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Concessional Financial Flows Among Southern Countries

Conceptualising Design Principles, Operational Modalities and an Assessment Framework



CENTRE FOR POLICY DIALOGUE (CPD)
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CONCESSIONAL FINANCIAL FLOWS AMONG SOUTHERN COUNTRIES

CONCEPTUALISING DESIGN PRINCIPLES, OPERATIONAL
MODALITIES AND AN ASSESSMENT FRAMEWORK

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ACRONYMS AND ABBREVIATIONS

AIIB	Asian Infrastructure Investment Bank
DAC	Development Assistance Committee
EXIM	Export-Import
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IBSA	India, Brazil and South Africa
IMF	International Monetary Fund
LoC	Line of Credit
MFI	Multilateral Financial Institution
NDB	New Development Bank
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
SSC	South-South Cooperation

EXECUTIVE SUMMARY

Context and objective of the paper: The international development community recognises the importance of South-South cooperation (SSC) in the context of mobilising much-needed finance for development across the global South during the post-2015 period. Emerging Southern countries' abilities to contribute in this manner are evidenced by their gradually increasing shares in global gross domestic product, foreign direct investment, trade and remittances as well as deeper integration with developing countries that includes providing assistance through financing and technical expertise. However, no consensual definition or common assessment framework for SSC exists. This paper seeks to present the collective knowledge on the challenges for SSC and assess the concessional aspect of Southern financial flows through rigorous analysis of existing trends in SSC and the multifaceted nature of SSC flows.

Study design: In view of the rising importance of SSC as a source of development finance, this paper seeks to empirically estimate the grant elements of concessional financing flows, specifically lines of credit from emerging providers to developing countries. The study first provides the background on SSC and clarifies relevant concepts, beginning with estimates of the Southern share of financial and trade flows in the global economy, collated definitions of SSC and a discussion on the conundrum of defining South-South flows as official development assistance and whether such flows can be deemed concessional, using the same methodology that is used for traditional aid. The paper then analyses the different financial instruments and channels used by Southern providers as well as their preferences regarding sectoral allocation. To increase geographical coverage and simplify the study, certain regional powers have been chosen as SSC providers for analysis, namely Brazil, China, India and South Africa. The paper provides case studies of five lines of credit (LoCs), each provided by China and India. The grant elements of financial flows are estimated to draw conclusions about their concessionality. An overview of other instances of bilateral assistance provided by Brazil and South Africa is then analysed. Based on the conclusions drawn about the concessionality of Southern financial flows, broad guidelines are articulated for assessing the quality of South-South bilateral concessional finance.

Lacking a consensual definition of SSC and a common assessment framework, the concessionality of South-South financial flows is evaluated through the tools and formulas of the Organisation for Economic Co-operation and Development (OECD) and the World Bank to calculate grant elements. The paper only considers concessional loans, lines of credit and grants provided through South-South foreign assistance packages. The degree of concessionality is assessed by comparing the provision of bilateral finance in the context of SSC with the traditional flows of foreign aid from the countries of the OECD's Development Assistance Committee (DAC). The global South is defined as all countries other than DAC members in this study.

Definition challenges: There are four related definition challenges for SSC. The first relates to relevant actors (e.g., whether financial flows between private-sector entities can be considered SSC, in addition to government-to-government transactions). The second relates to the objectives of financial flows (e.g., whether finance is provided with the purpose of creating a market for emerging countries by exploiting opportunities in poor countries or whether finance is provided according to recipients' national development priorities). The third relates to principles (e.g., whether finance is provided in line with the principles of equality and mutual benefit). The fourth relates to modalities (e.g., whether repayment conditions are attached to financial assistance or whether in-kind repayments for technical assistance are provided).

The concessionality of Southern financial flows can also be unclear due to the emergence of new financial actors. The traditional definition of ODA is compared with the definitions adopted by new institutions, such as the New Development Bank and Asian Infrastructure Investment Bank. Concessionality and the definition of ODA need to be tailored to the features of SSC.

The modalities of SSC require special attention because they help differentiate Southern providers from traditional aid donors. Southern providers assist developing countries according to their own areas of expertise in achieving development goals. The effectiveness of diverse development projects across countries and cases should be compared.

Finally, there are additional challenges for defining SSC in the realm of data and information. The dearth of available data and information on volumes, terms and conditions of financial flows as well as the lack of project-level data published by Southern providers impede impact assessments of financial flows. This paper uses data from online databases that collect information on SSC from multiple sources. It reviews several databases and analyses the scope of their data.

Trends in SSC flows: Southern countries are providing an increasing amount of assistance, with the largest being provided by China. The size of their contributions varies according to the size of their budgets, which vary according to their respective gross domestic product. Estimates provided by the OECD and others show that SSC flows have been growing over the years, with the latest estimate indicating that the share of SSC flows is 13 percent of global official development assistance. SSC flows take many forms, however, which make quantifying them and meeting reporting standards difficult. Hence, SSC flows are likely to be underestimated. Northern providers remain important, as they provided, for instance, as much as 86 percent of global official development assistance in 2013.

The Export-Import Banks of India and China operate in similar ways to provide LoCs to developing countries. They differ, however, in setting repayment conditions. The Export-Import Bank of India sets procurement conditions tied to equipment and inputs for approved projects, whereas the Export-Import Bank of China attaches in-kind repayment conditions and financial terms. The cases of Brazilian and South African bilateral assistance are difficult to analyse because information on repayment conditions is difficult to find. Notably, Southern providers mainly focus on infrastructure financing and assistance for technology and capacity-building in education, health and agriculture.

Estimating grant elements: Lacking a common assessment framework for SSC flows, the tools and formulas of the OECD and World Bank are used to estimate the grant elements of five randomly chosen LoCs provided by India and China. Indian LoCs were found to be concessional more often than Chinese LoCs. The lack of an adequate monitoring and review mechanism prevents the acquisition of complete information on terms and conditions and their impacts on receiving countries.

The modernised OECD criteria seem to provide a higher threshold for concessionality compared with the previous traditional OECD criteria and World Bank method. Loans made before 2014 are mostly deemed non-concessional when using the new OECD criteria. If more information were available to improve the assumptions made during calculations, results could change.

Brazil provides a small proportion of SSC in the form of LoCs for infrastructure or project financing. It is mostly involved in technical cooperation. It is unclear whether there are any cases that involve repayment and, if so, information on repayment conditions and terms were not found during this study. South Africa's SSC is multifaceted and provided through numerous channels. The country is mainly involved in peacekeeping and post-conflict development projects in Africa. It is also unclear if South African financial assistance is attached to repayment conditions.

Quality assessment: This paper concludes by providing broad guidelines with which South-South bilateral concessional finance can be assessed for quality. These guidelines fall under four themes: (i) project evaluation of projects financed by SSC flows; (ii) macroeconomic effects of SSC flows; (iii) linkages with special features of SSC flows; and (iv) data constraints in assessing SSC flows. Criteria in a process-assessment framework could include solicited or unsolicited aid flows, time lag in each step of project implementation, project selection, terms and conditions, disbursement of funds, and procurement and use of resources.

Regarding an outcome-assessment framework, criteria could include a project evaluation and accountability mechanism, implication for the livelihoods of people in the recipient country, local development in the area of the project, debt sustainability of recipient country, existence of reporting and monitoring mechanism, and data constraints. Equally important, in order to estimate the macroeconomic effect of the funds to determine the implication for people's livelihoods in the recipient country, certain project evaluation techniques must be applied. It would be pertinent to also analyse the synergies among project selection, project implementation and a project's impact on human and infrastructure development in Southern countries.

Common incentives for providers and recipients could help to channel all forms of SSC and to shape a collective understanding of SSC. Improvements in data and information, sensitisation through global and national forums, and the establishment of an assessment framework unique to the OECD and World Bank/IMF customised according to the features of South-South concessional finance would also be helpful.

The international development community needs to redirect its focus to articulating a new benchmark for 'good performance' of South-South financial flows and acknowledging that SSC has the most potential to support the achievement of the Sustainable Development Goals.

1. BACKGROUND

South-South Cooperation (SSC) is reorienting the international development cooperation landscape. The genesis of SSC can be traced to the 1955 Bandung Conference of Asian and African developing countries, the first large-scale meeting of its kind to promote economic and cultural cooperation and oppose colonialism in all its forms. In 2009, the High-level United Nations Conference on South-South Cooperation in Nairobi gave a major political boost to SSC by recognising its particularities and outlining ways to realise its potential. SSC has acquired renewed importance in the context of mobilisation of finance for development to implement recently adopted global development frameworks, such as the Addis Ababa Action Agenda of 2015 and the 2030 Agenda for Sustainable Development. Both explicitly mention SSC as a means of implementation. SSC is meant to strengthen the bargaining power of developing countries, also referred to as Southern countries, or collectively as the global South, which, in this study, is defined as all countries other than the OECD's Development Assistance Committee (DAC) members, by providing a heightened voice in multilateral negotiations. It also gives them the opportunity to promote self-sufficiency as a group and strengthen their economic ties with development partners.

In addition to the Southern share of global gross domestic product (GDP), Southern countries' participation in the global economy can be measured by financial and trade flows. These flows include official development assistance (ODA) and other official flows, foreign direct investment (FDI) (inflows and outflows), trade in goods and services (exports and imports), and remittances (received and paid). Table 1 presents trends in Southern shares in the global economy from 2000-2014.

Table 1: Southern shares of financial and trade flows in the global economy

Item		Year						
		2000	2005	2010	2011	2012	2013	2014
Share of global GDP (% of global total)		18.6	21.5	32.5	34.6	36.0	37.0	37.3
ODA (% of global total)	Share received	94.4	99.3	98.7	96.9	97.3	97.7	n/a
	Share of Southern GDP	0.9	1.1	0.6	0.5	0.5	0.5	n/a
FDI (% of global total)	Inflows	15.2	34.7	45.3	44.6	48.3	48.1	55.4
	Outflows	7.1	14.1	25.6	23.7	26.5	32.6	35.7
Trade in goods and services (% of global total)	Imports	25.3	28.9	36.3	37.0	38.6	39.0	38.4
	Exports	27.8	32.9	39.0	40.2	41.4	41.3	40.6
Remittances (% of global total)	Received	50.7	61.8	69.2	68.8	69.7	69.4	69.4
	Sent	25.1	28.3	37.1	39.3	42.4	44.2	42.8

Note: For calculations in this table, Southern shares refer to the shares of all countries other than DAC members.

Sources: Authors' calculations using data from UNCTADstat for FDI and the World Bank's World Development Indicators for GDP, ODA, trade and remittances.

According to Table 1, Southern countries accounted for 37 percent of global GDP in 2014, up significantly from approximately 19 percent in 2000. They also received an overwhelming and marginally changing share of ODA over that time. However, the share of ODA in the GDP of Southern countries was 0.9 percent in 2000 and 1.1 percent in 2005, after that it more than halved to 0.5 percent in 2012. Emerging Southern countries have been providing a notable volume of ODA and other official flows in recent years. Their contributions as a percentage of the global total increased from 2.2 percent in 2005 to 10.7 percent in 2013 (Bhattacharya, 2015). Emerging Southern countries' abilities to contribute to SSC are evidenced by their gradually increasing shares in the global economy (figures are provided in Section 3).

