

# Washington International Law Journal

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Volume 18 | Number 3

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8-1-2009

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### Recommended Citation

Jean J. Luyat, Comment, *A Tale of Regulation in the European 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).

Available at: <https://digitalcommons.law.uw.edu/wilj/vol18/iss3/4>

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# A TALE OF REGULATION IN THE EUROPEAN UNION AND JAPAN: DOES CHARACTERIZING THE BUSINESS OF STORED-VALUE CARDS AS A FINANCIAL ACTIVITY IMPACT ITS DEVELOPMENT?

Jean J. Luyat<sup>†</sup>

*Abstract:* The use of stored-value cards is growing rapidly in urban areas in Japan and gaining acceptance as a major means of payment. While institutional and cultural factors as well as business strategies go far in explaining the rapid growth of stored-value cards in Japan, regulation has also played an important role in enabling their use. In Japan, the regulation of stored-value cards has been mostly left to the Prepaid Card Law, which provides a comparatively simple regulatory framework with flexible capital requirements.

The European Union (“EU”) and France provide a compelling counter-example to Japan; the EU has pursued a different regulatory course and demand for stored-value cards has remained low there. Pressed by monetary concerns, the EU has directed its member countries to regulate electronic money according to its E-Money Directive. Following this Directive, France implemented a complex three-tiered regulatory framework with high capital requirements. European regulators are now questioning the Directive, which appears to have stifled the growth of stored-value cards. With Japan steaming ahead with stored-value cards, regulators worldwide may want to look to Japan for guidance.

## I. INTRODUCTION

When Kozo Matsuoka, an information technology worker based in Fukuoka, makes his bi-monthly trips to Tokyo to visit clients, his cell phone is the most valuable item he brings on the trip. His cell phone contains a contactless integrated circuit (“IC”) chip<sup>1</sup> that incorporates the data of three different electronic money issuers from whom Kozo regularly purchases prepaid electronic funds: *Suica*,<sup>2</sup> *Pasmo*<sup>3</sup> and *Edy*.<sup>4</sup> He can recharge these

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<sup>1</sup> A contactless Integrated Circuit (IC) chip is a miniature electronic circuit that can store electronic data and on which an IC chip reader/writer can withdraw and insert information without requiring contact. AKIO IWATA, DENSHI MANĒ SAIGŌ SENSŌ [ELECTRONIC MONEY: THE FINAL BATTLE] 13, 112 (2007). In Japan, stored-value cards are commonly referred to under the broader name of “Electronic Money.” *See id.*

<sup>2</sup> *Suica* is a rechargeable contactless smart-card based stored-value ticketing and payment system issued by JR East. *See* JR East website, *Suica*, <http://www.jreast.co.jp/e/suica/> (last visited May 8, 2009).

<sup>3</sup> *Pasmo* is a rechargeable contactless smart-card-based stored-value ticketing and payment system issued by a consortium private railway companies in Japan. *Pasmo* website, Participating Railways and Bus Companies, <http://www.pasmo.co.jp/en/index.html> (last visited May 8, 2009).

<sup>4</sup> *Edy* is a rechargeable contactless smart-card-based stored-value payment system issued by bitWallet, Inc. *See* *Edy* Website, <http://www.edy.jp/> (last visited Feb. 7, 2009).

funds at recharging booths, usually located near train stations or convenience stores. These recharging booths record the purchased funds either on the IC chip itself or on a distant centralized online server. Generally, Kozo purchases about ¥40,000 to ¥60,000<sup>5</sup> in prepaid funds every month from the three issuers, but seldom spends more than ¥2,000 on any one purchase.<sup>6</sup> He uses these electronic funds to ride trains, make purchases at vending machines, convenience stores, and a variety of other locations. This IC chip can also store digitized airline tickets and act as boarding pass that enables Kozo to bypass check-in. He can also change his reservation or seat assignment at any time before departure using his cell phone's internet access.

Kozo uses *Suica* and *Pasmo* to ride on almost any train or bus in the Tokyo metropolitan area. His cellphone's IC chip opens the automated entry turnstiles, which automatically subtract the minimum required amount for a journey on the train. The exit turnstiles then calculate and subtract the remaining fare based on the length of his journey. Completing a transaction to purchase a sandwich from a convenience store or pay for a taxi takes less than a second by hovering the cellphone a few inches over an IC chip reader. For Kozo, there are other benefits besides convenience; *Edy* also allows him to make purchases while earning mileage points with his preferred air carrier.<sup>7</sup>

Kozo's experience illustrates the development of contactless stored-value cards in Japan as a major means of payment. Stored-value cards have grown from a closed payment system originally limited to railway companies into an increasingly accepted open payment system<sup>8</sup> used as a

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<sup>5</sup> Approximately US \$400 to \$600. As of May 8, 2009, the US Dollar to Japanese Yen exchange rate was approximately 98 Yen to the Dollar. See Yahoo Finance, Currency Investing. <http://finance.yahoo.com/currency-investing> (last visited May 8, 2009).

<sup>6</sup> Approximately US \$20. Kozo's spending behavior is consistent with that of the average stored-value card user in Japan; in 2008, the average purchase was ¥696 (approximately US \$7). BANK OF JAPAN, RECENT DEVELOPMENTS IN ELECTRONIC MONEY IN JAPAN, Oct. 2008, <http://www.boj.or.jp/en/type/ronbun/ron/research07/data/ron0810a.pdf> (last visited May 8, 2009).

<sup>7</sup> The author would like to thank Kozo Matsuoka for sharing his experience using electronic money in Japan.

<sup>8</sup> Prepaid, or "stored-value," cards are broken into three distinct categories: "closed" systems in which the user can purchase goods and services as provided typically by one merchant or one issuer; "open" systems where the user may purchase goods and services at a wide range of merchants; and "semi-closed" systems which fall in between the two categories. Although Japan's electronic money is not universally accepted, its widespread acceptance in urban areas means that it probably constitutes an "open system." See MARK BUDNITZ & MARGOT SAUNDERS, CONSUMER BANKING AND PAYMENTS LAW 169 (2002); Anita Ramasastry, *Nonbank Issuers of Electronic Money: Prudential Regulation in Comparative Perspective*, in CURRENT DEVELOPMENTS IN MONETARY AND FINANCIAL LAW 663, 668-69 (International Monetary Fund ed., 2005).

cash substitute.<sup>9</sup> The evolution has been technological as well. Originally, issuers incorporated IC chips in cards about the same size as credit cards. Now, IC chips are also included in cell phones,<sup>10</sup> which transfer data back and forth with distant online servers where the funds are stored.<sup>11</sup>

The rapid development and growing adoption of stored-value cards as a major means of payment in Japan cannot be attributed to a single factor. Nevertheless, “institutions matter,” according to Professor Ronald Mann, who has identified four institutional structures that affect the development of payment systems: the retail environment, the size of the national economy, the cost of telecommunications, and the nature of the regulatory environment.<sup>12</sup> To better grasp the regulatory environment’s impact on the development of stored-value cards in Japan, this Comment compares it with the regulation in another region that has not witnessed the same explosive growth—the European Union (“EU”).

Despite implementing the E-Money Directive to foster the development of electronic money, which includes stored-value cards, in 2000, demand in the EU has not met expectations.<sup>13</sup> Within the EU, France provides a particularly compelling case-study of the impacts of the E-Money Directive. With Europe’s second largest population and third largest economy,<sup>14</sup> and with a per capita GDP on par with Japan,<sup>15</sup> France exhibits similar macroeconomic conditions. Demand for stored-value cards remains relatively low there and, in the absence of competitors, *Moneo*<sup>16</sup> remains

<sup>9</sup> See IWATA, *supra* note 1, at 13, 112.

