

## What if development aid were truly ‘catalytic’?

By Andrew Rogerson

**Quiz:** One of these statements is by a British Prime Minister and the other by an eminent ex-World Bank economist, 50 years apart. Which is which?

1. *‘Ideally, aid should be allocated where it will have the maximum catalytic effect of mobilizing additional national effort.’*
2. *‘We can spend aid in a catalytic way to unleash the dynamism of African economies, kick-starting growth and development and ultimately helping Africa move off aid altogether.’*

**Answer:** Harold (‘wind of change’) Macmillan, 1960 and Joe Stiglitz, 2010?

No ... the first is Austrian economist PN Rosenstein-Rodan, writing in the *Review of Economics and Statistics*, May 1961, and the second is UK Prime Minister David Cameron, speaking in Lagos, July 2011.

### Introduction

The idea that foreign aid should have a catalytic effect on other development processes and actors has a very long pedigree, as these quotes illustrate.

The term ‘catalytic’, borrowed from chemistry, refers to an agent that speeds up change processes in others. In the development community, only positive changes are intended. So, like ‘transparent’, the term has become aspirational – who would not want to be considered catalytic, all else being equal? This encourages a liberal, occasionally self-serving use of the term. This Background Note aims to probe some of the limits of the term, not as a black-or-white characterisation of good and bad aid, but to inform further analysis and policy-making.

Development processes are led by complex, uncertain, context-specific social and political dynamics and responses to national challenges. These shape the attitudes of families, taxpayers, communities, investors and others. Aid is marginal to these dynamics in most country contexts unless, by fortunate positioning or even accident as much as good design, it happens to align with them. In the best of circumstances, it provides some positive reinforcement.

The crucial short-term tension between the two ultimately complementary development goals of first, faster growth (soon) and second, better living standards (now) also plays out differently in different country contexts. In this Background Note, catalytic action is viewed as relating mainly to the former, and an improvement in living standards as a separable objective – accepting that some human capital improvements may also boost growth, as well as being intrinsically justified.

As Cameron’s last phrase and Rosenstein-Rodan’s famous ‘self-sustaining’ growth tag suggest, catalytic aid has long been associated with graduation from aid, in two once-again fashionable ways.

First, it is increasingly acknowledged that other development finance flows (see e.g. Kharas et al., 2011; Rogerson, 2010) are dwarfing aid as the main drivers of growth in most countries. Even its supporters see aid as playing a reduced, complementary role. In the view of vocal aid critics (Moyo, 2009), it actually holds back self-reliant development through perverse incentive effects analogous to welfare dependency at the household level in richer countries.

In this context, showing that aid in fact ‘crowds in’ other resources is a political necessity for OECD donor countries, simultaneously nodding to aid critics and appealing to countervailing domestic interests such as exporter and investor lobbies. The

example of the BRICS (Brazil, Russia, India, China and South Africa), who make no bones about the mutual-interest case for their own outbound assistance, spurs this thinking. In Lagos, flanked by a high-powered UK trade delegation, Cameron singled out China as having captured three times the UK's share of Nigerian imports.

The second recently fashionable connotation is that a catalytic approach to aid can also be a more sparing application of scarce grant-equivalent aid, especially towards recipient countries that have graduated into middle-income status. They now account for three out of four of the world's absolute poor (Sumner, 2010). Over an indefinite transition period, concessional assistance to them may taper down gradually, so long as it is blended increasingly with other instruments that have impressive headline numbers but low present value costs to the donor's exchequer. These include export finance and loan guarantees, equity funds, private-public partnerships (PPPs) and the whole gamut of 'innovative' financing, to which we return below.

Against this thoroughly modern, yet evergreen, political economy backdrop, it is worth asking what precisely we currently mean by 'catalytic' aid. How might we recognise it and make it operational? What aid objectives, and what aid instruments, prevalent today would a resolute shift to catalytic aid allocation principles exclude? That is to say, what might change in aid agencies on Monday morning if they acted, hypothetically, in single-minded pursuit of the catalytic principle?

