

**CREDIT CARD DISCLOSURES AND THE
ELDERLY: WILL THE PROPOSED
AMENDMENTS TO REGULATION Z HELP
THE ELDERLY UNDERSTAND CREDIT
CARD DOCUMENTS?**

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Older Americans are increasingly caught in the same credit and debt cycle that plagues younger members of society, yet are often less able to make sound financial decisions. In 2007, in order to address problems in the consumer credit market, the Board of Governors of the Federal Reserve System proposed amending Regulation Z, the federal regulation that polices communications between creditors and consumers. While the changes required by these amendments were vetted by consumer testing, older Americans were underrepresented in this process, and the results of an empirical study conducted by the author of this Note suggests that the proposed amendments to Regulation Z will not benefit the elderly as much as they will other segments of the population. This Note proposes that the Board of Governors reexamine these amendments to find ways to better address the consumer education needs of the elderly.

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I. Introduction

Credit card use and debt has been on the rise among Americans in recent years. Despite a popular focus on the financial troubles of younger Americans, the country's seniors are increasingly caught up in the credit and debt cycle. Indeed, the elderly are often less able to make sound financial decisions than other segments of the population, exacerbating the problems attendant to debt.

In 2007, in order to combat perceived problems in the consumer credit market, the Board of Governors of the Federal Reserve System (the Board) proposed a set of amendments to Regulation Z, the federal regulation that polices the communications between creditors and consumers. The changes required by these amendments were vetted by in-the-field consumer testing. However, older Americans were underrepresented in this testing.¹

This Note suggests that the proposed amendments to Regulation Z may not be enough to provide the elderly with needed consumer education. In support, this Note explores the issues surrounding the proposed amendments. The Note first examines how credit card use and debt has grown over the past half-century among the elderly and the general population. Next, the Note illustrates the need, in the wake of credit card expansion, for consumer education because of the prevalence of financial illiteracy among Americans, particularly the elderly. The Note then examines the federal government's response by outlining its legislative response: the Truth in Lending Act (TILA) and Regulation Z. Additionally, the Note describes how the Board proposes to amend Regulation Z to provide better consumer education. Finally, the Note presents the results of an empirical study conducted by the author to determine whether the proposed amendments to Regulation Z will benefit the elderly as much as they will other segments of the population, suggests that they will not, and proposes that the Board reexamine the amendments.

II. Background

The use of credit cards has expanded greatly over the past fifty years, bringing with it a host of problems that affect the elderly as much as any other segment of the population. The danger of this ex-

1. *See infra* Part II.E.

pansion of credit cards is more alarming given the prevalence of financial illiteracy among Americans in general and the elderly in particular.² Congress responded to these issues by encouraging disclosure of credit terms through TILA, and the Board furthered this purpose through Regulation Z.³ Responding to calls for improvement in credit card disclosure regulations, the Board has proposed several amendments to Regulation Z that are based in part on consumer testing.⁴ However, the Board did not conduct sufficient research to know whether these amendments will be adequate to address the particular consumer education needs of the elderly.⁵

A. Credit Cards and the Financial Health of the Elderly

Expansion in the use of credit cards has led to serious debt problems for Americans in general and older Americans in particular. Over the past several decades, the credit card has become extremely popular, and Americans have incurred increasing amounts of credit card debt. This increase in credit card debt can be traced to decreasing income and wealth, along with an increase in the cost of necessities. Attendant to this increase in debt, consumers are experiencing a host of problems, both personal and financial.

1. CREDIT CARD USE AND DEBT

Since the 1950s, the use of credit cards in the United States has greatly expanded.⁶ Today, more than a billion credit cards are in use,⁷ and 75% of American families held a credit card in 2004.⁸ The accompanying rise in credit card spending has contributed to an increase in consumer debt over the same period.⁹ A recent study found that, for every dollar per capita increase in credit card spending, consumer debt per capita increases by about \$1.05.¹⁰ Indeed, in 2004, the average

2. See *infra* Part II.B.

3. See *infra* Part II.C.

4. See *infra* Part II.D.

5. See *infra* Part II.E.

6. See generally RONALD J. MANN, CHARGING AHEAD 81–92 (2006) (recounting the rise of credit cards in America and abroad).

7. David K. Stein, Comment, *Wrong Problem, Wrong Solution: How Congress Failed the American Consumer*, 23 EMORY BANKR. DEV. J. 619, 633 (2007).

8. JOSÉ A. GARCÍA, DEMOS, BORROWING TO MAKE ENDS MEET 5 (2007), available at <http://www.demos.org/pubs/stillborrowing.pdf>.

9. MANN, *supra* note 6, at 52–54.

10. *Id.* at 54.

credit card debt for households with at least one credit card was \$5219.¹¹

While the media and commentators tend to focus on how debt affects youth,¹² the elderly face the same issues with credit cards as other segments of the population. Around 75% of the elderly hold a credit card.¹³ In 2001, the average amount of credit card debt for consumers over the age of sixty-five was \$4041.¹⁴ This is 21% of the average income for the age group from the same year (\$18,938).¹⁵ For newly retired consumers, those aged sixty-five to sixty-nine, the average amount of credit card debt was \$5844,¹⁶ representing 22% of that group's average income of \$26,796.¹⁷ Although their average incomes are higher,¹⁸ near-retired individuals, aged fifty-five to sixty-four, are also accumulating more credit card debt, averaging \$4088 in 2002, a 47% increase since 1991.¹⁹ Indeed, compared to other age groups, the retired and near-retired have experienced the largest growths in credit card debt—194% and 121%, respectively, between 1989 and 2004.²⁰

2. CAUSES OF RISING CREDIT CARD DEBT

The reasons for rising credit card debt can be traced to basic household finances, psychology, and the practices of credit card companies. From a financial standpoint, American families are increasingly under stress.²¹ The costs of housing, health care, transportation, child care, and education have increased dramatically over the past

11. GARCÍA, *supra* note 8, at 5.

12. See, e.g., Stein, *supra* note 7, at 624–25; *Iowa Universities Reviewing BofA Marketing Pacts*, S.F. BUS. TIMES, Nov. 5, 2007, <http://www.bizjournals.com/sanfrancisco/stories/2007/11/05/daily10.html>; Fred Tung, *Financial Literacy for Teens*, CONGLOMERATE, Nov. 4, 2007, <http://www.theconglomerate.org/2007/11/financial-liter.html>; Leslie Wines, *The Burden of Debt; Should Schools Do More to Warn About the Risk of Student Loans?*, NEWSDAY (N.Y.), Nov. 4, 2007, at F04.

13. HEATHER C. MCGHEE & TAMARA DRAUT, DEMOS, *RETIRING IN THE RED 2* (2004), available at http://archive.demos.org/pubs/Retiring_2ed.pdf.

14. *Id.* at 1.

15. OFFICE OF RESEARCH, EVALUATION & STATISTICS, SOC. SEC. ADMIN., PUBL'N NO. 13-11871, *INCOME OF THE POPULATION 55 OR OLDER: 2002*, at 47 tbl.3.1 (2005) [hereinafter *INCOME OF THE POPULATION*].

16. MCGHEE & DRAUT, *supra* note 13, at 3.

17. *INCOME OF THE POPULATION*, *supra* note 15, at 47 tbl.3.1.

18. See *id.*

19. MCGHEE & DRAUT, *supra* note 13, at 7.

20. GARCÍA, *supra* note 8, at 9. By comparison, the eighteen to twenty-four age group experienced credit card debt growth rates of 11% for the same period. *Id.*

21. See *id.* at 2.

two decades, contributing to a rise in the cost of living of 90%.²² To cope with these increasing costs, families are spending their savings, liquidating home equity, and taking on more debt.²³ In addition, credit cards are increasingly used by families as a safety net when unexpected events, such as job loss or medical emergencies, occur.²⁴

From a psychological perspective, one important factor is that credit cards facilitate spending.²⁵ When people pay with credit cards, they tend to spend more.²⁶ This is partly due to the relative ease of use of credit cards as compared to other payment methods.²⁷ Other factors involve the lesser and deferred pain associated with future credit card statements as compared to current cash or debit payments, and inaccurate estimation of future ability to pay.²⁸

The practices of the credit card companies have also led to the increase in credit card debt. Deregulation has democratized credit, but at a cost: more than one-third of cardholders have a 20% or higher annual percentage rate (APR).²⁹ Indeed, credit card companies have an incentive to target families already in financial distress, because “they are the ones who provide most of [the companies’] profits.”³⁰ Because these distressed families face higher interest rates and fees, credit card companies can extract larger total payments than if the balances were paid off regularly.³¹ The longer families “limp along” and carry a balance, the more profitable they become.³²

The causes underlying the increase in debt among older Americans are similar to those of the general population. As is the case with the general population, the accumulation of debt by the elderly has been driven by declining income and wealth coupled with rising costs.³³ As private pensions and individual savings decline, older

22. *Id.*

23. *Id.*

24. *Id.* at 2–3.