Their growing shares in global FDI, trade and remittances best illustrate the economic strength of Southern countries. In the case of FDI, Southern recipients increased their share from about 15 percent of the global total in 2000 to more than 55 percent in 2014, an almost fourfold increase. Similar growth is observed in FDI outflows, where the Southern share increased from 7 percent in 2000 to nearly 36 percent in 2014. The global share of trade attributable to Southern countries also demonstrates a robust upward trend. Exports originating from the South accounted for about 28 percent of the global total in 2000 and close to 41 percent in 2014. This export expansion was paralleled by growth in imports, with the Southern share of imports in the global total rising from 25 percent in 2000 to 38 percent in 2014. As for remittances, Southern countries strengthened their position as both recipients and providers. They received 50 percent of global remittances in 2000 and 69.4 percent in 2014. They have emerged as a dominant source of remittances, with the Southern share in the global total of remittances sent increasing from 25 percent in 2000 to 43 percent in 2014.

With the global economy experiencing a downturn due to such multifaceted challenges as declining oil prices, subdued demand and slower trade, emerging Southern countries - Brazil, China, India and South Africa - could provide much-needed complementary support to other developing countries in the South. The foreign aid situation is changing globally, with emerging countries competing with industrialised countries in providing development aid to the poorest nations (The Economist, 2011). Essentially, emerging countries have set up separate units within their government to manage overseas development assistance programmes that are similar to the UK's Department for International Development (DFID) or the US Agency for International Development (USAID).¹ SSC has effectively boosted development and alleviated poverty by decreasing Southern countries' dependence on Northern countries and promoting self-reliance through innovation and the use of technology while strengthening local and regional partners in development. Further, SSC is expected to be sustainable and reliable, since it is conducted according to the principles of equality and mutual benefit. In practice, however, there is still no shared understanding of the nature and goals of SSC. Emerging economies and developed countries have varied and sometimes divergent interpretations of SSC. Moreover, some argue that SSC can be perceived as a substitute for, rather than a complement to, North-South cooperation, while others argue that the two cooperation models cannot be given equal value.

1.1 Objectives

This paper aims to provide a holistic overview of SSC and the associated financial assistance provided by

¹ For example, India has set up its own agency to manage its development cooperation programmes (Taneja, 2012). There is a possibility that DAC countries would be pulling their aid flows from emerging countries given the phenomenal economic progress they made. For instance, Britain declared it would stop providing development aid to India (Mandhana, 2012).

CLARIFYING RELEVANT CONCEPTS

Southern countries. By addressing a significant gap in development literature, this paper investigates the extent to which South-South bilateral concessional finance can be characterised as being on par with traditional ODA in terms of principles, operational modalities and assessment frameworks. It argues that emerging Southern countries' concessional finance will play a critical role in financing for development during the post-2015 period.

1.2 Methodology

This paper's methodology is based on four pillars: (i) a review of the literature relating to SSC in general and the experiences of providers and recipients of South-South bilateral concessional finance in particular; (ii) the compilation and analysis of relevant data and information from secondary sources; (iii) the mapping of experiences by countries and sectors regarding flows of concessional finance among Southern countries; and (iv) interviews with key informants to gain insights into specific issues. The methodologies for calculations are described as and when they appear in the paper. Data, information and case studies throughout the paper were sourced from various publicly available sources and the literature.

1.3 Scope and structure

Given that SSC encompasses ODA, FDI, trade, remittances and more, this paper narrows its scope by aiming to systemise knowledge on South-South bilateral financial assistance provided through public institutions, particularly focused on concessional finance. It only considers concessional loans, lines of credit and grants in South-South foreign assistance packages that are provided under bilateral arrangements. The emerging Southern countries that have been chosen for analysis are Brazil, China, India and South Africa, given the significant scale of their financial assistance and commitments to SSC. In turn, this paper addresses the current challenges in assessing SSC flows by outlining definitional challenges for SSC, concessionality and modalities; presents recent trends in as well as composition and sectoral allocations of South-South flows; estimates South-South loan concessionality; and proposes guidelines for quality assessment of South-South bilateral concessional finance.

2. CLARIFYING RELEVANT CONCEPTS

A review of the literature indicates that there are varied interpretations of SSC and associated transactions. This section aggregates and clarifies relevant concepts to take a deeper look into the different working definitions of SSC, the current modalities of South-South bilateral concessional finance, the parameters of concessionality offered by prominent providers of development assistance and the data challenges that are often encountered when researching South-South flows.

2.1 Defining SSC

There is no consensual definition of SSC that covers relevant actors, objectives, principles and modalities. Several working definitions of SSC used in various international development forums and across the literature essentially posit that SSC involves cooperation among developing countries to accumulate necessary resources, according to the principle of common but differentiated responsibilities. This definition, however, does not clarify the boundaries of SSC. An analytical framework based on different definitions of SSC collated

from various sources has been constructed and is presented in Table A1 of the Annex.

Using the framework, common features of SSC in terms of actors, objectives, principles and modalities can be discerned. Technical cooperation among developing countries evolved to be termed SSC, or triangular cooperation, when a developed country or multilateral organisation is also involved,² and SSC is now considered an important feature of international development cooperation. The relevant actors are developing countries, where governments play leading roles while involving non-governmental organisations, civil society organisations, academia and the private sector. The objectives of SSC are to enhance local capacity development through cost-effective means and provide alternative sources of finance for infrastructure-building in developing countries. The overarching goal is to channel external finance, according to recipient developing countries' national priorities, to areas where traditional donors, such as DAC members, have failed to act.

SSC is based on the principles of equality and mutual benefit. Partnerships are guided by shared experiences of similar constraints to development. Notably, SSC occurs only when a developing country requests it. SSC flows, therefore, should not be viewed as ODA but as complementary finance provided on the grounds of solidarity. The modalities of SSC vary. They can include financial and monetary cooperation, technical assistance for infrastructure and long-term projects, and sharing of knowledge and expertise through in-kind contributions, such as training public officials.

These common features, drawn from various sources, do not capture certain realities. FDI, trade, flows of migrant workers and currency-swap arrangements are all included in the essence of SSC. Financial flows among Southern countries do not involve conditions to reform governance or macroeconomics policies, but can involve conditions to procure goods and services from providers to implement projects financed by their funds. China, for instance, claims that it is following the principles of 'non-interference and sovereignty' by not imposing policy conditions but including procurement conditions to ensure funds flow directly to implementing companies rather than to government institutions. According to Chinese authorities, procurement conditions enhance accountability, improve cost-effectiveness and facilitate speedy completion of projects (Mwase & Yang, 2012). Though the emerging Southern countries of China and India are signatories to the Paris Declaration on Aid Effectiveness of 2005, they claim that they are signatories only as recipients, not providers, of assistance. This claim implies that they do not consider assistance tied to procurement conditions to be the same as aid provided by DAC members. Regardless of the type of conditions, recipient countries must fulfil certain requirements to secure loans from Southern partners. This paper seeks to better understand such SSC practices in bilateral concessional finance.

2.2 Definition of concessional financial flows

External finance is channelled to developing countries mainly in two forms: market-oriented finance and concessional finance. Concessional finance includes grants and loans, where grants do not have any repayment conditions and loans are provided on terms that are more lenient compared with commercial finance arrangements. The DAC constitutes all Northern countries that provide ODA to the DAC list of ODA recipients (see OECD, n.d.a.). The recipients are developing countries and multilateral financial institutions (MFIs). The OECD works with governments, civil society organisations, multilateral organisations and others

² Triangular cooperation is itself under definitional scrutiny and beyond the scope of this paper.

CLARIFYING RELEVANT CONCEPTS

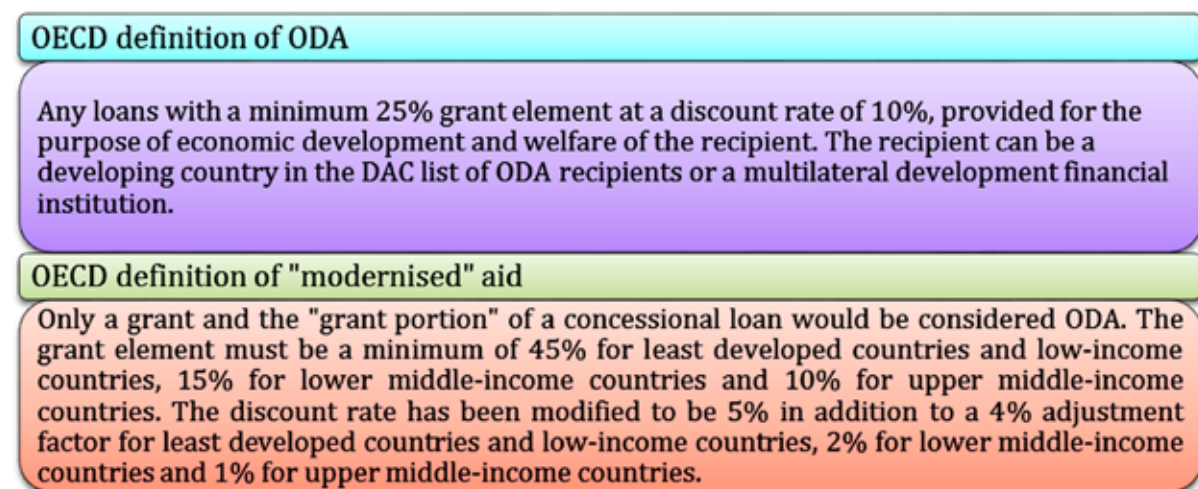
to formulate policies that guide the foreign aid programmes of its member countries, including defining the criteria for loan concessionality.

The concessionality of a loan is measured by grant element calculation formulas. The grant element is the difference between the loan's face value and the sum of discounted future debt service payments to be made by the borrower (or present value), expressed as a percentage of the loan's face value. If the interest rate is lower than the discount rate, the present value of the loan is smaller than the nominal value of the loan. This difference is equivalent to the grant element of the loan (World Bank, n.d.a.). The larger the grant element is, the more concessional the loan.

The World Bank and International Monetary Fund (IMF) have a particular formula for grant element calculation that requires certain variables: face value of the loan, grant amount, commission paid up front, management fees, interest rate, maturity (in years), payment per annum and grace period (in years). The OECD has a separate formula for grant element calculation (see OECD, 2013a & 2015c). The difference between the World Bank/IMF and OECD formulas is that the former takes into account commission and management fees attached to the loan agreement. The methodology for calculating grant element is further discussed in Section 4.

Apart from the different methodology for calculating grant element, the World Bank and OECD set different criteria for loan concessionality (see Figures 1 and 2).³ DAC members conform to the definition of ODA provided in Figure 1. They regularly report data and information on their foreign aid programmes to the DAC, which are made publicly available through the OECD's International Development Statistics online database.

Figure 1: OECD grant element threshold for regarding assistance as 'concessional'



Sources: OECD (2008, 2014a).

As provided by DAC members, ODA excludes all private-sector financing, such as FDI and loans for strictly commercial and export financing purposes. However, export credits are counted as concessional if they have a minimum grant element of 35 percent when using the six-month average currency-specific commercial

³ See the OECD definition of concessionality level see OECD(n.d.c)

interest reference rate. Other ODA-like flows are also offered by governments, such as official subsidies to non-governmental organisations, export credits, military aid, student scholarships and official guarantees for private investment in a foreign country (OECD, 2008). Such flows are not considered within the scope of this paper.

The DAC modernised ODA in 2014 by changing criteria in a way that directs more ODA to the poorest countries. The funds are discounted at rates that differ according to the income group of countries as per World Bank classifications. This change was necessary because aid allocation to the poorest countries was falling – by as much as 16 percent in 2013 (OECD, 2015a). Many development partners have appreciated the change. For example, the United Kingdom’s Department for International Development commended the change for enabling aid data reporting to be more disaggregated and transparent (Lowcock, 2014).

