



## Key points

- Development finance institutions (DFIs) can help tackle the effects of a growing number of global challenges on poor countries, for example climate change, financial crises and global security
- Using a macro-framework we show that DFIs have promoted investment, growth (including post-conflict) and energy efficiency in developing countries
- DFIs and their shareholders need to step up their efforts in coordination with others to invest more in the poorest countries, particularly during financial crises, directly after conflict and towards environmental goals

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## The role of development finance institutions in tackling global challenges

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**E**ven though the world is becoming richer and more globalised, developing countries in particular are increasingly facing global challenges that are setting a new context for development and growth. The risks that are likely to have the greatest impact in the coming decade are climate change, fiscal crises, economic disparity, global governance failures, storms and cyclones, geopolitical conflict, corruption, flooding and water security (WEF, 2011). Recent discussions have also focused on commodity price volatility.

Here, we divide global challenges into three categories: 1) economic – maintaining investment during global economic and financial crises; 2) environmental – facilitating the transition towards a low-carbon development path; and 3) other – providing global health and security, especially in post-conflict countries, and addressing volatility and equity concerns.

We examine the role of development finance institutions (DFIs) in addressing such challenges, amongst a range of other policy responses. We distinguish among four different types of policy response to tackle these global challenges: 1) global rules; 2) developed country policies; 3) aid and public sector DFIs; and 4) DFIs supporting the private sector. Table 1 (overleaf) maps policy responses, including the role of DFIs, in tackling global challenges.

### The importance of DFIs globally and in national economies

Private sector investments by DFIs have grown rapidly over the past decade, with annual global commitments rising from \$15.4 billion in 2003 to \$21.4 bn in 2005 and \$33 bn in 2009. DFI support is now equivalent to a quarter of official development assistance (ODA), although much of it is not counted as ODA but as Other Official Flows (OOF).

A database we have compiled of DFI invest-

ment by country and year from 1985 onwards highlights 26 developing countries where three DFIs (International Finance Corporation (IFC), European Investment Bank (EIB) and CDC Group plc (CDC)) have together averaged between 2% and 12% of total national investment for the period for which data are available.<sup>1</sup>

This suggests that examining the macro effects of DFIs in terms of tackling global challenges makes sense. Our analysis focuses on available data for IFC, the European Bank for Reconstruction and Development (EBRD), EIB and CDC. Figure 1 (overleaf) shows that these are among the largest DFIs in terms of commitments. A further issue to note is that DFIs are not really biased towards poor countries. Clearly, in absolute terms, large and more developed countries can absorb larger volumes, but even when scaled for market size, there is no greater exposure of DFIs in poorer countries. There are variations amongst DFIs, e.g. CDC spends relatively more funds in poorer countries (as a percentage of gross domestic product (GDP)); whilst there is no such trend for EIB or IFC (see Figure 2 overleaf).

### Scaling up the focus of DFIs and designing new impact measures

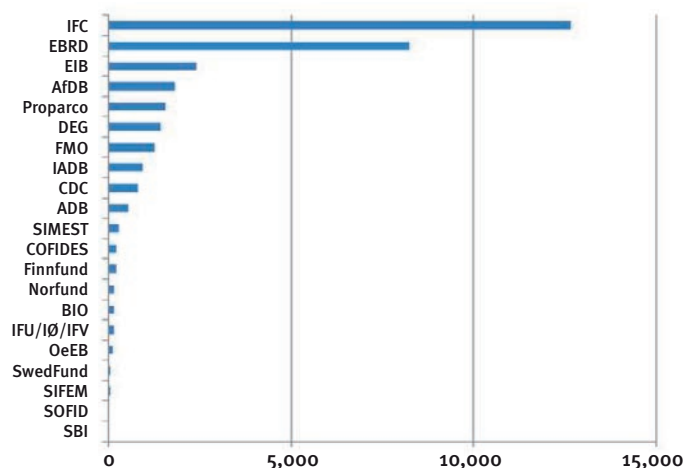
While DFIs have traditionally focused on addressing capital market imperfections and investing in viable enterprises and financial intermediaries, we argue that they can play an important role in tackling global challenges. This requires an expansion of their focus to entail addressing market and coordination failures associated with technology adoption and the environment (in some cases they already do this) and an appreciation of allocating funds where the greatest challenges and market failures lie.

