



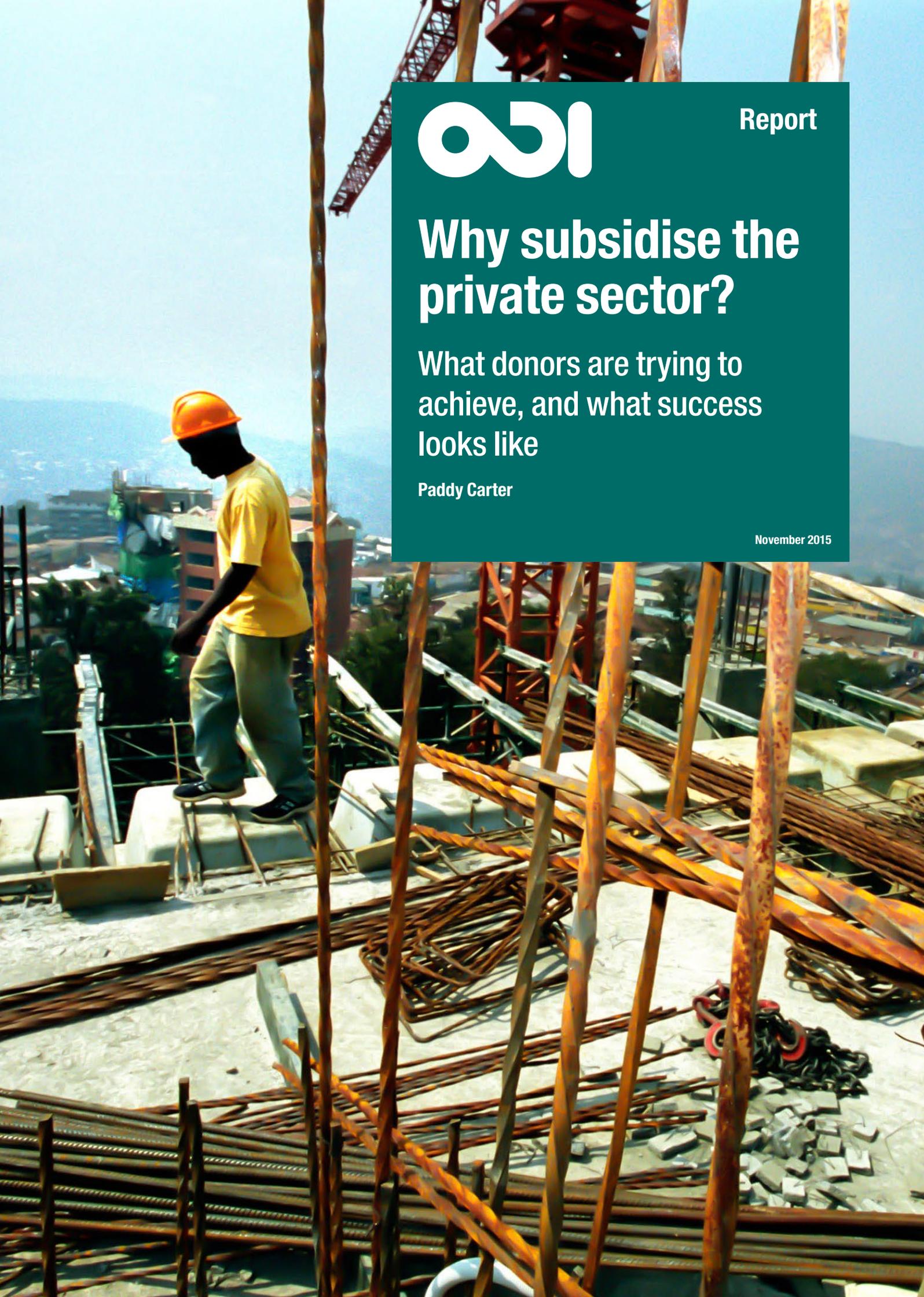
Report

# Why subsidise the private sector?

What donors are trying to achieve, and what success looks like

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# Key messages

- Subsidising private investment in developing countries is a legitimate use of aid when the benefits to society exceed private returns.
- Ideally only projects that genuinely require a subsidy to be viable would be subsidised, but some misallocation is inevitable.
- Many social benefits of investment emerge slowly and are hard to trace. Results evaluations can only provide a partial view.
- Using grants to lever-in private finance on market terms does not help close the financing gap when donors can already provide the same finance at the same cost to taxpayers.
- Subsidies should not be used to mobilise private finance for the sake of “getting from billions to trillions”. Investments should only be subsidised when there is a case grounded in public economics.
- Putting more money into investment funds will yield diminishing returns unless more is done to increase the supply of projects

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# Abbreviations

DAC	Development Assistance Committee
DCED	Donor Committee for Enterprise Development
DFI	Development Finance Institution
EIB	European Investment Bank
EU	European Union
EUBEC	Platform for Blending in External Cooperation
ICAI	Independent Commission for Aid Impact
IFC	International Finance Corporation
IMF	International Monetary Fund
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Public-private partnership
SDGs	Sustainable Development Goals
UNCTAD	United Nations Conference on Trade and Development
WEF	World Economic Forum

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# Executive summary

This paper makes a case for subsidising private sector investment in developing countries, based largely on the economic theory of positive externalities: the idea that the benefits from investment that accrue to society at large exceed the returns to private investors. The implication is that without public intervention there is too little investment, from society's point of view. The social benefits of investment not captured by private returns include: the creation of knowledge about production possibilities; the formation of economic networks and supply of intermediate inputs; and increased investments in human capital. The presumption should be that more investment in developing countries is a good thing, subject to the right safeguards, even if there is not always an obvious immediate link to poverty reduction. If donors have procedures in place to ensure that they do in fact have a positive impact on investment by (more often than not) subsidising projects that genuinely require a subsidy to be viable, then accelerating private investment in developing countries is a perfectly valid use of aid.

Because the benefits of investment are often indirect and only emerge over time, even the best impact evaluation exercise is likely to provide only a partial picture. There are mainstream economic arguments suggesting that the economy-wide benefits of investment are likely to be hard to trace, and empirical evidence will always be inconclusive because the challenges of econometric identification are insurmountable. But we should be especially cautious about results evaluation exercises if we believe that the economy is a complex adaptive system and, for example, investment may move the economy closer to an unknown tipping point. This mismatch between what results evaluation exercises can teach us and how the benefits of investment are likely to unfold does not imply that results evaluation exercises are useless, merely that their usefulness is limited.

Taken together, these arguments suggest that in the right circumstances donors should not be dissuaded by a lack of rigorous evidence that subsidising private investment has a direct impact on poverty reduction. The right circumstances are geographies and sectors where private investment is appropriate but demonstrably lacking.

Donor support for private investment has often come in for criticism. Eurodad, a network of 46 non-governmental organisations, has called for an immediate end to Official Development Assistance (ODA) being channelled through European-level blending mechanisms, and the UK's Independent Commission for Aid Impact (ICAI) gave the Department for International Development (DFID) an amber-red rating – the second worst – for its work with businesses. ICAI called for 'more strategic oversight of business engagement activities' and 'detailed operational plans with a clear focus on poverty reduction'. The arguments presented in this essay support a rather straightforward overarching strategy of accelerating private investment in those developing countries that most lack it, and also suggest that detailed planning to show how each investment will reduce poverty may be of relatively little value.

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These arguments support the recent pivot towards the private sector that most donors have performed in recent years, but there are more negative points to be made. First, basic supply and demand analysis tells us that if donors want to increase the quantity of private investment, they are not going to get very far by subsidising the supply side if there are not lots of investment projects demanding finance which are close to commercial viability. That prospect is hard to reconcile with perennial complaints that the real constraint on investment in developing countries is a lack of bankable projects. The implication is that donors should not push too much money into blending facilities or investment funds without also finding ways of increasing the creation of viable investment projects. Without movement on the demand side, cost-effectiveness can be expected to fall as more money is poured into supply-side subsidies because at the margin, the size of subsidy required to push projects over the threshold of commercial viability will rise.

Secondly, donor rhetoric around ‘blended finance’ or the idea of using a small amount of aid to ‘leverage’ large amounts of private finance is misleading, and donors’ motives may be misguided. The background motivation is that trillions of dollars of investment will be required to achieve the sustainable development goals (SDGs) – an order of magnitude larger than the global aid budget, and no more aid will be forthcoming – so aid must be used to increase the quantity of available development finance. Donors have coalesced around the objective of ‘turning billions into trillions’. But that is an argument about what is desirable, not about what is possible. If it costs as much to catalyse private finance as to provide the equivalent public finance, catalysing private finance does not help close the financing gap.

Claims of mobilising finance are misleading when the small amount of aid is a grant and the large amount of private finance is a loan (or other forms of finance that require returns). Donors are quite capable of offering loans without involving the private sector. According to data from the Organisation for Economic Co-operation and Development (OECD), developing countries received grants totalling \$133 bn in 2013 from all donors that report to the Development Assistance Committee (DAC). In principle these donors could instead offer concessional loans of many times that value, at the same net cost to their taxpayers. Donors could also inject capital into development banks who could then leverage their balance sheets. But, holding constant the cost to the taxpayer, these alternatives would not increase the size of the transfer from donor to recipient, nor would loans necessarily be preferable to grants, from the recipient’s perspective. Using a small public grant to ‘catalyse’ private finance can be just another way of creating a concessional loan, and the appearance of mobilising finance is an illusion.

Seen in this light, blended finance is something donors should support to the extent it make sense to subsidise private investment in developing countries, and its scale should be determined by the supply of investments worthy of subsidy. Blended finance is not a pump that donors can prime to increase the quantity of money available for funding the sustainable development goals, independently of locating investments where there is a public economics case for a subsidy.

The intention behind this paper is to contribute some novel ideas to the important debate about donor engagement with the private sector and draw attention to some old ideas that tend to be overlooked. There is much more to be said. In particular this paper avoids the question of how to allocate subsidies amongst alternative investment propositions, taking into account variation in expected poverty impact, and it discusses the limitations of results evaluation exercises, but it does not

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address the questions of what donors can learn from them and how. Another important question left for future research is which of the instruments available to donors have the greatest impact on investment, holding constant the cost to the taxpayer.

Even if one is prepared to believe, on the basis of economic theory, that accelerating investment is likely to have a positive impact on long-run poverty reduction via various channels that are likely to elude impact evaluation exercises, spending money in the absence of evidence is not a comfortable position to be in. It is particularly uncomfortable when the opportunity cost is spending less aid in traditional ways where the (intended) impact on poverty is easier to discern (even if this evidence, also, may often be too weak for comfort). The problem of how to allocate resources in the face of such fundamental uncertainty is beyond the scope of the present paper, which merely argues that subsidising the private sector deserves its place in the mix, alongside other development instruments.

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# 1 Introduction

The aid industry has a new mantra: Aid must be catalytic. It is not hard to understand why. An estimated \$2.5 trillion of additional annual investment will be required to achieve the sustainable development goals (SDGs), a sum that is an order of magnitude larger than the global aid budget.<sup>1</sup> Rather than just stand by and hope that private finance and domestic taxation will rise to the challenge, donors want to help make that happen. In the words of Angel Gurría and Erik Solheim, secretary-general of the Organisation for Economic Co-operation and Development (OECD) and chair of the OECD Development Assistance Committee (DAC) respectively, ‘the money being spent on aid today could have a substantially greater impact if it were used to mobilise domestic tax flows and private investment in aid-dependent countries’.

This paper is about just one aspect of that effort: using aid to subsidise private sector investment. This is an activity that attracts much controversy, and also accounts for an increasing proportion of donor budgets. Some of the strongest objections to donors’ private sector strategies come from civil society organisations, but eminent establishment economists share their concerns.<sup>2</sup> World Bank Chief Economist Kaushik Basu warns: ‘This partnership between the private and public is however fraught with risks, because it is like bringing two very different animals inside the arena. If the design of incentives and boundaries of action are not well-specified [it] can be a disaster ... remember, crony capitalism is also a form of public-private partnership’ (Basu, 2014).

Donor engagement with the private sector is not new, but direct participation in private investment projects has hitherto largely been a niche activity performed by specialist entities known as development finance institutions (DFIs).<sup>3</sup> More recently, a number of donors have announced a strategic pivot towards the private sector, and have stepped up bilateral involvement in private investment.<sup>4</sup> In the space of a few years, the UK’s Department for International Development (DFID) will have more than doubled its Private Sector Development budget, to £1.8 bn in 2015-16.<sup>5</sup>

Of course, not all of this activity involves providing subsidies, but subsidies are of such growing importance that the OECD DAC has set about revising the rules so that donor efforts are better reflected in Official Development Assistance (ODA) statistics.<sup>6</sup> A recent report by the European Court of Auditors described blended finance – a term that the European Union (EU) uses to describe combining aid grants

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<sup>1</sup> The \$2.5 tn figure comes from the United Nations Conference on Trade and Development (UNCTAD) World Investment Report 2014.

<sup>2</sup> Negative assessments by civil society include Oxfam (2015), Romero (2015) and Eurodad (2014).

<sup>3</sup> The oldest of these, the UK’s CDC, was founded in 1948, and the largest, the World Bank’s International Finance Corporation (IFC), was founded in 1956. The IFC established a Blended Finance Unit in 2008.

<sup>4</sup> For example, in 2010 the Netherlands announced a shift from the social sectors towards economic opportunities for private initiatives (NMFA, 2010). Former USAID administrator Rajiv Shah called partnering with the private sector a ‘new model of development’ that now accounts for 40% of USAID programming and is expected to grow (Remarks at the Wilson Centre Public-Private partnerships in aid).. In 2014 the Australian government announced a new aid strategy that places the emphasis on growth, including efforts to stimulate private sector investment (DFAT, 2014).

<sup>5</sup> DFID Improvement Plan 2014

<sup>6</sup> OECD statistics in a post-2015 world: Outcomes of the 2014 OECD DAC High Level Meeting.

