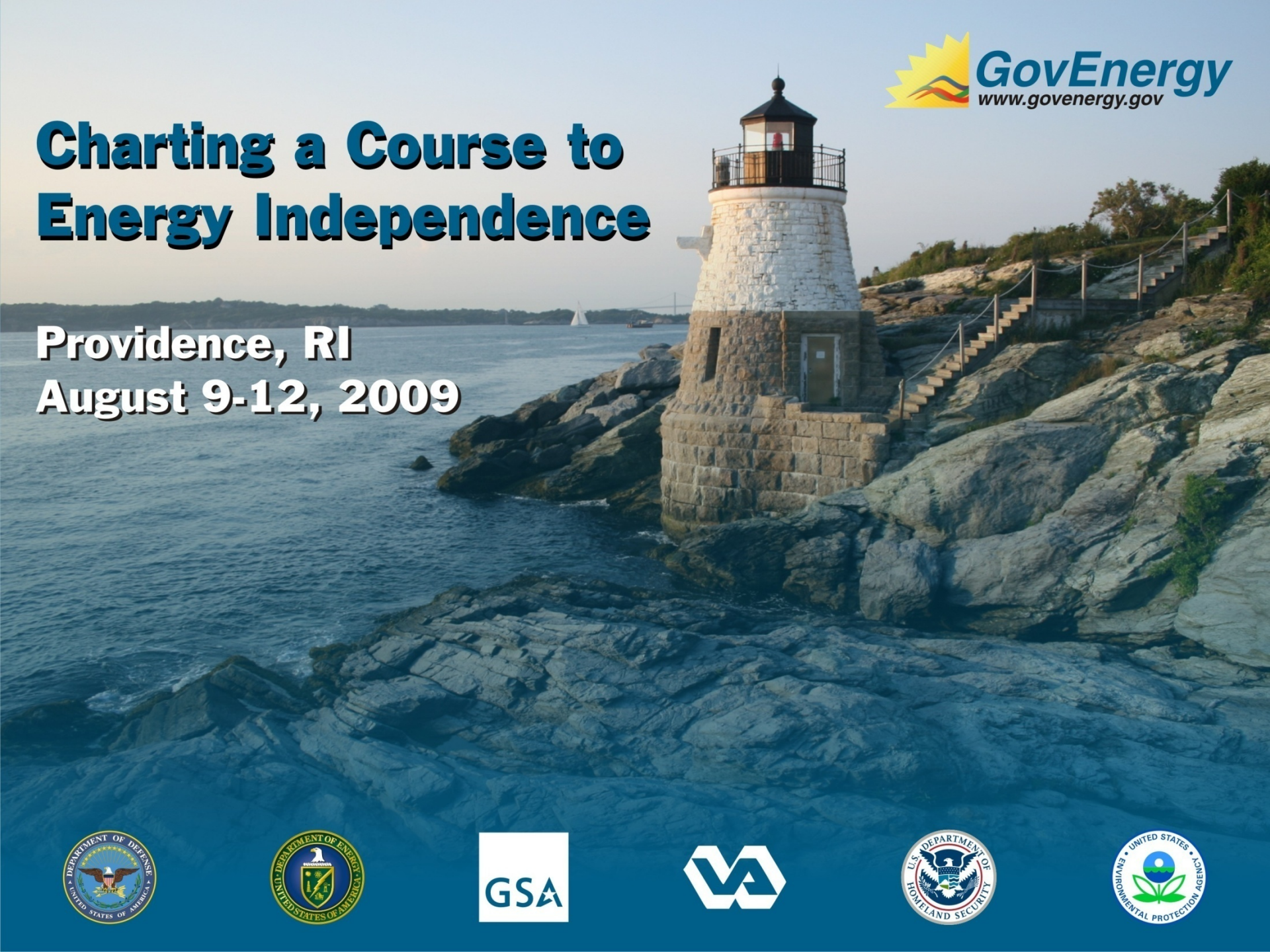
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Charting a Course to Energy Independence
Providence, RI
August 9-12, 2009
GSA