<sup>10</sup> For convenience, this Comment will refer to these Japanese prepaid payment systems as stored-value cards even though they are conceptually no longer only cards.

<sup>11</sup> Nobuhiko Sugiura, *Denshi Manē to Hō: Denshi Manē wo Meguru Hōteki Genjō to Kongō no Kadai ni Tsuite* [Electronic Money and the Law: Legal Realities and Future Challenges], 1361 JURISUTO 74, 79 (2008). A translation of this article precedes this Comment.

<sup>12</sup> Ronald J. Mann, *Credit Cards and Debit Cards in the United States and Japan*, 55 VAND. L. REV. 1055, 1108, 1059-60 (2002).

<sup>13</sup> See Council Proposal for a Directive of the European Parliament and of the Council on Electronic Money: Taking up, Pursuit and Prudential Supervision of the Business of Electronic Money Institutions (amend. Directives 2005/60/EC and 2006/48/EC; repeal. Directive 2000/46/EC), COM/2008/0627 final (Oct. 9, 2008), rec. 2 [hereinafter 2008 Council Proposal].

<sup>14</sup> See The CIA World Factbook, Country Comparisons—GDP, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2001rank.html> (last visited May 8, 2009); The CIA World Factbook, Country Comparisons—Population, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html> (last visited May 8, 2009).

<sup>15</sup> See The CIA World Factbook, Country Comparisons—GDP per capita, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html> (last visited May 8, 2009) (Japan: \$34,200; France: \$32,700).

<sup>16</sup> *Moneo* is a stored-value card issued by SFPMEI (*Société Financière du Porte-Monnaie Electronique* [Financial Company of the Electronic Purse]), which is held by consortium of major French banks and supported by the French Ministry of Finance and Industry. See *Moneo*, Le Porte Monnaie Electronique Français, [Moneo, the French e-purse], at 2, 13, [http://www.moneo.net/fileadmin/user\\_upload/PDF/plaquette\\_institutionnelle\\_2008-p15.pdf](http://www.moneo.net/fileadmin/user_upload/PDF/plaquette_institutionnelle_2008-p15.pdf) (last visited Feb. 28, 2009).

France's only major stored-value card issuer.<sup>17</sup> In addition, France's central bank has long favored strong regulation of stored-value cards, subjecting them to bank-like regulations.<sup>18</sup>

This Comment argues that differing characterizations of stored-value cards produced different regulatory systems in Japan and France. Although many factors account for growth in Japan and stagnation in France, European regulation as applied in France appears to be burdening the development of stored-value cards to a greater degree than Japanese regulation. Part II compares the development of stored-value cards in Japan and Europe, focusing on France. Part III briefly explores reasons for the rapid growth of stored-value cards in Japan, and how Japanese law regulates these products. Part IV examines why stored-value cards are not emerging as a major means of payment in France and contrasts the current European regulatory framework with that of Japan, focusing on the E-Money Directive and its application in French law.

## II. STORED-VALUE CARDS ARE GROWING RAPIDLY IN JAPAN BUT NOT GAINING ACCEPTANCE AS A PAYMENT METHOD IN THE EU AND FRANCE

Because this Comment seeks to determine the impact of the regulatory environment on the development of stored-value cards, this section examines the growth of stored-value cards as a means of payment in Japan, Europe, and France.

The use of stored-value cards is growing rapidly in Japanese urban areas as a means of payment, and this rate of this growth has accelerated. From 2005 to 2007, the number of issued stored-value cards increased from 30 million to 80 million.<sup>19</sup> In 2007, the volume of stored-value card transactions was seventy times larger than debit card transactions and one third of credit card transactions,<sup>20</sup> while the outstanding value of electronic money in Japan reached ¥77 billion<sup>21</sup> at the end of March 2008.<sup>22</sup> The value

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<sup>17</sup> EVALUATION OF THE E-MONEY DIRECTIVE (2000/46/EC)—FINAL REPORT, app. at 22 (Feb. 17, 2006), [http://ec.europa.eu/internal\\_market/bank/docs/e-money/evaluation\\_en.pdf](http://ec.europa.eu/internal_market/bank/docs/e-money/evaluation_en.pdf) (last visited May. 8, 2009) [hereinafter EVALUATION OF THE E-MONEY DIRECTIVE].

<sup>18</sup> See *Développements Récents en Matière de Monnaie Electronique [Recent Electronic Money Developments]*, Bulletin de la Banque de France No. 72, Dec. 1999, at 90, available at [http://www.banque-france.fr/fir/publications/telechar/bulletin/etud72\\_3.pdf](http://www.banque-france.fr/fir/publications/telechar/bulletin/etud72_3.pdf).

<sup>19</sup> Nobuhiko Sugiura, *supra* note 11, at 74.

<sup>20</sup> BANK OF JAPAN, *supra* note 6.

<sup>21</sup> As of May 8, 2009, the exchange rate between the Japanese Yen and the Euro was approximately 133 Yen to the Euro. European Central Bank, Foreign Exchange Rates, <http://www.ecb.int/stats/exchange/eurofxref/html/index.en.html#downloads> (last visited May 8, 2009). The Exchange rate between the Euro and the United States Dollar was 1.34 Dollars to the Euro. *Id.* However, the reader may find it simpler to compare Yen and Euro figures at 100 Yen to the Euro.

of stored-value card transactions is expected to exceed ¥3 trillion in 2012, up from ¥175 billion in 2006.<sup>23</sup> A recent survey of four major Japanese metropolitan areas revealed that one in two residents used a stored-value card,<sup>24</sup> and terminals accepting stored-value cards now largely outnumber ATMs.<sup>25</sup> New issuers, each attempting to tap new uses for stored-value cards, have emerged almost every year since *Suica* started issuing cards in 2001.<sup>26</sup> As Professor Nobuhiko Sugiura argues in *Electronic Money and the Law: Legal Realities and Future Challenges*,<sup>27</sup> stored-value cards have become a substantial force to be reckoned with, one that has the potential to one day replace cash as the primary form of payment in Japan.<sup>28</sup>

By its own account, the EU is not satisfied with the demand for stored-value cards.<sup>29</sup> Figures directly comparable with Japan are not available, but statistics reflect that stored-value cards are not emerging as a major means of payment. Stored-value cards represented only 0.7% of the volume of non-cash transactions in 2007.<sup>30</sup> The European Commission estimated the total amount of electronic money<sup>31</sup> in circulation in Europe increased from 675 million euro in 2005 to 1,053 million euro in 2007, a figure that includes server-based electronic money,<sup>32</sup> which has been growing at a faster pace.<sup>33</sup> When considering the EU's larger population,<sup>34</sup> these numbers reflect lower growth and usage rates.

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<sup>22</sup> BANK OF JAPAN, *supra* note 6.

<sup>23</sup> Nobuhiko Sugiura, *supra* note 11, at 74.

<sup>24</sup> Etona Ueda, Presentation made before the FTC's Conference at the University of Washington: Pay on the Go, Consumers and Contactless Payments: e-Money and the Evolution of Payment Systems in Japan, at 3 (July 24, 2008), <http://www.ftc.gov/bcp/workshops/payonthego/presentations/ueda.pdf> (last visited Jan. 3, 2009).

<sup>25</sup> BANK OF JAPAN, *supra* note 6.

<sup>26</sup> *See id.*; Etona Ueda, *supra* note 24, at 4.

<sup>27</sup> Nobuhiko Sugiura, *supra* note 11, at 75.

<sup>28</sup> *Id.*, *supra* note 11, at 75.