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with other forms of finance – as ‘the next big thing in EU development policy funding’.<sup>7</sup>

Data on the use of subsidies for private investment are hard to find – DFIs tend not to explicitly report the value of subsidies associated with their investments – and it may be that the hype has run ahead of the reality, for the time being at least.<sup>8</sup> For example, between 2007 and 2013 just EUR 270 million of grants from EU blending facilities were allocated to projects involving the private sector (EUBEC, 2014). Nonetheless, subsidies for private investment are widely expected to play a larger role in post-2015 development cooperation. This was very evident at this year’s Third International Conference on Development Finance in Addis Ababa, and has been part of the mainstream donor narrative for some years now.<sup>9</sup>

Amid such controversy, and the potential reallocation of scarce donor funds towards providing subsidies, it would seem timely to revisit the basic economics of subsidising the private sector. This paper asks what donors are trying to achieve, and why; what success looks like; and what determines whether donors are likely to be successful. Much has already been written on these questions, and the intention here is to contribute some more novel ideas, or at least draw attention to some old ideas that tend to be overlooked. The result is a somewhat eclectic argument that goes where (some of) the gaps are, rather than providing a thorough and systematic treatment of the subject.

## 1.1 The concise case for subsidies

In this context, one way of seeing the purpose of a subsidy is to enable the production of something that costs more than people are willing to pay for it.<sup>10</sup> Governments around the world subsidise rural bus services because bus operators cannot make enough money from ticket sales on rural routes to turn a profit. However, usually when something costs more than people are willing to pay for it, it does not get produced. This is why Marks and Spencer does not stock diamond-studded socks. So in addition to identifying projects that are genuinely not commercially viable, governments must also identify a genuine justification for helping the producer turn a profit. The theory of public economics provides plenty of potential justifications for subsidies, on two grounds: equity and efficiency.

Providing rural bus services can be seen as redistribution in kind, rather than via income. Economics is supposed to be about giving people what they want, and if society agrees that rural bus services should be provided, that can be justification

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<sup>7</sup> See also ‘Juncker plan is not new: How the EU fell in love with “blending”’. EU Observer January 2015, in which EU development commissioner, Neven Mimica is quoted as saying of an EU Foreign Affairs Council meeting: ‘Ministers were quite vocal on enhancing private investments and contributions to development goals’. And ‘EU Development Cooperation. Welcome to the blending era’ (Afronline, 2014), which refers to blending as a silent but irreversible revolution.

<sup>8</sup> Two methods for estimating the subsidies provided by DFIs are presented in Schreiner and Yaron (2001). To our knowledge, recent estimates using these methods do not exist.

<sup>9</sup> Enthusiasm for subsidising the private sector is perhaps not obvious from the text of the Addis Ababa Action Agenda, which merely states (paragraph 54) ‘An important use of international public finance, including ODA, is to catalyse additional resource mobilization from other sources [...] to unlock additional finance through blended or pooled financing and risk mitigation, notably for infrastructure and other investments that support private sector development’. That wording reflected reservations on the part of developing countries but understates the change of direction at Addis, summarised by a UN analyst as: ‘The message brought by Western negotiators to Addis was the end of expanding volumes of ODA ... the future would see more of what used to be aid-funded development ... financed instead in combination with private, for-profit funds in “blended” arrangements’. (FUNDS, 2015). Two blended finance initiatives were announced in Addis: the Sustainable Development Investment Partnership (SDIP) and Convergence, a virtual platform for deal-making.

<sup>10</sup> This paper is about public subsidies for private investment projects in developing countries. In the case of a discrete investment project, a subsidy can have a binary, yes-or-no, impact on the production decision. More generally, subsidies change prices of goods and services and thus quantities produced and purchased.

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enough. Subsidies can increase economic efficiency in the presence of market failures – a set of reasons why markets might not operate efficiently, or might even fail to exist. One could think of market failure arguments that apply to rural transportation (perhaps based on access to labour markets).

To induce private investment, a subsidy must do more than enable a project to break even. It must offer sufficient returns to attract investors who have other places they could put their money. To vastly simplify matters, we can think of investors evaluating returns by looking at two metrics: how much money the project will make if successful, and the probability of it being successful. Seen in that light, a subsidy may address either insufficient returns or excessive risk.<sup>11</sup> In both cases, governments should attempt to calibrate the subsidy so that it delivers the minimum uplift needed (to expected risk-adjusted returns) to induce investment without conferring economic rents (excess profits) on investors.

When the relevant government agency has established a case for using subsidies, it must select which investors to support, gauge the appropriate instrument and level of support, and monitor results. Crucially, governments, civil society, and everybody else with a stake in development, needs to know what success looks like.

Nothing yet says that the private sector needs to be involved: governments are quite capable of running loss-making bus services themselves, subsidised by general taxation. So part of the required justification for subsidising private investment concerns the involvement of the private sector investor in the first place.

The questions implicitly raised by these few paragraphs will be addressed in the main body of this paper. The remainder of this introductory section briefly discusses why donors are so keen on mobilising private finance, why investment matters, and what is meant by a subsidy.

## 1.2 The concise case for mobilising private finance

There are two reasons why donors (or the public sector more generally) might not want to finance the entirety of an investment, choosing to mobilise private investment instead.

Donors have coalesced around the idea of getting ‘from billions to trillions’.<sup>12</sup> The incredibly ambitious SDGs have estimated financing requirements that far outstrip the global aid budget, and nobody expects that aid budget to go anywhere fast. The global aid budget is not only constrained in terms of the size of the transfer rich countries want to give to poor countries; some donors may also face institutional constraints on gross borrowing to funded lending and may be attracted to ‘off balance sheet’ vehicles for development finance. Domestic resources are also constrained in most developing countries, and public borrowing capacity is low. So this is one motivation for mobilising private finance: to fund investments without burdening public budgets.

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<sup>11</sup> Properly speaking, risk refers to the variability of returns, not the ‘probability of success’. For citizens in donor countries, risk mitigation has unpleasant associations with ‘socialising losses, privatising profit’ and bailing out banks during the financial crisis. The difference is that OECD citizens did not choose to insure their banks against the risks of making highly leveraged bets at no benefit to society. Subsidised guarantees should only be offered when excessive risk is preventing the production of something socially desirable. Some of issues raised by bailing out banks do apply in development contexts, such as moral hazard (the effect that insurance has on behaviour). See Barder and Talbot (2015) for insightful discussion.

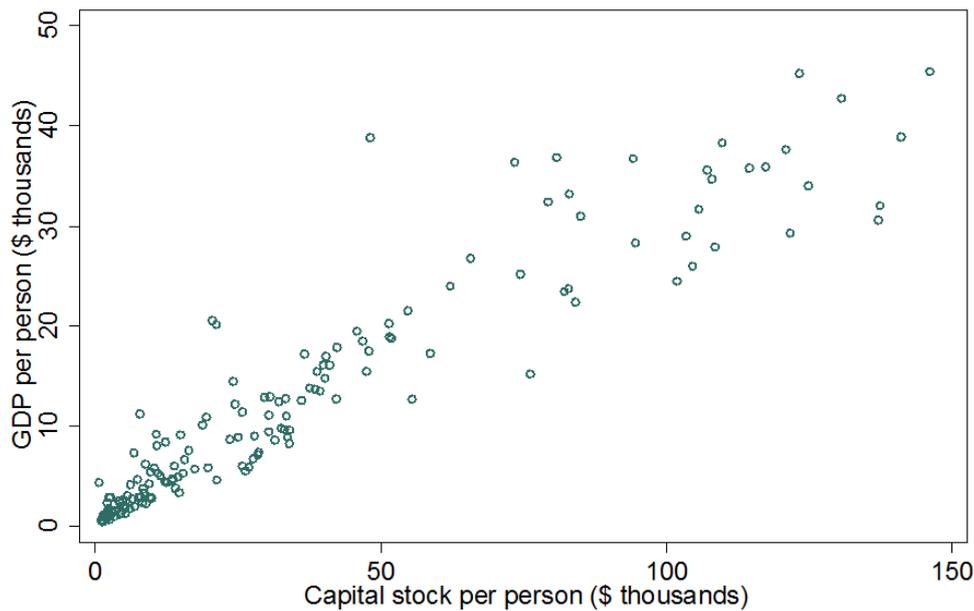
<sup>12</sup> See ‘From billions to trillions: transforming development finance. Post-2015 financing for development’ published by The Development Committee of the World Bank and IMF.

But there is a second motivation: the idea that private investment brings with it desirable attributes such as management expertise. The deeper justification is less about attributes of private sector actors per se, and more about dynamic efficiency and the nature of the environment in which they operate. There are arguments that private actors in a competitive environment are more likely than publicly owned and run investments to deliver economic growth through a process resembling adaption and natural selection. If advocates for subsidising private investment invoke these arguments, then it is important to question whether doing so may interfere with these dynamics.

### 1.3 The concise case for investment

Subsidies for private investment are there to increase the rate of capital accumulation in developing countries (physical and human capital). In the long run, eradicating poverty boils down to raising labour productivity, because people cannot consume more than their economy can produce. Investment raises productivity.<sup>13</sup> In other words, capital accumulation raises real wages and reduces poverty: the evidence is overwhelming.<sup>14</sup> Figure 1 shows the relationship between the estimated accumulated capital stock and income per capita across countries. This is not a surprising relationship – it merely confirms in the data what we can see out of our windows.

**Figure 1: Capital accumulations is the path out of poverty**



Accepting the importance of capital accumulation does not require accepting a mechanistic ‘production function’ theory of growth that ignores questions of allocation. Economists have long distinguished between ultimate and proximate causes: investment is a proximate cause of growth. It may be true that growth is really

<sup>13</sup> This is not to deny the importance of ‘getting institutions right’ or technological progress, but both of these can be expected to result in (and effect poverty via) capital investments. Capital accumulation is a proximate cause of wage increases, not the root cause. It is also not to deny the importance of redistribution.

<sup>14</sup> De Long and Summers (1993) show how important equipment investment is in developing countries. Of course, what is true on average does not always hold, and growth is not always pro-poor, although as Dollar et al. (2013) show, it usually is.

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the result of contestability, experimentation and adaption, or that the ultimate causes of growth operate at the political and institutional levels. However growth is conceived, those processes invariably manifest themselves through investment, and causation will often flow in both directions.

Recognising the link between investment and wages does not imply wages will necessarily rise immediately in the sector experiencing investment. Productivity increases in a sector can sometimes even see employment and wages fall, but real wages may rise across the rest of the economy as prices fall. Or wages may only rise slowly as labour is reallocated across sectors. The effects of investment may also reach beyond the sector in question: labour markets are integrated (to varying degrees) so wage increases in one location or industry may drive up wages elsewhere.

However, none of this yet justifies subsidies for investment, because in the absence of market failures, private and social returns are aligned, and therefore the market should deliver the socially optimal quantity of investment. That is where the theory of public economics comes in.

## 1.4 What subsidies?

The word ‘subsidy’ is rarely used by donors in the context of catalysing private finance, probably a reflection of perceived negative connotations. Instead aid organisations prefer phrases such as ‘blended finance’ and ‘smart levers’ (OECD, 2014).<sup>15</sup> The extent to which donors subsidise private investment varies tremendously across organisations and different funds within organisations. Some DFIs do not provide explicit subsidies, although they may, for example, invest more in project preparation or provide more ‘patient’ capital than commercial investors would.

In this paper, any intervention by a public development agency, at the project level, that has the effect of raising expected risk-adjusted returns for private investors will be thought of as a subsidy.<sup>16</sup> Subsidies may be implicit, such as the ‘stamp of approval’ that the participation of a DFI can confer on a project, which reduces the need for costly due diligence by private investors. Some subsidies have a straightforward financial valuation – such as an interest rate discount – but implicit subsidies can be thought of as having a cash equivalent value: there is some sum of money that the private investor would have been willing to pay for them.

The European Investment Bank (EIB) is one of the few DFIs with a mandate to unilaterally offer subsidised interest rates on the basis that subsidies ‘boost the economic and financial soundness of projects offering substantial environmental or social impacts’ (EIB, 2014). But concessional loans are not the only financial instrument donors have at their disposal. Another way of providing a subsidy is by tolerating returns on equity that are below those a private investor would expect – for example, the Private Infrastructure Development Group (PIDG), a multi-donor facility for mobilising private investment in developing countries, expects two of its

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<sup>15</sup> OECD (2014) writes about how ODA can ‘leverage private finance for development by sharing risk and reducing any costs involved,’ and ‘help build the confidence of potential private investors in situations that might otherwise seem too costly and/or too risky’ and investments in projects that do not ‘generate high enough returns’ – without using the word *subsidy*. The IFC Blended Finance Unit is one of the few organisations to use the word *subsidy*. See their brochure [Blended Finance at IFC](#).

<sup>16</sup> The qualification ‘at project level’ rules out, for example, legal and macroeconomic reforms designed to improve the investment climate and encourage private investment. There are many things government and donors can do to stimulate private investment – this paper concerns only a small subset of them.

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funds to make continuing losses on their most developmental investments (NAO, 2014). Subsidies can also be attached to output indicators, a practice that is promoted by the Global Partnership on Output-Based Aid (GPOBA), a multi-donor trust fund for explicit performance-based user fee subsidies in the delivery of basic services.

Even where finance is offered on market terms, DFIs – because they may enjoy a lower cost of capital and other advantages over private sector actors whilst charging the same rates as private financiers – may be able to do things like spend more money on project development and evaluation before agreeing to participate in a project. Private co-investors can ‘free ride’ on that, creating an implicit subsidy. One way of providing a subsidy is by offering products or services, such as technical assistance, for free or at a discount to market rates, but it is not always clear when this is happening. For example, the World Bank’s Multilateral Investment Guarantee Agency (MIGA) offers political risk insurance, but there is not always a market comparator to determine whether the fees they charge imply a subsidy.

In a paper about how the European Bank for Reconstruction and Development uses blended finance and subsidies, economists Buiters and Schankerman (2002) argue that donors and DFIs may undercut the returns demanded by private sector financiers without that constituting a subsidy, if and when the returns they require (price they charge) exceeds the incremental cost of provision (evaluated against the opportunity cost of funds) and when the price being charged by the private sector is excessive, for whatever reason. This line of reasoning explains why many development banks and DFIs regard themselves as not offering subsidies, despite sometimes providing finance and services more cheaply than private comparators in developing countries where local capital markets are thin and uncompetitive. Donors and DFIs may also play a useful role by offering more long-term finance, widely seen as in short supply (World Bank, 2015), without that necessarily constituting a subsidy.