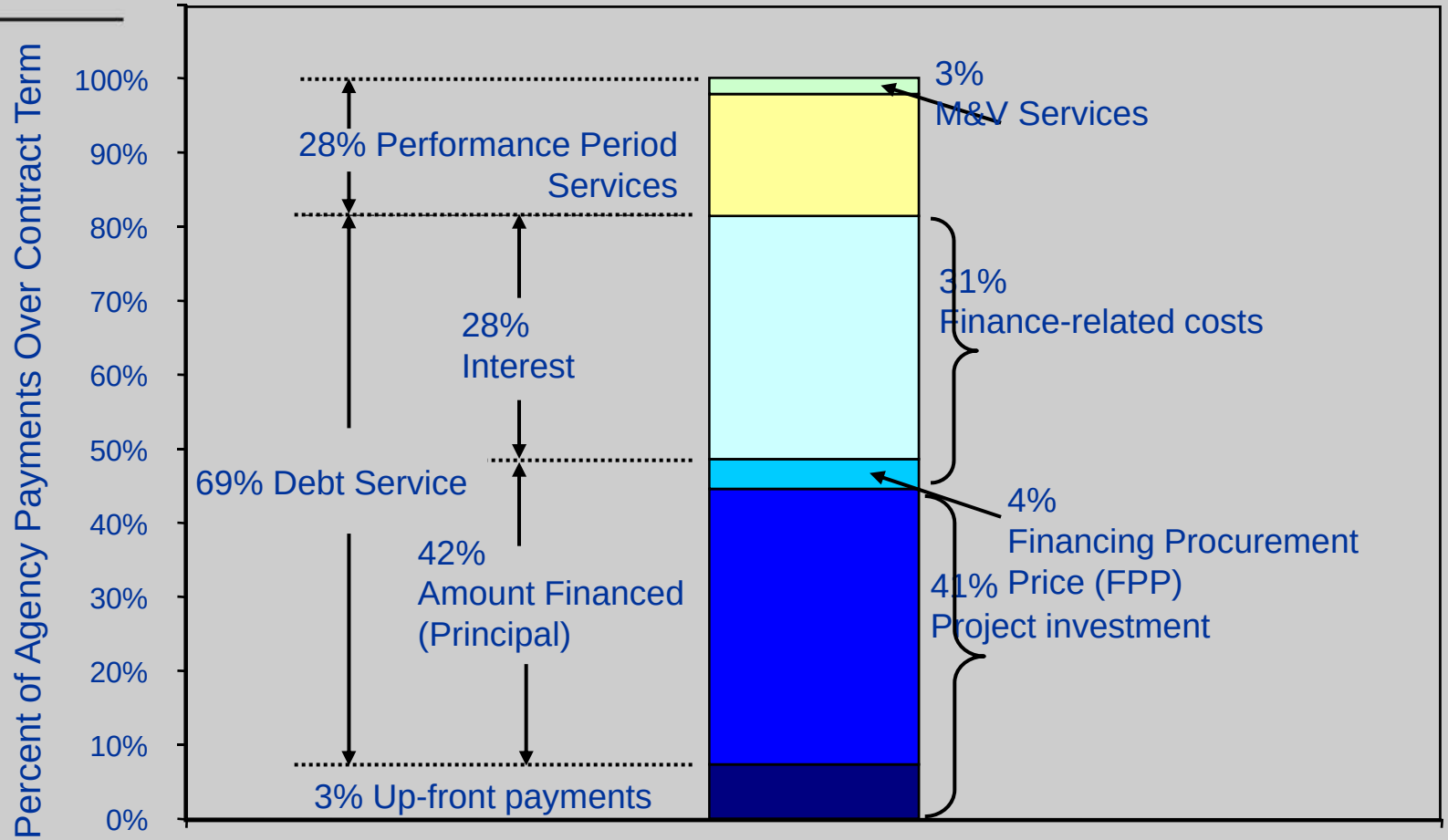
ESPC FINANCING: OBTAINING BEST VALUE IN TODAY'S MARKET

JOHN SHONDER
OAK RIDGE NATIONAL LABORATORY

What this presentation will cover

- Components of ESPC interest rates
- How has the current financial crisis affected ESPC financing?
- What has been done in the past to reduce interest rates?
- What can Agencies do to reduce interest costs and interest rates in the current market?
- What can the federal government do in the medium term?

“Cost Stack” for DOE Super ESPCs*



*Figures may not add to exactly 100% due to rounding.

Understanding the Interest Rate

Components of the interest rate:

Index Interest Rate

+ Premium

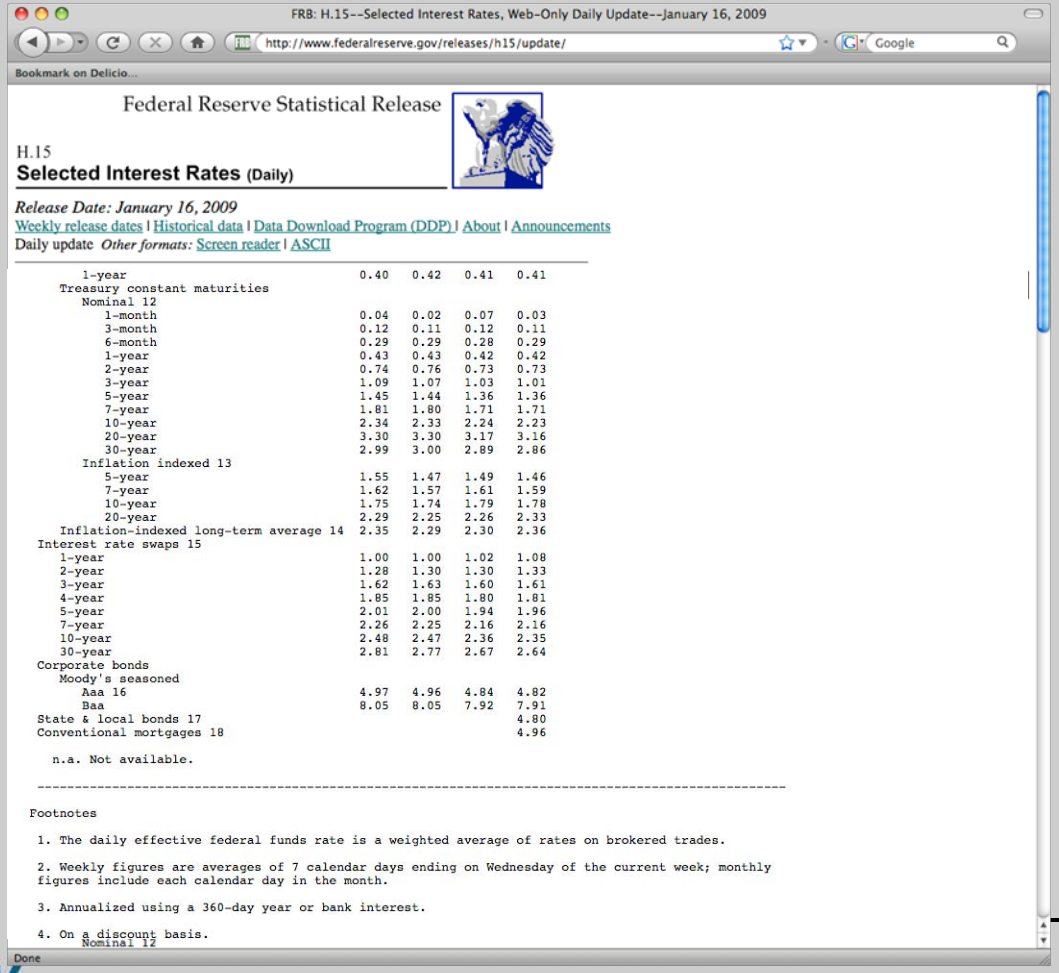
Total Interest Rate

The Index Rate

- Index rate is largest component of the interest rate
  - Represents the prevailing cost of money in the financial markets
  - Changes day to day
  - Any standard index acceptable to both agency and ESCO can be used
  - Financier specifies in Standard Financial Offer (also appears on schedule TO-3)
  - 10-yr Treasuries, 20-yr Treasuries, swap rate are common

- Web sources for rates
  - www.federalreserve.gov/releases/h15/current