25. See MANN, *supra* note 6, at 45–49.

26. See *id.* at 46 (describing a study conducted at Sonic restaurants in Oklahoma that indicated that customers spent 30% more when permitted to pay with credit cards and another study that indicated that customers spent more than double at vending machines that accept credit cards).

27. *Id.*

28. *Id.* at 48–49.

29. GARCÍA, *supra* note 8, at 3.

30. ELIZABETH WARREN & AMELIA WARREN TYAGI, *THE TWO-INCOME TRAP* 139 (2003).

31. Ronald J. Mann, *Bankruptcy Reform and the “Sweat Box” of Credit Card Debt*, 2007 U. ILL. L. REV. 375, 386.

32. *Id.* at 391–92.

33. See MCGHEE & DRAUT, *supra* note 13, at 4–7.

Americans increasingly rely on Social Security as their sole source of income in retirement.³⁴ Housing costs for elders have increased as well, as more homeowners continue to hold mortgages well into retirement.³⁵ Out-of-pocket medical expenses consume an increasing share of elders' incomes, even among those covered by Medicare and private health insurance.³⁶ Increasing energy and utility prices and escalating property tax bills further squeeze the elderly.³⁷

Despite these similarities, the elderly have some unique characteristics that make them particularly vulnerable to the problems associated with credit card debt.³⁸ They are trusting and trustworthy, believe in meeting any obligation incurred, and are more likely to be homeowners, confined to home, or on a fixed income.³⁹ Because of these vulnerabilities, the elderly are often targeted by predatory lenders seeking to tap into their home equity, payday loan companies, and consumer scam artists—and also credit card companies.⁴⁰

3. CONSEQUENCES OF RISING CREDIT CARD DEBT

In addition to generally increasing debt, credit card spending results in a host of other problems.⁴¹ On a macro level, the financial distress that results from increased credit card debt loads burdens the social safety net, leads to losses in the national economy through decreased productivity, and harms the interests of non-credit card creditors.⁴² On an individual level, there is the threat of financial collapse and bankruptcy as consumers take on more debt than they can repay.⁴³ As consumers devote more of their income to repaying debt, less is available for necessities like food and health care.⁴⁴ Foreclosures, repossessions, and collection suits can exacerbate already diffi-

34. See Deanne Loonin & Elizabeth Renuart, *The Life and Debt Cycle: The Growing Debt Burdens of Older Consumers and Related Policy Recommendations*, 44 HARV. J. ON LEGIS. 167, 170–71 (2007).

35. *Id.* at 171–72.

36. *Id.* at 172.

37. See *id.* at 172–73.

38. See Donna S. Harkness, *When Over-the-Limit Is Over the Top: Addressing the Adverse Impact of Unconscionable Consumer-Credit Practices on the Elderly*, 16 ELDER L.J. 3, 3–4 (2008).

39. *Id.*

40. See Loonin & Renuart, *supra* note 34, at 180–85.

41. See Stein, *supra* note 7, at 623–25.

42. MANN, *supra* note 6, at 50.

43. Stein, *supra* note 7, at 623.

44. See Loonin & Renuart, *supra* note 34, at 169.

cult situations.⁴⁵ Families already saddled with credit card debt may find they have no safety net remaining when an unexpected event occurs.⁴⁶ As debt loads increase, consumers may face familial discord⁴⁷ and emotional, psychological, and physical health problems.⁴⁸ Moreover, indebted consumers are not the only parties harmed: spouses and children suffer too when consumers are in financial distress.⁴⁹

The elderly are not immune to these problems. Tellingly, Americans over sixty-five are the fastest growing age cohort of bankruptcy filers, with filings per thousand people jumping 213% between 1991 and 2001.⁵⁰ Considering that the elderly population grew by 10% during this period, this represents a rather large increase in absolute number of filers.⁵¹ The near-retired, those aged fifty-five to sixty-four, were the second fastest growing group, increasing by 60.6% during the same period.⁵² Although the elderly still file at rates disproportionately small for share of the U.S. population, and at lower rates than other age cohorts, the proportion of cases filed continues to increase.⁵³ Individuals age sixty-five or older represented 2.1% of all bankruptcy petitioners in 1991, 4.6% in 2001,⁵⁴ and 7.8% of all debtors seeking pre-bankruptcy credit counseling in 2006.⁵⁵

As credit card use expands among the elderly, they will accumulate more consumer debt. This accumulation is driven by increasing expenses and decreasing incomes. As the elderly take on more debt than they can repay, they will increasingly face the problems usually associated only with younger consumers.

45. *See id.*

46. *See generally* WARREN & TYAGI, *supra* note 30 (discussing the lack of safety net for indebted two-income families in an era when both parents work).

47. Stein, *supra* note 7, at 623–24.

48. Loonin & Renuart, *supra* note 34, at 169.

49. MANN, *supra* note 6, at 49.

50. Teresa Sullivan et al., *Young, Old, and In Between: Who Files for Bankruptcy?*, NORTON BANKR L. ADVISOR, 1, 2 (Sept. 2001).

51. *Id.*

52. *Id.* at 8 fig.4.

53. LESLIE E. LINFIELD, INST. FOR FIN. LITERACY, AGING AND BANKRUPTCY 9 tbl.1 (2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1086731.

54. Sullivan et al., *supra* note 50, at 4 tbl.1.

55. LINFIELD, *supra* note 53, at 8. It is not known how many of those seeking prebankruptcy credit counseling eventually filed for bankruptcy. *Id.* at 6.

B. Ability to Make Financial Decisions

Older Americans generally display less ability to make sound financial decisions than other age groups. For example, financial literacy among elders is lower than for any other age group.⁵⁶ While there are many public and private initiatives for financial literacy education, most focus on youth rather than elders. In addition, other factors may also impair the ability of the elderly in financial decision making.

1. FINANCIAL LITERACY OF ELDERS

The prevalence of financial illiteracy among elders demonstrates a special need for consumer education in that age group. While true illiteracy is no longer viewed as a problem in the United States, financial illiteracy is widespread.⁵⁷ Financial literacy is the ability of consumers to assess basic financial information,⁵⁸ requiring basic numeracy skills and an understanding of basic commercial concepts and skills.⁵⁹ Even among the general population, as few as 4% of consumers have a level of financial literacy adequate to compare credit card offers or compute interest.⁶⁰ Those who are financially literate can better manage debt and avoid falling to scams and predatory lending schemes.⁶¹

Financial literacy can be roughly measured by detailed studies of literacy, such as the National Assessment of Adult Literacy (NAAL).⁶² The NAAL examined three types of literacy: prose, document, and quantitative.⁶³ Prose literacy is the ability to search, understand, and use continuous texts, such as news stories and instructional materials.⁶⁴ Document literacy is the ability to search, understand, and use

56. See *infra* notes 68–69.

57. Susan Block-Lieb, *Mandatory Protections as Veiled Punishments: Debtor Education in H.R. 975, the Bankruptcy Abuse Prevention and Consumer Protection Act of 2003*, 69 BROOK. L. REV. 425, 430–31 (2004).

58. *Id.* at 430.

59. *Id.* at 433–40 (discussing the results of the National Adult Literacy Study). The National Adult Literacy Study is the predecessor to the National Assessment of Adult Literacy. See Nat'l Ctr. for Educ. Statistics, National Assessment of Adult Literacy (NAAL)—History of NAAL, <http://nces.ed.gov/naal/naalhistory.asp> (last visited Feb. 25, 2009).

60. Karen Gross, *Financial Literacy Education: Panacea, Palliative, or Something Worse?*, 24 ST. LOUIS U. PUB. L. REV. 307, 308 (2005).

61. See *id.* at 308–09.

62. See Block-Lieb, *supra* note 57, at 430–31.

63. MARK KUHNER ET AL., U.S. DEP'T OF EDUC., LITERACY IN EVERYDAY LIFE: RESULTS FROM THE 2003 NATIONAL ASSESSMENT OF ADULT LITERACY 2 (2007), available at <http://nces.ed.gov/Pubs2007/2007480.pdf>.

