

HMDA Data and Fair Lending – Best Practices for Lenders

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Home Mortgage Disclosure Act (HMDA) Data – useful but not enough

- Very valuable for screening purposes by regulators
- Very valuable for basic peer comparisons
- Very valuable for use in internal review by lenders
 - » Check integrity of data! Seems obvious, but errors occur
 - » Check geographical distributions (e.g. by high minority and low income census tracts)
 - » Make sure that variables that influence underwriting and pricing can be linked to HMDA data

- Key data for fair lending analysis because it is the ONLY dataset that allows lenders to include loan level information on race and ethnicity
 - » Race/Ethnicity Changes in 2004:
 - Separation of race/ethnicity
 - Up to five race categories for applicant and co-applicant
- Key data for fair lending analysis because it includes underwriting (approval/denial) and pricing information (rate spread, HOEPA)

What are the issues?

- How do we identify “higher priced loans”
 - » Those with HOEPA flags
 - » Those that have reported rate spreads (but threshold percentages change over time) – e.g. we find 30% threshold picks up most subprime lenders in 2004 but 50% more reasonable for 2005 data
- We can compare outcomes by race or ethnicity
 - » Incidence – either in terms of relative probabilities or “odds ratios”
 - » Magnitudes, levels, severities – do minorities pay more, on average than do White, Non-Hispanic borrowers

How Can We Analyze the Data?

- Can analyze by loan purpose: purchase, refinance, home improvement
- Can look at lien status
- Can look at loans with Reportable Rate spreads (higher priced) – and compare like firms by year
- Can look at HOEPA loans (for refinance or home improvement)
- Can examine patterns by geography

- Cannot analyze by channel
 - Cannot analyze by specific loan product (ARM, term, etc)
 - Cannot look at rate sheet information
 - Cannot include information on profitability of products
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- BUT – need to be able to link all this data for fair lending analyses

Differences by Entity, Channel, Division

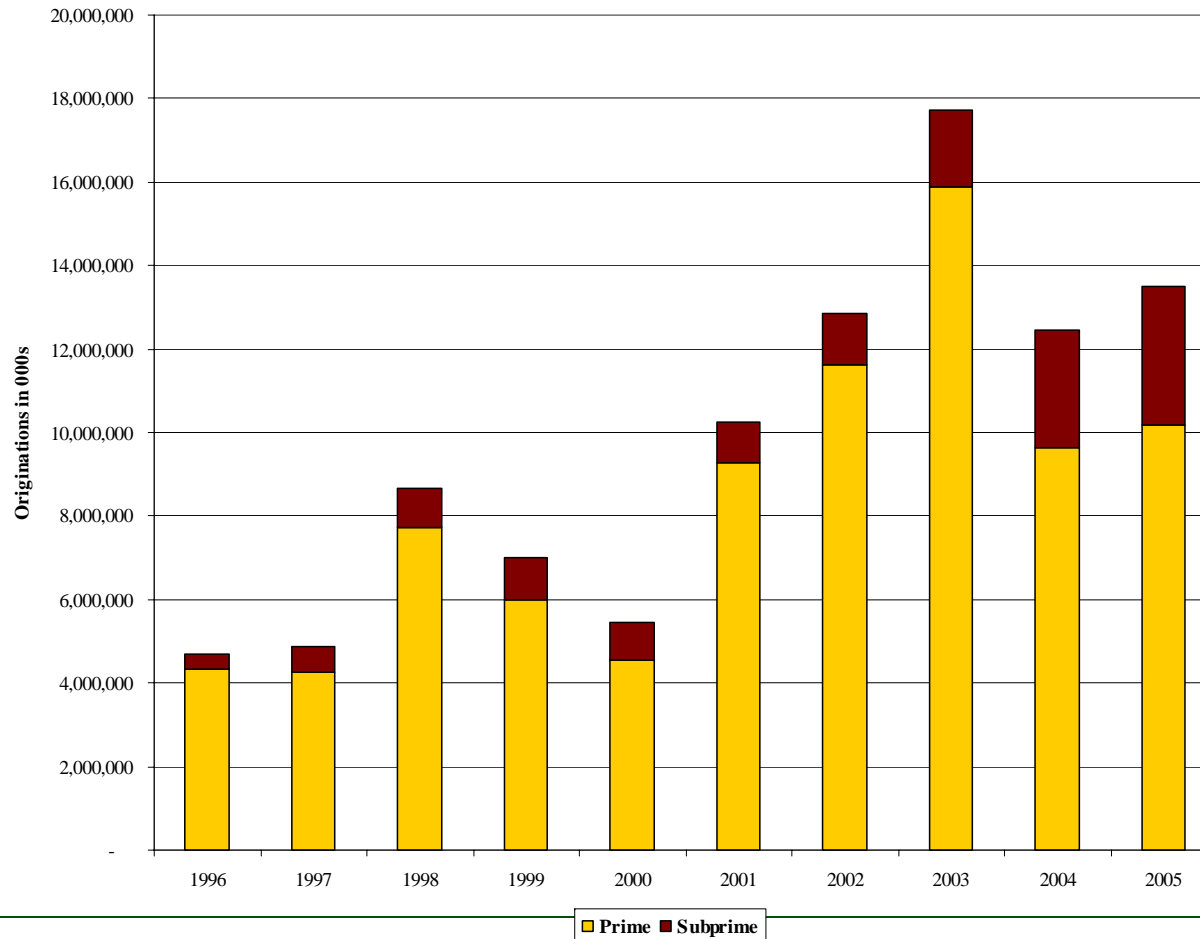
HMDA data cannot capture, necessarily, separate divisions for the lender that originate under different guidelines, price under different guidelines, and for which different types of products are offered