<sup>29</sup> COMMISSION OF THE EUROPEAN COMMUNITIES, IMPACT ASSESSMENT, EUR. PARL. DOC. NO. COM(2008)627, at 6, available at [http://ec.europa.eu/governance/impact/ia\\_carried\\_out/docs/ia\\_2008/sec\\_2008\\_2573\\_en.pdf](http://ec.europa.eu/governance/impact/ia_carried_out/docs/ia_2008/sec_2008_2573_en.pdf) (accompanying the proposal for a Directive of the European Parliament and of the Council Amending Directive 2000/46/EC on the taking up, pursuit of and prudential supervision of the business of electronic money institutions) [hereinafter IMPACT ASSESSMENT].

<sup>30</sup> IMPACT ASSESSMENT, *supra* note 29, at 8.

<sup>31</sup> In Europe, electronic money includes both card-based e-money (stored-value cards) and server-based e-money (pre-funded payment schemes such as *Paypal*). *See* EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 21, 29. In Japan, electronic money generally refers to stored-value cards only (although post-pay systems are sometimes included in the definition). *See, e.g.,* IWATA, *supra* note 1, at 73 (describing stored-value cards as electronic money); Nobuhiko Sugiura, *supra* note 11, at 75 (same; distinguishing "post-pay" electronic money).

<sup>32</sup> Server-based electronic money is a money substitute that is transformed into digital information which is then stored on a central server, which consumers can access and use by logging on to a website. *See* Ramasastry, *supra* note 8, at 665-667.

<sup>33</sup> IMPACT ASSESSMENT, *supra* note 30, at 8.

In France, stored-value card issuers are largely absent from the payments market. Although limited-purpose electronic gift cards<sup>35</sup> are growing, and cell-phone operators are developing prepaid services,<sup>36</sup> *Moneo* remained France's lone major stored-value card issuer as of 2007.<sup>37</sup> *Moneo* has not yet been met with widespread acceptance.<sup>38</sup> *Société Financière du Porte-Monnaie Electronique* ("SFPMEI"), a credit institution backed by major French banks, instituted *Moneo* in 1999, but did not roll it out across the French territory until 2004, around the same time that Japan's JR East launched *Suica*.<sup>39</sup> At the end of 2007, only one million consumers used *Moneo*.<sup>40</sup> Stored-value cards, then, are not yet emerging as a major means of payment in France.

### III. WHAT ACCOUNTS FOR THE GROWTH OF STORED-VALUE CARDS IN JAPAN?

Regulation alone cannot account for the rapid growth of stored-value cards in Japan. Rather, businesses emerge in a complex environment where business strategy, infrastructure, and policy interact.<sup>41</sup> Japan's payment culture and unique socio-economic factors are crucial in explaining the growth of stored-value cards. Japan's Prepaid Card Law has also provided a supportive regulatory environment with a simple and flexible framework for issuers. But, today, technological developments and widespread use of stored-value cards are straining the regulatory capacity of the Prepaid Card Law.

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<sup>34</sup> The CIA estimates the population of the European Union at 491,582,852. The CIA World Factbook, European Union, <https://www.cia.gov/library/publications/the-world-factbook/geos/ee.html> (last visited May 9, 2009). In contrast, Japan's population stands at 127,078,679. The CIA World Factbook, Japan, <https://www.cia.gov/library/publications/the-world-factbook/geos/ja.html> (last visited May 9, 2009).

<sup>35</sup> Gift-cards are generally single-purpose cards where one issuer supplies the card for one type of purchase. See BUDNITZ & SAUNDERS, *supra* note 8, at 169.

<sup>36</sup> EUROPEAN CENTRAL BANK, BLUE BOOK: PAYMENT AND SECURITIES SETTLEMENT SYSTEMS IN THE EUROPEAN UNION 233-34 (2007), available at [http://www.ecb.int/pub/pdf/other/ecbbluebook\\_ea200708en.pdf](http://www.ecb.int/pub/pdf/other/ecbbluebook_ea200708en.pdf) (last visited Feb. 22, 2009).

<sup>37</sup> *Visa* and *Mastercard* also issue stored value-cards, but only 70,000 such cards circulated in France in 2007. See OBSERVATOIRE DE LA SECURITE DES CARTES DE PAIEMENT, RAPPORT ANNUEL 14 (2007), [http://www.banque-france.fr/observatoire/telechar/rap\\_an\\_2007.pdf](http://www.banque-france.fr/observatoire/telechar/rap_an_2007.pdf) (last visited Feb. 17, 2009).

<sup>38</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 26.

<sup>39</sup> See *Moneo*, Le Porte Monnaie Electronique Français, *supra* note 16, at 2-4, 13.

<sup>40</sup> OBSERVATOIRE DE LA SECURITE DES CARTES DE PAIEMENT, *supra* note 37, at 14.

<sup>41</sup> See generally CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY 3-18 (1999) (explaining the economic principles behind successful information technology businesses).

A. *Payment Culture, Technology, and Original Business Models Partly Explain the Growth of Stored-Value Cards in Japan*

Many non-legal factors explain the growth of stored-value cards in Japan. Nonetheless, three factors stand out: Japan's unique payment culture, technology that confers additional benefits compared to cash, and business strategies.

1. *Japan's Predilection for Cash and the Late Arrival of Debit Cards May Account for the Widespread Adoption of Stored-Value Cards*

One important characteristic of Japanese payment practices is the predilection of Japanese consumers to pay with cash.<sup>42</sup> The reasons for this may be due in part to cultural traditions: gift-giving marks both life and seasonal cycles in Japan, and many gifts are made with large cash amounts.<sup>43</sup> In addition, a relatively crime-free society makes it safe for the Japanese to carry large amounts of cash.<sup>44</sup> Japanese consumers also do not use checks, which accounts for their reliance on cash as a primary means of payment.<sup>45</sup> This reliance on cash may contribute to the growth of stored-value cards, which are conceptually closer to cash than credit cards. Using a credit card creates a liability that must be repaid in the future, as consumers temporarily borrow money that they do not have.<sup>46</sup> But for Japanese consumers, carrying a stored-value card containing ¥5,000<sup>47</sup> is almost equivalent to carrying ¥5,000 in cash. Once consumers exhaust the prepaid funds they must recharge the card, just as one withdraws additional cash from the ATM.

Directly related to this predilection for cash is the relatively low usage rates of debit cards in Japan, which partially explains the success of stored-value cards.<sup>48</sup> Japanese consumers' willingness to carry cash and the late development of debit cards accounts for the country's low debit card usage rates.<sup>49</sup> If debit cards function as a substitute for cash,<sup>50</sup> then stored-value

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<sup>42</sup> Japanese Bankers Association, Payment Systems in Japan, [http://www.zenginkyo.or.jp/en/banks/payment\\_systems/index.html](http://www.zenginkyo.or.jp/en/banks/payment_systems/index.html) (last visited Jan. 17, 2009).

<sup>43</sup> See KATHERINE RUPP, GIFT-GIVING IN JAPAN 73-97 (2003).

<sup>44</sup> See Mann, *supra* note 12 at 1059.

<sup>45</sup> RONALD J. MANN, CARD-BASED PAYMENT SYSTEMS IN UNITED STATES AND JAPAN 2 n.5 (Bank of Japan, ed., 1999).

<sup>46</sup> Nobuhiko Sugiura, *supra* note 11, at 76-77.

<sup>47</sup> Approximately US \$50.

<sup>48</sup> Mann, *supra* note 12, at 1100-01.

<sup>49</sup> *Id.* at 1102.

<sup>50</sup> See *id.* at 1102 (describing how consumers use debit cards to avoid using cash in the United States).

cards may be filling a void left by the relative absence of debit cards in Japan's payment structure.

