ARTICLE

A DEPOSIT SUBSTITUTE FOR POST DODD-FRANK REGULATORY POLICY ASSESSMENTS OF EMERGENT PAYMENTS: A TAXONOMICAL APPROACH

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I. INTRODUCTION: A PROPOSAL TO ADDRESS AN IMPORTANT ISSUE

The efficiency of the payments system is at risk. Existing stored value products (SVPs, e.g. gift cards and gift card apps) are early prototypes of what payments and money will become—digital, dis-intermediated, and possibly, neither state- nor bank- issued. The formulation of stored value regulatory policy in the United States ("U.S."), however, has been a complicated, slow process, ultimately producing a piecemeal scheme of broadly incoherent, uneven regulations.[1] The result of those short-term fixes has merely been to postpone looming inefficiencies and the limitations stemming from inconsistencies inherent in their use.[2]

Past regulatory efforts have thrown a startling fact into sharp relief: the relevance of deposits—the hallowed central concept of payments jurisprudence—is being undermined in SVPs and emergent payments.[3] While payments are becoming increasingly abstract, deposit-centered approaches to regulation or policy formulation are becoming ineffective or irrelevant.[4] Some of these abstract products have defied efforts to pigeonhole them into traditional categories.[5] The role of deposits—the lynch pin of payments regulation and regulatory policy—is thus under question. Meanwhile, the existing consumer framework in the U.S. does little to prepare for the demands a sophisticated, ultra abstract globalized payments system will make, at least as far as emergent stored value possibilities are concerned.

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[1] Eniola Akindemowo, *Recalibrating Abstract Payments Regulatory Policy: A Retrospective After the Dodd-Frank Act,* 21 KAN. J.L. & PUB. POL'Y 86, 105-08 (2011) [hereinafter *Recalibrating Payments*].

[2] *See id.* at 86-101; *see infra* Part II.A; *see also* Eniola Akindemowo, *Contract, Deposit or E-Value? Reconsidering Stored Value Products for a Modernized Payments Framework*, 7 DEPAUL BUS. & COM. L.J. 275, 337-39, 347-49 (Winter 2009) [hereinafter *Reconsidering SVPs*].

[3] This was the raison d'etre for the progression of SVP related inquiries dating back to the FDIC's General Counsel Opinion No.8 [hereinafter *Old FDIC Opinion 8*], 61 Fed. Reg. 40, 490 (August 2, 1996); *see also Recalibrating Payments, supra* note 2, at 104-105; *see also infra* Part II.

[4] Deposit-centered approaches base the decision to regulate on the deposit-like nature (exact or close equivalence) of the subject matter concerned.

[5] *See, e.g.*, Insurability of Funds Underlying Stored Value Cards and Other Nontraditional Access Mechanisms, 73 Fed. Reg. 67, 155 (Nov. 13, 2008) [hereinafter *New FDIC Opinion 8*] (the outcome of the FDIC's attempts to pigeonhole beginning from *FDIC Opinion No. 8*, *supra* note 3).

The changing nature of abstract consumer payments has been recognized as an important matter for attention in other jurisdictions.[6] Years ago, the European Union ("EU") deemed the task of readying the payments system for emergent payments and predicted sophisticated, ultra abstract payment methods a priority.[7] Though the EU approach has its limitations, the matter was at least accorded priority so far as law reform and policy formulation was concerned.[8] Consequently, the need for preparedness for future strategic advantage in the global payments arena has been on the EU radar for some time. In contrast, in the U.S., the wait and see approach that encouraged a degree of complacency in the past may still hinder opportunities to address shortcomings of the consumer regulatory patchwork.[9] A result of such unaddressed shortcomings is that the consumer framework is subject in effect to a looming "best by" expiration date.

Discussion of such issues, which implicate the jurisprudential underpinnings of our payments system, must ultimately lead to the question: where to from here? With an eye to the future, this article answers the important question of how SVPs may be flexibly and efficiently regulated and proposes specific steps designed to facilitate the formulation of enduring SVP policy. Part II

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[6] *See infra* Part II.C for more on the abstract nature of SVPs.

[7] *See* BANK FOR INT'L SETTLEMENTS, COMM. ON PAYMENT AND SETTLEMENT SYS., GENERAL GUIDANCE FOR NATIONAL PAYMENT SYSTEM DEVELOPMENT 1-11, 73 (2006), *available at* http://www.bis.org/publ/cpss70.pdf?noframes=1; *see also* EUROPEAN BANKING ASSOCIATION, INITIAL CONSIDERATIONS ON THE WORKING DOCUMENT BY THE COMMISSION ON A POSSIBLE LEGAL FRAMEWORK FOR THE SINGLE PAYMENT AREA IN THE INTERNAL MARKET 2-4, 6-9 (2002); Council Directive 2007/64, rec. 2-4, 10, 2007 O.J. (L 319) 1, 2 (EU), *available at* http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:319:0001:0036:EN:PDF.

[8] *See SEPA – Vision and Goals*, EUROPEAN PAYMENTS COUNCIL, http://www.europeanpaymentscouncil.eu/content.cfm?page=sepa_vision_and_goals (last visited Feb. 4, 2012) (summarizing SEPA's vision and goals). The much criticized governance structure of SEPA was revised recently to include the SEPA Council. *See SEPA Council*, EUROPEAN COMMISSION, http://ec.europa.eu/internal_market/payments/sepa/council_en.htm (last visited Feb. 4, 2012); *see also SEPA Council formed to encourage EU payments convergence and salvage project*, FSTECH, http://www.fstech.co.uk/fst/Payments_SEPAcouncilFormed.php (last visited Feb. 4, 2012).

[9] *See generally* BD. OF GOVERNORS OF THE FED. RESERVE SYS., REPORT TO CONGRESS ON THE APPLICATION OF THE ELECTRONIC FUND TRANSFER ACT TO ELECTRONIC STORED VALUE PRODUCTS (1997), *available at* http://www.federalreserve.gov/boarddocs/rptcongress/efta_rpt.pdf (failing to recommend strong regulatory action).

discusses the motivating need: the intensifying need for a deposit concept in emergent payments. Steps to the formulation of a suggested taxonomical aid follow in Part III. Part IV presents the results of a pilot run of this regulatory aid in the form of a three-layered, tailored solution to the motivating question.

II. THE ISSUE: THE NEED FOR A DEPOSIT CONCEPT SUBSTITUTE IN EMERGENT PAYMENT METHODS

A. The Waning Role of the Deposit Concept in Emergent Payments

Payment cards are commonly referred to as "access devices" because they provide access to funds in an account over which the cardholder possesses beneficial ownership rights[10] or owes repayment obligations.[11] Properly speaking, an account based/access product is not an SVP.[12] Arguably the ultimate conventional store of value, access devices are distinguishable from SVPs because SVPs are a further abstraction of an already abstract concept yet they are free of the historical obligation to repay.

Stored value products are grouped into at least three functional categories, each with distinct legal characteristics:

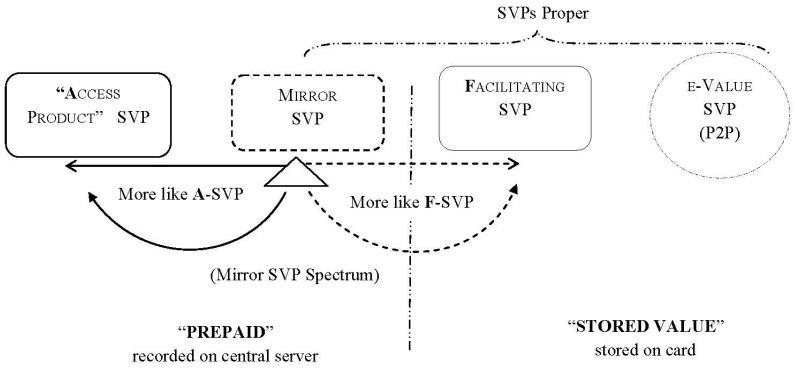

Figure 1: Spectrum of SVP Models

[10] This is the case because the cardholder or a third party previously deposited those funds for the cardholder's benefit, for example.

[11] This is the case because the cardholder is obliged to repay credit facilities provided by a card issuer, for instance.

[12] *See Reconsidering SVPs, supra* note 2, at 282-287.

Facilitating SVPs (F-SVPs) function as abstract contractual devices that create a payment obligation that is ultimately satisfied by conventional means.[13] Mirroring SVPs (M-SVPs) reflect the balance of an account or pseudo account that underlies the device.[14] Depending on how closely an M-SVP approximates an access product, it may be categorized as a so called "Access SVP" (A-SVP) or as an F-SVP.[15] With e-Value SVPs, (eV-SVPs) the device stores units that are transferrable P2P in 'spendable' form.[16] In two of these categories, the SVP functions either as a contractual device or as a form of currency.[17] It is only in the third category—where the SVP is a virtual mirror of an underlying account—that the SVP functions as an access device.[18] In this latter category, the ability to trace transactions may range between accountability and "trackability".[19] The end result is that in at least two of these three categories, the role of deposits—the conventional trigger for close payments regulation—is significantly minimized, if not outright eliminated.[20] This is a significant change.[21]

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[13] *Id*. at 342.

[14] *Id*. at 343.

[15] In general, an SVP is categorized as an A-SVP where there is a close resemblance to an access device, as an M-SVP where the similarities exist but are limited, and as F-SVP where the resemblance is extremely limited or non-existent. *See supra* Figure 1 (detailing the spectrum of SVPs types).

[16] *Reconsidering SVPs*, *supra* note 2, at 344.

[17] F-SVPs or eV-SVPs respectively.

[18] *See Reconsidering SVPs*, *supra* note 2, at 329-32 (referring to M-SVPs).

[19] *Id*. at 283-88. Payment systems are often described as 'accountable' when transactions are tracked by a central recordkeeping entity. In such systems, a balance is maintained on the card and is also stored centrally. 'Trackable' transactions are centrally tracked without account-based rights being held by the cardholder, while 'untraceable' transactions involve neither cardholder account-based rights nor central tracking. The balance, or units of such transactions, are maintained solely on the card.

[20] *See, e.g.,* Deposit Insurance Coverage; Stored Value Cards and Other Nontraditional Access Mechanisms, 70 Fed. Reg. 45, 571, 45,579 (Aug. 8, 2005) (codified at 12 C.F.R. pt. 330) (explaining "[a]n alternative approach would be to treat the funds as 'non-deposits' in those cases (if any) in which the insured depository institution sells stored value cards directly to cardholders without keeping any information as to the identities of the cardholders or any other party. This approach would be different than the FDIC's treatment of funds underlying traditional access mechanisms."); *see also Reconsidering SVPs*, *supra* note 2, at 337-39; *Recalibrating Payments*, *supra* note 1.

