

Aid absorption: Factors and Measurements

Huma Haider
Independent Consultant
9 March 2018

Question

What factors support or limit aid absorption? Are there any specific aid absorption tipping points, or contexts within which scale-ups in spending have been limited in effectiveness due to absorption issues?

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1. Overview

Absorptive capacity refers to ‘the ability to use additional aid without pronounced inefficiency of public spending and without induced adverse effects’ (Bourguignon and Sundberg, 2007, 640). An absorptive capacity limit is the point at which a country can no longer absorb or spend aid efficiently and aid is then subject to diminishing returns (IES, 2017; Dornan and Pryke, 2017). Absorptive capacity involves not only the ability of a recipient country to absorb aid, but also the ability of donors to correctly assess and consider the recipient’s characteristics and absorptive constraints in designing programmes (Choi et al., 2013).

Much of the aid allocation and aid absorption literature focuses on the effects of aid on growth, rather than private and public consumption and investment (Tengstam, 2017). This results in a large evidence gap, as findings in relation to aid and growth do not necessarily provide insights into the relationship between aid and other outcomes (Carter, 2014). Some of the literature emphasise that donors should not allocate aid solely based on growth targets and/or solely to countries with more efficient government and better institutions. Rather, aid could be used to raise the level of consumption of households in less efficiently governed countries that would otherwise experience prolonged poverty (Carter, 2014). Temple and Van de Sijpe (2017) find that aid is generally absorbed, but that household consumption responds more strongly than investment or government consumption.

Absorptive capacity and absorptive capacity limits varies across countries. General governmental instability is considered a constraint on absorptive capacity (Serie et al., 2009). Some studies, find however, that least developed countries (LDCs - with high vulnerability and low levels of human capital) experience increasing returns to aid and higher absorptive capacity, even if they obtain lower average rates of success (Guillaumont and Wagner, 2014; Guillaumont and Guillaumont Jeanneney, 2006).

Despite acknowledgement of the importance of absorptive capacity, empirical evidence on such constraints in developing countries is relatively limited (Presbitero, 2016). Constraints that are identified in the literature include: macroeconomic constraints; institutional and policy constraints; technical, human and physical capital constraints; donor aid delivery constraints; social and cultural constraints; and specific sector constraints

Approaches to measuring absorptive capacity remain largely unsystematic and ad hoc (Lamb and Mixon, 2013). The Composite Index of Absorptive Capacity incorporates: capital constraints; governance constraints; and donor practices. The Measuring Absorptive Capacity framework, which identifies barriers to absorption by testing development, plans against local conditions. Some emphasise that absorptive capacity can only be understood in relation to a specific objectives or particular projects, rather than in relation to a given country or to aid in general (Choi et al., 2013).

Attempts to quantify absorptive capacity constraints have focused on the concept of an absorptive capacity *threshold, limit or tipping point* – a point of negative marginal net returns to aid. There are limited attempts, however, to develop a method of determining such a threshold, given that it would vary from country to country. The empirical evidence that does exist is drawn mainly from aid-growth regressions, with 20% often being identified as the threshold beyond which additional aid is correlated with negative returns. Such studies do not take into consideration other goals of aid and forms of absorptive capacity such as absorption based on household consumption.

Absorptive capacity is not fixed, but can potentially be improved through successful reform and effective policies. However, there has been little systematic analysis on how to overcome absorptive capacity constraints (Lamb and Mixon, 2013). Ways in which to improve absorptive capacity could include: alleviating macroeconomic constraints; simple, technical capacity development, particularly around bureaucratic aspects; substantive capacity development, such as improved ability to manage the domestic fiscal space; improvements in donor aid delivery; alternate channels for aid distribution; targeting different aid aims, such as consumption; and phased aid.

2. Introduction

The question of absorptive capacity has arisen in various international development contexts. In the case of Afghanistan, for example, some locals and international officials assert that stabilisation and development efforts would have been much more effective had there been less funding (Lamb and Mixon, 2013). In the case of the 2010 earthquake in Haiti, where already weak state institutions were further undermined by the natural disaster, there are also concerns that the country was overwhelmed with aid and able to effectively spend only a fraction of the amount received (Lamb and Mixon, 2013).

What is absorptive capacity?