This Background Note is structured in six sections including this introduction. The next section offers a two-part definition of catalytic. The third and fourth sections look at some potential critiques against deploying aid in a two-track framework, and variants of catalytic aid that are less vulnerable. It concludes with a simplified 'decision tree' for policy-makers. The fifth section considers alternative aid aims and instruments that would not fall within this definition, and their justification. The sixth and last section looks at a possible research agenda, especially in terms of how implementing countries may experience and view this brave new world of catalytic aid.

## Towards an operational definition of catalytic aid: a two-track framework

Rosenstein-Rodan touched on two separable but related senses in which aid is catalytic (Rosenstein-Rodan, 1961): the first is about objectives; the second is about instruments:

- in promoting *growth-enhancing change* in domestic policies, infrastructure and institutions (in his case, achieving higher absorptive capacity via rising savings rates, but we can broaden this to other

growth-related actions).

- in being *complementary to other development finance*, specifically to long-term private capital flows.

Both senses align quite well with today's popular or 'Cameronian' usage of the term in aid policy circles. **We can call these 'transformative' and 'crowding in' twin-tracks of catalytic aid.**

They can be mutually reinforcing, as institutional change that expands national opportunity sets successfully (say, improved economic infrastructure, more stable and dependable administration, etc.) often also attracts greater private flows. Improvements in the quality as much as quantity of public investment are at the heart of that model, as they were for Rosenstein-Rodan.

Crowding-in aid need not be transformative, however, to merit the catalytic tag; it could, for example, catalyse changes in private behaviour to achieve equivalent social benefits at lower public cost, without claiming any lasting impact on growth. Innovations in social service delivery are one such example.

The main alternative aim to transformative aid, as we shall see later, is a redistributive transfer that improves lives while it lasts, but does not necessarily leave systemic change behind when it ends. The main alternative instruments to crowding-in aid are aid that substitutes heavily for private or domestic funding (crowding out), or aid-supported subsidies that fail to elicit a sufficient private response.

Being or not being transformative is, therefore, about different time frames and levels of ambition: crowding in, or not, is about alternative design and execution.

The direct rates of return to transformative, capacity-unlocking, investment were originally thought to be low, as Rosenstein-Rodan wrote in 1961:

*'Such investment in economic infrastructure yields directly only small increases of income. It creates, however, a framework necessary to the profitability of more immediately lucrative subsequent investments.'*

This is a salutary reminder that truly transformative aid in this sense is not a quick fix: it may need longer time horizons (lower social discount rates) and more persistence and stability to deliver results than politicians on both sides of the aid relationship have patience for.

There is also a strong element of the 'market shaping' case for crowding-in aid in this framework. This is the core of the catalytic case for aid articulated recently, for example, by Bill Gates (Gates, 2011; Lamb et al., 2011), based on his Foundation's

experience with vaccine and drug development and agricultural research. Vaccine programmes can trigger changes in private behaviour, for example by taking advantages of economies of scale to shift industry pricing structures, by front-loading aid to bring forward disease immunity, or addressing time-inconsistency problems inhibiting research and development (R&D) by private firms. Analogous cases for international public intervention have been made in the areas of agricultural research and climate change mitigation.

## Potential difficulties with, and variants of, the two-track framework

### Transformative aid

Aid has the potential to bring about, or accelerate, transformation in two ways. Aid resources can do something that might be intrinsically transformative of the domestic growth context in the partner country, mainly in terms of helping deliver ‘soft’ (institutions, knowledge, and skills) or hard infrastructure. It can also be argued that the aid relationship can leverage transformative change via, for example, the policy dialogue, influence and conditionality. There are serious doubts about the second route, and some modest caveats to be framed about the first.

**The statistical fog around aid and growth:** Before attempting to distinguish what kinds of aid might be transformative and what not, we have to accept the inherent difficulties of establishing any clear relationship between aid and growth from cross-country regression evidence (Barder, 2011). Recent studies continue to both challenge and support the hypothesis that aid (on average, or in particular forms, or with diminishing returns, or only in specific settings) has a significant positive effect on growth. This relationship may nonetheless exist; it just cannot be demonstrated conclusively across a wide range of aid interventions.

