trustworthy assets that borrowers and lenders use as collateral in transactions known as repurchase agreements. They can securitize and lend for short-term trade. They can also expand their real estate lending practices and encourage the development of clusters specializing in offering investment insurance. Finally, shadow bankers can operate in jurisdictions most likely to delay the implementation of legislation recommended by the Financial Stability Board aimed at choking off shadow banking. Brazil, Mexico and Russia seem likely candidates in the near-term.

IEMS EMERGING MARKET BRIEF // APRIL, 2014

### IEMS Research Monthly Briefs

Vol. 09-01	"The global financial crisis: impact and responses in China and Russia" (February 2009).
Vol. 09-02	"Managing through the global recession: Opportunities and strategic responses in China and
	Russia" (March 2009).
Vol. 09-03	"Global expansion of emerging multinationals: postcrisis adjustment" (May 2009).
Vol. 09-04	"Operational challenges facing emerging multinationals from Russia and China" (June 2009).
Vol. 09-05	"MNC Operations in Emerging Markets: Post-Crisis Adjustments of FDI Inflows in China and
, -	Russia" (August 2009).
Vol. 09-06	"Is Demographics Destiny? How Demographic Changes Will Alter the Economic Futures of
-	the BRICs" (September 2009).
Vol. 09-07	"Executive leadership structure in China and Russia" (December 2009).
Vol. 10-01	"Size Matters: Just How Big Are The BRICs?" (January 2010).
Vol. 10-02	"Decoupling Revisited: Can the BRICs Really Go Their Own Way?" (February 2010).
Vol. 10-03	"The "New Geography" of International Trade "How the Emerging Markets are Rapidly
0	Changing Global Trade" (March 2010).
Vol. 10-04	"Chief Executive Officer Turnover in China and Russia: Implications for Corporate Governance
-	and Strategic Management" (April 2010).
Vol. 10-05	"Sovereign Wealth Funds and the New Era of BRIC Wealth" (July 2010).
Vol. 10-06	"Corporate Giants and Economic Growth — A Case for China and Russia" (August 2010).
Vol. 10-07	"Is Low Wage Manufacturing in China Disappearing? - Who will be the World's next
	Workshop?" (November 2010).
Vol. 11-01	"The New Oil Paradigm: Can the Developing World Live with \$100 Plus Oil?" (January 2011).
Vol. 11-02	"Beyond Business, Not Beyond Government: How Corporate Social Responsibility Leaders in
	China and Russia Do Philanthropy" (February 2011)
Vol. 11-03	"All Roads Lead to Rome: High Performance Firms in China and Russia" (June 2011).
Vol. 11-04	"Stock Market Development and Performance in the Emerging Economies" (July 2011).
Vol. 11-05	"The Political Dimension Of Doing Good: Managing the State Through Csr In Russia And
	China" (August 2011).
Vol. 11-06	"Food Prices: Drivers and Welfare Impacts in Emerging Market Economies" (September 2011).
Vol. 11-07	"The Rapid Ascendency of the Emerging World's Financial Markets. A Snapshot of their
	Development" (September 2011).
Vol. 11-08	"World Financial Crisis and Emerging Market Bank Performance: A Bank Efficiency Study"
	(September 2011).
Vol. 11-09	"The Rising Cost of Doing Business in Emerging Markets: Targeting Entrepreneurs in Tough
	Economic Times" (October 2011).
Vol. 11-10	"Victimizer, Victim or What: Unraveling the Multinational Corporation's Public Crisis in China
	and Russia" (November 2011).
Vol. 11-11	"African Lions in the Making" (December 2011).
Vol. 12-01	"IEMS Emerging Market Soft Power Index" (February 2012).
Vol. 12-02	"Riskiness of BRIC Banks in a Risky World" (May 2012).
Vol. 12-03	"Hide or Fight: Profit Misreporting in Emerging Economies: China and Russia" (June 2012).
Vol. 12-04	"Brave New World SKOLKOVO-E&Y 2012 Emerging Market Index" (August 2012).
Vol. 12-05	"Towards a Eurasian Union: Opportunities and Threats in the CIS Region" (October 2012).
Vol. 12-06	"Commodities and Rapid Growth Markets: Joined at the Hip?" (November 2012).
Vol. 12-07	"Capital flows and rapid-growth markets: 1995-2010" (December 2012).
Vol. 13-01	"FDI Flows in the MENA Region: Features and Impacts" (January 2013).
Vol. 13-02	"Profitable Growth: Avoiding the "Growth Fetish" in Emerging Markets" (February 2013).