The purpose of this short section has been to fix some ideas before proceeding; much more thorough surveys of the nature and use of subsidies for promoting private sector investment are provided by te Velde and Warner (2007) and Miller (2013).

### **Blended Finance**

The term blended finance sometimes refers to one part of the public sector (a donor providing a grant) acting in concert with another part of the public sector (a DFI providing finance on market terms) to create a concessional financing package. The majority of grants dispersed through EU Blending Facilities are of this public–public nature. This is an important innovation in the sense that it gets around real organisational constraints, but in another sense there is not much of economic interest happening – from a consolidated point of view, this is simply the public sector offering concessional finance.

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Governments could rearrange things to allow a single entity to do that, rendering this variety of blending unnecessary. This paper is solely concerned with the public sector blending with the private.

The EU defines blended finance as the combination of ‘EU grants with loans or equity from public and private financiers’. The World Economic Forum (WEF) uses a broader definition: ‘the strategic use of development finance and philanthropic funds to mobilise private capital flows to emerging and frontier markets’. That includes things like building local capacity and shaping policy and regulatory reform, which fall outside the narrow definition of subsidy used in this paper. But the blended financing tools presented in WEF (2015) all serve to shift ‘the investment risk–return profile with flexible capital and favourable terms’ which is more or less synonymous with the definition of a subsidy used in this paper.

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# 2 Lessons from the theory of Public Economics

Economists have a reputation for extolling the virtues of free markets and minimal government, but economics actually has a long history of justifying government interventions in markets.<sup>17</sup> One of the seminal texts is Arthur Pigou's *The Economics of Welfare*, published in 1920, which is best known as the first systematic study of market failures as well as for its treatment of public policies (taxes and subsidies) designed to remedy these failings and maximise economic welfare. There are two fundamental welfare-based justifications for intervening in markets: efficiency and equity.

The intention behind this section is to plunder the wealth of the theory of public economics for anything relevant to the debate around subsidising private investment, focusing on ideas that may be less well known in the development community.

## 2.1 Maximising social welfare

Most justifications for subsidising private investment invoke market failures, for example Miller (2013) and WEF (2015).<sup>18</sup> But even if all market failures were corrected, society might still find the outcome unsatisfactory and want the government to intervene to change it. Market failures are about efficiency, but social welfare is also concerned with distribution (equity).<sup>19</sup> Suppose, for example, that the price of education is subsidised to reflect the benefits that one person's education has on society at large, thereby correcting a market failure known as an 'externality', but thereafter provision is left to the market. Some poor families may (efficiently) choose not to purchase an education, simply because they have other priorities. Society might regard that outcome as undesirable.

This is mostly standard economics (known proverbially as 'Econ 101'), although welfare economics does sometimes stray into contentious territory. It is hard to evaluate social outcomes without making what economists call 'interpersonal comparisons of utility'. There is no settled view on how to do that.<sup>20</sup> For present purposes it suffices to say that orthodox economic theory allows for public

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<sup>17</sup> See Fourcade et al. (2015) for some evidence of how economists are perceived.

<sup>18</sup> Buiter and Schankerman (2002) is one of the few papers to invoke both market failures and equity concerns, stating: 'subsidies should be used to correct market failure or institutional failure, or to pursue distributional objectives'

<sup>19</sup> Although not put in terms of social welfare, Rogerson et al. (2014) cite 'inclusive and sustainable growth' as a rationale for donor support of social enterprise. This brings in distributional concerns.

<sup>20</sup> Binmore (2007) observes: 'There are at least as many views on how the welfare of individuals should be compared as there are authors who write on the subject'.

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intervention in markets justified by distributional concerns, not only in the presence of market failure. The following section attempts to summarise the key elements of economic theory upon which this argument rests.

In the rarefied world of economic theory, market allocations are efficient in the absence of market failures, in the sense that all potential for mutual gain (more precisely: where at least one person benefits but nobody is made worse off) has been exhausted, with the result that the only way to make some people better off is to make others worse off (this is known as Pareto efficiency). But whilst it is self-evidently desirable to ensure that all such opportunities for gain are exploited, Pareto efficiency is not otherwise a useful yardstick for evaluating outcomes, because there is an infinity of Pareto-efficient outcomes, many of which will be patently unfair.<sup>21</sup> Markets might be efficient, but they cannot do much about iniquitous initial endowments, which is economics jargon for some people being born rich and others poor (and some people having marketable skills). The same economic theory which tells us that markets are efficient, under idealised conditions, also tells us that any desired Pareto-efficient outcome can be achieved by the appropriate redistribution of initial endowments. Before getting to the problem of how to implement redistribution, how can society decide which outcomes are better than others?

Welfare economics makes use of a concept called a *social welfare function*, which ranks all possible social outcomes in order of preference. This device assumes that either interpersonal comparisons of utility can be made or a mechanism (such as voting) exists that aggregates the preferences of individuals in order to evaluate outcomes without requiring such interpersonal comparisons.<sup>22</sup> Orthodox economics has little to say about the content of social welfare functions (whether we really do want rural bus services or not) because economists do not claim to know what people's preferences look like, beyond what can be deduced from observing behaviour, and that means social welfare functions can only be roughly gleaned from the highly imperfect evidence of voting behaviour and opinion polls.<sup>23</sup> Hence this justification for public expenditure must be wielded with great care, because in theory society could want anything, such as a splendid presidential palace.

A potentially useful economic concept in this context is a *merit good* (Musgrave, 1959). These are goods that society desires to be allocated on the basis of need, not willingness to pay.<sup>24</sup> Returning to the example of education, where for the sake of argument we suppose that even in the absence of market failures some families might choose not to purchase an education, we can think of education as a merit good if society judges that every child ought to receive an education, regardless of willingness to pay. The same might be said of health care, access to water, and other basic services. In simple economic models, desired social outcomes can be achieved by the redistribution of initial endowments, but in a more realistic setting income redistribution may be constrained by efficiency concerns or politics,

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<sup>21</sup> An entertaining illustration of this point is Piccione and Rubinstein (2007).

<sup>22</sup> Arrow (1950) famously proved the impossibility of a fair voting system to produce such a ranking of social outcomes.

<sup>23</sup> In practice, analysts sometimes adopt a very simple social welfare function based on a consumption bundle, the assumption of diminishing marginal utility of consumption, and utilitarian aggregation (simply adding up everybody's utility), in order to reach some indicative, much-caveated, conclusions.

<sup>24</sup> Merit goods are perhaps a rather peripheral concept in contemporary economics, which likes 'micro founded' explanations for everything. It is not clear why, in the absence of market failure, society ought to overrule somebody's decision not to buy something, and impose social preferences over individual preferences, unless individuals are somehow misinformed or mistaken. One explanation is that the concept is really the expression of an underlying social preference for redistribution.

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meaning that redistribution may sometimes need to be achieved in kind, through the provision of goods and services.<sup>25</sup> Again, nothing here says that the goods or services in question need to be provided by the private sector.

The concepts of social welfare functions and merit goods provide a basis for redistributive policies within an economy, but there is also an international dimension. Citizens of rich countries may want everybody in the world to have access to a basic set of goods and services – as envisaged by the social compact that the world’s governments endorsed this year in Addis Ababa – and, with the qualification that their assistance must be welcomed by the recipients, this provides a justification for aid policies that aim to deliver those goods.

## 2.2 Market failures

As Miller (2013) observes: ‘Donors tend to justify subsidies to the private sector by invoking the classical market failure argument – that the free market is failing to allocate goods and services at a level that would be socially optimal’. One of these classical market failures is an *externality*, which refers to ‘indirect effects of consumption or production activity, that is, effects on agents other than the originator of such activity which do not work through the price system’ (Laffont, 2015). A classic example of an externality is carbon emissions, where the environmental cost is not reflected in prices, with the result that too much carbon is emitted. One of the major uses of public subsidies for private investment in contemporary development cooperation is to promote the adoption of sustainable energy in developing countries.

This section will review a selection of externality and coordination failure arguments that may justify subsidising private investment. There are also potential asymmetric information justifications for subsidies, although the picture there is a little more clouded. Other variants of market failure – public goods for example – more often provide reasons for governments to do things instead of private actors, not reasons for subsidising the private sector. Government failures, some of which may provide justification for refraining from doing so, will be touched on in following sections.

A fundamental source of positive externalities to investment, so basic that it is easy to overlook, is job creation in the presence of involuntary unemployment. The theoretical result that investment will be optimal in the absence of market failures is derived from models where resources are fully utilised, which is unlikely to be the case in developing countries. Investment can have a multiplier effect on job creation throughout the supply chain, outside the invested firm. Hence the private returns to investment will not reflect the social returns of job creation, to the extent that job creation reduces unemployment, with the result that investment will be too low. Equity considerations are also relevant here.

Rodrik (2008) lists many other sources of positive externalities, including: externalities arising from ‘learning by doing’ that raise economy-wide productivity; the effect capital accumulation has on economy-wide investments in human capital; and the public good of experimentation (learning about production possibilities: the costs of and demand for new activities). Rodrik notes ‘the policy implications ... can be quite unconventional, requiring the crowding-in of private investment through

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<sup>25</sup> A large body of economic theory and empirical research is concerned with the problems involved in implementing redistribution, including the effects that being taxed and receiving benefits have on economic behaviour, and aligning the costs of public provision with the benefits. Such questions are vital but beyond the scope of the present paper. In the context of international development cooperation we may be forgiven for assuming that costs of raising public funds in rich countries are safely beneath the benefits of spending them in poor countries, with some provisos about misappropriation by elites.

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subsidisation'. Some of these are models with 'poverty-trap' characteristics where poverty is self-reinforcing, meaning that outside impetus for capital accumulation may be required to escape poverty.<sup>26</sup>

There are also potential political and institutional externalities. One of the critiques of the theory that good institutions are the root cause of development is the idea that causation runs in the other direction. If so, capital accumulation and growth can spur institutional development, and because that would not be captured in private returns, without subsidies investment would be sub-optimal. Using firm-level data from Vietnam, Bai et al. (2013) find that economic growth lowers corruption. These arguments are not lost on DFIs. International Finance Corporation (IFC, 2011) describes a virtuous circle in which growth raises government revenues, the government raises investments in social sectors, human capital is accumulated, governance improves ... and round again.

Rodrik (2008) also lists possible sources of coordination failure. These ideas go back to at least Rosenstein-Rodan (1943) and suggest an approach to development known as a 'big push' based on the supposition that a number of things have to happen at once for development to succeed, and that left to its own devices the private sector struggles to get the ball rolling. The obvious retort is that governments are not as good at coordinating development as they imagine (Easterly, 2006). This is not the place to get into the debate about active industrial policy. However, there is strong evidence that agglomeration effects exist (development clusters that exhibit self-reinforcing dynamics) and that historically subsidies to encourage these can have lasting effects (Kline and Moretti, 2014). Without assuming omniscience on the part of economic planners, nor that success will always follow, there is a case for donors to support the provision of some basic ingredients, like infrastructure, and firms that provide support services and other links in supply chains.

Jones (2011) suggests that the huge disparity in productivity between rich and poor countries can be explained by complementarities between intermediate inputs that are absent in poor countries. As he puts it: 'Low productivity in electric power generation – for example because of theft, inferior technology, or misallocation – makes electricity more costly, which reduces output in banking and construction. But this in turn makes it harder to finance and build new dams and therefore further hinders electric power generation'. This provides a justification for subsidies, but also a reason not to expect too much from them. Jones concludes that subsidies or reforms that 'address a subset of an economy's distortions may have relatively small effects on output. If a chain has a number of weak links, fixing one or two of them will not change the overall strength of the chain'.

A widely accepted idea in the economics literature, which may be less well known in development circles, is that one reason why poor countries remain poor is that they face a relatively high price of capital goods (Hsieh and Klenow, 2007). The intuition is simply that when each unit of investment requires a greater sacrifice in terms of forgone consumption goods, people will choose to invest less. When the local relative price of capital is accounted for, some estimates suggest that the marginal product of capital is roughly the same in rich and poor countries alike (Caselli and Feyrer, 2007) which superficially may look like an argument against expecting foreign aid to raise investment and stimulate growth.<sup>27</sup> However, in a paper that deserves to better

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<sup>26</sup> However, there is not much empirical evidence that poverty traps operate at the macroeconomic level. See Kraay and McKenzie (2014).

<sup>27</sup> The idea here is that capital will flow to where returns are greatest. When aid is given to a developing country we might expect it to be invested there if returns are relatively high, otherwise we might expect it to flow out of the country again. This is on the assumption that there are diminishing returns to investment so that investing aid in a

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known, De Long (1997) argues that the relative price of equipment could be endogenous to the level of development. That suggests that donors could subsidise investment in hope of generating a self-reinforcing dynamic in which the relative price of capital falls, spurring investment and growth.

Most economists would probably cite asymmetric information as the primary market failure that explains why worthwhile investment projects do not get funded. The idea here is that borrowers cannot credibly signal the quality of their projects, which increases perceived risks, which increases the interest rate charged, which may further mean that higher quality borrowers drop out leaving only opportunists, further exacerbating the problem. But it is less easy to construct a justification for public subsidies on the basis of asymmetric information, in part because the theoretical consequences are ambiguous. It can lead to credit rationing – Stiglitz and Weiss (1981) – but also sometimes oversupply – De Meza and Webb (1987). However, in cases where credit supply is too low, one could argue that simply by accepting lower returns, on average, donors can cause more projects to be funded, which could move society closer to the optimal, if asymmetric information is the dominant reasons projects are not getting funded (as opposed to low project quality). Also the subsidy might consist of investments in project evaluation, provided for free or at a discount, which is the ‘stamp of approval’ mechanism by which DFIs may stimulate investment even when requiring market returns on loans or equity. These arguments may acquire greater force in the context of micro and small enterprises (not the main focus of this paper) where information problems and credit constraints are thought to be particularly severe. There is some evidence that offering grants to entrepreneurs, allocated on the strength of their business plans, can produce remarkably durable positive effects (McKenzie, 2015).