Measures of success currently relate to the number of firms and jobs supported successfully by DFI investments at the micro level. However, because DFIs have different systems for ex-ante assessment, it is difficult to compare

**Table 1: Global challenges and policy responses**

	Economic	Environmental	Other
Global rules (international public goods, IPGs)			
	Global rules on capital markets (e.g. G-20)	Rules on carbon emissions to get interest from private sector (UNFCCC)	Global rules on public health; UN Security Council on conflict (promote IPGs)
Developed country policies			
Domestic	Promote systemic financial stability	Promote a low-carbon domestic economy	Contribute domestically to IPGs
External	Export and investment credits	Trade and investment policies that promote low-carbon development positively	Contribute non-aid funds to IPGs
Aid and public sector DFIs (e.g. International Development Association, IDA)			
Aid	Maintain critical public spending in low-income countries – improve counter-cyclicality (e.g. crisis response window)	Climate finance to be new and additional; however, some support for energy efficiency (Rio marker) classified as ODA	Provide aid to IPGs – especially in case of ‘weakest link’ finance
Blended aid	Maintain critical public spending in more resilient countries – improve counter-cyclicality	Blended finance for public sector projects (e.g. some of EIB), with grants covering project preparation or green purposes	Important role to provide blended finance to IPGs – especially in case of ‘weakest link’ finance but with a higher level of concessionality in poorer countries
Private sector DFIs (e.g. IFC, CDC)			
Loans, direct equity, equity funds, guarantees	Support private sector investment by correcting market and coordination failures in capital markets	Support green private sector investment by correcting market failures (relating to capital markets, technology and environment)	Possible opportunities (e.g. promoting investment in post-conflict countries)
Technical assistance through private sector DFIs; subsidised loans and lower return equity	Support private sector investment by correcting market and coordination failures in capital markets	Account for externalities, environmental impact assessments, etc.	Possible opportunities (e.g. promoting investment in post-conflict countries)

**Figure 1: DFI investments in 2009 (\$ millions) – heterogeneous but substantial**



Notes: To private sector only, EBRD and EIB investment to public sector excluded. IFC: year to March 2010, excludes syndications. Portfolio data might be more appropriate for some: e.g. annual commitments to funds are less meaningful. Non-European bilateral DFIs such as OPIC excluded. Source: Kingombe et al. (2011) based on DFIs' own accounts.

the ‘development impact’ on the basis of their own data. A further challenge is that, while some indicators might seem to be comparable, for example number of jobs created, the number on its own may not be indicative of a good or bad outcome at the macro level, as this will depend on the counterfactual, which is a dynamic process with spillovers and indirect effects. Randomised Control Trials are not suitable in US\$25 million projects where the contribution of the DFI could be small compared to the private sector.

Meanwhile, if – as this paper suggests – addressing global challenges is indeed one of the major aims of DFIs, measurement of impacts also needs to use a macro lens. We need to design a framework that is able to measure such a contribution, which means we need to understand how the micro-level investments contribute to addressing the bigger, global challenges. Such a framework would measure the macroeconomic impact that goes beyond the micro-level assessments that are the focus of DFI evaluation departments.

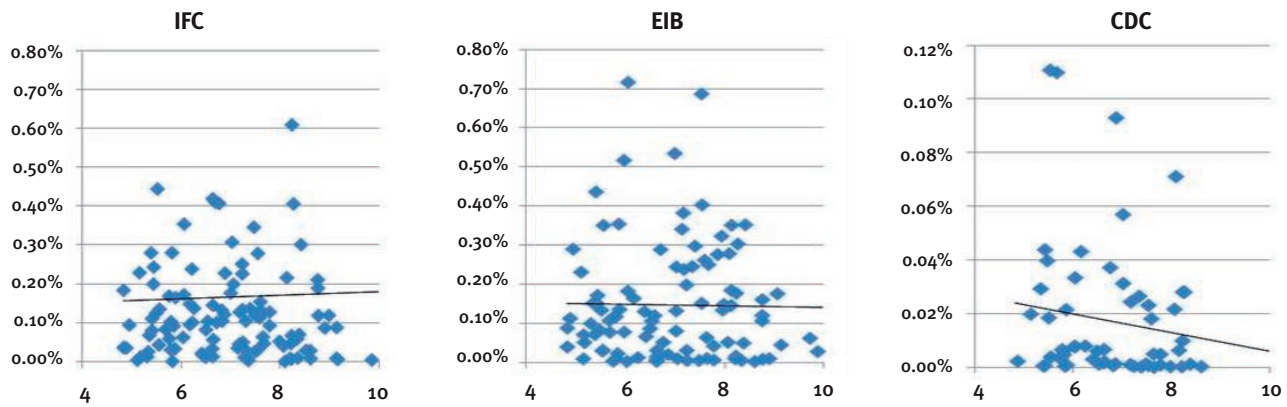
### Estimating the effects of DFIs on investment and energy efficiency in recipient countries