64. *Id.*

noncontinuous texts, such as job applications, transportation schedules, and tables.⁶⁵ Quantitative literacy is the ability to identify and perform computations using numbers found in printed material, including tasks like balancing a checkbook or filling out an order form.⁶⁶ The NAAL measured these literacy areas by surveying over 17,000 people in 2003.⁶⁷

The results of the NAAL show that the elderly as a group are less financially literate than the general population.⁶⁸ Respondents age sixty-five or over scored lower than every other age cohort for all three types of literacy.⁶⁹ Although the elderly have shown improvement in all areas of literacy since the last survey was conducted in 1992, they still have not reached the levels attained by the general population.⁷⁰ Additionally, a far greater percentage of the respondents age sixty-five or over were at or below “basic” levels of literacy than other cohorts.⁷¹

2. OTHER FACTORS AFFECTING DECISION MAKING

Apart from the problem of financial literacy, other questions may be raised about the ability of older Americans to make financial decisions. The issue of capacity, both legal and medical, is an omnipresent concern in the area of elder law. If a person lacks capacity to make legal or medical decisions, more information is not likely to enhance that person’s performance on a financial literacy exam or ability to understand a monthly credit card statement. Determining whether a person has the necessary capacity is a difficult issue, without black and white answers. The problem of capacity is addressed with other tools and is beyond the scope of this Note.

Less dramatic factors also affect the decision-making ability of older Americans. Recent neuroscience research suggests that as people age, they have reduced responsiveness to anticipated monetary losses, impacting older people’s ability to make sound financial decisions.⁷² Other studies have suggested that the aging mind has dif-

65. *Id.*

66. *Id.*

67. *Id.* at 8, 100.

68. *See id.* at 27–29.

69. *See id.* at 27 fig. 2-13.

70. *See id.*

71. *See id.* at 28–29 figs.2-14a, 2-14b & 2-14c.

72. *See* Gregory R. Samanez-Larkin et al., *Anticipation of Monetary Gain but not Loss in Healthy Older Adults*, 10 NATURE NEUROSCIENCE 787, 787 (2007).

ficulty understanding new information, focusing only on simply and positively presented information as a result.⁷³ This means that some warnings and education meant to help the elderly may be ineffective.⁷⁴

Regardless of the cause, because the elderly are particularly prone to making unsound financial decisions, consumer education should be targeted at their special needs.

C. The Legislative Response: Consumer Education Through TILA and Regulation Z

Congress's answer to the lack of consumer education about credit cards was to encourage disclosure of credit terms through TILA. The Board carried out this congressional mandate by promulgating credit card disclosure requirements in Regulation Z.

1. THE TRUTH IN LENDING ACT

Against the backdrop of expanding consumer credit markets, Congress enacted TILA in 1968.⁷⁵ Like many other major pieces of legislation, the Truth in Lending Act was the product of a long and tortuous legislative process, becoming law only after eight years of legislative debate.⁷⁶

By enacting TILA, Congress was reacting to a perception that credit card companies were employing confusing and misleading terms, as well as "gimmicks," which made it impossible for the average consumer to understand the cost of credit.⁷⁷ Congress intended TILA to promote the informed use of credit by raising awareness of the cost of credit.⁷⁸ The purpose of the statute is to "assure a meaningful disclosure of credit terms so that the consumer will be able to compare more readily the various credit terms available to him and avoid the uninformed use of credit, and to protect the consumer against inaccurate and unfair credit billing and credit card practices."⁷⁹

73. Harkness, *supra* note 38, at 19.

74. Loonin & Renuart, *supra* note 34, at 197.

75. Edward L. Rubin, *Legislative Methodology: Some Lessons from the Truth-in-Lending Act*, 80 GEO. L.J. 233, 262 (1991).

76. *See id.* at 242-63.

77. H. REP. NO. 90-1040 (1968), *reprinted in* 1968 U.S.S.C.A.N. 1962, 1965.

78. Truth in Lending Act § 102, 15 U.S.C. § 1601(a) (2000).

79. *Id.*

To carry out its purpose, TILA requires consumer credit companies to disclose the cost of credit in a standardized way.⁸⁰ Most importantly, TILA requires disclosure of applicable finance charges and APRs.⁸¹ If a company violates TILA, consumers can sue that company and collect actual damages, statutory damages, attorney's fees, and court costs.⁸² Criminal sanctions are also available for willful and knowing violations.⁸³

2. REGULATION Z

In TILA, Congress authorizes the Board to promulgate regulations carrying out the purposes of the statute.⁸⁴ These regulations can be anything "necessary or proper," including the publication of model disclosure forms and clauses.⁸⁵ The Board's subsequent regulations are codified in Regulation Z.⁸⁶

Regulation Z divides the world of credit into two parts: open-end credit and closed-end credit.⁸⁷ An open-end credit plan is one which contemplates repeated transactions, the application of finance charges to unpaid balances, and conditioning the amount of available credit on any outstanding balance.⁸⁸ Credit cards are open-end credit plans, as are retail charge accounts, revolving accounts, check overdrafts, and home equity plans.⁸⁹ Closed-end plans encompass all other types of credit plans, such as car loans and home mortgages.⁹⁰ Regulation Z imposes different disclosure requirements for open-end

80. Christopher L. Peterson, *Truth, Understanding, and High-Cost Consumer Credit: The Historical Context of the Truth in Lending Act*, 55 FLA. L. REV. 807, 880 (2003).

81. *Id.* A finance charge is "the sum of all charges, payable directly or indirectly by the person to whom the credit is extended, and imposed directly or indirectly by the creditor as an incident to the extension of credit." 15 U.S.C. § 1605(a). An annual percentage rate is an interest rate calculated in the manner set out in TILA. *See id.* § 1606(a).

82. *Id.* § 1640.

83. *Id.* § 1611.

84. *Id.* § 1604(a).

85. *Id.* § 1604(a)-(b).

86. Regulation Z, 12 C.F.R. § 226.1(a) (2006).

87. *See* 12 C.F.R. § 226.1(d)(2)-(3).

88. *See id.* § 226.2(a)(20).

89. *See* JOHN H. HIGGS & JOAN P. WARRINGTON, PRACTICING LAW INST., PLI ORDER NO. A4-4432, OPEN-END CREDIT (EXCLUDING HOME EQUITY PLANS): AN OVERVIEW 35-37 (1993). Home equity plans are also open-end credit plans. *Id.* Because they differ significantly from credit cards, however, they will not be discussed in this Note.

90. Nefertara Clark, Note, *Finance and Other Charges: Is Disclosure for the Sake of Disclosure Sufficient?*, 33 S.U. L. REV. 313, 318 (2006).

plans and for closed-end plans.⁹¹ Those for the former are less strict than those for the latter.⁹² Regulation Z also provides for special rules for certain home mortgage transactions⁹³ and contains several miscellaneous provisions.⁹⁴

For open-end credit plans, Regulation Z provides separate disclosure requirements for several phases of the creditor-consumer relationship. Areas of particular interest include credit card applications and solicitations, account opening, periodic statements, changes to account terms, and advertising.

a. Credit Card Applications Regulation Z contains several requirements affecting credit card applications and solicitations. The creditor must disclose to the consumer: applicable APRs, in eighteen-point font, including any variable APRs,⁹⁵ annual or other periodic fees,⁹⁶ minimum finance charges,⁹⁷ transaction charges,⁹⁸ any grace period for payments,⁹⁹ and the balance computation method used by the creditor.¹⁰⁰ This information must appear in a table, popularly known as the "Schumer Box,"¹⁰¹ which must be substantially similar in format to model forms provided in the appendix to the regulation.¹⁰² Additionally, the creditor must provide information about any applicable cash advance fees,¹⁰³ late payment fees,¹⁰⁴ over-the-limit fees,¹⁰⁵ and balance transfer fees.¹⁰⁶ These disclosures may be included either inside or outside the Schumer Box, as the creditor chooses.¹⁰⁷ All of

91. Compare 12 C.F.R. §§ 226.5–.16 (disclosure requirements for open-end credit plans), with 12 C.F.R. §§ 226.17–.24 (disclosure requirements for closed-end credit plans).

92. Clark, *supra* note 90, at 318–19.

93. 12 C.F.R. §§ 226.31–.34.

94. *Id.* §§ 226.25–.30.

95. *Id.* § 226.5a(b)(1).

96. *Id.* § 226.5a(b)(2).

97. *Id.* § 226.5a(b)(3). Finance charges are defined and explained elsewhere in the regulation. *See id.* § 226.4.

98. *Id.* § 226.5a(b)(4).

99. *Id.* § 226.5a(b)(5).

100. *Id.* § 226.5a(b)(6).

101. Credit.com, Look for the "Schumer Box", <http://www.credit.com/slp/chapter4/Look-for-the-Schumer-Box.jsp> (last visited Feb. 25, 2009) (attributing the legislation requiring the table to Senator Charles Schumer).

102. 12 C.F.R. § 226.5a(a)(2)(i); *see id.* pt. 226 app. G.