Though not an exhaustive list, these are some of the more relevant potential reasons to subsidise private investment. There is a common theme. The beneficial effects of subsidies operate at an economy-wide or at least regional level and may take a considerable time to emerge. The broader outcomes we seek may not be visible by inspecting the outcome of the project that has been subsidised or the impact on the local economy.

### 2.3 Why the private sector?

In the context of large investment projects, where there is a case for public subsidy either on welfare or efficiency grounds, it is not often obvious that private sector provision is preferable to public sector provision. The decision to pursue private provision must be justified on efficiency grounds.

Much of the debate around the relative efficiency of public versus private provision takes place in the context of regulated natural monopolies, such as utilities. The evidence here is mixed, and much depends on context.<sup>28</sup> A particularly controversial model is a public–private partnership, where the government enters into a long-run contractual relationship with a private company to provide a service, such as running a port. The port is privately financed and operated. The basic idea here is that under conventional public procurement, when the government pays for the construction of a state owned and run port, the contractor has an incentive to maximise profits by skimping on quality and agreeing specifications that it knows will need revising with

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developing country would push returns beneath those available elsewhere. These ideas are consistent with the observation that developing countries are often net creditors to advanced economies.

<sup>28</sup> See for example: Kumbhakar and Hjalmarsson (1998), Shirley and Walsh (2001), Estache and Rossi (2002) and Parker and Kirkpatrick (2005).

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costly associated fees. Whereas if the private contractor must also own and operate the port, and meet contracted standards for service delivery, it has an incentive to build a better port to maximise its subsequent profits (Iossa and Martimort, 2015). The empirical evidence is again mixed, and success tends to hinge on the complexity of the service in question, and on whether contracting difficulties outweigh the potential efficiency gains from altered incentives.

From a more general economy-wide perspective, the strengths of the private sector are not a matter of intrinsic efficiency but stem from the incentives created by competitive markets and the profit motive.<sup>29</sup> Competition breeds experimentation and selection; hence the private sector may be quicker to adapt and evolve than the public sector. There are also arguments about the nature of information, and about how prices synthesise dispersed information about demands and costs.<sup>30</sup> These arguments suggest that markets will often allocate resources more efficiently than centralised government, from both a static and a dynamic perspective. This is important in the context of raising productivity, which is a matter of efficient capital allocation, not just aggregate capital accumulation.<sup>31</sup>

There are also arguments about efficiency within firms. Public sector production may be less efficient because it involves ‘soft budget constraints’.<sup>32</sup> To survive, a loss-making private firm must either raise revenues or cut costs. That is a hard budget constraint. A public sector producer can always ask for more money from the government, which may be reluctant to see jobs cut or failures confronted. Recall that in the long run real wages are a function of productivity, so incentives to raise efficiency matter a great deal in the quest to eradicate poverty.

This short section has barely scratched the surface of the debate about the respective economic roles of private and public actors, and it has not touched upon reasons why private provision may sometimes be inefficient.<sup>33</sup> Its purpose has been to briefly reprise some potential reasons why private sector investment may be preferred to public sector investment. Most of the justifications for promoting the private sector emanating from donors and DFIs tend to emphasise the importance of job creation and the fact that the private sector often accounts for the majority of a country’s jobs (see IFC (2013) for an example) without always tackling the question: why not promote public sector job creation over private?

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<sup>29</sup> Kay (2003) is an excellent non-technical discussion of the merits (and failings) of markets. Robert Solow’s [review](#) in the *New Republic* of John Cassidy’s book *How Markets Fail* contains a tremendous concise analysis of markets and market failures. Theoretical economic analysis of the relative merits of markets versus governments can be found in Acemoglu, Golosov and Tsyvinski (2008a) and references therein.

<sup>30</sup> Although perhaps a rather unconventional reference, Spufford (2011) is a superb exposition on the role of prices and of incentives in a non-market system.

<sup>31</sup> There is a large body of research into capital misallocation and its role in explaining the wealth or poverty of nations. See Hopenhayn (2014) for a survey.

<sup>32</sup> See Kornai et al. (2003)

<sup>33</sup> Acemoglu et al. (2008b) show how commercial incentives may lead to wasteful signalling behaviour in sectors such as health and education, for example.

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# 3 The theory of subsidising projects

Why should we expect judicious dollops of donor money to have a large impact on private investment? Donors who are taking resource allocation decisions – choosing how much money to spend on subsidies for the private sector – must think in terms of magnitude. If it costs too much to have much of an impact on private investment then that money may be better spent elsewhere (including on alternative ways of encouraging private investment, other than subsidies). Existing research in the context of investment in developing countries has little to say on what determines the magnitude of the impact of subsidies, so this section starts with some very basic supply and demand analysis of when we should expect small subsidies to have large impacts on the quantity of investment. The section concludes with a short survey of what economic theory does have to say about subsidies for private investment.

Although the ultimate aim of aid is to raise welfare, in this section we take for granted that increasing investment would be welfare improving and adopt the intermediate objective of increasing the quantity of investment. We also implicitly assume that public budgets are constrained and therefore donors want to have as large an impact as possible because they cannot achieve their objectives by increasing spending.

## 3.1 Some simple supply and demand analysis

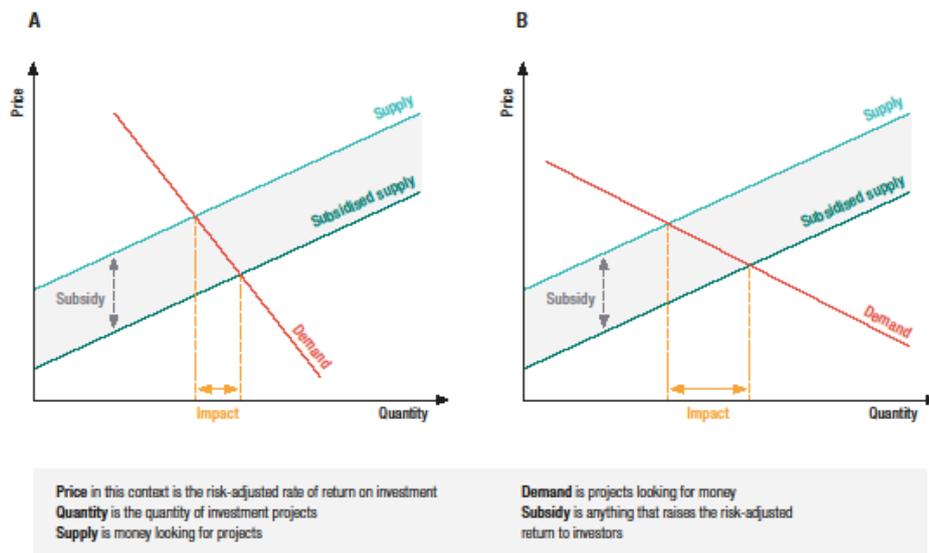
Ask an economist when a subsidy can be expected to have a large impact on quantity and he or she will start talking about the slope of supply and demand curves. Steep curves mean it takes lots of movement in the price dimension to get anywhere in the quantity dimension. In this context we could think of the two sides of the market as money looking for projects (supply of finance) and projects looking for money (demand for finance), and the price as the expected risk-adjusted return on investment. A subsidy shifts the money supply curve downwards (because investors receive the underlying project return plus the subsidy).

In principle at least, if the risk-adjusted returns on offer in developing economies exceed those available on the global market even slightly, money should pour in (implying a very shallow supply curve). In practice there are likely to be frictions that constrain the supply of finance in the developing markets where donors are operating. Nonetheless, it is probably safe to assume that the supply curve is relatively shallow and that a small increase in returns would be met with a large increase in the supply of the problem is more likely to lie on the demand curve.<sup>34</sup>

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<sup>34</sup> If the supply curve is steep, that would make subsidies even less effective.

**Figure 2: The impact of a subsidy depends on the slope of the demand curve.**



This simple analysis tells us two things. First, as illustrated by Figure 2, any claim that blended finance will leverage large quantities of private investment is equivalent to a claim that the demand curve is shallow – that each incremental reduction in required returns will push a large number of projects over the threshold of commercial viability. This notion does not sit well with the common observation that the real constraint on investment is a lack of bankable projects.<sup>35</sup>

The need for action on the demand side is widely acknowledged, and there has been a spate of new project preparation facilities announced by development banks. The recent Addis Ababa Action Accord calls for a new Global Infrastructure Forum to coordinate these efforts. Supply and demand analysis reminds us that unless these efforts are successful, stimulating investment via a supply-side subsidy will be pushing on a string (to borrow a phrase from John Maynard Keynes). This observation has implications about sequencing. Investments to accelerate project planning and preparation are likely to bear fruit over time, whereas blended finance facilities can be set up relatively quickly. That suggests that donors should be careful not to push too hard on the supply side before the demand side starts to pull.

Secondly, this analysis shows us that without an accompanying shift on the demand side, further increases in the quantity of investment will require larger subsidies, worsening the cost–benefit picture. This also tells us something about the plausibility of high leverage ratios (how much private investment is mobilised for every dollar of subsidy). There may be a few projects that only require a soupçon of subsidy to become commercially viable, but, because demand curves slope down, the subsidy must rise to increase the quantity of investment demanded. Thus as the number of co-invested projects rise we should expect leverage ratios to fall as projects require ever greater subsidies to become viable.

<sup>35</sup> See for example the [Statement by the Heads of the Multilateral Development Banks and the IMF on Infrastructure](#), November 2014: ‘The critical barrier to achieving an uplift in infrastructure investment in emerging and developing economies is not a lack of available finance, but an insufficient pipeline of bankable projects ready to be implemented’.

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## 3.2 Insights from economic theory

There is not much work by economists on the details of how donors should go about subsidising the private sector. This section will draw lessons from those studies that exist, and a precis of key papers is presented in an appendix. However, papers written for publication in academic journals tend to have a narrow focus and do not often stop to provide much background discussion. So first, some background.

Donors need some way to evaluate claims made by investors, regarding expected and required returns, risk profiles, and development impacts. It has been said that donors need to hire investment bankers and industry specialists who are as smart and devious as those sitting across the table.<sup>36</sup> This is not necessarily the case – it can be more cost-effective to employ project selection mechanisms based on competitive bidding or crude criteria that do not require these expensive and scarce skills. Before donors consider a project for a subsidy, credible efforts (extensive market testing) should have been made to get the project under way without subsidy.

By subsidising private investment, donors aim to achieve ‘additionality’, by which they mean making investments happen that would not have happened otherwise. This implies that donors must only provide subsidies to those projects that genuinely require a subsidy to be commercially viable is obvious. If donors can put in place procedures that credibly establish the need for a subsidy, then we can be confident of additionality even in the absence of ex-post empirical evidence.

The problem is that private investors have an incentive to conceal private information about their projects’ risk profiles and expected returns, and about their true required returns, because they would like to claim subsidies that will increase their expected risk-adjusted returns. Whilst this looks like a problem for donors, it is also a problem for those private investors who lack credible ways to signal that their projects genuinely deserve subsidies. Even when donors are convinced the projects will yield social returns that exceed cost, the problem is more complicated than identifying projects that are not commercially viable, because sometimes lack of viability may reflect poor design and implementation and the solution is to find more competent contractors, not subsidise incompetence. So donors want to select projects that require subsidies even when delivered efficiently.

The possibility that subsidies may create rents (or excess profits) for investors is unappealing, but that should probably be regarded as a second-order risk in comparison with the first-order problem of insufficient investment in developing countries.<sup>37</sup> In some cases when rents are created, the investors may be pension funds or similar, but even when investors are oligarchs or other extremely wealthy individuals, the distributional problem can be partially mitigated by taxing capital income properly. Donors should err on the side of occasionally creating rents for investors rather than err on the side of leaving socially worthwhile investment opportunities unexploited for fear of creating rents.

Finally, it is worth touching on some theoretical reasons not to subsidise the private sector. These are sometimes put in terms of ‘distorting the market’, which is an unfortunate phrase because the whole point of a public subsidy is to change (distort) market outcomes that are unsatisfactory.<sup>38</sup> Many of the risks of distortion amount to

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<sup>36</sup> Personal correspondence with an experienced investor. In the investor’s view, there was no option other than for donors to invest in the expertise needed to independently evaluate investment projects.

<sup>37</sup> Because lifting people out of poverty is more important than preventing excessive profits for the few. Accepting this conclusion requires accepting that raising investment levels will have a greater long-run impact on poverty than redistributing subsidies to the poor.

<sup>38</sup> The risk is of creating further distortions by getting subsidies wrong.

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mistakenly subsidising the wrong projects – either by mistaking the social returns, by wrongly assessing risk and return, or by picking the wrong investors to support and perhaps propping up inefficient producers. Public support for chosen firms can inhibit the experimentation and selection that helps spur productivity growth, undermining the case for subsidising the private sector in the first place.<sup>39</sup> Many of these risks are common to activist industrial policy in general; in particular there is a risk of favouring politically connected firms and becoming a vehicle for patronage and corruption, evidence for which can be found in Ades and Tella (1997) and Khwaja and Mian (2005). Flyvbjerg (2009) describes the incentives to systematically understate the costs and overstate the benefits of infrastructure investments. Donors and multilaterals may be partially insulated from some of these risks, but the theoretical remedies are investments in project evaluation, competitive bidding processes, and transparency.

### 3.3 Review of relevant research

Summaries of a selection of particularly relevant academic papers are presented in an appendix. This section presents some highlights that paraphrase key points made in these papers, although they each contain much more.

