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BRIEF

Deposit Insurance and Digital Financial Inclusion

Policy makers worldwide are increasingly appreciating the expanding role that digital financial services play in reaching financially excluded and underserved customers. Though models vary widely, all have at their heart a low-cost digital financial product—such as e-money issued by a mobile network operator (MNO) or financial institution—that permits customers to make payments, to transfer money, and to store value in small amounts. This value-storage functionality enables the offering of additional services such as digital credit and off-grid electricity on a "pay as you go" basis—services better tailored to the unpredictable cash flow of poor households and microenterprises.

The rapid scaling of digital stored-value products coincides with a sustained interest (initially triggered by the 2008 global financial crisis) in establishing or strengthening deposit insurance systems, and with emerging frameworks that extend deposit insurance coverage to financial products with characteristics similar to deposits in multiple countries. This Brief summarizes issues relevant to deposit insurance arising from emerging digital stored-value products and offers three distinct approaches for countries to consider—depending on their market structure, the nature of the products in question and their providers, and the approach being taken to deposit insurance generally—so as to address legal uncertainties and improve the protection of digital customer funds.

Answering the question "what is a deposit?" is becoming more difficult as digital financial services continue to evolve rapidly, and as unserved and underserved customers use products in new ways. The appearance of electronic wallets, prepaid plastic or virtual cards, online transaction accounts, and other value-storing instruments is making it harder for authorities, providers, and consumers to identify clearly what products are, or should be, considered deposits—and which are "deposit-like" enough to consider insuring.

The wide range of digital stored-value products and differences in design and implementation of deposit insurance systems across jurisdictions make general prescriptions on deposit insurance treatment of digital deposits and deposit-like stored-value products challenging. This said, three general approaches to deposit insurance for digital stored-value products merit policy maker consideration: (*i*) the ***exclusion approach***, whereby such products are explicitly excluded from deposit insurance coverage, although other measures to protect customers' stored value are adopted; (*ii*) the ***direct approach***, whereby such products are directly insured by a deposit insurer and their providers must be or must become members of the deposit insurance system; and (*iii*) the ***pass-through approach***, whereby deposit insurance coverage "passes through" a custodial account at a depository institution that is a deposit insurance member and holds customer funds from deposit-like stored-value products, to the individual customer of the digital product provider (although this provider is not a deposit insurance member). This Brief also explores implementation challenges for each of these approaches and suggests topics for further work to improve protection of digital customer funds.

The Basics of Deposit Insurance Systems

Deposit insurance aims to protect depositors against the loss of their savings when an individual depository institution fails. This protection reinforces trust in the financial system and averts deposit runs. Deposit insurance is referred to as an "explicit" system, where the cost of protecting deposits is largely borne by the financial industry and its customers (with a back-up guarantee from the government to make such protection credible), in contrast to a system where there is an implicit expectation that the government will step in to protect all depositors or even all creditors of a depository institution. According to the International Association of Deposit Insurers (IADI), today over 110 jurisdictions have an explicit deposit insurance system[1] as part of their "financial safety-net."[2]

Deposit insurance focuses on depositors who cannot assess the risks of their providers. Deposit insurance systems limit coverage, typically both by the maximum amount covered and by type of depositor (e.g., individuals versus legal entities). Also, deposit insurance systems aim to maximize the participation of relevant providers, to avoid both the systemic stability and consumer protection consequences of uninsured nonmembers competing in the market. IADI's Deposit Insurance Core Principle (DICP) 7 states that "[m]embership in a deposit insurance system should be

1 See http://www.iadi.org/di.aspx.

2 Financial safety-nets comprise also prudential supervision, lender-of-last-resort facilities (e.g., a finance ministry or central bank), and resolution authorities. For a more detailed description, see IADI (2014).

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compulsory for all banks" (IADI 2014, p. 26). However, DICPs do not directly address deposit insurance system participation by the types of nonbanks likely to play leading roles in offering digital deposit and deposit-like products, as discussed further below.

