

# Giving credit... where credit is due



**How credit bureaus and credit scoring help  
to fill the credit gap for MSME and  
formalize the *“Informals”***

1988: the real story of an SME masterpiece...

## A prototype “Missing Middle” SME



- The tee-shirt... with a...  
**printed, fake seat-belt!**
- Over 1 million sold



# Would you lend credit to the “Missing Middle?”

## • Profile

- Small entrepreneur
- New client
- Textile sector
- Annual turnover US\$ 285,000
- 3 employees (including himself)
- No account with your bank
- Not reliable data/docs on the SME
- No tax file return
- No collateral (real estate)

## • Loan applied for

- US\$ 10,000
- Working capital



## • Questions

- Would you grant him a \$ 10,000 loan?
- If yes, how long to process it?
- Would you need documentation?
- Would you request collateral from him?
- How many department would work on that?
- Who would take a decision (a person)?
- How much would it cost to grant such loan?

## • Answers (MENA)

- NO (90%)
- 3 weeks
- YES
- YES
- 4-8
- Credit committee
- \$ 300 – \$ 800

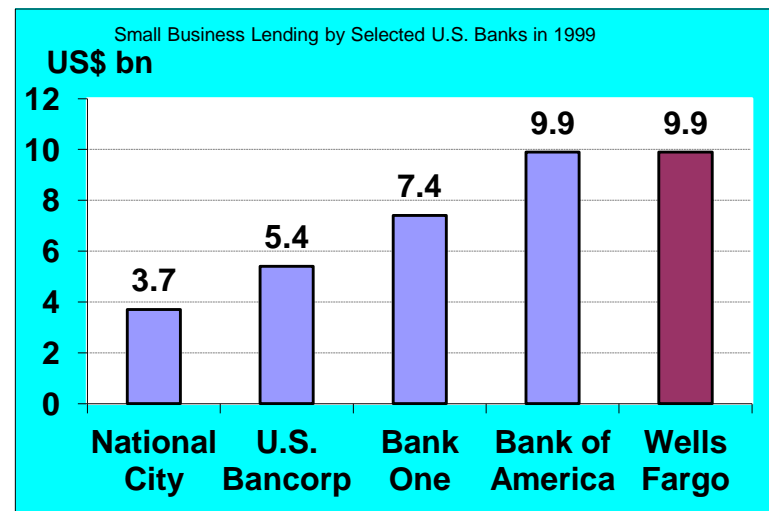
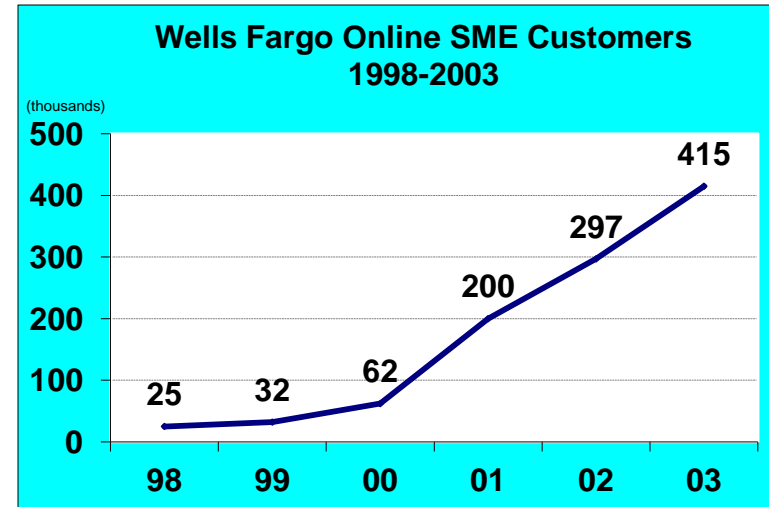