## 2. *Stored-Value Cards Offer Japanese Consumers Additional Benefits Compared to Cash*

Japanese stored-value cards offer customers increased speed and usability compared to cash because they do not require a time-consuming cash exchange.<sup>51</sup> Thanks to contactless IC chips, transactions can now be completed in just 0.2 seconds.<sup>52</sup> Contactless payment also provides the added benefit of not having to remove a card from a wallet to effectuate payment because sensors will detect the IC chip once it is just two or three inches from the IC chip reader.<sup>53</sup> Furthermore, incorporating IC chips in cell phones increases convenience because several stored-value card systems can now be bundled into a single cell phone.<sup>54</sup> More importantly, bundling stored-value cards with cell phones is particularly convenient for Japanese consumers because cell phones are widespread in Japan.<sup>55</sup> Increased speed and usability compared to regular cash help explain the development of stored-value cards in Japan.

Loyalty programs also play an important role in generating support for stored-value cards.<sup>56</sup> *Edy*, Japan's largest stored-value card issuer, gained consumer loyalty by offering airline mileage.<sup>57</sup> Similarly, *Seven and i Holdings Co. Ltd.*<sup>58</sup> made a loyalty program central to its business strategy.<sup>59</sup>

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<sup>51</sup> See Nobuhiko Sugiura, *supra* note 11, at 74.

<sup>52</sup> See IWATA, *supra* note 1, at 13-14.

<sup>53</sup> See Akira Yasuoka & Tomoki Hiratsuka, *IC Cards Spur Innovative Change in Financial Institutions*, NOMURA RES. INST. PAPER, NO. 93 (Aug. 1, 2005), at 6, available at <http://www.nri.co.jp/english/opinion/papers/2005/pdf/np200593.pdf> (last visited May 9, 2009).

<sup>54</sup> See *id.*

<sup>55</sup> At the end of 2007, there were more than 100 million cell phone subscribers in Japan. See MINISTRY OF INTERNAL AFFAIRS AND COMMUNICATION, WHITE PAPER 43 (2008), available at <http://www.johotsusintokei.soumu.go.jp/whitepaper/eng/WP2008/chapter2-1.pdf>.

<sup>56</sup> See Hiromichi Yasuoka & Masahiro Kajino, *Shōhisha Ishiki no Takamari wo Ikashita "Kigyō Tsūka Māketingu" no Dōnyū [The Introduction of "Marketing Corporate Currencies" Capitalizing on Increased Consumer Awareness]* CHITEKISHISAN SŌZŌ, May 2008, at 86-89, available at <http://www.nri.co.jp/opinion/chitekishisan/2008/pdf/cs20080507.pdf>.

<sup>57</sup> See *id.*

<sup>58</sup> *Seven & i Holdings Co., Ltd.* is a diversified retail group engaged in the planning, management, and operations of convenience, general merchandise, and department stores. See *Seven & i Holdings Co., Ltd. Website, Corporate Profile*, <http://www.7andi.com/en/company/summary.html> (last visited Feb. 20, 2009).

<sup>59</sup> See Junji Kodama, *"nanaco"ni Miru Denshi Manē wo Sasaeru Shisutemu [The System that Bolsters Electronic Money as Seen in "nanaco"]* CHITEKISHISAN SŌZŌ, Aug. 2007, at 86-89, available at <http://www.nri.co.jp/opinion/chitekishisan/2007/pdf/cs20070809.pdf>.

These additional benefits, compared to regular cash, help explain the success of stored-value cards in Japan as a major means of payment.<sup>60</sup>

3. *Japanese Stored-Value Cards Complement Existing Businesses and Benefit from Unique Characteristics of the Japanese Market*

Successful stored-value card issuers in Japan are not financial institutions but retailers and railway companies.<sup>61</sup> Unlike *Visa* or *Mastercard*, which generate income by charging retailers a fee for processing each transaction,<sup>62</sup> Japanese issuers do not generally generate income directly through their cards. Instead, stored-value cards supplement issuers' main businesses by improving efficiency.<sup>63</sup> Stored-value cards generally complement an existing business rather than compete directly against other payment systems.<sup>64</sup>

For example, railway companies such as JR East implemented *Suica* to reduce the costs associated with ticket collectors, and to improve efficiency at the turnstile.<sup>65</sup> *Suica* originated as a train fare card for the JR East railway in 2001, and it was not until 2004 that it launched its wider payment function.<sup>66</sup> In urban areas in Japan, commuting by train or subway is a way of life;<sup>67</sup> by installing a payment function on train fare cards, which Japanese commuters use every day, railways simply expanded the use of those cards.<sup>68</sup> Retailers such as the *Aeon* group<sup>69</sup> and *Seven and i holdings Co. Ltd.* implemented their stored-value cards to collect customer data and to strengthen relationships with customers.<sup>70</sup>

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<sup>60</sup> See *id.* at 88.

<sup>61</sup> See Nobuhiko Sugiura, *supra* note 11, at 74.

<sup>62</sup> See generally RONALD MANN, CHARGING AHEAD: THE GROWTH AND REGULATION OF PAYMENT CARD MARKETS 20-33 (2006) (describing the mechanics of payment transactions).

<sup>63</sup> IWATA, *supra* note 1, at 30-31.

<sup>64</sup> *Id.*

<sup>65</sup> Nobuhiko Sugiura, *supra* note 87, at 74-75; NIHON GINKŌ KESSAIKIKŌKYOKU, KESSAI SHISUTEMUTŌ NI KANSURU CHŌSA RONBUN: SAIKIN NO DENSHI MANĒ NO DŌKŌ NI TSUITE [RECENT DEVELOPMENTS IN ELECTRONIC MONEY IN JAPAN] (Aug. 2008), at 7, <http://www.boj.or.jp/type/ronbun/ron/research07/data/ron0808b.pdf> (last visited Jan. 3, 2009); see also Junji Kodama, *supra*, note 59, at 89.

<sup>66</sup> BANK OF JAPAN, *supra* note 6.

<sup>67</sup> In 2007, Japanese railways transported 22 billion passengers. Japanese Ministry of Land Transport and Infrastructure, Monthly Statistical Report on Railway Transport (Sept. 2008), <http://toukei.mlit.go.jp/60/monthly/index.html> (last visited Feb. 27, 2009).

<sup>68</sup> See generally SHAPIRO & VARIAN, *supra* note 41, at 159-62 (describing the importance of looking to complementary products in devising a successful business strategy).

<sup>69</sup> The *Aeon* Group is a group of Japanese retailers. See *Aeon Group* Homepage, About *Aeon*, <http://www.aeon.info/en/aboutaeon/index.html> (last visited May 8, 2009).

<sup>70</sup> See Nobuhiko Sugiura, *supra* note 11, at 74-75.

Japanese issuers also benefit from unique characteristics of the Japanese market. Retailers such as *Seven & i holdings* are saturation retailers with very concentrated presence throughout Japan.<sup>71</sup> Consumers use them on a daily basis and have many opportunities to make purchases with their stored-value cards. Furthermore, in urban areas, railways are often the tenants and developers of areas surrounding train stations, thereby giving issuers a lot of leverage in expanding the number of stores that accept stored-value cards.<sup>72</sup> Japanese issuers not only benefit from an existing large network of customers but also from a unique business environment.

*B. The Prepaid Card Law Provides a Simple and Flexible Regulatory Framework*

In Japan, many laws regulate stored-value cards, from their contractual to their criminal aspects.<sup>73</sup> By definition, however, stored-value cards fall outside the scope of most banking laws, so the bulk of the regulation comes from the Prepaid Card Law.<sup>74</sup>

The purpose of the Prepaid Card Law is to regulate the issuance of prepaid vouchers, protect the funds of voucher holders, and improve the trustworthiness of prepaid vouchers.<sup>75</sup> A voucher is a tangible item on which value is recorded for the purpose of effectuating payment for goods and services with counterparties defined by contract.<sup>76</sup> As such, the Prepaid Card Law does not target all forms of electronic money, but only electronic money that takes the form of a voucher. Not all vouchers are included. This law covers a broad spectrum of vouchers, including train fare cards and admission tickets,<sup>77</sup> but does not include government issued vouchers, or vouchers used in complex financial transactions.<sup>78</sup>

Under Chapter 3 of the Prepaid Card Law, any person or entity may issue prepaid vouchers<sup>79</sup> provided they meet certain registration and

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<sup>71</sup> See Akinobu Terasaka, *Development of New Store Types: The Role of Convenience Stores in Japan*, 45 GEOJOURNAL 317, 318 (1998).

