

Sustaining Sustainable Development: Re-thinking the Role of the Financial System

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Agenda

- The role of financial systems for a sustainable development
- The role of the public sector
- Sustainable banking: objective, characteristics and existing experiences
- The banks of the Global Alliance for Banking on Values
- Government-backed banks for sustainable projects
- Reforming the EIB
- Creating a new sustainable EU bank

Finance and sustainable investments: are they compatible?

- Does transition to a sustainable development model require mobilizing new financial capitals?
- Why sustainable investments are not supported by financial investments?
- There could be two kinds of conventional government interventions:
 - «orthodox» economists and the Efficient Market Hypothesis
 - «open minded mainstream» economists and the government role within the market
- According to Eric Clark (session 1) financialization and sustainability are incompatible because of myopic and short-termism orientation of financial actors.
- As suggested by Giovanni Ferri (session 1), ethics could help to solve the conflict. Why economic choices should be driven by ethics is a tricky question. Therefore we try to find out whether a different solution can be explored, possibly with a relevant role of the public sector directly operating within financial markets, also with non conventional solutions.

The role of the public sector

- Projects which promote environmental sustainability often require large upfront investments and produce cash flows and returns only in long-term horizons. Therefore, they tend to be highly sensitive to policy and regulatory uncertainty. Finance can be redirected to sustainable projects if the risk adjusted return is compatible with expectations.
- Policy makers can have an active role in reducing the “sustainable finance gap”.
- Governments have different additional options. They can:
 - i) regulate the private banking sector in order to ensure that credit allocation policies and mechanisms include also social and environmental considerations,
 - ii) finance, either directly or through public development and investment banks, green investment;
 - iii) introduce environmental and social criteria in allocation and priority choices in the use of public funds.
- We focus on these latest types of interventions which, however, can have also indirect consequences for resource allocation in the private banking sector.

Investment Belief 2

A long time investment horizon is a responsibility and an advantage.

Are sustainable investment long time horizon?



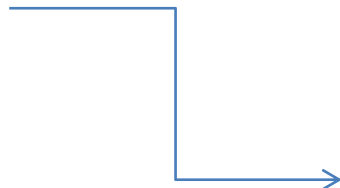
Long time horizon requires that CalPERS:

- Consider the impact of its actions on future generations of members and taxpayers
- Encourage investee companies and external managers to consider the long-term impact of their actions
- Favor investment strategies that create long-term, sustainable value and recognize the critical importance of a strong and durable economy in the attainment of funding objectives
- Advocate for public policies that promote fair, orderly and effectively regulated capital markets

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Are sustainable investment long time horizon?

One of the challenges to overcome on the road toward a more sustainable economy is the inherent disconnect many see between the short-term time horizons of traditional financial analysis and the long-term nature of the business impacts of ESG. This notion has not gone unnoticed by the CFA Institute, which noted in a publication devoted to ESG factors at public companies: “A company that incorporates ESG exposures into its long-term strategic planning and adequately communicates these factors and strategies to investors will provide a more complete picture of that company’s prospective value.”¹⁰



STATE STREET.

Are sustainable investment long time horizon?

A joint report by
The Asset Management Working Group of the
United Nations Environment Programme Finance Initiative
and Mercer

Demystifying Responsible Investment Performance

A review of key
academic and broker research
on ESG factors

**Are sustainable
investment long
time horizon?**

Demystifying Responsible Investment Performance

Environmental, social and corporate governance (ESG)

The term that has emerged globally to describe the environmental, social and corporate governance issues that investors are considering in the context of corporate behaviour. No definitive list of ESG issues exists, but they typically display one or more of the following characteristics:

- Issues that have traditionally been considered non-financial or not material
- A medium or long-term time horizon
- Qualitative objects that are not readily quantifiable in monetary terms
- Externalities (costs borne by other firms or by society at large) not well captured by market mechanisms
- A changing regulatory or policy framework
- Patterns arising throughout a company's supply chain (and therefore susceptible to unknown risks)
- A public-concern focus

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Sustainable banking: objective, characteristics and existing experiences

- If the EU's 2020 growth strategy is to transform EU in a smart, sustainable and inclusive economy, EU needs to identify the requisites of a sustainable economy and to create a sustainable banking system to finance and fuel this transition.
- As recently observed by Bruyninckx, the Executive Director of the European Environmental Agency (EEA), promoting a sustainable economy means “greening the entire economy; not a number of selected sectors, such as renewables, eco-innovation, corresponding to 5 or even 10 percent of our economy” (Bruyninckx, 2014)
- Banking is expected to be reformed as well

Sustainable banking: objective, characteristics and existing experiences

- What is sustainable banking?
- A definition of sustainable banking was proposed by Bouma et al. (2001) “as a decision by banks to provide products and services only to customers who take into consideration the environmental and social impacts of their activities”.
- More effectively, we suggest going beyond a sort of light green criterion and referring to a more active notion like that used by Weber and Reber (2011), as “banking that aims to have a positive impact on people and the environment by means of banking”.
- The Global Alliance for Banking on Values (GABV), an international network of sustainable banks, in its principles establishes that sustainable banks provide products and services that are designed and developed to meet the needs of people and safeguard the environment.