Te Velde (2011) presents a new way of looking at the impact of DFIs by estimating their aggregate impact in terms of promoting investment (especially during financial crises, but also post-conflict) and their ability to improve energy efficiency. Using regression analyses, based on data from EIB, EBRD, IFC and CDC, it is found that DFIs increased total investment and improved energy efficiency in recipient countries compared with the constructed counterfactual. A one percentage point increase in DFI investment as a percent of GDP would lead to a 0.8 percentage point change in the investment to GDP ratio. Hence, for 26 countries, DFIs have kept investment to GDP ratios more than 1.5 percentage points higher than would otherwise have been the case.

Meanwhile, investment by DFIs increased total investment in countries after they emerged from conflict. It is argued that such macro evidence is more appropriate for estimating leverage effects than the static financial additionality or leverage measures DFIs currently present. Further work could examine when DFIs have the greatest leverage impact, and what policy levers could be used to improve the impact of DFIs in tackling global challenges.

Te Velde argues that while DFIs are able to increase investment – and owing to their locational presence they are likely to be particularly additional in poorer countries – they could be seen as a useful tool to promote investment and growth. Thus, an important tool to address the effects of global financial crises in poor countries would be to increase DFI exposure to such countries in times of crises, especially the poorest (and more than is currently the case). This could be achieved in part by maintaining a good pipeline of projects so that,

**Figure 2: Investments by DFIs are not concentrated in the poorest countries, although CDC scores better than IFC and EIB**



Notes: Dots refer to country observations. Country level DFI exposure (as % of GDP) on vertical axis and log of the level of GDP per capita on the horizontal axis. For visibility IFC data for Tonga and Kiribati excluded in figure. EIB average over 1986-2009; IFC average over 2002-2009, and CDC average over 2004-2009. Lines are trendlines estimated through the dots. Source: Data in Te Velde (2011).

when a crisis hits, DFIs can step in immediately and play the counter-cyclical role; in part by linking better to additional sources of finance (e.g. sovereign wealth funds). It also means that pull measures (softer terms) and push measures (more investment officers and better incentives) could be designed to stimulate DFI investment in post-conflict countries, or to tackle global challenges more generally.

#### Estimating the effects of DFIs on economic growth

Massa (2011) fills a major gap in the literature on the macroeconomic impact of DFIs on growth. By using Generalized Method of Moments (GMM) for panel data analyses, she examines the relationship between the investments of a selected sample of multilateral DFIs (EIB, EBRD and IFC) and economic growth for a sample of 101 countries in the period 1986-2009. The findings suggest that investment by multilateral DFIs play a positive and significant role in fostering economic growth in recipient countries, with a stronger impact in lower-income countries than in higher-income countries.

Massa finds that a 10% increase in multilateral DFIs' investment commitments may increase growth by 1.3% in lower-income countries, and by 0.9% in higher-income countries. Investments in infrastructure, industry and agribusiness play the biggest role in fostering economic growth: lower-income countries benefit mainly from investments directed towards agribusiness and infrastructure, whereas higher-income countries take advantage mostly of investments in infrastructure and industry.