[21] "Having reconsidered the issue of whether funds underlying stored value products qualify as ''deposits,'' the Legal Division has concluded that such funds always should be

B. The Historical Role of Deposits

The deposit concept has long been central to payments regulation both as a characterizing feature of "banking business" and as an assessment tool for payments regulatory policy.[22] A depositor would leave funds with a depository, subject to the depositor's understanding that those funds would be repayable, not in the original funds but in funds of an equal value subject to agreed interest and other charges. The deposit thus gives rise to a debt enforceable in court. Similar arrangements have been the foundation of banking laws and policies for centuries.[23]

For almost as long a time, rules have existed to guard depositors against the imprudent actions of deposit takers (actions that might rob customers of their deposited funds). The desire to protect public deposits from wrongful dissipation was not the only motivator for such rules, however. It was because there was the need to maintain public confidence in the payments system that banking business came to be strictly limited. Unreliable entities were thus barred from the business of banking while deposits were closely regulated as a vital public interest.[24] As deposits were the foundation of conventional

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treated as ''deposits'' provided that the funds have been placed at an insured depository institution. This conclusion is based upon the general premise that the funds underlying stored value cards and other modern access mechanisms are no different, in substance, than the funds underlying traditional access mechanisms such as checks, official checks, traveler's checks and money orders. In other words, the access mechanism is unimportant. Whether funds should be classified as ''deposits'' should not depend upon the access mechanism (or whether the access mechanism is a plastic card as opposed to a paper check). Rather, as recognized by the Supreme Court, the existence of a ''deposit'' depends upon whether ''assets and hard earnings'' have been entrusted to a bank. *See FDIC* v. *Philadelphia Gear Corporation*, 106 S.Ct. 1931 (1986)." *New FDIC Opinion 8*, *supra* note 5, at 67, 156 (emphasis added). In other words, where the subject is an insured depository institution issued access product e.g. an 'Access SVP' or an M-SVP, the FDIC will regard it as a deposit product for the purposes of providing deposit insurance. The opinion applies to neither F-SVPs nor eV-SVPs, which makes sense, as in neither case are the underlying funds 'entrusted' with the expectation of being able to get those assets back.

[22] For a wide-ranging historical account of the history of banking and money, see GLYN DAVIES, A HISTORY OF MONEY: FROM ANCIENT TIMES TO THE PRESENT DAY, ch, 2,3,5,6. For a legally focused account of the history of payments see BENJAMIN GEVA, BANK COLLECTIONS AND PAYMENT TRANSACTIONS: A COMPARATIVE LEGAL ANALYSIS, 61-88 (2001).

[23] *See* GEVA, *supra* note 22, at 6-19.

[24] *Id*. *See also* People *ex rel*. Nelson v. Wiersema State Bank, 197 N.E. 537 (Ill. 1935); Priest v. Whitney Loan & Trust Co., 261 N.W. 374 (Iowa 1935); Farmers & Mechs. Sav.

payments, any appreciable loss of public confidence in the safety of deposits or in the perceived reliability of depositories would undermine such payments, threatening the stability of that system. Policy objectives of systemic safety and user protection were thus entwined around the deposit concept as it was then perceived.[25] The incorporation of a deposit within a payment mechanism accordingly marked that mechanism as one requiring legal protection because it was perceived as being especially susceptible to fraud. The safety of deposits has been a fiercely protected priority because of the central role it has played hitherto in payments systems' functionality.

C. A Prediction: There is No Going Back

Payments systems fall broadly into four generational groups: Objects-as-Money, Currency-as-Money, Claims-as-Money, and Digital-Data-as-Money. The Objects-as-Money group includes trade by barter and trade with valuable objects, while the "Currency-as-Money group" is centered on the use of coins and paper notes as money. The "Claims-as-Money group" represents a shift of emphasis from objects to claims and includes checkable deposits, credit cards, and electronic payments such as debit card transactions. The newest group, the "Data-as-Money group", is relatively new and still evolving. The "Data Group" presently includes e-money, SVPs, and mobile payments (hereafter "m-payments").

Bank of Minneapolis v. Department of Commerce, Sec. Div., 102 N.W.2d 827 (Minn. 1960).

[25] In this sense, keeping the payments system safe and sound is a primary pillar in the protection of financial service users.

<table>
<tr><th>OBJECTS
as money</th><th>CURRENCY
as money</th><th>CLAIMS
as money</th><th>DIGITAL DATA
as money</th></tr>
<tr><td rowspan="2">trade by
BARTER</td><td rowspan="2">COINS</td><td>Checkable
DEPOSITS</td><td>SVPs,
'electronic money'</td></tr>
<tr><td rowspan="2">CREDIT CARDS</td><td rowspan="2">Internet payments
e.g. NETWORK
MONEY</td></tr>
<tr><td>trade with
VALUABLE
OBJECTS</td><td>NOTES</td></tr>
<tr><td>electronic payments
e.g. DEBIT CARDS</td><td>Mobile payments e.g.
M-PAYMENTS</td></tr>
<tr><td colspan="4">Decreasing abstractness ←----------→ increasing abstractness</td></tr>
</table>

Figure 2: Payments System Generations

Abstraction, a feature of payments since the currency payments generation, came about because a convenient substitute to transfer was sought instead of the valuable object, which the substitute represents. The deposit—previously a pervasive feature of (most) payments—is itself an abstract concept. It refers to a loan of money, which the borrower is obliged repay, a debt recorded in an account. The debt, which constitutes an *obligation* to repay the money loaned, is itself an abstraction and a chose-in-action, as is the *account* which records it. Currency, on the other hand, is a manifestation of the *value* which it represents—a physical manifestation of value, value being a quality that all payments share.

Value—an ascribed quality and a qualitative measure of worth—is also an abstract concept. An object would be ascribed a certain value that makes it more or less desirable and thus transferrable. Eventually, a note would be substituted for the valuable object. Rather than collect the object for onward transfer, the claim over the object, evidenced by the note, would subsequently be transferred. In time, the claim would be manifested in electronic form, as by means of a debit card. Today, some SVPs generate virtual claims that represent transferrable value, which are of themselves valuable, and for that

reason are accepted (circulate) person to person. Therefore, such "peer-to-peer" virtual claims, to which they are sometimes referred, are called "P2P" transactions.[26] In short, the abstract nature of payments has increased over time, and the trend will intensify as virtual methods become an increasingly characteristic feature of payments.

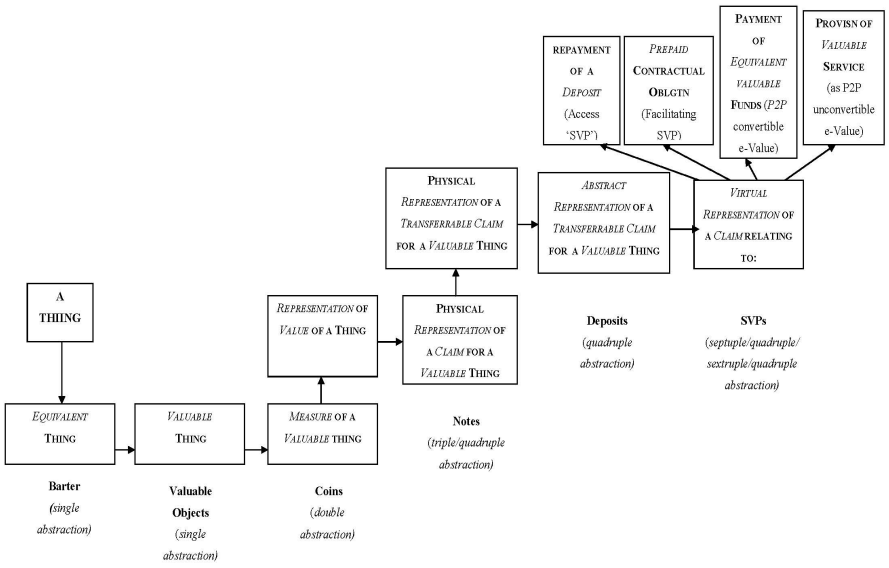

Figure 3: The Progression of Abstract Payment Features

That there is a widening gap between conventional payments and emergent payments is obvious. It is not difficult to predict that the gulf between conventional payments and emergent payment applications will widen as payments become more abstract. A long-range perspective is needed to consider changes as virtual payment methods increase and paper-based or wired methods decline. This perspective must take account of the waning influence of the deposit concept and the likely need for an alternative.[27]

[26] *See* TERRI BRADFORD ET AL., NONBANKS IN THE PAYMENTS SYSTEM 54-60 (2003) [hereinafter Bradford]; *see also* Peter Tucker, Note, *The Digital Currency Doppelganger: Regulatory Challenge or Harbinger of the New Economy?* 17 CARDOZO J. INT'L & COMP. L. 589, 593-601 (2009); David E. Sorkin, *Payment Methods for Consumer-to-Consumer Online Transactions*, 35 AKRON L. REV. 1, 2 (2003).

[27] The waning influence of the deposit concept is exemplified by the drawn-out and often inconclusive inquiries into the legal nature of SVPs. *See also supra* text accompanying notes

Ultimately, the consideration of payment methods across the payments system, in the context of likely changes, to predict the commonalities will be a fruitful exercise. Once identified, such commonalities may provide the basis for broad-based, technology-neutral rules, rules that are more likely to stand the test of time. Formulating such rules will require many heads in a long, careful debate and a complex, painstaking process. This article provides one roadmap to the beginning of such a process.[28]

It is likely that cash payments will continue to diminish, as will paper-based payment methods like checks.[29] Account-based payments, especially those in mobile form (such as a debit transactions executed via cell phone) are growing in variety and volume, and are likely to continue to do so for the foreseeable future.[30] The role of banks as intermediaries will diminish, particularly in inflexibly structured transactions, which are likely also to eventually decline in numbers.

The need for instruments and negotiability can be dispensed with in virtual P2P payments.[31] Instruments evolved as the tangible representation of a valuable object that would otherwise be transferred. Where there is no tangible

21 and 22; *see generally Recalibrating Payments, supra* note 1.

[28] The broadly inclusive, technology-neutral terms used in Title X of the Dodd-Frank Act are another positive step in this direction. *See* Consumer Financial Protection Act of 2010 §§ 1001 et seq., 12 U.S.C.A. §§ 5481 et seq. (2011).

[29] Check volumes have been waning for the last several years. *See* CAPGEMINI, THE ROYAL BANK OF SCOTLAND & EFMA, WORLD PAYMENTS REPORT 12 (2011) (noting that check use declined from 22% to 15% of all non-cash global transactions from 2005 to 2009).

[30] Mobile payments are projected to total 15.3 billion in 2013, or 15% of all card transactions and at the present rate of growth, are expected to overcome card volumes by 2023. *Id*. A rough barometer of the high expectations currently prevailing for m-payments may be found in the fact that Starbucks has introduced a Starbucks Card Mobile App as well as an Android and an iPhone app; similarly, Google introduced a Wallet app, which stores a user's credit card information on his mobile phone and permits the user to make purchases by tapping his phone at the point of sale. STARBUCKS, http://www.starbucks.com/coffeehouse/mobile-apps/starbucks-card-mobile (last visited Feb. 9, 2012); GOOGLE, http://www.google.com/wallet/ (last visited Feb. 9, 2012).

[31] More specifically, this can be done in P2P payments underlaid by P2P, rather than centralized server-based architecture. A centralized server-based service model depends on a central server that operates as a hub to which participant node users (e.g. PayPal, typical cell phone SMS P2P services) are linked. The P2P architectural model is premised on disintermediation, dispensing with the hub, necessitating a network of interconnected node users. For more on P2P systems, see JOHN F. BUFORD ET AL., P2P NETWORKING AND APPLICATIONS (2009).

valuable object to exchange and value, a qualitative measure, is ascribed to an abstract unit that can be transferred virtually, then there is no need for an instrument because the value can be transferred directly and conveniently.[32]

Illustrative of the divergence between conventional and emergent payments, therefore, is the role, or lack thereof, of tangible elements and core related concepts both respectively. The deposit concept will become less central than it has been hitherto in the payments system, but it is unlikely to be easily displaced across the payments system as a whole. The divergence between conventional and emergent payments, in other words, is not expected to be so divergent in the short run that they cease to co-exist.

Insofar as payment may be made or value paid for currency units that are convertible or refundable, a deposit, a pseudo-deposit, or pseudo–account will exist in relation to it. At this point in time, the dawn of the use of inconvertible e-currency seems remote. If (or when) convertible e-value currency becomes more mainstream, it is also unlikely to replace cash quickly, although cash will continue to decline. It seems more likely that there will be a dual currency system of co-existent physical cash currency and e-currency,[33] even if only limited convertibility back into cash from e-currency is permitted.