Sustainable banking: objective, characteristics and existing experiences

- A sustainable bank should include in its credit allocation policy a set of criterions which conventional markets fail to incorporate and to account for.
- This misalignment with standard financial markets can create frictions between funding costs and capacity on one hand, and the risk, return and efficiency assessment of banks' loans portfolios on the other hand.
- Examples:
 - Positive externalities of a project for waste treatment and recycling facilities or for independent renewable energy producers are not valued by markets and cannot be included in the assessment of financial returns.
 - Credit risks of renewable energy project might be higher than one based on dominant fossil fuel energy systems because of the possibility that the new facilities will not be able to integrate in conventional power grids and in existing oligopolistic energy and power sectors.

The banks of the Global Alliance for Banking on Values

- The GBAV gathers several banks all over the world. Among the largest members based in 25 countries, there are VanCity, Triodos, Banca Etica, and Alternative Bank (tot assets 100 bn USD).
- The sustainable banks of GBAV usually concentrate on traditional banking activities (deposit taking and lending), they select specific sectors and they fully integrate social, financial and environmental considerations in their assessment procedure monitoring both financial viability and socio-environmental impact of the financed projects.
- Their relationship with costumers is strongly dependent on credibility and reputation (Weber and Remer, 2011).

The banks of the Global Alliance for Banking on Values

The financial performance of these banks shows that a focus on projects with a positive social or environmental impact can be viable and profitable

Table 3.2: Financial comparison between GBVA members and GSFIs.

<i>Indicator</i>	2003-2007		2008-2012		2003-2012	
	GBAV members	GSFIs	GBAV members	GSFIs	GBAV members	GSFIs
<i>Loans to Total Assets</i>	74.5%	41.0%	77.4%	39.3%	75.9%	4.01%
<i>Deposits to Total Assets</i>	74.5%	43.0%	75.3%	42.8%	73.1%	42.9%
<i>Return on Assets</i>	0.59%	0.78%	0.53%	0.37%	0.56%	0.57%
<i>Return on Equity</i>	8.8%	17.7%	7.5%	5.2%	8.2%	11.5%
<i>Growth of loans</i>	13.6%	17.7%	12.5%	3.8%	12.6%	8.4%
<i>Growth of deposits</i>	13.1%	16.6%	13.9%	6.5%	12.3%	9.5%
<i>Total Income growth</i>	12.8%	15.8%	8.0%	2.0%	10.4%	6.1%

Note: GSFIs include Bank of America, Bank of China, Bank of New York Mellon, Banque Populaire CdE, Barclays, BBVA, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, Group Crédit Agricole, HSBC, ING Bank, JP Morgan Chase, Mitsubishi UFJ FG, Mizuho FG, Morgan Stanley, Nordea, Royal Bank of Scotland, Santander, Société Générale, Standard Chartered, State Street, Sumitomo Mitsui FG, UBS, Unicredit Group. The group of sustainable banks includes Alternative Bank Schweiz, Assiniboine, Credit Union, Banca Popolare Etica, BancoFie, BancoSol, bankmecu, BRAC Bank, Group Crédit Coopératif, Cultura Bank, Ecological Building Society, GLS Bank, Merkur Cooperative Bank, Mibanco, SAC Apoyo Integral, Sunrise Community Banks, Triodos Bank, Vancity, XacBank.

Source: GBVA, 2013.

