Credit Cards 101
(in the Aftermath of the Global Financial Crisis)

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The Credit Card Industry Has Been Slammed by Three Related Events

- The global financial meltdown in 2008 dried up many of the traditional sources of funding that credit card companies used to make loans

  => credit availability on credit cards started to tighten in fall 2008

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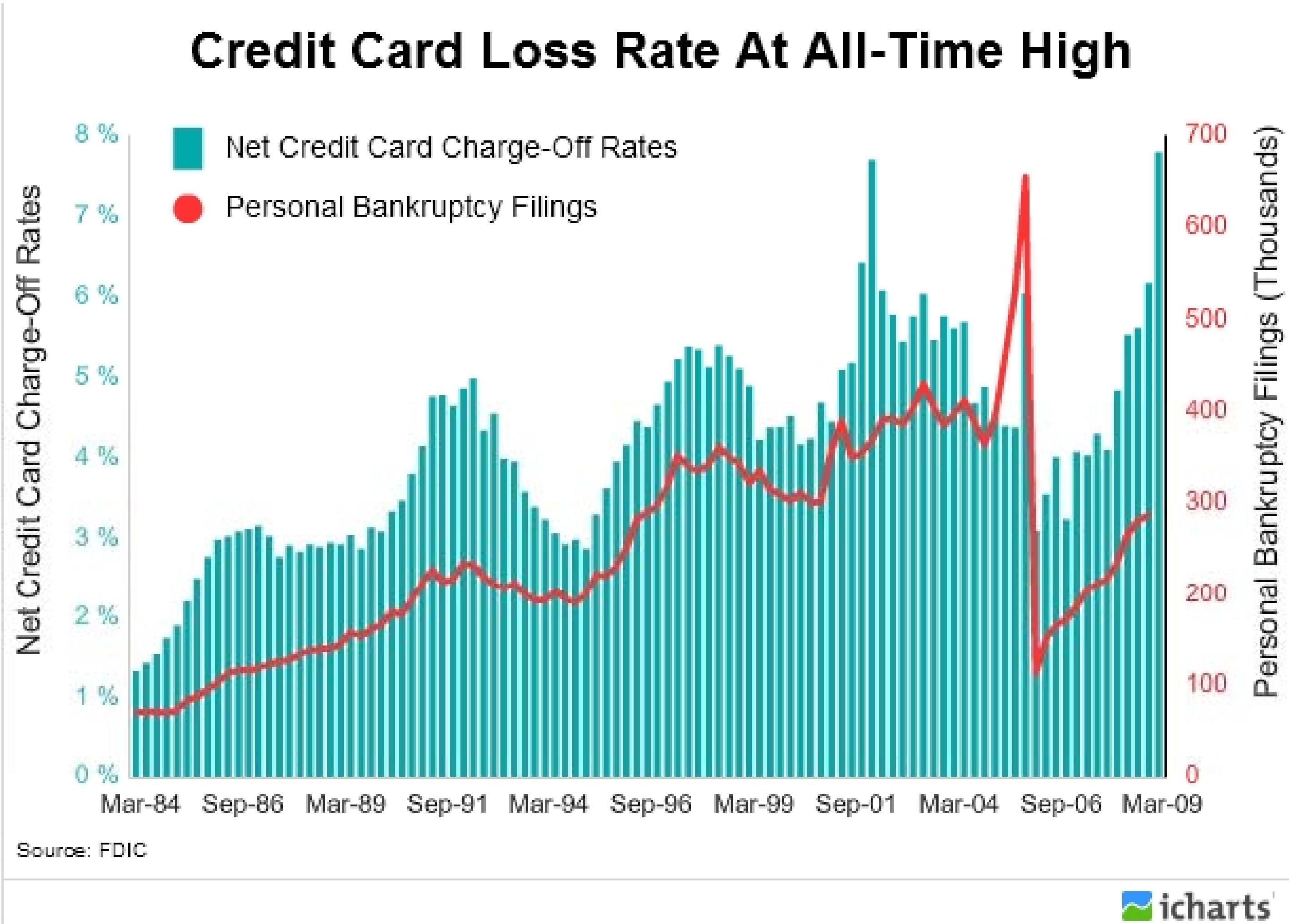
- **The sharp recession that was created by the financial meltdown has caused losses to soar (and they will stabilize at an historically high rate in 2010)**
  - Example: Bank of America announced record chargeoff rates of 13.5% of total balances owed in December 2009
  - Since the 4th quarter of 2008, card issuers have been scrambling to reduce risk

    => slashed trillions of $ of unused credit lines for millions of cardholders, AND sharply raised the qualifying standards for a new credit card

Credit Card Loss Rates and Personal Bankruptcies



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- The global financial meltdown in 2008 dried up many of the traditional sources of funding that credit card companies used to make loans => credit availability started to tighten in fall 2008

- The sharp recession created by the financial meltdown has caused losses to soar => trillions of $ of unused credit lines cut for millions of cardholders

- **CARD Act of 2009 will change the industry's revenue model going forward** (for the worse)
  - Why? Reduced pricing flexibility, in a market already saturated by too many issuers and too many products

Overview of Sessions #1 and #2

Objective: Understand the workings of the credit card business so as to understand the likely impact of the landmark CARD Act passed in 2009

- **Session #1** Credit Cards 101: a brief overview of the credit card industry in the U.S.
- **Session #2** Credit Card Reform Act of 2009
- **Discussion:** What does it all mean for consumers in the months and years ahead

Evolution of Consumer Payment Devices

- **Four transformational leaps in the evolution of payments that facilitate our day-to-day transactions**
  - **Switch from barter to coin (around 700 BC)**
  - **Introduction of paper checks (12th century, Venetians)**
  - **Intro of paper currency (17th century)**
    - **1690, Massachusetts Bay Colony, first government in western world to issue paper money. Source WSJ, 4/23/2010**
  - **Payment card (mid-20th century)**
    - **Paper**
    - **Metal charge plates**
    - **Plastic credit cards**
    - **Digital, pure electronic transactions**

Evolution of Consumer Payment Devices

- **Today, it's not the card itself that matters…. it's the digits**
  - **The account number provides the unique link to you, the customer**
- **The digital age has revolutionized the concept of money**
- **How the digits are actually stored is merely a detail**
  - **embossed number on a card**
  - **magstripe on back of card**
  - **RFID transmission through "close proximity" devices**
  - **pure electronic form as in e-commerce over the internet**

Taxonomy of Payment Cards

- **Credit Cards**
  - **General Purpose cards**
    - **Visa**
    - **MasterCard**
    - **Discover**
    - **American Express**
  - **Proprietary (store) cards**

- **Debit cards (linked to a checking account)**
- **Prepaid Cards/Stored value cards**
- **Mobile/Contactless payment devices (link to either a credit card account or a checking account – or some other source of funds)**