On the other hand, MFIs provide concessional finance using varied instruments for which terms and conditions do not match. For example, the World Bank’s concessional finance from the International Development Association and International Bank for Reconstruction and Development has different sets of terms. Terms and conditions are customised according to the recipient’s developmental status and credit-worthiness, with low-income countries receiving finance with more concessional terms than middle-income countries. MFIs’ operations have been criticised for largely being the same as those of DAC members. MFIs provide loans to support economic and social development in developing countries, but they tie loans to policy reforms by receiving governments, with a focus on recovering the funds and transparency in impact assessments, especially for funds provided through multilateral channels (Nelson, 2015). Figure 2 presents the criteria for concessional finance used by key MFIs.

CLARIFYING RELEVANT CONCEPTS

Figure 2: MFIs' grant element thresholds for concessional finance

World Bank and IMF

The World Bank and IMF define a concessional loan as a loan with a minimum grant element of 35%, taken as part of a macroeconomic stabilisation programme with a unified discount rate of 5%. In October 2013, the previous system of setting interest rates according to the currency-specific commercial interest reference rate was terminated. Now interest rates and grant elements are calculated based only on the US dollar value of the loan.

Arab Bank for Economic Development in Africa

The Arab Bank for Economic Development in Africa provides loans and grants. Loans to low-income countries had an average grant element of 48.3% at a discount rate of 5.58% in 2013. Loans to middle-income countries follow the OECD definition of ODA.

Islamic Development Bank

The Islamic Development Bank's lending is based on Islamic law, which prohibits making profits from loans. Its interest-free loans are therefore concessional by nature. The Islamic Development Bank is the only regional development bank in operation with membership drawn entirely from the global South.

Asian Development Bank

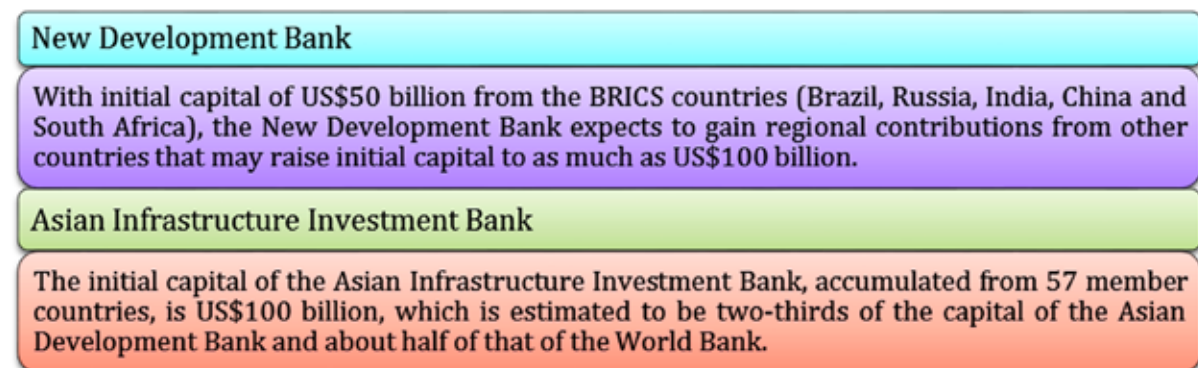
The Asian Development Bank uses the Asian Development Fund and ordinary capital resources to provide concessional loans at low interest rates and long maturity periods and grants to finance development projects in Asia and the Pacific. The Asian Development Fund only provides project and programme loans. Blended finance of the Asian Development Fund and ordinary capital resources is provided with a 25-year maturity, five-year grace period and 2% interest rate per year.

Sources: International Monetary Fund (2015); Arab Bank for Economic Development in Africa (2013); Droesse (2011); Asian Development Bank (n.d.).

As to SSC, developing countries mostly use the World Bank's concessional criteria to measure the concessional nature of the loans that they receive, since Southern providers do not have unique criteria. The debate on whether loans provided through SSC should be evaluated using the World Bank's or OECD's concessional criteria is continuing. Since these are established criteria and thus widely agreed benchmarks, they could be used to compare and contrast the concessional nature of SSC loans. Whether the criteria could be improved to capture certain benefits of SSC loans by adding and/or removing certain variables could be a subject of future research.

The international development cooperation landscape continues to change with the emergence of new regional MFIs in the South that aim to provide developing countries with a supplementary source of development finance. The two major MFIs that were established in this context are the New Development Bank and Asian Infrastructure Investment Bank, the former in February 2016 and the latter in December 2015. Both have been preparing to disburse their first sets of loans. Figure 3 provides more information on their initial capital.

Figure 3: New MFIs' initial capital



Sources: Griffith-Jones (2015); *The Economist* (2014).

New MFIs are expected to be core providers of development assistance for sustainable development during the post-2015 period. Given that the developing world has a gap of US\$1 trillion in infrastructure investment (Bhattacharya, Romani, & Stern, 2012), the New Development Bank is set to contribute to filling it. The China-led Asian Infrastructure Investment Bank is part of the country's 'One Belt, One Road' initiative to strengthen regional connectivity among Asian, African and European countries. The MFI has been proclaimed an alternative to the World Bank for securing development finance and traditional donors, including Germany, the United Kingdom and France, have committed to contributing.

As much as these MFIs can develop their schemes by taking inspiration from successful MFIs, such as the World Bank, they must be careful to preserve the principles of SSC. For instance, if the New Development Bank and Asian Infrastructure Investment Bank operate similarly to the World Bank, then South-South infrastructure investment in developing countries may not benefit populations as originally intended. New MFIs should establish mandates that ensure their sustainability and encode critical SSC practices.

Having outlined the loan concessionality criteria for the OECD, the World Bank and IMF and key MFIs, it is evident that the concessionality of SSC loans would vary according to the formula used to calculate grant elements. Another conundrum arises as to the contents of foreign assistance packages in traditional donors' and South-South development assistance programmes. The package provided by DAC members does not capture all the development-related financial resources provided by Southern countries. For instance, DAC members have excluded military assistance, peacekeeping support, policy services to control civil disorder, sponsoring of concert tours or athletes' travel costs, assistance to refugees with more than one-year's stay in the donor country. Export credits extended by a donor government or its agencies are specially excluded in

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case of loans with one or more years' maturity; and an element grant of less than 25 percent, regardless of the purpose, and short-term debt are also excluded. Their customized 'programmable aid' in the ODA domain further excludes humanitarian assistance, debt relief and administration costs. Southern providers, on the other hand, do not usually include scholarships or student costs in their assistance, whereas DAC countries do, which expands the share of DAC contribution to aid for education (UN ECOSOC, 2008). Concessional export credits and other official flows are categorised as 'concessional in character' though not included in ODA. Southern countries such as China and India include administrative costs, refugee costs and military aid in their development assistance programmes. Since their foreign assistance packages are not comprehensively defined, it is difficult to assess the quality of SSC flows and conduct cross-country comparisons of development assistance programmes among partners from the DAC and the global South.

The benefits of coherent definitions include not only having a reliable understanding of SSC, but also ensuring mutual accountability for disbursing development assistance, monitoring the effectiveness of assistance and meeting commitments. Hence, it is important to understand the overarching nature of loan concessionality and what counts as ODA.

2.3 Defining the modalities of development assistance

There are about 50 non-OECD providers of development assistance to developing countries.⁴ For the purpose of this study, regional powers – Brazil, China, India and South Africa – in key Southern regions have been chosen for analysis. Table 2 summarises Southern countries' preferential partners, recipient sectors and the modalities of concessional finance.

Table 2 : Modalities of South-South concessional finance as of 2013

Providers	Major recipients ^a	Recipient sectors	Modalities
Brazil	Lusophone African countries, Latin American and Caribbean countries and MFIs, mainly the World Bank's International Development Association, the Inter-American Development Bank and the United Nations World Food Programme.	Agriculture, health, education and public administration.	Financial cooperation (including debt relief and some concessional loans), bilateral cooperation (mostly humanitarian and emergency assistance and technical cooperation) and triangular cooperation.
China	Asian and African countries and MFIs, mainly United Nations peacekeeping operations and the Inter-American Development Bank.	Industrial and economic infrastructure, agriculture, education, medical, health and public welfare facilities, capacity building and environmental protection.	Bilateral cooperation (concessional and non-concessional finance), technical cooperation and debt relief.
India	South Asian countries and MFIs, mainly the United Nations via the International Fund for Agricultural Development.	Health, education, energy (specifically hydropower) and information technology.	Bilateral concessional LoCs and grants, technical cooperation, and emergency and budgetary support to some neighbouring countries.

⁴ Tierney et al (2011) has the database for development assistance flowing from non-OECD countries. The number of non-OECD providers was obtained from this database by filtering the donor list.

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South Africa	African countries, mainly members of the Southern African Development Community, and MFIs, mainly the United Nations and African Development Bank.	Peacekeeping, security and governance.	Grants, debt relief, humanitarian assistance and bilateral finance provided mainly through African MFIs.
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Notes: ^a Regarding 'major recipients,' only two or more recipients receiving the highest percentages of total development assistance are listed.

Sources: Adapted from Walz & Ramchandran (2010) and Mwase & Yang (2012).

For Brazil, the modalities of development assistance are scientific and technical cooperation, educational cooperation (including scholarships and other bilateral academic exchange programmes), contributions to multilateral organisations, humanitarian cooperation (including food aid), refugee support and protection, and peacekeeping operations (Baumann, 2014; Cintra, 2011). Brazil's assistance is largely directed toward Lusophone African and Latin American and Caribbean countries. Notably, 77 percent of its development assistance is provided to MFIs (Cabral & Shankland, 2013). Brazil is also a key player in triangular cooperation, which involves collaborating with a developed providing country and a developing recipient country to implement development projects (Inoue & Vaz, 2012).

India provides LoCs and technical assistance, 85 percent of which go to neighbouring countries in Asia and the remaining percentage to oil-exporting countries in Africa (United Nations Economic and Social Council, 2008). The bulk of India's development assistance is in the form of finance and technical assistance, which are tied to procurement conditions for equipment and inputs (OECD, 2010). The country provides significant amounts of finance for electricity generation, hydropower systems and railway and road transport systems in neighbouring countries such as Bangladesh, Bhutan and Nepal. Such a focus may be due to India's interest in reducing transport costs to boost the regional trade of goods and services (see Section 4).

China provides grants and interest-free loans, mainly for social infrastructure projects such as stadiums, medical clinics and schools and government facilities. The country also provides LoCs for major infrastructure projects such as hydropower, water and transportation.

South Africa, on the other hand, provides assistance to countries in its region to help with reconstruction and rehabilitation in post-conflict contexts. Its modalities of development assistance are mainly debt relief, humanitarian assistance and financial assistance for infrastructure. South Africa also provides assistance for peacekeeping efforts in the region.

The modalities of development assistance are evidently mostly comprised of concessional finance for development projects and grants. Southern providers are not commonly known to provide budget support.⁵ They appear to be more concerned about the micro-feasibility of the projects that they are financing in recipient countries, whereas traditional donors are more careful about macroeconomic impacts and debt sustainability (Mwase & Yang, 2012). Southern providers do not impose policy conditions on recipient countries like those attached to loans provided by the World Bank and IMF. However, they choose modalities and recipients with the intent to secure resources and expand business to overseas markets. For instance, the proposed Agartala-Akhaura rail link from Tripura's capital, Agartala, in Northeast India to Akhaura near Chittagong port in

⁵ The exception is India, which provides budget support to Bhutan, Nepal and recently Afghanistan.

