



GARCIA HAMILTON & ASSOCIATES

Green Bonds

APAFS Pacific Region Investment Conference

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What is a Green Bond?

- Type of bond that raises capital to finance or refinance green projects with a clear environmental benefit
- Examples include projects for energy, transportation, sustainable water, and waste management
- Aligned with the four core components of the Green Bond Principles (GBP) developed by the International Capital Market Association



Core Components of Green Bond Principles

1. *Use of Proceeds*

- Proceeds must be utilized towards Green Projects
- Issuer must assess environmental benefits of the Project
- Broad categories of environmental concern:
 - climate change
 - natural resource depletion
 - loss of biodiversity
 - pollution



2. Process for Project Evaluation and Selection

- Communicate the environmental sustainability objectives
- Communicate the process to determine the eligible categories
- Communicate eligibility criteria and process to manage potential environmental and social risks

Core Components of Green Bond Principles

3. Management of Proceeds

- Net proceeds should be tracked by the issuer in a sub-account
- Issuer's lending and investment operations for Green Projects should be attested to in a formal process
- Balance of proceeds should be adjusted to match allocations to Green Projects

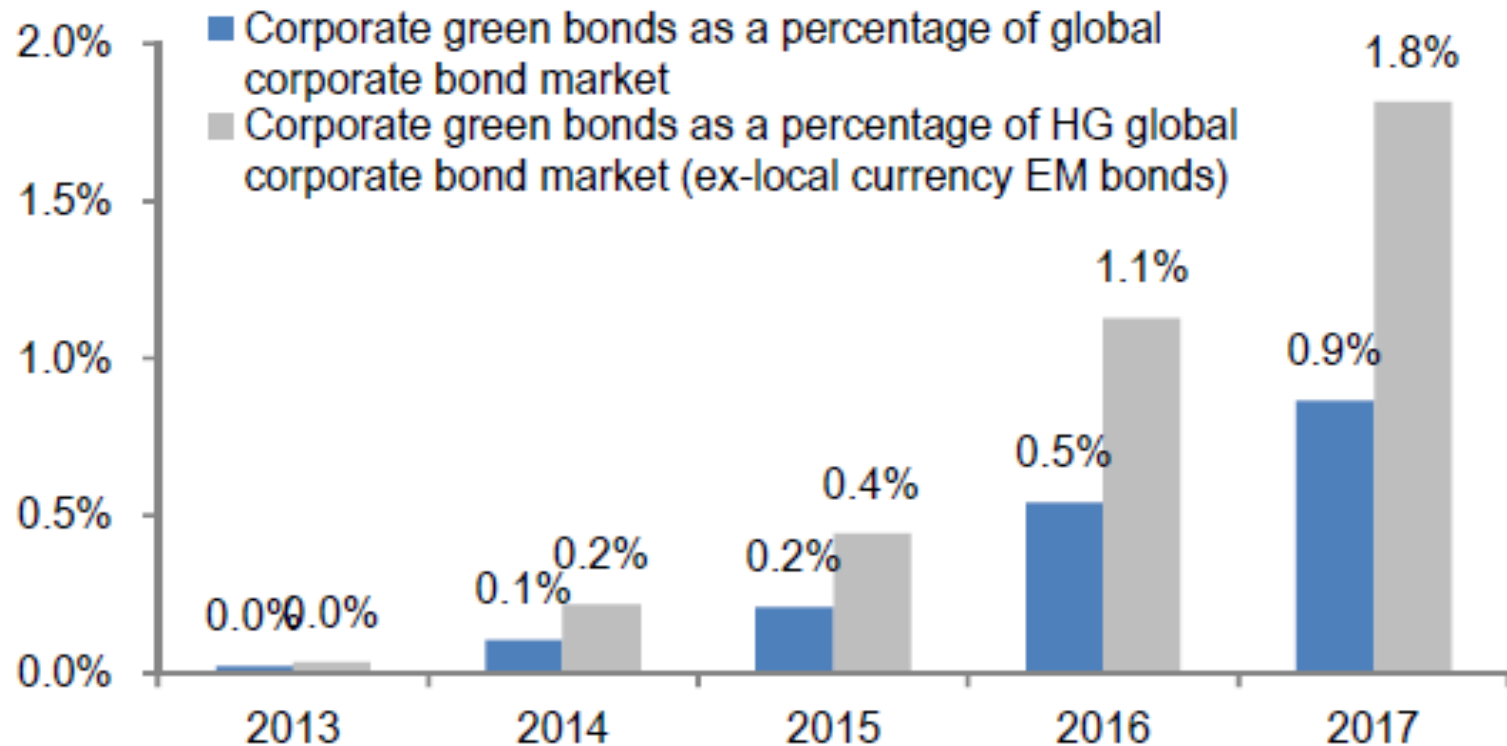
Core Components of Green Bond Principles