# Somebody dares to do it! And successfully

## Case study: Wells Fargo (USA)



- From Collateral to ***“Reputational collateral”***
  - In 1994 Wells Fargo starts **Business Direct** (SME credit division)
  - Client profile: sales <US\$ 325.000 year; employ <5 people
  - Average loan amount US\$15.000; max loan amount US\$ 100.000
- **Results:**
  - Portfolio: by 1999 US\$ 9.9 billion; by 2003 US\$ 15bn
  - In 2002 WF rated number 1 SME lender in the USA
- **Success factors?**
  - Loan applications by **Internet, phone, mail** (or branch)
  - **No tax return** or financial / income statements required;
  - **No collateral required** (about 94% of loans **unsecured**)
  - Fully automated decisions (70% of total)
  - Taken with **credit bureau + bureau scores + WF scoring**)
  - **Decision based mainly on SME owner’s consumer loans data**
  - Very low processing costs (**US\$ 30**)
  - Very low processing time (**max 15 minutes**)



# An isolated case? Not really...

## Cases study: Garanti Bankasi (Turkey)



### • THE PROBLEM/OPPORTUNITY:

- SMEs with <250 workers = 77% of jobs and 56% of exports in Turkey (2010)
- However, slowest-growing group in the economy, lagging peers in ECA
- Main obstacle to SME growth: **lack of working capital**
- **Collateral always required** of SMEs, exceeding 90% of loan
- SME loan applications frequently rejected, underwriting slow / cumbersome / paper-based
- **Opportunity for banks with innovative products and more efficient delivery models**

### • THE PIONEER: GARANTI BANKASI:

- 2<sup>nd</sup> largest bank / 856 branches
- Covers 96% of the country
- Largest POS network (190,000)
- 2007: launch of P.O.S SME loans
- 17<sup>TH</sup> different SME segments
- **POS + Scoring + credit bureau**

1 POS owner keys in loan amount needed into menu installed in POS machine.

2 Historical transactional data from POS machine is used as inputs in Garanti's credit scoring model.

POS at retail vendor

Garanti



3 Loan is approved within five minutes via SMS, and money is transferred into the vendor's bank account, accessible through POS machine, ATM, and phone banking.

- Loan size TRY2,000-9,000

- (US\$1,200-5,200)

- Loan term 3-12 months.

- No documentation, guarantor, or collateral required.

### • THE RESULTS ( in 2010):

- SME loans: + 38% (US\$ 12.9 bn)
- NPL: 3.3% (peers 7.5%)
- 157,000 new SME clients (US\$ 4.3 bn)
- Total SME clients 1,27 million
- No collateral
- Build **"REPUTATIONAL COLLATERAL"**



# What is “reputational collateral”?

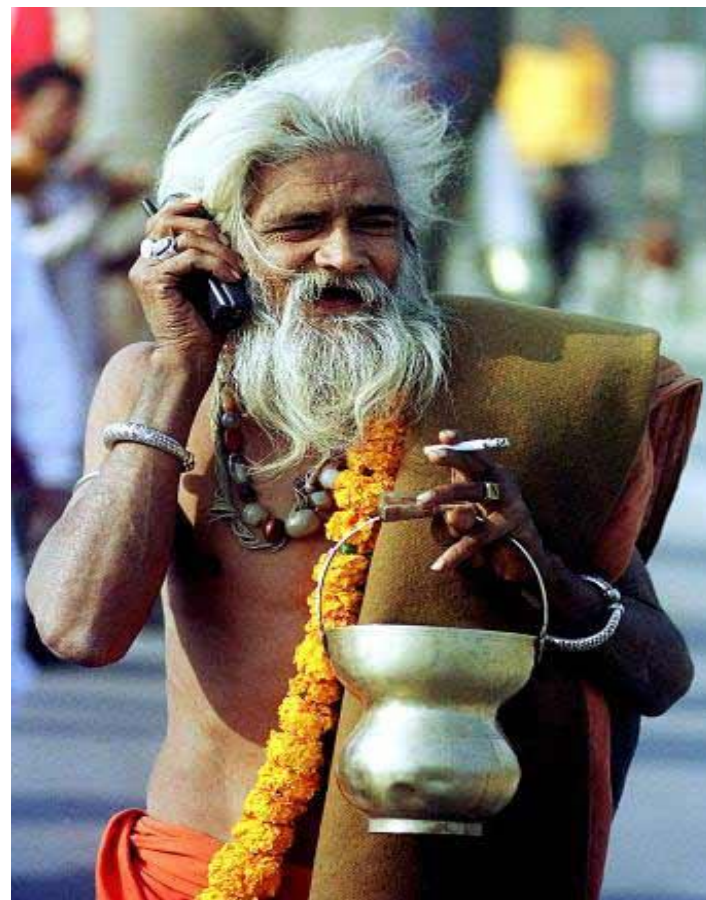
- Is an **intangible** reputation
- **Not** based on **assets** but...
- ...based on **individual repayment behavior**
- It is “certified” by the **credit bureau**
- It is validated by the **credit report**