The introduction to DICPs notes that while, in most jurisdictions, promoting financial inclusion does not fall explicitly within the mandate of the deposit insurer, the agency and other participants in the financial safety net need to stay abreast of financial inclusion initiatives and associated technological innovations occurring in their jurisdictions, particularly those affecting unsophisticated small-scale depositors. "The involvement of deposit insurance in the promotion of financial inclusion, for example the extension of coverage to deposit-like stored value products, should be undertaken with the strong engagement of, and coordination with, supervisory authorities and other financial safety-net participants. In addition, public awareness campaigns should adequately address what types of deposits and money transfer vehicles are covered by deposit insurance and what types are not, in order to minimise potential confusion among small-scale depositors and financial service providers alike" (IADI 2014, pp. 15-16).

Digital Transactional Platforms and Deposit Insurance

While the wide variety of digital transactional platforms and the products they offer challenge generalization, some common issues relevant to deposit insurance are emerging.

Use of agents. Retail agents using a digital device connected to the telecommunications infrastructure to transmit and receive transaction details enable customers to convert cash into digitally stored value and to transform stored value back into cash. Agents thus play a critical role in expanding financial access and usage by becoming a new interface for financially excluded and underserved customers who are often located far from a financial institution's premises. Agents can be unsophisticated, which may complicate the task of communicating to new digital customers the deposit insurance status of different products (which may even be offered by the same agent side by side). Agents may also receive limited oversight and training, especially due to their physical remoteness and turnover rates. These challenges could exacerbate risks associated with fraud, data protection, record keeping, or customer due diligence, all relevant to deposit insurers, and thus should be addressed by policy makers designing a framework for agent regulation and supervision.[3]

Complex partnerships, nonbanks, and deposit insurance system membership. Digital financial inclusion models typically involve multiple bank and nonbank parties (including often nonfinancial firms such as MNOs). Many nonbank providers are not members of the deposit insurance system, and there are typically practical and legal barriers to bringing them into the system, including their not being prudentially regulated and supervised (an essential criterion for deposit insurance membership). If such providers are to be treated as deposit-taking institutions, they would have to incur multiple regulatory compliance costs, including those associated with being prudentially regulated and supervised, as well as the premiums of deposit insurance membership. On the one hand, these compliance costs could be passed on to consumers, adversely affecting access and usage; on the other hand, they would also set minimum requirements for providers to operate in a safe, sound, and sustainable manner.

Pooled accounts and stored-value account management. Nonbank providers of digital stored-value accounts typically hold customer funds in pooled custodial accounts in one or more banks or other licensed financial institutions. Given their special nature, these accounts may not be directly covered by deposit insurance (and if they are, only an insignificant fraction of the account balance would be insured, given deposit insurance coverage limits). In the case of an MNO issuing e-money and maintaining the records of individual customers' stored-value accounts, there may be practical challenges for real-time reporting to the custodian bank. Even if the customer's stored-value account is with a bank, expensive day-to-day account management may be outsourced to a nonbank party technologically equipped to perform this function more efficiently. In all these cases, the potential failure of a critical nonbank—e.g., the manager of individual stored-value accounts—complicates the task of designing effective deposit insurance, as discussed later.

Three Approaches to Deposit Insurance for Digital Stored-Value Products

Given the wide variations in emerging business models, and in the structure and implementation of deposit insurance systems, it is not surprising that functionally similar products across countries are often treated differently. These and other country-specific considerations will therefore determine which of the approaches summarized below make the most sense from a political, policy, and practical standpoint.

3 See Lauer, Dias, and Tarazi (2011); Lauer and Lyman (2015); McKee, Kaffenberger, and Zimmerman (2015); and Dias, Staschen, and Noor (2015) for further discussion on agent-related risks and agent regulation and supervision.

Exclusion Approach

Today in most countries, without the conscious attention of policy makers, digital stored-value products would be excluded from deposit insurance coverage, either because they do not meet the local definition of an "insured deposit" or their provider is not eligible for membership in the deposit insurance system. The ***exclusion approach*** as discussed here is a conscious decision by policy makers who consider digital stored-value products to be primarily instruments of *temporary* value storage to make payments or transfers.