1. Selecting projects with the greatest gap between private and social returns is the wrong objective, because some of these may be viable without subsidy. From Warner (2013).
2. When the cost of screening projects to identify those that genuinely require a subsidy is high, it may be better to offer blanket subsidies in geographies or markets where the number of commercially viable projects is thought to be small – in which case guarantees are the lowest cost option because viable projects are less likely to call on them. From Hainz and Hakenes (2012).
3. If project type were observable, development banks could be prevented from financing projects that do not need public assistance. Otherwise they have an incentive to finance good projects and enjoy the returns. To avoid crowding out private finance and/or creating rents, there may be pricing structures that cause investors with good projects to select unsubsidised private finance. From Hainz and Hakenes (2012).
4. Output-based subsidies open to all can avoid distorting competition by selecting subsidy recipients in advance. Holding the benefit to recipients constant, the cost to donors of output-based subsidies is no more than when providing a guarantee or concessional loans. From Barder and Talbot (2015).
5. The prospect of instruments that have a greater benefit to private investors than cost to donors is alluring, but arguments why these may exist rest on questionable theories of incomplete markets and other departures from standard theories of investment. Evidence would be extremely valuable
6. concerning which instruments have the greatest impact on investment per dollar cost of subsidies incurred by donors. Inspired by Barder and Talbot (2015) but not explicitly stated there.
7. One justification for private provision is that governments may find it politically difficult to charge prices that recover costs, and hence may underinvest from a social perspective if fiscally constrained. From Estache et al. (2015).
8. In principle, when projects are complements, donors can increase the probability of the projects succeeding by offering coordinated subsidies and,

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<sup>39</sup> This is by Barder and Talbot (2015) advocate output based subsidies available to all providers.

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in the case of guarantees, can reduce the probability of having to pay out.  
From Basu (2014).

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# 4 What does success look like?

Subsidies for private investment have a twofold objective: to send private sector investment where it would not otherwise go *and* to have a positive impact on development. This section examines these objectives and asks how donors can distinguish between success and failure.

Much work in this area has understandably focused on the empirical evidence (or lack of it) that subsidies have had a positive impact on the level of investment in developing countries, rather than merely funding projects that would have happened anyway. As the previous section hinted, ‘additionality’ is not something we should expect donors to achieve with every project they are involved in, but within the bounds of what is reasonable – given the cost and difficulty of screening projects – it is what donors should aim at. But before getting to that, there is an important potential conceptual confusion that needs clearing up: the difference between having an impact on investment, and leveraging in private *finance*.

## 4.1 Why subsidise private finance (as opposed to investment)?

A distinction must be drawn between real investments (in buildings, equipment and people) and financial investment (providing funds for real investments). The economic case for subsidising the private sector, as presented in the preceding section, pertains to real investments. Donor efforts to leverage private sector investment, through the use of subsidies, sometimes means subsidising private finance. The two need not go together, although they often do. An example might help clarify things.<sup>40</sup>

An activist private equity fund is planning to build a chain of hospitals and clinics in a developing country. It will provide \$500 m. itself but seeks \$500 m. from outside investors. It estimates an internal rate of return of 17%. That meets the fund’s own threshold for investment (perhaps because it has confidence in its ability to execute its business plan) but it is struggling to attract outside investors (perhaps because outsiders view the project as too risky). The fund proposes structuring a deal in which a donor invests equity but agrees to a maximum return of 5%. If the donor puts in \$100m, the implied return on offer to outside private investors would rise to 19%; if the donor puts in \$200m, it would rise to 22%.<sup>41</sup> These higher returns may be enough to induce private investors. If a donor wishes to subsidise this real investment in the private health care sector, it will be hard to avoid raising returns for the private equity

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<sup>40</sup> This example is taken from a presentation given by a private equity firm, at a conference on the subject of using ODA to catalyse private sector investment.

<sup>41</sup> These numbers are taken from the investor presentation. We were not able to replicate them exactly using rate of return formulae, although the numbers we obtained were not too different.

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fund, but the donor need not accept this structure whereby it also raises returns for outside private financiers. Donors could, in principle, invest \$500 m. and take the expected 17% return themselves.

For a project of any given size, at one extreme the public sector could fund it entirely, and at the other extreme the public sector could leverage as much private investment as possible, by injecting grants (or equivalents) with a return of negative 100%. In between, the public sector could invest an intermediate amount and take an intermediate rate of return. There is no reason to think that leveraging as much private investment as possible is the right choice.

## 4.2 When private finance substitutes for public finance

What does it mean for ODA to unlock additional finance? The basic idea seems fairly straightforward: make money flow that would not have flowed otherwise. But appearances can be deceiving. If a small grant is used to leverage a large private loan, this does not get us any further from billions to trillions than conventional lending by the public sector, at the same cost to the taxpayer. No new money has been unlocked.

Consider two concessional loans of the same amount – say \$100 m. – that are identical from the point of view of the recipient. One of these is a standard concessional loan of a \$10 m. grant-equivalent value, provided by a donor, while the other is a \$10 m. grant blended with a \$90 m. private market-rate loan. The grant-equivalent value of a loan captures its expected cost to the taxpayer and incorporates compensation for bearing risk. In most circumstances, if a donor can afford to give away a \$10 m. grant then it ought to be able to afford to make a concessional loan of \$10 m. grant equivalence, because usually governments can take the long view. What matters is the size of the transfer from donor to recipient – in which case, although the \$90 m. private loan might not have been forthcoming without the \$10 m. grant sweetener, we cannot say the blended finance has really unlocked any new finance because the donor itself could equally well have offered a \$100 m. concessional loan.<sup>42</sup> All that has happened is that the donor has chosen between two equally affordable alternatives – the constrained global ODA budget has not been stretched any further.

The argument that we need to use ODA to leverage private finance – because the quantity of investment needed to deliver the SDGs far exceeds donor budgets – is an argument about what is desirable, not about what is possible. If it costs as much to catalyse private finance as it would to provide the equivalent public finance, this does not help close the financing gap.

An exceptional case in which blending could be said to mobilise new finance would be when, for some reason, a donor could afford to give away a \$10 m. grant but could not raise the \$100 m. it would need to make the \$10 m. grant-equivalent loan itself. In the current austere economic context, this might appear to be a likely scenario for some governments, but it is worth remembering that financing a loan does not add to the donor's reported national debt, because an offsetting asset is created, and some donor governments currently face no problem borrowing at historically low rates. Nonetheless, donors may sometimes face institutional gross

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<sup>42</sup> There may be implications regarding recognition as ODA. A \$100m loan with a \$10m grant element would not be eligible as ODA if the recipient is a low or lower-middle income country, but a \$10m grant contributed to a blending facility could be.

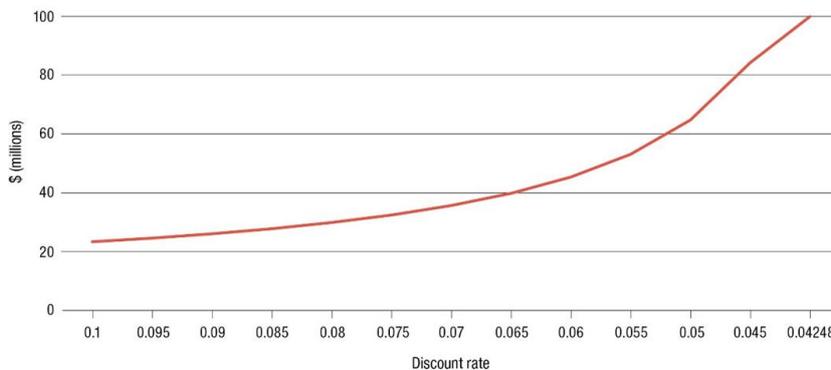
borrowing constraints, in which case if they are unable to finance a loan then blending a grant with private money can be said to have genuinely increased the gross quantity of available finance, if not the size of the net transfer.

### 4.3 Does blending mobilise as much money as pure public finance could?

The argument thus far has employed an example of two \$100 m. loans, one which blends a \$10 m. grant with \$90 m. private money and one which is a concessional loan of \$10 m. grant-equivalent value. But the repayment terms have not been specified. Can both methods really mobilise the same sum, on the same terms, at the same cost to the taxpayer?

The grant-equivalent value of a loan is the gap between the amount loaned and the net present value of interest and principal repayments. The net present value depends on the choice of discount rate, which can reflect not only the lender's cost of financing the loan but also the risk of default. In terms of expected returns, if the risk of default is high then a high discount rate is needed to adjust the net present value downwards and reflect the chances of the lender not getting paid back.<sup>43</sup> Figure 2 shows the size of a loan with an expected cost to taxpayers (grant equivalent) of \$10m, as the discount rate varies. This figure is based on a very simple loan, where an interest payment of 3% is paid once each year and the principal is repaid in full in year 10. In this case a \$100 m. loan has a \$10 m. grant-equivalent value when the discount rate is roughly 4.25%.

**Figure 3: Size of a \$10m grant-equivalent loan**



Source: author's calculations. See text.

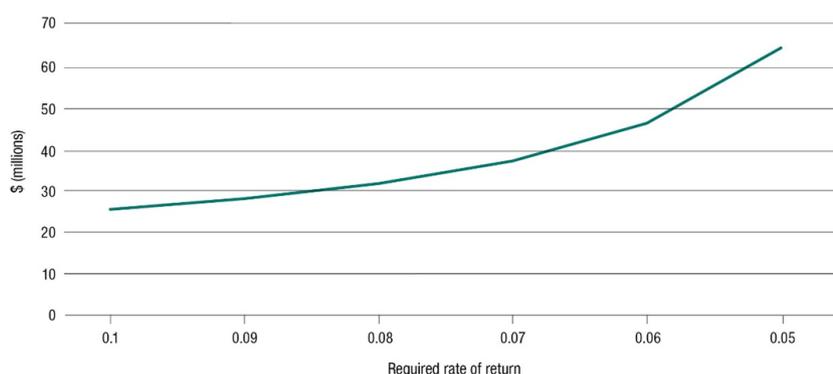
Holding the terms of the loan constant, so that it looks exactly the same from the point of view of the recipient, what size of loan can be achieved by blending a \$10 m. grant with private money? The answer, unsurprisingly, depends on the rate of return required by the private investor. Ignoring details like overhead cost recovery, which do not change the underlying message, we might expect a public sector lender (donor) to consider its cost of capital and the risk of default, and to evaluate the cost of making the loan, and thus its willingness to lend, on that basis. But a private sector

<sup>43</sup> The new OECD method for computing grant equivalence adjusts the discount rate according to the income group of the recipient country, to reflect default risk. Their 'differentiated discount rates' consist of a base factor, which will be the IMF discount rate (currently 5%), and an adjustment factor of 1% for upper-middle-income countries (UMICs), 2% for lower-middle-income countries (LMICs) and 4% for least developed countries (LDCs) and other low-income countries (LICs). To qualify as ODA, a loan to a LIC or LDC must have a grant equivalent value of 45%, for LMICs 15% and for UMICs 10%. See [DAC High Level Meeting final communique December 2014](#).

investor is unlikely to be willing to lend just because risk and cost of capital is covered – it will want to make a return on top of that. In developing countries, capital markets are typically imperfect, so participants are able to extract some economic rent.

Consider a loan to a recipient in which the risk of default makes a discount rate of 5% appropriate (and all parties have the same information about risk). With a 5% discount rate, a \$65 m. loan has a \$10 m. grant-equivalent value when repaid in year 10 and when a 3% annual interest rate is charged. How large a loan, on the same terms, would blending produce? To answer that question, suppose the private sector supplies an amount \$P to which a donor adds a \$10 m. grant to create, from the perspective of the borrower, a concessional loan of size \$L (equal to \$P + \$10m). The repayment profile remains exactly the same, with 3% interest paid on \$L. Holding repayment terms constant also implies that the private investor is repaid the full loan amount \$L in year 10, not just the amount \$P (because the donor does not want any money back). From the private investor’s perspective, what return is it making on \$P? It will be higher than 3%, because that rate is applied to \$L, and in year 10 it receives repayment \$L, but the private investor only provides \$P. Figure 3 shows the blended loan size, including a \$10 m. grant, as a function of the return required by the private investor on \$P, using a 5% discount rate. If the private investor demands a 5% return, then the blended loan size is identical to the public concessional loan size at \$65m, but in that case the private investor is making zero economic profit.<sup>44</sup> If the private investor demands positive economic profits, then the size of the blended loan made possible by a \$10 m. grant falls. This means that not only is blending a grant with a private loan sometimes better seen as a choice between equally affordable alternatives, as opposed to unlocking additional finance, but holding the cost to taxpayer and loan repayment terms constant, choosing the blended route can actually reduce the quantity of development finance made available.

**Figure 4: Size of blended loan**



Source: author's calculations. See text.

<sup>44</sup> Because the size of loan in the two cases is identical when the returns demanded by private investors equal the discount rate, that means the two figures look exactly the same. But they are showing a different thing. Figure 3 holds the discount rate fixed at 5% and varies the return demanded by the private investor, and should be compared against the single point in Figure 2 corresponding to a discount rate of 5%.

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## 4.4 The cost of public capital

These illustrative examples show that the quantity of finance mobilised by blending may actually be lower than via traditional concessional loans, per dollar of subsidy, if private investors demand rents, or, put differently, the cost of capital is higher in the private sector. It is often observed that because governments can borrow at low rates, the cost of capital in the public sector is bound to be lower. This argument should not be taken too far. Government borrowing costs fail to account for the economic costs that arise through the impacts that taxation required to service debts has on behaviour (in this context, in absence of default only the non-grant element will need servicing from taxation). A more complete accounting of costs is incorporated into a metric known as the marginal cost of public funds (Browning, 1976). Moreover, in the context of extending loans, although there are some fundamental reasons to think governments can be more tolerant of risk than private investors, we should not be too quick to assume that governments should be much more tolerant of risk with taxpayers' money than taxpayers are themselves. These arguments suggest that the appropriate discount rate when computing the grant-equivalent value of a public loan may not be so very different to the returns demanded by private investors. However, as Figure 3 shows, a small gap between the rate of return required by private investors and the discount rate can imply that a much smaller loan is created via blending than via traditional public sector lending, at the same cost to taxpayers.