A Word on Credit vs. Debit Cards
(Visa and MasterCard logos)

Credit Cards

- **Versatile, widely accepted payment card product**
- **Allows for payment in full each month**
- **Also, can revolve a purchase balance for many months**
- **Cardholder required to make a minimum monthly payment**

Debit (Check) Cards

- **A versatile widely accepted payment card product**
- **Linked directly to cardholder’s checking account**
- **Used like a check**
- **Purchase is deducted directly from cardholder’s checking account**

General Purpose Credit Cards, 2006

(generally accepted across many types of merchants)

- **Visa brand:**
  - **6.7 million merchant locations in U.S**
  - **24 million merchant locations worldwide**
- **MasterCard brand:**
  - **6.8 million merchant locations in U.S.**
  - **25.1 million merchant locations worldwide**
- **American Express**
  - **3.0 million merchant locations in U.S.**
  - **5.0 million merchant locations worldwide**
- **Discover**
  - **4 million merchant locations in U.S.**

Some Basics of General Purpose Credit Cards

- **Visa and MasterCard are "brands", not issuers: that is, Visa and MasterCard do not issue credit cards**
  - **Used to be "associations" owned by thousands of member banks**
  - **Both Visa and MC are now separate, for-profit, corporate entities (Visa, Inc.; MasterCard Worldwide)**
  - **Both are now traded on the NYSE**

Some Basics of General Purpose Credit Cards

- Visa and MasterCard are “brands”, not issuers

- Only banks can issue Visa and MC products, under a franchise license from the respective companies

  Examples:

  – Bank of America issues mostly Visa products
  – Citibank issues mostly MasterCard products (but some Visa)
  – Your local credit union probably issues one or the other but not both

Some Basics of General Purpose Cards

- Visa and MasterCard are "brands", not issuers
- Only banks can issue Visa and MC products, under a franchise license from the respective companies
- American Express and Discover Financial Services are also general purpose card brands, but different in important ways
  - Each is the brand **AND** the issuer
  - Each company has a unit chartered as a national bank, that permits them to issue a general purpose credit card
  - American Express is now partnering with some other banks to jointly issue AMEX cards to the bank's customers

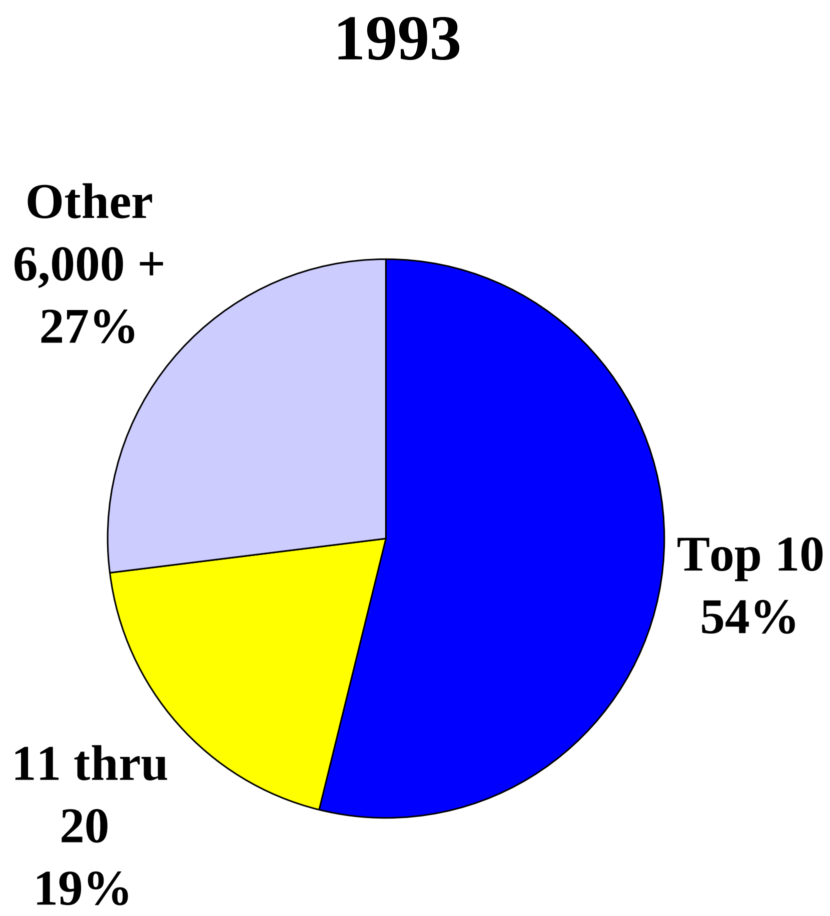
Who Does What?
Let's Consider Visa as an Example

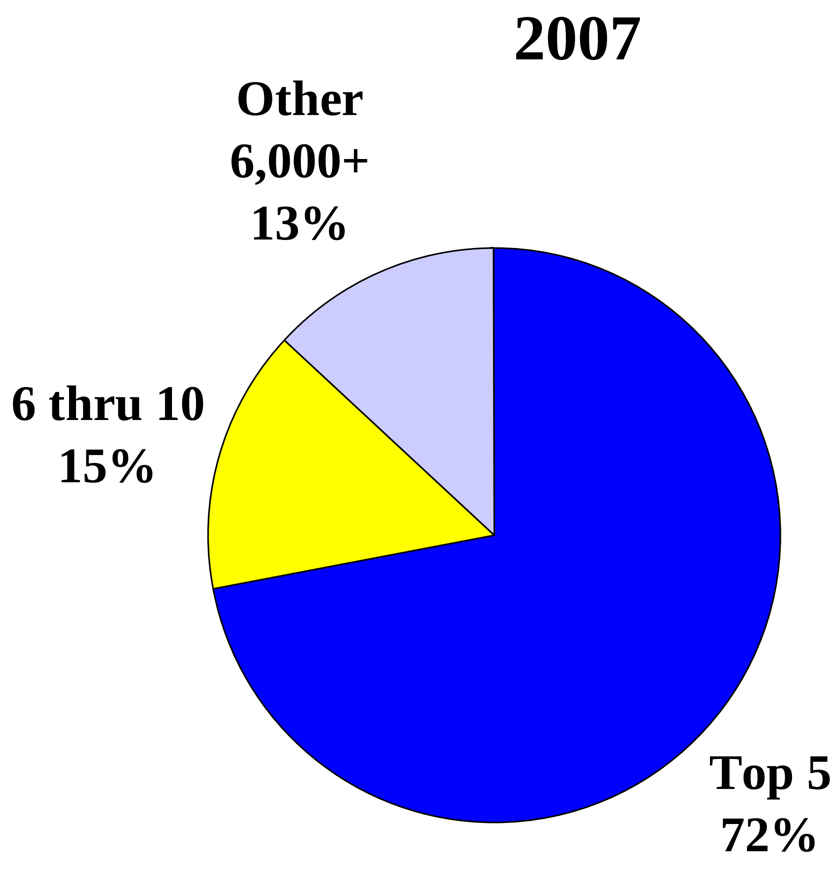
- **Visa**
  - Promotes the "brand"
  - Signs up merchants to accept the brand
    - constantly changing as merchants go in and out of business
    - constantly expanding overseas
  - Maintains the transaction processing network (vast network of computer terminals and "switching/routing" equipment)
  - Develops new payment card products (credit, debit, smart cards; e-commerce applications; other electronic payment devices)
- **Bank Card Issuers**
  - Market specific payment card products to consumers
  - Make all credit and card-issuing decisions (pricing; product features; accept/reject criteria)
  - Collection activity on all accounts