103. *Id.* § 226.5a(b)(8).

104. *Id.* § 226.5a(b)(9).

105. *Id.* § 226.5a(b)(10).

106. *Id.* § 226.5a(b)(11).

107. *Id.* § 226.5a(a)(2)(ii).

these required disclosures must accompany the application or solicitation when it is provided to the consumer.¹⁰⁸

b. Account Opening When a credit card account is opened, certain disclosures must be made through an initial disclosure statement.¹⁰⁹ A company must provide detailed information on finance charges, including when they begin to accrue, any periodic rates used to compute the charge, an explanation of the balance computation method used for the account, and an explanation of how the finance charges will be computed.¹¹⁰ The creditor must also disclose the amount and computation method of any other applicable charges,¹¹¹ as well as the possibility that the creditor will acquire a security interest in property purchased with the credit card.¹¹² Additionally, the credit card company must provide a statement of consumer rights and creditor responsibilities in a format similar to the model forms found in the appendix to the regulation.¹¹³ The initial disclosure statement must be provided to the consumer before the first transaction is made on the credit card.¹¹⁴

c. Periodic Statements Periodic statements generally must be sent to consumers at the end of each billing cycle.¹¹⁵ The periodic statement must include the previous balance,¹¹⁶ a summary of the credit transactions during the past billing cycle,¹¹⁷ credits during the last billing cycle,¹¹⁸ periodic rates used to compute the finance charge,¹¹⁹ the balance upon which the finance charge was computed,¹²⁰ the amount of the finance charge,¹²¹ the APR,¹²² charges other than the finance charge,¹²³ the closing date of the billing cycle,¹²⁴ the due date of the

108. *Id.* § 226.5a(c).

109. *See id.* § 226.6.

110. *Id.* § 226.6(a).

111. *Id.* § 226.6(b).

112. *Id.* § 226.6(c).

113. *Id.* § 226.6(d); *see* §§ 226.12(c), 226.13, 226.13 app. G.

114. *Id.* § 226.5(b)(1).

115. *Id.* § 226.5(b)(2)(i).

116. *Id.* § 226.7(a).

117. *See id.* §§ 226.7(b), 226.8.

118. *Id.* § 226.7(c).

119. *Id.* § 226.7(d).

120. *Id.* § 226.7(e).

121. *Id.* § 226.7(f).

122. *Id.* § 226.7(g).

123. *Id.* § 226.7(h).

payment,¹²⁵ and the address to which the consumer can write in case of a billing error.¹²⁶ There is no formatting requirement for periodic statements.¹²⁷ The periodic statement must be mailed to the consumer at least fourteen days before the date that payment is due for the billing cycle.¹²⁸

d. Changes to Account Terms A creditor must notify the consumer when certain account terms change. Specifically, any change to a term listed on the initial disclosure statement, as well as any increase in the minimum payment, must be brought to the consumer's attention.¹²⁹ This disclosure must be made in writing fifteen days prior to the effective date of the change.¹³⁰

e. Advertising Regulation Z contains several regulations on the advertisement of credit cards.¹³¹ For instance, a creditor may only advertise terms that are actually available.¹³² Additionally, if any terms are advertised that would otherwise be provided on the account opening statement, the creditor must also advertise any applicable fees or charges.¹³³ Additional special requirements apply for advertisements that appear in catalogs or electronically.¹³⁴

TILA and Regulation Z are both aimed at educating consumers about the terms and conditions attached to credit card accounts. They accomplish this goal by requiring creditors to disclose specific, important pieces of information to consumers at various stages of the creditor-consumer relationship.

D. The Proposed Amendments to Regulation Z

The Board developed the proposed amendments to Regulation Z in order to improve the disclosures that credit card companies pro-

124. *Id.* § 226.7(i).

125. *Id.* § 226.7(j).

126. *Id.* § 226.7(k).

127. *See id.* § 226.7.

128. *Id.* § 226.5(b)(2)(ii).

129. *Id.* § 226.9(c).

130. *Id.*

131. *Id.* § 226.16. Note that advertisements do not include credit card applications or solicitations. *Id.* at n.36d.

132. *Id.* § 226.16(a).

133. *Id.* § 226.16(b).

134. *Id.* § 226.16(c).

vide to consumers. The amendments derive from several sources, including public comments, legislative direction, and consumer research. The proposed amendments would affect documentation at all stages of the creditor-consumer relationship.

1. MOTIVATION FOR THE AMENDMENTS

“The goal of the proposed amendments to Regulation Z is to improve the effectiveness of the disclosures that creditors provide to consumers at application and throughout the life of an open-end . . . account.”¹³⁵ Until 2004, the Board had not reviewed Regulation Z since it was revised in 1981.¹³⁶ Because of the complexity of the regulation, the Board decided to review it in stages over several years, beginning with the provisions relating to open-ended credit accounts.¹³⁷

2. SOURCE OF THE AMENDMENTS

The proposed amendments to Regulation Z were derived from public comments, congressional consumer protection legislation, and in-the-field consumer testing.¹³⁸

a. Comments from the Public In December, 2004, the Board initiated a comprehensive review of Regulation Z by publishing an Advanced Notice of Proposed Rulemaking.¹³⁹ The Board solicited comments on fifty-eight separate questions, covering the scope of its review, the format and content of required disclosures, and other issues.¹⁴⁰

In response, the Board received over 200 comments from individual consumers, industry representatives, consumer advocate groups, federal and state government agencies, and members of Congress.¹⁴¹ The comments generally approved of the Schumer Box, a tabular format required in direct mail credit card applications and solicitations, but also asked that only truly essential information be

135. Regulation Z, 72 Fed. Reg. 32,947, 32,948 (proposed June 14, 2007) (to be codified at 12 C.F.R. pt. 226).

136. Advanced Notice of Proposed Rulemaking, 69 Fed. Reg. 70,925, 70,926 (Dec. 8, 2004).

137. *Id.*

138. Regulation Z, 72 Fed. Reg. at 32,949–51.

139. Advanced Notice of Proposed Rulemaking, 69 Fed. Reg. at 70,925.

140. *Id.*

141. Regulation Z, 72 Fed. Reg. at 32,949.

emphasized so as not to overload consumers with information.¹⁴² Commentators expressed many different views on content of the disclosures, with creditors and consumers sharply divided over several issues, such as the usefulness of APRs, advance notice of changes to rates and fees, and whether notice should be required when a penalty rate has been triggered.¹⁴³

b. Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 One of the consumer protection features of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (BAPCPA) was the amendment of TILA, adding several new requirements to credit plan disclosures.¹⁴⁴ The new requirements affecting open-ended credit plans included new minimum payment, late payment deadline, and penalty disclosures on periodic statements; introductory rate disclosures in credit and charge card applications; and disclosures related to internet advertising.¹⁴⁵

Incorporating these statutory changes into the general review of Regulation Z that was already underway, the Board issued a second Advanced Notice of Proposed Rulemaking on October 17, 2005.¹⁴⁶ This time, the Board received just fifty comments: forty-five from financial institutions and trade groups and five from consumer groups.¹⁴⁷ Industry groups generally favored limiting the instances when disclosures would be required and standardizing those disclosures when they were required.¹⁴⁸ In contrast, consumer groups favored broader application of the new disclosures and more customization to each consumer's particular situation.¹⁴⁹

c. Consumer Research Consumer research and testing was a key part of the Board's effort to "produce revised and improved credit

142. *Id.* at 32,949–50.

143. *Id.* at 32,950.

144. Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. 109-8, §§ 1301–1308, 119 Stat. 23, 204–14 (codified at 15 U.S.C. § 1637 (2000)).

145. *Id.*

146. Regulation Z, 70 Fed. Reg. 60,235, 60,235–36 (proposed Oct. 17, 2005) (to be codified at 12 C.F.R. pt. 226). This was, perhaps not coincidentally, the very same day that BAPCPA took effect. Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 § 1501.