Under this approach, the term "deposit" specifically excludes digital stored-value products (e.g., in Peru and the Philippines), and these products are therefore explicitly *excluded* from deposit insurance coverage. Customer funds are still protectable from some risks associated with the failure of their provider, for example, by requiring that the digital float be held in a custodial account (as discussed below), although many factors may limit the certainty and expediency for customers to recover their balances in case their provider fails.

Direct Approach

The ***direct approach*** includes digital stored-value products in the definition of "insured deposits" and is applied by countries where such products are provided by prudentially regulated and supervised financial institutions that are members of the deposit insurance system. Colombia, India, and Mexico have adopted this approach. They have not only permitted banks to offer insured digital stored-value products, but also created new specialized categories of prudentially regulated and supervised institutions that are allowed to offer such products, while being subject to less costly prudential requirements. With the creation of new categories of institutions, these countries have attempted to address concerns that the direct approach may stifle innovations by permitting only traditional deposit-taking institutions to offer digital stored-value products or by imposing strict prudential requirements to any new provider of such products. Another challenge of the direct approach arises with the common scenario where individual stored-value account management is outsourced to a nonfinancial firm such as an MNO, the failure of which could complicate access to customer records and adversely affect customer trust.

Pass-Through Approach

The ***pass-through approach***, the most complex and the least explored approach to date, allows for deposit insurance coverage to be extended to digital deposit-like products even when the provider of such products is not a member of the deposit insurance system. This approach is being implemented in countries like Kenya and Nigeria where deposit-like products may be provided by nonfinancial firms, including MNOs and technology companies.[4]

With the pass-through approach, the float collected by providers from customers through the issuance of stored-value products is placed in one or more pooled custodial accounts with a bank (or other insured depository institution). As the custodial accounts are held for the benefit of the end customers rather than the provider of deposit-like products (e.g., an MNO), no deposit insurance coverage is extended directly to such provider (which is not a member of the deposit insurance system). Instead, coverage is provided indirectly or "passed through" by the custodial account provider (which is a member of the deposit insurance system) to each individual stored-value accountholder—as these accountholders are the owners of the funds making up the float held in the custodial account.

Even in countries where the legal and regulatory framework has been adjusted to accommodate the pass-through approach, practical challenges may arise in its implementation. For example, when a nonfinancial firm must supply multiple banks providing the custodial accounts with real-time information on the verified identity of customers opening digital stored-value accounts through agents, as well as the constantly fluctuating balances of such stored-value accounts, there are opportunities for human or technological complications.[5] Other challenges arise when the deposit insurance coverage limit applies to the totality of funds of an individual accountholder, which would require deposit insurers to aggregate the amounts in both (*i*) accounts that are directly insured and (*ii*) stored-value accounts subject to indirect pass-through insurance. Additionally, in the event of a custodian bank failure, while in principle the pooled accounts holding customers' float could be moved by the competent resolution authority to another bank without disrupting the operations of the nonbank issuer of stored-value accounts or adversely affecting customers, the practical feasibility of such a transfer has thus far not been tested.

Topics for Further Work

Deposit insurers, policy makers, IADI, and other stakeholders are increasingly interested in better

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4 The United States, where numerous prepaid stored-value products, among others, have been approved for pass-through deposit insurance coverage, is perhaps the jurisdiction with the most experience with the pass-through approach. Notwithstanding pioneering steps taken in several key markets, like Kenya and Nigeria, the authors are not aware of any emerging market or developing economy where the approach is already fully operational.

5 For example, the United States Federal Deposit Insurance Corporation (2016) indicated that banks' deposit records are often inaccurate or incomplete and do not allow identification of owners and prompt deposit insurance determination—a challenge that is exacerbated with the use of custodial accounts by large and geographically dispersed institutions.

understanding the benefits and challenges of extending (or not) deposit insurance to digital stored-value products. In addition to the specific issues of relevance to each deposit insurance approach, other related topics need increased attention and in-depth work.

Customer awareness. DICP 10 states that "it is essential that the public be informed on an ongoing basis about the benefits and limitations of the deposit insurance." At a minimum, customers deserve clear information about whether digital stored-value products are directly or indirectly insured or uninsured. In jurisdictions where customers may promptly transfer their uninsured digitally stored value to insured accounts, they should also be clearly informed about the differences between the products. Further work is needed on effective ways to raise customer awareness, particularly in developing and emerging markets with multilingual constituencies and where some (but not all) competing products are offered via agents and mobile phones.