The Major Players Among Card Issuers as of 2009 (ranked by $ amount owed)

1. JP Morgan Chase
2. Bank of America
3. Citigroup
4. American Express
5. Capital One
6. Discover
7. Wells Fargo
8. HSBC
9. US Bank
10. USAA Federal Savings Bank

Consolidation in the General Purpose Credit Card Market

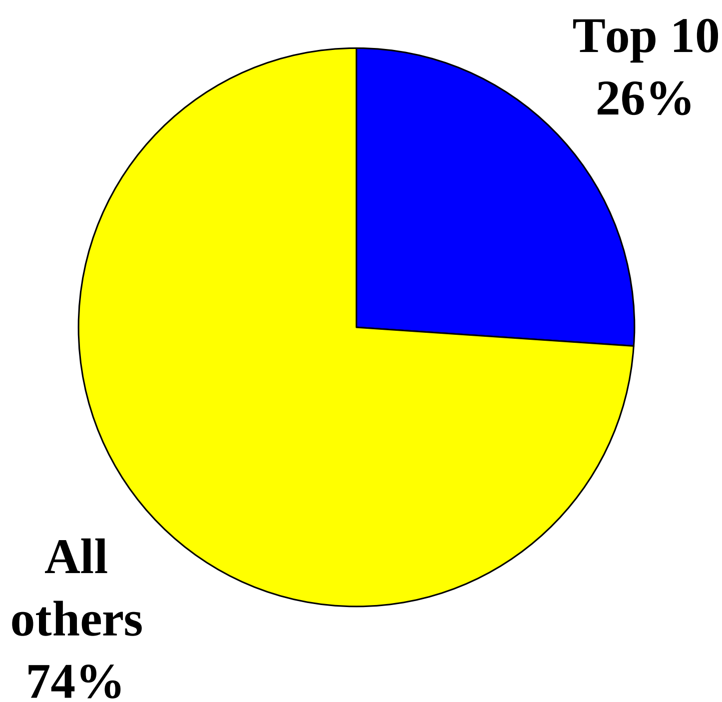




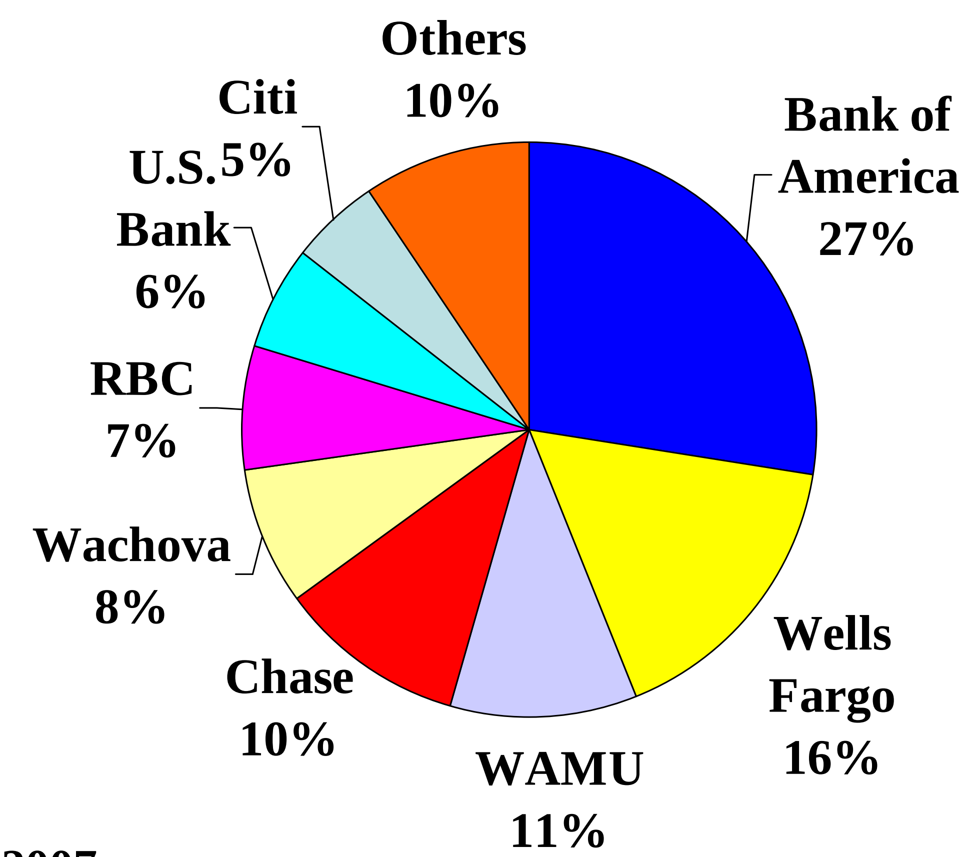
Source: Card Industry Directory

Contrast with Debit/Check Card Issuers, 2007: Much Less Consolidation

Total Debit Card Market



10 Largest Issuers



Source: Card Industry Director, 2007

Debit and Credit Card Products Operate in Very Different Competitive Environments

- **Most general-purpose credit cards are issued to consumers who do NOT have checking or deposit accounts with issuing bank**
  - **In 2001, only 17% of all Visa/MC credit products were issued to consumers who already had at least one banking relationship with the issuing bank**
  - **RESULT: credit cards are marketed to expand the bank's customer base**
    - **Opportunity for cross-selling other bank products**
    - **Lots of competition on card features**
- **And, the potential for generating revenue from the payment product is much higher on credit cards than debit cards**

So, Credit Card Issuers Try to Differentiate Their Card Products to Get Them Into Your Wallet

- **Price Competition**
  - **Interest rate (on revolving balances)**
  - **Fees (annual; overlimit fee; late fee; cash advance fee; foreign currency exchange fee)**
  - **Balance transfer offers**

- **Amount of credit line**

- **Rewards (Cash back rebates; airline miles)**

- **Affinity relationships**

In contrast, debit cards are pretty much all the same

So, How Do Banks Make Money on Credit Cards?