  - www.bloomberg.com

Different sites sometimes have different rates, so pick an official source for the index rate



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The Premium

Premium — Basis points added to index rate

- 1% = 100 basis points

Premium covers

- Lender's costs (legal fees, administration, etc.)
- Cost to lock rate in advance of closing
- Lender's perception of risk

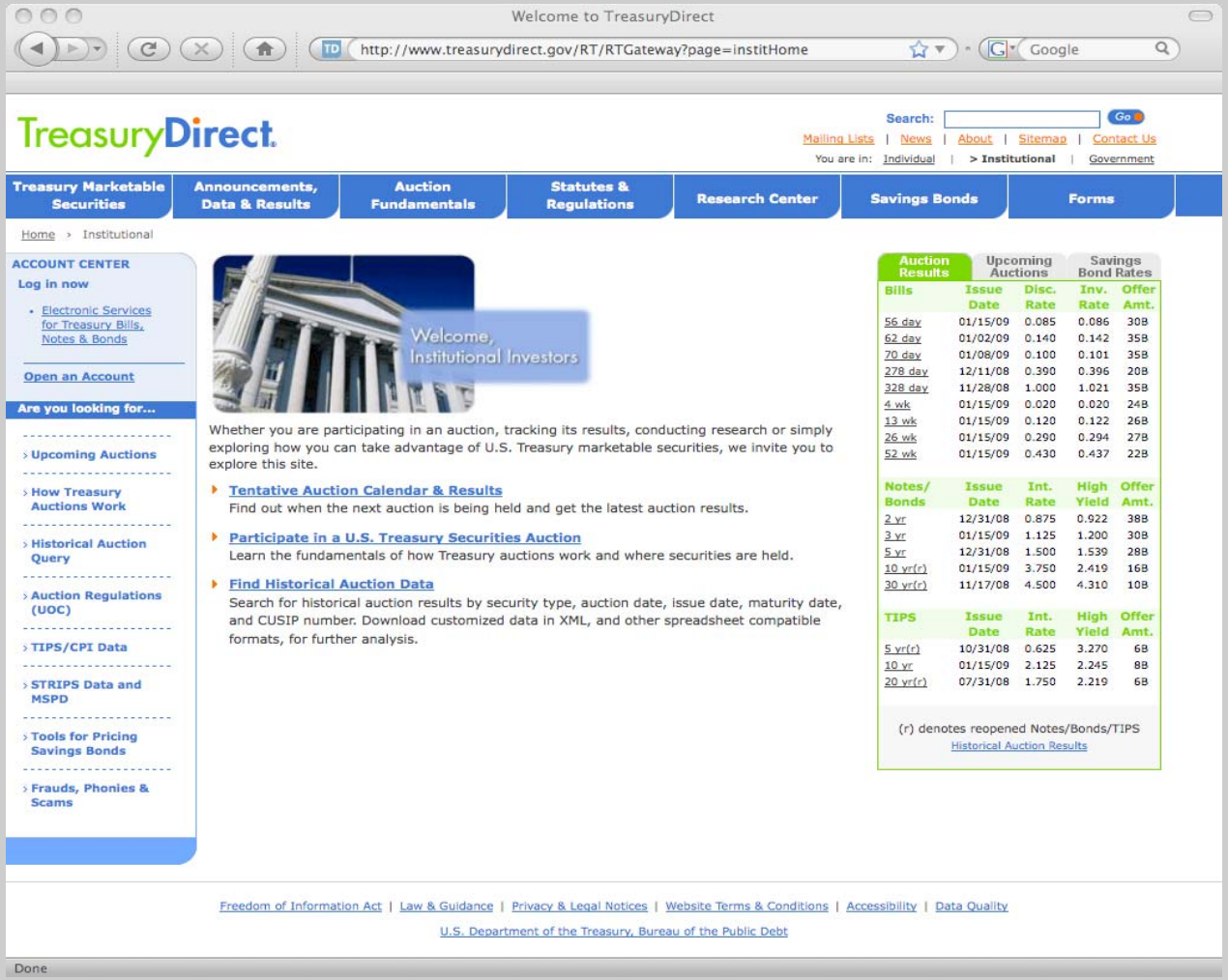
Many Agencies question why ESPC interest rates are higher than the Treasury's rates