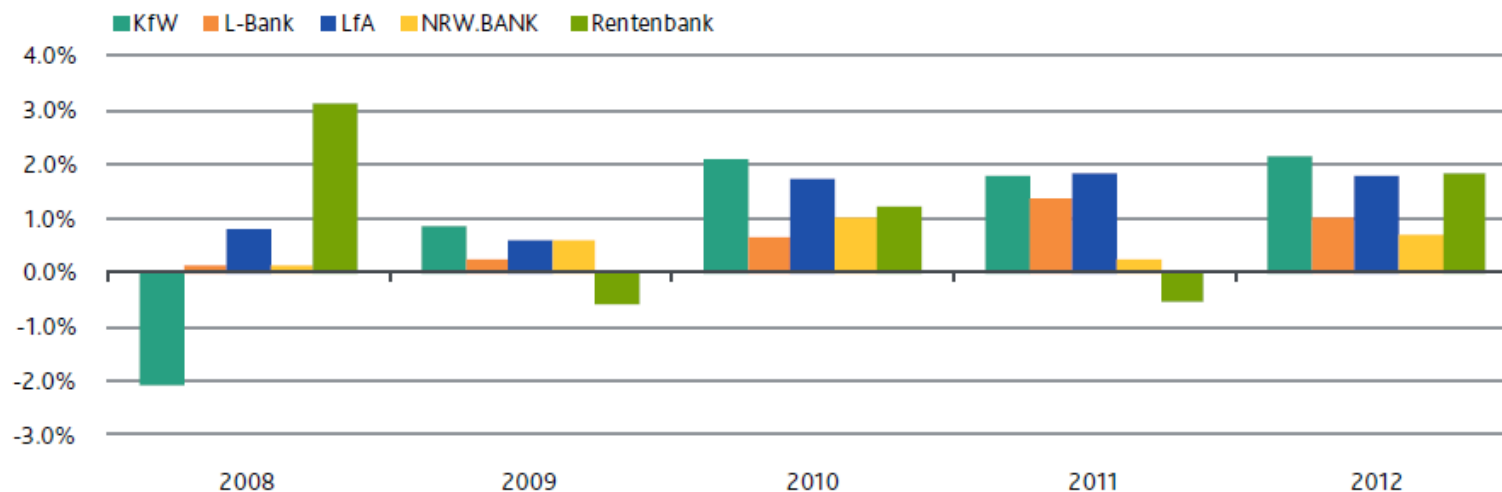
Government-backed banks for sustainable projects

- Green investments such as those in renewable energies are often characterized by relevant externalities, high up-front capital costs, deployment of immature technologies, uncertainties regarding prices and regulatory frameworks, unfavorable relative prices compared with conventional energy, and institutional, market and infrastructural barriers to the integration into the current energy production and distribution system (IPCC 2011, UNEP and BNEF 2011).
- Private financial markets tend to under-finance this type of projects. Public banks, instead, by providing stable, anti-cyclical, low-cost and long-term financing might reduce these financing barriers and crowd-in private capitals for green investments.
- In our paper we compare the German Development Bank (KfW) and the British Green Investment Bank (GIB)

Government-backed banks for sustainable projects.

The case of German Banks

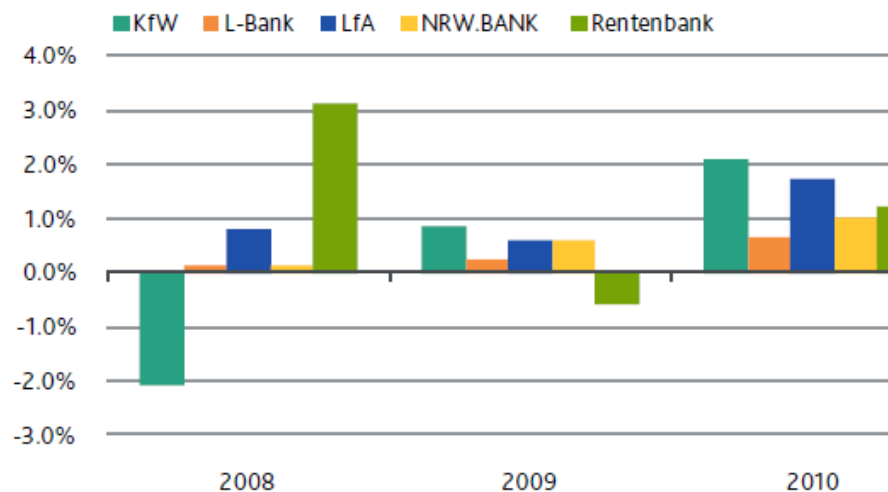
Net Income as % of Average Risk-Weighted Assets



Government-backed banks for sustainable projects.