D. Why These Payment System Changes Are Important

A patchwork of reactionary rules holds the ideological fort, while rules addressing generic security risks have been introduced piecemeal. [34] The point is not that broad based rules are bad—after all, a framework rooted in broad-based commonalities is the subject of this article. The current framework has arguably managed, for now, to function adequately[35] despite its shortcomings.[36]

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[32] Short of radically dispensing with negotiability, the Uniform Law Commission introduced electronic chattel paper, and hence the concept of virtual negotiability, to revised U.C.C. Article 9. Electronic chattel paper is simply chattel paper evidenced by electronic information. Chattel paper may be perfected by filing, delivery, or the transfer of control. U.C.C. §§ 9-102(31), 9-312 (2010).

[33] Alternatively, if there are competing systems, more than one currency may exist.

[34] These risks are generic in the sense that they are raised by a varied group of activities and are not limited to SVP issue and use. Thus, the risks are only incidentally raised by SVPs. Regarding the piecemeal nature of prior regulatory arrangements, see *Recalibrating Payments, supra* note 1, at 105-108.

[35] *See* New FDIC Opinion 8, *supra* note 5, at 67, 157.

[36] *See id*. at 337-39.

The crucial point is that this framework is unlikely to weather the technological changes almost certain to occur—changes which, even now, are testing the foundations of our payments system.[37] Rather than an internally coherent, comprehensively responsive approach, a piecemeal jigsaw of disparate parts currently exists.[38] A cobbled together response inevitably proves a short-term solution, likely to fail future challenges ahead.

If the emerging shortcomings of the regulatory framework are not adequately addressed, the payments framework will be neither efficient nor flexible. The U.S. cannot afford to rest on its laurels; other regions according regulatory readiness a higher priority have been revamping their payments systems to meet the future demands of emergent payments for quite some time.[39] Thus, the U.S. is at risk of eroding its hard fought position of leadership in the future global payments arena because of regulatory complacency.[40] It is possible that the U.S.'s claims to lead in this arena will be met with eager derision in the future if there are scrambling efforts to address legal inconsistencies and inefficiencies after the fact, particularly if other regions had the foresight and will to at least try to do so.

These concerns are not simply theoretical; technologies certain to test these shortcomings are not only being contemplated, but are emerging now. Mobile iterations of stored value mechanisms, in the meantime, are drawing new attention. M-commerce,[41] not e-commerce, is the latest buzzword as mobile payments generate increasing interest.[42] Research and investment in m-

[37] For a discussion of the erosion of the deposit concept, see *supra* Part II.A.

[38] *See supra* text accompanying note 34.

[39] For example, the E.U. has recognized the vital need for harmonization in this area. EUROPEAN BANKING ASSOCIATION, INITIAL CONSIDERATIONS ON THE WORKING DOCUMENT BY THE COMMISSION ON A POSSIBLE LEGAL FRAMEWORK FOR THE SINGLE PAYMENT AREA IN THE INTERNAL MARKET, *supra* note 7.

[40] While there can be no doubt that the U.S. continues to play a leadership role in the global payments arena, this status cannot be taken for granted. In additional to concerns about erosion of the U.S.'s historical role as leader of the free world, there are increasingly-voiced fears that the U.S.'s influence is waning. *See Strengthening American Competitiveness in the 21st Century Before the Sen. Comm. on Health, Education, Labor, and Pensions*, 110th Cong. 11, 18-19 (statement of Bill Gates, Chairman of Microsoft Corporation); *see also* Rich Miller and Simon Kennedy, *G-20 Shapes New World Order With Lesser Role for U.S., Markets*, Bloomberg, (Apr. 2, 2009, 8:22 PM), http://www.bloomberg.com/apps/news?pid=newsarchive&sid=axEnb_LXw5yc.

[41] M-commerce refers to commercial transactions conducted by means of mobile devices such as a cell phones or PDAs.

[42] BANK FOR INT'L SETTLEMENTS, COMM. ON PAYMENT AND SETTLEMENT SYS., SURVEY

payment applications is booming[43] because m-payments are expected to revolutionize payments business.[44]

Stored value products, the subject of several rule proposal analyses over the last two decades, continue to evolve, intensifying the ramifications of this systemic misfit. The rising number of payment applications falling uneasily within or outside categorizations of "deposits" testifies to the diminishing efficiency of certain payment concepts. The need to reconcile—or if not, to distinguish—the characteristics of increasingly abstract, practical, mobile payment methods with jurisprudential concepts is daily evident.

It is time to devise and implement a long-range plan to adapt the payments system for the future changes that are now beginning to manifest. The recent financial system overhaul reviewed the hierarchy of regulators, dispensing with some regulators and introducing others.[45] The new Bureau of Consumer Financial Protection ("BCFP") is the sole agency authorized to administer federal consumer financial protection law, including the supervision of consumer financial products and services.[46] The jurisdiction of the BCFP is

OF DEVELOPMENTS IN ELECTRONIC MONEY AND INTERNET AND MOBILE PAYMENTS 4 (2004), *available at* http://www.bis.org/publ/cpss62.htm ("Payments made using the internet and mobile phones have advanced rapidly and have become quite important in the field of electronic retail payments recently compared to e-money." (footnote omitted)); *see also* David S. Evans, *The Decade's 12 Greatest Developments in Payments: #2 Mobile Payments*, PYMNTS.COM, (Jan. 3, 2010, 2:10 PM) http://www.pymnts.com/the-marriage-of-mobile-and-payments-make-the-world-a-better-place/.

[43] The number of mobile payment patent applications started to increase in the late 1990s and has sharply accelerated thereafter. *See* Ari Hyytinen & Tuomas Takalo, *Who Owns Mobile Money?*, PYMNTS.COM, http://www.pymnts.com/who-owns-mobile-money/ (last visited Feb. 9, 2012).

[44] *See Online Banking Report Publishes New Issue "Online & Mobile Banking Forecast: Current, Future and Historical Usage: 1994 to 2019",* PYMNTS.COM, (Feb. 15, 2010, 6:54 AM), http://www.pymnts.com/online-banking-report-publishes-new-issue-online-mobile-banking-forecast-current-future-and-historical-usage-1994-to-2019-20100215006214 (projecting that 73 million households will be paying bills by mobile by 2013); *see also* Minna Mattila, *Factors Affecting the Adoption of Mobile Banking Services*, JOURNAL OF INT'L BANKING & COMMERCE, *available at* http://www.arraydev.com/commerce/JIBC/0306-04.htm (last visited Feb. 10, 2012).

[45] *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376-2223 (2010) (codified in scattered sections of U.S.C.) [hereinafter Dodd-Frank Act].

[46] Title X of the Dodd-Frank Act creates the BCFP. *See* Dodd-Frank Act, Title X, *supra* note 23, §§ 1021(a), 1022(a) [hereinafter BCFP Act]. The existence and role of the BCFP, as indeed the Dodd-Frank Act in it's entirety, however remains the object of fierce political

broad, covering the protection of consumer users of payment products and services,[47] as well as rule-making and regulatory gap-filling.[48] Significantly, the BCFP is the sole rule-making authority for federal consumer financial protection matters.[49] As this new agency commences operation, a fundamental shift in perspective by payments regulators is in order. Regulators must be willing to "think outside the box" to entertain even radical solutions if the goal is to develop a payments framework likely to function efficiently in the future.

III. A SOLUTION: A TAXONOMY OF EMERGENT PAYMENT OBLIGATIONS FOR REGULATORY ANALYSIS AND POLICY STEERING

A. The Proposal

For centuries, payments have embodied a linear procedure: the physical exchange of funds typically gave rise to a physical note of the deposit that was good for exchange and often was negotiable. The transaction created an obligation to repay the amount of the funds transferred initially, which obligation could be redirected by negotiation. A particular *obligation* to repay was the central basis, a powerful core common to banking and transfers. That obligation shaped the rules and doctrine that evolved as the body of banking and payments law. The root obligation was embellished over time with rules, regulations, and doctrine, which varied according to perceived or deemed needs. Those needs shaped objectives for regulations and regulatory policies, and the risks that were perceived to arise from their existence. This process, particularly the norms utilized inspired the approach suggested in this article.[50]

The heart of conventional transactions is a common obligation to repay funds. Even where payments metamorphosed and were shaped by technological advances, an obligation to pay, associated strongly with a contractual, account-based relationship[51] was the basis of the interaction between parties. Stored value products do not necessarily embody either a

contention, and cannot perhaps yet be taken for granted. *See* Edward Wyatt, Dodd-Frank Act a Favorite Target for Republicans Laying Blame, NEW YORK TIMES, Sept. 20, 2011, *http://www.nytimes.com/2011/09/21/business/dodd-frank-act-is-a-target-on-gop-campaign-trail.html?pagewanted=all*.

[47] *See id*. at § 1021(b)(5).

[48] *See id*. at § 1021(b), § 1021(c), § 1022.

[49] *See id*. § 1022(b)(4).

[50] *See supra* Part II.B*; see also infra* note 92.

[51] For example, credit cards.

deposit or an account relationship.[52] Yet the roots of the proposed solution are found in both the history of payments and the technological evolutionary prelude that SVPs represent. The proposed solution suggests the careful design of a taxonomy of characteristic, careful SVP payment obligations. Used thoughtfully to assess potential regulatory subjects,[53] this taxonomical aid will facilitate deeply analyzed, tailored answers to questions regarding whether to regulate or not, and to what degree, that will ultimately arise. Previous research had indicated that the conceptual nature of the three payment forms to be assessed were distinctly different,[54] so the ultimate finding that in the case of SVPs, one obligation type "did not fit all" was not entirely surprising. The investigation on which the proposed solution is based focused on the types of obligations involved in the payment methods assessed, the transactional embellishment represented by the type and number of parties involved, and the transactional sophistication of the related technology. A consideration of possible perceptions led to the assessment of risks and possible objectives behind decisions to regulate or not.[55]

B. Devising A Taxonomical Aid

Once an assessment of obligation types became the initial inquiry of this project, a possible approach began to take form. F-SVPs and M-SVPs were assessed in terms of their core obligations.[56] The obligation types on the resulting list were then further assessed in terms of the risks they might pose. Once those risks were mapped to SVP type, it became possible to assess those mapped risks against a list of potential regulatory objectives. The point of this assessment was to arrive at an objective assessment of what were optimum balances between risks, benefits and regulatory objectives. At this point, the layered nature of the ultimate solution began to emerge, e.g. the possibility that differentiated contracts might serve F-SVPs well but not the other two.

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[52] *See Reconsidering SVPs*, *supra* note 2, at 337-39; *see also Recalibrating Payments*, *supra* note 1.

[53] Such as SVPs or mobile hybrids of the same.

[54] *See Reconsidering SVPs*, *supra* note 2, at 328-36.

[55] A comparable evaluation is documented in Olujoke E. Akindemowo, *Electronic Money Regulation: A Comparative Survey of Policy Influences in Australia, the European Union and the United States of America*, 11 J.L. & INF. SCI. 61, 62-65 (2000-2001) [herineafter *Comparative Survey*].

[56] For more on these categorizations, see *supra* Part II.B and *Reconsidering SVPs*, *supra* note 2, at 328-36.