Debates about absorptive capacity are often subject to similar uncertainties that characterize knowledge about aid effectiveness (Lamb and Dixon, 2013). While there are variations in the definition of absorptive capacity, it 'refers loosely to the **ability to use additional aid without pronounced inefficiency of public spending and without induced adverse effects**, for instance the 'Dutch Disease', or the crowding out of domestic saving' (Bourguignon and Sundberg, 2007, 640). 'Dutch Disease' refers to macroeconomic issues, whereby large aid inflows contribute to a loss of competitiveness through real currency appreciation (Guillaumont and Guillaumont Jeanneney, 2006, 4). While absorptive capacity can refer to disbursement constraints, evidenced through a long lag between commitments and disbursements, or low utilisation of credits, the more classical meaning is a **decline in the marginal return of aid beyond a certain amount**. This can be viewed at the macro level, in terms of growth, or at the micro level, in terms of projects or specific expenditures (Guillaumont and Guillaumont Jeanneney, 2006). In the case of growth, having high absorptive capacity means that economic growth is faster, the return on investment is higher, and foreign aid is better spent (Lamb and Mixon, 2013). Low absorption means that economic growth is stalled, investments are wasted and foreign aid is unproductive or even harmful (Lamb and Mixon, 2013).

Absorptive capacity involves not only the ability of a recipient country to absorb aid in a way that achieves a given objective, but also the ability of donors to correctly assess the recipient's characteristics and absorptive constraints and to design an effective project, given the context (Choi et al., 2013). Absorptive capacity can be low if donors have a poor understanding of what is actually possible in a local context, given local desire, resources, or capabilities, and how problems can be resolved (Lamb and Mixon, 2013).

Absorptive capacity limits

In contexts where total aid is relatively low, additional aid is likely to improve government performance. Eventually, however, incremental improvements can become negative (IES, 2017).

An absorptive capacity limit is the **point at which a country can no longer absorb or spend aid efficiently and aid is then subject to diminishing returns** (IES, 2017; Dornan and Pryke, 2017). In such circumstances, allocating more financial aid to a government could have adverse effects, undermining government performance and increasing the risk of corruption and mismanagement. This could reach a potential tipping point where too much aid can impact the effectiveness of all existing aid (IES, 2017; Dornan and Pryke, 2017). There can be a positive relationship between the higher the level of aid and the faster the speed of aid increases on the one hand; and the triggering of negative net returns on the other. Speed of increase itself can add strain to an already troubled system (De Renzio, cited in Serie et al., 2009).

Concerns over absorptive capacity have in some cases, justifiably resulted in some countries receiving less aid than they need (Serie et al., 2009). Donors need to be able to allocate aid in such a way that the performance of a recipient government is not compromised by having inappropriate levels of assistance (too much or too little), or too much of the wrong type of assistance (IES, 2017).

3. The aims of aid

Much of the aid allocation and aid absorption **literature focuses on the effects of aid on growth**, rather than private and public consumption and investment (Tengstam, 2017). This results in a large evidence gap. Findings in relation to aid and growth, in particular of diminishing returns of aid's contribution to growth (a non-linear relationship) **do not necessarily provide insights about the relationship between aid and other outcomes, such as increases in household consumption, poverty reduction and increases in welfare** (Carter, 2014). This has implications for determinations about absorptive capacity and absorptive capacity limits.

Research has often stated that countries with quality policies are better at absorbing large amounts of aid before the returns begin to diminish; and consequently that how much aid a country can receive depends on the quality of its policies (Serie et al., 2009). The neoclassical growth model, in particular, supports the idea that aid only causes growth in recipients with 'good policies', with the assumption that good policies are considered as those conducive to growth (Carter, 2014).

In their absorptive capacity analysis Feeny and McGillvray (2009) find that while a number of fragile states can efficiently absorb more aid than they have received, a number receive far more aid than they can efficiently absorb from a per capita growth perspective. They acknowledge, however, that this is not necessarily bad in terms of other aid objectives, including poverty reduction.

Carter (2014) asserts that donors should not allocate aid based on growth targets (traditionally the criteria for performance based allocation rules) and solely to countries with more efficient government and better institutions that are able to invest aid more productively. These are countries that would often be considered to have high aid absorption capacity. Such countries would likely have a better future in the absence of aid and are thus less in need of aid. Rather, countries that are 'stagnant' are preferable recipients, as aid could be used to raise the level of consumption of households that would otherwise experience prolonged poverty (Carter, 2014). This is referred to as 'Bauer's paradox' – where aid is most effective (in economic growth terms) where it is least needed, as such countries could grow on their own (Carter, 2014). Further, it cannot be assumed that economic growth is the only channel through which to reduce extreme

poverty (Carter, 2016) and that the former should be the key consideration when thinking absorptive capacity and absorptive constraints.