The case of German Banks

Net Income as % of Average Risk-Weighted Assets



RATINGS

Kreditanstalt für Wiederaufbau

Senior unsecured/Outlook	Aaa
Outlook	Negative

Landwirtschaftliche Rentenbank

Senior unsecured	Aaa
Outlook	Negative

NRW.BANK

Senior unsecured	Aa1
Outlook	Negative

L-Bank

Senior unsecured	Aaa
Outlook	Negative

LfA Förderbank Bayern

Senior unsecured	Aaa
Outlook	Negative

Government-backed banks for sustainable projects

- A public sustainable bank at EU level can be developed either reforming existing banking institutions or setting up a new bank with a clear and specific green mandate.
- According to the European Association of Public Banks (EAPB) at least seven of its members explicitly identify promotion of environmental protection, energy saving, efficiency and renewable energy as priority of their mission
- Some public banks (e.g. Scandinavian ones) adhere to corporate social responsibility principles and publish reports on their approach to sustainability, though only few of them (such as the Hungarian Export-Import Bank) report to apply environmental and social considerations in eligibility for the bank's services.
- Moreover, most of them target to sectors which have strict connections to sustainability and are pillars of green conversion of all economic systems (technology, housing, transport, infrastructure).

Government-backed banks for sustainable projects

- We focus on the EIB as emblematic case, but the EAPB may also play an important role by enlarging its mandate to environmental sustainability becoming a crucial arena, think-tank and network to disseminate, promote and coherently coordinate the application of sustainable banking principles to its members as well as to share their experience and expertise in this sector.
- The European Investment Bank (EIB) being the largest multilateral lender and borrower in the world, might represent a powerful tool to catalyze and redirect funds and capitals to sustainability-oriented projects.
- The EIB is clearly not the only public bank in Europe which environmental protection among its goal or with systems of monitoring, promoting and reporting sustainability actions

Reforming the EIB

- The EIB has not a specific focus on green investments, but it has been always a fundamental institution in the implementation of development strategies of the European Union countries and climate action is one of its current priorities.
- Thus, the EIB, as a public bank of the Europe Union, is a natural candidate to assist State Members in channeling public funds to green projects as well as in mobilizing additional private resources (“we work closely with other EU institutions to implement EU policy”).
- By analyzing all utilities projects financed by the EIB from 1958 to 2004, Clifton et al. (2014) reveal that the EIB finance, in terms of sector and country allocation of projects, shifted from a instrument for development of the poorest regions among EU members to a leading role in consolidating the Single Market and in financing utilities subject to liberalization, namely in promoting the private market logic
- Under the Europe 2020 strategy for a smart, sustainable and inclusive growth, the priorities areas of the EIB are now innovation and skills, access to finance for smaller businesses, climate action and strategic infrastructure

Reforming the EIB

- Though much lower than the sum of national budgets of all EU Member states (more than € 6,000 billion), total annual lending of EIB appears to be far more relevant when compared to the EU budget: in 2011 the EU budget was around € 140 billion, while the EIB disbursed almost €55 billion. Moreover, in 2013 EIB total loans provided within the European Union for environmental protection amounted at €5.3 billion, namely almost one third of total public investments in total environmental protection activities of all 28 EU countries which in 2011 was estimated about €16.8 billion.
- The EIB, therefore is in a privileged position to finance a transition to a phase of sustainable and inclusive development path since, as recently observed by Griffith (2013), the EIB can provide stable, anti-cyclical, low-cost and long-term financing.
- The EIB plays a strong role in mobilizing private resources and crowd-in private green investments. In 2013, for instance, a total lending of €21.9 billion to support Europe's SME mobilized more than €50 billion (EIB 2013a), while €1.8 billion of guarantee and securitization signatures catalyzed €8.6 billion, while €1.4 billion of equity signatures catalyzed € 7.1 billion (EIB, 2013b)

Reforming the EIB

- In order to understand whether the EIB might be able to take up these challenges, we need to address two main questions:
 - Is the current EIB strategy effective in promoting an environmental conversion of the economy?
 - What interventions in EIB lending activity could open the road towards a real transformation of the EIB into a sustainable bank?
- We suggest that the EIB could have a key role in promoting sustainable development but only after important changes:
 - Adoption of a more comprehensive notion of environmental sustainability.
 - Improvement in social and environmental monitoring of loans and investment decision.
 - A more active and green-oriented engagement in its relations with intermediary banks, financial institutions or funds.
 - A less market-dependent funding which affects the quality of asset allocation

Creating a new sustainable EU bank

- A second option is to create a brand new institution operating as a public sustainable investment bank.
- Among these initiatives we can quote some relevant examples, such as the renewable and clean energy projects supported by the Indian IREDA and the China Development Bank, and the loan guarantees provided by the US and Australian governments within the green economy investments.