- **Replaces:** collateral, financials, tax files
- **It is:**
  - **free** and...
  - **easily available to every good payer**

# How can the “*informals*” build reputational collateral?

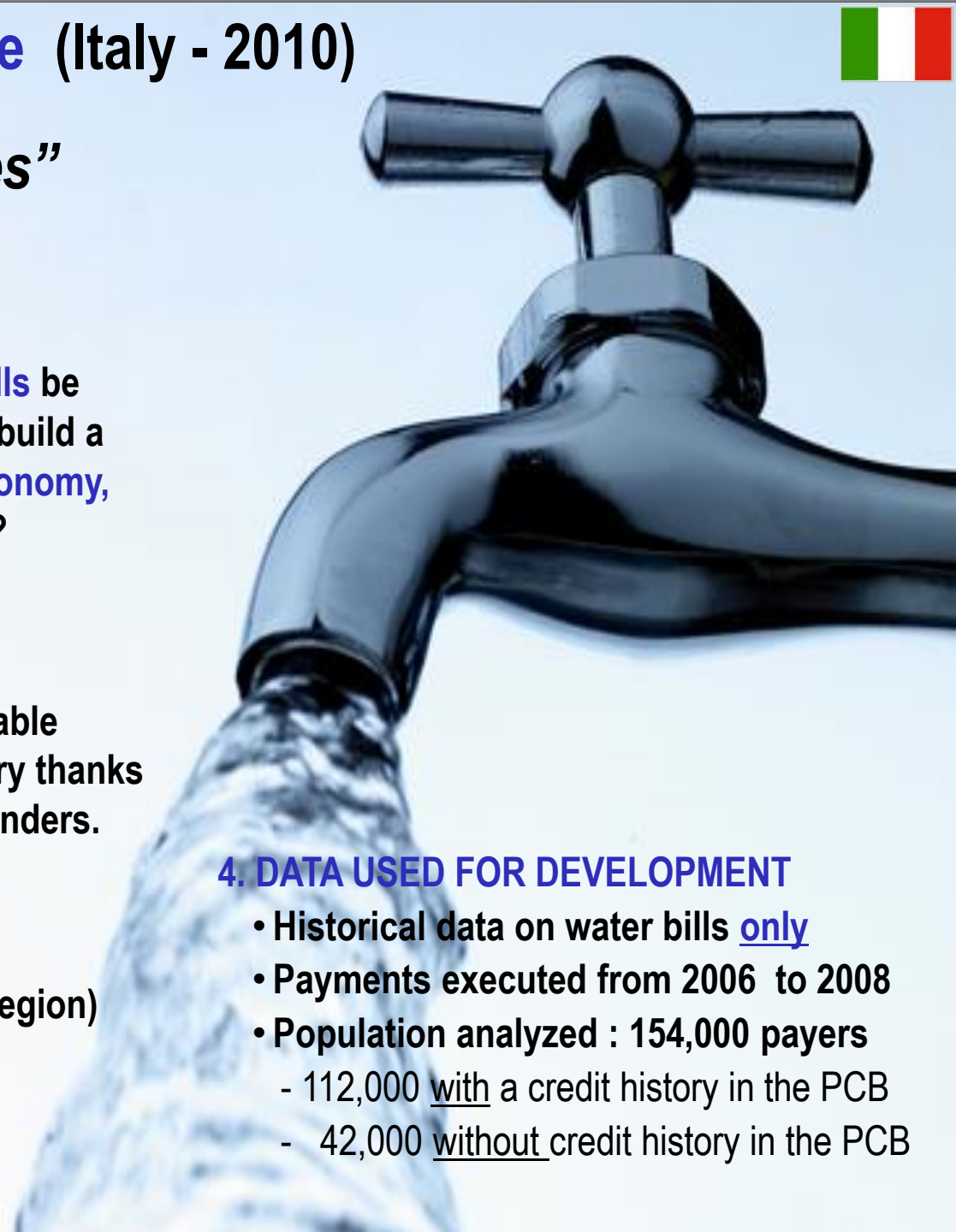
- The “**CATCH-22**” situation:
  - Poor consumers, micro / informal entrepreneurs pay cash
  - Have no credit history = (“no file” or “thin file”)
  - No reputational collateral
  - Are not “scorable”
  - Therefore difficulty in accessing credit
  - Their transactions defined as “**credit like / cash-like**”
  - Even in the US estimated in **35-50 million**
- **Answer: alternative (non-traditional) data**
  - Includes: utilities, rentals, cable TV, insurance
  - **Utilities** are the most helpful since universal, homogeneous, reliable
  - This data is very predictive
  - Payment regularity is a strong risk indicator
  - It is a shortcut to build a credit history