Domestic absorption typically comprises household consumption, gross investment and government consumption (Temple and Van de Sijpe, 2017). The ability to absorb aid could focus not only on translating aid into growth, but also absorbing aid in terms of higher consumption. Temple and Van de Sijpe (2017) find that **aid is generally absorbed** (it increases expenditure relative to output), but that **household consumption responds more strongly** than investment or government consumption. This could be through government lowering taxes, rather than increasing government purchases; or through aid that bypasses domestic governments (Temple and Van de Sijpe, 2017).

4. Recipient country contexts

While studies have looked at increasing or decreasing returns to aid, generally, **absorptive capacity and absorptive capacity limits of countries and economies varies**, depending on their own characteristics, for example levels of education, capital and so on (Dornan and Pryke, 2017; Guillaumont and Wagner, 2014; Guillaumont and Guillaumont Jeanneney, 2006). Wagner (2014) finds that thresholds beyond which aid has diminishing returns vary according to structural characteristic.

The administrative burden of receiving foreign aid is considered to be a key issue in fragile states (Feeny and McGillivray, 2009). **General governmental instability is a concern for donors in terms of lowering absorptive capacity**. In particular, it undermines personal and institutional memory amongst the recipient ministries, which means that donors have to start processes over again with each turnover; and undermines the average quality of personnel at any given time, as more highly qualified personnel are less tolerant of instability (Serie et al., 2009).

At the same time, **aid has the potential to enhance absorptive capacity in situations of structural vulnerability (instability)**, as measured by vulnerability indexes (i.e. the UN's Economic Vulnerability Index or measures of export instability) (Guillaumont and Wagner, 2014). This is evidenced by a higher threshold of aid level to reach negative marginal returns when vulnerability is high, particularly economic vulnerability (Wagner, 2014). The stabilising effect of aid in helping vulnerable countries to cope with negative exogenous shocks is considered to increase the threshold of absorptive capacity (Wagner, 2014). Vulnerable countries also appear less exposed to decreasing returns from World Bank projects as aid levels increased (Guillaumont and Laajaj, 2006; cited in Guillaumont and Wagner, 2014).

In addition to vulnerability, **low human capital or lower levels of education is another factor found to slow the decline of marginal returns** with increases in aid (Guillaumont and Guillaumont Jeanneney, 2006). This is consistent with the finding that the knowledge content that comes with aid has a higher marginal impact the lower the level of education. Thus, while vulnerability and lack of human capital are negative factors of the average success of projects, they are positive factors in making this success less subject to diminishing returns when the level of aid increases (Guillaumont and Guillaumont Jeanneney, 2006). Guillaumont and Guillaumont Jeanney (2006) conclude that least developed countries (LDCs - with high vulnerability and low levels of human capital) experience increasing returns to aid and higher absorptive capacity, even if they obtain lower average rates of success.

A recent trend in some low-income developing countries has been a rapid scaling-up of public investment, in particular infrastructure investment, sometimes in relation to the exploitation of natural resources of post-conflict and post-disaster reconstruction (Presbitero, 2016). While not necessarily linked to scaling-up of international aid. Presbitero (2016) finds that a rapid scaling-up of public investment appears to produce absorptive capacity bottlenecks and poor project outcomes. Projects undertaken in periods of public investment scaling-up are found to be less likely to be successful, although the effect is relatively small, particularly in poor and capital scarce countries. The study also finds that project outcomes do not depend exclusively on the scaling-up of public investment, but also on institutional capacity: there is a positive association between strong policies and institutions and project outcomes (Presbitero, 2016).

5. Factors affecting aid absorption

Despite acknowledgement of the importance of absorptive capacity for determining returns to aid and public investment, empirical evidence on absorptive capacity constraints in developing countries is relatively limited (Presbitero, 2016).