Step 1: **Your bank card issuer wants you to use the card!**

- **The card-issuing bank gets a small percentage (1.5 – 2%) of every dollar charged**

Step 2: **Many customers choose not to pay the balance in full each month**

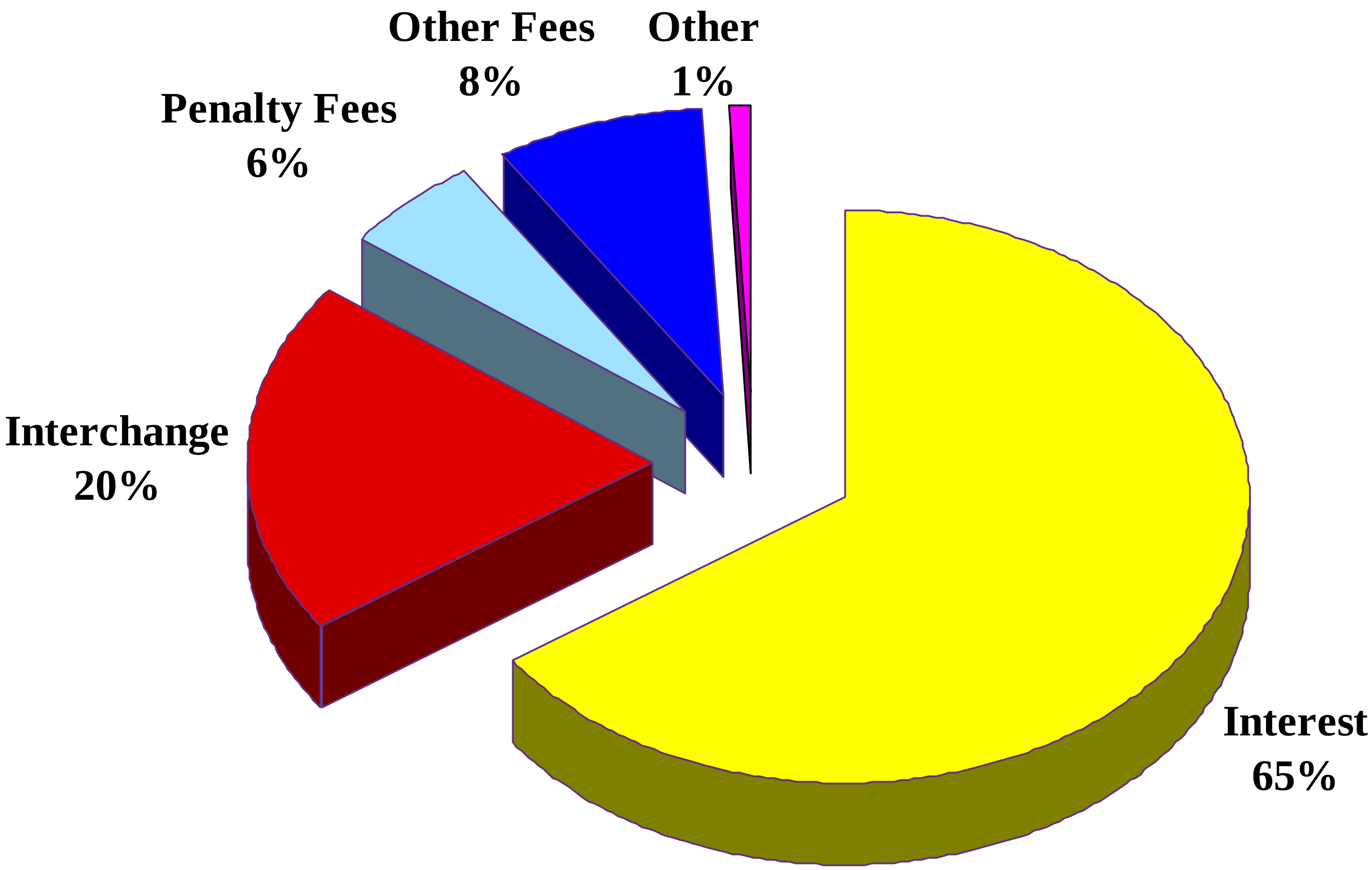
- **The issuer collects interest income on the portion of the balance "revolved" from month to month**

Step 3: **Many customers have late payments, or go over their credit limits**

- **The issuer typically charges a penalty fee, and may raise the interest rate (but this is harder now after the CARD Act)**

Source of Bank Card Revenues, 2006

(Total = $115 billion)

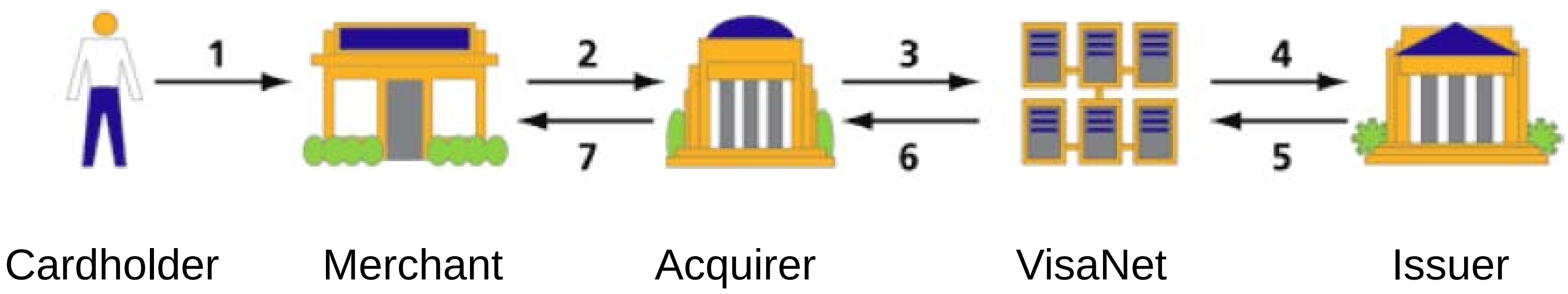


Source: Card Industry Directory, 2007

Key Players in the Routing of A Typical Credit Card Purchase

- **Cardholder (who initiates a purchase)**
- **Merchant (who transmits info from the credit card/payment device)**
- **Acquiring bank (who the merchant hires to "talk" to the authorization network and eventually collect payment from issuing bank)**
- **Visa Network (verifies cardholder ID, available credit, and gets authorization for the transaction)**
- **Issuing Bank (the bank that issues the credit card, approves the transaction and bills the customer via the monthly statement)**

