Are Financial Institutions the “Silver Bullet” for Environmental Markets?

Roger Ullman
Linden Trust for Conservation

1. What Are They?
2. How Can They Help?
3. What Are Their Limitations?
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3. What Are Their Limitations?

What Do Financial Institutions Do?

1. Lend
2. Invest
3. Underwrite
4. Trade
5. Advise
6. Insure
## Who Does What?

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<th>Lend</th>
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<th>Trade</th>
<th>Advise</th>
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<tbody>
<tr>
<td><strong>Commercial Banks</strong></td>
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<td><strong>Investment Banks</strong></td>
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<td><strong>Insurance Companies</strong></td>
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### Some Real-Life Examples

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<tr>
<th>Commercial Banking</th>
<th>Bradesco</th>
<th>HSBC</th>
<th>JP Morgan Chase</th>
<th>Bank of America</th>
<th>Citigroup</th>
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<tbody>
<tr>
<td>Investment Banking</td>
<td>Merrill Lynch</td>
<td>Goldman Sachs</td>
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<td>Insurance</td>
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What is Most Relevant for Environmental-Services Markets?

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Focus of Today’s Talk
Why Borrow?

- To obtain cash that is needed today but is not otherwise available

- Ex: A watershed authority wants to buy land today but will be receiving payments only in the future
How do Financial Institutions Decide Whether to Lend?

- **Assurance of payback**
- Can come from 3 sources:
  1. Hypothecation of an asset
     - e.g. cash, land
  2. Guarantee of a creditworthy party
     - e.g. government, rich uncle
  3. Future cash flows

No Assets or Rich Uncles?
Then you need **cash flows**!

So what qualifies?

1. **Without “Credit Support”**
   - Based on historical track record
2. **With “Credit Support”**
   - Based on contract and/or law
   - Examples:
     - Big company agrees to make payments in future
     - Government will collect taxes
What is Traded?
Securities, Contracts, Other Assets

- A share in a company (stock)
- An obligation of a company (loan/bond)
- A ton of coffee
- Rights:
  - Right to buy stock in future
  - Right to pollute
  - Right to kill an animal
- Environmental offsets
  - Wetland mitigation
Why Is Trading Good?

• Establishes a price
• Lowers the price
• Reduces transaction costs
• Increases speed
• Attracts investors by providing entry and exit

GREED IS GOOD!

What Do Financial Institutions Want in a Trading Market?

1. Property rights (ownership)
   • Rule of law
   • Enforceability of contracts

2. Liquidity
   • Lots of money, lots of players

3. “Trading Utilities”
   – Exchanges, depositories, etc.
Who are the Buyers and Sellers?

1. “Natural” buyers & sellers
   • Ex: Exxon buys, Petrobrás sells
   • Without these, there is no market

2. Speculators

3. “Dealers”
   • Take price risk
   • Ex: wetland banks

4. “Brokers”
   • Matchmakers: no price risk

So Which Trading Markets are of Interest to Financial Institutions?

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<tr>
<td>Kyoto CO2</td>
<td>Utah Prairie Dogs</td>
<td>Wetlands Mitigation</td>
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<td>U.S. SO2</td>
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Are Financial Institutions the Silver Bullet?
Not Necessarily!

• They don’t set up the markets
  – ALL MARKETS first need natural buyers and sellers
  – ENVIRONMENTAL MARKETS often also need government action

• Many PES systems involve only direct payments
  – E.g. government or company pays forest owners directly

• Many markets are unattractive to the big banks
  – Small
  – Insufficient legal support

• Borrowing is not always needed
  – E.g. some tax-based systems, much of cap & trade

So What Can We Expect?

• Financial institutions can be helpful, but not in all cases
• The largest trading markets will attract the big players
• Smaller trading markets—e.g. offset trading—can attract specialized players
• Lending is a possibility
• BUT FIRST markets must be designed and established!
The Dog Wags the Tail!