Green Investment Bank experiences from France, Germany, Spain and a few others

Executive Summary

1. Countries in Western Europe and in North America have often used state-owned specialised financial institutions to implement public policies and respond to emergencies (such as during post-war emergency reconstruction).
2. These public financial institutions usually take the form of public banks with an initial significant capitalisation. Most of them have to follow Basel II-type of prudential ratios and fall under the supervision of their national banking regulation. Often they are closely monitored by their national Parliaments, Public Audit bodies and, if relevant, by the European Union.
3. They are assessed by international rating agencies that allow them to raise bonds on their domestic then international markets, after an inception period that is used to build their team and establish their reputation (governance, policies) and their financial track record.
4. They may benefit from lines of credit and refinancing facilities (including securitisation and partial guarantees) from the likes of the European Investment Bank or the European Investment Fund.
5. These public financial institutions have adopted better-defined policy rules, along their history, that revolve around the principle of not crowding out private sector initiative.
6. Their focus is to fill the gaps that markets, commercial banks and other classical financial institutions cannot or dare not serve. These public financial institutions can deploy patient capital (when markets tend to follow short term incentives), long term finance (when the private sector cannot gauge long term cash flow forecast or long trends) and tackle early-stage risks that are difficult to assess in absence of established track record.
7. These public finance institutions (FIs) are using a variety of financial instruments and partnerships with the private sector, depending on their experience, on the depth of capital markets they can tap and on general risk appetite.
8. These FIs usually start by offering long term loans and guarantee funds, leveraging their capital and their sovereign guarantee; then move towards junior/mezzanine debt; and finally may structure sophisticated products such as early-stage venture capital, challenge funds, partial risk guarantee mechanisms, first loss reserves or (re)insurance schemes.
9. Marginalised by efficient market theory in the most advanced economies, public financial institutions have thrived in more statist context such as France and its neighbours, but also in most emerging G20 countries (South Africa, South Korea, India, Brazil). The recent financial crisis has revealed the limitations of a pure market-driven model and vindicated public-private solutions.
10. The most powerful and forward-looking public financial institutions, such as KfW in Germany, Caisse des Dépôts and Oseo in France or ICO in Spain, have entered the climate and efficient energy sectors and recently a consortium of European institutions have created a European Fund for Energy, Climate Change and Infrastructure ("Marguerite Fund") and a The Long Term Investors Club (LTIC) to raise billions of Euros from the markets and from the EU.
11. **The timing is thus ripe for the UK to play its part in this landscape and launch its Green Investment Bank.**
12. One can learn some positive lessons from precedent British successful schemes such as 3i (Investors in Industry), the Enterprise Capital Funds or CDC Group plc (ex Commonwealth Development Corporation).

By Xavier Lecacheur | June 2010

What model for a Green Investment Bank? Can we learn from European examples?

A discussion paper on experiences from France, Germany, Spain and a few others

By Xavier Lecacheur | June 2010

"The remedy lies in breaking the vicious circle and restoring the confidence of the European people in the economic future of their own countries and of Europe as a whole."

George C. Marshall - June 5th 1947

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1. Introduction

In the United Kingdom's 2010 elections all three political parties proposed the creation of Green Investment Banks. The Conservative- Liberal Democrat coalition government that came into power duly set about the process of doing so[1]. The first step was the release of a wide-ranging report[2] by a Green Investment Bank Commission set up by the Conservative Party while in opposition.

This paper has been prepared to inform debate about how to structure the Bank and what size it needs to be. It explores models that may help the design of such a Bank (or Fund or Guarantee Facility or Insurance Mechanism) as there are many interesting models that have been tested in the past or are still flourishing in several European countries. Some of these have already invested the climate mitigation and adaptation sector.

The scope of the paper has been limited by time available; that time has not been sufficient to investigate **models coming from new G20 members** such as the **Korea** Development Bank set up in 1954 (www.kdb.co.kr) ; the Industrial Development Corporation of **South Africa** (IDC) established in 1940 "to promote economic growth and industrial development in South Africa" (www.idc.co.za) ; BNDES in **Brazil** (www.bndes.gov.br) since 1952 and to do justice to the complex history of Indian Development Banks (IDBI, IDFC, IIBI, NADARB, SIDBI,…). Most of them are involved in financial schemes to support energy efficiency programmes, climate-friendly investments and innovative schemes (such as guarantees) in partnership with local financial institutions as well as SMEs and sometimes microfinance institutions.[3]

As the aftermath of the financial crisis is showing us, relying on market-based solutions only is unlikely to be sufficient to develop innovative financial models to fund the needs of a new green economy.

We have to reinvent new public-private partnerships (PPPs) models and delve into historical examples and/or more continental types of experiments where there is a fine balance between the role of the state (playing the role of the honest broker, the long term, patient, visionary and being the benevolent owner of public goods) and the private sector building on innovation, depth of financial systems and bringing a minimum of market discipline through price signalling and better governance.