Improved custodial arrangements for customers' digital float. The importance of protecting the float collected from digital stored-value products has been recognized since the early developments of digital financial inclusion.[6] Initial protective measures included requiring issuers to have fraud insurance and full liquidity backing of customers' digitally stored value. More recently, increased attention is being paid to custodial arrangements for digital float. In common-law jurisdictions, the trust legal form is generally well-suited to the requirement of custodial accounts to hold digital float, providing a means of clearly establishing the individual stored-value accountholders as the beneficial owners of the funds, and insulating them from claims against the stored-value issuer—although recent developments, such as interest payments to stored-value accountholders and the still limited experience with trust administration, call for attention. In civil-law and hybrid jurisdictions where the trust legal form is absent, there is ongoing exploration of alternative approaches to pooled custodial account design that will approximate the beneficial ownership and liability insulating attributes of a common-law trust.[7]

Emerging failure-resolution issues. In some jurisdictions, the special resolution regimes for failed financial institutions may have unintended consequences for stored-value accountholders. For example, while deciding on a resolution measure, a regulator may place a financial institution into a moratorium on accepting new deposits that may last for an extended period of time, thereby creating hardship for accountholders who may be using e-money as both a deposit and a payment instrument. Alternative resolution measures may need to be designed to address such consequences. Furthermore, special resolution regimes are typically applicable only to depository institutions; however, digital stored-value products often introduce nonbanks in key roles. Further work on resolution regimes for such nonbanks will be useful, especially in jurisdictions interested in implementing the pass-through approach.

References

Dias, Denise, Stefan Staschen, and Wameek Noor. 2015. "Supervision of Banks and Nonbanks Operating through Agents." Working Paper. Washington, D.C.: CGAP, August.

Federal Deposit Insurance Corporation. 2016. "Recordkeeping for Timely Deposit Insurance Determination; Proposed Rule." Federal Register, Vol. 81, No. 38, February.

Greenacre, J., and R. Buckley. 2014. "E-Money Knowledge Product: Trust Law Protections for E-Money Customers." Working Paper No. 09/2014. Centre for International Finance and Regulation, March.

Hansmann, H., and U. Mattei. 1998. "The Functions of Trust Law: A Comparative Legal and Economic Analysis." *New York University Law Review*, May.

IADI (International Association of Deposit Insurers). 2014. "Revised IADI Core Principles for Effective Deposit Insurance Systems." Basel, November.

Izaguirre, Juan Carlos, Claire McGuire, and David Grace. 2015. "Deposit Insurance and Digital Financial Inclusion." CGAP Blog post. Washington, D.C.: CGAP, 16 July.

Lauer, Kate, and Timothy Lyman. 2015. "Digital Financial Inclusion: Implications for Customers, Regulators, Supervisors, and Standard-Setting Bodies." Brief. Washington, D.C.: CGAP, February.

Lauer, Kate, Denise Dias, and Michael Tarazi. 2011. "Bank Agents: Risk Management, Mitigation, and Supervision." Focus Note 75. Washington, D.C.: CGAP, December.

McKee, Katharine, Michelle Kaffenberger, and Jamie M. Zimmerman. 2015. "Doing Digital Finance Right: The Case for Stronger Mitigation on Customer Risks." Focus Note 103. Washington, D.C.: CGAP, June.

Tarazi, Michael, and Paul Breloff. 2010. "Nonbank E-Money Issuers: Regulatory Approaches to Protecting Customer Funds." Focus Note 63. Washington, D.C.: CGAP, July.

6 See Tarazi and Breloff (2010).
7 See, for example, Greenacre and Buckely (2014).

AUTHORS:
Juan Carlos Izaguirre, Timothy Lyman, Claire McGuire, and Dave Grace

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CGAP
1818 H Street, NW
MSN IS7-700
Washington, DC
20433 USA

Tel: 202-473-9594
Fax: 202-522-3744

Email:
cgap@worldbank.org

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