The next step was to prioritize all three subjects in terms of their suitability for regulation.[57] Here the nature of regulation—i.e. by means of contracts, by means of "deposit-lite" rules, or by means of eCurrency policy—was analyzed and eventually differentiated to assist policy steering. A specialized "beefed up" contractual approach, for example, could be used for lesser risk obligations, "deposit- lite" rules could be used in the case of riskier, more sensitive pseudo-deposit products, and eCurrency might be reserved for governmental implementation only.[58]

1. Identify Obligation Variants

As a starting point, it should be recognized that the contracts underlying the three SVP types under analysis are contracts for goods and services, but are distinguishable from "ordinary" contracts.[59] Using F-SVPs as an example, the construct facilitating the prospective contractual transactions is not only prepaid, it underlies the entire arrangement.[60] The construct includes the understanding that any goods or services provided thereby will create no payment obligation on the cardholder, just on the card issuer.[61] There is something more than an ordinary sale in which the customer has paid in advance for purchases that are claimed and delivered later. These SVP contractual obligations should be differentiated from and accorded a stronger priority than ordinary contractual obligations because the unconventional origin and nature of these obligations permeate the entire transaction. The obligations originate with an ultra-abstract payment instrument (i.e. the SVP), and goods and services are already paid for before the cardholder receives them.

This is not as radical an idea as it might seem. It is approximately how banking rules evolved: from contractual obligations into specialized contractual rules. Banking obligations were of a sensitive nature because they related to the safety of public deposits, and were therefore accorded a higher priority.[62]

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[57] *See infra* Part III.B.3(c); *see also Reconsidering SVPs, supra* note 2, at 328-36.

[58] *See infra* Part IV.

[59] *Reconsidering SVPs*, *supra* note 2, at 340, 349.

[60] *Id*. at 289-296, 328-329.

[61] *Id*. at 293.

[62] The protection of deposits has long been a primary strategy in the operation of the payments system. Adam M. Zaretsky, *Learning the Lessons of History: The Federal Reserve and the Payments System,* THE REGIONAL ECONOMIST (July 1996), *available at* http://stlouisfed.org/publications/re/articles/?id=1805. The regulation of deposits is the

	PerfOb: contractual obligation to perform a non payment action
	ConOb: contractual obligation to pay a third party
	pConOb: prepaid contractual obligation to pay a third party

Figure 4: SVP Performance Obligation Types

The **p**repaid **Con**tractual **Ob**ligation that the issuer owes the cardholder—called a **pConOb** (pee-con-awb) for short—will create rights or impose obligations on all the parties involved.[63] The issuer is obliged to pay the merchant for goods or services released in advance to the cardholder. The cardholder is not obliged to pay the merchant and is entitled to demand the release of goods or services from the merchant. The merchant is entitled to demand payment from the issuer for such goods or services released to the cardholder. The cardholder thus has the right to exercise a pConOb and to enforce it, but there may be restrictions on the period of time the cardholder has to generate the pConOb, how the pConOb may be exercised, and even how the purchased goods or services may be claimed by the cardholder.[64] The issuer, in turn, is obliged to execute the pConOb by paying the merchant even though the pConOb was generated not by the merchant, but by the cardholder. The issuer will also have some rights, which will be shaped by the extent to which the pConOb is restricted. The merchant for whose benefit the pConOb comes into being will have rights against the issuer as a third party beneficiary.[65] The issuer will thus owe secondary, rather than direct,

preferred means of providing this protection. *See supra* Part II.B; *see also supra* notes 24, 25; *infra* note 93.

[63] The proposed obligation names are intended to be a shorthand description of the essential nature of each SVP obligation type identified.

[64] Restrictions may include the requirement that the pConOb be generated by means of a specific card, token or computer chip previously issued to the cardholder, that the obligation must be created at authorized point of sale terminals only, or that transactions must be completed before a certain expiry date. However, there are restrictions on such terms: gift cards cannot expire for at least five years after they were last loaded with money unless the full value has been used. 15 U.S.C. 1693 § 915(c) (2006). Additionally, dormancy charges may not be applied unless the card has been inactive for 12 months. 15 U.S.C. 1693 § 915(b) (2006).

[65] *See Reconsidering SVPs*, *supra* note 2, at 293. The bare bones of this arrangement are similar to the anatomy of a credit card transaction. However, having made the prepayment

obligations to a third party by this arrangement.[66] This secondary prepaid obligation to pay a third party that is enforceable by the third party will be referred to as a **pConpayOb** (pee-con-pay-awb).[67]

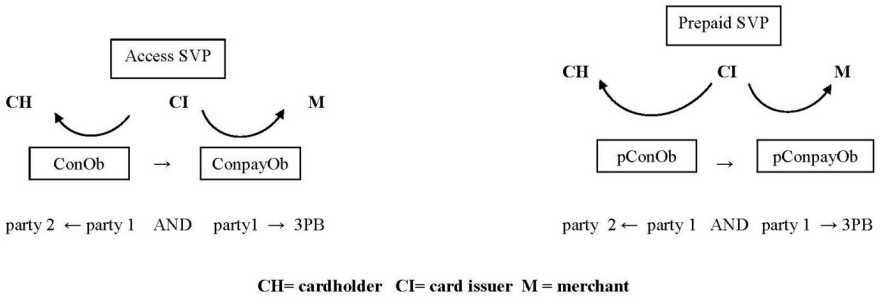

Figure 5: SVP Contractual Obligation To Pay A Third Party

	PayOb: primary contractual payment obligation
	DetOb: payment obligation arising other than from contract
	RepayOb: obligation to repay lent or deposited funds
	ConpayOb: secondary payment obligation to third party
	pConpayOb: prepaid secondary payment obligation to third party

Figure 6: SVP Payment Obligation Types

But why highlight these obligations and resort to new shorthand[68] when the obligations are in essence contractual obligations to pay for a bargained

from which the pConOb derives, at no point in the ensuring process will the SVP holder be obliged to pay either the issuer or the merchant anything at all.

[66] There will of course also be a direct (unremarkable) contractual relationship between the Issuer and third party Retailer under which the Retailer agrees to permit cardholder purchases by means of the SVP and the Issuer agrees to reimburse the Retailer for the value of such purchases.

[67] The Restatement (Second) of Contracts confirms the ability of third party beneficiaries (as opposed to incidental beneficiaries) to enforce beneficial obligations, noting that the promisor is thus obliged to both the other party (promisee) and the third party beneficiary. RESTATEMENT (SECOND) OF CONTRACTS §§ 302, 305 (1981).

[68] *See supra* note 64 and accompanying text.

exchange, albeit obligations worthy of a high priority? The answer is that these obligations are distinctive. They are distinguishable, and should be distinguished, from garden-variety contractual obligations for a few reasons.

Ordinary contractual obligations are usually inter partes; that is, they are usually between a first party[69] promisor and second party promisee.[70] The typical obligation to pay a contractual debt is thus inter partes; it emanates from an executed transaction, or if it is provided for in an executory arrangement that is yet to occur, no debt will come into being until the transaction actually occurs. In the latter case, the distinct existence of the contractual performance obligation (to execute the agreed transaction at a future date) and of the payment obligation (to pay the consequent debt when it falls due) is especially obvious. The obligation at hand, the contractual obligation to pay a third party (ConOb), is a contractual performance obligation, not a payment obligation. Owed directly to the second party, this performance obligation is however inextricably linked in this SVP context to the fulfillment of a payment obligation. The owed performance is to make payment not to the other party, but to a third party. This bargain sees the promisor undertaking a contractual obligation to pay a third party beneficiary for goods or services to be received by the promisee, but before the promisee ever receives any goods or services. This again is not a new arrangement. The contractual arrangement underlying the typical credit card is so structured. The distinction is that unlike the credit card situation, where the promisee reimburses the promisor for goods and services received by the promisee after the fact, the promisee in the SVP situation will either pay the promisor in advance (prepaid SVP) or grant the promisor access to a deposited amount in advance of receipt of any goods or services. A final point of distinction is that ordinary contractual obligations may be entered into between any two willing, agreeable parties whereas a ConOb comes into being exclusively between an SVP issuer (promisor party) and SVP cardholder (promisee party) contemplating the conferral of a specific benefit—the right to demand payment from the issuer—on a third party.[71]

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[69] Or a group of persons representing the first party promisor, and vice versa.

[70] RESTATEMENT (SECOND) OF CONTRACTS § 2 (1981).

[71] This holds true for Access, Facilitating, and Mirror SVPs. E-value SVPs, because they are analogous to currency, raise somewhat different obligations. *See Reconsidering SVPs*, *supra* note 2, at 337-39.

2. Determine Constituent Commonalities

A preliminary contemplation of which commonalities might emerge as payments incorporate more virtual features produces interesting results. Reduced to their constituent obligations, payments[72] consist of any of three main obligation types: performance obligations, payments obligations, and value obligations.

PERFORMANCE OBLIGATIONS	***PerfOb***: contractual obligation to perform a non payment action
	ConOb: contractual obligation to pay a third party
	pConOb: prepaid contractual obligation to pay a third party
PAYMENT OBLIGATIONS	***PayOb***: primary contractual payment obligation
	DetOb: payment obligation arising other than from contract
	RepayOb: obligation to repay lent or deposited funds
	ConpayOb: secondary payment obligation to third party
	pConpayOb: prepaid secondary payment obligation to third party
VALUE OBLIGATIONS	***eQuiv***: obligation to convert units to equivalent value in funds
	valOb: obligation to provide value e.g. by enabling P2P circulation

Figure 7: Table of Obligation Groups

A payment obligation may arise from different sources, such as a debt, a contractual transaction, or a prior loan. The contractual obligation to pay for goods or services incurred, say, by a cardholder from a merchant, will be referred to as a **PayOb**. It derives from a contractual transaction and is not prefaced by a loan. The shorthand term **DetOb** will also be used to distinguish payment obligations arising from something other than a contract—debt obligations, for example.[73] Particularly significant in payments is the

[72] That is, the range of payment models to be found in the currency, claims, or data group categories noted above. *See supra* Figure 2.

[73] Reference to the common law action in debt, reflected in the modern ability to sue to collect what is due on a debt without needing to frame the claim according to the ancient action of debt.

obligation to repay a (prior) loan, a **RepayOb**, a specialized debt that is strongly protected in payments law.

A **ConOb** is similar to a PayOb in that they both represent an obligation to make a payment, but the ConOb differs by obliging the issuer, rather than the cardholder, to pay the merchant.[74] The issuer incurs a performance obligation, the ConOb, which gives rise in turn to the duty to pay the third party merchant, which is a payment obligation, a **ConpayOb**. In the case of a **pConOb**, the issuer's performance is preceded not by a loan, but by a pre-payment. By this pre-payment the cardholder pays in advance the price of goods or services in return for which the card issuer promises to pay the merchant for such transactions on the cardholder's behalf. The performance pConOb thereby gives rise to a **pConpayOb**, a payment obligation contracted for by the cardholder that is enforceable by the third party beneficiary merchant. A contractual obligation to perform a non-payment action will be referred to simply as a performance obligation, or a **PerfOb**.

	eQuiv: obligation to convert units to equivalent value in funds
	valOb: obligation to provide value e.g. by enabling P2P circulation

Figure 8: Value Obligations

Although the units in a convertible e-value system, referred to as **eQuivs,** resemble a RepayOb, the two are distinguishable because the payment obligation arises from the convertibility of payment unit rather than a prior loan. Insofar as true P2P currencies obviate the need for user accounts, the redeemability of units vindicate the creditworthiness of the system, rather than reflect the repayment of a loan. In an unconvertible system, the obligation associated with the circulating unit (the obligation to provide a unit of equal value if, say, the replaced unit was corrupt) or the obligation to provide a unit that will circulate P2P as promised and thus be accepted as good value, referred to for short as a **ValOb**, is similarly unrelated to the making of a loan.