There are various types of bottlenecks or constraints identified in the literature that are believed to affect the capacity of recipient countries to absorb aid and limit the effectiveness of additional aid (see Bourguignon and Sundberg, 2006; and de Renzio, 2005 for categorisation). These include:

Macroeconomic constraints

The key macroeconomic constraint discussed in the literature is the risk that **large increases in aid can produce inflation and an appreciation in the real exchange rate, undermining export competitiveness and, in turn, long term development** (Dutch Disease effect) (Feeny and de Silva, 2012; Feeny and McGillivray, 2009; Serie et al., 2009; Guillaumont and Guillaumont Jeanneney, 2006). This could explain why the aid-growth relationship is non-linear and exhibits diminishing returns (Feeny and McGillivray, 2009). Countries that are heavily reliant on exports would be particularly affected. Feeny and McGillivray (2009) state that in some fragile states, concerns about Dutch disease impacts may be higher than concerns over the capacity of the public sector.

Findings in the literature about macroeconomic constraints, however, are ambiguous (Feeny and de Silva, 2012). In some circumstances, constraints other than exchange rate volatility will have a greater effect on export sector (ibid). A recent study on domestic absorption did not find any symptoms of Dutch Disease (Temple and Van de Sijpe, 2017).

Institutional and policy constraints

Institutional and policy constraints include the **lack of capacity to handle the administrative burden associated with high levels of aid** (e.g. negotiation, management, long-term national development plans; reporting requirements) **and to generate credible strategies to transform aid into development** (Feeny and de Silva, 2012; Feeny and McGillivray, 2009; Serie et al., 2009). Strong institutions, capable of administering aid programmes and developing effective policies are essential (Feeny and de Silva, 2012). Presbitero (2016) finds that there is a positive association between strong policies and

institutions and project outcomes. The administrative burden of receiving foreign aid is believed to be a particularly problematic for fragile states (Feeny and de Silva, 2012).

The response of recipient country's fiscal policy to aid can be a key constraint. Adverse effects of increases in aid include an increase in undesirable expenditures; greater scope for corruption and financial mismanagement; and greater accountability to aid donors rather than to electorates (Feeny and de Silva, 2012).

Technical, human and physical capital constraints

Technical and human capital constraints include **shortages in skilled or adequately trained civil servants** to manage and administer aid flows. Constraints can also occur at **the sector level**, with difficulty for developing countries to recruit, train, and hire qualified teachers, nurses, doctors managers, instructors, etc. (Feeny and de Silva, 2012; Serie et al., 2009).

Donor aid delivery constraints

Constraints generated by donor behaviour include **aid fragmentation**, with a multiplicity of aid sources in a country and/or interventions through small projects that creates a lack of coordination between the donors and the recipient country (Presbitero, 2016; Serie et al., 2009; Guillaumont and Guillaumont Jeanneney, 2006). This is particularly problematic in countries that are small, with low administrative capacities (Guillaumont and Guillaumont Jeanneney, 2006). As donors scale-up foreign aid, the burden can be further exacerbated by increasing donor proliferation and fragmentation (Presbitero, 2016; Feeny and de Silva, 2012). Serie et al. (2009) find that **at times, problems in absorptive capacity in the ministry side have more to do with specific knowledge of donor procedures**, rather than shortfalls in general knowledge of public management or education.

Donor poaching of government staff can also undermine the quality of bureaucracy in recipient countries, resulting in absorptive capacity constraints (Presbitero, 2016; Serie et al., 2009).

In addition, donors' **misunderstanding of a ministry's actual capacity** and the setting of excessive ambitions, rather than customized, realistic plans is another key constraint that undermines absorptive capacity (Lamb and Mixon, 2013; Serie et al., 2009).

Social and cultural constraints

Social and cultural factors can also constrain the effective use of additional aid flows. These constraints relate to a **lack of demand** for health and education services in some developing countries. In such cases, even if schools and clinics are well built and staffed, people may not necessarily attend them. This needs to be considered when scaling up aid programmes in particular countries (Feeny and de Silva, 2012).

Sector constraints

Each sector will also have its own specific set of constraints that influence absorptive capacity. In the case of education for example, the following recipient-side factors influence the absorptive capacity of aid: the pre-existing educational attainment and health conditions of a population; per capital income levels; percentage of population under the age of 15; urban population and infrastructure; human and capital resources; and assessment tools (Choi et al., 2013).