## 4.5 Leverage ratios and concessionality

The European Union claims a leverage ratio of 20 from its blending activities, on the basis that \$2 bn of grants have ultimately triggered investments of \$42 bn (of which \$19 bn came from public sector DFIs and banks).<sup>45</sup> High leverage ratios can be seen as the counterpart to a low degree of concessionality. On the assumption that the \$40 bn was provided on market terms, and treating it all as a loan for sake of illustration, blending can be seen as creating a \$42 bn loan with a 5% grant element.<sup>46</sup> That would not even meet the OECD DAC grant element threshold of 10% for recognition as ODA when the recipient is an upper-middle-income country. If donors wanted to offer loans with such a small degree of conditionality, leveraging current global ODA grant spending of around \$133 bn, they could lend \$2.6 tn at a 5% grant element. That gets us from billions to trillions. Thinking of blended finance simply as a way of turning 'billions to trillions' obscures the fact that it turns grants into a type of finance (close to market terms) that cannot be so widely used in pursuit of sustainable development, because only a subset of development needs will be delivered by investments that generate returns.

Seen in this light, blended finance is something donors should support to the extent it makes sense to subsidise private investment in developing countries, and its scale should be determined by the supply of investments worthy of subsidy.

Although the European Union could in principle lend \$42 bn itself rather than leverage private finance, that would not be desirable when the objective is to subsidise real private investment, because the private sector should have financial skin in the game (ideally, equity). Private finance brings expertise and incentives with it. Some donors may also find themselves facing binding gross borrowing

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<sup>45</sup> Fernando Frutuoso de Melo, Director General of DEVCO of the European Commission quoted in 'Commission says blending of funds produces "huge" results', EurActiv.com October 2015.

<sup>46</sup> If the \$40 bn was not provided at market rates, then the \$2 bn of grants does not capture the full extent of public subsidy, and the true leverage ratio is below 20.

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constraints. But beyond that, substituting private for public finance is not an end in itself and donors should not bend over backwards to bring in private money for the sake of it.<sup>47</sup>

The right objective of blended finance is to subsidise investments where there is a case for doing so based on public economics. Turning a small number into a large number is the wrong objective. Blended finance is not a pump that donors can prime to increase the quantity of money available for funding the sustainable development goals, independently of locating investments where there is a public economics case for a subsidy.

## 4.6 Externalities from private finance?

In addition to the aforementioned incentive and expertise justification for wanting to involve private financiers (who are not project leaders but merely sources of money) there are potential spillover effects from their involvement.

Analysis based on the one-off financing of a project arguably takes too narrow a view of what blended finance is trying to achieve. One possible motivation for bringing private financiers into deals is to help develop markets by introducing them to countries or sectors they would not otherwise have invested in, in the hope that the experience will encourage them to repeat similar investments without requiring a subsidy in the future: a demonstration effect for financiers. The entry of new private financiers may have knock-on consequences through network formation and relationship building. Rogerson (2011) draws a distinction between aid that is catalytic in the sense of mobilising finance and aid that is catalytic in the sense of transforming the nature of the economic process.

## 4.7 What success looks like: investment impact and observational equivalence

Returning now to the basic objective of having a positive impact on the level of investment in developing countries: unfortunately, in terms of observational data, success looks exactly the same as failure. That is to say, whether subsidies have a positive impact on investment or they are merely attached to projects that would have happened anyway, we observe a correlation between subsidies and projects. There is no easy way of taking observational data and identifying success. This means we are unlikely to get convincing empirical evidence that subsidies increase investment until somebody agrees to run a *very* expensive randomised control trial.<sup>48</sup>

In the place of rigorous evidence, we largely have: the evaluation of procedures that establish in advance whether a subsidy is needed, surveys afterwards asking whether the subsidy was needed, and judgements concerning the plausibility of other supporting arguments. The UK Aid Network (UKAN, 2015) provides a useful review of research that attempts to find empirical evidence of ‘additionality’, and the evidence is decidedly mixed, in some cases with evidence of additionality in as little

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<sup>47</sup> Other potential arguments for preferring private to public finance invoke various reasons why public investment decisions may be inefficient or captured by interest groups. Such arguments do not apply with such force in the context of blended finance, which inevitably involves a public intervention. A qualification is that when extending a \$10 m. grant-equivalent loan, as opposed to giving a \$10 m. grant, the taxpayer is exposed to the risk of making much greater loss, so that if the government is bad at picking winners, it is safer to stick to giving grants.

<sup>48</sup> The econometricians Joshua Angrist and Jörn-Steffen Pischke have coined the term a ‘fundamentally unidentified question’ to describe questions which could not even be answered by running an experiment. This is not quite the case here, because the barriers are practical – in principle an experiment could be done.

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as 20% of projects. The absence of evidence is also hard to interpret because it often reflects inadequate efforts made to gather evidence. The optimal level of errors is also not clear. In certain countries or sectors it might make sense for donors to offer subsidies without (much) screening and to accept some errors.

#### **4.7.1 What else we could measure: returns**

If donors are subsidising only those projects that require a subsidy to become commercially viable, and the magnitude of the subsidy is no greater than needed, then in risk-adjusted terms the returns that investors enjoy on subsidised projects should be the same as those on unsubsidised projects. It would not be a perfect test of additionality – if we observed that subsidised projects delivered excess profits, we would not know if that meant the projects would have happened anyway, or that the subsidies were too large – but comparison of risk-adjusted returns on projects with DFI involvement against returns on pure private investments would be informative.<sup>49</sup> This is an argument for greater transparency about the commercial terms of investments with public participations.

#### **4.7.2 Leverage: the folly of rewarding A whilst hoping for B**

In a classic of the management literature, Kerr (1975) exposed the problem of rewarding the wrong thing because the real objective is too hard to measure. If we knew that subsidies were only given to projects that genuinely required them, then the ratio of public money spent to private investment catalysed would be a useful measure of how effective public subsidies are. But we do not know that. We can only observe the ratio of public to private money, without knowing whether the projects would have taken place without public aid. The OECD DAC is currently busy trying to figure out how to reflect catalytic aid in its new Total Official Support for Development statistics, and is grappling with problems such as how to measure donor effort (analogous to the grant-equivalent cost of a loan) and how to attribute leverage when there are multiple donors present in a deal. But unless it comes up with some convincing eligibility criteria based on advance efforts to ensure projects were not commercially viable, the DAC reporting guidelines cannot do anything about observational equivalence.

Whilst it is inevitable that donors are going to report ‘leverage ratios’, as little weight as possible should be placed upon these data. Certainly no incentives within organisations should be based on achieving high leverage ratios. The easy way to hit a high leverage target is to attach a small sum of public money to a large already-viable investment project. The hardest way to hit a leverage ratio target is seek out projects with large development impacts that face high barriers to private participation and overcome them. We are hoping for the latter; we do not want to reward the former.

### **4.8 What success looks like: development impact**

There is wide agreement that development is a multi-dimensional concept that incorporates what Amartya Sen has called ‘capabilities’ (Sen, 2001), not merely access to material goods. That said, the best single indicator of development, most consistent with the economic rationale for subsidising the private sector, is household consumption. This is not an original observation, but impact evaluation problems

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<sup>49</sup> If readers are aware of any research please do get in touch.

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across huge swathes of development practice would be solved, or at least much improved, if we had more frequent and representative household survey data. Because the ultimate objective is to raise economy-wide consumption (via real wages, public services and social protection), in an ideal world we would be looking for evidence of a long-run impact of subsidies on the distribution of consumption, based on survey data. That may be more likely than DFIs agreeing to run a multi-billion dollar randomised control trial, but still asks too much of available data.<sup>50</sup>

In the absence of compelling evidence at the macroeconomic level, results measurement tends to focus on observable variables at a micro level with a direct connection to the subsidised project, such as the nature of employment at invested companies, or directly targeted outcomes outside the project (for example the incomes of local smallholder farmers after investment in a supply chain firm).

There is currently a great deal of activity around oversight and results measurement, both from DFIs and donors that want to understand their impact and from civil society organisations who are keen to improve the regulatory framework under which public subsidies of private investment take place. The efforts of donors are probably best represented by the results measurement framework developed by the Donor Committee for Enterprise Development (DCED), made up of 22 bilateral and multilateral donors (see DCED (2015) for a good introduction. Civil society's views are well represented by Cafod (2015), where the focus is on ensuring that public-private investments meet the same standards as traditional aid spending, that invested companies comply with relevant UN standards on human rights, and that donor activity is well aligned with local national development strategies.

Obviously donors should not be spending money without evaluating its impact, and in this context there is a particular need for oversight, not least because of the risk of large investment projects actively doing harm (such as in mistreatment of displaced persons or environmental damage). However, this section will (tentatively) make the heretical argument that current approaches risk straying into unproductive managerialism. There is limited overlap between what donors are trying to achieve and what donors are capable of measuring. Subject to a few clear criteria, donors should still be subsidising private investment in the absence of compelling evidence. This also implies that some criticisms of donors' private sector development strategies are misguided.<sup>51</sup>

## 4.9 How would China have scored on results measurement frameworks?

China's extraordinary rate of capital accumulation and economic growth has been the development success story of the modern era, if not an entirely unalloyed good (environmental degradation being an obvious negative). Extreme poverty has fallen from around 85% in 1980 to under 10% today, making China more or less singlehandedly responsible for the achievement of the Millennium Development Goal of halving global extreme poverty.

China is now generally regarded as having reached the fabled Lewis Turning Point (Gollin, 2014), when the pool of surplus rural labour is exhausted and the economy

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<sup>50</sup> Household surveys are too infrequent; data on subsidies are not available. There are also severe econometric problems of identifying a causal impact of subsidies at the macroeconomic level. There is some macroeconomic evidence that DFIs have a positive impact on investment at the macroeconomic level (Jouanjean and te Velde, 2013) although the estimates rely on a number of assumptions.

<sup>51</sup> A (rather extreme) example of such criticism is the blog [What's the point of 0.7% aid target if it gets spent on malls and luxury hotels?](#) From Global Justice Now.

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enters a phase of labour scarcity. Average real wage growth has been meteoric, at around 10% annually (ILO, 2014) and wages in rural areas have now caught up sufficiently with booming coastal urban centres so that the impetus for internal migration has waned. This is the result of massive mixed private and state investment (Knight and Ding, 2009) largely in coastal urban centres. If we knew that subsidising private investment in developing countries would help them replicate the success of China, spending scarce public funds in this way would be uncontroversial.

We could imagine a DFI subsidising a Chinese coastal manufacturing plant in 1985 but cannot imagine its results framework would capture its contribution towards the long-run change in rural wages. And as the Lewis model of structural change hints, this process by which capital investment leads to wage increases may be highly non-linear, with wages held back by the presence of a large reserve army of labour. Nonetheless, each successive investment may chip away at that reserve. Investments in China were centrally planned to a great extent, with economic growth and development as the overarching objective, but investment decisions were not made on the basis of a sustainable development impact ranking matrix (Lin et al., 2003; Huang, 2008).

#### 4.10 Complexity and managerialism

Two strands of recent thinking on development, which have evolved separately but are closely related, are: scepticism about results-based management, and the idea that economies are complex adaptive systems. The implications of these ideas have perhaps not yet fully permeated the debate around donor support for the private sector.

The basic criticism of results-based management is that if organisations are judged on a set of quantitative targets, their behaviour is distorted around producing the outward appearance of performance, and they may even indulge in what's known as 'gaming' (manipulating results indicators). In a well-known paper (Natsios, 2011) the former administrator of USAID claimed: 'A central principle of development theory [is] that those development programs that are most precisely and easily measured are the least transformational, and those programs that are most transformational are the least measurable'. There are some obvious dilemmas in this context – for example the tendency to evaluate private sector strategies by the number of jobs created (see EPS, 2015) could give donors an incentive to select more labour intensive production technologies, which may sometimes be the right choice but other times may be in tension with the objective of raising labour productivity. The difficulties and risks involved in selecting appropriate targets have been the subject of extensive research.<sup>52</sup>

The defining characteristic of a complex system is that you cannot understand it by examining its component parts, and that system-wide behaviour only emerges through interaction of these parts. 'Systems like this undergo change in dynamic, non-linear ways; characterised by explosive surprises and tipping points as well as periods of relative stability'.<sup>53</sup> These ideas are not on some wacky fringe of development thinking; they are now firmly part of the mainstream. DCED's introduction to its Standard for Results Measurement starts with a quote from Owen Barder about complexity and says its standard provides 'programmes working in

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<sup>52</sup> See for example: Bevan and Hood (2006), Bouckaert and Van Dooren (2009), Van Thiel and Leeuw (2002), Propper and Wilson (2003) and Bird et al. (2005).

<sup>53</sup> See the blog [Complexity, Adaptation, and Results by Owen Barder](#). Ramalingam (2013) provides a book-length treatment of these ideas.

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complex market systems with the framework, tools and incentives to monitor their results in a systematic way’.

Barder and other proponents argue that when intervening in a complex system, results measurement is more important than ever. In a complex system, the secret is to experiment, learn and adapt. And learning requires monitoring results. This makes sense in the context of a relatively tightly defined problem, such as improving educational outcomes. It is less obvious what the learning feedback loop looks like when the objective is long-run macroeconomic impact. If change is highly non-linear then if nothing appears to be happening, it could still be that donor interventions are edging the system closer towards an unknown tipping point. If changes to emergent system-wide variables (like wages) cannot be predicted from changes to individual components, how can donors learn how to adapt their interventions at the component level from observing what is happening at the macro level? DFIs are criticised for doing things like funding luxury shopping malls or tourist hotels, on the basis that there is no obvious ‘linear’ connection between these and poverty reduction. But if we abandon simplistic linear thinking, as complexity gurus urge us to do, who knows where luxury shopping malls may lead?

The DCED is aware of the problems these two strands of thinking raise for results measurement. DCED (2014) acknowledges that ‘most traditional approaches to results measurement, however, neglect wider changes in the market – even though this is often where the most impressive impacts and scales are to be found’. Even there, though, to capture system-level results, donors are asked to first describe and then evaluate a causal pathway to systemic change, which is not too dissimilar to linear thinking and not consistent with the idea that emergent behaviour cannot be understood by examining its component parts.<sup>54</sup> This is not to suggest that a priori impact evaluation and ex-post results evaluation have no role, only that no more weight should be placed upon them than they can bear. In some cases when subsidies have been justified on the basis of particular market failure or distributional justifications it may be possible to learn something about whether the investment has its intended effect; in other cases the timescale or identification challenges may be insurmountable.