A currency transaction occurs because there is the desire or obligation to transfer a valuable currency unit—in other words, an obligation to issue or transfer value, or a ValOb. With a check transaction, an obligation to pay money (a PayOb) is conditionally settled by the negotiation of the check. The depositary is obliged to pay or transfer funds from the drawer's account to the order of the drawer. This represents a repayment obligation (a RepayOb) upon

[74] In other words, a PayOb would directly oblige a cardholder to pay the merchant.

the issuer. In a credit card transaction, the issuer owes the cardholder the contractual obligation, or ConOb, to pay merchants the price of goods or services purchased with the credit card by the cardholder.[75] This performance obligation also translates to a payment duty, owed to the cardholder, to pay a third party, a ConpayOb, which the third party, the merchant, can enforce as a third party beneficiary.[76] The cardholder in any case does not owe the merchant a payment obligation. It is the cardholder's obligation (that is, PayOb) to reimburse the issuer for settling such transactions. In a debit card transaction, in contrast, it is the cardholder who is obliged to pay the merchant for purchases. Because the payment is to come from the cardholder's account (a RepayOb in relation to the issuer), the cardholder is obliged to facilitate this performance obligation[77] (PerfOb) by ensuring there are sufficient funds in the account for transfer by the issuer to the merchant.

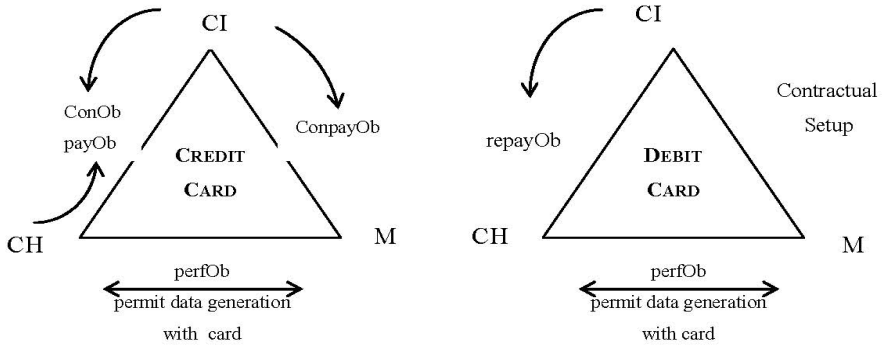

Figure 9: Interparty Obligations: Credit Card v Debit Card

[75] RONALD J. MANN, PAYMENT SYSTEMS 125 (2006).

[76] There would be no need for the merchant to resort to third party beneficiary rights if the issuer and merchant have directly contracted for such payments. A ConpayOb, as a secondary contractual obligation to pay a third party, is distinguishable from the direct obligation to pay a contractual party, a PayOb.

[77] In other words, a contractual obligation to perform a non-payment action.

	CH – CI RELATIONS	**CH – M** RELATIONS	**CI – M** RELATIONS
SVPs	**Prepayment**	Sale or other transaction	CI pays to settle own debt owed to M
CREDIT CARD	pre-arranged **Postpayment**	Sale or other transaction	CI pays to settle own debt owed to M
DEBIT CARD	pre-arranged **Debit** at time of transaction	Sale or other transaction	CI facilitates payment to M to settle CH's debt

Figure 10: SVP/Credit/Debit Card Party Relations

The prepayment in a prepaid SVP transaction obliges the issuer to settle the payment obligation that would otherwise arise between the cardholder and merchant when the cardholder "purchases" goods or services from the merchant.[78] This prepaid contractual obligation to perform a contractual duty, a **pConOb,** also translates to a prepaid contractual obligation to pay a third party, a **pConpayOb**.

Where the transaction is a "deposit"-based SVP transaction, it may not be a stored value transaction at all, but a debit transaction.[79] If the SVP is in fact an access device, rather than a pConpayOb, the transaction will give rise to a RepayOb.

[78] *See Reconsidering SVPs*, *supra* note 2, at 328.

[79] *Id*. at 285-290.

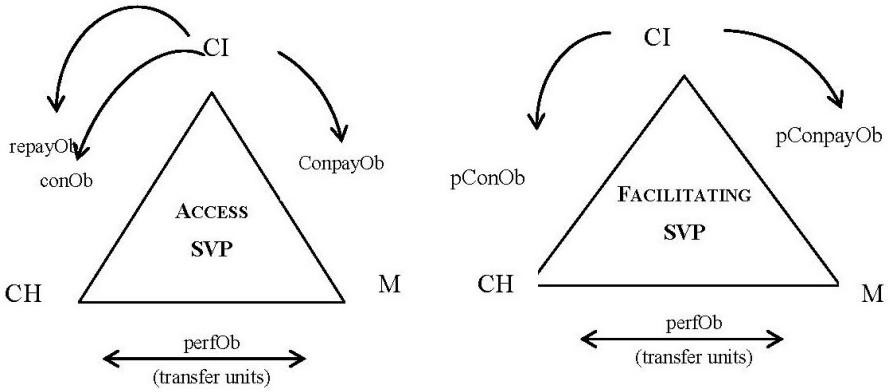

Figure 11: Interparty Obligations: Access SVP vs. Facilitating SVP

In the case of e-Value transactions involving units that are convertible to funds, the issuer is obliged to provide the cardholder with units that are the equivalent value of the funds paid, or funds that are the equivalent value of the units redeemed. This obligation will be referred to as an **eQuiv** for short. In the case of SVP e-Value transactions based on unconvertible units, the issuer's obligation is to provide and enable the P2P transfer of units of value—a value obligation or **ValOb**. The cardholder will transfer this value obligation to a peer to settle whatever claim for payment (a PayOb or **DetOb**[80]) the recipient peer may have against her.

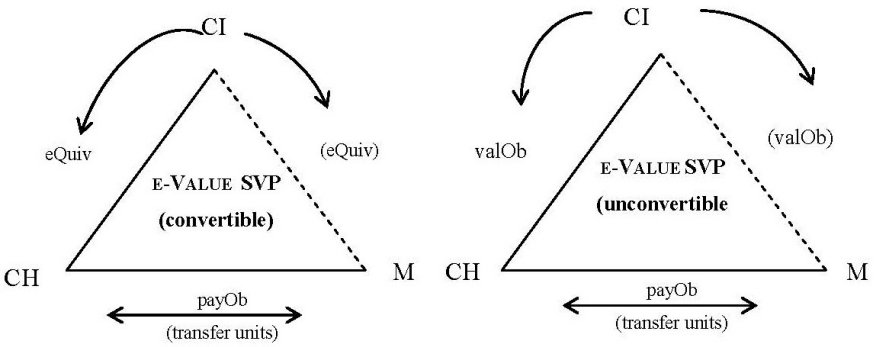

Figure 12: Interparty Obligations: e-Value Convertible & Unconvertible SVPs

[80] The shorthand term DetOb refers to a payment obligation that arises other than by contract, such as the result of a debt or court order.

3. Consider the Implications of Obligation Types

a) Risks Presented By SVP Types

The obligation types identified in the last section may be grouped into three categories: performance obligations, payment obligations, and value obligations.[81] In light of the above, a facilitating SVP would therefore represent a pConOb, a prepaid *performance* obligation—a service—which obliges the issuer to ensure that the cardholder receives goods and/or services ordered from the merchant, and also incorporates a promise by the issuer to pay the merchant on the cardholder's behalf.[82] A mirroring SVP, depending on what rights of access there may be to the underlying "pseudo account", may bear a close resemblance to either an access product or a facilitating SVP.[83] If it closely resembles an access product, it will be akin to a RepayOb, and if not it will be more similar to a pConOb. An SVP as e-value ultimately envisages virtual currency. It is likely that such systems, at least at first, will be an alternative for funds, and thus be convertible into funds, i.e. a dual system. This dual system would represent the obligation to replace a unit of e-value with its equivalent in ordinary funds or physical currency–an eQuiv. A single, unconvertible system, perhaps provided on a mandatory basis by a national government, would possibly represent the obligation to replace a unit of e-value with another unit of the exact form and value (a ValOb) if, for example, the unit had become corrupt and resisted onward transfer.

From this vantage point, categorizing and regulating payments by broad-based, technology-neutral commonalities, without relying on the deposit concept as a central factor, appears eminently achievable. Such an approach will permit policy weightings that shade the lightness or severity of crafted rules or remedies to be adjusted according to the type of obligation or combination of types involved. For example, a debit transaction is premised on the availability of a deposit account. The higher priority traditionally assigned the regulation of such products makes sense and is unremarkable

[81] *See supra* Figure 7; *see also Reconsidering SVPs*, *supra* note 2, at 337-39.

[82] *See supra* Part II.B; *Reconsidering SVPs*, *supra* note 2, at 328-36.

[83] For more on pseudo accounts, see *supra* Part II.B*; Reconsidering SVPs*, *supra* note 2, at 331-333.

today. The ultimate purpose of distinguishing different features of different SVP models in this way, therefore, is to permit the design of regulation that is more finely tuned and able to deal with the specifics of each payment model as needed.

Payment obligations are often contractual obligations; they typically derive from a contractual promise to pay money. When made in return for some consideration, such as the performance of an action by the promisee, the obligation is protected and is enforceable under contracts law. Such promises to pay were accorded especial weight/gravity when they were preceded by a loan of money, making the promise a promise to *repay* money.[84] Not only were such promises enforceable, but the preceding loan imbued the transaction with a heightened priority.[85] Assessments were made as to how to best preempt the danger that such obligation might not be honored. One tactic was to place restrictions on who could receive such loans or make such promises to repay loaned money.[86] The result is that different obligations were accorded different priorities, depending on how susceptible to risk they were perceived to be.[87]

b) Articulating Objectives

The objectives, conscious or not, that motivate a regulator to consider regulating a particular activity shape the form such regulations ultimately take. The pursuit of the objectives motivating deliberate measures aimed at the regulation of targeted activities can only be more efficient where those objectives have been thoughtfully articulated. This remains so whether those conscious objectives have been disclosed publicly or to a private or closed group of stakeholders. The reluctance to publicly articulate or disclose regulatory objectives may be deliberate in some cases.[88] The desire to maintain the status quo may be a valid objective for a governmental regulator, for example, and yet be deliberately unarticulated by other stakeholders lobbying for regulation, e.g. in a commercial context, lest their objectives raise the specter of anticompetitive conduct. In other words, a failure to articulate regulatory objectives may be inadvertent, artful, or unashamedly deliberate but

[84] *See supra* note 22 and accompanying text.

[85] *See* DAVIES, *supra* note 22. *See also* GEVA, *supra* note 22.

[86] DAVIES, *supra* note 22.

[87] *Id.*

[88] *See Comparative Survey, supra* note 55 at 62-65.

measures not deliberately shaped by such objectives will be hit and miss at best.

A complex mix of motives has fueled past attempts to regulate eMoney in general.[89] Objectives in the context at hand may include the desire to subject all such activity to central banking regulation, to keep transactions accountable or trackable, or to foster vigorous yet responsible transactional growth.[90] The desire of certain stakeholders to exclude non-bank providers in general from this space may or may not be expressed, depending on the lobbying power of such entities. Other regulation attempts may be motivated by the desire to light-handedly shape the regulatory framework so that it is broadly compatible with global trends. Whatever the motives may be, once they have been carefully articulated, they can be used to deliberately shape the content and scope of the regulatory method of choice.

c) Setting Priorities

Evaluation of the obligations types that were identified as a result of the transaction analysis above yielded insights that are helpful in terms of assigning priorities to obligation types or combination variants.[91]

The RepayOb would easily be seen as demanding a higher priority since it is an obligation akin to a deposit—a core concept that is historically deemed especially vulnerable.[92] In the same manner, insofar as an eQuiv is akin to a

[89] Motives have included the desire for systemic soundness and safety, consumer protection, systemic development, fostering competition, legal certainty, the avoidance of regulatory arbitrage, preserving the status quo, or political control. *Id*.

[90] *Id*.

[91] *See supra* Part III.B.1.

[92] The obligation to repay money previously entrusted or lent has historically been deemed an interest particularly vulnerable to fraud or other mishap, and thus especially deserving of regulation.