6. Measuring the absorptive capacity of recipient countries

While debates over the dangers of ignoring absorptive capacity re-emerged with efforts to achieve the millennium development goals, and subsequently the sustainable development goals, **approaches to measuring absorptive capacity remain largely unsystematic and ad hoc**. There is no standard assessment tool (Lamb and Mixon, 2013).

The most basic measure of absorptive capacity involves **dividing how much donor money recipient countries have spent in a given year by how much money donors have offered**. It is not clear, however, how this figure can guide policy beyond either offering less money the following year or attempting to build capacity to spend the money (Lamb and Mixon, 2013).

Feeny and de Silva (2012) develop the **Composite Index of Absorptive Capacity (CIAC)**, which incorporates three major components of absorptive capacity:

- **Capital constraints** (including human capital and infrastructure constraints): proxies include the number of doctors, nurses and primary and secondary school teachers; adult literacy in relation to staff in recipient public sectors; extent of paved roads.
- **Governance constraints** (including policy and institutional constraints): proxies include the World Bank's governance indicators
- **Donor practices**

Lamb and Mixon (2013) introduce the **Measuring Absorptive Capacity (MAC)** framework, which **identifies barriers to absorption by testing development plans against local conditions**. It takes into account technical requirements, the political economy and adaptive capacity of recipient institutions and societies to absorb and make productive use of aid, and the delivery capacity of donor institutions. It involves the identification of the resources, capabilities, knowledge, or conditions required for the intervention to work but that are not provided or produced by the intervention itself (prerequisites). Input prerequisites for a police training programme could include, for example, the availability of qualified recruits and trainers; and decent pay for the police force, such that they have the incentive to take on more patrols. Once the prerequisite structure is known, it is necessary to determine whether the prerequisites are present in the system at the necessary level. This requires political economy analysis and likely field research (Lamb and Mixon, 2013).

Its premise is that donor plans are easier to change than societies. As such, if a poor fit is discovered between a plan and the presence of prerequisites for its success, attention is first given to whether the plan itself can be revised to better reflect realities on the ground. This could involve addressing the missing prerequisites, for example including a literacy component to the donor intervention if potential recruits to the police force are illiterate. It could also involve reconsidering whether the objectives are appropriate to the recipient system or should be adjusted (Lamb and Mixon, 2013).

In countries that exhibit low levels of absorptive capacity, donors should work to ensure that their programmes are effectively relieving existing constraints are at least working around them (Feeny and de Silva, 2012).

Choi et al. (2013) emphasise that **absorptive capacity can only be understood in relation to a specific objective**, as each given objective will have a unique set of constraints that could undermine its achievement. Further, determinations of absorptive capacity and factors that

shape or limit absorption often make sense only **in regard to particular projects, rather than aid in general**. What happens when scaling-up a cash transfer programme will be different from increasing budget support, for example (Expert comments). Constraints to reducing corruption, are also likely to be markedly different from constraints to providing access to piped water (Choi et al., 2013). It is thus not possible to establish a method for determining the overall absorptive capacity of a given country. In addition, it can be challenging to correctly assess recipients' constraints. As such, donors must ensure their project design has enough flexibility to be reshaped in order to adapt to emerging constraints previously unaccounted for (Choi et al., 2013).

7. Thresholds or tipping points

Beyond the question of what are the factors that constrain absorptive capacity, there is the question of what the **consequences of exceeding absorptive capacity** are (Lamb and Mixon, 2013). Here, the literature often focuses on the subject of **diminishing returns** (whether they are returns to growth, returns to poverty reduction, or other returns) (Lamb and Mixon, 2013).

Attempts to quantify absorptive capacity constraints in the context of aid allocation have focused on the concept of an absorptive capacity threshold, limit or tipping point – a point of **negative marginal net returns to aid**, a point that is reached when what the recipient country gets in return from increments in aid is less than an acceptable level or less than the increases in costs it generates (diminishing returns) (see Serie et al., 2009; Carter, 2014). There are limited attempts, however, to suggest a quantitative benchmark or method of determining such a threshold, given that it would vary from country to country (Serie et al., 2009; Carter, 2014). The empirical evidence that does exist is drawn mainly from aid-growth regressions, which focuses on the marginal impact of aid upon growth. In this case the threshold is the point at which the marginal impact of aid upon growth is zero (Carter, 2014).