There is nothing new here and those like myself who have been working with Development Finance Institutions (DFIs)[4] on **access to finance** constraints recognise the key role that public solutions can play in bridging market gaps and tackling long term issues that market-driven solutions cannot solely handle, such as early stage venture capital, SME finance, microfinance, investing in infrastructure including IPPs[5] in low income countries, attract businesses to regions dealing with industrial restructuring, etc.

In this short paper it's not possible to cover other models such as foundations, socially responsible investors and cooperatives and mutuals that also have the capacity to **deploy "patient capital"** to mediate between short term financial return and longer social objectives, biding their time in order to maximise the sustainability of economic/financial and societal outcomes in the long run.

We will not delve either into the potential of a green economy. The UNEP[6] Finance Initiative[7] reminds us that "investment in greening the economy across a range of sectors […] can drive economic recovery and lead to future prosperity and job creation". This has been one of the arguments of the recent political campaigns in the USA and the UK.

However, despite the appeals at the G20 Summits in London and in Pittsburgh, recovery funds that have been allocated to so-called "environmental, green new deal projects" are far from the ca $750bn or 1% of GDP that are called for by developmental activists or even from the $270bn/$400bn recommended by Sir Nicholas Stern in 2009.

This order of magnitude will not be covered only by recourse to public funding, given the sorry state of most public finance (with perhaps the exception of China and a few others), or by privately-raised funds when capital markets are still edgy and volatile and far from ready to get involved in structuring 12 to 25-years maturities.

A sub-stratum of the funding challenge is the flow of green finance to developing countries and especially those low-income countries devoid of access to capital markets. Data on climate finance compiled by ODI[8] call for a radical new UK instrument to reach our international commitments.

We have thus turned our attention to similar times in our history when such challenges had to be faced and new public schemes and public-private partnerships had to be devised.

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[1] www.telegraph.co.uk/news/newstopics/politics/7715166/In-full-the-Conservative-Liberal-Democrat-coalition-agreement.html
[2] www.e3g.org/programmes/systems-articles/green-investment-bank-commission-recommends-urgent-action-to-unlock-low-car/
[3] There is a body of specialised literature about "Rethinking the role of National Development Banks" – see for instance the UN workshop in 2005 (www.un.org/esa/ffd/msc/ndb/index.htm)
[4] DFIs = Development Finance Institutions
[5] IPPs = Independent Power Projects
[6] United Nations Environment Programme
[7] http://www.unep.org/greeneconomy/GreenEconomyReport/tabid/1375/language/en-US/Default.aspx
[8] Overseas Development Institute - www.odi.org.uk/resources/download/4538.pdf

2. American schemes of interest

2.1. SME schemes

Born out of the Reconstruction Finance Corporation (1932 restructured in 1942), the US Government-backed **Small Business Administration or SBA** was launched in 1954 to provide guarantees, loans and equity support as soon as 1958 via **Small Business Investment Companies** "under which SBA licensed, regulated and helped provide funds for privately owned and operated venture capital investment firms."[9]

The current economic outlook looks like the situation at the end of the Second World War that saw the birth of a venture capital / private equity industry with the **American Research and Development Corporation** created in Boston in 1946. This is a good model of a fledgling industry supported by a blend of tax incentives, seed money and public guarantees, as it was launched to prop up innovative companies that would hire the soldiers after their demobilisation. It had very strong links with the military and the university labs.

2.2. Sallie Mae - the Student Finance Programme

The model of **Sallie Mae**, providing student loans could be worth assessing further. It was created as a "Government-sponsored enterprises" or GSE in 1972 and then privatised in 2004. It manages $180bn and serves 10 million students and parents[10]. It is a listed company that is not guaranteed by the US Government but is a servicer of student loans on behalf of the Government "Federally Guaranteed Student Lending Programs".

Since 1957 it seems that the Government and the Congress have hesitated between several models in order to keep under control the budget support they provide to this student finance scheme, a **mix of guarantee funds, operational subsidies, reinsurance scheme, loans of last resort as well as incentives to collect defaulted loans (and bonuses** for rehabilitating defaulted loans) to a wide range of non-for-profit, state-level public bodies and private operators like Sallie Mae.

In 2010 the new Obama administration has decided to reform these programmes and create a Direct Student Loan Program, claiming "it will generate $68.7 billion in savings over the next ten years"[11].

2.2. A counter-example of a Frankenstein model, Fannie Mae and Freddie Mac

Fannie Mae and Freddie Mac were created, respectively in 1938 by F.D. Roosevelt and in 1970 by Lyndon Johnson, as GSEs to provide mortgages to households.

