New Wine in New Bottles? The Fermentation of Behavioral Economics in PFM

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Introduction

What’s DRM?

What’s it got to do with wine?
Overview

Is use of behavioral economics new?

Is big data new?

Where big data breaks out

Predictions: where is this taking us?
Is behavioral economics new?

What can we expect from behavioral economics?

Guatemala study

Evidence from El Salvador
Is big data new?

- Historical example of big data
- Computer Assisted Mass Appraisal
- Exploratory data analysis
Where big data breaks out: traditional

How big data can strengthen behavioral economics?

Predictive data mining

Could it help in Guatemala?

And from there?

The IRS foreshadows the future
Sources of data

**Jamaica**
- Internal data bases
- Telecommunications data

**IRS**
- Internal data bases,
- Commercial sources (Facebook, MySpace, YouTube)
Sources of data

IRS uses big data for:

• Charting and analyzing social media
• Targeting audits by matching tax filings to social media or electronic payments
• Tracking individual Internet addresses and emailing patterns
• Sorting data in 32,000 categories of metadata and 1 million unique “attributes”
• Machine learning across “neural” networks
• Statistical and agent-based modeling
• Relationship analysis based on Social Security numbers
Where big data breaks out: fiscal space

Other sources of data:

- Mobile devices
- Software logs
- Radio-frequency identification readers, and
- Wireless sensor networks
The private sector foreshadows the future

- How the financial industry uses big data
The downside of big data

- Privacy
- Ethical issues
Conclusions

Is behavioral economics new wine? What’s the vote?

Big data can inform behavioral economics

And the future is…
Questions?