In discussing the CIAC index, Feeny and de Silva (2012) state that a way of examining whether countries are receiving appropriate levels of aid is to estimate the specific threshold at which diminishing returns sets in for each individual country. They assume that for a country with an average CIAC, this threshold is where aid accounts for 20% of a recipient's GDP. This is justified on the basis that aid growth studies have identified this figure as the threshold for the average developing country. The threshold is then adjusted for individual countries by scaling it by a factor equal to its CIAC score relative to the average CIAC (Feeny and de Silva, 2012, p?).

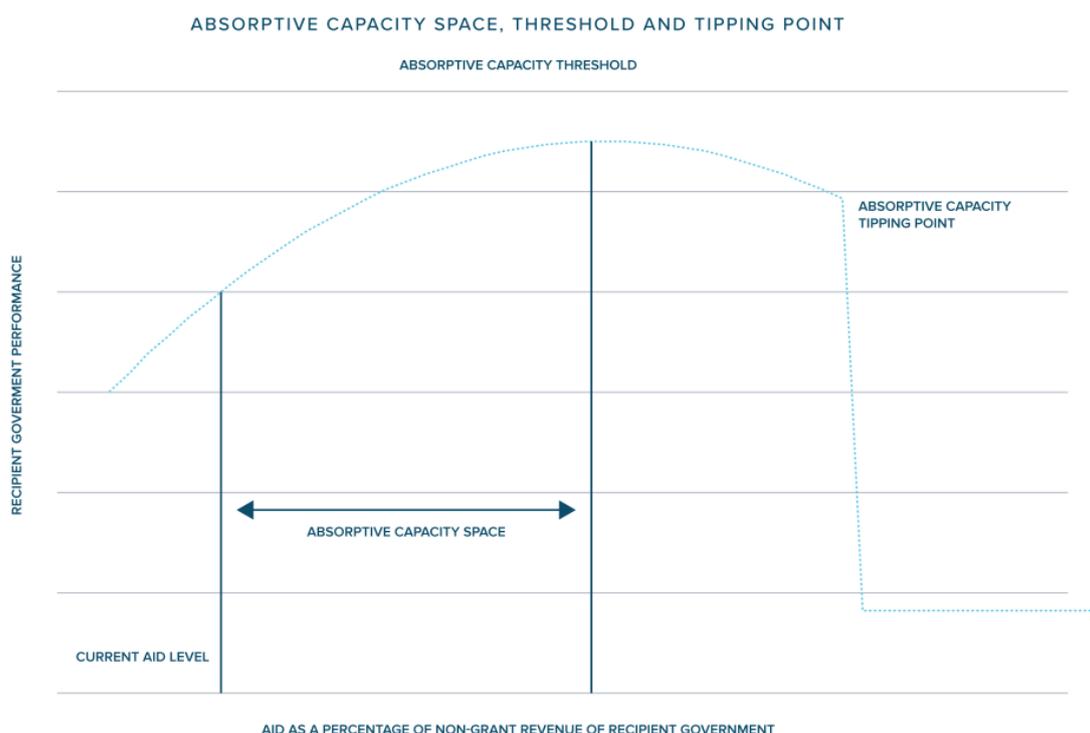
Feeny and McGillivray (2011, 59) estimate that the level of aid that maximises per capita income growth in recipient countries is when it accounts for 20.7% of a recipient's GDP. Others have cited 30% of a recipient's GDP as the threshold beyond which additional aid is correlated with slowing or negative per capita GDP growth (Lensink and White, 1999; cited in Lamb and Mixon, 2013; Clemens et al., 2012; cited in Carter, 2016).

De Renzio estimates a range of anywhere between 15 and 45% of GDP as the threshold, beyond which aid loses its effectiveness (cited in Serie et al, 2009, 6). Clemens et al. (2012) find a range of 15-25% of GDP (cited in Carter, 2014, 136). Carter (2015, 145) identifies average turning points across recipients at levels of aid intensity of 8, 16 and 24% of GDP.

IES (2017) provides an illustration of absorptive capacity for a hypothetical recipient government, adopting the often-cited optimal aid level of 20% of GDP as the absorptive capacity threshold, beyond which government performance deteriorates significantly, to levels that theoretically

could be worse than if no aid was given at all. Absorptive capacity space is the difference between current aid levels and the absorptive capacity threshold, representing the additional aid a country can absorb without declines in government performance.