# Cases study: **Water Score** (Italy - 2010)



## Scoring the “*unscorables*”



### 1. THE CHALLENGE

- can a good payment track on **water bills** be considered **as good as credit data** to build a scoring model for **MSME, informal economy, and individuals** without credit history?

### 2. THE OBJECTIVE

- increase credit access for non bankable applicants or without a credit history thanks to the utilization of water score by lenders.

### 3. THE PLAYERS

- Local Administration (South of Italy region)
- CRIF Private Credit Bureau (PCB)
- The Water Company (public utility)

### 4. DATA USED FOR DEVELOPMENT

- Historical data on water bills only
- Payments executed from 2006 to 2008
- Population analyzed : 154,000 payers
  - 112,000 with a credit history in the PCB
  - 42,000 without credit history in the PCB



# Cases study: Water Score (Italy - 2010)



## The results

- The answer is yes, the scoring model developed on water payment data allows a robust risk assessment of those clients that pay their water bills regularly and punctually

- In particular, among the 42,000 with **no credit history**, roughly **37,000 borrowers (83%)** can become eligible for credit.

SCORE	Media	% en cl asse	Classe	Bad Rate odds
514.932 <= -- <=938.917	881.067	7.15%	1	12.27%
938 .917 < -- <=970.647	959.753	9.69%	2	4.15%
970.647 < -- <=977.784	976.107	16.10%	3	2.47%
977.784 < -- <=982.541	981.626	19.02%	4	1.78%
982.541 < -- <=985.418	984.718	10.26%	5	1.50%
985.418 < -- <=986.880	986.838	30.92%	6	1.11%
986.880 < -- <=990.488	988.987	6.85%	7	0.48%

- If appropriately fine tuned the model can easily be extended to other utilities / or municipalities
- In conclusion, a potential 'good' customer that finds it difficult to access credit through traditional channels and traditional information, could vastly benefit from the utilization of alternative data