4. Reporting

- Information on the use of proceeds should be made available at least annually and in the event of material developments
- Include list of projects to which proceeds have been allocated
- Utilize qualitative and quantitative performance measures

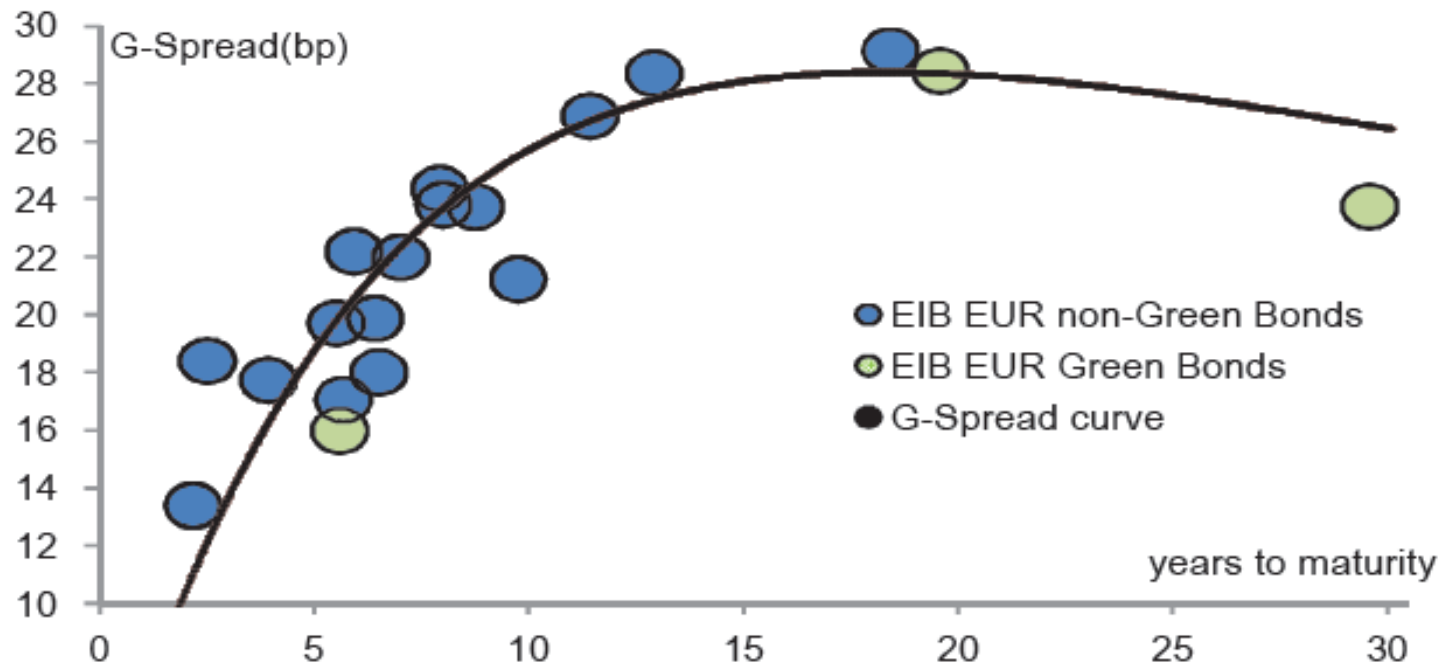
Growth of Green Bond Market

- Green Corporate Bonds remain a niche sector, but issuance is growing faster than the overall market