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Southeast Bangladesh,⁶ is expected to improve trade and the cost-effectiveness of communication between the Indian ‘Seven Sisters’ and mainland India through Bangladesh. Also, oil-rich Angola has attracted many foreign investors to the country who are eager to secure oil supplies for their expanding economic activities.

Overall, China and India are mostly involved in the productive sectors under bilateral arrangements rather than the education, health and governance sectors, areas in which DAC members focus their development assistance. Brazil and South Africa provide large loans through regional MFIs and are more involved in social sectors than China and India. Notably, SSC providers allocate resources to sectors in which they have experience and expertise. Their primary focus tends to be on the productive sectors, such as developing special economic zones that would enable them to lower transaction costs and mitigate supply-side constraints in long-term projects.

2.4 Data challenges

Southern countries provide financing through various channels of government institutions and associated financial institutions, which makes measuring financial flows and setting reporting standards difficult (Walz & Ramachandran, 2010). The definition challenges for SSC are additional constraints. Several online databases collect and compile data and information on Southern development assistance from various sources. Table 3 presents the relevant databases, the types of data on SSC flows that are available and comments on the utility of available data.

Table 3: Data sources for SSC flows

Data source	Type of data	Utility of the data
International Development Statistics, OECD www.oecd.org/development/stats/idsonline	Time series data on the disbursement of ODA by DAC countries, MFIs, private donors (such as the Bill & Melinda Gates Foundation), and non-DAC countries that report to the OECD Creditor Reporting System. Development assistance provided by non-DAC non-reporting countries such as Brazil, China, Chile, India and South Africa, is also estimated. Data are aggregated and categorised according to flows by providers, flows by providers and recipients, and flows for individual projects.	Data on gross disbursements are available. However, no data are available on project-level disbursements or resources directed to local offices. Non-DAC countries’ aid statistics are mainly estimated.
World Development Indicators, World Bank http://data.worldbank.org/products/wdi	Net ODA received.	Data are published from the perspectives of recipients of development assistance in current and constant prices. These figures are not disaggregated according to project-level disbursements and commitments.

⁶ The ‘Seven Sisters’ refers to the seven Northeast Indian states separated from the mainland by a narrow corridor between the borders of Bhutan and Bangladesh. The seven states are Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, plus the Himalayan state of Sikkim and Jalpaiguri Division. For more information about the construction of the Agartala-Akhaura rail link, see ‘Agartala-Akhaura rail link gets boost’ (2016).

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<p>AidFlows www.aidflows.org</p>	<p>Aggregated aid data of the World Bank, OECD, Inter-American Development Bank and Asian Development Bank.</p>	<p>Data on Brazil, China, India and South Africa as aid providers are minimal. Only their contributions to the World Bank's International Development Association and International Bank for Reconstruction and Development as well as regional development banks are available.</p>
<p>AidData www.aiddata.org</p>	<p>Collective database that presents data on development finance at the country, local and project levels.</p>	<p>Geocoded data on projects, locations and transactions are available at the national and sub-national levels for non-OECD countries. There is a standalone database for Chinese development assistance (china.aiddata.org) that provides information on types of flows from China.</p>
<p>International Aid Transparency Initiative www.aidtransparency.net</p>	<p>Collective database that presents data on development assistance that is provided by various stakeholders and published in the initiative's Datastore.</p>	<p>Data on development assistance from all established data providers are made available collectively using a common standard.</p>

Sources: Authors' compilation from different sources.

The data available from the OECD's International Development Statistics and the World Bank's World Development Indicators are not useful for analysing SSC flows. AidFlows and the International Aid Transparency Initiative collect information from existing sources and provide links. Data from AidFlows have the same constraints as those from the International Development Statistics and World Development Indicators databases. The International Aid Transparency Initiative mainly provides links to civil society organisations' information portals, which makes it of limited use to analyse financial flows from the Export-Import (EXIM) Banks of China and India. On the other hand, AidData provides customised data on financial flows that are disaggregated by country and project. Information on types of flows – grants, loans (concessional and non-concessional) and humanitarian assistance – is provided. Notably, there are separate databases for non-OECD and Chinese development assistance, but their data are dated, with no figures from 2013 onward. This paper has made extensive use of data and information from AidData to analyse development assistance from Brazil, India, China and South Africa.

Southern providers' inadequate reporting on SSC constrains analysis. The International Development Statistics database makes some data available on Southern providers. Apart from the DAC, 18 countries report to the OECD using the OECD's ODA definition. For nine countries that do not report to the OECD, the International Development Statistics database makes information available by collecting information from their public domains.⁷ These 27 countries consist of OECD member countries, OECD accession countries and non-OECD countries. Data for non-OECD countries are understood to be the least reliable among the three country categories, since these countries do not report their development assistance using a common definition.

⁷ The 18 bilateral providers of development assistance that report to the OECD are Bulgaria, Croatia, Cyprus, Estonia, Hungary, Israel, Kuwait, Latvia, Liechtenstein, Lithuania, Malta, Romania, Russia, Saudi Arabia, Taiwan, Thailand, Turkey and the United Arab Emirates. The nine non-reporting countries, for which the OECD tries to maintain data on development assistance, are: Brazil, Chile, China, Colombia, India, Indonesia, Mexico, South Africa and Qatar (OECD, n.d.b.).

The burden of providing comprehensive, disaggregated data falls on and will remain with Southern providers. The data situation concerning SSC is undergoing changes, however.⁸ For instance, the provision of more elaborate foreign aid statistics in the fiscal yearbook published by the Chinese Ministry of Finance was discussed in more detail in the second white paper on China's foreign aid compared with the first (Information Office of the State Council, 2014). Still, emerging Southern countries do not have sufficient incentives to be transparent and accountable with disaggregated data that are available globally (Southern Voice, 2016). Even in the second white paper on China's foreign aid, data are only gross estimates and do not include project-level information or the conditions imposed on recipient countries.

Definition challenges for SSC are also constraints. Since Southern providers do not necessarily cooperate on the basis of the OECD definition of ODA, data and information from the South are not comparable with those from the North. Types of development assistance are dissimilar even across Southern providers, which hinders comparison of their foreign assistance packages. Discussions within international development forums have led to commitments to address data challenges in developing countries, which might soon improve the data situation concerning SSC.

The third issue constraining analysis is the accessibility of data. Southern donor institutions report on their activities to national authorities, but such data is often not publicly available. Also, there are cases where data are reported only in the national language (e.g., Arabic for Arab donors and Mandarin for China's activities). Hence, relevant data would not be immediately universally useful if they were made publicly available, as they would require translation for the international development community. In an earlier study that attempted to compile the volumes and types of SSC flows, public data and information were accessed, specifically the annual reports of EXIM banks, development cooperation agencies and MFIs. To fill gaps, public officials responsible for implementing and managing SSC programmes were contacted for information.⁹ Seeking access to data and information that are not publicly available, translation and contacting public officials to fill gaps all take time, which could preclude accurate, timely analysis.

A quality assessment of bilateral concessional finance is therefore constrained by definition challenges for SSC and associated data challenges. In view of the rising importance of South-South flows, there is a need to develop a unique methodology for estimating their concessionality. Meanwhile, the established formulas of the OECD and World Bank can be used. The modalities of development assistance are mostly comprised of concessional finance for development projects and grants. These modalities could be better understood with improved definitions and data. Notably, innovative databases on aid and development cooperation, such as AidData, have emerged. Based on the data and information available from AidData, the grant elements of certain LoCs can be estimated later in this paper.

⁸ A database for Chinese development assistance has been established and is updated by AidData. One of the database is used for Strange et al (2013 and 2015). Discussions on methods to address data challenges are ongoing. Some of these discussions are elaborated upon in Southern Voice (2016).

⁹ The methodology followed for this earlier study is outlined in United Nations Economic and Social Council (2008).

3. OVERVIEW OF SOUTH-SOUTH CONCESSIONAL FINANCE

As a preamble for analysing the concessionality of Southern financial flows, the trends, composition, financial channels and sectoral allocations of South-South concessional finance are investigated in this section.

3.1 Trends in South-South concessional finance

Southern providers manage financial flows under both bilateral and multilateral arrangements, but the former is most prevalent in SSC. For this paper, only bilateral financial transactions between Southern governments have been considered. This section highlights gross estimates found in the literature over successive years in order to outline trends in South-South concessional finance.

The OECD maintains the most comprehensive database of the 28 DAC members' development assistance programme. These 27 countries provided a gross amount of \$23.5 billion as development assistance in 2013, which was more than 13 percent of global ODA (Development Co-operation Directorate, 2015b). Table 4 presents estimates of total South-South flows, all of which follow the OECD definition of ODA.¹⁰

Table 4: Estimated development assistance flows, 2010-13 (gross figures, US\$ billions, current prices)

ODA Flows	2010	2011	2012	2013	2013 (% of total)
ODA from 28 DAC members	141.8	149.6	140.0	151.4	86.6
ODA from 18 non-DAC countries reporting to OECD	7.1	9.5	7.1	16.9	9.7
ODA flows from nine non-reporting non-DAC countries	4.3	5.2	5.7	6.6	3.8
Total flows from non-DAC providers	11.4	14.7	12.8	23.5	13.4
Estimated global total	153.2	164.3	152.9	174.9	100.0

Note: Brazil and Mexico have not published data on their development assistance for the years included in this table. To complete the table, Brazil's development assistance in 2011, 2012 and 2013 has been estimated to be at the same level as in 2010 and Mexico's development assistance in 2013 has been estimated to be at the same level as in 2012.

Source: Adapted and compiled from Development Co-operation Directorate (2015b).

Table 4 shows that global ODA flows have been rising, with an exceptional drop in 2012. According to the OECD, this drop was due to DAC members' ODA budget constraints. Although DAC countries are gradually improving their ODA disbursement, it has been found that least-developed countries had been receiving a smaller share of global ODA (Keeley, 2015). ODA from non-DAC countries reporting to the OECD has also been rising, and a drop was also observed in 2012, which was due to a decrease in Saudi Arabian ODA flows from \$5 billion 2011 to \$1.3 billion in 2012. A year later, Saudi Arabia increased ODA flows to \$5.7 billion; the United Arab Emirates and Turkey increased flows as well to address the refugee and humanitarian crisis in Syria, which contributed to the higher global total figure in 2013. As a percentage of the global total, the share of non-DAC providers' ODA-like flows (in current \$ billions) was 7 percent in 2010 and 13 percent in 2013 (Development Co-operation Directorate, 2015). Non-DAC providers' economic strength, which enables

¹⁰ The OECD definition of ODA can be found at OECD (n.d.). The OECD and DAC share the common definition for ODA.

them to offer large foreign assistance packages, is based on the performances of Brazil, China and India, which collectively produced as much output as the Group of Seven countries together in 2013 (Glennie & Hurley, 2014).

Basu (2014) attempted to estimate financial assistance flows to developing countries, considering (i) ODA flows through bilateral and multilateral channels from DAC and non-DAC countries; (ii) ODA-like flows from emerging Southern providers; and (iii) private philanthropic flows from both DAC members and emerging Southern providers. In 2012, total financial assistance was estimated to be as high as \$220 billion and the forecast for 2013 suggested it would increase. An estimated total SSC flows was \$16.1 billion to \$19 billion in 2011 (United Nations, 2014). In the same year, DAC countries provided an estimated \$135.5 billion in ODA (OECD, 2012). SSC flows are therefore 12 percent to 14 percent of global ODA flows. This finding is similar to that of the OECD's Development Co-operation Directorate mentioned above. Therefore, it can be concluded that SSC flows are following an increasing trend.