147. Regulation Z, 72 Fed. Reg. 32,947, 32,950 (proposed June 14, 2007) (to be codified at 12 C.F.R. pt. 226).

148. Regulation Z, 72 Fed. Reg. at 32,950–51.

149. *Id.*

card disclosures that consumers will be more likely to pay attention to, understand, and use in their decisions, while at the same time not creating undue burdens for creditors."¹⁵⁰ To that end, in April 2006, the Board commissioned a research firm, Macro International Incorporated (Macro), to conduct consumer testing and develop proposed model forms for summary table disclosures provided in credit card applications, account opening statements, periodic statements, and subsequent disclosures.¹⁵¹

Macro conducted its research in two phases.¹⁵² The first phase consisted of four focus groups and one set of cognitive interviews.¹⁵³ The purpose of the focus groups was to determine what information consumers use to make decisions about their credit card accounts, as well as how they find and process that information.¹⁵⁴ Utilizing several samples of credit card forms that complied with current regulations, the focus groups discussed what pieces of information would be most useful at different points in the life of a credit card account.¹⁵⁵ The cognitive interviews tested the usability of credit card disclosures in greater depth, utilizing one-on-one interactions between participants and researchers.¹⁵⁶ For the second phase, Macro developed new model disclosure forms based on the information gathered in the first phase.¹⁵⁷ To test these forms, Macro conducted a new round of one-on-one interviews, presenting each participant with a revised document and asking a series of questions about the information contained in the document.¹⁵⁸ After each round of interviews, Macro made further modifications to the model forms based on the information gathered in the previous round.¹⁵⁹

The Board also planned to revise the forms again after the latest comment period closed on October 12, 2007.¹⁶⁰ The revisions will be based on comments received and will again be tested by Macro.

150. *Id.* at 32,951.

151. *Id.*

152. MACRO INT'L INC., DESIGN AND TESTING OF EFFECTIVE TRUTH IN LENDING DISCLOSURES 1-2 (2007) [hereinafter MACRO REPORT], available at <http://www.federalreserve.gov/dcca/regulationz/20070523/execsummary.pdf>.

153. *Id.* at 1.

154. *Id.* at 4.

155. *Id.*

156. *Id.* at 8.

157. *Id.* at 17.

158. *Id.*

159. *Id.*

160. Regulation Z, 72 Fed. Reg. 32,947, 32,952 (proposed June 14, 2007) (to be codified at 12 C.F.R. pt. 226).

3. CONTENT OF THE AMENDMENTS

The proposed amendments to Regulation Z affect five areas of the creditor-consumer relationship: credit card applications and solicitations, account opening disclosures, periodic statements, changes in interest rate or account terms, and advertisements.¹⁶¹

a. Credit Card Applications Several changes are proposed for credit card applications and solicitations. The proposed amendments would require more information about any penalty rate that applies when a consumer defaults.¹⁶² Specifically, the documents would be required to use the term *penalty rate* and describe some circumstances which would trigger the rate.¹⁶³ Companies would also disclose late fees, over-the-limit fees, returned payment fees, cash advance fees, and balance transfer fees within the Schumer Box.¹⁶⁴ Because the current requirements tend to confuse consumers, information about variable rates would be simplified.¹⁶⁵ Additionally, applications and solicitations would be required to describe how payments are allocated in situations where the account carries balances with different APRs.¹⁶⁶ The proposed amendments would also require that the documents include a reference to the Board's Web site where consumers can get more information about credit products.¹⁶⁷ When a credit card company charges a security deposit of 25% or more of the available credit because an account is deemed subprime, the company would be required to disclose this practice to the consumer.¹⁶⁸ Finally, companies would be required to display balance computation methods outside the Schumer Box so that the information is still available, but not distracting.¹⁶⁹

161. *Id.* at 32,953–57.

162. *Id.* at 32,953.

163. *Id.* at 32,953–54.

164. *Id.*

165. *Id.* at 32,954.

166. *Id.* In many situations, creditors may allocate payments to low-rate balances first. *Id.* If, for instance, a consumer has a low-rate balance transfer balance, then makes a regular purchase on the same card, the payment could be applied to the balance transfer first, while interest on the higher-rate purchase continues to accrue. *Id.*

167. *Id.*

168. *Id.*

169. *Id.*

b. Account Opening At account opening, a credit card company must provide detailed disclosures before the first transaction is made. Under the amendments, account opening statements would separate key pieces of information from credit agreement terms by utilizing a tabular format, essentially adopting a more detailed Schumer Box model.¹⁷⁰ The method for disclosing charges would be simplified, requiring only interest, minimum charges, transaction fees, annual fees, and penalty fees to be disclosed in writing.¹⁷¹ Other, less important fees that were previously required could instead be disclosed orally or at the time they are incurred.¹⁷²

c. Periodic Statements Under the proposed amendments, periodic statements would be the subject of some of the most extensive changes. All fees and interest costs would be itemized by type and grouped together.¹⁷³ Additionally, credit card companies would have to disclose the total dollar amount of fees and total interest charged during the past billing cycle and year-to-date.¹⁷⁴ Regarding the effective APR, which reflects fees in addition to interest, the Board made two alternative proposals.¹⁷⁵ Because of confusion among consumers, the regulations would either include additional explanatory language to clarify the effective APR or drop the effective APR altogether.¹⁷⁶ The amendments would also have companies group similar transactions together by type, such as purchases or cash advances, along with relevant fees for those transaction types.¹⁷⁷ To make late payment terms clearer, periodic statements would list payment due dates and cut-off times on the front of the form, as well as the penalty APR that would be triggered by a late payment.¹⁷⁸ The amendments would also require periodic statements to include a warning that making minimum payments increases the interest the consumer must pay and the time it will take to pay off the full balance on the card.¹⁷⁹ Companies would also provide a hypothetical example illustrating the length of

170. *Id.*

171. *Id.*

172. *Id.*

173. *Id.*

174. *Id.*

175. *Id.* at 32,955–56.

176. *Id.* at 32,956.

177. *Id.*

178. *Id.*

179. *Id.*

time required to pay off a specified balance when making minimum payments and provide a toll-free number that the consumer may use to obtain more information.¹⁸⁰ Additionally, the Board proposed a model form for periodic statements.¹⁸¹

d. Changes in Interest Rate or Account Terms Under current regulations, creditors must send written notice to consumers before an account term changes. The proposed regulations would increase the period that must run between sending the notices and actual change in terms.¹⁸² Imposition of penalty APRs would be added to the list of events that trigger the advance notice requirements.¹⁸³ Change-in-term documents would also include a new table for changed terms that, if listed in an account opening statement, would be in the required table on that form.¹⁸⁴ Similarly, if a change of terms accompanies a periodic statement, the statement must set out the changed terms in a separate table on the front of the document.¹⁸⁵

e. Advertisements Advertisements for credit cards would be subject to two new requirements. When advertising minimum payments for certain credit plans, companies would be required to disclose information about the length of time required to pay off a balance in full when making minimum payments.¹⁸⁶ Additionally, a company would only be permitted to advertise a rate as “fixed” if the company also discloses the period during which the rate will not change, and the rate will not actually increase during that period.¹⁸⁷

The proposed amendments affect almost every area of communication between credit card companies and consumers. These changes derive from a measured and careful review of Regulation Z, incorporating public comments, legislative direction, and consumer research. Using these inputs, the Board proposed the various amendments in order to further its goal of improving the disclosures

180. *Id.*

181. *Id.* at 33,079–82.

182. *Id.* at 32,957.

183. *Id.*

184. *Id.*

185. *Id.*

186. *Id.*

187. *Id.*

that credit card companies provide to consumers throughout their relationship.

E. Motivations for the Study

As much as any other segment of the population, the elderly are using credit cards and gathering credit card debt.¹⁸⁸ Combined with the fact that the elderly are less financially literate and less able to make sound financial decisions than the general population,¹⁸⁹ the need for consumer education targeted at the elderly is clear. It is equally clear that the Board has not recognized this need. Although the proposed amendments to Regulation Z do attempt to improve consumer comprehension of credit card documents, they were not based on the needs of the elderly. In fact, only two of the participants in the Board's consumer research were over the age of sixty, and those two only participated in a single, early-stage focus group.¹⁹⁰

The Board is not alone in its disregard of the elderly: few attempts have been made to systematically evaluate the consumer education tools produced for their benefit.¹⁹¹ Financial literacy education has recently gained some national attention,¹⁹² and in 2008, President George W. Bush established the President's Advisory Council on Financial Literacy (the Council).¹⁹³ The express purpose of the Council is to "assist the American people in understanding and addressing financial matters."¹⁹⁴ Although the executive order establishing the program does not direct the Council to focus on any particular age group, other programs have generally focused on younger age groups.¹⁹⁵ The Council is currently planning for subcommittees ad-

188. See *supra* Part II.A.

189. See *supra* Part II.B.

190. MACRO REPORT, *supra* note 152, at app. A tbl.1.

191. See Loonin & Renuart, *supra* note 34, at 197.

192. See, e.g., Editorial, *How to Spell Solvency: What You Don't Know Can Hurt You*, L.A. TIMES, Jan. 27, 2008, § M, at 2.