They should be studied very carefully as a counter-example of what not to do! Chastised on a regular basis by the Department of Justice, the US Securities and Exchange Commission and the Senate in the 80s and 90s, they seem to have become out of control as "privately owned and operated by shareholders, they are protected financially by the support of the Federal Government."[12]

These warnings proved to be prescient as both needed to be bailed out in 2008 by the taxpayer.[13]

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[9] http://www.sba.gov/aboutsba/history/index.html
[10] http://www.salliemae.com/about/
[11] New American Foundation: http://febp.newamerica.net/background-analysis/federal-student-loan-programs-history
[12] Peter Wallison, and Bert Ely – Nationalizing mortgage risk: the Growth of Fannie May and Freddie Mac – American Enterprise Institute 2000 and Rob Alford - What Are the Origins of Freddie Mac and Fannie Mae? – George Mason University - 2003
[13] In his blog "What Volker thinks" Robert Peston, BBC Business correspondent, writes "mortgages securitised into bonds are the biggest part of the US bond market; and 90% of all mortgages are - through the mortgage-backed bond market - in effect granted or bought by US government agencies."

3. French models

The idea of creating dedicated financial institutions to help rebuild post war economies has also been tested in France, as early as 1919 with the "**Credit National**", a private company but controlled and funded by the State, to rebuild the businesses and infrastructure damaged by the First World War.[14]

3.1. Oseo Group

The Credit National was not the only French long term financial institution with a mixed capital held by private and public institutions, issuing long term bonds on the market with the state guarantee. In 2004-05 **Oseo** was created out of the merger of the Banque de Développement des Petites et Moyennes Entreprises[15] (BDPME) with Anvar (Agence de Valorisation de la Recherche) and Sofaris (Société française de garantie des financements des Petites et Moyennes Entreprises).

Oseo has the regulatory status of a financial company, and is subject to the prudential supervision of the French Banking Commission. It follows the German mode of a supervisory board (made of representatives from the equivalent of the UK CBI, Chambers of Commerce, ministries and experts) and a small number of executive directors.

Event though there is a commitment to simplify the organisation, Oseo is actually the brand for a family of financial institutions that have various statuses:

- **Oseo (Holding)** is 100% owned by the State
- **Oseo Financement**, the main FI, has an equity of €377m controlled by Oseo (Holding) – 53.4% ; Caisse des Dépots et Consignations or CDC – 42.8%
- **Oseo Innovation** is 100% owned by Oeso (Holding).
- **Oseo Garantie** is 60% controlled by Oseo Financement and 40% by banks and other commercial financial players. Bankers and other stakeholders such as the Chairperson of the French Venture Capital Association sit at the Supervisory Board of the Guarantee Fund.
- **Private equity subsidiaries** (Avenir Entreprises Group) and **leasing** subsidiaries

A few data for Oseo Garantie at 31/12/2009:

- guaranteed amount €11.3bn (+ 64% in 1 year) ; net of bad debt €10.2bn. This is due to a special facility (€3.8bn gross ; €491m of provisions) to help businesses cope with the financial crisis. Their "normal" lines of business amounted to €7.5bn, an increase of 11%.
- risk covered by Oseo €5.8bn or 51% on average
- types of financial instruments: 81% medium-to-long term loans ; 16.5% short term facilities ; 2.5% equity.
- 104,000 guarantees have been provided to 81,000 companies. 57% are start ups or early-stage MSMEs[16]
- the line of guarantee for innovation has actually decreased by 4% to €626m.

Oseo praises itself to support 38 out of the "Technology Fast 50", a list complied by Deloitte.

In terms of financing facilities, Oseo draws from:

- a programme of bond issues guarantied by the French state
- special budgetary allocations such as a €1bn facility in 2009/2010 that will allow businesses to access mezzanine funding (mainly convertible bonds)
- a €600m budget for "patient capital" facilities to be leveraged with other banking and rights issues

From time to time the national budget provides for additional general reserves and ad hoc provisions commensurate with the specific risks associated with social mandates.

In 2010 Oseo forecasts it will access €2.8bn of the "National Bond" Issue ("Grand Emprunt National") recommended by a special committee made of former prime ministers to invest in long term infrastructure (IT backbone ; biotechnologies ; sustainable development…). **€500m have been allocated to "green investments".**

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[14] Having been privatised in 1996 and merged several times since with other financial institutions to make Natexis, it is difficult to get information. A specialist in this field would be Professor Lescure from Paris Nanterre see http://www.u-paris10.fr/75485735/0/fiche___pagelibre/&RH=cdr_idhe

[15] Petites et Moyennes Entreprises or PME = Small and Medium-sized Enterprises SMEs

[16] MSMEs = micro, small and medium-sized businesses

3.2. Caisse des Dépôts et Consignations (CDC)

Caisse des Dépôts et Consignations (CDC): created by Napoleon, it is still playing some important public roles, especially mobilising long-term savings towards financing public housing and municipal infrastructure.

Besides supporting Oseo, CDC has committed to invest in **renewables** (wind, solar, hydro and biomass), up to 10% of France's international commitment to reach ca 1,000 MW by 2020.

It has also subsidiaries involved in the carbon market (Sagacarbon BlueNext brokerage firm; CDC Climat with an aim to raise €500m by 2014[17]), in forestry and bio-diversity related projects.

It has key stakes in third-party venture capital funds that support innovative companies in the environment and energy sectors (Demeter 1 and Demeter 2 investment funds ; Emertec 4 and Emertec Energie Environnement – 3E Funds)[18]. To note that these funds have a European scope and have already €160m invested out of ca €400m raised.