- To a degree, they have a point: both in a sense are "government-backed" investments
- Furthermore, ESCOs generally do a good job of meeting their savings guarantees
  - They are technically competent, and ensure that the installed equipment delivers the savings
  - They tend not to guarantee all of the savings, thus providing a reserve in case of problems
  - Very few examples of ESPC payments being withheld
- If all that is true, then why can't ESPCs be financed at the rate of Treasury securities, i.e., premium=0?

What investors get when they buy Treasury securities

- A steady stream of fixed payments
- Coupon payments made every six months
  - Electronically deposited to your account
  - Never late
  - Treasury has never defaulted
- Very liquid asset
  - Large secondary market
  - Heavily traded
  - Easy to price
- Often called “risk free”

Government makes it very easy to purchase Treasury securities



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ESPCs on the other hand have a number of risks

- ESCO
- Construction acceptance
- Base closure or realignment
- Equipment performance
- Measurement and verification
- Late payment
- Reduced liquidity
- Even though the government's ability to pay is the strongest link in the chain, the risk is assessed at the *weakest* link

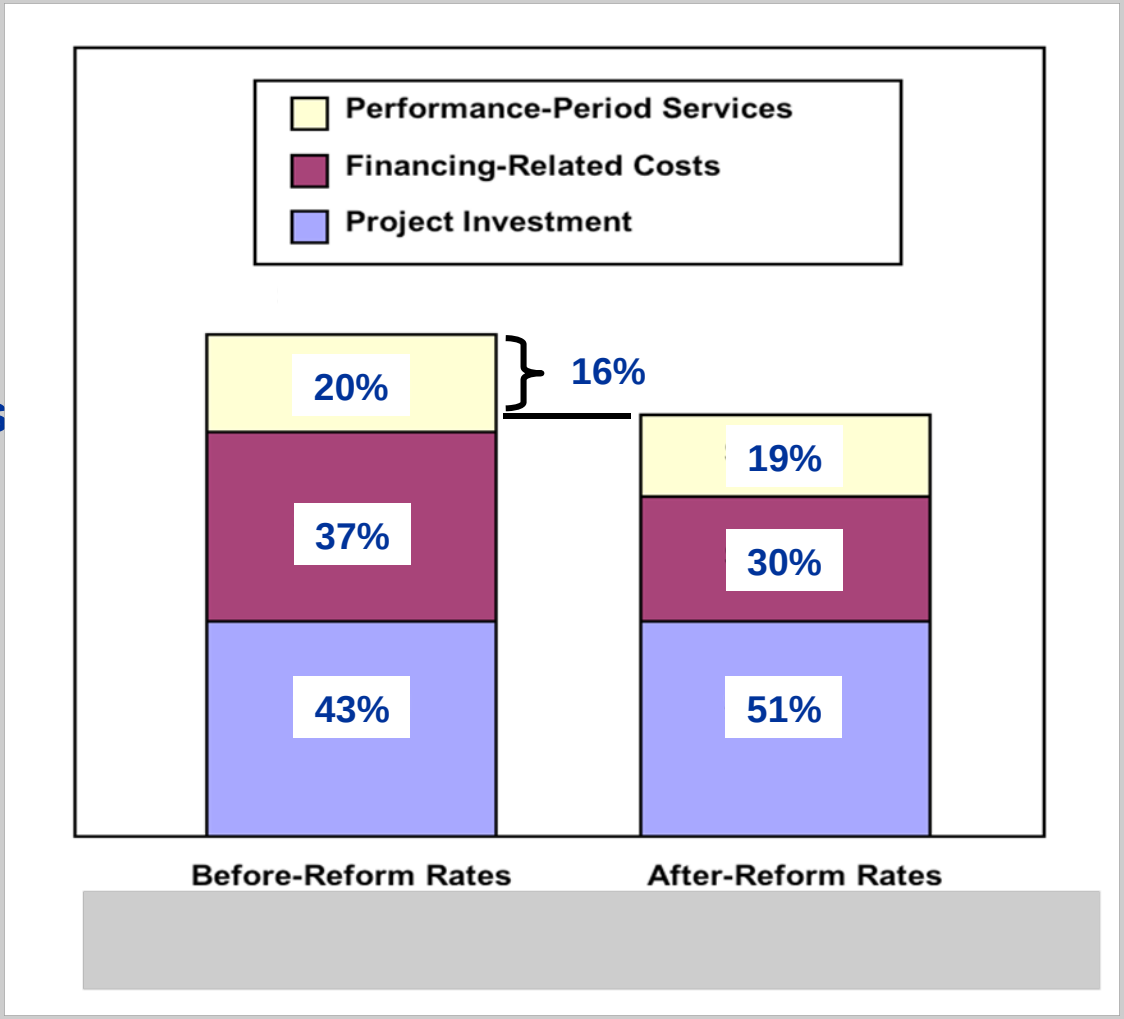
Competition in Super ESPC Financing

- Since 2005, Super ESPC ESCOs have been required to solicit competitive financing offers
- Process and templates are defined in the contract
- Financing costs declined significantly
- Selection of financing is still the ESCO's responsibility

Reducing premiums initially reduced ESPC costs by 16%

Using post-reform financing rates, the sum of payments for the average project is 16% lower than with pre-reform rates.

("Average project" is calculated from all Super ESPC awards)