How the Digits on Your Visa Credit Card Allow You To Buy that Flat Panel TV

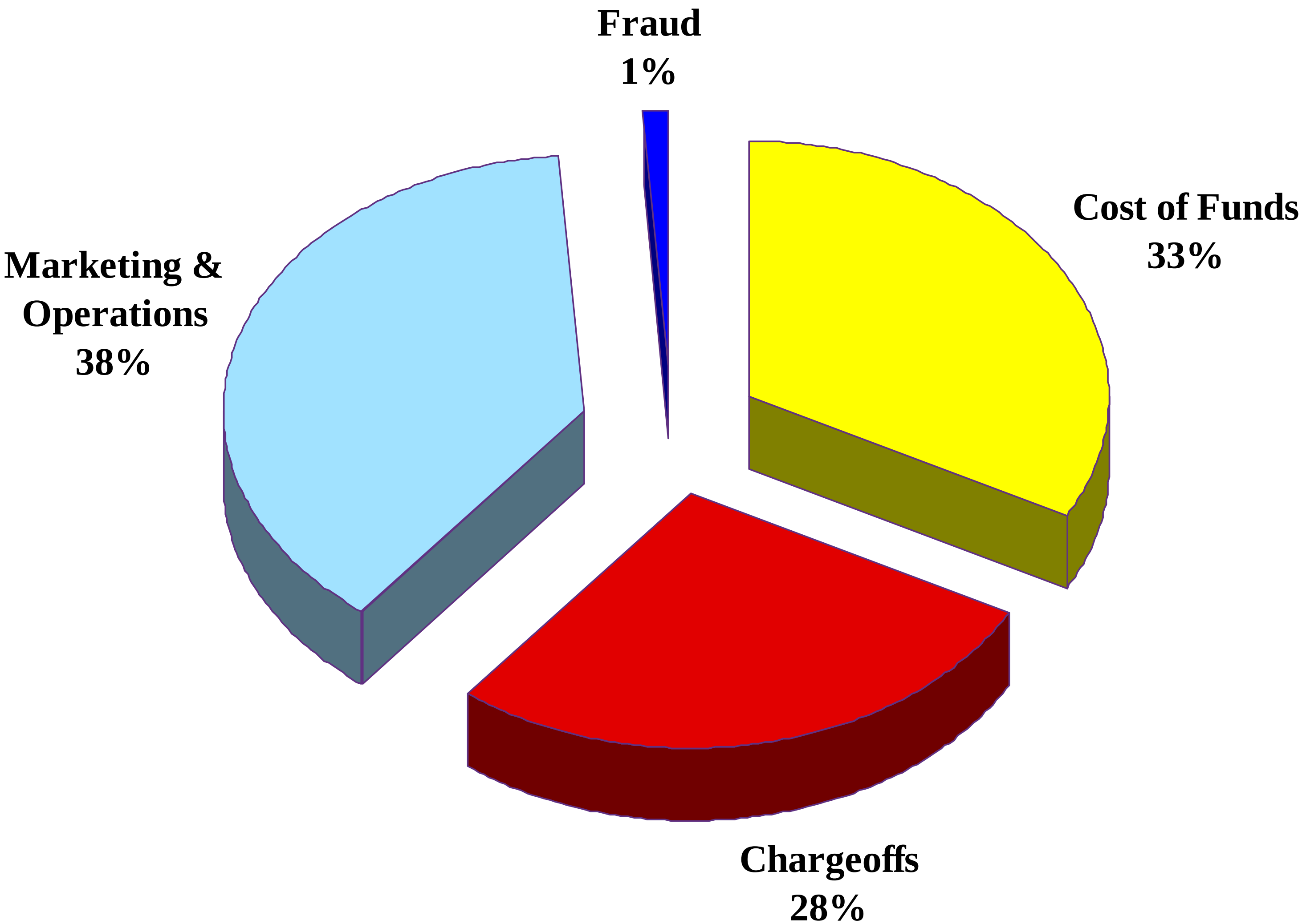


Who Pays for all of this Transaction Clearing Activity?

- **Merchant Discount Fee**
  - **On average, the merchant pays about 2% of the $ value of every transaction made with a general purpose credit card**
- **Issuing bank gets about 80% of that (or about 1.6% of the transaction value)**
- **Acquiring bank gets the rest**
- **Visa Network gets paid by the Issuing bank and Acquiring bank through their franchise fees**

FYI: Source of Bank Card Expenses, 2006

(Total = $87 billion)



Source: Card Industry Director, 2007

Credit Card Accountability, Responsibility and Disclosure Act

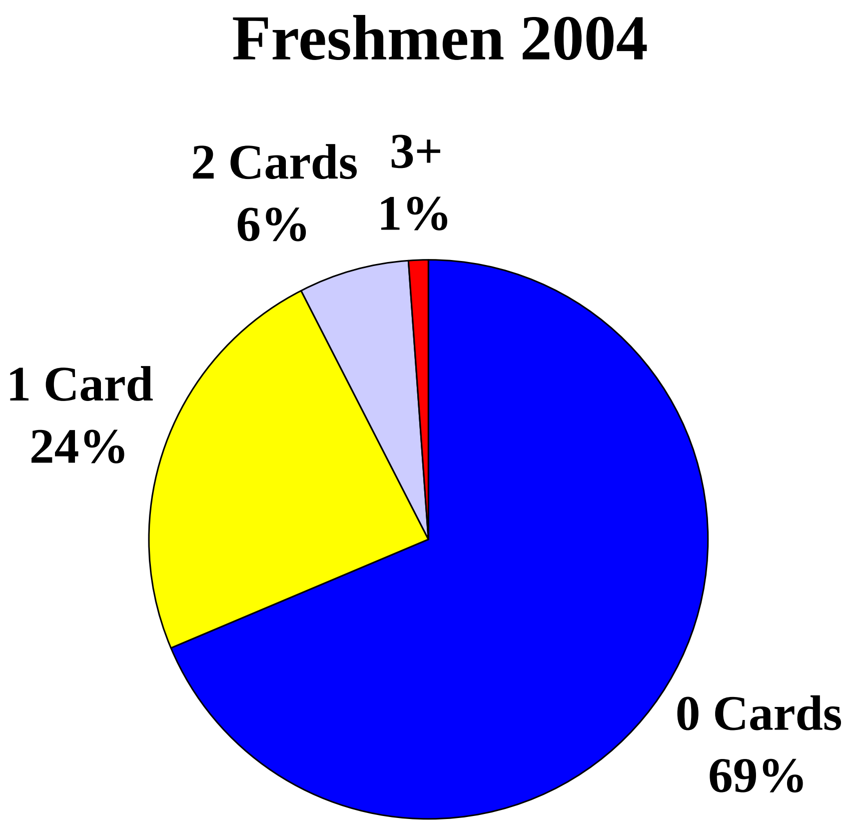
- President Obama signed into law May 22, 2009
- Most features became effective 9 months after signing => February 2010.