**The ‘picking winners’ problem:** how might we know which aid-funded investments are likely to be transformative and which not? As Easterly (2002) has pointed out, we may not even be able to spot lasting change in developing countries after it happens, much less predict it ahead of time and target interventions accordingly. Too many ‘success stories’, often associated with singular national leadership, have proved ephemeral, despite initial enthusiasm on the part of the country’s external partners.

We do not even have a testable general theory of institutional change, let alone one capable of explaining dramatic accelerations of institutional development, in a fraction of the decades taken by many OECD countries to achieve such transformation

in their day. Much of the picking-winners debate surrounding industrial policy in 1970s and 1980s Asia, especially Japan, covers similar ground. How replicable has such an approach in fact proved across time and/or country contexts? Or did we with hindsight tend to generalise too quickly from too few, context-dependent cases?

This is mainly a caveat about grand attempts to engineer overarching or ‘strategic’ uses of aid, as against patient capacity-building and infrastructure support at a more modest scale, demonstration projects, and better information, which could yet be transformative at lower visibility (and risk). Such approaches will however depend for their ultimate impact on their scale-ability.

**The conditionality problem and scaling-up:** The Utopian streak in many development agencies drives them to promote institutional reform models before they are widely understood, tested, accepted and embedded in local contexts, often in the precise name of catalysing major change, attributable, ideally, to their influence. Yet there is no evidence that carrot-and-stick aid itself, absent of existing national consensus, triggers policy and institutional change in a durable way (Collier and Dollar, 2002). Aid does not, by itself, leverage better policies, though better policies can perhaps leverage aid, along with other resources.

But if conditionality is discredited as an instrument, what other transmission mechanisms might credibly link aid to sustainable institutional change? How, if at all, could one deliver or support transformative change from the outside?

Presumably the main alternative form of aid relationship that could still plausibly be transformative is a non-linear approach to helping countries pilot changes carefully for themselves, evaluate pilots rigorously, debate and learn lessons inclusively and finally scale up a few proven and popular experiments. This would happen at a pace that is locally driven and that may often be overtaken by exogenous shocks.

A reality check may be in order, however.

Are today’s international development agencies really willing and able how to do this well enough, and are their internal incentive systems sufficiently geared towards such a patient, risky and hands-off business model? What changes would need to happen to enable this shift of practice across a large enough spectrum and timeframe to be truly transformative? Surprisingly little attention has been focused on these topics (for an exception see Linn, 2011).

**‘Mere’ public infrastructure, publicly financed, without shame?** There is a danger of getting carried away with such institutional transformation ambi-

tions (and related policy-reform fascination) to the exclusion of more modest, yet valid growth-enhancing infrastructure options beyond the immediate reach or interest of the private sector. This infrastructure gap may arise because user charges that serve as collateral for private investment funding are simply not feasible (for example, most rural road networks). Such public investments have fallen out of fashion with many donors, but are still part of the backbone of the growth platform that state and local governments need to provide – and they link closely to the domestic consensus on tax-and-spend.

Clearly, minimum hurdles of sustainability – such as how to ensure basic operation and maintenance – need to be passed for such investments to generate adequate economic returns. The timeframe for truly systemic change, for example for the creation of robust national institutions for maintenance, may be considerably longer, but the boost to growth of more limited solutions may still pass muster as catalytic. This is likely to be a grey area in practice, on which the opinions of implementing countries should be heard.

### **Crowding-in aid**

**Mechanistic versus catalytic approaches to blending aid with other flows:** How can we really tell whether public aid genuinely crowds in private resource flows, or merely subsidises those that would have occurred anyway? There is a tendency in PPP literature and statements by some public development finance institutions to treat greater leverage of private resources per unit of public ones as a good thing in and of itself. Actually the contrary can be argued: a public stake of 10-20% might plausibly anchor a private one of 80-90%, whereas scepticism is warranted for claims that, say, a 99% private deal is only made possible thanks to a residual 1% public presence. It is equally plausible that the public stake is redundant.

