ENVIRONMENTAL POLICY PERFORMANCE BONDS

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Not this Bond...
BMT 216A


SERIES EE
INTEREST CEASES 30 YEARS
FROM ISSUE DATE
SERIES I
INTEREST CEASES 30 YEARS
FROM ISSUE DATE
1998
SERIES I
INTEREST CEASES 30
FROM ISSUE
08
This Bond!

What is this presentation about?

- Concept of Bonds
- What are EPPB's
- Metrics of Measurement
- Accountability Issue
- Perspectives
- Conclusion

CONCEPT OF BONDS

A bond is an investment contract

Has a face value, coupon(interest), and maturity date

Sold by local, state, and national government to the public

POLICY AND PERFORMANCE

"The interest rates on these new bond types would be linked to CO2 reduction targets. For example, governments could set a rate of return [coupon] on their bonds that pays investors more when the proportion of renewable energy over a year drops below a target percentage (Mainelli, 2015)."

Government performance on track or better…

Coupon Payment =0

Incentives

Government performance off track or worse…

Coupon Payment increases

HOW DO WE MEASURE THE COUPON?

- The coupon would be calculated by the difference in percentage, based on where we *ought* to be.
- For example, if we set a 1.0% increase per year on renewable energy starting in 2018, and by 2020 we had only increased renewables by 1.0%, we would pay 1.0% interest on the bond.

WHERE MIGHT EPPB'S BE SUCCESSFUL?

- *Through C02 reduction targets*
- *Water Quality*
- Recovery from an emergency situation by a specific date(Eg. Hurricane, flood)
- Increased greenspace % in cities

C02 REDUCTION TARGETS

- In 2000 the United States the renewable energy percent of 9.38 %. Through EPPB's, we could have set target rates/goals to reach increasing levels of renewable energy. In 2016, the renewable rate was 14.94(US Energy Admin). (Increase of only 5.56% in 16 years)
- If we had implemented the policy…

Most likely set at 1.0% per year. By 2017 we would have reached 26.38%, provided we had a yearly increase of 1.0%. If we stuck to the 1.0% increase yearly, we pay $0 on the bonds.

WATER QUALITY

- Water quality is measured by PH levels, dissolved oxygen, salinity etc.
- Lets use the Caloosahatchee as our example
- An EPPB would be effective if we tied dissolved oxygen levels to it. If dissolved oxygen levels dipped below 5.0 mg/l, the percentage difference would be paid by the municipal gov. (month to month coupon rate)

ISSUE OF ACCOUNTABILITY

Government accountability has never been popular.

Much data on the EPA website is over two years old, with an 85% average margin of error.

"67% of members agree that investors have become more cautious regarding the use of EPA's in their investment processes. Only 27% agree regulatory protections have insured greater transparency or EPA processes (Institute, 2014)."

STANDARD
&POOR'S

MOODY'S

FitchRatings

CREDIBLE RATING AGENCIES

- International Energy Agency- known for keeping a watchful eye on local-global C02 measurements
- Eurostat- A model for local organizations who wish to keep track locally
- Local non-profits-owing no allegiance to anyone, could possibly be trusted to report to the government(river water quality for example)

Perspectives

THE GOVERNMENT'S PERSPECTIVE

- A way to keep the people believing in their structure
- A way to incentivize themselves to do better
- Unable to "blame it on the other political party" due to the month to month coupon rate changes based on performance

THE INVESTOR'S PERSPECTIVE

- Government Bonds are seen as a "safe" investment. Credit ratings usually around AAA or AA+.
- The investor makes more if the government fails to do its job
- A way to invest in local community

"Clearly, local and state governments must become more proactive and enact more stringent regulations governing water use and conservation when conditions warrant such actions (Joseph Delfino, 2004)".

ACCOUNTABILITY

is the glue that ties

COMMITMENT

to

RESULTS

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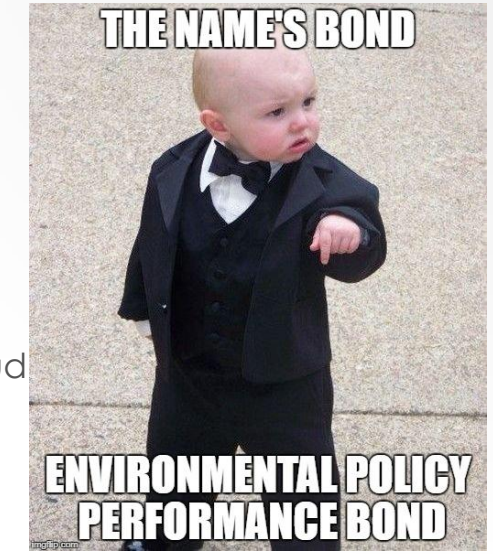

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