In the 1990s, 95 percent of all ODA was provided by DAC members (United Nations Economic and Social Council, 2008). Table 4, above, shows that this figure fell to 86 percent in 2013, with DAC members still the main providers of ODA. However, oil-rich Middle Eastern countries were involved in providing development assistance to neighbouring countries before DAC members' rise to prominence in the 1980s (Walz & Ramachandran, 2010). From this perspective, recent phenomena reflect a re-emergence of the South with new key players such as China and India. The relative significance of these new players is illustrated by the large contributions that they are making under bilateral arrangements. For example, China provided \$2 billion in 2010, which was more than the amounts provided by Brazil, India or South Africa, but lower than Saudi Arabia's contribution of \$3.5 billion (Poon, 2013). Table 5 shows total concessional flows from Brazil, China, India and South Africa.

Table 5: Estimates of Southern providers' gross concessional flows (\$ millions)

Country	2006	2007	2008	2009	2010	2011	2012	2013	Total
Brazil	n/a	291.9	336.8	362.2	482.1	n/a	n/a	n/a	1473.0
China	n/a	1466.2	1807.0	1946.5	2011.2	2776.0	3114.0	3009.0	16129.9
India	381.4	392.6	609.5	488.0	639.1	788.0	1076.0	1257.0	5250.2
South Africa	n/a	108.0	108.5	99.6	106.0	227.0	188.0	183.0	1020.1

Notes: Not all data and information are available online, so parts of foreign assistance packages might not be reflected in the figures in this table. Data from 2011 onward have been taken from OECD (2015b) and therefore data for 2011 are updated. Figures for India and South Africa are based on their fiscal years. For example, data for 2012 correspond to fiscal year 2012/13. These data are estimates of gross concessional flows made by the OECD-DAC Secretariat for countries that do not report to the DAC statistical system. These estimates are not comparable since figures have been collected from different publicly available sources. The websites of the United Nations Department of Economic and Social Affairs, AidFlows and other multilateral organisations have been used to obtain estimates of funds transferred through multilateral organisations for some countries.

Sources: Adapted and compiled from OECD (2013b, 2015b).

Table 5 shows estimates of ODA-like flows as published in national publications. As observed, there has been a steady increase in ODA-like flows from Southern countries. The sizes of their contributions are correlated with the sizes of their annual budgets for ODA-like flows. The larger the budget, the larger the commitments to assistance typically are made. China provides the largest amount of development assistance, followed by India, Brazil and South Africa. South Africa's contribution dipped in 2009, with a gradual increase afterward. The dip does not reflect an actual decline in the provision of development assistance, but rather the situation can be explained by fluctuation in the exchange rate used for currency conversion (OECD, 2015b). The table suggests that earlier figures on financial flows were not systematically reported in official documents, given that data are missing. Also, the gross estimates might be underestimated since many SSC flows take different forms that make them difficult to quantify. These figures do not reflect the composition of concessional finance (i.e., the proportion of development assistance [ODA-like] and other official flows cannot be separated in these figures). The following sub-section aims to provide insight in this respect.

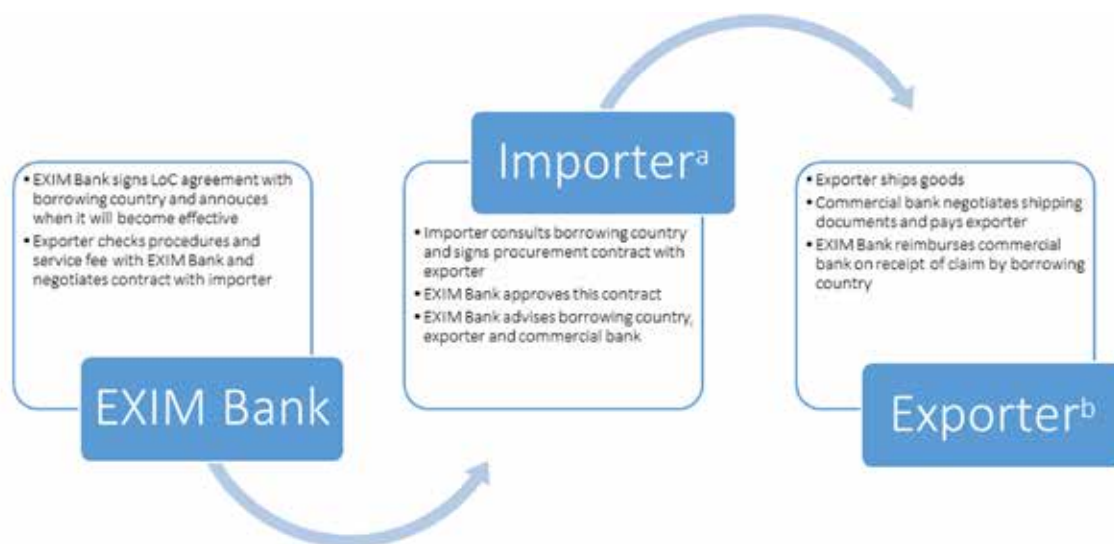
3.2 Instruments and channels for South-South flows

As mentioned, South-South flows come in multiple forms such as grants, loans, trade credits and remittances. This sub-section looks at the composition of concessional finance provided by Brazil, China, India and South Africa to other developing countries and identifies the instruments and channels used for transactions.

India provides development assistance in the forms of grants, technical assistance, training of public officials, scholarships to study in India and, occasionally, budget support (Mullen, 2014). The Ministry of External Affairs allocates grants and technical assistance to development partners, mainly Bhutan, Nepal and Afghanistan. The Ministry of External Affairs, under the supervision of the Ministry of Finances, disburses bilateral loans. The Indian government provides concessional LoCs through the EXIM Bank of India, which maintains a disbursement mechanism that is illustrated in Figure 4.

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Figure 4: Process of disbursement from the EXIM Bank of India



^a Importer refers to any stakeholder in the borrowing country involved in procuring goods and services from India.

^b Exporter refers to any Indian counterpart involved in trading with the borrowing country on behalf of the EXIM Bank of India.

Source: Adapted from Project Exports Promotion Council of India (n.d.).

Across the process of disbursement, the EXIM Bank of India holds importers and exporters accountable for every transaction taken by means of the LoC. It has authority over major decisions regarding funds disbursement and project implementation. Since project contracts require the approval of the EXIM Bank, it can be deduced that the EXIM Bank can take quality assurance measures for appropriate use of the funds that it commits. Funds disbursed by the EXIM Bank do not involve long appraisal processing, which enables faster transactions and facilitates proceedings.

China provides a combination of concessional and non-concessional finance largely comprised of grants, interest-free loans and concessional loans. According to the second white paper on China's foreign aid, the composition of concessional finance was concessional loans at 55.7 percent, grants at 36.2 percent and interest-free loans at 8.1 percent (Information Office of the State Council, 2014). The determinants of modalities remain unknown. Based on the information available from AidData, the proportions of grants and loans flowing to various developing countries vary (see Table A2 in the Annex). The Chinese Ministry of Finance decides the aid budget, which is disbursed bilaterally to developing countries and MFIs, such as the World Bank and IMF. The Chinese Ministry of Commerce is responsible for disbursing grants and interest-free loans, whereas the EXIM Bank of China provides concessional LoCs, non-concessional loans and preferential export credits.

Official figures for China's development finance are hardly comparable with other official figures because of definition mismatches between the Chinese and other established systems. Some of China's funds meet the OECD definition of ODA, but the majority of financial flows cannot be classified as ODA. For instance, unlike

ODA flows from DAC members, China includes military aid, but not student scholarships, in development finance. Some loans are provided on concessional terms but have repayment conditions attached, such as oil exports or through profits from another project being financed by a Chinese company (Brautigam, 2011a). Therefore, disentangling genuine forms of development assistance from investment, project support and technical assistance funds can be difficult.

Brazil provides technical cooperation through the Brazilian Cooperation Agency under the jurisdiction of the Ministry of Foreign Affairs of the Brazilian government. The amount of technical cooperation provided increased fivefold from approximately \$11.4 million in 2005 to \$57.7 million in 2010 (Costa Leite, Suyama, Trajber Waisbich, Pomeroy, Constantine, Navas-Aleman, Shankland, & Younis, 2014). The Brazilian Cooperation Agency also provides finance to regional MFIs, such as the Mercosur Structural Convergence Fund, Pan American Health Organization and Organization of American States. It also provides debt relief, mainly to highly indebted poor countries, in order to help them cope with structural indebtedness. Financial assistance is provided to developing countries in Latin America and the Caribbean and some African countries through LoCs from the Brazilian Development Bank's Exim Automatic, a financing line for overseas banks. These LoCs aim to support the trade of Brazilian goods abroad during the post-shipment phase through a network of accredited banks (Brazilian Development Bank, n.d.). The Brazilian Development Bank first signed agreements with Latin American countries, which represent the largest market for Brazilian industrial products. It is now reaching Europe, the Middle East and Africa, where LoCs have been opened with Nigeria and South Africa, with others being negotiated in Angola and Mozambique.

For project implementation, Brazil has development institutions in different sectors. The key institution for implementing the country's development assistance in the agricultural sector is the Brazilian Agricultural Research Corporation, a state-owned company that oversees and guides the development of the country's tropical agriculture and agribusiness through knowledge and technology generation and transfer. It opened an office in Ghana in 2008, in Panama in 2010 and in Venezuela recently, in partnership with the Brazilian Agency for Industrial Development. It is responsible for Brazil's three main 'structuring projects' in African agriculture: cotton in Benin, Burkina Faso, Chad and Mali; rice culture in Senegal; and agricultural innovation in Mozambique. There is also the Oswaldo Cruz Foundation, which is designated by Brazil's Ministry of Health as the focal point for Brazilian health-related SSC. Another notable development cooperation agency is the Brazilian National Service for Industrial Training, a professional education and vocational training company that implements official agreements coordinated by the Brazilian Cooperation Agency and cooperates autonomously with partner organisations in developing countries. In 2011, it was engaged in 13 technical cooperation projects and concurrently received approval of 13 new projects (Costa Leite et al., 2014).

South Africa's development assistance is channelled mainly toward other African countries to advocate for and on behalf of the continent in various international development forums (Grobelaar, 2014). South Africa has had multiple channels for development finance over time. Following its isolation from the Commonwealth in 1961, South Africa provided bilateral assistance to African countries through its Economic Cooperation Promotion Loan Fund beginning in 1968. Later, South African development finance was provided through the Development Bank of Southern Africa for regional and bilateral infrastructure projects. South Africa's Industrial Development Corporation is a novel financial institution that focuses on private-sector financing in mining, agriculture, tourism, public-private partnerships, health care, infrastructure and manufacturing. It is owned by the South African government and operates under the jurisdiction of the Economic Development Department. Both the Development Bank of Southern Africa and the Industrial Development Corporation

provide regional assistance mainly through infrastructure development and loans. Both have units dedicated to providing assistance to the New Partnership for Africa's Development and the African Agenda.¹¹

South Africa's involvement in SSC has also included contributions to MFIs, such as the World Bank and African Development Bank. Notably, the country is a founder of the India, Brazil and South Africa (IBSA) Fund, which was established in 2003 to provide assistance in combatting poverty and hunger in developing countries by providing essential financing to meet the Millennium Development Goals and continues today. The substantive South-South principles that underpin the IBSA Fund include: national ownership, mutual benefit, horizontality and equality, non-conditionality and complementarity to North-South cooperation (Grobbelaar, 2014). Apart from that, the African Renaissance and International Cooperation Fund, administered by the South African Department of International Relations and Cooperation, was established in 2001 to provide the necessary finance for promoting development and stability in Africa. Its focus has been democracy and good governance, conflict prevention, social and economic development, and humanitarian assistance. In 2010, the fund contributed roughly \$60 million, a significant increase from the \$12.3 million contributed in 2006. Part of these finances is used for 'triangular SSC' (Tomlinson, 2015), specifically research for development, an important modality for South Africa's SSC flows (Braude, Thandrayan, & Sidiropoulos, 2008).