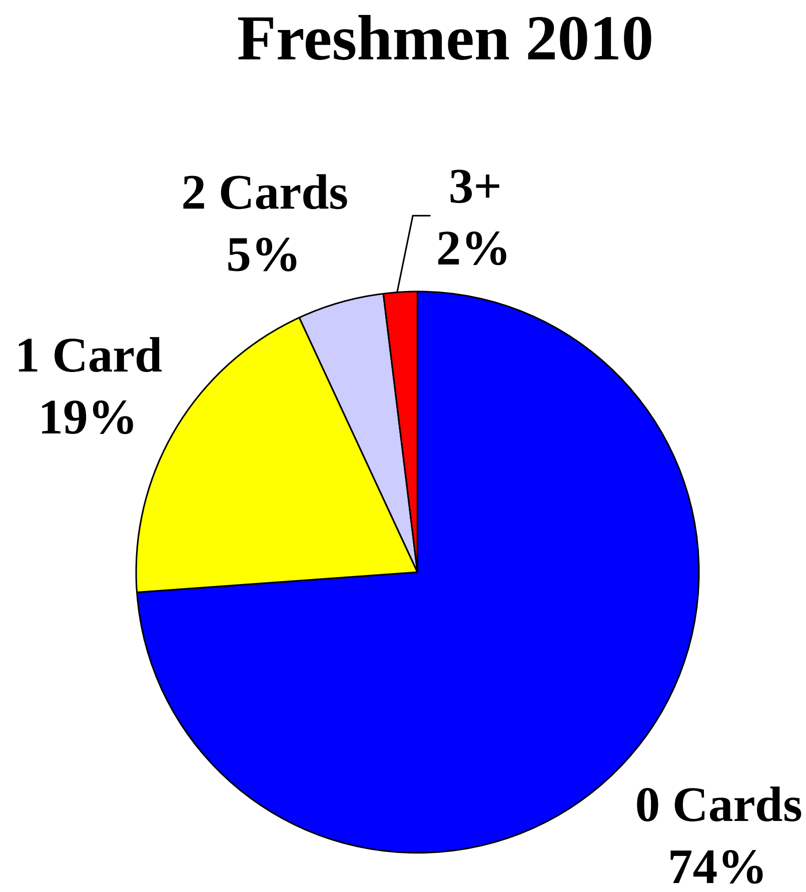
“[the legislation] marks a turning point for American consumers and ending the days of unfair rate hikes and hidden fees.”

A Digression Close to Your Students: What Do We Know About College Student Credit Marketing as of Early 2010?

- **Survey data derived from nationwide college student survey**
- **4-year institutions**
- **Undergraduates**
- **Source: Student Monitor**
  - **(Ridgewood, NJ.** http://www.studentmonitor.com)