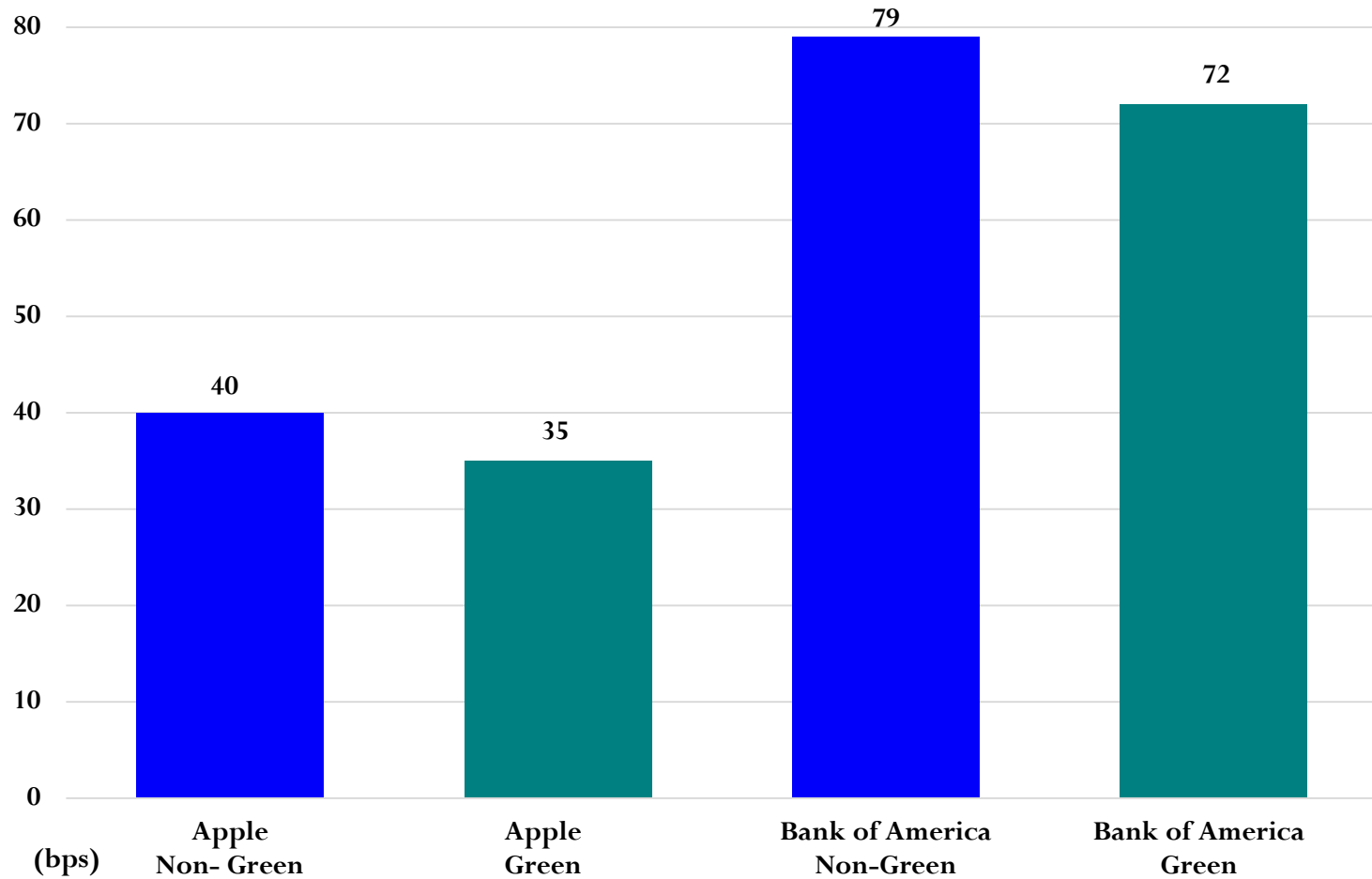
Green Bond Premium

- Green Bonds are currently trading tighter than comparable non-Green Bonds

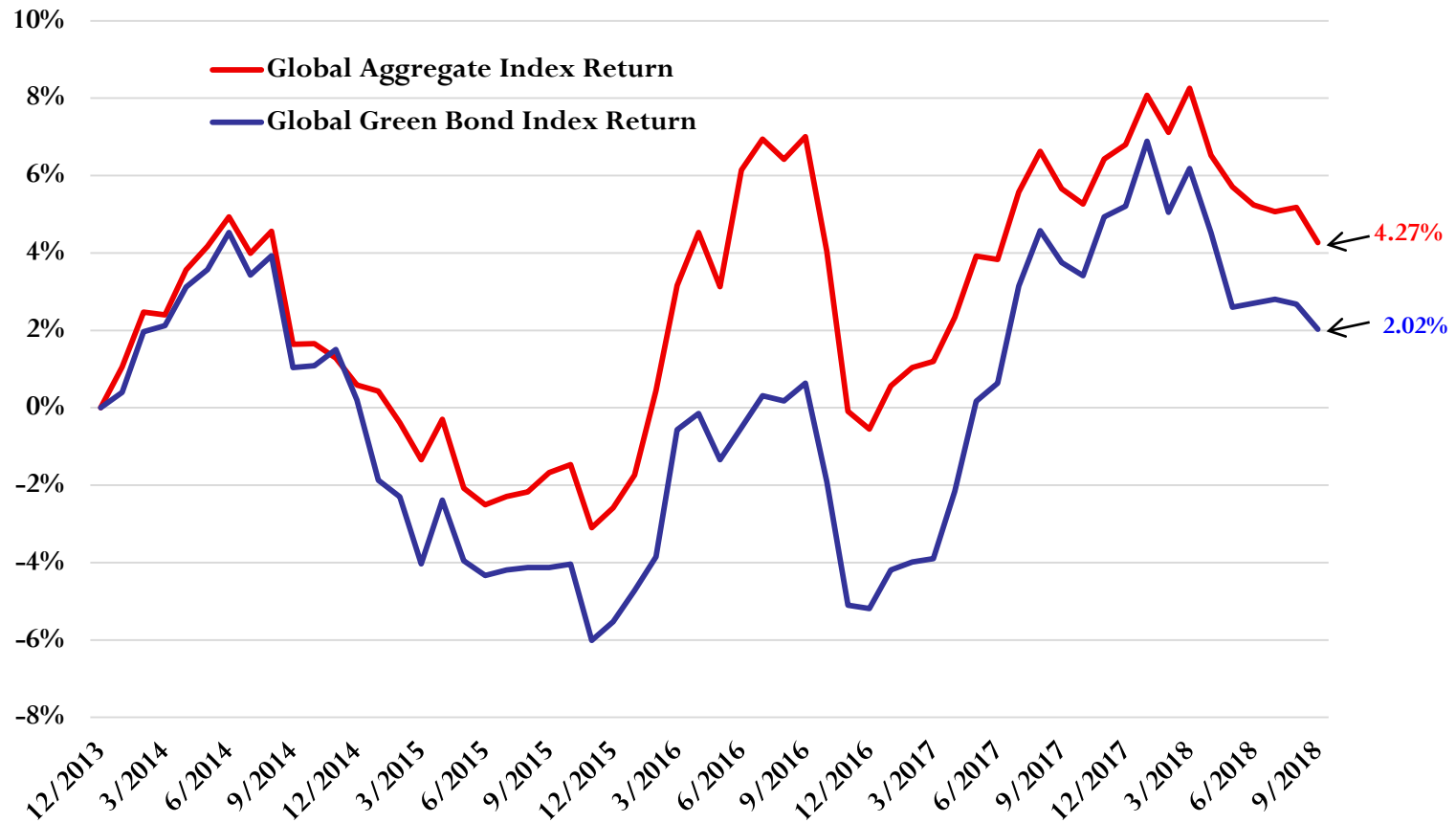


Green Bond Premium Examples

Comparison of 5-Year Spreads



Performance and Characteristics



| | Global Aggregate Index | Global Green Bond Index |
|------------------|------------------------|-------------------------|
| Number of Issues | 22,448 | 273 |
| Average Duration | 6.90 | 7.03 |
| Yield to Worst | 2.15 | 1.88 |

Benefits for Investors

- Confirms commitment to sustainability and green investing
- Contributes to goals of investing in sustainability projects
- Dual benefit of debt investment and sustainability investment



Cons for Investors

- Limited amount of investment grade dollar denominated Green Bonds
- A “Green Premium” means lower yields and potential underperformance
- “Green” Bonds can be issued by “Brown” Companies

“Green” Bonds but “Brown” Companies

- “Environmentally conscious investors might end up funding fossil-fuel power stations” – *Wall Street Journal* story on Green Bonds
- Taiwan Power Company, a state-owned electricity provider, used Green Bond proceeds to upgrade coal and gas power plants
- A German electricity company, which issued Green Bonds to finance wind energy projects, was subsequently acquired, and their Green Projects were abandoned

Conclusions

- Although Green Bond issuance is growing, options are limited and often trade at a premium
- A potentially better way to conduct sustainable investing may be to designate an exclusionary list of “Brown” Companies to avoid
- Add the exclusionary list as an addendum to your Investment Policy Statement and work with investment professionals whose views align with yours