3.3. Financing innovation

The French Government is using various funding schemes to support R&D in priority sectors that include environment and renewable energy. **Agence Nationale de la Recherche** (ANR – its 2008 budget was €955m) and **Agence de l'environnement et de la maîtrise de l'énergie** (ADEME) are the main delivery institutions. They usually participate in funding schemes in partnership with **Oseo Innovation** and provide quasi-equity facilities, patient capital and reimbursable advances (www.oseo.fr/votre_projet/innovation/aides_et_financements/aides).

Last but not least President Sarkozy has created the **Fonds Stratégique d'Investissement** or FSI, a quasi sovereign wealth fund, to invest in "strategic" French businesses. It can mobilise up to €20bn.

3.4. Agence Française de Développement (AFD), the overseas development bank

The French state has transposed its unique expertise in public financial institutions in the development space, with the AFD that is supporting the French aid strategy in overseas departments and territories as well as developing countries.

Out of new commitments of €6.2bn in 2009, AFD provided €2.5bn "for projects and programs that contribute to fighting against climate change […] practically double that of 2008. This financing was earmarked for both small-scale investments and support for public policies."

If the AFD is 100% owned by the French state, it also has a subsidiary called Proparco that is a PPP as 30% is owned by banks, big businesses and overseas partners[19] (such as DBSA in RSA or Aga Khan Akfed). Proparco invests in the private sector.

AFD is also supporting a guarantee fund in Africa called **Ariz** that is providing banks, microfinance institutions and private equity funds with partial guarantees for their long-term loans, leasing or equity investments. It can also provide guarantees for FI portfolios. These are risk-sharing mechanisms.

[17] http://www.cdcclimat.com/media/dossier_presse_04022010/en/1_pr.pdf
[18] http://www.cdcentreprises.fr/portefeuille/moteur-fonds.php
[19] http://www.proparco.fr/jahia/Jahia/lang/en/Accueil_PROPARCO/PROPARCO/Actionnaires

4. The German model: KfW, the largest IFI in the world?

KfW (Kreditanstalt für Wiederaufbau) is a financial institution owned by the Federal Government (80%) and the German regional states (20%). It was created in 1948 to channel the funds of the **Marshall Plan** to rebuild Germany. KfW played an important role to support the restructuring of the Eastern German economy after the **reunification**, especially in the housing and SME sectors.

KfW has been also used by successive governments as their main policy instrument to provide long term export finance (50s), enter international development (60s), finance municipalities and MSME/business start ups… Progressively KfW has absorbed publicly-owned financial institutions such as Ipex, the export cum project finance institution and DEG, the German DFI.

The Federal Government has also used KfW to take over ailing banks it needed to restructure or bail out such as the infamous IKB (2001-2008)[20]. KfW will be the proxy for the German loans to Greece[21]

Today KfW-Bankengruppe is the largest (non-multilateral) player in Europe with ca €75bn disbursed in 2009. KfW has provided €50.9bn to the German industry during that year.

Rated AAA by agencies[22], benefiting from the sovereign guarantee of the German state[23], KfW raised €74bn in capital markets in 2009, including 10-year bonds in Euros and dollars.

There are guarantee programmes for approved private equity funds that are channelling funds for SMEs as well as subordinated loans for innovative business in Germany[24].

3.1 KfW climate and environmental – related activities

These represent the most important activity (apart from those linked to the financial crisis), with €19.8bn committed in 2009, up by 12.5%.

As soon as 2003, KfW got involved in carbon trading via an ad hoc KfW Carbon Fund and developed a partnerships with the EIB called the **EIB-KfW Carbon Programm** and funded by a special facility of €100m[25].

According to REN21, the Paris-based policy network on renewable energy, **KfW became in 2008 the world's largest financier for renewables in developing countries**, committing €340m for investment in renewable energies (excluding hydropower) and €405 million as part of its **Special Facility for Renewable Energies and Energy Efficiency**.

KfW itself is providing special lines of credit to banks in partner countries such as in 2009 a €30m facility to 6 Russian banks "under the International Climate Protection Initiative to small and medium-sized Russian enterprises intending to implement energy-efficiency measures."

Its subsidiary for overseas development, DEG, has "provided €260m for investments that promote climate protection, use renewable energy and ensure energy-efficient production and among others, hydro-electric and wind power plants in Africa, Asia and Latin America."