#### DFIs and investment in post-conflict countries

Te Velde (2011) also examines the role played by DFIs in conflict-affected countries. The average investment to GDP ratio is lowest in 31 countries in conflict (defined as conflict-affected countries by a UNDP study) (15%), but during post-conflict

periods it increases to around 20% (a 5% peace investment dividend) in such countries. The average ratio in other countries is 22%. EIB invests similar amounts (as a percentage of GDP) in conflict-affected and other countries and, importantly, significantly more in post-conflict times. Thus, DFIs may contribute to post-conflict stabilisation. For example, we estimate that the relationship between EIB investment and total fixed investment in Uganda is positive and significant over the period 1985-2009. With the rise of EIB/GDP by 0.2 percentage points (average over 1985-1992 to average over 1993-2009), we find that EIB may have been responsible for an increase in Uganda's investment ratio of a third of a percentage point on average in the post-conflict period (after 1992).

#### Conclusions and policy implications

The two papers in this project suggest that it is important to consider the role of DFIs in tackling global challenges and to design a framework to measure such work. We have carried out the latter task and examined the macroeconomic effects of DFIs on investment, growth and energy efficiency. The findings so far suggest that DFIs can indeed play an important role in the policy options suggested to address global challenges (Table 1), but that their impact can be improved.

Table 2 (overleaf) summarises the main issues by describing global challenges, a DFI macroeconomic perspective on these, the evidence from our papers and some relevant policy issues. It argues that DFIs are important in addressing global challenges but also that their role can be enhanced by further stimulating their core activities (e.g. through liaison with bodies such as the G-20 and UN Framework Convention on Climate Change, UNFCCC); redirecting them to the poorest countries and post-conflict countries; promoting energy

**Table 2: Global challenges, macroeconomic evidence and DFI policy issues**

Global challenge	Key questions from a macroeconomic perspective	Relevant macro evidence in this paper	Policy issues
Helping the poorest countries overcome financial crises by maintaining their investment rates	<ul style="list-style-type: none"> <li>• Are DFIs investing in poor countries?</li> <li>• Do DFIs increase investment in recipient countries?</li> </ul>	<p>EIB, EBRD and IFC have the ability to promote investment and growth in poor countries.</p> <p>However, only CDC slightly more exposed (as a % of GDP) to poorer countries. Not EIB and IFC.</p>	<p>Prepare for scaling-up of activity during crises through more and better project preparation activities, especially in poor countries (e.g. blending of loans and grants) (e.g. link to G-20 high-level panel on infrastructure and EU discussions on blending).</p>
Promoting security by promoting investment in post-conflict countries	<ul style="list-style-type: none"> <li>• Are DFIs investing in conflict-affected countries?</li> <li>• Do DFIs allocate more investment post-conflict?</li> </ul>	<p>Investment ratio is higher post-conflict, and EIB steps up investment in post-conflict situations.</p>	<p>Use DFIs in post-conflict situations to promote economic activity.</p> <p>Ensure DFIs understand post-conflict investment opportunities (create incentives for investment officers).</p> <p>(Link DFIs to post-conflict stabilisation discussions.)</p>
Transition to a low-carbon economy	<ul style="list-style-type: none"> <li>• Do DFIs allocate funds to 'green sectors'?</li> <li>• Do DFIs have a dynamic environmental effect?</li> </ul>	<p>EBRD and IFC are associated with greater energy efficiency.</p>	<p>Link DFIs to Rio+20 and EU discussions on climate finance as well as new G-20 discussions on climate finance.</p>



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efficiency; and putting in place complementary activities.

Specifically, we argue that DFIs and their shareholders should:

- regard DFIs as a tool for resilience-building against crises in the poorest countries
- invest more resources (DFI and complementary) in poor countries in order to be prepared for engagement in times of crisis
- design project preparation funds to pull DFIs into the poorest countries

- improve the link between DFIs and other financiers such as sovereign wealth funds
- design pull and push incentives to promote DFIs in post-conflict situations and
- use DFIs to channel climate finance.

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## Endnotes, references and project information

### Endnotes:

- 1 The table of countries can be found in Te Velde (2011). The 26 countries are: Tonga, Maldives, Mauritania, Panama, Sierra Leone, Djibouti, Tunisia, Ghana, Madagascar, St Lucia, Jordan, Mozambique, Uganda, Zambia, Liberia, Lebanon, Kiribati, Democratic Republic of Congo, Cape Verde, Malawi, Fiji, Kenya, Swaziland, Bolivia, Gambia and Georgia.

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### Project Information:

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