Proving that aid crowds in private investment is notoriously difficult in the absence of an easily observed counter-factual, where we might compare specific investment behaviours with and without public support of various kinds. Large PPP schemes in developing country contexts in particular are more likely to be non-replicable, one-off cases. However, at the macro level, researchers have been able to construct counterfactuals linking the activities of development finance institutions (DFIs), in particular, with significant positive effects both on growth and on levels of investment (Massa, 2011; te Velde, 2011).

**Be careful with market-failure justifications:** It is obvious that a rigorous catalytic approach to public-

private combinations involves more than achieving attractive-looking cost-sharing ratios. It is possible that there is a real case of *market failure* that blocks sufficient private participation, as in the vaccine cases cited earlier. In this case the first-best policy response is to fix the cause of the market failure (which could be a result of political uncertainty, inadequate property rights or their enforcement, etc.), rather than use public subsidies to try to cover it over. But some of the response may have legitimate financial elements.

So, for example, many innovative instruments in guarantee, insurance or contingent-financing form have been developed to address sources of market failure that may otherwise prevent or delay private investment, as in the vaccine case.

More generally, a class of market making initial public investments is often invoked to create or unblock the potential for private delivery. Famous cases include the Kenyan M-PESA mobile-phone based money transfer service that has initial seed funding from the UK Department for International Development, and a variety of social marketing programmes – for example improved woodstoves or family planning products – where the aid intervention, beyond the reach of any single private supplier, helped unlock effective demand (Kharas et al., 2011).

**Bureaucrats in business?** These are recognisable catalytic success stories, anecdotally, but they are also risky ones *ex ante* for aid agencies, and they raise the picking-winners question again at the micro level. We should not rule out, but need to be ready to challenge, the basic premise that a civil servant has insights into enormous investment potential and economic returns that the market has somehow failed to identify.

We also tend to hear a lot about a few ‘best buys’ and their heroic public sector champions, but not so much about the many quiet but worthy flops, which were either not implemented as intended, or somehow failed to trigger the sought-after market reaction. Looked through the metaphor of private venture capital, scaling up this type of catalytic approach implies tolerance of high failure rates, in exchange for potentially very large returns to a small minority of successful investments.

In terms of catalytic aid, the losses are socialised in the public sector, while the gains are privatised, though with luck they will spill over more broadly. This means that in addition to tolerance of failure, there has to be political tolerance of the perception of capture by vested interests, as and when failure is exposed by audits and spot lit in aggressive media stories.

**Private-public mixes that ‘merely’ improve wel-**

**fare distribution:** A second, less demanding test for crowding-in aid is to improve overall welfare distribution, *by leveraging in private money to reduce the public cost* of a given distributional goal, such as the delivery of, for example, education provision or apprenticeship places. This approach assumes the goal is justified intrinsically, with demonstrable results at least in the short term, and seeks simply to deliver it in a more cost-effective way. No ‘market shaping’ is necessarily intended, though that may be an added bonus.

In this more limited case of public cost reduction, the questions will tend to focus on the value-for-money of alternative financing and delivery constructs over a sufficiently long life cycle. As the history of the Private Financing Initiative (PFI) in the UK shows, shifting most of the initial investment for, say, hospital construction off budget, is only one element of the equation. Is there a large hidden subsidy implicit in the public guarantees required? What is the profile of the debt service and maintenance costs, as compared to the nearest sovereign-funded alternative? And so on.

As this calculus is about cost-effectiveness, not just efficiency, we also need to compare like for like in terms of impact. It is plausible that the private or quasi-private delivery alternative is not only cheaper, but also better in terms of results, but that comparison needs to be evidenced. Proponents of PPP-type programmes may not be crisp on whether their case primarily rests on greater economy (cheaper inputs), efficiency (better transformation of inputs into outputs) or effectiveness (greater outcomes per delivered output) grounds – the three underlying components of value-for-money. Aid sponsors and implementing countries should seek sufficient assurances of this. Once they have them, they have a catalytic offer under this framework.

A highly simplified framework (Figure 1, overleaf) illustrates a possible decision-tree to summarise what makes some aid catalytic, and what does not.

## So what kind of aid is not catalytic?

**Humanitarian aid** – with the immediate alleviation of suffering as the main aid motive – does not fit this framework. The only exceptions are in the extreme sense of preserving the minimum fabric of society during episodes that would otherwise destroy it, or the opportunity sometimes offered by crises, by way of a silver lining, to leapfrog earlier institutional barriers. The logic is anyway one of human security in the widest sense, and it should not be forced into a catalytic framework.