<sup>72</sup> For example, the Odakyu Group, one of the largest railway operators in Tokyo, operates hotels, department stores, advertising agencies, restaurants, and leases retail space along its rail lines and near its train stations. See ODAKYU RAILWAY GROUP, ANNUAL REPORT 6 (2008), available at <http://www.odakyu.jp/ir/shared/pdf/h20/all.pdf>.

<sup>73</sup> See Nobuhiko Sugiura, *supra* note 11, at 77-79.

<sup>74</sup> See *id.* at 77-79.

<sup>75</sup> Maebaraishiki Shōhyō no Kiseitō ni Kan Suru Hōritsu [Prepaid Card Law], Law No. 92 of 1989, art. 1, as amended.

<sup>76</sup> Nobuhiko Sugiura, *supra* note 11, at 78.

<sup>77</sup> Prepaid Card Law, *supra* note 75, art. 2.

<sup>78</sup> *Id.* art. 3.

<sup>79</sup> *Id.* arts.6-7.

prudential requirements.<sup>80</sup> To meet registration requirements, issuers must submit the name of the issuing entity, its stock capitalization, the name of the directors, and indicate the type of voucher to be issued.<sup>81</sup> The registration may be refused and fines may apply for failing to comply with these requirements.<sup>82</sup> The Prepaid Card Law does not require issuers to refund prepaid funds at the request of the voucher holder, nor does it place restrictions on the activities of issuers.<sup>83</sup> The Prepaid Card Law applies equally regardless of the type of institution that seeks to issue vouchers.

Article 13 imposes the most significant prudential requirement of the Prepaid Card Law, requiring issuers to keep at least half of the value paid by a voucher holder as a security deposit.<sup>84</sup> This security deposit must in turn be invested in government bonds or other secure investments.<sup>85</sup> Voucher holders also receive priority rights over all other creditors with regards to this security deposit, which means that their deposit is at least partially protected if the issuer goes bankrupt.<sup>86</sup> Because the Prepaid Card Law requires issuers to keep fifty percent of the voucher holder's funds in safe investments, the issuer's capital requirements grow in tandem with the growth of its business, regardless of size: the more cards an entity issues, and the more prepaid funds customers purchase, the greater the amount of money it must keep in escrow. Smaller issuers are not burdened vis à vis larger issuers: capital requirements apply equally to all institutions.

In summary, the Prepaid Card Law provides a simple framework that applies equally to bank and non-bank issuers alike and flexible capital requirements that are proportional to the size of the issuer.

### C. *Technological Development and Growth Are Stretching the Prepaid Card Law Thin*

For all its simplicity, the Prepaid Card law also has limitations. Growth and technological development are creating new legal challenges that the Prepaid Card Law cannot cope with in its present state.<sup>87</sup> Technological developments and growth are steering stored-value cards in a direction where they are becoming less voucher-like. For example, some

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<sup>80</sup> *Id.* arts.7, 13.

<sup>81</sup> *Id.* art.7.

<sup>82</sup> *Id.* art.9.

<sup>83</sup> These are importations distinctions compared to European Regulation. *See infra* Part IV.B.2-.3.

<sup>84</sup> Prepaid Card Law art.13.

<sup>85</sup> *Id.* art.13, no. 7.

<sup>86</sup> *Id.* art.13; *see also* SHINSAKU IWAHARA, DENSHI MANĒ TO HŌ [ELECTRONIC MONEY AND THE LAW] 565-66 (2003).

<sup>87</sup> Nobuhiko Sugiura, *supra* note 11, at 79-81.

stored-value card issuers have begun storing value not on the card itself, but on distant servers.<sup>88</sup> The advantage is that when consumers lose the card, they do not lose the value on the card because issuers can retrieve the data and issue a new card.<sup>89</sup> On the other hand, this also means that stored-value cards no longer constitute vouchers within the meaning of the Prepaid Card Law, which requires the recording of value on a single tangible item.<sup>90</sup> As issuers store prepaid funds on centralized servers, stored-value cards lose their voucher-like quality and begin to resemble deposits:<sup>91</sup> just as consumers deposit funds in a bank, stored-value card carriers deposit their prepaid funds on a centralized server. This resemblance to bank deposits means that bank regulation may prove more adequate to regulate stored-value cards and that the Prepaid Card Law is inadequate.<sup>92</sup> Neither does the Prepaid Card Law address the potential consequences were one of these servers to fail, resulting in the loss of account information.<sup>93</sup>

Japanese regulators are now deciding whether to strengthen the current regulation of stored-value cards, and if so, to what degree.<sup>94</sup> At the time of writing, a Payment Services Bill is before the Japanese House of Representatives.<sup>95</sup> If adopted, this law, which covers not only stored-value cards but also other forms of funds transfers and interbank fund settlement, would retain the broad outlines of the Prepaid Card Law, such as its capital and registration requirements.<sup>96</sup> It addresses the main flaw of the Prepaid Card Law by replacing the concept of “voucher” with the more inclusive concept of “prepaid payment instrument,” so as to include server-based stored-value cards.<sup>97</sup> Although this proposed law represents a major transformation for Japanese payment services regulation and effectively revokes the Prepaid Card Law,<sup>98</sup> it would not depart significantly from the system put in place by the Prepaid Card Law.<sup>99</sup> This bill therefore strongly

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<sup>88</sup> See Junji Kodama, *supra* note 59, at 89.

<sup>89</sup> *Id.* at 88.

<sup>90</sup> Nobuhiko Sugiura, *supra* note 11, at 79-80.

<sup>91</sup> *Id.* at 80.

<sup>92</sup> *Id.* at 80.

<sup>93</sup> *Id.* at 79-81.

<sup>94</sup> See, e.g., Etona Ueda, Presentation made before the FTC's Conference at the University of Washington: Pay on the Go, Consumers and Contactless Payments: e-Money and the Evolution of Payment Systems in Japan, at 150 (July 24, 2008) (transcript), <http://www.ftc.gov/bcp/workshops/payonthego/transcript080724.pdf> (last visited Feb. 20, 2009).

<sup>95</sup> Shikin Kessai ni Kansuru Hōritsuan [Payment Services Bill], House of Representatives No. 50, 171st Session (2009).

<sup>96</sup> *Id.* art 14.

<sup>97</sup> *Id.* art. 3.

<sup>98</sup> See *id.* art. 1 (purpose).

<sup>99</sup> See *id.* ch. 2.

suggests that the Prepaid Card Law has been an effective regulatory mechanism because it leaves intact the structure of the Prepaid Card Law.

#### IV. WHY ARE STORED-VALUE CARDS NOT EMERGING AS A MAJOR MEANS OF PAYMENT IN FRANCE?

Non-legal reasons such as France's payment institutions, payment culture, and markedly different business strategies may explain the low uptake levels of stored-value cards in France. But regulation seems to factor in negatively to a greater degree in France than in Japan. The EU implemented the E-Money Directive to promote the growth of electronic money, but monetary concerns influenced the Directive's creation. Compared to the Japanese Prepaid Card Law, the E-Money Directive presents a complex regulatory scheme with rigid capital requirements. France's application of the Directive reflects this complex scheme and adds further constraints. The EU's recent proposal for a new Directive strongly suggests that the EU currently over-regulates stored-value cards.