193. Exec. Order No. 13,455, 73 Fed. Reg. 4445 (Jan. 24, 2008).

194. *Id.*

195. See, e.g., Gross, *supra* note 60, at 309; *Financial Course Required of Allegany Students*, Feb. 14, 2008, <http://wjz.com/local/school.financial.class.2.653765.html> (reporting on a program for high school students); Press Release, USAA Educational Foundation, *Driving, and Finances Should Go Hand in Hand for Teens* (Feb. 12, 2008), available at https://usaa.com/inet/ent_utils/McStaticPages?key=2008_02_LTD_release (encouraging parents to teach teens about finances); Press Release, USA Funds, *USA Funds Introduces Bilingual Version of Financial Literacy Program for College Students* (Feb. 12, 2008), available at <http://www.nasfaa.org/publications/2008/cnusafunds021308.html>. But see *Seniors Learn Financial Li-*

dressing “Financial Literacy for Youth” and “Financial Access for the Underserved,” among others, but none that deal specifically with elder issues.¹⁹⁶ It seems unlikely that elder issues will be comprehensively dealt with.

Although some commentators doubt the efficacy of credit card disclosures,¹⁹⁷ to the extent that they are used, these disclosures should be helpful as possible to older consumers. Given the lack of research on the subject, it is important to study whether these proposed amendments to Regulation Z will benefit the elderly as much as the general population or whether more targeted measures are necessary.

III. Methodology

The empirical study reported in this Note utilized a survey instrument to test the proposed amendments to Regulation Z. The survey was administered to a sample of students and a sample of seniors. The survey itself was based on the model documents in the current Regulation Z and the proposed amendments.

A. Sample

The researchers selected two sample populations for the study: elders and students. The elderly sample consists of individuals aged sixty or older, a cutoff derived from Macro’s consumer testing for the Board.¹⁹⁸ The student sample, consisting of university students aged eighteen to twenty-five, was selected as a comparison group. The researchers made this selection largely because that group is generally the focus of financial and consumer education concerns.¹⁹⁹ The relative ease and convenience of administering a survey to undergraduates also contributed to this decision. The study did not include a general population sample as a control group, although it would have

teracy from *SECU*, *CHEROKEE SENTINEL* (Murphy, N.C.), Jan. 30, 2008, <http://www.cherokeesentinel.com/news/2008/0130/Community/017.html>.

196. Press Release, Treasury Department, Treasury Holds Inaugural Meeting of President’s Advisory Council on Financial Affairs (Feb. 13, 2008), available at <http://www.ustreas.gov/press/releases/hp827.htm>.

197. See, e.g., Harkness, *supra* note 38, at 19. Indeed, when the author described the subject of this Note to family and friends, a typical response was “Credit card disclosures? Nobody reads those things.”

198. *MACRO REPORT*, *supra* note 152, at 69 tbl.1.

199. See *supra* Part II.E.

been helpful as a comparison group, and future research on this issue should include one.

1. THE ELDERLY SAMPLE

Participants in the elderly sample were recruited from various facilities serving the elderly near Champaign, Illinois. Researchers visited community senior center events, life-long learning center classes, and assisted living facilities, asking individuals to participate in study. The request was made in person at most facilities, but also by letter at one assisted living facility. No financial or other incentives were offered for participation.

Response rates for the elderly sample varied widely, from 6% at one assisted living facility²⁰⁰ to 75% at a small senior-center coffee group.²⁰¹ The overall response rate was slightly under 20%, with a total of sixty individuals participating in the survey.²⁰² This response rate could indicate some nonresponse bias, although it may be satisfactory considering the lack of incentives and subject matter of the survey. Future funded research on this issue could easily boost the response rate by offering a small monetary token for participation or by other methods.

Another potential source of bias is the activity level of the participants. Participants were solicited in public areas, where only relatively active seniors venture. Shut-ins and other inactive seniors, who may be less financially able than their more active peers, could not have been solicited. Not including this group in the sample population could affect the results of the survey, resulting in a sample that is more sophisticated than a random sample of the elderly would be.

The education level of the elderly participants may also introduce bias. An unusual number of the participants had post-collegiate degrees.²⁰³ This likely results from the geographic concentration of the sample to the area surrounding Champaign, Illinois, and the presence of a large public university. As with activity level, this could intro-

200. Facility administrators requested that the researchers administer the survey during a lunch service, allowing the researchers to solicit volunteers only while the residents were eating their meals. The researchers subsequently decided that this was not an efficient or respectful way to recruit participants.

201. Six out of eight regular members of the coffee group participated in the study.

202. A total of 304 individuals were solicited to be part of the elderly sample.

203. See *infra* Part IV.A.

duce a bias in favor of greater sophistication when compared with a true random sample.

2. THE STUDENT SAMPLE

Students were recruited from undergraduate classes at the University of Illinois, Cornell University, and the University of Notre Dame. Researchers distributed the surveys at the beginning or end of class sessions after explaining that participation was completely voluntary and would not affect course grades. No financial or other incentives were offered to participants.

The overall response rate for the student sample was 91%. A total of 235 individuals participated in the student sample. Any non-respondent bias is likely minimal. Another potential source of bias is the relative quality of students at the three universities. The participants may not be representative of their age group, or even of the subpopulation of university students. Future research in this area would ideally expand to include other universities and individuals who are not university students at all.

B. Survey Instrument

The survey administered in this study tested consumers' ability to comprehend various credit card documents under the current and proposed Regulation Z. It focused on two particular areas of the proposed amendments to Regulation Z: applications and periodic statements.

Applications and periodic statements were chosen because many of the changes designed to improve consumer comprehension were made to the regulations governing each of these areas,²⁰⁴ and because the Board developed model forms for these two areas based on its consumer testing.²⁰⁵ Additionally, testing the other areas would be difficult, add little value, or both. The proposed requirements for account opening statements are similar to those for applications, so testing the model account opening forms would be largely duplicative for the purposes of this study. The proposed content and format changes to the regulations governing changes of interest rate or account terms are also very similar to the application disclosure rules. The changes

204. *See supra* Part II.D.3.

205. Regulation Z, 72 Fed. Reg. 32,947, 33,069–71, 33,077–82 (proposed June 14, 2007) (to be codified at 12 C.F.R. pt. 226); *see supra* Part II.D.3.

proposed for the timing of change-in-term disclosures would be difficult to test with a survey instrument. Additionally, the major goal of those changes is not to increase comprehension, but to give consumers sufficient time to comparison shop before changes take effect.²⁰⁶ Testing the proposed amendments to advertising provisions would also add little, because they apply in only particular situations and deal with subjects also covered in the proposed application disclosures.

The survey came in four versions. Each version contained a credit card document, followed by a series of questions. The distinguishing feature of the different versions was the credit card document included: a portion of a credit card application that complies with the current Regulation Z (Current Application); a portion of a credit card application that complies with the proposed amendments (Proposed Application); a periodic statement that complies with existing regulations (Current Statement); or a periodic statement that complies with the proposed amendments (Proposed Statement).

The Current Application presented a Schumer Box based on the model form provided in Regulation Z.²⁰⁷ The Proposed Application included the same information as the Current Application, but was instead modeled after the model form in the proposed amendments.²⁰⁸ Both of these surveys presented the same list of questions, asking the participant to identify the APR for purchases offered by the card, whether the APR varied depending on the market interest rate, whether payments were applied to high- or low-rate balances, circumstances under which the penalty rate applied, and fees other than interest charges.

Under the current Regulation Z, there is no model form for periodic statements, so the Current Statement was based on one used in the Board's consumer testing.²⁰⁹ As with the Applications, the Proposed Statement included the same information as its current counterpart, but was based on the model form included in the proposed amendments.²¹⁰ Both surveys asked the participant to identify the total of balance transfer fees charged, the total interest charged, the number of cash advances made, whether a late fee was charged, the payment due date, whether the penalty APR had triggered, the time

206. *See id.* at 32,957.

207. *See* 12 C.F.R. pt. 226 app. G-10 (2006).

208. *See* Regulation Z, 72 Fed. Reg. at 33,069–71.

209. MACRO REPORT, *supra* note 152, at 79–80.

210. *See* Regulation Z, 72 Fed. Reg. at 33,079–82.

of day payment was due by, the minimum payment, and the number of months it would take to pay off the balance while making only minimum payments.

Each survey also contained a short series of demographic questions. These questions asked for year of birth, education level, home zip code, and whether the participant currently held a credit card.

C. Survey Administration and Data Recordation

Each participant in the survey randomly received one of the four versions of the survey. The participants were instructed to read the credit card document and then answer the questions to the best of their ability.

After the participants completed the survey, the results were tallied. The application surveys had a total of five possible points, and the statement surveys had a total of nine possible points. If a respondent completed at least one of the questions about the credit card document, any unanswered questions were counted as incorrect. If none of these questions were answered, all questions were marked as missing. Each survey was scored and the results were entered into a database.