3.3 Sectoral allocations of South-South financial flows

South-South financial flows are mostly a blend of aid and investment in several sectors, such as agriculture, infrastructure, health, and information and communications technology, which has contributed to accelerating economic growth. For example, South-South financial flows to infrastructure projects were estimated to be 55 percent of total flows, but at the same time South-South flows to technical and capacity-building projects were estimated to be 75 percent of SSC (United Nations, 2014). This discrepancy demonstrates that clear estimates of sectoral allocations can be hard to find. Table 6 shows the amounts provided by India, Brazil and South Africa under bilateral arrangements to countries that receive high amounts of development finance from these providers. The information has been collected from the AidData database on non-OECD countries, which provides data according to commitment amounts for each project in various recipient countries. The purpose of the analysis that follows is to discern the sectoral allocations of South-South financial flows.

¹¹ The New Partnership for Africa's Development is an economic development programme of the African Union adopted in 2001 to provide an overarching vision and policy framework for accelerating economic cooperation and integration among African countries. South Africa's African Agenda refers to the South African Department of International Relations and Cooperation's strategic plan for framing the country's relations with the rest of Africa.

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Table 6: Bilateral financial flows from India, Brazil and South Africa to select recipients^a

DONOR	Recipient(s)	Amount (US\$ millions)	Year(s)	Purpose
India	1. Bhutan	1,000	2010	Railway construction, power generation
	2. Nepal	530	2010	Railway and road transport, power generation, flood control, higher education, welfare services
	3. Bangladesh	13	2009-10	Scholarships and training programmes, railway construction and maintenance
	4. Afghanistan	50	2006	Import support
	5. African countries ^b	87	2005-10	Multipurpose aid: railway and road transport construction and maintenance, export support, basic health infrastructure, agricultural development
	6. Multilateral organisations	63.3, 57.1	2010, 2011-13	n/a
Brazil	1. Haiti	0.12	2008-10	Urban development and management, advanced technical and managerial training, agricultural development, welfare services
	2. Cape Verde	0.2	2007-10	Training on basic life skills, tourism policy and administrative management, infectious disease and parasite disease control
	3. Cuba	0.05	2006-10	Health policy and administrative management, medical services
	4. Mozambique	0.20	2009-10	Medical services, vocational training
	5. Angola	0.06	2008	Health policy and administrative management, medical services
	6. Multilateral organisations	231.9, 246.9	2010, 2011-13	n/a
South Africa	1. Congo	99.3	2006-08	Presidential elections, government administration and peacekeeping
	2. Kenya	2.1	2007	Economic and development policy and planning
	3. Liberia	25.8	2005	Government, civil society
	4. Seychelles	3.8	2006	Reconstruction relief and rehabilitation
	5. Multilateral organisations	64.1, 104.3	2010, 2011-13	n/a

Notes:

^aThe figures in the table are calculated averages of the commitment amounts for the years available in the AidData database. For example, the figure for India's development finance flowing to different African countries is actually an average of all figures available for the 2005-10 period.

^b African countries include Benin, Cameroon, Ethiopia, Ghana, Mali, Mauritius, Mozambique, Namibia, São Tomé and Príncipe, Senegal and Sudan.

Sources: Authors' calculations from Tierney et al (2015) and OECD (2013, 2015b).

Given the figures in Table 6, some priorities for each provider can be discerned. India has been providing significant amounts of finance for building railway and road transport systems in neighbouring countries, which may reflect its interest in reducing costs to promote the regional trade of goods and services. Brazil has been providing assistance, specifically technical and capacity-building assistance, largely in the education, health and agricultural sectors (Vaz & Inoue, 2007). In 2010, Brazil's development assistance to Latin America and the Caribbean was disbursed for the mobilisation of the military in Haiti (55%), regional organisations (26%), transport and logistics (13%), project implementation in the education, technology, health and defense sectors (9%) and health equipment and medical treatment (1%) (Costa Leite et al., 2014). South Africa, as discussed above, channels development finance through multiple organisations, and no aggregate figures are available on the sectoral allocations of the country's South-South financial flows. Notably, Grobbelaar (2014) outlines some priorities for South Africa's Industrial Development Corporation (see Table A3 in the Annex). According to AidData, the aforementioned recipients received funding for governance, peacekeeping efforts and reconstruction.

It is difficult to estimate the exact proportions of finance committed to each purpose. Also, figures are likely to be underestimated and reflect commitments rather than actual disbursements. The figures in Table 6 were published in 2013 and disbursements have likely been made since then. Hence, there are concerns about the accuracy of South-South financial flows. For example, India announced a commitment of a \$1 billion LoC to Bangladesh in 2010 (Mullen, 2014), but this figure is not reflected in the data reported in the AidData database. This oversight raises concerns that figures for other commitments are understated as well. Moreover, the figures for Chinese financial flows could not be included in Table 6 because it presents data on ODA-like financial flows and it is difficult to segregate ODA-like flows from the gross figures on China's development assistance.

Overall, this section has provided perspectives into the trends, composition, financial channels and sectoral allocations of South-South concessional finance. Unfortunately, similar analyses could not be conducted for all four Southern providers mainly because information had been gathered from multiple sources, which precluded comparability in some ways. Nevertheless, it is evident that South-South concessional finance has been rising over the past decade, with China providing the majority of financial flows among the emerging Southern countries. DAC members remain important as providers of development assistance and South-South flows can only complement their contributions. Each Southern provider has multiple channels for development assistance, beyond loans and grants. Brazil and South Africa make considerable in-kind contributions. Moreover, data reporting on South-South flows has no common standards. Notwithstanding these constraints, the following section aims to assess the concessionality of South-South financial flows.

4. ESTIMATING CONCESSIONALITY OF SOUTHERN FINANCIAL FLOWS

This section estimates the concessionality of select LoCs from Southern providers based on information available from online databases. Where information was not available, other case studies are provided. Following the discussion above on the different modalities of South-South bilateral concessional finance, this section focuses on the terms and conditions attached to concessional finance.

Since South-South flows are not monitored by a common platform, information on terms and conditions is not reported and is often more difficult to find than information on total volume and sectoral allocations of South-South financial flows. Official documents from the EXIM banks and ministries disclose disbursed amounts, but information on terms and conditions can only be found in the literature relating to SSC. Against this backdrop, this section assesses the degree of concessionality and conditions attached to Southern loan agreements. The crucial factors to be analysed are the grant elements of LoCs and the nature of the conditions attached to funds.

4.1 Methodological approach

The terms of Southern loans can be used to assess concessionality. As mentioned in Section 2, there are two formulas for measuring concessionality, established by the OECD and World Bank/IMF (see Annex for the calculation formulas). In order to understand how loan concessionality differs when using two separate methods, this paper includes an exercise calculating the grant elements of select LoCs provided by the EXIM Banks of India and China. The original intent was to select at least five LoCs from Brazil, China, India and South Africa. However, the information available through the AidData database as of March 2016 only included detailed data on the required variables for Indian and Chinese loans. LoCs for India and China were then chosen randomly from the list in the database. There are no fixed time series. The results are shown in Tables 7 and 8.

The common variables in the two formulas for calculating the grant element are: face value of loan, grant amount, interest rate, discount rate, maturity period (in years), grace period (in years), number of repayments per annum, principal repayment period, which is the difference between maturity and interval between two payments and total number of repayments (see the annex for the illustrated formulas). The World Bank calculator takes account of grant amount and administrative fees—commitment and management fees—unlike the OECD method. The AidData database does not contain complete information on the financial terms of LoCs. For example, there was no information on the number of payments per annum, commitment fee amount, grant amount or repayment scheme (equal principal payment, annuity or lump sum debt service). Therefore, calculations had to be made based on some assumptions. Since grant element calculation is based on repayment scheme, all three repayment schemes were considered while assuming one payment per annum. The commitment fee amount and grant amount were assumed to be zero in cases of missing information. Two calculations were made using the OECD method, based on the discount rates for the ‘modernised’ and traditional criteria. In Tables 7 and 8, the estimates made using the new discount rates are placed above the figure estimated with the previous (uniform) discount rate of 10 percent.

Results show that the lump sum debt service scheme has a higher grant element than the equal principal payment or annuity schemes. Also, it is found that the higher the discount rate, the higher the grant element and hence the more concessional the loan becomes. Similarly, the lower the number of instalments per annum, the higher the concessionality of the loan. The calculated results provided in Tables 7 and 8, and thus the judgements on concessionality, may change if the assumptions are changed.

4.2 India's LoCs to developing countries

India's development assistance has been generously extended to neighbouring countries in Asia and Africa. Apart from Bhutan, Nepal and Bangladesh, the top African recipients are Ethiopia, Sudan, Mozambique, Tanzania and the Democratic Republic of the Congo. Notably, India's project financing in Africa is not targeted only toward resource-rich countries (Modi, 2015). Table 7 shows the grant elements of randomly chosen LoCs to Ethiopia, Jamaica, Cameroon and Bangladesh.

Table 7: Grant element calculations for Indian LoCs (as a percentage of the nominal value of the loan)

Grant element calculation ^a :		OECD method			World Bank/IMF method ^b		
Provider	Recipient; OECD discount + adjustment a factor	Equal principal payment	Annuity	Lump sum	Equal principal payment	Annuity	Lump sum
India	Ethiopia 5% + 4%; 10%	50.91 56.61	51.81 57.43	75.91 80.68	28.78	29.42	49.12
	Jamaica 5% + 1%; 10%	27.41 44.14	27.68 44.52	41.36 62.40	22.24	22.47	34.29
	Cameroon 5% + 2%; 10%	41.22 54.95	42.04 55.87	65.11 79.93	28.78	29.42	49.12
	Bangladesh (LoC 1) ^c 5% + 2%; 10%	47.12 59.94	47.65 60.52 ^d	68.99 82.16	54.99	55.44	74.43
	Bangladesh (LoC 2) ^e 5% + 2%; 10%	47.11 59.94	47.65 60.52	68.99 82.16	34.92	35.37	54.27

Notes:

^a The grant element is expressed as a percentage of the nominal value of the loan in US dollars. For all calculations, the number of instalments per annum for loan repayment was assumed to be 1 if information was otherwise unavailable.

^b All loans disbursed by the World Bank and IMF are discounted at 5%. In the case that information on commitment fee amount and grant amount is unavailable or not applicable, they were assumed to be 0.

^c LoC 1 refers to the first Indian LoC to Bangladesh worth US\$1 billion. The commitment fee was calculated at 0.5% of US\$862 million (the loan amount; see Box 1), which is equal to US\$4.31 million.

^d Mullen (2014) calculated the grant element of this loan to be 61%. It was calculated at a 10% discount rate according to the previous concessionality criteria of the OECD.