[20] Moody's estimates KfW losses due to IKB at € 8.3bn over 2 years and that this project is mainly responsible for the depletion of its €5.3bn general reserve for banking risks! www.kfw.de/DE_Home/Investor_Relations/Pdf_Dokumente_Investor_Relations/2009_10_01_Moodys__CreditOpinionKfW.pdf

[21] http://www.kfw.de/EN_Home/Presse/Our_Current_Work/_involvement_of_KfW_Bankengruppe_in_the_European_emergency_plan_for_Greece.jsp

[22] http://www.kfw.de/DE_Home/Investor_Relations/20010-4-15KfW_InterimFA_15Apr2010.pdf

[23] The guarantee of the Federal Republic of Germany have been recognised by the European competitions authorities and reiterated in 2002: www.kfw.de/EN_Home/Presse/PressArchiv/bis11.2005/Pressemitteilung22764.jsp

[24] Features such as tenor (10 years), leverage (50-60%) and grace period (2 years) can be found here: www.kfw-mittelstandsbank.de/EN_Home/Loans/The_individual_loan_programmes/ERP_Innovation.jsp

[25] http://www.kfw-foerderbank.de/EN_Home/KfW_Carbon_Fund/Pdf_documents_carbon_fund/Term_Sheet_EIB_KfW_22Jan2008_engl.pdf

5. The Spanish model: ICO

The **Instituto de Crédito Oficial or ICO** is the State's Financial Agency of Spain. Its main features are[26]:

- provision of medium and long-term financing for productive investments ;
- focus on businesses with "social, cultural, innovative or ecological significance and worthy of priority attention" ; in practice this is targeting SMEs, start ups and micro-enterprises as well as large–scale projects in Spain or overseas by Spanish enterprises (including energy infrastructure);
- ICO acts in accordance with the principle of financial equilibrium
- It emphasises it is meeting the financing needs "which the private system does not cover or does so only in part";
- ICO operates through the banking system but accepts direct applications by businesses.

It is interesting to note that ICO has a special scheme for entrepreneurs who have been turned down by banks called "the facilitator", in partnership with the Association of Chambers of Commerce.

ICO status is that of a state-owned bank, regulated by the Bank of Spain since 1999. Its funding is mainly through the annual budget. It has provided 360,000 loan transactions for an amount of €15bn.

It is issuing bonds in the domestic and international markets with the state guarantee that is "explicit, irrevocable, unconditional and direct." Moreover "In no case the Basel 2 ratio may fall below 9.50%."

Here is a summary of the Institute´s activity indicators at December 2009:

Total Assets	€ 60,360m
Capital and reserves	€ 3,147m
Net Profit	€ 20.26m
ROA	0.50%
ROE	0.75%
BIS Ratio*	11.61%

In December 2009 the Spanish Government announced the launch of the Sustainable Economy Fund to support Spain's recovery with a budget allocation of €20bn.

It will cover environmental projects and will have 4 components

- a €10 bn investment capital fund to finance infrastructures and energy ; projects of up to €100m may be financed, with a repayment term of up to 30 years.
- a €300m venture capital fund for tickets up to €15m and up to 12 years.
- a co-financing facility with ICO and other financial institutions
- a wholesale refinancing facility for SMEs and for microcredit.

The last 2 components will total €8.7bn.

[26] http://www.ico.es/web/contenidos/4/1017/index.html

6. Other European examples and cooperation between European FIs

6.1 OeKB – Austria and Scandinavia

There are other European models of state-owned long term investment banks engaged in supporting the new "green economy". An interesting model can be found in **Austria** with the Oesterreichische Kontrollbank Aktiengesellschaft or OeKB created in 1946.

Similar to KfW or ICO, it is also Austria's central securities depository and the sole clearing and settlement agency for subsidised green electricity in Austria (OeMAG programme) via the Energy Exchange (EXAA). It claims it "offers an outsourcing solution for trading CO2 allowances" for Austrian businesses.

It has exported its expertise in Northern Europe becoming "a settlement bank on the spot and derivatives markets of the Scandinavian energy exchange, **Nord Pool**."

6.2 European Investment Fund (EIF) guarantees

The European Investment Fund provides partial guarantees & credit enhancement or securitisation for portfolios aimed at SMEs that meet certain European priorities, such as the Competitiveness and Innovation Framework Programme, a 2007 - 2013 programme with an overall budget of € 3.6bn.

One component is called the Intelligent Energy Europe Programme (IEE) and amounts to €730m.[27]

KfW has used the EIF SME loan securitisation transaction scheme, as a credit enhancement mechanism for a series of SME loan portfolios originated by German Landesbanks. The EIF structured many such transactions in Europe, including Britain28. Despite a difficult securitisation market in 2009, post financial crisis, EIF closed 22 deals for €2.2bn.29

6.3 The Marguerite Fund, a partnership between European Long Term Finance Institutions

Six European FIs (European Investment Bank EIB, French Caisse des Dépôts et Consignations CDC, German KfW, Spanish ICO, Polish PKO Bank Polski and Italian Cassa Depositi e Prestiti or CDP) have launched the **European Fund for Energy, Climate Change and Infrastructure ("Marguerite Fund")** that will invest in infrastructure sectors in Europe: transport (Ten-T), energy (Ten-E) and renewables.(RE programmes).

Its specific objective is to finance greenfield, medium size and, if possible, cross-border projects.

The seed capital brought in by its founders is €600m, in equal tranches, and is aiming to reach €1,500m. Already the Bank of Valletta (Malta), the Caixa Geral de Depósitos (Portugal) and the European Commission have committed €100m. Additional lines of credit of ca. €5,000m will be provided by investors.