> The quasi public nature of the banking business, and the intimate relation which it bears to the fiscal affairs of the people and the revenues of the state, clearly bring it within the domain of the internal police power, and make it a proper subject for legislative control. Bankers invite general deposits primarily for their own profit, and usually obtain a measure of public patronage, and the expediency of guarding the people against imposition, extortion, and fraud, of affording efficient means of detecting irregular practices, and of learning the true financial condition of the bank, and the necessity of preserving the confidence of patrons in its solvency, and of protecting their interests in case of insolvency, justify inspection and control by the state.

repayment obligation, it could be the next highest priority. Though a lesser priority than RepayObs, eQuivs could be regulated directly or indirectly through market forces.[93]

Because future goods and services are prepaid with a pConpayOb, the process of assuring the cardholder's receipt of what has been paid for in advance might be assigned a higher priority than the two other obligations, the ConOb and the DetOb. The obligation to pay money in both cases is free from any notion of repaying a prior loan.

The ValOb might be assigned the least priority. Issuers of ValObs, like issuers of eQuivs, are likely to be government issuers, established payment providers of strong repute or newer, heavily regulated issuers.[94] Moreover, as an unconvertible unit, the ValOb would not incorporate any notion of repaying funds to holders. Thus the prime concern would relate to the creditworthiness of the issuer, a matter that would be addressed by the likely restrictions mentioned immediately above, and for that reason—in this taxonomy at least—it would be the least risky.

This analysis suggests that SVPs could be prioritized downward in the following order: RepayOb, eQuiv, pConpayOb (and pConOb), ConpayOb (and ConOb), DetOb, PerfOb, and finally ValOb. State-backed eQuivs would be a much lesser risk and could be demoted from the second to the sixth position, immediately above the ValOb.

State v. Richcreek, 77 N.E. 1085, 1086 (Ind. 1906).

> Among matters of that sort probably few would doubt that both usage and preponderant opinion give their sanction to enforcing the primary conditions of successful commerce . . . . If, then, the legislature of the state thinks that the public welfare requires the measure . . . analogy and principle are in favor of the power to enact it . . . . [T]he primary object of the required assessment is . . . to make the currency of checks secure, and by the same stroke to make safe the almost compulsory resort of depositors to banks as the only available means for keeping money on hand . . . . The power to compel . . . to make a failure unlikely and a general panic almost impossible, must be recognized, if government is to do its proper work . . . .

Noble State Bank v. Haskell, 219 U.S. 104, 111-12 (1911).

[93] This is admittedly less unlikely, given the latest trend against deregulation following the fallout of the 2008 financial crisis, but this may change again after another cycle or two.

[94] For more on this topic see Benjamin J. Cohen, *Electronic Money: New Day or False Dawn?,* 8 REV. OF INT'L POL. ECON. 197.

RepayOb: obligation to repay lent or deposited funds	*first priority*
pConpayOb: prepaid secondary payment obligation to third party	*second priority*
pConOb: prepaid contractual obligation to pay a third party	*second priority*
ConpayOb: secondary payment obligation to third party	*third priority*
ConOb: contractual obligation to pay a third party	*third priority*
PayOb: primary contractual payment obligation	*fourth priority*
DetOb: payment obligation arising other than from contract	*fifth priority*
PerfOb: contractual obligation to perform a non payment action	*sixth priority*
eQuiv: obligation to convert units to equivalent value in funds	*seventh priority*
valOb: obligation to provide value e.g. by enabling P2P circulation	*eighth priority*

Figure 13: Suggested Regulatory Priority of Obligation Types

This order is based on a somewhat shallow analysis of the obligations involved and is presented as a starting example only. This article seeks to inspire a deeper and more detailed analysis of such issues. Having first determined a progression of priority, the form and extent of regulation, the specific controls to be applied, and the penalties to impose for specific contraventions would then be determined separately.

The framework suggested above ostensibly eliminates deposit-centered categorizations, although it incorporates limited deposit analogies to some degree, e.g. the "Access Product SVP". The tendency to describe certain access products as "SVPs" in the U.S makes this limitation inevitable if the objective is to fully account for so-called SVPs. Once such products are eliminated from the SVP grouping, only limited references to a spectrum of comparison between deposit access products and mirror SVPs remain in the arrangement. These references will thus become subsidiary factors included to assist categorization of ambiguous mirroring SVPs as either an access or facilitating SVP. Ultimately, however, the framework suggested above is centered not on *deposit* conceptions or similarities, but on underlying legal *obligation* contrasts.

This suggested approach is no mere rehash of a deposit based regime. Although it includes the operation of the RepayOb (the obligation to repay lent or deposited funds), a promise to repay money may not amount to a deposit *per se*. More importantly, the RepayOb obligation is merely one among several

possible obligations, and it is one that arises infrequently at that. Unlike deposit-based regimes, in which the deposit concept plays a central role, the RepayOb, which may have several variants upon a spectrum of (dis)similarity,[95] is not the focal point of this suggested framework. The framework is based upon an approach that builds upon and references different obligation types. The authority of the suggested framework thus rests not upon the authority and priority of a single core obligation type, but upon the calibrated prioritizations of multiple obligation types and combinations. This approach is first suggested as an alternative to prior proposals that in some way have been rooted in the primacy of the deposit concept. The suggested approach is also a part of a second, wider ultimate recommendation that there be a systems-wide rationalization of core legal obligations underlying the payments system.

C. The Benefits of a Taxonomical Aid

The benefits of using this taxonomical aid are varied. By identifying and utilizing the specific obligations underlying each payment type, a regulator is presented with a clear picture of the inherent risks of each one.[96] This analysis immediately discourages any lingering tendencies to approach the task with a "one size fits all" mentality that the deposit presumption may have previously encouraged.[97] By teasing out the specific legal obligations concerned, and thus the interests implicated, the aspects of the payment type that are most vulnerable to risk, and which risks are most likely to affect that payment type, are highlighted.

Another benefit of this approach is that it does not squeeze payment types that are inherently different, however non-obvious those differences may be, into unsuitable conceptual categories. Instead, the provided foundation of careful conceptual analysis makes it easier to resist the temptation to force disparate concepts under a single umbrella in the name of convenience.

By resisting the temptation to squeeze differing payment types into categories that obscure their inherent features, the proposed approach permits room for growth. Because assessments of the degree of regulation needed for each type depend on conclusions drawn from individually tailored analyses,

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[95] *See infra* Figure 15.

[96] There are other risks, e.g. of their use (abuse), raised by such payments of course, but the focus of this paper are the inherent features of the payments that previous regulations have sought.

[97] *See Reconsidering SVPs*, *supra* note 2, at 337-39; *Recalibrating Payments*, *supra* note 1.

nascent payments can be progressively assessed. This also leaves room for the possible emergence of a distinct conceptual category, such as a possible basis for grouping emergent payments that is not the deposit concept, which can be monitored.

By yielding clear factual information upon which legal conclusions can be drawn, the proposed approach provides objective premises upon which tailored policy-driven compromises or other regulatory decisions may be made.

IV. PILOT OUTCOMES: A THREE-TIERED REGULATORY SOLUTION

The aim of the foregoing procedure is to assist policy steering through the investigation and differentiation of SVPs as they might be considered for regulation. The proposed approach enables the hitherto elusive legal nature of these products to be mapped to their risks as they are perceived and the regulatory objectives the potential regulator may have. The pilot of this approach, the subject of this article, led to a three-tiered possible solution.

A. Consider the Use of Specialized Contracts

A Facilitator (Contractual Device) SVP may be structured in at least three ways: (i) the SVP is directly sold to the holder by the issuer;[98] (ii) the SVP is sold to the holder by the retailer acting as the agent of the issuer; or (iii) the retailer purchases SVPs from the issuer for later sale to holders. In all three cases, there is a direct contractual relationship between the issuer and holder, although there is a direct sale between the issuer and holder in the first case only. In the first two cases, the issuer purchases the SVP from the issuer by transferring the prepayment directly, or through the agency of the retailer, to the issuer. In the third case, a unilateral contract for the functionality of the SVP comes into being between the issuer and holder when the holder purchases and uses the SVP. Although the SVP was purchased from the retailer, by issuing the SVP, the issuer offers the functionality and service of the SVP in return for the holder's consideration, the purchase and use of the card. In all cases, having exchanged the prepayment for the SVP, the holder is under no obligation to pay money to the retailer. The underlying sale between the holder and retailer, however, must be supported by valuable consideration to be legally valid.[99] The stored value units are valid consideration; they are

[98] *See Reconsidering SVPs*, *supra* note 2, at 328-29.

[99] "To constitute consideration, a performance or a return bargain must be bargained for." RESTATEMENT (SECOND) OF CONTRACTS § 71(1) (1981). *See also* RESTATEMENT (SECOND) OF CONTRACTS § 71(1) cmt. b (1981) ("[A] mere pretense of bargain does not suffice, as where there is a false recital of consideration or where the purported

valuable to the retailer because they will entitle the retailer to either claim reimbursement from the issuer or to retain prepayments for SVPs that have been purchased outright from the issuer. By using the SVP and transferring stored value units to the retailer, the holder provides the retailer with good consideration for the release of the goods or services purchased via that underlying transaction to the holder.

Facilitator SVPs thus enable the holder to claim a service that is paid for in advance. Using the card, the holder may purchase goods or services, which the issuer by reason of a contract between them and prepayment, is obliged to settle with the retailer. The cardholder's purchase of goods or services creates a payment obligation that the card issuer is obliged to settle.[100] The merchant is also obliged to provide the cardholder with the purchases without further ado. The satisfactory execution of the cardholder's contract with the issuer is key; the issuer must pay as promised and the merchant must provide the purchases as contracted. The law of contracts clearly governs this arrangement.[101]

The suggestion in summary is that there should be specialized contractual rules surrounding this specialized contractual obligation. The specifics and configuration of the contractual relationships surrounding the ConOb[102] will need careful thought. The contractual terms that will be ordinarily associated with, or implied into, the cardholder-SVP issuer relationship will need to be carefully crafted. The comparative interests of the parties involved will need to be taken into account in the imposition of rights and duties. [103] The process detailed in this article includes prioritization of the ConOb and suggestions for the related design of a specialized contractual framework. The functions of the new BCFP include the review and formulation of a payments policy.[104]

consideration is merely nominal.").

[100] The issuer may be discharged from such settlement because the retailer purchased the SVPs outright and will thus retain prepayment realized from their sale.

[101] *See Reconsidering SVPs*, *supra* note 2, at 342- 43.

[102] This also applies to its variants, such as the prepaid contractual performance obligation, the pConOb. *Id*.

[103] An examination of the comparative contractual rights of the parties and associated third party beneficiaries is beyond the scope of this article. This piece is a call to action and will not explore those issues further.

[104] *See supra* text accompanying notes 25-26.