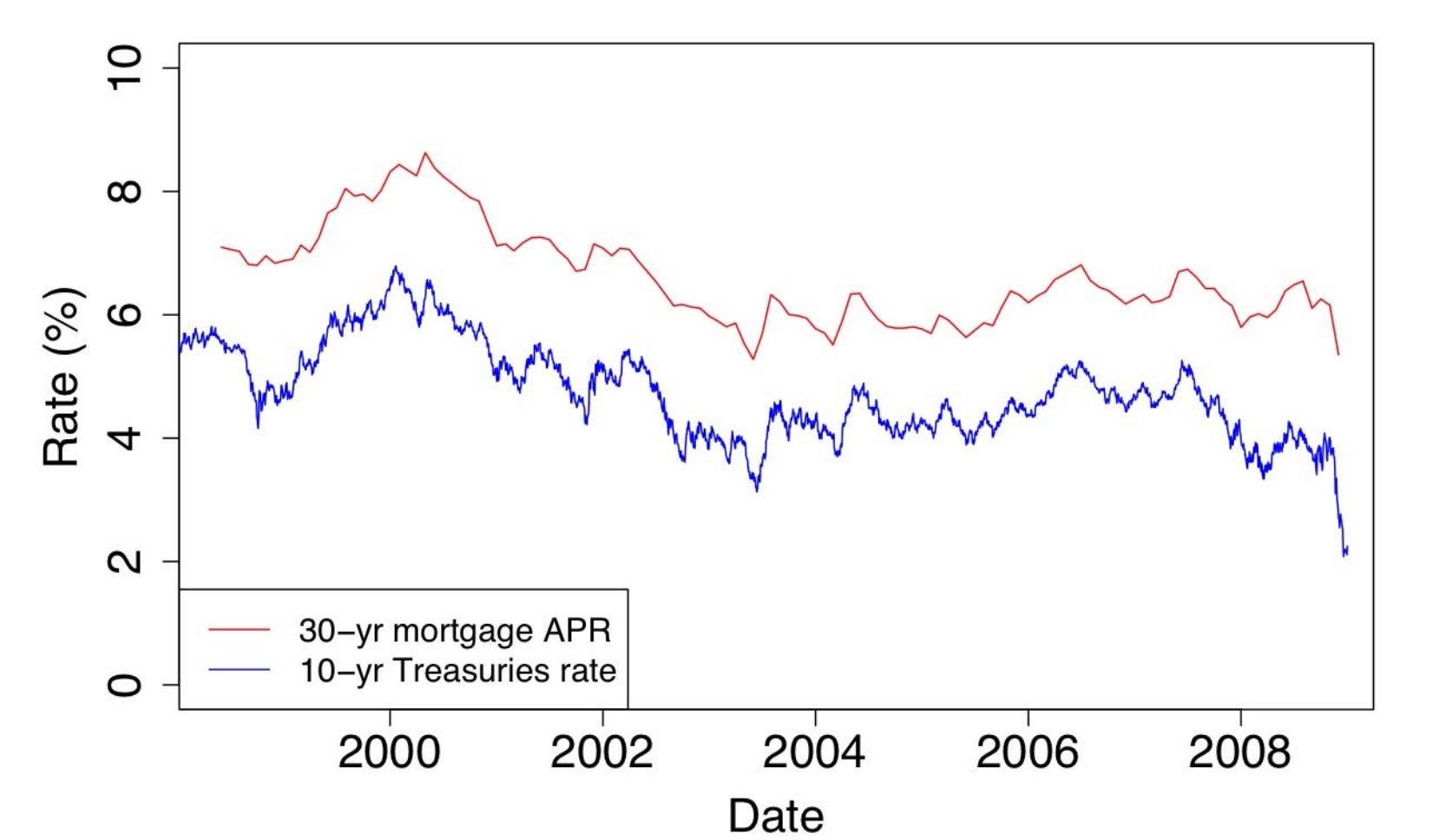
History of ESPC Premiums

- From 1998 through end of FY03, average premium was 240 basis points
- After the finance reforms, competition drove premiums down to 120 basis points from 2005-2006
- As a result, costs of an average ESPC were reduced by 16% over project term
- In early 2008, the premiums began to rise once again
- Premiums have returned to previous levels

What happened?

- Under normal circumstances, Treasuries are a reasonably good measure of underlying inflation rate
- They make a good index, because investors want to know the yield of an investment above the inflation rate
- Financial crisis caused flight to quality which increased demand for Treasuries
- This pushed the interest rate of these instruments lower than the rate of underlying inflation
- Thus the yield of Treasuries became too low to serve as a reliable index rate for ESPC
- Of course, this is just one theory -- there are others, and it must be admitted that no one fully understands the current situation