A fund manager has already been selected and all information on the investment policy "geared towards financing projects which contribute to achieving European key priorities in the transport and energy sectors"[30]. To be noted that the founders have chosen the legal status of a Luxembourg Sicav.

6.4 Other partnerships between European public financing institutions

Four European FIs — the French CDC, the Italian Cassa Depositi e Prestiti, KfW and EIB — have created **The Long Term Investors Club or LTIC** that is promoting (lobbying for) long term finance. Their slogan is "Now is the time to take the long view"[31]. [At least the Anglo-Saxons are represented by their language, the lingua franca of the project].

There have been partnerships in the past in the environmental sector, such as in 2008, EIB, initiator and principal investor, French CDC, Spanish ICO, KfW Bankengruppe and the Nordic Investment Bank-NIB have established a €125m "**Post 2012 Carbon Credit Fund**". Managed by a third party fund manager, Conning Asset Management Limited (Swiss Re group), it has invested in renewables in China and Mexico.

[27] www.eif.europa.eu/what_we_do/guarantees/cip_portfolio_guarantees/index.htm
[28] http://www.eif.europa.eu/what_we_do/guarantees/credit_enhancement/index.htm
[29] www.eif.europa.eu/news_centre/publications/eif-annual-report-2009.pdf - especially Chap 3 from page 39
[30] http://www.eib.org/attachments/news/marguerite-faq-final-at-10-03-15-en.pdf
[31] http://www.ltic.org/en-gb/the-club/message-from-the-president.html

7. Looking at the British record

It is striking that most of these European experiences and partnerships exist without direct British equity involvement; yet most of these initiatives are raising funds with London City-based institutions and markets. However there are some publicly-driven and funded initiatives that have been tested British history.

7.1. 3i (Investors in Industry)

After the Second World War, Britain supported the reconstruction of its infrastructure and the creation of jobs in innovative sectors via the **Industrial and Commercial Finance Corporation** (ICFC) and the Finance Corporation for Industry that after merger became **3i** or **Investors in Industry** in 1983[32].

3i's initial capital was held by the Bank of England and British commercial banks that appreciated its complementary support for their clients. 3i ancestors had been allowed to raise funds on the capital markets since 1959. Very quickly they had become the largest provider of long-term funding for medium-sized businesses and diversified in growth capital (equity and quasi-equity).

It is to be noted that as soon as 1984 3i opened offices in Germany and France and 1997 in Singapore.

7.2. Supporting innovation in the regions

Britain has a long history of supporting businesses in the regions. Successive governments have addressed the imbalances of access to early-stage capital, facilitated connections between university labs and business as well as incubators, clusters and other science parks.

The most relevant benchmarks for a Green Investment Bank are in England[33]:

- **Enterprise Capital Funds (ECFs)** "address a market weakness in the provision of equity finance to SMEs by using Government funding alongside private sector investment to establish funds that operate within the 'equity gap'".
- the Small Firms Loan Guarantee (SFLG) scheme[34].

Recently the UK NAO has published a very interesting report[35] on the results of the public-backed venture capital schemes, with useful lessons that could be used by a Green Investment Bank.

7.3. CDC, the British institution for developing countries

Britain, like its European partners, has created a Financial Institution to support investment in overseas countries as the "CDC" acronym reveals: Colonial Development Corporation, then Commonwealth Development Corporation, CDC Capital Partners and CDC Group plc.

Its original funding came from budget allocations and loans. It was then capitalised by the Thatcher Government, but without access to new money after it was transformed into a pre-emerging market fund of private equity funds.

The December 2008 National Audit Office Report on CDC[36] includes interesting recommendations on governance and oversight from the UK Government It could form a useful framework for a state-owned Green Investment Bank.

7.4. CDC has a long tradition of cooperation with its sister European organisations.

They have created EDFI - the Association of European Development Finance Institutions.12 EDFI members are already partners in a joint financing facility called European Financing Partners (EFP) that has mobilised a (second) facility of €230m in 2009. EFP invests in senior loans, mezzanine debt, equity, quasi-equity and guarantees.

EDFI partners have just signed a MoU with the European Investment Bank on 7 May 2010 to set up The Interact Climate Change Fund (ICCF), "an investment matching facility to invest in private sector climate change projects in Africa, the Caribbean and the Pacific, Asia and Latin America" [37].

7.5. Challenge Funds, an original concept

Britain, Australia and a few Nordic countries have been champions of challenge funds, funding mechanisms that allocate public grants via competitive and transparent bidding processes for special public purposes. A good example is the current Africa Enterprise Challenge Fund[38] jointly-funded by DFID.