^e LoC 2 refers to the second Indian LoC to Bangladesh worth US\$2 billion. The commitment fee was calculated at 0.5% of \$2 billion, which is equal to \$10 million.

Sources: Authors' calculations using information from a key informant interview with an official of the Economic Relations Division, Ministry of Finance, Government of Bangladesh, and Tierney et al., (2011).

First, the Indian LoC to Ethiopia with a face value of \$122 million provided in 2007 was considered. It was provided to develop sugar industry in the country. The loan was provided at LIBOR [London Interbank Offered Rate] plus 0.75 percent per annum rate of interest with a five-year grace period and 20-year maturity period. Calculations show that this LoC was technically concessional under the OECD criteria, but it does not abide by the World Bank/IMF concessionality criteria (that is, a grant element below 35 percent). The lump sum debt payment condition would make the LoC concessional under World Bank/IMF criteria, but no comments can be made on its concessionality since the actual repayment scheme is not known (it is unlikely to be lump sum debt payment).

Similarly, the grant element of the \$7 million LoC provided to Jamaica in 2006 was calculated. The country's National Water Commission provided this loan for the purchase of water pumps for \$7.5 million. The loan covered 75 percent of the order value, with the remainder to be covered by the supplier's credit, and it was used to import machinery and equipment as well. This LoC was found to be non-concessional against the modernised OECD criteria and World Bank/IMF criteria. The previous OECD criteria, however, render it concessional by showing a grant element above 35 percent. Furthermore, a \$37.65 million LoC to Cameroon for maize and rice farm plantation projects in 2008 was found to be not concessional, since the World Bank/IMF method indicates that the grant element is below 35 percent. On the other hand, these LoCs were all found to be concessional using the traditional OECD method.¹² When the modernised OECD criteria were used for calculation, the LoC provided to Jamaica was found to be non-concessional. Therefore, the concessionality of these loans varied according to the method used for calculation.

The EXIM Bank of India committed two LoCs to Bangladesh in 2010 and 2015, which were the largest LoCs to ever be offered by the bank. As shown in Table 8, both were deemed concessional. A deeper investigation into this case resulted in validated information on their terms and conditions (see Box 1).

Box 1: Terms and conditions of India's first LoC to Bangladesh

In August 2010, the first large 'dollar credit line agreement' worth \$1 billion was signed between India and Bangladesh. The primary purpose of India's LoC was to strengthen the infrastructure in Bangladesh's transport sector, particularly railways. Fifteen projects were approved, of which 12 involved railways. Initially the LoC was offered at a 1.75% interest rate with a requirement that 85% of needed goods and services be purchased from India. In May 2012, the terms were revised. They offered almost \$200 million as a grant equivalent and \$862 million as the loan amount from the EXIM Bank of India. The LoC is being provided at a fixed interest rate of 1% and the condition that 65% of construction resources and 75% of other goods and services are procured from India. The LoC will mature in 20 years and has a grace period of five years. The LoC has an approximate grant element of 61% (traditional OECD method), 48% (modernised OECD method) or 55% (World Bank/IMF method). It is therefore technically concessional and ODA-like. Since it was negotiated and finalised directly with the Bangladesh government, there was no requirement for a sovereign guarantee. Funds are transferred directly to the bank accounts of the Indian firms contracted for implementing the projects rather than to Bangladesh government ministries.

Source: Key informant interview with an official of the Economic Relations Division, Ministry of Finance, Government of Bangladesh.

The first LoC to Bangladesh was widely criticised for its conditions and the long delay in the disbursement of funds. It is a service-tied loan, with the main construction work being contracted to Indian firms. In this case, even if there is an inherent transfer of knowledge from the Indian firms during infrastructure building, there is limited capacity-development and improvement in expertise for Bangladeshi officials regarding the management and implementation of major infrastructure projects, potentially causing them to stay dependent on foreign firms for major projects. At the same time, the internal rate of return of these projects is low, less than 1 percent, which can be largely attributed to lags in the disbursement of funds that halt work at sites and raise the costs of projects in expenses for storage and salaries of workers. For example, the largest allocation from the \$862 million LoC was for the construction of the 3rd and 4th dual-gauge rail track

¹² The traditional OECD method is to measure the grant element at a 10% discount rate, assuming equal principal payment with one installment per annum.

between Dhaka and Tongi and the doubling of the dual-gauge rail track between Tongi and Joydevpur. The total project cost \$149 million, and a LoC allocation of \$123.1 million was decided that included improving the Bangladesh Railway's signalling works (Economic Relations Division, 2015). However, the EXIM Bank of India had disbursed funds very slowly for this project, and only 2.25 percent of the project has been completed as of May 2016 ('Indian LoC projects hit snag for slow disbursement,' 2015 and Sultana, 2016). The implementation deadline for this project was recently extended from December 2016 to December 2017. On the other hand, the repayment process for the disbursed \$205.59 million began in 2016. Evidently, sound implementation of major projects is hindered due to the slow disbursement of funds. Even when funds are disbursed on time, the implementation process is often delayed due to lengthy feasibility studies and tender processes. Consequently, projects' financial returns are adversely affected, yet the monitoring reports can still highlight projects' social benefits, such as contributions to the social safety net, poverty reduction and the empowerment of women.

From the recipient's perspective, the Indian LoC is more attractive than concessional loans from the World Bank. The LoC has a much shorter maturity period compared with the 40-year maturity loans from the World Bank, and the conditions for repaying the LoC are tighter, essentially limiting the benefits of it being concessional. However, the LoC fills the necessary investment gap in the transport sector that traditional donors, including the World Bank and the Japan International Cooperation Agency, had been skeptical about filling (as known from the key-informant interview). Moreover, the project selection and fund disbursements from the traditional providers require lengthier appraisal procedures for which the funds from India are preferable. Therefore, the constraints of a shorter maturity period and tighter repayment conditions are insignificant given the other benefits of acquiring relatively more cost-effective, speedy processing of funds and no attached conditions regarding governance and macroeconomic policy reforms in line with the South-South principles of and horizontality and non-conditionality.

Perhaps the attraction of such infrastructure financing led Bangladesh to welcome the announcement of a second LoC from the EXIM Bank of India, worth \$2 billion, which is the largest bilateral LoC offered by India to any developing country. The financial terms are exactly the same as in the previous LoC, but the second LoC has tighter conditions. It requires 75 percent of needed goods and services to be procured from India and the submission of biannual implementation reports, along with the condition that only Indian firms can take responsibility for all projects under this LoC. Thirteen projects, a combination of procurement deals and construction projects, have been approved under the LoC. From the experience of project implementation under the first LoC, the procurement deals were approved and implemented much faster than the construction projects. Disbursements for the largest construction projects have not yet begun. Completion of the construction projects is essential in order to have sufficient infrastructure to make use of the locomotives, wagons, buses and vans being purchased.

In conclusion, only the Indian LoCs to Ethiopia and Bangladesh were found to be concessional according to all methods. They were targeted according to the countries' national development priorities. Notably, the Ethiopian sugar industry became self-sufficient through increased production and becoming a net exporter of sugar by the end of 2015 (Kumar, 2015). However, practical project implementation challenges under the LoCs were similar in Ethiopia and Bangladesh. In Ethiopia, the lack of rigorous monitoring and verification mechanisms affected project implementation in the sugar industry. Under the mutually agreed terms and conditions of the LoC, the approved projects were to be implemented by Indian firms. However, they sub-contracted to other firms that may not have been competent or have had incentives to complete projects in a timely manner, which resulted in delays and higher overhead costs (Kumar, 2015). In Bangladesh, despite the availability of funds at concessional rates and without attached policy conditions, the development impacts of these funds depend on their appropriate use. Importantly, service and procurement conditions partially

mitigate the essence of an LoC being development assistance. Also, unless projects are completed on time, the recipient country bears costs in terms of delayed project implementation and other associated externalities, such as disturbance to local livelihoods in areas where construction work is planned. Still, recipients preferred the Indian LoCs despite their challenges.

4.3 China's LoCs to developing countries

Much like India's foreign assistance package, the EXIM Bank of China provides LoCs to developing countries as part of China's development assistance. China's bilateral finance was approximately \$2.8 billion in 2013, up from \$2.6 billion in the preceding year (OECD, 2015b). Overall, China's development assistance is provided for industrial and economic infrastructure projects, particularly turn-key projects (Krauss & Bradsher, 2015). It is not necessarily targeted to the poorest countries in Africa, but rather those with which China has strong political ties (Dreher et al., 2015). There appears to be no empirical evidence, however, for the widely proclaimed view that only natural resource-rich African countries can attract Chinese aid. Table 8 shows the grant elements of randomly chosen Chinese LoCs to Ethiopia (two separate LoCs were considered), Ghana, Uganda and Angola. Only African recipients were considered because, according to Strange et al (2014), China's development assistance transactions have been most frequent on the continent of Africa.

Table 8: Grant element calculations for China's LoCs (as a percentage of the nominal value of the loan)

Grant element calculation:		OECD method			World Bank/IMF method ^a		
Provider	Recipient; OECD discount + adjustment factor	Equal principal payment	Annuity	Lump sum	Equal principal payment	Annuity	Lump sum
China	Ethiopia (1) 5% + 4%; 10%	48.27 52.72 ^b	49.07 53.54	73.24 77.70	23.62	24.13	43.47
	Ethiopia (2) ^c 5% + 4%; 10%	34.53 48.81	36.25 50.89	66.29 82.15	21.42	22.6	47.97
	Ghana 5%+ 2%; 10%	39.26 53.28	40.15 54.30	63.82 79.19	26.56	27.24	47.24
	Uganda 5% + 4%; 10%	53.40 57.50	54.82 58.94	82.60 86.16	29.86	30.90	55.70
	Angola 5%+1%; 10%	20.75 42.01 ^d	21.38 43.06	42.05 69.13	13.79	14.23	31.89

Notes:

^a All loans disbursed from the World Bank and IMF are discounted at 5%. In the case that information on commitment fee amount and grant amount is unavailable or not applicable, they were assumed to be 0.

^b If one instalment per annum is assumed, the calculation will be same as that in Strange et al (2013).

^c The indications of Ethiopia (1) and (2) are used only for the authors' convenience. They are not based on any chronological order.

^d This grant element calculation is close to the grant element figure of 42.68% provided in Strange et al (2013). The difference in the two methods for these calculations is the assumption of instalments per annum. Here, one instalment per annum was assumed, whereas in Strange et al (2013), grant element was calculated based on the assumption of two instalments per annum.

Sources: Authors' calculations using information from Brautigam (2011b) and a database constructed from media reports by Strange et al (2013), which is available at china.aiddata.org.

Overall, the LoCs provided by the EXIM Bank of China were found to be not concessional.¹³ The grant elements calculated using the World Bank/IMF method are below 35 percent for all the LoCs considered. However, calculations using the OECD method indicate that the grant elements for all the LoCs were far above the minimum thresholds of both the traditional and modernised criteria, rendering them concessional. This contradiction can be attributed to the assumptions made during calculations. More specifically, the results are due to the World Bank method, unlike the OECD method, including commitment fee in its formula.

The first Chinese LoC considered in Table 8 was committed to Ethiopia in 2013. It has a face value of \$332 million and was intended to support the construction of a cross-border water pipeline from Ethiopia to Djibouti (only 90 kilometres of which was to lay in Djibouti). Since Ethiopia is a low-income country, the risk adjustment factor used during calculation with the modernised OECD criteria, with the 5 percent discount rate, is 4 percent. The OECD method indicates that the grant element of this LoC is more than 45 percent, but the World Bank method indicates that it is less than 35 percent. This discrepancy is probably because a 0.25 percent management and commitment fee was considered in the latter method's formula, which narrowed the grant proportion of the LoC.