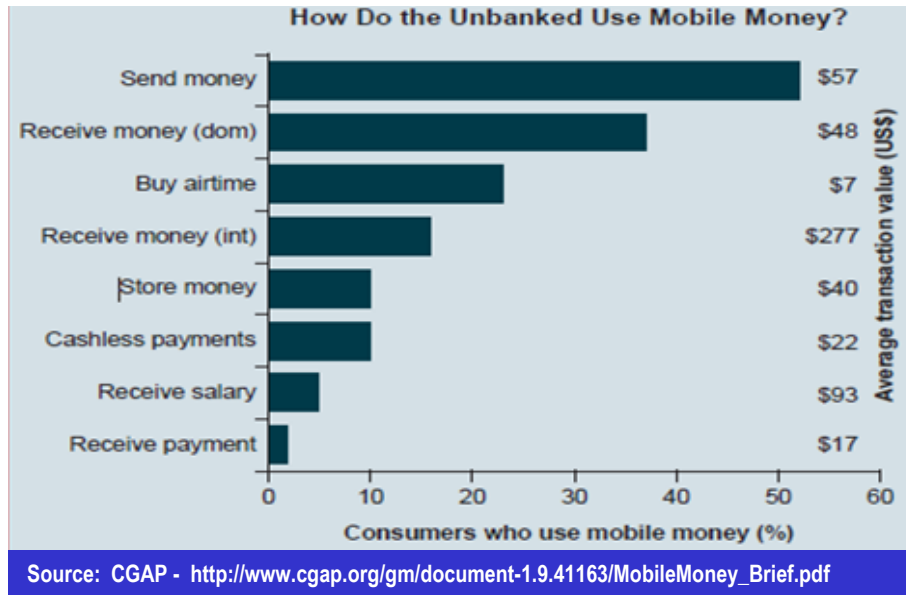
# Case study: from airtime to credit

## Philippines - 2012



### 1. THE CHALLENGE

- Can scoring models built on pre-paid mobile phone usage data, predict MSME credit risk?



### 2. THE PLAYERS

- Developed by Experian MicroAnalytics
- A few banks partners (users)
- SMART, largest mobile operator (68%)

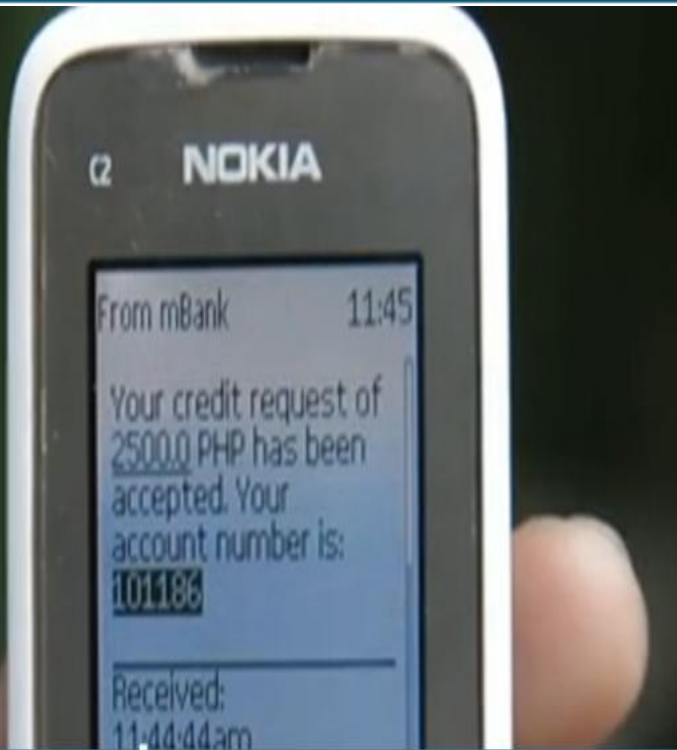
### 3. THE OBJECTIVE

- create a scoring model that allows banks to offer unsecured loans to MSME in a country where practically everybody holds a mobile phone

### 3. DATA USED FOR DEVELOPMENT

- Only data on pre-paid mobile telephone (no credit data)
- Available practically for every Filipino
- Supplied by SMART (anonymous data)
- Including: mobile usage, SMS usage, number and value of calls, top-up amounts and number

# Case study: from airtime to credit Results



- The answer is **yes**
- The **airtime** score **predicts risk very well**
- **SMART** clients apply for loans directly from mobile
- If score is positive, they are granted a loan
- **No collateral** requested
- **Paperless on-line application**
- **NO** tax files, financials, papers
- Approval time: **instant**
- Initial loans between 50 / 200 euro (score based)
- Automatically increased for good payers
- **Cost of risk very contained: NPL low single digit**

1. Banks partners of SMART can grant unsecured loans based only on the airtime scoring model
2. Bank's target: clients too small to be profitably served by MFI/bank, due to location and loan size
3. Transaction costs are risible: loans are granted using SMART's airtime network
4. Airtime score allows financial inclusion for millions of otherwise "non-bankable" Filipinos
5. Builds reputational collateral / credit histories