**Programmes designed to improve living standards by providing key services** – such as ramping up primary

education or vaccinations through public intervention in non-fragile, non-humanitarian contexts – are an alternative aim for aid to that of accelerating growth through any means. Barder (2011) estimates that this goal accounts for nearly three-quarters of purpose-allocated UK aid, three to four times the share of ‘growth-enhancing aid’ (though these two categories are not synonymous with catalytic versus non-catalytic).

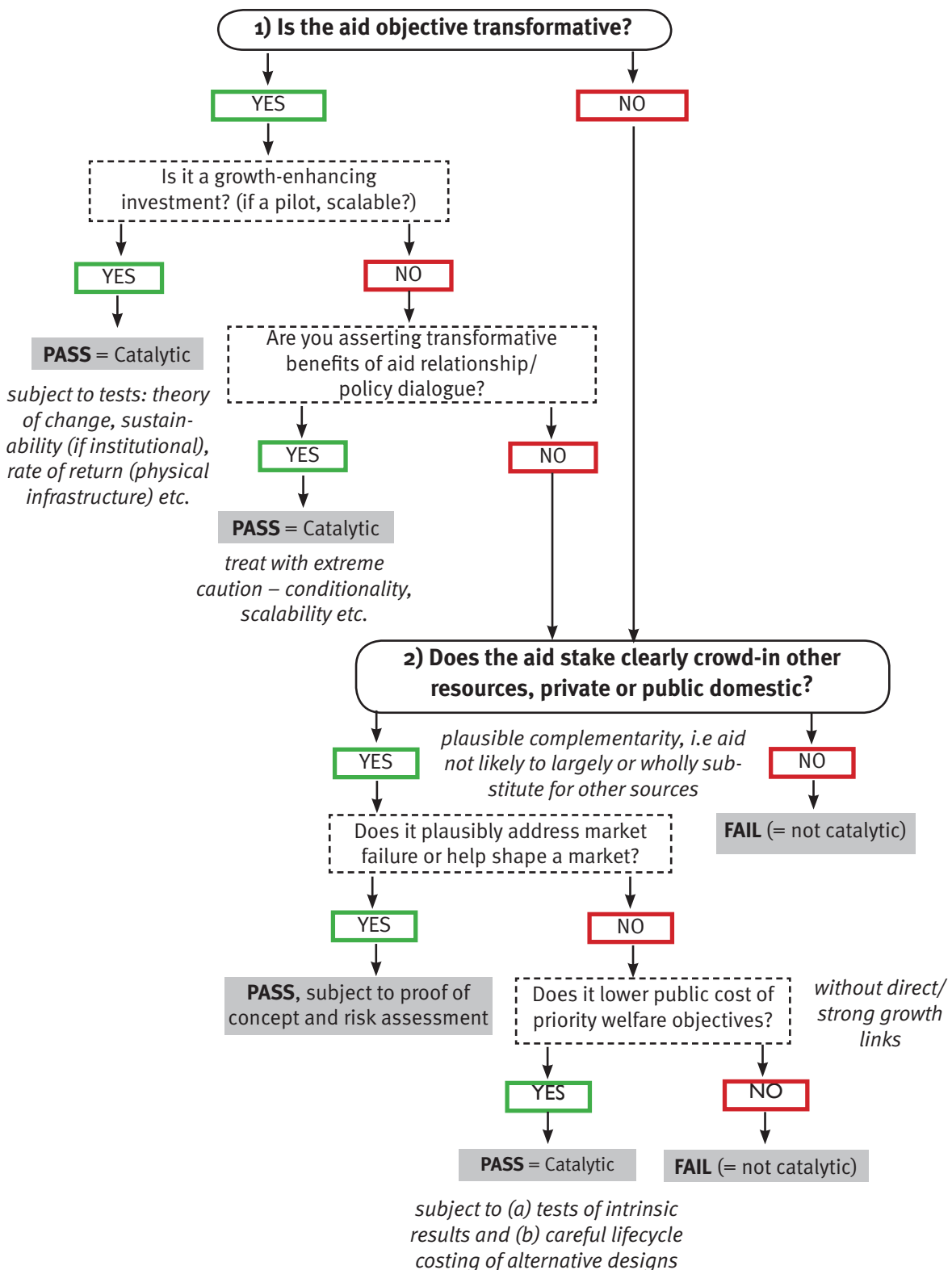
Barder’s larger point is that ‘aid can improve living standards while development largely happens through other means’ (personal communication). Indeed, the logic of this improved living standards aid is not concerned directly with achieving sustainable exit from aid dependency through higher growth.