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[32] http://www.3i.com/about3i/history-of-3i.html
[33] These initiatives have been mirrored by the "Devolved Administrations" in Scotland Wales and Northern Ireland such as www.scottish-enterprise.com/innovation-grants
[34] the SFLG was boosted in 2009 by The Enterprise Finance Guarantee, a £1.3bn scheme available through 27 lenders to support bank lending, of up to 10 year maturity, to UK businesses with a turnover of up to £25m"who are currently not easily able to access the finance they need." This had a deadline of 31 March 2010.
[35] National Audit Office Report HC 23 2009-10 – December 2009 - http://web.nao.org.uk/search/search.aspx?Schema=&terms=enterprise+capital+funds
[36] NAO report: www.nao.org.uk/publications/0809/investing_for_development.aspx - Executive Summary - Recommendations 8 and 9
[37] www.edfi.be/news/news/17-news-item-4.html

8. What can we learn - first lessons

We can find several common features, after this non-exhaustive research of state-funded and publicly-owned long term financial institutions, useful for the design of a Green Investment Bank.

Lesson 1:

It is **not shocking** for most countries to set up publicly-funded financial institutions to address **industrial policy challenges** and **lack of access to capital**, as they recognise that their own financial markets are too narrow, immature and that their domestic savings may not be sufficient or ready to invest in long term, riskier projects and/or niche and unproven segments.

Lesson 2:

What comes back the most often in terms of arguments to justify this public concept are:

- **patient capital**
- **finance gap for SMEs**
- financial support in order to pursue **priority public policies**: helping export-oriented businesses, young entrepreneurs, business investing in priority geographies affected by industrial restructuring, women entrepreneurs, entrepreneurs from minority groups or disenfranchised geographies …
- **coping with crisis situations**: natural disasters or financial crisis that are freezing usual financial/ banking channels for the weakest.

Lesson 3:

Private sector players are often supportive and some recent studies show they accept that public-backed schemes that leave a space for private sector initiative can be beneficial, as they plug a gap. This has been confirmed by the aforementioned UK NAO Report that has interviewed private stakeholders, a 2006 report for the UK Office of Fair Trading "Case studies of public subsidies"[39] and the 2009 report updating the original 2003 **"**The Supply of Equity Finance to SMES: Revisiting the "Equity Gap"[40]**.**

Their arguments could be taken into account for a Green Investment Bank:

- "not crowding out the private sector as the private sector has commercial reasons for not being more involved in the early stage market"
- "co-investment arrangements were cited by stakeholders as a way of encouraging the private sector […] to invest alongside the public sector"
- "a way of the public sector making use of private sector fund management skills to do deals that the private sector might not otherwise consider"
- "the selection of the fund managers […] was set up as a bidding process, and the level of subsidy proposed was among the selection criteria. This might have promoted selection of the most efficient provider, and minimised the level of subsidy required."

Lesson 4:

There is a wide range of financial engineering **to maximise the leverage of public grants and budget allocations** as well as **manage wisely the country reputation and rating** on the international bond (and securitisation) markets:

- a financial methodology is based on **partnerships and risk-sharing schemes with originating** banks and FIs, (and sometimes spread with other guarantee schemes funded by industry-based mutual societies or local/regional authorities)
- the **EU institutions are big players** and important partners: EIB, EIF and the EU itself (European Lisbon agenda, Eureka programme…)
- **a wide range of instruments**: long term loans, leasing, portfolio refinancing, quasi equity, participating loans with long grace periods;
- guarantee funds and other risk-sharing schemes are popular;
- there are **dedicated products, flexible rules and support mechanisms for start ups** and early-stage businesses as well as R&D funding for innovative enterprises;

[38] www.aecfafrica.org/
[39] www.oft.gov.uk/shared_oft/reports/comp_policy/oft828.pdf especially section E.
[40] www.berr.gov.uk/files/file53949.doc

- **linkages are quickly built with specialised funding vehicles** such as venture capital funds, often in JVs with third party managers, or **in conjunction with tax-efficient (un)quoted investment vehicles** offered to sophisticated investors (pension funds or/and wealthy individuals).

Lesson 5:

The reputation of the Long Term Financial Institution becomes good enough (and the scale of its activities large enough) to be able to raise notes and bonds on the domestic then international markets (with or without an explicit Government guarantee). Sometimes, for publicity purposes, these are in the form of patriotic bond issues ("Grand Emprunt National").

However strong state support remains needed:

- at inception, some significant capitalisation (including for guarantee funds as the leverage ratio accepted by clients is very low indeed whilst a track record is built);
- all FIs have been created or consolidated by Acts of Parliament, that explicitly provide for (and limit) sovereign support, especially when they want to tap capital markets.
- from time to time the state budget provides for additional general reserves and ad hoc provisions commensurate with the specific risks associated with the FI social mandates.

In terms of **institutional framework**, these FIs have evolved over time but are usually made of equity shares provided by the Central Government, by commercial banks (often arm-twisted to contribute), sometimes by regional and local public bodies. They may have access to special reserve funds from their Central Banks (unclaimed bank accounts left by deceased people) or by European schemes.