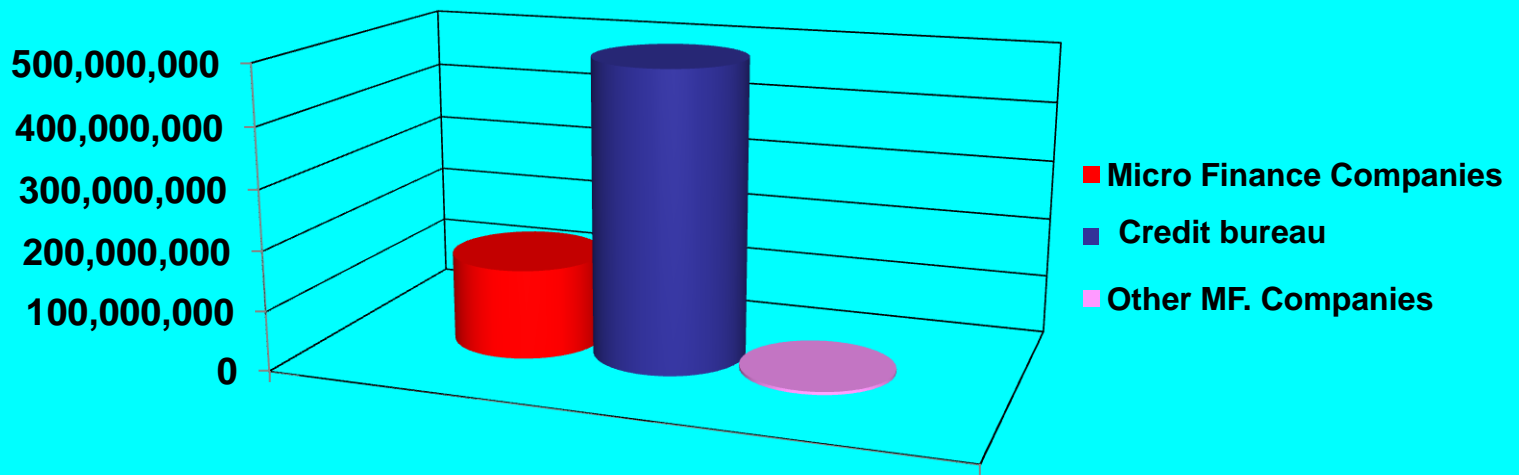
# From finance access to... finance excess



## Case study: Egypt - 2011

- Granting credit is not enough: credit must be granted responsibly!
- How bureau scores preempt portfolio risk deterioration
  - In Egypt 1 PCB operating only with banks (mandated by law to share data and inquire)
  - MFIs refused to share data (not mandated by law)
  - **TEST:** comparison of MFIs clients with the data in the Credit Bureau (all the Egyptian banks)

SAME CLIENTS	MFIs loan volumes	Credit bureau Loan volumes (banks)	Other MFIs Loan volumes
Outstanding Balance (LE)	149,309,665	494,702,958	5,019,795



Outstanding Balance details

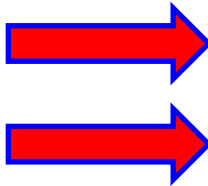






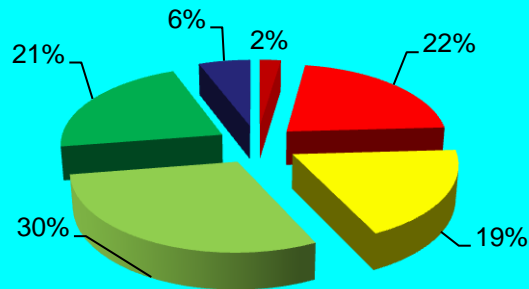
# The role of Bureau Scores in the Egyptian case

- Worst still to come when...



SCORE DISTRIBUTION	
1-DEFAULTING (300-400)	2%
2-HIGH RISK (401-625)	22%
3-GOOD (626-700)	19%
4-VERY GOOD (701-750)	30%
5-EXCELLENT (751-HIG)	21%
6-SCORE NOT AVAILABLE	6%

### Score distribution



- 1-DEFAULTING (300-400)
- 2-HIGH RISK (401-625)
- 3-GOOD (626-700)
- 4-VERY GOOD (701-750)
- 5-OUTSTANDING (751-HIG)
- 6-SCORE IS NOT AVAILABLE

- ...Bureau Scores identified 24% of those clients in common with the banks to be either bad or very bad

Guess the number....

**11,000,000,000**

**Number of Bureau Scores sold in  
the US in 2011**



# Thank you



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