The bottom line is, if we think our ability to predict and capture the results of subsidising the private sector is low, how much weight should we put upon those results indicators that we have?

#### 4.11 The implications for project selection

Suppose we have a list of desirable project attributes (the right kinds of job, linkages to local economy, alignment with national development strategy). The question then becomes: Should donors and DFIs turn down projects that require subsidies to be commercially viable if they do not have enough of these attributes?<sup>55</sup> Some of the economic arguments for subsidising investment suggest that capital accumulation in general is likely to be helpful, because there may be positive externalities from simply by adding to the capital intensity of the economy. Some of the arguments about the difficulties around finding the right metrics, and the idea that economic

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<sup>54</sup> To be fair, the authors of DCED guidelines on systemic change note ‘simplistic causalities can be misleading: change may be non-linear’.

<sup>55</sup> Ideally, estimates of social returns would be constructed using the tools of public economics, including the positive externalities covered earlier in this paper. That is easier said than done. Here we assume the use of more tractable investment evaluation tools.

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development may be an emergent process that cannot be predicted by inspecting its components parts, suggest that we should not have too much faith in tick lists.

Is the supply of projects so large, relative to the supply of finance, that donors should be choosy? The supply of finance is not fixed, of course, so one response to that question could be to reduce the quantity of money that donors make available for subsidising the private sector until it makes sense to be more selective. But most DFIs report that close-to-viable projects in low-income countries are thin on the ground.<sup>56</sup> If there are large projects on the cusp of commercial viability, in those developing countries where private investment is a relative rarity, then the presumption should be that making them happen would help development, whether aligned with national development strategies or fine-grained development impact assessments or not. Critics like Easterly (2006) probably overstate the case against ‘planners’, but acknowledging a role for centrally coordinated industrial policy does not entail that *only* projects that are part of the plan should go ahead.

It would make sense for the magnitude of a subsidy to be tied to the expected degree and timing of developmental impact, and it is hard to say anything definitive about where the line should be drawn. But when inspecting the portfolio of a DFI or donor’s private sector division, it is not obvious that having some investments that score poorly on development indicator assessment exercises is a bad thing. DFIs are sometimes criticised for taking a ‘do no harm’ approach to oversight and project selection and for not paying enough attention to ‘do some good’, but the arguments made here suggest that it might be a sensible approach. Much simplified, project selection procedure could be:

1. Identify countries or sectors where private investment is scarce.
2. Establish that the project is not commercially viable.
3. Screen for ‘do not harm’.
4. Calibrate the magnitude of the allowable subsidy to estimated development impacts.
5. Fund the project if the required subsidy is less than the allowable subsidy.

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<sup>56</sup> Conversations with individuals from DFIs and other donor organisations.

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# 5 Conclusions

A theme of this paper has been that accelerating capital accumulation in capital-scarce countries is probably a good thing and that our ability to fine-tune project selection in advance and evaluate afterwards is probably quite limited. The implication is that with a few broad project selection criteria and safeguards, donors should subsidise private investment even if rigorous evidence of the impact on poverty is not always available and the linkages are not obvious.

Donor support for private investment has often come in for criticism. Eurodad, a network of 46 non-governmental organisations, has called for an immediate end to ODA being channelled through European-level blending mechanisms, and the UK's Independent Commission for Aid Impact (ICAI) gave DFID an amber-red rating – the second worst – for its work with businesses. ICAI called for 'more strategic oversight of business engagement activities' and 'detailed operational plans with a clear focus on poverty reduction'. The arguments presented in this essay suggest a rather straightforward overarching strategy of accelerating private investment in those developing countries that most lack it, and also that detailed planning to show how each investment will reduce poverty may be of relatively little value.

These arguments are supportive of the recent pivot towards the private sector that most donors have performed in recent years, but there are more negative points to be made. Firstly, basic supply and demand analysis tells us that if donors want to increase the quantity of private investment, they are not going to get very far by subsidising the supply side if there are not lots of investment projects demanding finance that are close to commercial viability. That prospect is hard to reconcile with perennial complaints that the real constraint on investment in developing countries is a lack of bankable projects. The implication is that donors should not push too much money into blending facilities or investment funds without also finding ways of increasing the creation of viable investment projects.

Secondly, donor rhetoric around 'blended finance' or the idea of using a small amount of aid to 'leverage' large amounts of private finance is misleading, and donors' motives may be misguided. The background motivation is that trillions of dollars of investment will be required to achieve the SDGs – an order of magnitude larger than the global aid budget – so aid must be used to increase the quantity of available development finance. Donors have coalesced around the objective of 'turning billions into trillions'. But that is an argument about what is desirable, not about what is possible. If it costs as much to catalyse private finance as it would to provide the equivalent public finance, catalysing private finance does not help close the financing gap. Claims of mobilising finance are misleading when the small amount of aid is a grant and the large amount of private finance is a loan (or other forms of finance that demand returns).

Seen in this light, blended finance is something donors should support to the extent it make sense to subsidise private investment in developing countries, and its scale should be determined by the supply of investments worthy of subsidy. Blended finance is not a pump that donors can prime to increase the quantity of money

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available for funding the sustainable development goals, independently of locating investments where there is a public economics case for a subsidy.

This paper is about one small aspect of what international development cooperation must do to push private investment into the service of sustainable development. There is currently roughly \$18 tn of annual global investment (based on data from the International Monetary Fund (IMF)), and subsidies will only ever play a minor role in diverting more of that towards the poorest countries. The levers with the greatest effect are likely to be political and institutional, and there are policy reforms in both developing and advanced economies that could have a great impact on financial flows. It should be remembered that, when asked, private investors usually say investment decisions hinge on considerations like political stability, a country's track record of seeing projects through to completion, and the risk of investing time and money on preparation and bidding only to lose to a politically connected competitor.<sup>57</sup> There are also other tools – such as the provision of basic public infrastructure in developing countries, which is not classed as a subsidy by the WTO, despite being of great benefit to the private sector. There is compelling empirical evidence that on average every dollar invested in public infrastructure in developing countries crowds in two dollars of private investment (Eden and Kraay, 2014). Another priority is building domestic government technical and legal capacity in developing countries to engage with the private sector.

The intention behind this essay is to contribute some novel ideas to the important debate about donor engagement with the private sector and draw attention to some old ideas that tend to be overlooked. There is much more to be said. In particular, this essay avoids the question of how to allocate subsidies amongst alternative investment propositions, taking into account variation in expected poverty impact, and it discusses the limitations of results evaluation exercises but has not addressed the questions of what donors can learn from them and how. Another important question, left for future research, is which of the instruments available to donors have the greatest impact on investment, holding constant the cost to the taxpayer.

Even if one is prepared to believe, on the basis of economic theory, that accelerating investment is likely to have a positive impact on long-run poverty reduction, via various channels that are likely to elude impact evaluation exercises, spending money in the absence of evidence is not a comfortable position to be in. It is particularly uncomfortable when the opportunity cost is spending less aid in traditional ways where the (intended) impact on poverty is easier to discern (even if the evidence may also often be too weak for comfort). The problem of how to allocate resources in the face of such fundamental uncertainty is beyond the scope of the present paper, which merely argues that subsidising the private sector deserves its place in the mix, alongside other development instruments.

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<sup>57</sup> See EY's 2015 Africa Attractiveness Survey for example.

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# References

- Acemoglu, D., Golosov, M., and Tsyvinski, A. (2008a) 'Markets versus governments', *Journal of Monetary Economics* 55(1), 159-189.
- Acemoglu, D., Kremer, M., and Mian, A. (2008b) 'Incentives in markets, firms, and governments', *Journal of Law, Economics, and Organization* 24(2), 273-306.
- Ades, A., and Tella, R.D. (1997) 'National Champions and Corruption: Some Unpleasant Interventionist Arithmetic\*', *Economic Journal* 107(443), 1023-1042.
- Arrow, K.J. (1950) 'A Difficulty in the Concept of Social Welfare', *Journal of Political Economy* 58(4): 328-346.
- Bai, J., Jayachandran, S., Malesky, E.J. and Olken, B.A. (2013) *Does economic growth reduce corruption? Theory and evidence*. National Bureau of Economic Research (NBER) working paper no. 19483.
- Barder and Talbot (2015) "Guarantees, Subsidies, or Paying for Success? Choosing the Right Instrument to Catalyze Private Investment in Developing Countries" Center for Global Development Working Paper 402.
- Basu, Kaushik (2014) 'Fiscal policy as an instrument of investment and growth', *Journal of Quantitative Economics* 12(1).
- Bevan, G., and Hood, C. (2006) 'What's measured is what matters: targets and gaming in the English public health care system', *Public administration* 84(3), 517-538.
- Binmore, K. (2007) Interpersonal comparison of utility. University College London. Mimeo.
- Bird, S.M., David, C., Farewell, V.T., Harvey, G., Tim, H., and Peter, C. (2005) 'Performance indicators: good, bad, and ugly', *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 168(1), 1-27.
- Bouckaert, G., and Van Dooren, W. (2009) 'Performance measurement and management in public sector organizations', *Public management and governance* 2, 151-164.
- Browning, E.K. (1976) 'The Marginal Cost of Public Funds', *Journal of Political Economy* 84(2): 283-298
- Buchanan, J. M. (2008) 'Opportunity cost', in Steven N. Durlauf and Lawrence E. Blume (eds), *The New Palgrave Dictionary of Economics. Second Edition*. Palgrave Macmillan.

---

Buiter, W. and Schankerman, M. (2002) 'Blended Finance and Subsidies: an economic analysis of the use of grants and other subsidies in project finance by multilateral development banks'. EBRD, available from [willembuiter.com](http://willembuiter.com).

CAFOD (2015) 'Delivering sustainable development: a principled approach to public-private finance'. Actionaid, Bond, Cafod, Eurodad, Oxfam, WWF.

Caselli, F., and Feyrer, J. (2007) 'The Marginal Product of Capital', *The Quarterly Journal of Economics*, 535-568.

DCED (2014) 'Guide to Capturing Wider Changes'.

DCED (2015) 'The 2015 Reader on Results Measurement'.

De Aghion, B.A. (1999) 'Development banking', *Journal of Development Economics* 58(1), 83-100.

De Long, J.B., and Summers, L.H. (1993) 'How strongly do developing economies benefit from equipment investment?', *Journal of Monetary Economics* 32(3), 395-415.

DeLong, J.B. (1997) 'Cross-country variations in national economic growth rates: The role of technology', in J. Fuhrer and J.S. Little (eds.) *Technology and growth*. Federal Reserve Bank of Boston, Boston.

De Meza, D., and Webb, D.C. (1987) 'Too much investment: a problem of asymmetric information', *Quarterly Journal of Economics*, 281-292.

DFAT (2014) "Australian aid: promoting prosperity, reducing poverty, enhancing stability" Australian Government Department for Foreign Affairs and Trade

Dollar, D., Kleineberg, T., and Kraay, A. (2013) *Growth still is good for the poor*. World Bank Policy Research Working Paper (6568).

Easterly, W. (2006) *The white man's burden: why the West's efforts to aid the rest have done so much ill and so little good*. Penguin.

Easterly, W. (2006) 'The Big Push Déjà Vu: A Review of Jeffrey Sachs's The End of Poverty: Economic Possibilities for Our Time', *Journal of Economic Literature* 44(1): 96-105.

ECA (2014) European Court of Auditors' Special Report No. 16/2014: *The effectiveness of blending regional investment facility grants with financial institution loans to support EU external policies*.

Eden, M., and Kraay, A. (2014) 'Crowding In' and the Returns to Government Investment in Low-Income Countries. World Bank Policy Research Working Paper (6781).

EIB (2014) Annual Report on EIB activity in Africa, the Caribbean and Pacific, and the overseas territories.

EPS (2015) 'Overview of recent literature on mobilizing private investment in developing countries'. Economic and Private Sector Professional Evidence and Applied Knowledge Services.

- 
- Estache, A., and Rossi, M.A. (2002) 'How different is the efficiency of public and private water companies in Asia?', *The World Bank Economic Review* 16(1): 139-148.
- Estache, A., Serebrisky, T., and Wren-Lewis, L. (2015) 'Financing infrastructure in developing countries', *Oxford Review of Economic Policy* (forthcoming).
- EUBEC (2014) 'Mobilization of private sector resources: Report to the Policy Group'. EU Platform for Blending in External Cooperation (EUBEC).
- Eurodad (2014) 'A dangerous blend? The EU's agenda to "blend" public development finance with private finance'.
- Flyvbjerg, B. (2009) 'Survival of the unfittest: why the worst infrastructure gets built – and what we can do about it', *Oxford review of economic policy* 25(3): 344-367.
- Fourcade, M., Ollion, E., and Algan, Y. (2015) 'The superiority of economists', *Journal of Economic Perspectives* 29(1): 89-113.
- FUNDS (2015) 'Addis Ababa July 2015: Near death of a global governance experiment'. Future United Nations Development System Briefing 33.
- Gollin, D. (2014) 'The Lewis model: A 60-year retrospective', *Journal of Economic Perspectives*, 71-88.
- Hainz, C., and Hakenes, H. (2012) 'The politician and his banker – How to efficiently grant state aid', *Journal of Public Economics* 96(1), 218-225.
- Hausmann, R., and Rodrik, D. (2003) 'Economic development as self-discovery', *Journal of Development Economics* 72(2), 603-633.
- Hopenhayn, H.A. (2014) 'Firms, misallocation, and aggregate productivity: A review'. *Annu. Rev. Econ.* 6(1): 735-770.
- Hsieh, C.T., and Klenow, P.J. (2007) 'Relative Prices and Relative Prosperity', *American Economic Review* 562-585.
- Huang, Y. (2008) *Capitalism with Chinese characteristics: Entrepreneurship and the state* (Vol. 1). Cambridge: Cambridge University Press.
- IFC (2011) *International Finance Institutions and development through the private sector*. International Finance Corporation. Washington, D.C.
- IFC (2013) *IFC jobs study: assessing private sector contributions to job creation and poverty reduction*.
- ILO (2014) *Global Wage Report 2014/15: Asia and the Pacific Supplement*. International Labour Organization (ILO) Regional Office for Asia and the Pacific Regional Economic and Social Analysis Unit (RESA).
- Iossa, E., and Martimort, D. (2015) 'The Simple Microeconomics of Public-Private Partnerships', *Journal of Public Economic Theory* 17(1): 4-48.