- Channel
 - » What data do you link from institution to HMDA for each channel?
 - Broker compensation?
 - Broker ID/Branch?
 - Retail Branch/Internet?

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Growth in Subprime Exacerbating Concerns

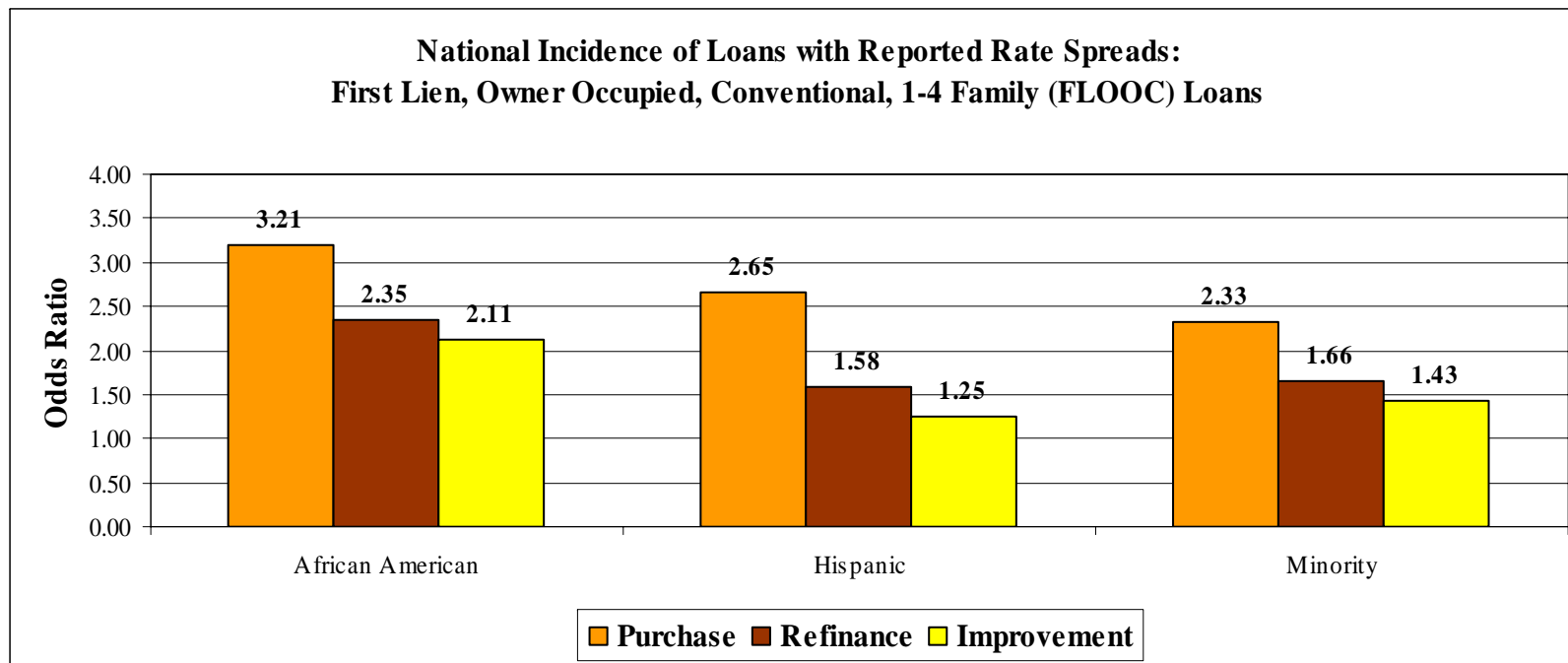


Markets Can Be Very Different

- Prime vs. Subprime -- key data needed to model underwriting and pricing is NOT included in HMDA
 - » Business focus is different
 - » Loan terms may be different (40 year term)
 - » Prepayment penalties may be present in subprime
 - » Products may differ (Interest only)
- Wholesale vs. Retail
 - » Branch/geography