##### A. *Number of Non-Legal Factors Account for the Low Usage of Stored-Value Cards in France*

Many of the same non-legal factors at play in Japan explain the low take-up levels of stored-value cards in France. France's payment culture relies more on debit cards and less on cash. Technological delay and different business strategies also explain *Moneo's* low usage rates.

The structure of the French payments market may account for the low demand for stored-value cards. Compared to Japan, France relies more on debit cards and checks as payment methods.<sup>100</sup> If debit cards, which are widespread in France,<sup>101</sup> function as a substitute for cash,<sup>102</sup> then France does not have a void that stored-value cards would fill. In addition, France has one of the lowest currency to GDP ratios in the developed world,<sup>103</sup> so stored-value cards may not seem as intuitive to French consumers as to Japanese consumers.

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<sup>100</sup> BANK OF INTERNATIONAL SETTLEMENTS, COMM. ON PAYMENT AND SETTLEMENT SYS., BANK FOR INT'L SETTLEMENTS, RETAIL PAYMENTS IN SELECTED COUNTRIES: A COMPARATIVE STUDY 25-26 (1999), available at <http://www.bis.org/publ/cpss33.htm> [hereinafter BIS RETAIL PAYMENTS STUDY].

<sup>101</sup> *Id.* at 25.

<sup>102</sup> See Mann, *supra* note 12, at 1102.

<sup>103</sup> Currency to GDP ratios are one way to measure the use of cash in a given country. BIS RETAIL PAYMENTS STUDY, *supra* note 100, at 9. Japan has one of the highest currency to GDP ratios in the world. *Id.*

Unlike its Japanese counterparts, *Moneo* did not begin using contactless technology until 2006.<sup>104</sup> *Moneo* may be a victim of technology delay, which may have put it at a temporary disadvantage compared to other forms of payment. Japan's *Felica*<sup>105</sup> contactless technology, used by most issuers in Japan, does not meet European payment security standards, and could not have been used there.<sup>106</sup> Today, only 300,000 contactless *Moneo* cards circulate in France.<sup>107</sup> Without the added convenience of contactless payment, French consumers may be unwilling to switch over to *Moneo*.

Finally, *Moneo* competes directly with other payment methods, especially debit cards and credit cards. Indeed, *Moneo*'s main purpose is to provide a payment service,<sup>108</sup> unlike Japan's *Suica* and *Pasmo*, the main purpose of which is to provide a transportation card. Worse, many French debit cards include the *Moneo* function, thereby further blurring stored-value cards' distinctive features.<sup>109</sup> Without additional benefits for either merchants or consumers compared to other payment systems, the high costs of installing terminals, and transaction fees paid by both merchants and customers impair *Moneo*'s spread.<sup>110</sup> *Moneo*'s planned launch of a transportation card in 2009, and its decision to partner with corporations and universities to offer cards that can be bundled with other functions,<sup>111</sup> suggests that its original business strategy may not have taken into account all the possibilities that stored-value cards offer.

#### B. *The E-Money Directive's Financial Characterization of Stored-Value Cards Results in a Complex Regulatory System with Strict Prudential Requirements*

The EU's characterization of stored-value cards differs substantially from the Japanese stance. Monetary concerns colored the formation of the E-Money Directive, resulting in a relatively complex regulatory system with rigid capital requirements. France's implementation of the Directive reflects this complex structure but further rigidifies its requirements.

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<sup>104</sup> See *Moneo*, Dossier de Presse [Moneo Press Kit], at 8 (Feb. 2009), [http://www.moneo.net/fileadmin/user\\_upload/PDF/plaquette\\_institutionnelle\\_2008-p15.pdf](http://www.moneo.net/fileadmin/user_upload/PDF/plaquette_institutionnelle_2008-p15.pdf) (last visited Feb. 27, 2009).

<sup>105</sup> *Felica* is a contactless smart card produced by the Sony Corporation (which was originally designed as a transportation card). The name originates from a contraction of "Felicity" and "Card." See IWATA, *supra* note 1, at 228.

<sup>106</sup> See *id.* at 228-29.

<sup>107</sup> See *Moneo*, Dossier de Presse, *supra* note 104, at 8.

<sup>108</sup> *Moneo* Website, A propos de Moneo [About Moneo], <http://www.moneo.net/a-propos-de-moneo.html> (last visited Feb. 20, 2009).

<sup>109</sup> OBSERVATOIRE DE LA SECURITE DES CARTES DE PAIEMENT, *supra* note 37, at 14.

<sup>110</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 26.

<sup>111</sup> See *Moneo*, Dossier de Presse, *supra* note 104, at 8.

### 1. *The E-Money Directive Is Rooted in Monetary Regulation*

The emergence of the first electronic money products in the early 1990s prompted European central banks and ministries to begin regulating electronic money.<sup>112</sup> As an initial step, the European Monetary Institute<sup>113</sup> published a report where it characterized issuers of multi-purpose stored-value cards as institutions taking deposits from the public and demanded their regulation under existing banking laws.<sup>114</sup>

The European Central Bank (“ECB”) identified monetary policy and consumer protection as its main concerns, and produced a report in 1998 arguing for a strong regulatory framework.<sup>115</sup> The first concern was that private issuers could over-issue electronic money and thus impact price stability by flooding the market with electronic money disconnected from central bank currency.<sup>116</sup> Meanwhile, from the perspective of consumer protection, the ECB was concerned that electronic money issuers would face liquidity risks similar to those experienced by credit institutions because the business of stored-value cards amounts to deposit taking.<sup>117</sup> Prepayments made to an issuer are generally not left idle, but invested for a return, and unsound investment policy could potentially jeopardize the consumer’s prepaid funds.<sup>118</sup> Finally, if electronic money were to become a valid substitute for cash transactions, the failure of an issuer could affect the stability of payments markets.<sup>119</sup> With respect to such concerns, the ECB believed that electronic money issuers should be subject to prudential provisions similar to those governing credit institutions.<sup>120</sup>

Many countries, including France, heeded the ECB’s warnings and adopted laws that limited the issuance of electronic money to credit institutions and subjected prepaid funds to deposit insurance.<sup>121</sup> SFPMEI, *Moneo*’s issuer created in 1999, emerged when the French government intended to limit electronic money to credit institutions.<sup>122</sup>

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<sup>112</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 18.

<sup>113</sup> The European Monetary Institute is the predecessor to the European Central Bank (ECB).

<sup>114</sup> Ramasastry, *supra* note 8, at 681.

<sup>115</sup> EUROPEAN CENTRAL BANK, REPORT ON ELECTRONIC MONEY, at 13-20 (Aug. 1998), <http://www.ecb.int/pub/pdf/other/emoneyen.pdf> (last visited Jan. 3, 2009).

<sup>116</sup> *See id.* at 13.

<sup>117</sup> *Id.*

<sup>118</sup> *Id.* at 15.

<sup>119</sup> *See id.* at 15-16.

<sup>120</sup> *Id.* at 14-15.

<sup>121</sup> *See* Développements Récents en Matière de Monnaie Electronique, *supra* note 18, at 91.

<sup>122</sup> *Id.*; Moneo, Le Porte Monnaie Electronique Français, *supra* note 16, at 13.

Fearing that a proliferation of ad-hoc national rules would stifle competition, innovation, and a common European market in the payment sector, the European Commission<sup>123</sup> proposed a directive that reflected the Commission's desire to provide a legal framework that would encourage innovation.<sup>124</sup> The ECB, on the other hand, concluded that the simplest way to regulate electronic money would be to limit the issuance of electronic money to credit institutions.<sup>125</sup> The final version of the Directive, commonly referred to as the E-Money Directive, reflects the divergent positions of the European Commission and the ECB.<sup>126</sup>

## 2. *The E-Money Directive Creates a Complex Three-Tiered Regulatory System with Rigid Prudential Requirements*

The conflicting interests of the ECB and European Commission produced a complex three-tiered system that imposes rigid prudential requirements. The E-Money Directive requires member states to prohibit "persons or undertakings that are not credit institutions" from carrying on the business of issuing electronic money.<sup>127</sup> Banks that issue electronic money are covered under the prudential regime of the Directive Relating to the Taking Up and Pursuit of Credit Institutions,<sup>128</sup> which requires them to adhere to strict prudential requirements.