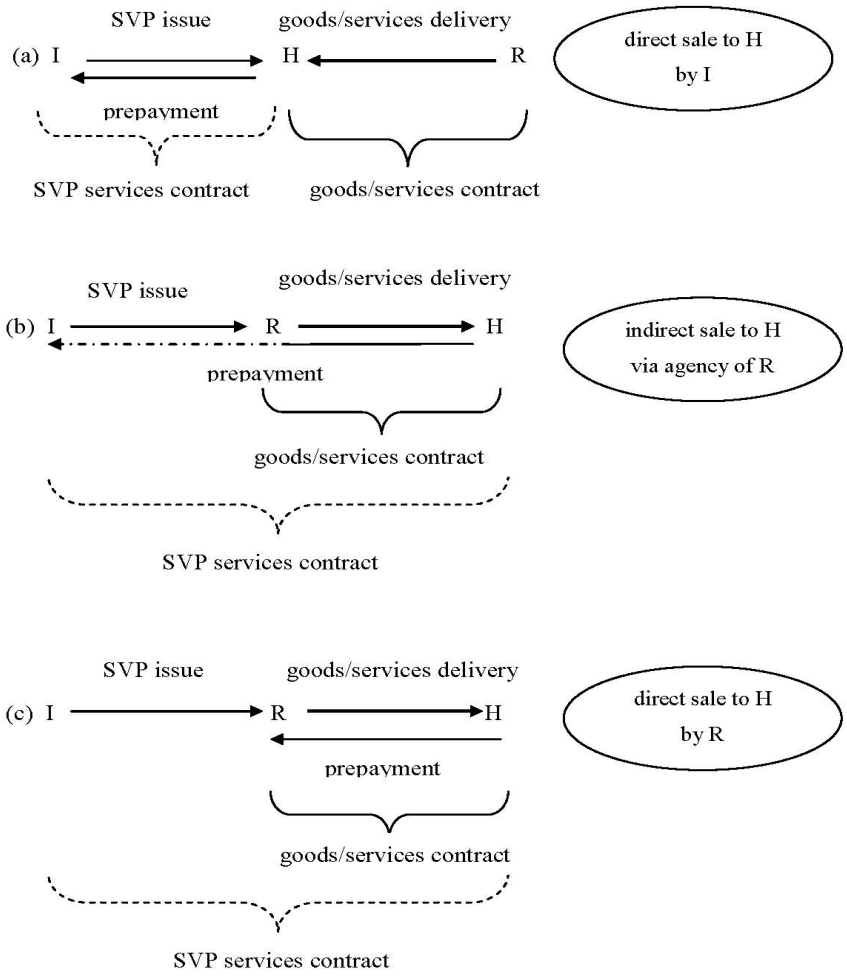

Figure 14: Facilitator SVP Variants

The assessment of the proposed process for possible adoption is a task that falls squarely within the jurisdiction of the new BCFP[105], although input from other entities would also be of great value.[106]

[105] *See supra* note 46.

[106] If this approach were to be adopted, entities such as the Uniform Law Commission,

B. Consider the Limited Use of "Deposit-Lite" Rules

The Virtual Account (Mirror) SVP is a virtual account, a mirror of the account into which the underlying funds have been paid. The account may belong to either the card issuer or to the cardholder. The functionality of the SVP is affected by who owns the funds, although the funds will be debited regardless of which party the account belongs to.[107] The SVP presents an up-to-date balance of the cardholder's balance, a reflection of the underlying account against which the merchant's claim for reimbursement will be applied. The card issuer remains the party responsible for reimbursing the merchant regardless of the name of the accountholder of the underlying funds. The account may be the cardholder's in name and function, it may belong to the cardholder in name only, or it may belong to the issuer. The term "pseudo account" indicates that the facility provides the cardholder with more than balance updating, including limited rights to demand balance refunds and the ability to make cash withdrawals against the balance.[108] "Pseudo account" is used instead of "account" to highlight an important distinction: in the case of pseudo accounts, the arrangements are not premised on the understanding that the cardholder will have a general right to repayment on demand of the balance, as is the case with deposits underlying accounts.[109] The balance of the underlying funds, tracked by a pseudo account, falls short of the core characteristic of a "deposit."[110] The corollary to this—a deposit made by the cardholder, but tightly controlled by the card issuer—is the pseudo deposit.[111]

Deposit analogies work with this SVP model, but even here, they only go so far. There is also a sliding scale of close equivalents that approximates the SVP's functionality. If the SVP plainly incorporates a deposit, it does not

the American Law Institute, and the American Bar Association (e.g. the Uniform Commercial Code, Banking Law, and Cyberspace Law Committees of the Business Law Section) could also contribute valuable input.

[107] *See Reconsidering SVPs*, *supra* note 2, at 329–34.

[108] *See id*. at 331-333.

[109] *Id*.

[110] The characteristics of F-SVP, eV-SVP and less accountable versions of M-SVPs do not fulfill the common definition of a deposit, e.g. as provided in the Federal Deposit Insurance Act in 12 USC § 1813(l). Neither the deposit sub possibilities of escrow funds, a trustee account (12 U.S.C. § 1813(l)(2)), nor 'money received or held…in the usual course of business for a special or specific purpose…' (12 U.S.C. § 1813(l)(3)) satisfactorily describe such SVP models. See *Reconsidering SVPs, supra* note 2, at 282-88 for more on "trackability."

[111] .*Reconsidering SVPs, supra* note 2, at 333.

belong on this scale. The SVP in this case is really an access device—a deposit product—that is appropriately regulated by deposit-based rules. This is so even though the access device may be referred to as an SVP or marketed as such. On this spectrum of close equivalents, there are two extremes.

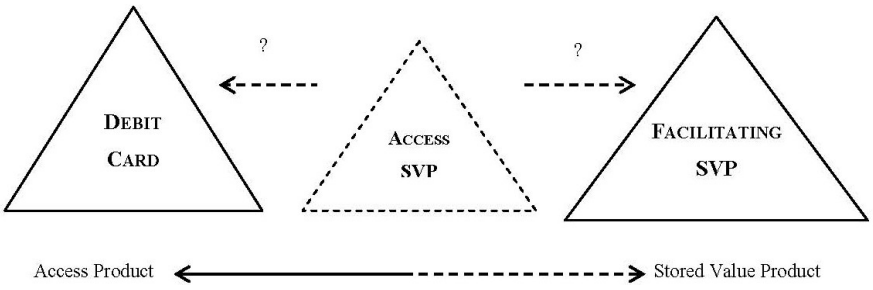

Figure 15: Mirror SVP Spectrum

At one extreme are SVPs based on pseudo accounts over which the issuer permits the cardholder limited access. At the other extreme are SVPs based on pseudo deposits that are so restricted by the issuer that the cardholder in effect has no access, although contractual entitlements such as balance tracking and updating apply. As deposit analogies work relatively well in this context, most SVPs within this spectrum could be regulated by a carefully adjusted "lite" version of deposit-based rules.[112] At either extreme, a judgment call might need to be made about whether a product should be regulated as a deposit-based product, or, because the deposit analogy is so tenuous, within the type of specialized contractual regime suggested above.[113] The design of "lite" deposit-based rules, assessments of which regime—deposit "lite" or "beefed up" contractual—borderline products should fall under, and guidelines for such assessments would fall squarely within the purview of the BCFP.[114] Input from the FDIC would also be appropriate.

[112] Lite is used here in the sense of being diminished or less weighty, e.g., a rule framework shaped by deposit based frameworks and including comparatively similar rules while being carefully calibrated to exclude all but those rules that are necessary to protect subject matter of such (accorded) priority.

[113] *See supra* notes 52-53 and accompanying text.

[114] *See supra* note 46.

C. Encourage Inquiry & Debate About e-Currencies

The promise of P2P transfers is being explored by emerging systems.[115] P2P transactions are structured as direct value transfers between cardholders without the need for a payment-facilitating intermediary. There are different methods by which this may be accomplished.[116] One model limits the role of the intermediary, and stored value units are transferable for a limited number of times only. Subsequently, authorization, or re-issue and certification, are then necessary before further circulation of units is possible. Other models envisage P2P circulation without the need for intermittent certification or authorization. The ultimate aim is to facilitate the transfer of units from one party to another so that the latter possesses units that are transferrable onward to another as a value payment.[119]

When a cardholder transfers units to a merchant or another cardholder so that the recipient receives those units in "spendable" form without intermediation, the units function as a form of e-currency. The units are a "true" currency if they can be transferred to another peer without intermediation.[120] In such cases, deposit analogies are inapplicable.

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[115] *See supra* notes 13-14 and accompanying text.

[116] In some models, central records are periodically updated from transaction histories maintained on the SVP. The system is set up such that the SVP must contact the central entity periodically, at which time the transactional history updating also takes place. In the Mondex model, cardholder identity is linked to the SVP by a unique sixteen-digit number that highlights the cardholder's transactions in the transactional history. Transactions are not subject to central authorization at the time of their making. Instead, the system is a closed one based on reputably tamper-proof security protocols. *See* SUSAN STEPNEY ET AL., AN ELECTRONIC PURSE: SPECIFICATION, REFINEMENT, AND PROOF 1-3 (2000), *available at* http://www-users.cs.york.ac.uk/~susan/bib/ss/z/prg126.pdf; Jim Woodcock et al., *The Certification of the Mondex Electronic Purse To ITSEC Level E6*, 20 FORMAL ASPECTS OF COMPUTING 5, 11-18 (2008). P2P m-payment utilizing cloud technology are also beginning to emerge (presently centralized and account based though the concept has potential for decentralized developments). *See* Matt Gunn, *ING Direct makes mobile P2P payments as easy as bumping knuckles*, BANK SYSTEMS TECHNOLOGY (May 2, 2011) http://www.banktech.com/blogs/229402582.

[119] E-money was once limited to prepaid products in which the value was stored on a card or computer drive in the possession of the holder rather than a remote server in the EU, and was considered a surrogate for coins and banknotes in the EU. *See* Council Directive 2000/46/EC, rec. 3, 2000 O.J. (L275) 39 (EC) [hereinafter First E-Money Directive]; *cf.* Council Directive 2009/110/EC, rec. 2, 2009 O.J. (L267) 7 (EU) [hereinafter Second E-Money Directive]. *See also* COHEN *supra* note 94 .

[120] Disintermediation as a goal in payments is proceeding slowly. *See* Tim Warner, *The*

Functional e-currency systems are presently rare. Systems utilizing stored value units for circulation among holders are still "emergent"; they currently tend to be modest implementations of sophisticated conceptual models or are sophisticated models in early development. Those that exist have been subjected to strong suspicion.[121] There are also conflicting schools of thought on whether private currencies are permissible or viable.[122] Regardless of this uncertainty, some jurisdictions have started to take small steps,[123] while others

Impact of P2P Technology Is Just Starting to Emerge, COMPUTING CANADA (October 20, 2006, 9:27 AM) http://www.itbusiness.ca/it/client/en/home/News.asp?id=41645.

[121] Examples include "E-Gold," issued by e-Gold Ltd., a Nevis corporation, and "Mondex," owned by MasterCard. Establishing such systems has not been without its difficulties; charges of misleading consumers and deceptive conduct were made against Mondex in 1997 for promoting the product as being "like cash." *See* Privacy International, Mondex Digital Cash Service (Sept. 25, 1996), https://www.privacyinternational.org/article/mondex-digital-cash-service (last visited Oct. 2, 2011). In 2008, e-Gold was the subject of a U.S. Department of Justice investigation into money laundering. *See* Press Release, U.S. Dept. of Justice, Digital Currency Business E-Gold Indicted for Money Laundering and Illegal Money Transmitting (Apr. 27, 2007), *available at* http://www.justice.gov/criminal/cybercrime/egoldIndict.htm. *See also* Sarah Jane Hughes et al., *Developments in the Law Concerning Stored Value and Other Prepaid Payment Products*, 62 BUS. LAW. 229, 238-39 (2006).

[122] Jeffrey M. Lacker, *Stored Value Cards: Costly Private Substitutes for Government Currency*, 82 Fed. Res. Bank Richmond Econ. Q. 1 (1996), *available at* http://www.richmondfed.org/publications/research/economic_quarterly/1996/summer/pdf/lacker.pdf; Gerald P. Dwyer, Jr., *Wildcat Banking, Banking Panics, and Free Banking in the United States*, FED. RES. BANK ATLANTA ECON. REV. 1 (1996), *available at* http://www.frbatlanta.org/filelegacydocs/ACFCE.pdf; Kerry Lynn Macintosh, *How to Encourage Global Electronic Commerce: The Case for Private Currencies on the Internet*, 11 HARV. J.L. & TECH 733 (1998); Thomas A. Rohling & Mark W. Tapley, *Optimal Regulation of Electronic Money: Lessons From the "Free Banking" Era in Australia*, 17 ECON. PAPERS 7, 13 (1998); Robert G. King, *On the Economics of Private Money*, 12 J. MONETARY ECON. 127, 136-37 (1983); George A. Selgin & Lawrence H. White, *How Would The Invisible Hand Handle Money?*, 32 J. ECON. LIT. 1718, 1743-45 (1994).