 - » Concentration of brokers
 - » YSPs, Broker Compensation – can you link to HMDA?

Easy Question: Who has the higher priced loans?

Odds ratio (relative probability):
probability reported minority/probability reported non-minority



Note: "Reported" refers to having rate spread reported in the HMDA data.

Must have a rate spread more than 3% higher than comparable Treasury for 1st liens and 5% above comparable Treasury for 2nd liens.

In the Sept 2005 FRB study, the statistic is calculated as a difference in relative probabilities rather than a ratio.

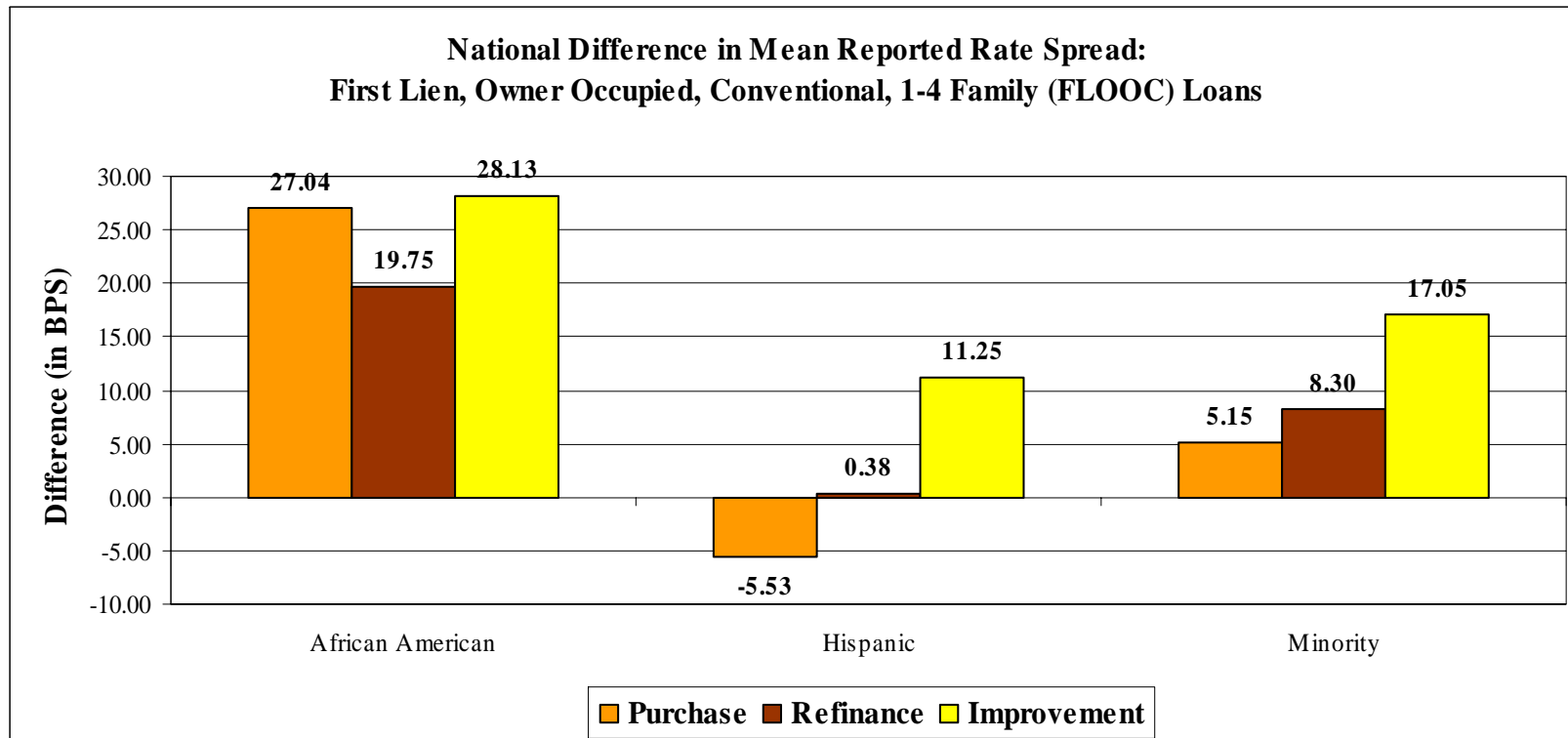
Hard Question: Why are There Higher Priced Loans?