Cost of home mortgages have also increased relative to Treasuries



Economists have various opinions as to the reason for this

The New York Times
Monday, January 19, 2009

Opinion

WORLD | U.S. | N.Y. / REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPIN

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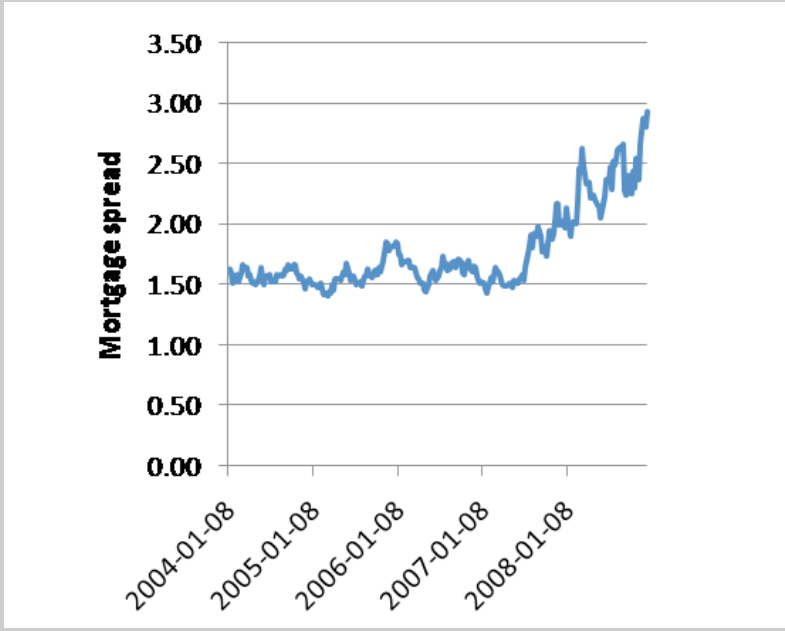
The Conscience of a Liberal

Paul Krugman

December 26, 2008, 9:38 AM

Mortgage rates are still too high

Mortgage rates have dropped a lot in recent weeks, which is a good thing. But there's still a huge spread between mortgage rates and rates on federal debt. Here's the spread between conventional 30-year mortgages and 10-year Treasuries (10-year because most mortgages get paid off early, when houses are sold, and the average duration is about 10 years.) This spread was historically stable at about 150 basis points, but has been nearly double that lately.



Other effects of the current situation

- Fewer buyers for long-term investments
- Insurance companies holding onto their money
- "Flight to quality" means short-term Treasuries are the preferred investment
  - Yields near zero, and have even gone negative
- All of these factors have combined to make ESPCs less attractive as an investment

The good news is that the credit crisis seems to be easing

- TED spread is difference between what the government and companies pay for loans
- Reached 465 basis points on 10/10/08
- Now back down to 34 points, indicating that money is once again being loaned
- But the economy is still in uncharted waters, and no one can predict what will happen next

How can we reduce ESPC finance costs in this environment?

- Ensure best pricing for ECMs
- Competition clearly works -- encourage more of it
- Construction period savings and annual-in-advance payments reduce interest charges
- With volatile conditions, it's tempting to want to lock in an interest rate early in project development
  - The more volatile the market, the more this will cost
  - The earlier you lock it in before award, the more it will cost
  - It's rarely worth it
  - Use the procedure recommended on next slide

One approach to obtaining best value in financing

- During development, ensure that the project will cash flow with a high (worst-case) interest rate
  - ESCO should know this rate from recently-awarded projects and informal contact with financiers
  - Hopefully, bids will come in lower than this
- Compete the financing as close to project award as possible
  - 5-10 days in advance if possible
  - This reduces the cost of locking the rate in a volatile market
  - Lock the premium, let the index float
- Check the math
  - Read the Investor Deal Summary and Standard Financial Offer and compare with TO Schedules
  - Compare listed index rate with official rate on-line
  - Question any discrepancies

What the government can do in the medium term

- More investors = more competition, leading to lower interest rates
- The more ESPC can be made like a Treasury security, the more attractive it will be to investors
  - Regular payments
  - Reduced need for intervention
  - Reduced risk of early repayment
- However, ESPCs always need the option of enforcing savings guarantees and terminating for convenience

FEMP's ESPC Core Team available for financing advice

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