On the contrary, if one can prove that well-targeted spending saves and improves people’s lives, there is a case to even deepen aid dependence in the short term, filling a gap in efforts around the Millennium Development Goals beyond the reach of domestic resources or private capital flows for generations (Sachs, 2010). This is not an aid trajectory that many donors would publicly acknowledge, so catalytic policy reforms, such as cost-sharing or cost-reduction measures may also be invoked to seem to shorten the time horizon for domestic self-reliance. Their credibility is however subject to all the usual caveats for sensitive policy conditions.

Much human development may also be ‘transformative’ of growth prospects in a long-run sense. However, the linkages are often so diffuse that expansion of publicly provided education and health coverage, by itself, fails to count as catalytic for our purposes. Therefore, for example, the evidence (Hanushek and Woessman, 2007) is that economic growth has a positive association with the quality of secondary education (not primary, and definitely not quantity), which is the focus of a relatively small fraction of education aid. Similarly a growth-focused human capital agenda in health would give relatively more weight to the chronic effects of ill health on adult morbidity and hence productivity, alongside the higher-profile burden of mortality, particularly in children.

**Global public goods (e.g. climate change mitigation):** Action predicated on enlightened funder self-interest, rather than the development of the implementing country as such, does not have to be either transformative of the national context, or crowding-in of other resources, though it may deliver better results if it is one or both of those things as well. Projects to reduce carbon dioxide emissions, therefore, might also stimulate technology transfer leading to ‘green growth’ and/or involve creative new public-private blends, but such initiatives stand on their own merit of emissions reductions.

Figure 1: When is aid catalytic? A simplified decision tree



Recent policy statements have articulated the larger case for all development as being ultimately about enlightened self-interest as David Cameron said at the Global Alliance for Vaccines and Immunisation (GAVI) replenishment conference in June 2011:

*'If we really care about Britain's national interest, about jobs, about growth, about security, we shouldn't break off our links with the countries that can hold some of the keys to that future. If we invest in Africa, if we open trade corridors, if we remove obstacles to growth, it's not just Africa that will grow but us too. And if we invest in countries before they get broken we might not end up spending so much on dealing with the problems, whether that's immigration or threats to our national security.'*

### Further questions and a research agenda

The above framework needs to be tightened, nuanced and tested for relevance to a wide range of programmes in different country contexts.

There is no black/white dichotomy intended, in which aid is either catalytic or somehow implied to be undesirable because it is not catalytic.

The main purpose of this framework is to push a little harder on the case for aid – especially but not only in middle-income countries where three quarters of the world's absolute poor now live – using the twin-track definition of catalytic as a springboard.

In terms of the research agenda, most of the more immediate research questions concern the crowding-in track, especially in terms of how implementing countries experience and perceive various kinds of blended public-private support.

So, for example, on country ownership, are national authorities aware of and consulted on packages, such as PPP, involving some elements of official development assistance-like support but also various other instruments and contracts between private companies, foreign and domestic, and between them and government entities? This refers to both DAC and non-DAC sources of 'mixed' or blended flows.

On transparency, how well are cost structures and burden-sharing arrangements defined and understood, and by whom, before such investments are committed?

In terms of success stories of catalytic investments from country case studies, what appear to be the main indicators of success, and what factors are more and less context-dependent? What are some of the lessons of failure, and who absorbed the cost of those failed investments?

In terms of scalability, which aid-supported investments intended to be transformative have been taken to scale, which not, in what timeframe and, if possible, why?

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