However, the E-Money Directive creates a new category of institution, the Electronic Money Institution ("ELMI"), which can also issue electronic money.<sup>129</sup> Some of the more relevant prudential requirements imposed on ELMIs include sound and prudent operations,<sup>130</sup> investments of an amount no less than the institutions' financial liabilities related outstanding electronic money,<sup>131</sup> redeemability at "par value,"<sup>132</sup> restriction

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<sup>123</sup> The European Commission is the executive arm of the European Union and is responsible for proposing legislation, implementing decisions, and upholding the Union's treaties.

<sup>124</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 38, at 19.

<sup>125</sup> See European Central Bank, *supra* note 115, at 13-20.

<sup>126</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 20. The Directive also reflects the European Commission's desire to create "a level playing field between electronic money institutions and other credit institutions issuing electronic money" by balancing the "less cumbersome features of the prudential supervisory regime applying to electronic money institutions" with "provisions that are more stringent than those applying to credit institutions, notably as regards restrictions on the business activities which electronic money institutions may carry on . . ." Council Directive 2000/46/EC, rec. 1, 12, 2000 O.J. (L 275).

<sup>127</sup> Council Directive 2000/46/EC, art. 1 (4), 2000 O.J. (L 275).

<sup>128</sup> Council Directive 2000/12/EC, 2000 O.J. (L 126).

<sup>129</sup> See Ramasastry, *supra* note 8, at 683.

<sup>130</sup> Council Directive 2000/46/EC, art. 7, 2000 O.J. (L 275).

<sup>131</sup> *Id.* art. 5.

<sup>132</sup> *Id.* art. 3.

of activities to those that are closely related to issuing e-money,<sup>133</sup> and a capital base of at least one million euro.<sup>134</sup> This last requirement, unlike the Japanese Prepaid Card Law, provides a rigid capital requirement that is independent of the size of the issuer.

The E-Money Directive waives some of these requirements for a third category of institution. The waiver scheme covers institutions that issue electronic money on a limited scale, and limit the storage amount of stored-value cards (and other electronic devices) to 150 euro.<sup>135</sup> Furthermore, issuers must satisfy one of several criteria: 1) financial liabilities must not normally exceed five million euro and never exceed 6 million euro; 2) the electronic money issued may only be accepted by subsidiaries of the issuer, any parent undertaking of the institution, or any other subsidiary of that parent undertaking; or 3) the electronic money shall only be accepted by a limited number of undertakings defined by close geographic area or a common distribution scheme.<sup>136</sup> Although the waiver broadens the range of institutions authorized to issue electronic money and eliminates capital requirements, it also severely restricts the activities in which these institutions can engage.

### 3. *French Regulation Replicates the E-Money Directive with Added Constraints and Complicates Matters for Issuers*

France transposed the E-Money Directive into a domestic regulation in 2003.<sup>137</sup> Although the regulation generally adopts the same definition of electronic money as the E-Money Directive, it construes ELMIs as a subcategory of credit institutions.<sup>138</sup> Issuers that limit their activities to issuing, offering and managing electronic money follow prudential requirements that do not apply to regular credit institutions.<sup>139</sup> French regulation departs somewhat from the E-Money Directive by preventing issuers from owning stock in companies that do not have an “accessory function” to the business of electronic money.<sup>140</sup> Like the E-Money Directive, French regulation also

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<sup>133</sup> *Id.* art. 5(a)-(b).

<sup>134</sup> *Id.* art. 4(1).

<sup>135</sup> *Id.*

<sup>136</sup> *Id.* art. 8(1); *see also* Ramasastry, *supra* note 8, at 683.

<sup>137</sup> Arrêté du 10 janvier 2003 portant homologation du règlement n° 2002-13 du Comité de la réglementation bancaire et financière, Journal Officiel de la République Française [J.O.] [Official Gazette of France], Feb. 1, 2003, at 2003 (Annexed Document), *available at* [http://www.banque-france.fr/fr/supervi/telechar/regle\\_bafi/crbf02-13.pdf](http://www.banque-france.fr/fr/supervi/telechar/regle_bafi/crbf02-13.pdf) [hereinafter Regulation no. 2002-13].

<sup>138</sup> *See id.* art. 2.

<sup>139</sup> *Id.* art. 12.

<sup>140</sup> *Id.*

waives some of the requirements for institutions whose financial engagements relative to electronic money do not normally exceed five million euro and never exceed 6 million euro.<sup>141</sup> Nevertheless, under the waiver, institutions must still meet a minimum capital requirement of one million euro and limit their business to issuing electronic money.<sup>142</sup>

Compared to Japan's Prepaid Card Law, France's three-tiered regulation complicates matters for issuers. In France, non-bank institutions seeking to issue stored-value cards must either register as an ELMI or apply for a waiver. Limitations on the activities of ELMIs also require institutions to set up a separate entity if their main business is not to issue stored-value cards.<sup>143</sup> This requirement is particularly problematic in Europe because some of the most compelling business models for electronic stored-value systems have arguably emerged from non-banks, such as cell phone providers.<sup>144</sup> France's implementation of the E-Money Directive thus provides additional headaches for potential non-bank issuers.

Nor does the waiver regime provide an adequate alternative for non-bank issuers because the lower capital requirement exemptions only apply to small-scale issuers. More importantly, the activity limitations on ELMIs still apply to issuers operating under the waiver, which means that the waiver regime presents few advantages besides lower capital requirements. Activity limitations on institutions operating under the waiver also represent a significant departure from the E-Money Directive, which does not require such limitations.<sup>145</sup>

France's regulation also imposes rigid capital requirements that are not necessarily proportional to the risks taken by issuers. While the Japanese Prepaid Card law requires the maintenance of a capital base that is proportionate to the amount received by the issuer, the French regulation requires a minimum threshold capital requirement of 2.2 million euro to establish an ELMI (higher than the E-Money Directive), or one million euro to operate under the waiver.<sup>146</sup> These rigid capital requirements have the potential for discouraging new market entrants.

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<sup>141</sup> *Id.* art. 19.

<sup>142</sup> *Id.*

<sup>143</sup> See IMPACT ASSESSMENT, *supra* note 29, at 14 (in the broader context of the European Union).

<sup>144</sup> See Hugo Godschalk & Malte Krueger, *Why E-Money Still Fails*, Paper Prepared for the Third Berlin Internet Economics Workshop 8 (May 26-27 2000), available at <http://www.paysys.de/download/Berlin5.pdf> (last visited Jan. 3, 2009).

<sup>145</sup> See *supra* Part IV.B.2.

<sup>146</sup> Arrêté du 31 décembre 1992 portant homologation des règlements du Comité de la réglementation bancaire et financière, Règlement No. 92-13, Journal Officiel de la République Française [J.O.] [Official Gazette of France], Jan. 9, 1993, at 513 (as amended), art. 1, available at [http://www.banque-france.fr/fr/supervi/telechar/regle\\_bafi/textes/CRBF92\\_14.pdf](http://www.banque-france.fr/fr/supervi/telechar/regle_bafi/textes/CRBF92_14.pdf). Since the waiver for electronic money

In summary, France's regulation seems more cumbersome than Japan's for two reasons. First, it creates a complicated regulatory framework that forces issuers to limit their business activities or set up a separate entity. Second, it imposes high, rigid capital requirements.