- Stage I: raw analysis by race/ethnicity – can look at this with simple software programs
- Stage II: HMDA analysis by race/ethnicity – can look at this with simple software programs
- Stage III: modeling firm specific behavior – simple software at this stage can be detrimental as it can provide a false sense of security that cannot stand up to regulatory scrutiny

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Easy Question: Who Pays More For Loans?



Hard Question: How is APR/Price Determined?

What do the Regulators Examine? And Why?

FRB: full distribution of APR – no common buckets; firm specific information that supports variables used in analysis

DoJ: denials, incidence of rate spread, APR

OTS: APR analysis, denial analysis, geographic analysis for low/mod and minority areas

FTC: every electronic piece of data that pertains to a loan – even if there are thousands of fields; every rate sheet; every investor guideline

Discrimination? Or Not? What do we See?

- Regulators and consumer groups support risk based pricing and non-prime lending – access to credit encouraged – but not predatory lending practices – can't deny too much but can't target either (e.g. “reverse redlining”)
- Broad implication: If credit distributions vary by race or ethnicity, and credit worthiness impacts the price of credit, we will see differences by race or ethnicity (disparate impact issues) – but FICO is not whole story – need quite complex analysis to compare “similarly situated” applicants/borrowers
- **Technology implication:** need to link all data needed for the “complex” story to HMDA
- Methodologies for analysis of disparate treatment/impact –
 - » Logit analyses on incidence
 - » Regression analyses on the full distribution of APR
 - » Regression analyses for overage patterns

Industry Best Practices

- HMDA – data must be clean; accurate; have no data quality or validity errors – many vendors provide this, but you can do it at little/no cost with simple internal programs
- Rate sheet information – must be linked to HMDA loan numbers and supplemental data
- Overages – discretion in pricing – compensation must be linked; reasons for up/down price changes must be provided AND tracked for compliance
- Broker information – discretion in pricing – fees, YSPs, must be linked to loan level HMDA data

Problems with Data.....

- Systems that do not code correctly validity and quality errors – this is trivially easy to fix
- Systems that do not “lock down” files so that even after loans are closed, values can change – for example, dates
- Incorrect mapping from LOS to HMDA reporting file
- No tracking of credit information on loans denied
- Truncation of variables when downloaded to HMDA
- NO QC OF DATA! – routine sampling essential

More Problems with Data.....

- No monitoring of brokers – no data collected on broker practices
- No monitoring of key credit fields – do you really make that many loans with DTI over 150%?
- No monitoring of key HMDA fields – is the average borrower age really 314?
- Hard coding of HMDA fields – hard coding HOEPA to “no Hoepa loans” because you think you don’t have any is not appropriate
- Geocoding – need to keep this up to date – can’t have counties and tracts that don’t exist
- Relying on software packages when you don’t understand inputs or outputs!

Problems with Inputs and Outputs

- How well do those who use LOS systems understand the needs for compliance reporting?
- How well do those who see tracking reports understand what they mean?
- Reports that are continually changing are hard to use effectively – e.g. contemporaneous comparisons of borrowers to those just past may never hold the comparator population constant – regulators look at data within a given year/time period – but markets and focus and competition may all change over time
- Focus on tight time periods or very small localities may hide higher level issues
- Focus on single loan products with few observations may mask any underlying problems

CONCLUSIONS

- HMDA data is an invaluable source of information on the treatment of minorities with respect to mortgage lending and it can be “screened” to best allocate scarce examination resources
- Peer analyses of the HMDA data can target resources
- HMDA data cannot be used to “prove” discrimination
 - » Internal compliance programs must improve – many ways in which lenders should link HMDA data to other internal data
 - » Examination by regulatory agencies is somewhat “uniform” – but not fully – and it is costly and counterproductive to have lenders try to adapt compliance to different regulatory standards across OCC, FRB, OTS, HUD, FTC