Indian IREDA Ratios

Particulars		Half Year Ended 31/03/2014 (Reviewed)	Half Year Ended 31/03/2013 (Reviewed)	Year Ended 31/03/14 (Un-Audited)	Year Ended 31/03/13 (Audited)
i.	Capital Adequacy Ratio	23.49%	25.27%	23.49%	24.75%
ii.	Earnings Per Share (EPS) (annualised)	333.03	309.34	333.03	300.90
18	NPA Ratios				
i.	Gross NPA/Cr.	248.72	254.59	248.72	254.8
ii.	Net NPA/Cr.	27.70	40.93	27.70	59.12
iii.	% of Gross NPA	3.01%	3.86%	3.01%	3.86%
iv.	% of Net NPA	0.34%	0.64%	0.34%	0.92%
v.	Return on Total Assets- Annualised	2.70%	2.82%	2.63%	2.82%

Creating a new sustainable EU bank

- Actually, an investment bank performs a variety of services in financial markets
 - Underwrite the initial sale of stocks and bonds
 - Deal maker in mergers, acquisitions, and spin-offs
 - Middleman in the purchase and sale of companies
 - Trading in financial markets
 - Asset allocation
- Most of these financial services appear to be incompatible with sustainable purposes. But with a best-in-case approach and designing innovative solutions (e.g. revolving fund as proposed by Andrew Gouldson in session 4) a public investment bank can be targeted to sustainable growth

Creating a new sustainable EU bank

- The foundation of a new public Bank for sustainable investments could ease the successful for a number of reasons:
 - Changing the culture of an organization (such as EIB) is an incredibly tough mission;
 - The creation of a new investment bank entirely focused on sustainable investments allows to fit the quality of assets which can be sponsored by;
 - An exclusively sustainable investments devoted intermediary is able to optimize its financial structure and not be constrained by market factors.

Creating a new sustainable EU bank

- Changing the culture of an organization is an incredibly tough mission. The failure rate of most planned organizational change initiatives is dramatic in looking at the success or failure of TQM initiatives, one survey of Fortune 500 companies reported that only 20 percent had achieved their quality objectives, while over 40 percent indicated that their quality initiatives were a complete flop. A study by McKinsey found that two thirds had stalled, fallen short or failed.
- Managers for changing organizations should have three characteristics if they are to arouse motivation to change and learn:
 - Credibility: Whatever they say must be believed and not discounted.
 - Clarity of vision: Whatever they say must be clear and make sense.
 - Ability to articulate the vision: They must be able to state verbally and in writing what it is they perceive and what the implications are for the future of the organization.
- Following these guidelines it is possible to manage a decision-making process and skilled people taking into consideration all the sustainable dimensions, as suggested by Paul Ekins in his Lecture.

Creating a new sustainable EU bank

- The second reason supporting the creation of a new investment bank entirely focused on sustainable investments allows to fit the quality of assets which can be sponsored by;
- If sustainable investments are only a part of the portfolio assets, it is likely to generate a sub-optimal solution because of budget constraints and the skill shortage in terms of specialists able to select the most adequate projects.
- Moreover, if the bank is also investing in alternative projects, that is “non-sustainable” assets, its strategic reliability appears to be weakened, along with the reputation and the consequent capability to
 - (i) communicate the quality of financial services (Engert, 2002),
 - (ii) magnetize the better human resources (Morrison and Wilhelm Jr., 2003),
 - (iii) enter the capital market with the adequate opportunities (Smith, Smith and Wang, 2008, Fleischer, 2004) and, finally,
 - (iv) manage the contestability levels (Kale, Kini and Ryan Jr., 1998).

Creating a new sustainable EU bank

- The third advantage is how an exclusively sustainable investments devoted intermediary is able to optimize the financial structure, particularly measuring and controlling the liquidity and the interest rate risks.
- The public sustainable investment bank should be totally or essentially capitalized not to depend on funding policies.
- The model should be a narrow bank, either without any issuance of risky liabilities or with a liabilities entirely ensured by the public sector.

Conclusions

- The advantages of a start-up exclusively devoted to support financially sustainable projects justify the policy proposal to find out whether a sovereign fund could be designed as a special financial vehicle.
- The public sustainable narrow bank we propose could be focused to support technological jumps compatible with sustainable rules, with a long holding period and facing most of the economic and managerial drawbacks already experienced by alternative options.
- A second solution (not alternative to the bank we proposed) is to design public asset allocation policies through sovereign wealth funds.
- In case this enormous amount of money would be directly invested in sustainable projects, policy makers could reach the goals to implement a more effective industrial policy and to ease a more controlled flow of financial within a more safe and sound financial system.