[123] Japan and Thailand have recently begun to seriously contemplate the move to a "cashless society," which is not the same thing as introducing an e-currency, but is an important step towards doing so. *See* Henryben, *Central Bank Wants Cashless Society*, ADOC 2.0, (Nov. 2, 2009, 10:10 AM), http://www.apecdoc.org/post/13/5526; Leo Lewis, *Cashless Vision Pops up in Japan*, THE AUSTRALIAN, June 20, 2009, http://www.theaustralian.com.au/news/cashless-vision-pops-up-in-japan/story-0-1225737946876. In Japan, SVP growth is flourishing, possibly due to the flexible nature of the country's prepaid card law. *See* Jean J. Luyat, *A Tale of Regulation in the European*

are taking larger strides,[124] towards the establishment of state-issued e-currencies. Regulators overseas are also taking measures to equip their payments and financial systems for the future. The Single Euro Payments Area (SEPA), for example, was launched in January 2008 to make cashless payments as easy and seamless as possible across Europe.[125]

It is presently uncertain what laws or policies apply to e-currencies, although obvious similarities with physical currencies might suggest to some that the adaptation of existing currency rules *inter alia* would be appropriate. [126] This is a complex question requiring careful consideration of the exclusive monetary powers of Congress and the policies underlying conventional restrictions on currency and coinage. The significance of the still-to-be-explored dissimilarities between physical and e-currencies must also inform that inquiry. It is also unclear whether the establishment of e-currencies in the U.S. is something the federal government would rather develop as a federal initiative kept firmly under its control, whether there is a current policy to discourage the development of such systems, and whether competition between emergent systems would be encouraged if competitors were to emerge.[127]

Union and Japan: Does Characterizing the Business of Stored-Value Cards as a Financial Activity Impact Its Development?, 18 PAC. RIM. L. & POL'Y J. 525 (2009).

[124] *See* Low Siang Kok, *Singapore Electronic Legal Tender (SELT) – A Proposed Concept, in* THE FUTURE OF MONEY 147, 154-55 (2002); *see also* Noor Mohd Aziz, *One Card for All E-Payments Soon*, CHANNEL NEWSASIA, June 27, 2006 (revised system now called CEPAS will be operational by 2010 and is predicted to generate transaction values of $50 billion).

[125] *See generally* EUROPEAN BANKING ASSOCIATION, INITIAL CONSIDERATIONS ON THE WORKING DOCUMENT BY THE COMMISSION ON A POSSIBLE LEGAL FRAMEWORK FOR THE SINGLE PAYMENT AREA IN THE INTERNAL MARKET (2002), http://ec.europa.eu/internal_market/payments/docs/framework/framework-workingdoc-contrib/eba_en.pdf; *see also* Directive 2007/64, *supra* note 7, rec. 4.

[126] The power to coin money and regulate its value thereof is endowed on Congress by the U.S. Constitution. U.S. CONST. art. I, § 8, cl. 5. This power, regarded as one of the prerogatives of sovereignty, has been broadly construed to permit the regulation of every aspect of currency. *See* Joseph Story, COMMENTARIES ON THE CONSTITUTION OF THE UNITED STATES, §§ 1112-1117 (Cambridge, Brown, Shattuck, and Co. 1883). States are prohibited from coining money under the Contracts Clause of the Constitution. U.S. CONST. art. I, § 10, cl. 1 ("No state shall . . . coin money . . . .").

[127] Theories about the possibilities of such competing currencies were a part of the work of Friedrich von Hayek, who shared the Nobel Prize for Economics in 1974. *See generally* FRIEDRICH A. VON HAYEK, MONETARY NATIONALISM AND INTERNATIONAL STABILITY (Kelley 1989) (1937).

Given the indications of interest in other jurisdictions, the continued advances in technology, and the topicality of considering the future of the U.S. financial system, now would be an excellent time to begin discussing the possibilities and the pros and cons of encouraging and establishing e-currencies in the U.S.

D. Other Suggestions

Several other steps can be taken to begin to accomplish the objective of comprehensively yet flexibly regulating SVPs for an efficient payments system.

1. Differentiate and Define SVPs, Virtual Access Products, and E-Money

There is the need to clarify what the terms "stored value," "SVP," and "e-money" mean. The objective would be to clarify the common legal meaning and general scope of the words, which are currently used inconsistently. The definitions should be expressed in terms that are as technology-neutral as possible.[128] A term "virtual access product" or such other phrase should be devised to distinguish access products from SVPs. [129]

Regarding SVPs, their definition should incorporate (a) a contrast with or the exclusion of deposit access products; (b) a reference to the transferability of stored value units by abstract means, whether this is via a terminal, infrared technology, contactless technology, etc.; (c) note that transfers are disintermediated and between peers;[130] and (d) a reference to the mobility of the device, where units are stored on a device in the possession of the user (rather than on a central server).[131]

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[128] What is contemplated here are definitions that clarify and differentiate core concepts for commonplace use in legal contexts. These would differ from the definitions recommended for legislative use below that would be expressed in terms of broadly defined, generic, nested concepts. *See infra* Part IV.D.3.

[129] The term "virtual access product" (VAP) does not currently exist. It is suggested here as an alternative to the existing variants of "SVP debit card," "Access SVP," and the like.

[130] "A retailer to whom units can be transferred directly" could be included within the class of peers in this case.

[131] A positive step in this direction is the inclusion of a definition of "stored value product" as a sub-definition of the broader term "financial product or service" in Title X of the Dodd-Frank Act. BCFP Act, *supra* note 25, § 1002(15)(A). The term as defined is presently a sub-definition used in relation to the broad mandating of the BCFP. This is but a first step. This article proposes the purposeful substantive use of such a term, informed by sub-sub-divisions informed by the analytical process proposed in this article and defined

I recommend E-money be defined as a global word that includes SVPs, Virtual Access Products, and current or future iterations of such products.

2. Use Terms of Art and Formulate Working Definitions

A helpful development would be the development of working definitions that encapsulate the more accurate of popular (legal) uses of the terms above. Working definitions are used where there are no authoritative definitions, yet working definitions may be tailored into authoritative definitions with consistent use. The consistent use of such definitions to distinguish specialized legal meanings from commonplace technical terms will transform the defined words into terms of art.[132] The use of these words as terms of art will distinguish concepts and may help clarify *per se* which products are included or excluded by the term.[133]

3. Use Broad, Technology-Neutral Descriptors Across the Payments Framework

The approach suggested earlier provides a policy aid that may be used to weigh and prioritize different SVPs. This is a needed first step; however, there is the need for more than a systematically ordered SVP frame of reference only. As payments continue to evolve across the payments system, payments will continue to evolve from their previous forms while increasingly sharing certain features in common, such as the trend towards abstraction detailed above.[134]

Reassessing payments systems in order to rationalize and build upon such similarities will be an important step towards ensuring the flexibility and efficiency of the payments system in the future.To prepare for future efficiency and competitiveness, the somewhat daunting task of rationalizing the entire payments system must be accomplished. Other jurisdictions are ahead of the U.S. in these preparations and have already commenced, and in some cases completed, such an overhaul.[135]

relative to potential users.

[132] A "term of art" is a word or phrase that assumes a special meaning in a particular context.

[133] Thus, the mere use of the term "SVP" would signal that access products are excluded from the reference *per se* and put to rest the use of such terms as "debit SVP."

[134] *See supra* Part II.C.

[135] *See supra* notes 7, 119. The Australia financial system was subjected to a major overhaul in the 1990s for this reason. *See* Australian Treasury, Financial System Inquiry,

An SVP obligations framework has been suggested above. A similar taxonomy, but this time across payments systems, would be the next step. It may be that payments are ultimately rationalized by obligation types that are the same or very similar to those identified above. Categorizing payment methods by their dominant obligations will provide a basis upon which cross payments *commonalities* may be more easily identified. Payments can thus be prioritized not only by obligation type, but according to the number and combination of obligation types involved in a particular payment model type. Debit card and credit transactions incorporate PerfObs in common, for example, but the obligation is utilized differently and linked to a distinct combination of other obligations in each instance.[136]

Definitions emphasizing similarities could then be devised at a broad level. Technology-neutral definitions should be the goal. Central generic terms that are progressively differentiated according to the specific payment method in contemplation would be the aim. Reflecting a trend towards the use of such terms internationally, the Dodd-Frank Act utilized of such terms.[137] There is accordingly a flow of nested concepts moving from a broad generic concept ("financial service" or "payment service") to conceptual products or services ("stored value"). Subsequent regulations designed by the BCFP should build upon this pattern by using associated, related terms to refer to specialized participants distinguished by scope or whatever restrictions that have been deemed appropriate.[138] This is already common practice in the EU and

(1997) [hereinafter Wallis Report]; Financial Services Reform Act 2001 (Act No. 122) (Austl).

[136] In a debit card, the PerfOb is owed by the issuer to the retailer to facilitate online access by holders at the retailer's terminal, to initiate the direct transfer of units by holder to retailer. A PayOb and RepayOb also come into play. In a credit card, the PerfOb is owed by the holder to the retailer by which the holder undertakes to use the credit card to execute the purchase so that the transaction may be authorized by the issuer and thus entitle the retailer to claim repayment from the issuer. A ConOb and ConpayOb also come into play. See MANN, *supra* note 75, for functional descriptions of credit and debit card payments.

[137] "Financial product or service" is used as a generic base term and is defined to include deposit-taking activity, the selling or issuing of stored value or payment instruments. BCFP Act, *supra* note 25, § 1002(15). The latter two terms are also defined in broad, technology-neutral terms. *See id*. §§ 1002(18), 1002(28).

[138] The closest terms in the Dodd-Frank Act are less-specific terms such as "financial institutions" or "non-depository covered persons." BCFP Act, *supra* note 46, § 1024; Dodd-Frank Act, *supra* note 45, § 803(5). Compare these terms with the somewhat specific yet general terms such as "holder of stored value" used in Australia - or "electronic money institution" used in the EU. *See* Wallis Report, the Financial Services Reform Act 2001;

elsewhere.[139] The use of such broad, nested terms makes it easier for conceptual and policy consistency to be maintained system-wide. This is important not only for purposes of regulatory symmetry, but also for fostering flexibility and efficiency in the operation of the payments system. Consistency will also facilitate the task of updating or revising payment rules.

Let the remedial work for an improved, durable stored value (and wider payments) framework proceed!

Payment Systems (Regulation) Act 1998 (Act No. 58) (Austl.); First E-Money, Directive, *supra* note 119; Second E-Money Directive, *supra* note 119.

[139] In the EU, the relevant term of choice is "payment service." *See* Directive 2007/64, *supra* note 7, art. 4 and Annex. "Electronic money" is a subset of this term, thus a payment service provided by an electronic money issuer. *Id.* rec. 9. "Electronic money issuer" is another generic term that is defined to include "credit institutions" (i.e. electronic money issuing banks) and "electronic money institutions" (non-bank electronic money issuers). *See* Second E-Money Directive, *supra* note 119, tit. 1, art. 1(1). In Australia, the equivalent term is "financial product," also defined as a "facility." SVPs are thus defined as "purchased payment facilities," a specialized generic concept that ties into the systems-wide rationalization of the Australian payments system. Financial Services Reform Act, *supra* note 135, §§ 762C, 763A; Payment Systems Act, *supra* note 142, § 9.