Undergraduates with General Purpose Cards in Their Own Names





Source: Student Monitor, Spring 2004 and 2010 Surveys

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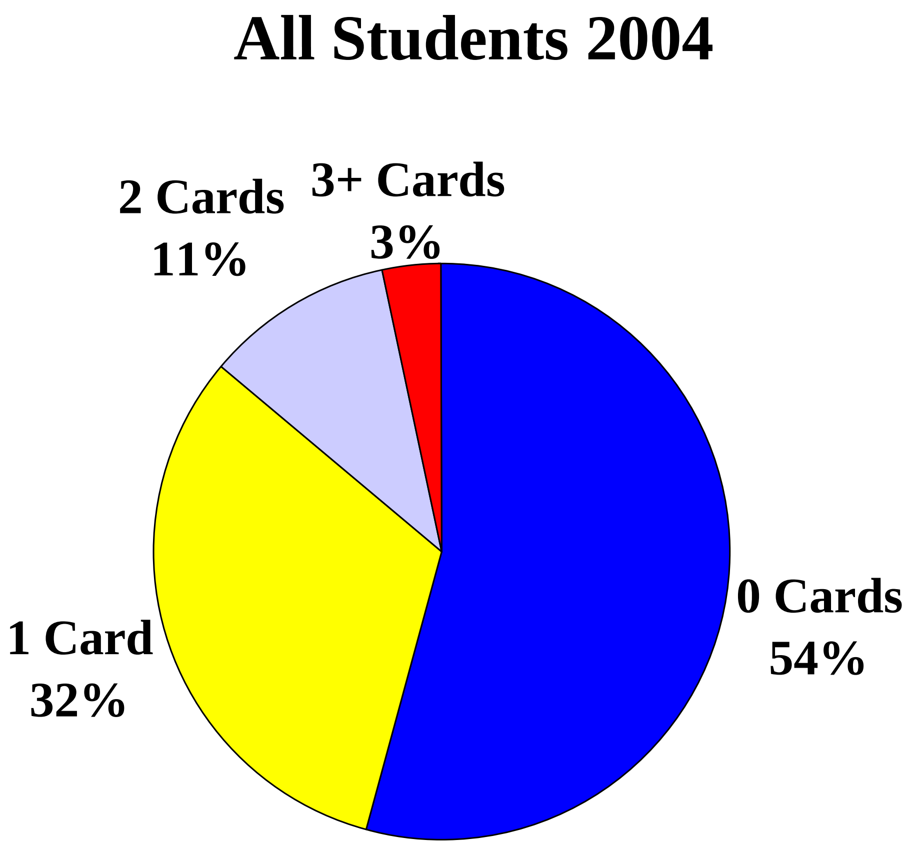
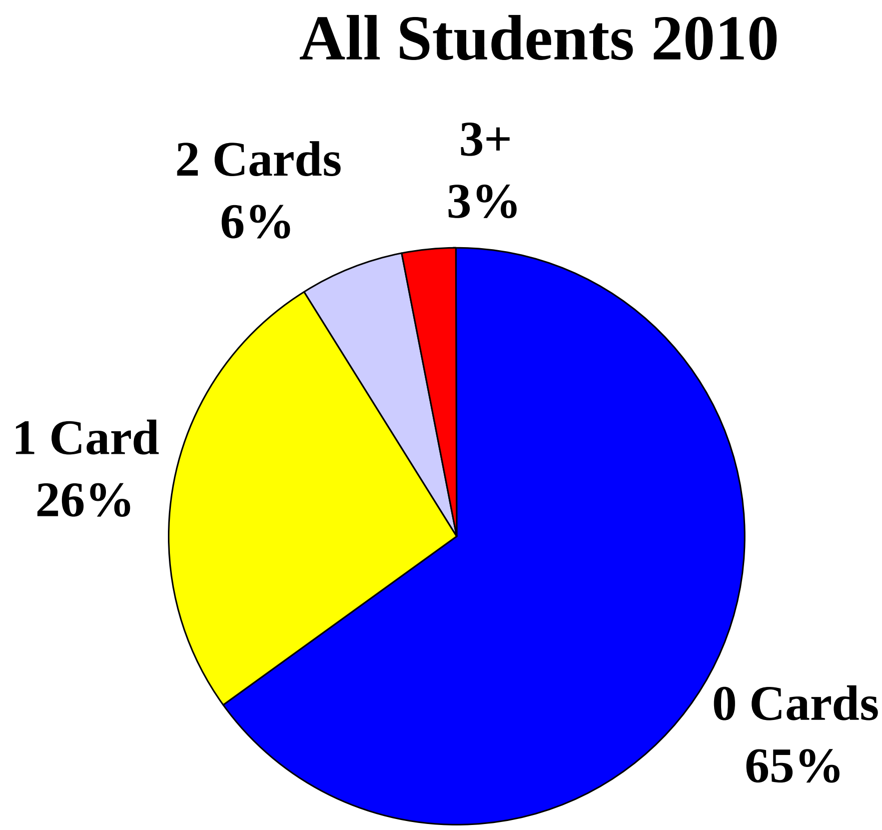
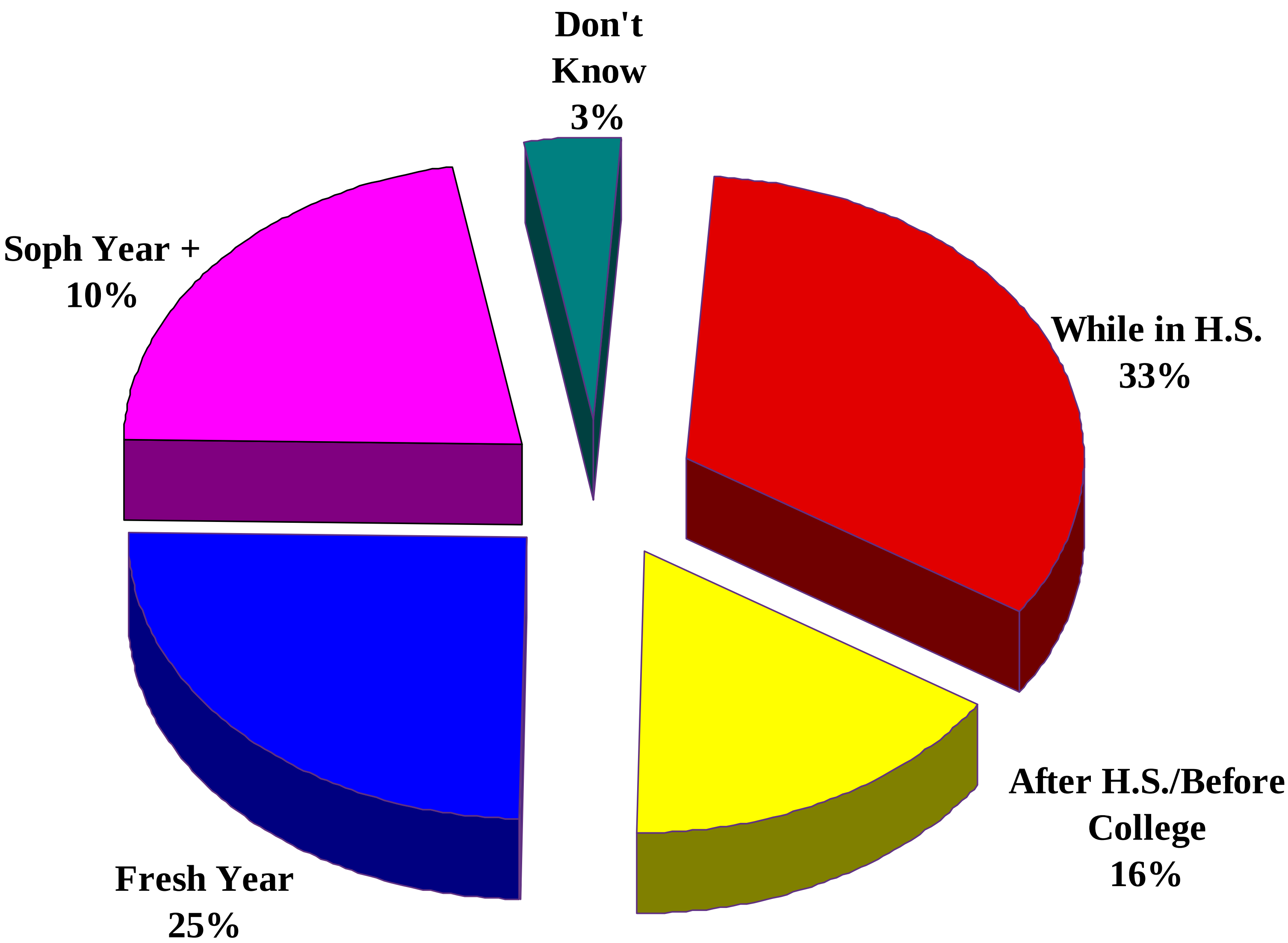