*C. The EU Acknowledges That the E-Money Directive Has Not Fulfilled Its Objectives and Is Considering a New Directive*

The European Commission published the final report of the Evaluation of the E-Money Directive in 2006,<sup>147</sup> which prompted the proposal of a new Directive to replace the 2000 E-Money Directive in 2008.<sup>148</sup> The Evaluation assessed the use of stored-value cards, reporting that their use remained stagnant after the implementation of the Directive, and even experienced a downward trend in some countries.<sup>149</sup> It also noted that, by the end of 2005, few ELMIs had emerged in Europe. Most countries, except for the United Kingdom, had minimal or no electronic money activity at all, with credit institutions still accounting for the majority of electronic money circulating in Europe.<sup>150</sup> The number of entities registered under the Directive's waiver provision grew more rapidly, but an overwhelming majority of these were operating in the United Kingdom and the Czech Republic, many of them without actually issuing electronic money.<sup>151</sup> As of 2006, no ELMIs or institutions operating under the waiver existed in France.<sup>152</sup> Generally, the Evaluation concluded that the number of newcomers to the European electronic money industry remained unsatisfactorily low.<sup>153</sup>

Although delayed implementation of the Directive by member states and other market factors partially explains the low level of new market participants in electronic money,<sup>154</sup> the European Commission acknowledges that ELMIs face an overly restrictive prudential regime that discourages new market entrants.<sup>155</sup> For example, the European Commission recognizes that limitations on the activities of ELMIs hinder the development of hybrid

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institutions in art. 1(d) only applies to institutions whose financial engagements never exceed 6 million euro, art. 1(c) applies. Art. 1(c) imposes a 2.2 million euro capital requirement for non-bank "financial companies." *Id.*

<sup>147</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 20.

<sup>148</sup> See 2008 Council Proposal, *supra* note 13.

<sup>149</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 28-29.

<sup>150</sup> *Id.* at 38-40.

<sup>151</sup> *Id.* at 39.

<sup>152</sup> *Id.* app. at 22.

<sup>153</sup> *Id.* expl. memo. at 2-3.

<sup>154</sup> *Id.* at 45.

<sup>155</sup> See IMPACT ASSESSMENT, *supra* note 29, at 12.

institutions because these limitations require hybrid entities to set up separate businesses at significant cost.<sup>156</sup> Redeemability of prepaid funds creates problems with issuers of electronic vouchers, which have trouble separating the issued electronic value from their bundled products.<sup>157</sup> High capital requirements discourage smaller market entrants.<sup>158</sup> Thus, the overall prudential requirements of the E-Money Directive appear disproportionate to the risks presented by stored-value cards.<sup>159</sup>

Many potential non-bank issuers have expressed dissatisfaction with the E-Money Directive, especially its muddled structure. European cellular phone operators, including France's *Orange*, have criticized the E-Money Directive because it fails to grasp the hybrid nature of institutions whose core business is not supplying payment services, but that nonetheless stand to benefit from issuing electronic money.<sup>160</sup> Many agree that the European Directive discourages the development of prepaid services in the cellular industry because of regulatory uncertainty as to whether the Directive applies to them.<sup>161</sup> *Accor*, a French hotel chain that has long been issuing paper vouchers, has argued that the Directive has prevented it from making the switch to electronic vouchers.<sup>162</sup> Many potential issuers advocate either repealing or amending the Directive to exclude vouchers and cellular phone providers' prepaid services from the definition of electronic money.<sup>163</sup>

The proposed Directive responds to these concerns by lowering the capital requirements to 125,000 euro and expanding the scope of acceptable ELMI activities, notably by allowing ELMIs to "engage in business activities other than the issuance of electronic money, having regard to applicable Community and National Law."<sup>164</sup> Although this proposed Directive basically lowers the burden for market entrants and allows the bundling of electronic money with other services, it does not change the complex three-tiered system.<sup>165</sup>

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<sup>156</sup> *Id.* at 14.

<sup>157</sup> *Id.*

<sup>158</sup> *Id.* at 14-15.

<sup>159</sup> 2008 Council Proposal, *supra* note 13, expl. memo. at 2-3.

<sup>160</sup> ORANGE GROUP, REVIEW OF THE E-MONEY DIRECTIVE, ORANGE GROUP POSITION 1 (2006), available at [http://circa.europa.eu/Public/irc/market/market\\_consultations/library?l=/financial\\_services/e-money\\_directive](http://circa.europa.eu/Public/irc/market/market_consultations/library?l=/financial_services/e-money_directive) [hereinafter ORANGE REPORT].

<sup>161</sup> *Id.* at 2; see also GSM EUROPE RESPONSE, CONSULTATION ON THE REVIEW OF THE E-MONEY DIRECTIVE 1-2 (Oct. 2005), available at [http://www.gsmeurope.org/documents/positions/2005/gsm\\_ob\\_servations\\_on\\_ec\\_consultation.pdf](http://www.gsmeurope.org/documents/positions/2005/gsm_ob_servations_on_ec_consultation.pdf) [hereinafter GSM RESPONSE].

<sup>162</sup> EVALUATION OF THE E-MONEY DIRECTIVE, *supra* note 17, at 33.

<sup>163</sup> ORANGE REPORT, *supra* note 160, at 3-4; GSM RESPONSE, *supra* note 161, at 12-14.

<sup>164</sup> See 2008 Council Proposal, *supra* note 13, art. 8.

<sup>165</sup> *Id.* art. 4 (prohibition on issuing e-money).

## V. CONCLUSION

The regulation of stored-value cards in Japan and the EU reflects drastically different characterizations of these payment systems. Japanese stored-value cards generally fall outside the reach of most banking laws. Under the Prepaid Card Law, stored-value cards are vouchers, which can be issued by any person or institution, provided that they provide guarantees to the voucher holder. In contrast, the EU adopted the view that stored-value cards should be subject to bank-like regulation because of their potential impact on monetary policy. The E-Money Directive's three-tiered structure reflects this initial characterization of electronic money as a financial activity. Only credit institutions may issue electronic money, with limited allowances for ELMIs and institutions operating under the waiver regime. In contrast, Japan avoids sweeping stored-value cards under a bank-like prudential system by characterizing stored-value cards as vouchers.

Regulation by itself cannot explain the lack of demand for stored-value cards in Europe and growing demand in Japan. Japanese issuers have emerged in a unique environment with a payment culture and payment institutions not replicated in Europe. Japanese issuers have also ingenuously exploited these unique characteristics in developing their business models.

Nevertheless, the E-Money Directive saddles stored-value cards with a complicated regulatory structure and high capital requirements, something that the Japanese Prepaid Card Law manages to avoid. While determining the degree to which the E-Money Directive has hindered the development of stored-value cards is difficult, its confusing three-tiered prudential system certainly has not made it easy for non-bank and hybrid issuers to develop stored-value cards. Non-bank issuers have expressed dissatisfaction with the confusing three-tiered structure, limitation on business activities for ELMIs, and prudential requirements that are not proportional to the risks undertaken by the issuers. The absence of major issuers besides *Moneo* in France is also revealing. In this light, the proposed revision to the E-Money Directive appears to be an admission that the current regulation is excessive. Seen from the perspective of the EU, the Prepaid Card Law's overarching qualities seem to be its comparatively simple framework and flexible capital requirements.

Yet, as technological developments transform the nature of stored-value cards, the Prepaid Card Law characterization of stored value-cards as simple vouchers appears increasingly outdated. Japan is now set to revisit its regulation of stored-value cards with a Payment Services Bill that broadens the concept of "voucher" to "prepaid payment instrument." As

Japan steams ahead with its stored-value cards, students of electronic money worldwide may be pressed to see how Japanese regulators address future legal challenges.