FIGURE 1 ABSORPTIVE CAPACITY SPACE, THRESHOLD AND TIPPING POINT



Source: IES, 2017: 2

An increased capacity to absorb aid can occur for various reasons (see following section). In this case, the curve in Figure 1 shifts upward and to the right, meaning that larger amounts of aid can be absorbed by the recipient government, without declines in government performance. Government performance is higher at all possible levels of aid (IES, 2017).

There are various limitations to the estimates of absorptive capacity thresholds. Many of the studies use total aid flows, which often include humanitarian aid and emergency balance of payments support where aid is given in a crisis. In such contexts, large amounts of aid can appear to be associated with poor economic performance (Manuel and Hoy, 2015). Different types and forms of aid are likely to have different impacts with different thresholds with regard to economic growth (Feeny and McGillivray, 2011; Expert comments). In addition, there should also be thresholds for sector or agency levels, being the point at which agencies should generally not receive more funding, in the form of projects (IES, 2017).

Further, as noted, these **estimates are primarily based on aid-growth studies, and thus do not take into consideration other goals of aid and forms of absorptive capacity such as absorption based on household consumption.** Tengstam (2017) finds that there do not

appear to be any estimates of saturation points for consumption-aid as there are for growth-aid. In their absence, it has been considered reasonable to think that the amount of aid a country can handle may be similar between different aid purposes.

8. Addressing absorption constraints and scaling up

A recent study on scaling-up of aid by the United Nations Development Programme (UNDP) finds that drivers of successful scaling-up include: a proper vision; external champions (UNDP and donors championing its programmes), that over time transfer to domestic champions; and incentive mechanisms (Begovic et al., 2017).

Enabling conditions for successful scaling-up include (Begovic et al., 2017):

- **Political space:** considering political realities and gaining political support for programmes;
- **Policy space:** addressing policy constraints that could undermine the implementation of programmes, such as actual decentralisation of national authority and resources to lower levels of government;
- **Institutional space:** strengthening institutional capacities at local and higher levels of government, of communities and civil society organisations, such that they can support sustained scaling-up, particularly when donors withdraw;
- **Fiscal and financial space:** ensuring that there is effective fiscal decentralisation in countries, such that they have sufficient resources and can deliver services to their citizens;
- **Partnership space:** teaming up with various national and international partners is critical for effective scaling-up;
- **Social and cultural space:** working to increase this space for programmes to grow effectively, focusing on including disadvantaged groups and with sensitivity to local community conditions and cultural factors.

Absorptive capacity is not fixed. It can theoretically be improved by successful reform, the right policies and, potentially, by appropriate development assistance (IES, 2017; Dornan and Pryke, 2017). An increased capacity to absorb aid could materialise for various reasons, such as improved public financial management competencies or less onerous aid delivery methods, reducing the administrative burden on recipient countries (IES, 2017). In general, however, there has been little systematic analysis on how to overcome absorptive capacity constraints (Lam and Mixon, 2013).

Donors can respond to existing absorptive capacity constraints by adjusting its aid flows in light of such constraints. They can also attempt instead to relieve constraints and increase absorptive capacities in recipient countries through a variety of means (Carter, 2016; Feeny and McGillivray, 2009).

Alleviating macroeconomic constraints

In order to mitigate the risk potential Dutch Disease impacts of aid, donors could aim to ensure that aid is directed towards the traded goods sector and to activities that are likely to yield productivity increases (Feeny and McGillivray, 2009).

Simple, technical capacity development

Absorptive capacity could also rise with simple capacity building, particularly around **bureaucratic aspects**, such as providing specific training interventions for ministry and project implementation unit staff (Serie et al., 2009). Serie et al., (2009, 18) report that such capacity development has been used effectively in some cases to boost absorptive capacity by as much as 100% in 2-3 years.

In order to address challenges with institutional memory in ministries, greater collaborative relations between donors and ministries could 'give back' some of this institutional memory. Such relations could even be institutionalized as part of donor coordination (Serie et al., 2009).

Substantive capacity development

More comprehensive capacity building may also be necessary. **Improved capacity of government authorities to manage the domestic fiscal space**, to develop effective fiscal policies and to execute budgetary plans, for example, can contribute to alleviating macroeconomic constraints and institutional and policy constraints (Terada-Hagiwara et al., 2016; Manuel and Hoy, 2015; Guillaumont and Guillaumont Jeanneney, 2006).