"Who is your company? Where to locate to compete in emerging markets" (February 2013).

Vol. 13-04	"Receding tide or gathering tsunami? Cr
Vol. 13-05	"Institutional regression in transition ed
	financial crisis" (August 2013).
Vol. 13-06	"Emerging Market Winners and Losers
Vol. 13-07	"The Evolving Importance of Banks ar
	structure is best for the rapid growth m
Vol. 13-08	"The Growth Elixir: Escaping the Middle
Vol. 13-09	"Evaluating emerging markets in the po
Vol. 13-10	"Money Left on the Table: Why Some E
	(December 2013).
Vol. 14-01	"Market Attractiveness Index for FDI: D
Vol. 14-02	"Playing the Shadowy World of Emergin

### **IEMS** Issue Reports

Vol. 10-01	"The World's Top Auto Markets in 2 Automotive Industry" (May 2010).
Vol. 10-02	"The Productivity Prize. Accounting for or Mirage?" (June 2010).
Vol. 10-03	"The Great Equalizer. The Rise of the 2010).
Vol. 10-04	"Central Bank Independence and the Glo Markets" (November 2010).
Vol. 11-01	"Brave New World, Categorizing the E SKOLKOVO Emerging Market Index" (Fo
Vol. 11-02 Vol. 11-03	"The New Geography of Capital Flows" ( "All That's Old is New Again: Capital Entrepreneurship in Emerging Markets"

Established in 2006, the Moscow School of Management SKOLKOVO is the largest private business school in Russia. SKOLKOVO trains business leaders to apply their professional skills in dynamically developing markets, training leaders who will set up and run their own businesses and lead the development of the Russian economy. SKOLKOVO offers a range of academic programs, including a full-time international MBA, an Executive MBA, corporate executive education programmes, the SKOLKOVO Startup Academy for young entrepreneurs, and the SKOLKOVO Practicum.

The SKOLKOVO community brings together those who believe that an entrepreneurial approach and proactive attitude are the key to the successful development of the Russian and global economies. This includes representatives of the largest Russian and foreign companies, small and medium businesses, and public authorities.

Moscow School of Management SKOLKOVO

Novaya ul. 100, Skolkovo village, Odintsovsky district, Moscow region, Russia, 143025 Phone.: +7 495 539 30 03 Fax: +7 495 994 46 68 E-mail: info@skolkovo.ru Website: www.skolkovo.ru

Vol. 13-03

ross-border lending in Emerging Europe" (March 2013). economies: Playing 'follow the leader' during the global

in Manufacturing" (August 2013). nd Markets in the Emerging World: Which financial narkets?" (October 2013).

le-Income Trap in Emerging Markets" (November 2013). ost-crisis period: a new methodology" (December 2013). Emerging Stock Markets Sell at a Discount"

Different entry modes" (March 2014). ing Market Shadow Banking" (April 2014).

2030: Emerging Markets Transforming the Global

Recent Economic Growth among the BRICs: Miracle

Emerging Market Global Middle Class" (September

lobal Financial Meltdown: A View from the Emerging

Emerging Market Economies - A New Methodology, February 2011).

' (March 2011).

Controls and the Macroeconomic Determinants of s" (April 2011).

The Institute for Emerging Market Studies (IEMS) – Moscow School of Management SKOLKOVO is a network-based think tank focused on managerial and economic issues. It is based in and dedicated to the study of emerging markets. Its mission is to undertake high-impact research that addresses critical issues in emerging market development.

This publication contains information in summary form and is therefore intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. Neither IEMS nor the Moscow School of Management SKOLKOVO can accept any responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this publication. On any specific matter, reference should be made to the appropriate advisor.

The views of third parties set out in this publication are not necessarily the views of the Moscow School of Management SKOLKOVO. Moreover, they should be seen in the context of the time they were made.

IEMS Moscow Moscow School of Management SKOLKOVO Novaya ul. 100, Skolkovo village, Odintsovsky district Moscow region, Russia, 143025 tel: +7 495 539 30 03, fax: +7 495 994 46 68

E-mail: iems@skolkovo.ru Website: www.iems.skolkovo.ru