IV. Data Presentation and Analysis

A. Description of the Samples

As expected, each of the samples had completely different demographic characteristics. By design, each group represented a different age group. Any respondents between the ages of twenty-six and fifty-nine, inclusive, were excluded. The mean age for the elderly and student samples were 78.83 and 19.78, respectively. Table 1 displays the age data for each sample.

Table 1
Mean Ages for the Elderly and Student Samples

	Mean Age	Standard Deviation	Minimum Age	Maximum Age
Elderly Sample (n = 54)	78.83	8.90	60	92
Student Sample (n = 227)	19.78	0.86	19	24

This table displays the mean ages for each sample group. Despite being a smaller sample, the elderly sample has a larger range than the student sample, and varies more within that range.

The education level for each group was also distinct. It was not surprising that the student sample overwhelmingly reported “[s]ome college, no degree,” as the sample was selected only from undergraduate students. The elderly sample is weighted heavily in favor of those with advanced education—77% reported having a four-year college or post-collegiate degree. Nationally, only 29% of adults over the age of twenty-five have at least a bachelor’s degree.²¹¹ Table 2 displays the number of respondents in each sample reporting each educational level.

211. U.S. CENSUS BUREAU, EDUCATIONAL ATTAINMENT IN THE UNITED STATES: 2007 tbl.1 (2007), <http://www.census.gov/population/www/socdemo/education/cps2007.html> (open “All Races” Excel file).

Table 2
Number of Respondents Reporting Each Education Level

	Elderly Sample (n = 53)	Student Sample (n = 227)
Some education, no degree	0	0
High school diploma or GED	5	3
Some college, no degree	6	223
Two-year college degree	1	1
Four-year college degree	12	0
Post-collegiate degree	29	0

This table displays the number of respondents in each sample indicating each education level. By design, the student sample included only undergraduate students, so it is unsurprising that the vast majority of the sample reported "Some college, no degree." The distribution of the elderly sample is more interesting: higher education levels are overrepresented.

The two samples also differed in their use of credit cards. Seventy percent of the student sample reporting having a credit card. At 96%, a much higher proportion of the elderly sample reported the same. Table 3 displays the number of respondents holding a credit card. Respondents in the elderly sample also report holding more credit cards than their student counterparts, at 3.23 and 1.19, respectively. Table 4 displays the number of credit cards held by respondents in each sample. Given the lower levels of financial literacy among the elderly,²¹² the higher number of reported credit cards for the older population could be a result of confusion between debit and credit cards. Considering the generally high level of education among the elderly sample, however, the prevalence of credit cards may instead be another testament to the uniqueness and sophistication of the sample as compared to the general elder population.

212. See *supra* Part II.B.1.

Table 3
Number of Respondents Holding a Credit Card

	Holding at Least One Credit Card	Not Holding a Credit Card
Elderly Sample (n = 54)	52	2
Student Sample (n = 227)	160	67

This table displays the number of respondents in each sample who report having at least one credit card. Among the elderly, 96% report holding a credit card, while only 70% of students report the same.

Table 4
Number of Credit Cards Held by Application Respondents

	Mean Number of Credit Cards Held	Standard Deviation	Minimum Number of Credit Cards Held	Maximum Number of Credit Cards Held
Elderly Sample (n = 30)	3.23	2.93	0	12
Student Sample (n = 113)	1.19	1.01	0	5

This table displays the mean number of credit cards held by respondents in each sample. Only respondents completing the Application surveys were asked for the number of credit cards held. The median number of credit cards held was two for the elderly sample and one for the student sample.

Overall, each sample consists of individuals of the proper age group. The elderly sample, however, is biased towards higher levels of education. Additionally, the elderly sample displays a higher rate of credit card usage than the general elderly population.²¹³ As these

213. See *supra* Part II.A.1.

factors suggest that the elderly sample will be more sophisticated than the general population, any effect revealed by the data must be carefully considered.

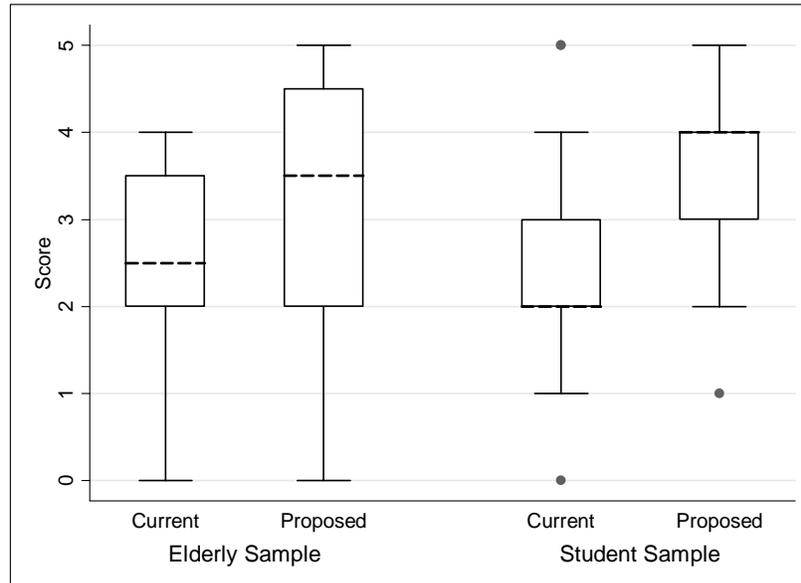
B. Survey Results and Analysis

The statistical point of interest in this study is whether the proposed amendments to Regulation Z effected a difference in scores between the two versions of each survey. Because the same questions were asked on the current and proposed versions of the survey and the surveys were randomly distributed to participants, any improvement in score between the two versions would suggest increased comprehension.

1. APPLICATION SURVEYS

The application surveys presented a sample credit card application to the participant and then asked a series of questions about the document. These surveys were scored out of a possible five points. Figure 1 displays the distribution of scores for each sample on each survey.

Figure 1
Distribution of Scores for Each Sample on the Current and Proposed Application Surveys



This figure displays the distribution of scores for each sample on the Application surveys. The dashed line is the median score, the box represents the middle 50% of scores, and the Ts represent the 25% tails. The small dots mark outlying responses.

For the elderly sample, there was no statistically significant difference in performance between the two surveys. In contrast, the student sample did show statistically significant improvement. Table 5 sets out the Wilcoxon Z statistic for each sample, which measures whether the scores on each version of the application survey are statistically different.

Table 5
Wilcoxon Z Statistic Comparing Scores on the Current and Proposed Application Surveys for Each Sample

	Wilcoxon Z	p
Elderly Sample	-0.956	0.3393
Student Sample	-4.912	0.0000

This table displays the Wilcoxon Z statistic for the Application surveys for each sample. This statistic measures whether the scores on the Current Application survey were statistically different from the scores on the Proposed Application survey. Because the p-value for the elderly sample is greater than 0.05, the null hypothesis that the scores on each survey are not statistically different cannot be rejected. In contrast, the p-value for the student sample is zero, indicating that the scores on each survey are statistically different.

The elderly sample did show a slight improvement on the Proposed Application over the Current Application of 0.43 points, but the result was not statistically significant. Indeed, based upon the data, the "improvement" may have been zero, or even a decline of as much as 0.71 points. The lack of statistical significance could be related to the small sample size—a problem that further testing could resolve. Performance by the student sample on the Proposed Application was statistically different than on the Current Application. The mean score for the sample improved by 1.06 points, and could range from 0.67 to 1.44 points. Tables 6 and 7 set out the improvements in scores on the application survey for each sample using a Two-Sample T Test.

Table 6

Score Improvement for Elderly Sample, Application Surveys: Two-Sample T Test with Equal Variances

	Mean Score	Standard Error	Standard Deviation	95% Confidence Interval	
Current Application (n = 16)	2.56	0.29	1.15	1.95	3.18
Proposed Application (n = 12)	3.00	0.52	1.81	1.85	4.15
Improvement (Proposed – Current)	0.43	0.56		-0.71	1.59

t = -0.7811 p = 0.4418

This table displays the improvement of scores between the Current Application survey and the Proposed Application survey for the elderly sample. The results show an improvement of 0.43 points (out of five possible points), which could range from -0.71 to 1.59 points. This means the “improvement” could in fact be zero or negative. Indeed, as the p-value is greater than 0.05, no statistically significant improvement can be seen.