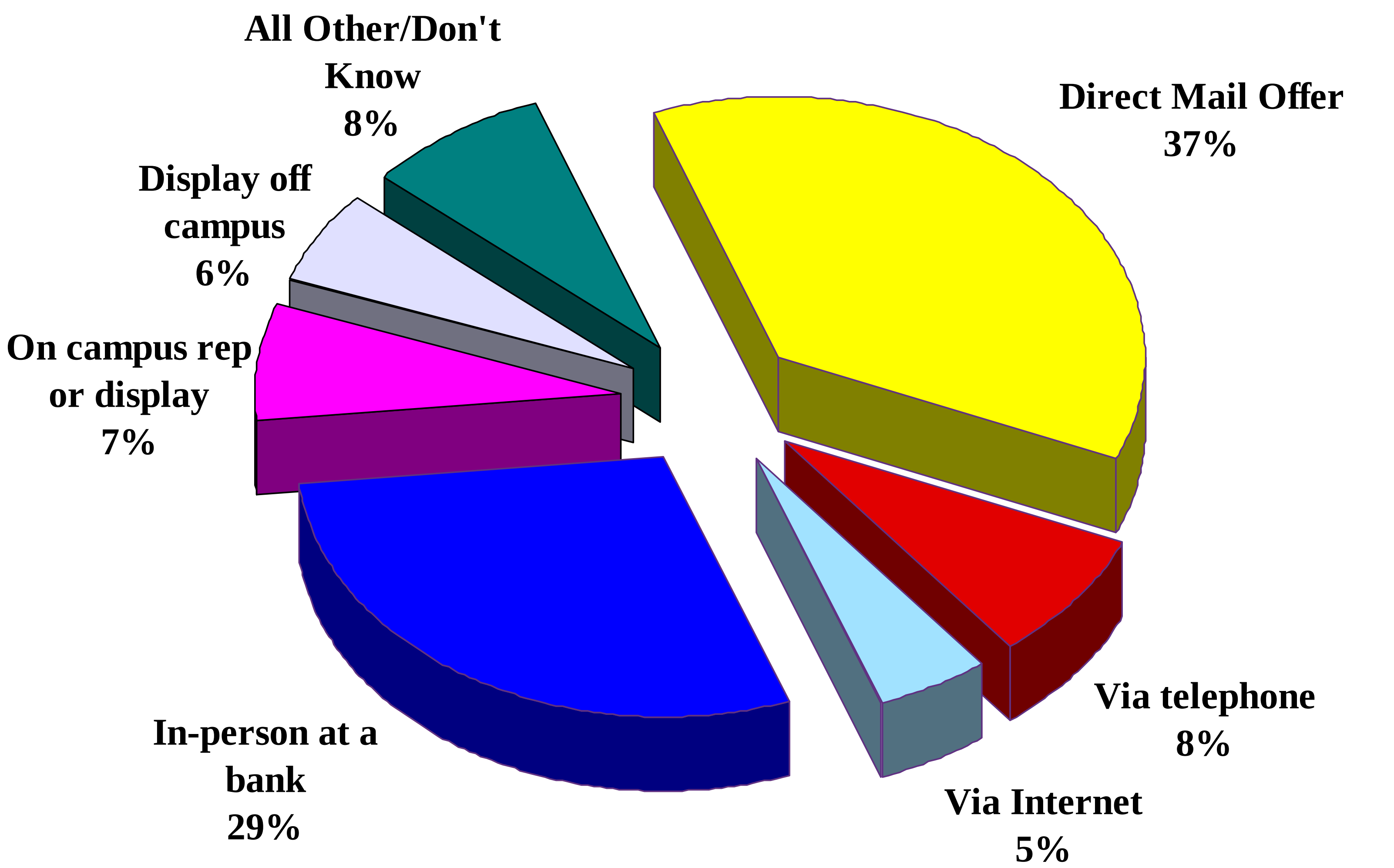
Source: Student Monitor, Spring 2004 and 2010 Surveys

When First Card in Own Name was Obtained



Source: Student Monitor, Spring 2010 Survey.

Methods of Obtaining General Purpose Cards in Students' Own Name, 2004



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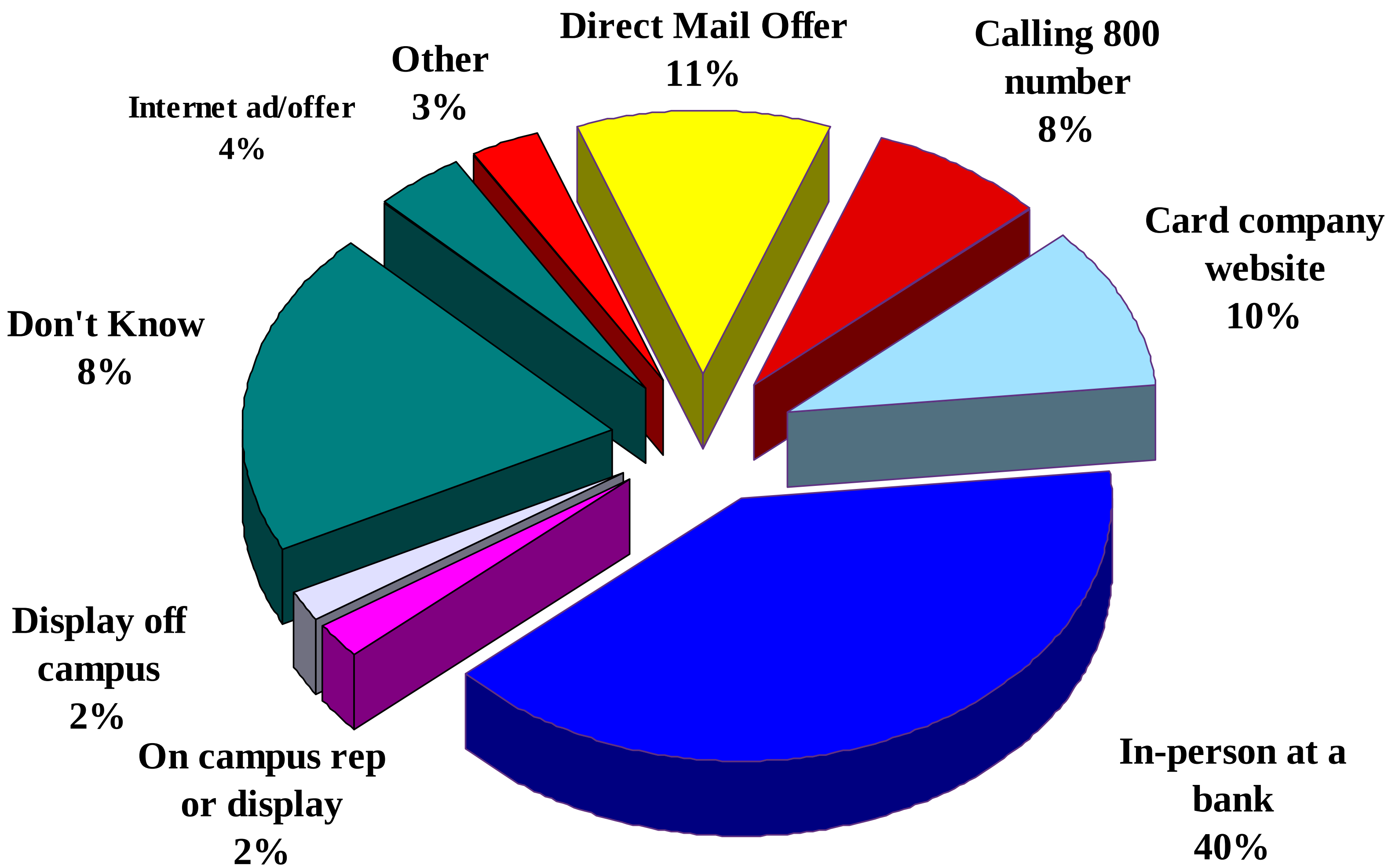
Methods of Obtaining General Purpose Cards in Students' Own Name, 2010



Source: Student Monitor, Spring 2010 Survey.

QUESTIONS?

Overall, What Does All of This Mean for Credit Card Companies and Consumers?

For Credit Card Availability. . . .

- **Higher eligibility standards for new accounts**
  - **Higher FICO score, etc.**
- **Lower credit limits and possibly fewer cases of multiple accounts per customer (to limit issuer risk)**

Overall, What Does All of This Mean for Credit Card Companies and Consumers?

For Pricing. . . .

- **Higher credit card interest rates**
- **Return of annual fees**
  - **But, possibly waived for cardholders who exceed spending thresholds**
- **Rewards programs may still be OK – but those cards may carry even higher annual fee or interest rate**