If recipient governments are effective in developing and implementing policies to improve export competitiveness, for example, through infrastructure development or even long-term investment in education, the value of additional aid flows are more likely to outweigh any additional costs. This has been the case with Liberia, which has attracted large amounts of foreign investment, without demonstrating absorptive capacity constraints (Manuel and Hoy, 2015).

In the cases of Papua New Guinea and Timor-Leste, a broader focus on building the capacity of the civil service, improving the coherence and coordination of the budget process, and ensuring adequate funding is provided for maintaining and operating assets is required in order to ensure that increased resources are absorbed effectively (Terada-Hagiwara et al., 2016).

Specific capacity building efforts will be required for different sectors. In the case of education, for example, developing human capital, such as through training programmes for teachers and fair compensation schemes, can be a way to address absorption constraints (Choi et al., 2013).

Improvements in donor aid delivery

Donors can help to relieve the administrative burden of aid by improving the way they deliver their assistance, for example, by **improving coordination** of donor activities and reporting requirements (Feeny and McGillivray, 2009). Greater **transparency** in the criteria of aid allocation could also make aid more predictable, facilitating the domestic management of aid flows (Guillaumont and Guillaumont Jeanneney, 2006).

The terms of aid could also be tailored better to the realities of the recipient country. Carter (2016) discusses a two-stage procedure in the aid process, such that donors first decide the allocation of transfers across countries; and then determine the terms of the transfer, in collaboration with recipient countries. For example, a very poor country could qualify for a large transfer, but this should not be accompanied by hard, burdensome terms.

In addition, as discussed elsewhere in this report (see Lamb and Mixon, 2013; Serie et al., 2009), donors should also set realistic targets and goals, based on the realities of the recipient countries – for example, using the MAC framework to ensure that the necessary prerequisites are met and altering plans if they are not. Choi et al. (2013) advocate that donors should develop an understanding of the history, culture and political systems of recipient countries in order to establish realistic and achievable targets.

The importance of a ‘champion’ within donor agencies and implementing ministries is also cited as a key factor for successful aid absorption (Gualberti et al., 2013).

Alternate channels for aid distribution

In some contexts, such as in the case of some fragile states, channelling additional aid to the state may continue to run into absorption problems, despite efforts to support capacity development. It could be advisable to seek out alternative channels, that by-pass recipient country governments, for distributing aid (Feeny and McGillivray, 2009). Potential alternative channels include the public sector of the recipient; the for profit and not-for-profit sectors of the recipient; other forms of civil society; or donors operating in-country themselves (Feeny and McGillivray, 2009).

Targeting different aid aims

While donors target a range of development outcomes, the dominant criterion of aid effectiveness in the economics literature continue to be its effect on output growth (Carter, 2014). However, donors could have a greater impact and recipient countries could have better absorptive capacity by focusing on increasing consumption in slow-growing recipient countries, rather than accelerating growth in recipient countries that would grow in any case (Carter, 2014).

Phased aid

If recipient countries lack absorptive capacity, it may be advisable to **increase aid over time, rather than to front-load it** (Carter et al., 2015). Presbitero (2016) also finds that a gradual scaling-up is preferable in the presence of absorptive capacity constraints. This is based on the assumption that as recipient countries develop, they can use additional resources more effectively (Carter et al., 2015).

Manuel and Hoy (2015) emphasise that aid naturally follows a phased process, as most aid agencies plan allocations years in advance. As such, recipient countries would have a number of years (e.g. 5 year cycles), in the medium term, to raise the capacity to use extra resources effectively. This could involve efforts, for example, to improve fiscal policymaking and/or to increase the export potential of the country to counter the possibility of Dutch Disease. In the case of particular sectors, for example the education and health sectors, it would be possible to build more classrooms, health clinics and training more teachers and health workers in the medium-term, in advance of the actual disbursement of funds (Manuel and Hoy, 2015). Experience from Latin America demonstrates that such progress is possible within the time period (Manuel and Hoy, 2015).

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Acknowledgements

We thank the following experts who voluntarily provided suggestions for relevant literature or other advice to the author to support the preparation of this report. The content of the report does not necessarily reflect the opinions of any of the experts consulted.

- Paddy Carter, CGD Europe
- Simon Feeny, RMIT University
- Jon Temple, Bristol University

Suggested citation

Haider, H. (2018). *Aid absorption: factors and measurements*. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.

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