- 
- Jegers, M., and Buts, C. (2015) 'Burden Sharing and optimal state aid schemes', *Advances in business-related scientific research*. Volume 6, Number 2
- Jones, C.I. (2011) 'Intermediate goods and weak links in the theory of economic development', *American Economic Journal: Macroeconomics* 1-28
- Jouanjean, M.A and D.W. te Velde (2013) *The role of development finance institutions in promoting jobs and structural transformation, a quantitative assessment*. ODI Working Paper.
- Kay, J.A. (2003) *The truth about markets: their genius, their limits, their follies*. Lane, Allen.
- Kerr, S. (1975) 'On the folly of rewarding A, while hoping for B', *Academy of Management Journal* 18(4): 769-783.
- Khwaja, A.I., and Mian, A. (2005) 'Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market', *Quarterly Journal of Economics* 120(4): 1371-1411.
- Kleimeier, S., and Versteeg, R. (2010) 'Project finance as a driver of economic growth in low-income countries', *Review of Financial Economics* 19(2):49-59.
- Kline, P., and Moretti, E. (2014) 'Local Economic Development, Agglomeration Economies, and the Big Push: 100 Years of Evidence from the Tennessee Valley Authority\*', *Quarterly Journal of Economics* 129(1).
- Knight, J. and Ding, S. (2009) 'Why is Investment so High in China?' Discussion Paper. Department of Economics (University of Oxford).
- Kornai, J., Maskin, E., and Roland, G. (2003) 'Understanding the soft budget constraint', *Journal of Economic Literature* 1095-1136.
- Kraay, A., and McKenzie, D. (2014) 'Do poverty traps exist? assessing the evidence', *Journal of Economic Perspectives* 28(3): 127-148.
- Kumbhakar, S.C., and Hjalmarsson, L. (1998) 'Relative performance of public and private ownership under yardstick competition: electricity retail distribution', *European Economic Review* 42(1): 97-122.
- Laffont, J.J. (2015) 'Externalities', in Steven N. Durlauf and Lawrence E. Blume (eds). *The New Palgrave Dictionary of Economics. Second Edition*. Palgrave
- Macmillan, 2008. *The New Palgrave Dictionary of Economics Online*. Palgrave Macmillan.
- Lin, J.Y., Cai, F., and Li, Z. (2003) *The China miracle: Development strategy and economic reform*. Chinese University Press.
- McKenzie, D. (2015) *Identifying and Spurring High-Growth Entrepreneurship : Experimental Evidence from a Business Plan Competition*.
- Miller, H. (2013) 'What practical approaches/frameworks are there for effectively delivering subsidy to private sector entities for development purposes?'. Helpdesk

---

request, Economic And Private Sector, Professional Evidence And Applied Knowledge Services [EPS-PEAKS].

Murphy, K.M., Shleifer, A., and Vishny, R.W. (1988) 'Industrialization and the big push' (No. w2708). National Bureau of Economic Research.

Musgrave, R. A., (1959) "The theory of public finance: a study in public economy" New York, McGraw-Hill

Mustapha, S., Prizzon, A., and Gavas, M. (2014) *Topic Guide: Blended finance for infrastructure and low-carbon development* [full report]. Evidence on Demand, UK.

NAO (2014) *Oversight of the Private Infrastructure Development Group*. Report by the Comptroller and Auditor General. National Audit Office.

Natsios, A. (2011) *The Clash of the Counter-bureaucracy and Development*. Center for Global Development.

NMFA (2010) Letter to the House of Representatives outlining development cooperation policy, The Netherlands Ministry of Foreign Affairs

OECD (2014) *Development Co-operation Report 2014: Mobilising Resources for Sustainable Development*.

Oxfam (2015) 'The suffering of others: The human cost of the International Finance Corporation's lending through financial intermediaries'. Oxfam issue briefing .

Parker, D., and Kirkpatrick, C. (2005) 'Privatisation in developing countries: A review of the evidence and the policy lessons', *Journal of Development Studies* 41(4): 513-541.

Piccione, M., and Rubinstein, A. (2007). Equilibrium in the Jungle\*. *The Economic Journal*, 117(522), 883-896.

Plender, J. (2015) *Capitalism: Money, Morals and Markets*. Biteback Publishing.

Propper, C., and Wilson, D. (2003) 'The use and usefulness of performance measures in the public sector', *Oxford review of economic policy* 19(2): 250-267.

Ramalingam, B. (2013) *Aid on the edge of chaos: rethinking international cooperation in a complex world*. OUP Oxford.

Rodrik, D. (2008) *One economics, many recipes: globalization, institutions, and economic growth*. Princeton University Press.

Rogerson, A. (2011) 'What if development aid were truly "catalytic"?' . Background Note. London: ODI.

Rogerson, A., Whitley, S., Darko, E. and Rabinowitz, G. (2014) *Why and how are donors supporting social enterprises?* London: ODI.

Romero, M.J. (2015) 'What lies beneath? A critical assessment of PPPs and their impact on sustainable development'.

---

Rosenstein-Rodan, P. 1943. 'Problems of Industrialisation of Eastern and South-Eastern Europe'. *Economic Journal* 53 (210-211).

Schreiner, M., and Yaron, J. (2001) *Development finance institutions: Measuring their subsidy*. World Bank Publications.

Sen, A. (2001) *Development as freedom*. Oxford University Press.

Shirley, M.M., and Walsh, P. (2001) *Public vs. private ownership: the current state of the debate*. World Bank Policy Research Working Paper, (2420).

Spufford, F. (2011) *Red Plenty*. Faber and Faber.

Stiglitz, J.E., and Weiss, A. (1981) 'Credit rationing in markets with imperfect information', *American Economic Review* 393-410.

Te Velde, D.W., and Warner, M. (2007) *The use of subsidies by Development Finance Institutions in the infrastructure sector*. London: ODI.

UKAN (2015) *Leveraging aid: A literature review on the additionality of using ODA to leverage private investments*. UK Aid Network

Van Thiel, S., and Leeuw, F.L. (2002) 'The performance paradox in the public sector', *Public Performance and Management Review* 267-281.

Warner, A. (2013) *A Framework for Efficient Government Investment*. IMF Working Paper WP/13/58.

WEF (2015) *Blended Finance Vol. 1: A Primer for Development Finance and Philanthropic Funders*. World Economic Forum.

World Bank (2015) *Global Financial Development Report 2015 | 2016: Long-Term Finance*.

Zedillo, E., Cattaneo, O. and Wheeler, H. (eds) 'Africa at a Fork in the Road'. Yale Center for the Study of Globalization, New Haven, CT, USA.

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# Appendix

This appendix presents some insights from academic papers on the topic of subsidising the private sector.

Warner (2013) makes one fundamental point. Guidelines for DFIs and other government agencies typically focus on selecting projects with the highest social rate of return, and they ignore the possibility that even in cases where private and social returns diverge, the private returns may nonetheless be sufficiently high for the project to be undertaken without public support. Public support should be limited to those projects that would not be undertaken privately. A qualification is that sometimes private returns may be sufficiently high to justify private investment, but this fact is unknown and needs to be demonstrated. In this case, public involvement can have a *demonstration effect* so that subsequent similar projects are undertaken privately. Warner also shows that the distortions arising from the taxation that funds the subsidy should be accounted for, although in this context these are often borne by the donor country not the recipient.

Hainz and Hakenes (2012) tackle the question of how to subsidise projects with positive externalities that are not commercially viable. As with all economic models, it is highly stylised and uses simplifying assumptions. The trick is to understand the intuition behind its results and then try to judge the extent to which they would hold in the context of DFIs.

The model features three varieties of project: those that have a positive net present value (NPV) based on private returns (good), those that have a positive NPV only when a positive externality is taken into account (medium), and those with a negative NPV (bad). Projects can be screened, which is costly and identifies project type (with some error). In the absence of government intervention, private banks would screen projects and only fund those they identify as good.

The first result is that when screening costs are high, it is better to offer subsidies without trying to identify project types and suffer the cost of giving windfall gains to projects that did not require a subsidy. This is a very basic and important point that probably translates into reality: we should expect to see some projects needlessly subsidised, because the cost of trying to get to zero errors would probably outweigh the benefit. The authors show that a guarantee that pays out upon failure is the most cost-effective form of subsidy, without knowing project type, because good projects fail least often, although that assumes that guarantees have no impact on behaviour (no moral hazard). The government must judge the magnitude of the guarantee so that private banks are willing to lend to medium projects but still screen out bad projects. In sectors where medium type projects are believed to be relatively common and good projects rare, it makes more sense to forgo screening costs and offer blanket subsidies.

Two other options are explored: (i) screening is delegated to a subsidised public bank (which we can think of as a DFI) or (2) the government screens applicants and grant subsidies itself. An important result is that if delegating to a DFI then the government must impose a rule that its interest rates are higher than private sector rates, otherwise

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all good projects would apply to the DFI and the private banking sector would be completely crowded out. It may not be obvious what the subsidy consists of if the rate charged by DFIs is higher, but it all fits together in their model because private banks charge a lower rate that does not capture the full surplus from good projects, private banks will reject medium projects, and by charging a higher rate public banks capture the (smaller) full surplus from medium projects yet still make a loss on that basis, hence still need a public subsidy. The idea here is that incentives within the public bank mean that it would not be able to resist funding good projects (so the government cannot enforce a rule to fund only medium projects) so the higher interest rate prevents good projects from applying to the public bank. This runs counter to the observation that DFIs tend to lend at market or beneath market rates and have the stated objective of financial additionality (only funding projects that would not be commercially viable otherwise). Nonetheless, the logic behind that result should serve as a reminder that if project type is unobservable to outsiders, even public development banks face incentives to fund good projects, crowding out the private sector and generating rents for investors.<sup>58</sup>

Barder and Talbot (2015) consider three alternative instruments for providing a subsidy: concessional finance, a guarantee, and payments linked to outputs. They demonstrate that in principle each of these can deliver the same benefit to the investors at the same cost to the donor, but that payments linked to outcomes have many advantages, in particular in terms of the incentives they give to investors. The authors make the very useful point that concessional finance and guarantees require selecting the investor in advance, which raises the risk of favouring politically connected firms and similar problems, whereas the promise to subsidise outputs could be open to competing providers without preselection (where feasible). These ideas are particularly important if we consider the driving force behind growth to be contestability, adaption and selection. Allocating subsidies in a fashion that inhibits these processes could be particularly harmful. But if the main effect of subsidies is to introduce entrants to markets that they would not otherwise be able to enter, without subsequently protecting them from competition, it is not clear how damaging preselection would be.

The authors make a strong case for output-based subsidies, but there may be cases where time consistency problems would arise. If revenues for the project partially originate from the domestic government (for example, state subsidised electricity provision), and investment decisions rest on both commitments from donors and the government, the presence of output-based payments by donors may sometimes create space later for the government to attempt to renege on their commitments, although they may be prevented from doing so by contractual agreements.

Barder and Talbot draw attention to the risk that guarantees will distort behaviour and perhaps reduce managerial effort, known as moral hazard, although it is acknowledged that guarantees can cover risks outside the control of project managers, such as the credit worthiness of counterparties. This may be an argument for project managers having an equity stake, so the incentive to succeed remains. The authors also express scepticism about the idea that donors are likely to have better information about risks than private investors, stating: ‘the value placed on a guarantee by a beneficiary is the same as the expected cost to the organization that issues it’. This is not necessarily so, if risk tolerance differs between insurer and insured (this is ultimately an empirical question, although it is not obvious from a theoretical standpoint why donors should have a different attitude towards taking

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<sup>58</sup> This is on the assumption that good projects are offered the same favorable terms as medium projects. If one allows for DFIs to fund good projects with minimal subsidy, then there is an argument for running a portfolio of mixed types, where returns from good projects cross-subsidise medium types.

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risks with taxpayer's money than private investors do).<sup>59</sup> The World Bank's Multilateral Investment Guarantee Agency (MIGA) has famously paid out very little for political risk guarantees that have been called in, suggesting that some parties either are overestimating risks or are risk averse. Given the emphasis placed by donors on leveraging as much investment as possible, the prospect of instruments that have greater value to the private sector than cost to the public is certainly alluring. The question of which form of subsidy has the greatest impact on investment, per dollar cost to the donor, is of crucial importance, and any evidence would be extremely valuable.

Estache et al. (2015) address the question of the appropriate mix of public finance, private debt, and equity. They do not consider subsidies, but the paper contains some relevant insights. They consider projects with priced output. In their baseline case, pure public finance is preferable, on the basis that it is cheaper than private, assuming the government has fiscal space. But their work makes the point clear that if the project generates returns, then by not financing it but encouraging private finance instead, the government forgoes those revenues. However, the authors show that one justification for private finance is that for political reasons governments may find it difficult to charge prices that recover costs, with the implication that projects become a fiscal burden (to the extent that any impact on growth does not generate sufficient incremental tax revenues) reducing the government's scope to undertake them. This is something of a double-edged sword in a development context, where there is sometimes a case for subsidised user fees, but it may provide a justification for private involvement in some context (for instance, a commercial port). The authors also show that giving project sponsors an equity stake in the outcome provides an incentive for efforts to raise efficiency, on the realistic assumption that the government may be unable to contract over effort – this is similar to the rationale behind public-private partnerships (PPPs).

Finally, Basu (2014) shows that when the probability of a project's success is increasing the number of other successful projects (i.e. there are complementarities across investments) then by offering carefully coordinated guarantees, a donor can, at least in theory, induce these projects to happen when they would not otherwise. Here, the very act of giving the guarantee changes the probability of the project being successful – a phenomenon that may apply in other cases if, as is sometimes said, governments behave differently towards projects once large donors are involved.

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<sup>59</sup> It is also possible to overestimate the expertise of fund managers when entering unfamiliar territory. DFIs may not have superior information, but they are at least comfortable with the idea of operating in developing countries.



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