Lesson 6:

Governance arrangements look diverse and would need to be studied further via national public audit and parliamentary committees reports:

- These FIs try to remain at arm's length from government interference so rely on business association support, on their home regulator's supervision, on international Basel ratios and on international ratings to constrain their owners to financial rigour. However the IKB example in Germany shows that total independence is difficult;
- They tend to regroup themselves in pan-European associations, clubs or joint ventures. They diversify their funding with EU resources.
- There is a move towards performance indicators around their policy objectives, even though what we could read from the French experience[41] or the UK NAO 2009[42] report shows it is still embryonic and timid.

[41] Oseo and AFD are co-owners of certain public policy objectives translated in indicators that are annexed to the Loi de Finances: www.performance-publique.gouv.fr/farandole/2009/LRBLEUMSN_MSNAD.htm#resultat.

[42] "The Department [BIS/BERR/DTI] failed to establish a robust framework of objectives, and associated baselines, to enable it to judge whether the taxpayers' investment offered value for money. The Department has set multiple aims for each fund but these have not been translated into clear measurable objectives or prioritised. With the exception of the Enterprise Capital Funds no clear financial objective was set for the impact of the funds to the taxpayer."

9. Conclusion:

Developing a new institution such as a **Green Investment Bank**[43] with the capacity to catalyse (rather than crowd-out) private sector investment through the effective and efficient use public finance to implement low carbon infrastructure investment **is feasible.**

The initial capitalisation of a Green Investment Bank could take many forms, but it seems that a blend of government budget and contribution from commercial banks is the most common.

Many countries have seized the opportunity of a crisis (after war in France in 1919, in Germany and Austria in 1946, in Korea or South Africa) to build a consensus in the society to allocate significant public resources to such a Public Long Term Finance Institution.

There are **enough models and partnerships** in Europe and in other G20 countries, enough experience in some part of the UK financial system (CDC, ECFs) to learn from useful financial and governance models that can be adapted to the UK context and a more private sector culture.

It is likely that these key features will have to be part of the scheme:

- **financial robustness**: most of these FIs have strong Basel 2 ratios, a few can raise funds without an explicit Sovereign Guarantee and they can mobilise funds efficiently in case of emergency.
- capacity to deploy long-term, "**patient", capital** that fits with the needs of climate change-related finance.
- **leverage** of private funds.
- their contribution to tackle difficult questions such as job creation, access to finance by start ups and MSMEs and an appetite for early-stage innovation and not-yet-commercially-proven sectors.
- some innovative schemes in terms of **risk-sharing with traditional commercial banks and FIs**, seed-capital for venture industries.

"The UK Enterprise Capital Funds, launched in 2006, strike a better balance between protecting the taxpayer and encouraging other investors to participate because the public sector is the preferential investor, while private investors have greater opportunity to benefit from success." The shares held by the Government do not take the first loss and carry a special priority return of 4.5%.

Risks and negative trends are mainly linked to **governance** and "at arm's length's" issues:

- **interference** from the government (or the parliament or the civil servants – not clear in many countries who can spoil the discipline) such as IKB and KfW
- **risk cursor** for new schemes between unacceptable defaults (for instance schemes to support enterprise creation by long-term unemployed ; early-stage R&D equity) and resistance/financial orthodoxy of management teams supported by rating agencies. It seems that the latter can extract some **concessions** (additional reserves, capital… as seen in France and Germany) but that would deserve a full-fledge analysis.
- **balanced risk-sharing burden** between private and public sector with two issues:
    - o are banks participating in a guarantee scheme contributing a fair share or is there a free rider on the public purse?
    - o if the public scheme is too successful, are private-sector driven solutions crowded out?

Once again the UK Nao is asking difficult and fair questions that will need to be seriously assessed: "Viewed at the micro level the Small Firms Loan Guarantee has been a lifeline to many small businesses but […] at the macro level the scheme has had a higher default rate than commercial lending […]. These might be indicators of positive impact but might be cause to question the value for money of the scheme."

I will finish with two personal suggestions that would need to be further assessed:

- A decentralised, SME dimension, is helpful, so people and businesses "at the bottom of the pyramid" can see they have a stake in the success of a Green Investment Bank.[44]
- Issuing bonds to the public may create a sense of urgency and general mobilisation that there is an emergent issue to be tackled. That has been successful when linked with overcoming a social crisis or a natural disaster, jobs creation, a massive reconstruction or recovery project, and some times large-scale infrastructure projects (Marshall Plan).

[43] http://www.e3g.org/images/uploads/Accelerating_Green_Infrastructure_Financing.pdf
[44] Accion, one of the world largest microfinance networks is providing green business loans to MSMEs in 2 American states: www.accionusa.org/home/small-business-loans/green-business-resources/green-business-loans.aspx

Appendix: Bibliography and references (see also footnotes)

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For a different perspective of the role of the state in the economy, see a Chinese point of view 2 recent papers in the **McKinsey Quarterly interview – May 2010** :

- Five forces reshaping the global economy: McKinsey Global Survey results – especially section on "the role of governments"
- The End of the Free Market: Who Wins the War Between States and Corporations? – video interview with Ian Bremmer.