Table 7
Score Improvement for Student Sample, Application Surveys: Two-Sample T Test with Equal Variances

	Mean Score	Standard Error	Standard Deviation	95% Confidence Interval	
Current Application (n = 59)	2.54	0.14	1.07	2.26	2.82
Proposed Application (n = 55)	3.6	0.13	0.99	3.33	3.87
Improvement (Proposed – Current)	1.06	0.11		0.67	1.44

t = -5.4549 p = 0.0000

This table displays the improvement of scores between the Current Application survey and the Proposed Application survey for the student sample. The results show an improvement of 1.06 points (out of five possible points), which could range from 0.67 to 1.44 points. A p-value equal to zero indicates that the improvement is statistically significant.

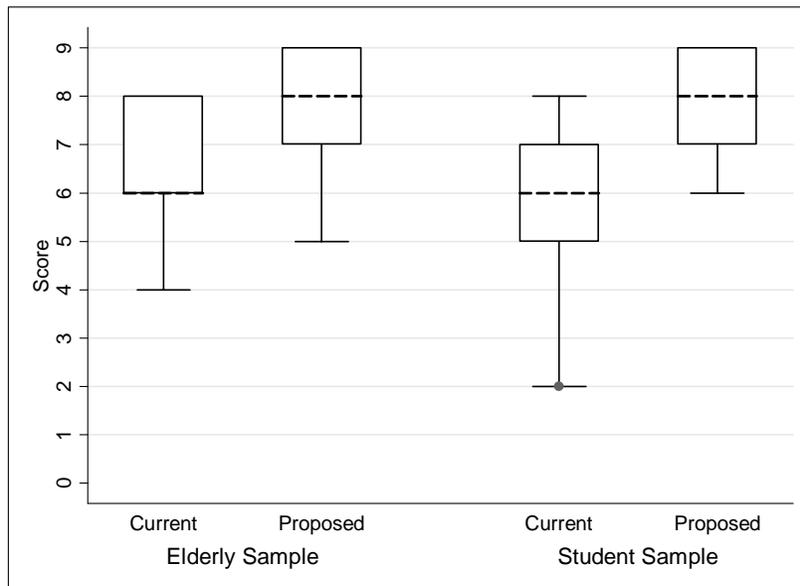
2. STATEMENT SURVEYS

The statement surveys presented a sample periodic statement to the participant, followed by a series of questions. There were nine possible points on this survey. Figure 2 displays the range of scores on each survey for each sample. Scores for the elderly sample on the Current and Proposed Statement surveys were statistically different. The improvement in mean scores was 1.45 points, and could range from 0.23 to 2.67 points. As with the Application surveys, a larger sample size could have revealed a more exact level of improvement or a narrower range. The student sample also exhibited statistically different scores on each of the surveys. The mean score on the Proposed Statement survey was 1.79 (possibly ranging from 1.36 to 2.21) points higher than on the Current Statement. Table 8 sets out the Wilcoxon Z

statistic for the two samples, and Tables 9 and 10 show the score improvements for each sample.

Figure 2

Distribution of Scores for Each Sample on the Current and Proposed Statement Surveys



This figure displays the distribution of scores for each sample on the Application surveys. The dashed line is the median score, the box represents the middle 50% of scores, and the Ts represent the 25% tails. The small dot marks an outlying response.

Table 8

Wilcoxon Z Statistic Comparing Scores on the Current and Proposed Statement Surveys for Each Sample

	Wilcoxon Z	p
Elderly Sample	-2.341	0.0192
Student Sample	-6.782	0.0000

This table displays the Wilcoxon Z statistic for the Statement surveys for each sample. The p-value for each sample is less than 0.05, indicating that, for both samples, there is a significant difference in score between the Current and Proposed Statement surveys.

Table 9**Score Improvement for Elderly Sample, Statement Surveys: Two-Sample T Test with Equal Variances**

	Mean Score	Standard Error	Standard Deviation	95% Confidence Interval	
Current Statement (n = 11)	6.45	0.41	1.37	5.53	7.37
Proposed Statement (n = 11)	7.91	0.41	1.38	6.98	8.83
Improvement (Proposed – Current)	1.45	0.58		0.23	2.67

t = -2.4867 p = 0.0218

This table displays the improvement of scores between the Current Statement survey and the Proposed Statement survey for the elderly sample. The results show an improvement of 1.45 points (out of a possible nine points), which could range from 0.23 to 2.67 points. As the p-value is less than 0.05, the improvement is statistically significant.

Table 10
Score Improvement for Student Sample, Statement Surveys: Two-Sample T Test with Equal Variances

	Mean Score	Standard Error	Standard Deviation	95% Confidence Interval	
Current Statement (n = 56)	6.12	0.17	1.29	5.79	6.47
Proposed Statement (n = 57)	7.91	0.13	0.95	7.66	8.16
Improvement (Proposed – Current)	1.79	0.21		1.36	2.21
t = -8.3783 p = 0.0000					

This table displays the improvement of scores between the Current Statement survey and the Proposed Statement survey for the student sample. The results show an improvement of 1.79 points (out of a possible nine points), which could range from 1.36 to 2.21 points. The zero p-value indicates that the improvement is statistically significant.

3. ANALYSIS AND LIMITATIONS

When the data from both surveys are considered together, they suggest that the proposed disclosures did less to increase comprehension by the elderly than by students. The elderly sample did not show any improvement between the Current and Proposed Application, while the student sample did. In contrast, both samples showed improvement between the Current and Proposed Statement. Still, the data suggest that the improvement by the elderly sample on the Statement surveys is smaller than that of the student sample.²¹⁴ Indeed, this effect is apparent despite the unique sophistication of the

214. That suggestion is by no means conclusive, however, and could even be incorrect. That is, the improvement by the elderly sample could, in fact, be larger than the student sample improvement. *See supra* tbls.9, 10.

elderly sample.²¹⁵ These results are consistent with other research showing that, apart from lower financial literacy rates among older Americans, neurological and other factors affect financial decision making.²¹⁶

Less expected was the difference in improvement by the elderly between the Application and Statement surveys. One might expect that, if similar disclosures were helpful on one document, they would also be helpful on another. Instead, the data show that the new statement disclosures were associated with increased survey scores for the elderly, while the new application disclosures were not. This could indicate some real difference between the two sets of proposed disclosures in the way they aid documentary and financial comprehension of the elderly. Alternatively, there could be some inherent difference between a credit card application and a periodic statement. The difference could be in the way information is presented in each document or the type of cognition the document requires of its reader.²¹⁷ In either case, there could be some neurological or psychological reason why the elderly sample displayed varying improvements.²¹⁸

The results set out above paint an incomplete picture, however, and the data are less than conclusive. First and foremost, a larger sample of elderly respondents would allow a clearer assessment of the effect of the disclosures. The relatively small number of participants in the elderly sample affects the reliability of the statistical tests used. Also, given the relative sophistication of the elderly sample, it is possible that any improvement is overstated. If the sample more accurately reflected the general population in terms of activity level, education level, and credit card usage, it is possible that the data would reveal even less improvement between the survey versions. Yet despite these limitations, the data still suggest that the elderly were not helped by the disclosures as much as the students were helped.

215. The elderly sample is more highly educated than the general population and has more credit cards more than the general elderly population. *See supra* Part IV.A.

216. *See supra* Part II.B.

217. A credit card application asks the reader to make decisions about uncertain, future events, while a periodic statement documents past events.

218. *See, e.g., supra* notes 72–74 and accompanying text.

V. Implications and Conclusions

If, as suggested by the data, the proposed amendments to Regulation Z help older Americans less than they help other segments of the population, there are important policy consequences. First and most immediately, the Board should consider whether and how these proposed amendments will help older Americans. The amendments are broadly targeted at increasing comprehension of credit card documents. The data in this empirical study suggest, however, that the specific changes required by the amendments will not be uniformly helpful across age groups. This is, perhaps, not surprising given the lack of input by older Americans in the Board's consumer testing.²¹⁹ To rectify this problem, the Board should include more individuals over the age of sixty in its next round of consumer testing. This would allow the Board to better assess the impact of the proposed changes on all segments of the population, and to craft a more relevant and effective Regulation Z.

More generally, the results of this study suggest that the Board should consider the particular needs of the elderly when drafting any consumer education regulation. Despite popular notions, the elderly face the same problems with credit and debt as other segments of the population. The elderly population is becoming more like the general population in financial terms as they increase credit card usage and accumulate more debt. This can have dire consequences for elderly individuals, from personal problems to bankruptcy. Lower financial literacy rates, fixed incomes, and biology make these consequences all the more likely and problematic among the elderly. Further, the data in this study suggest that disclosures need to be carefully crafted in order for the elderly to capture the same gains as other segments of the population. This is especially true if the regulations carry the label "consumer tested." To the extent that disclosure regulations are intended to be consumer education, they should address the needs of all consumers—young and old.

219. See *supra* Part II.E.