The second Chinese LoC considered was committed to Ethiopia in 2011. It has a face value of \$475 million and was intended to support the construction of a railway line of 36.5 kilometres in Addis Ababa. It was provided at LIBOR six months plus 2.6 percent per annum rate of interest with a three-year grace period and 25-year maturity period. The OECD loan concessionality calculator indicates that the grant element is below 45 percent, which means that the LoC is not concessional according to the modernised criteria. In the case of lump sum debt service payment, the grant element is greater than that threshold. However, the traditional OECD criteria indicate that the grant element is above 25 percent for this LoC, indicating that it is concessional, according to the 25 percent threshold for loan concessionality.

Next, the LoC provided for the construction of the Bui Dam in Ghana using an export credit worth \$292 million and a loan worth \$270 million from the EXIM Bank of China was considered. The export credit was provided on terms that included a five-year grace period and 12-year maturity period. The loan was provided at a 2 percent interest rate with a five-year grace period and 20-year maturity period. It is a resource-secured loan, where repayments can be secured through the export of cocoa beans to China. However, it is not known if transactions are made at spot price or futures price. Both OECD and World Bank methods deem this LoC to be non-concessional.

In contrast to the aforementioned LoCs, the EXIM Bank of China extended a LoC worth \$106 million to Uganda in 2007 for constructing fibre-optic infrastructure to improve information and communications technology in the country. The terms were a 2 percent interest rate, five-year grace period and 25-year maturity period. This loan was found to be concessional using both methods under consideration.

Finally, China's financial flows to Angola were considered. Chinese development assistance to Angola has been widely written about and debated. According to the database constructed by Strange et al. (2013), the EXIM Bank of China held as many as 122 different LoCs and loan agreements with Angola for innumerable projects from 2000 to 2013. The contracts were signed under agreement of repayment using future flows of finance from the concerned projects and/or profits from joint ventures or using valuable assets as collateral. Of these 122 agreements, only 95 were for loans (excluding debt rescheduling) and 19 were for grants. Of the loan agreements, 50 were calculated to be concessional (using the traditional OECD criteria) and only two agreements involved interest-free loans. Information on the concessionality of seven agreements was

¹³ The calculations in Table 9 have been done exactly the same way as in Table 8.

not found, mainly for projects involving road construction and electricity production. Since the modernised OECD criteria for loan concessionality were agreed in 2014, all these agreements were officially assessed in the context of the traditional ODA criteria. Overall, Chinese LoCs to Angola tend to be resource-tied, particularly for oil exports.

Looking at a particular case, the EXIM Bank of China agreed in 2004 to provide a \$2 billion LoC to Angola in two phases of \$1 billion. The terms of both phases were LIBOR plus 1.5 percent, a five-year grace period and a 12-year maturity period. Considering the interest rate to be 3.297 percent (as given in the database constructed by Strange et al. [2013]), the grant element of this loan was found to be 36.14 percent, calculating at 10 percent discount rate and assuming two instalments per annum in an equal principal payment scheme. Since the grant element of this loan is well above the OECD threshold of 25 percent, it could be considered concessional. This calculation, however, is based on the traditional OECD criteria for loan concessionality. According to the modernised OECD criteria, the grant element should be calculated at, other things being equal, a 6 percent discount rate, which makes it only 17.06 percent. This way, the grant element is far below the threshold for concessionality, according to the modernised criteria, which is 45 percent. Since this LoC was sanctioned in 2004, the concessionality level is better evaluated using the traditional criteria. Both phases of the LoC were contracted to be repaid by oil exports from Angola, specifically repayment with 10,000 barrels of oil per day as well as 70 percent procurement of construction materials from China. These conditions inevitably had multifaceted impacts on Angola's economy.

These LoCs demonstrate that any development project under a Chinese LoC involves a multifaceted approach. There is no single modality or uniform terms and conditions across the different LoCs. Moreover, most LoCs were found to be not concessional. However, as projects are mostly infrastructural, there are associated non-financial external benefits for recipients. For example, the completion of the railway line in Ethiopia and the dam in Ghana would contribute to long-term sustainability in these countries by spurring economic activities and subsequently social development in the projects' regions. Therefore, financial non-concessionality could be an insignificant burden if positive multiplier and spill-over effects are considered.

4.4 Other cases of SSC

The concessionality of South-South financial flows provided by Brazil and South Africa could not be assessed in the exercise calculating the grant elements of LoCs similar to those from India and China, as information on the repayment conditions of loans from these countries is scarce. Moreover, financial assistance provided to other developing countries for infrastructure projects constitutes a relatively smaller proportion of Brazil's and South Africa's SSC flows. In this context, Brazilian technical cooperation and South African SSC were analysed and the results contrast with those for India and China.

The expansion of Brazil's development cooperation beyond Latin American countries has been principally driven by a shift in foreign policy initiated by former Brazilian president Luiz Inácio Lula da Silva. To reiterate, Brazilian SSC flows are in the form of technical cooperation to developing countries coordinated by the Brazilian Cooperation Agency of the Ministry of Foreign Affairs. Though the Brazilian Cooperation Agency is the principal institution managing Brazilian technical cooperation, there are several other specialised institutions that manage the implementation of specific projects. For example, there are around 20 specialised institutions implementing Brazilian agricultural projects in Africa (figures have not been updated since 2010, however) (Cabral & Shankland, 2013). Technical cooperation does not necessarily involve providing machinery to boost agricultural productivity. Rather, cooperation extends to training local workers to build their capacity and learn from Brazil's experience in development. The Brazilian government does not provide much in terms

of concessional loans, grants or technology transfer, but the Brazilian Development Bank provides LoCs to developing countries for importing machinery and equipment from Brazil (Inoue & Vaz, 2012). However, these financial flows are considered private capital with commercial purposes and therefore deemed outside the scope of this paper.¹⁴

Brazil's development assistance is inherently different from what the EXIM Banks of China and India are providing to developing countries. Brazil's involvement in international development has been largest in the agricultural and health sectors, mostly by trilateral cooperation. Also, Brazil provides conditional cash transfers to invigorate the social sector, which should be recognised as an innovative modality. The ProSAVANA project in Mozambique is the largest international development project undertaken by Brazil in collaboration with Japan (see Box 2). Japan provided concessional loans to Mozambique to support the project financially and Brazil provides technical assistance. Japanese finance was provided as grants and loans under the terms of DAC members.

Box 2: ProSAVANA

In a recent study on Brazil's role in international development cooperation, one of the highlighted programmes was ProSavana, which is situated in Mozambique's Nacala Corridor. It is a 20-year agricultural project to be implemented by triangular cooperation among Brazil–Mozambique–Japan with a budget as large as \$500 million. This project is deemed rather ambitious not only because of its scale but also because the contractors' aims to collect funds through private investment that is expected to boost agribusiness and food production in the Nacala region. Other than that, the Nacal Fund would be used to motivate private-sector investment in this project to facilitate mainly the technical part of the project. This fund is an initiative promoted by the Brazilian Cooperation Agency, Fundação Getulio Vargas, Japan International Cooperation Agency, Embrapa, the UN Food and Agriculture Organization, Brazil–Mozambique Chamber of Commerce and Industry and Mozambique's Ministry of Agriculture. Once implemented, it will be one of the largest projects to be completed by triangular cooperation.

Adapted from: Costa Leite et al. (2014, pp:32)

South Africa, on the other hand, is a unique Southern provider, since its SSC aims to promote regional development in Africa and is undertaken by multiple institutions on behalf of the South African government, as mentioned in sub-section 3.2. South Africa has one of the highest GDP growth rates in sub-Saharan Africa and often assumes the role of regional power. It is both a recipient and provider of development assistance, with foreign assistance consisting of less than 1 percent of its annual budget (Grobbelaar, 2014). Its development assistance is principally focused on peacekeeping, conflict mediation, post-conflict reconstruction and stimulating stronger partnerships among African countries. Therefore, South African development assistance cannot be considered ODA, since the OECD definition of ODA excludes military and peacekeeping assistance (United Nations Economic and Social Council, 2008). Nevertheless, South Africa has the advantage of having strong infrastructure and a sound financial system compared with the rest of Africa, which enables it to coordinate international development cooperation programmes. Braude et al. (2008) found that the majority of South African public-sector corporations provide development assistance in one form or another to African countries in the region. They also provide significant amounts of finance to the African Development Bank and Arab Bank for Economic Development in Africa.

¹⁴ The terms and conditions of the LoCs are outlined in Brazilian Development Bank (n.d.).

Tierney et al. (2011) recorded only five cases of bilateral assistance from South Africa provided through the African Renaissance and International Cooperation Fund. The time frame was 2006 to 2008 and the recipient countries were the Democratic Republic of the Congo, Seychelles, Kenya and Liberia. None of these cases had any details on terms and conditions for the repayment of these funds. Two cases had been recorded for the Democratic Republic of the Congo, one where South Africa provided more than \$40 million to assist in presidential elections in 2006 and the other involved almost \$2.5 million for refurbishment and construction of the National School for Public Administration. These funds were provided through grants and as such can be counted as ODA. Similarly, South Africa provided assistance in the form of a grant to reconstruct public infrastructure in Seychelles after the Indian Ocean earthquake and tsunami in December 2004. The Seychelles government mainly sought budget support to stabilise skyrocketing prices in the country's construction industry, particularly for timber and steel. The grant helped to build the necessary social infrastructure in the post-tsunami period and hence acted as both humanitarian and development assistance. For Kenya, a research grant of \$300,000 was provided to the African Economic Research Consortium. Finally, South African assistance of \$4 million to Liberia through a grant allotted to budget support was recorded in 2005. This assistance was meant to help Liberia to recover after a decade-long civil war through disarmament of various militias, formation of a single army and holding parliamentary elections for a democratic government. Financial assistance for good governance was crucial as Liberia's economy was suffering from poor water and energy distribution, a collapsed health care system, damaged communication infrastructure and limited food production and supply.

The aforementioned cases are only a few examples of bilateral development finance provided by South Africa from 2005 to 2008. They show that South Africa provided funds in diversified areas, including aiding a developing country to strengthen local civil society and conducting economic research and policy analysis. Even if DAC members do not consider these forms of assistance, particularly the military aid and research grant, to be ODA, it appears that South African development cooperation programmes are ODA-like and customised to meet the specific needs of countries in the region, which traditional providers might fail to address due to their strict parameters and definitions for lending criteria.

In view of the above and taking note of the importance of the concerned countries, particularly in their respective region, it will be useful to undertake more focused and in-depth study on concessional financial flows from Brazil and South Africa to other developing countries.

Overall, it is observed that repayment conditions attached to South-South concessional finance are not adequately reported, so comprehensive analysis on concessionality cannot be conducted. From what has been found, the modernised OECD method has tighter criteria for loan concessionality. The loans provided before 2014 were found to be non-concessional, using the modernised aid threshold for the grant element, even if they were found to be concessional, according to the traditional OECD or World Bank criteria. Evidently, concessionality varies according to the criteria used for assessment. It also depends on the availability of information on the variables used for calculations.

The financial assistance from India and China are more alike. However, Indian LoCs to developing countries were found to be concessional more often across cases than Chinese LoCs. The LoCs from China are attached to different forms of repayment arrangements, such as loans for oil or service-tied loans. The extent to which these loans are development-friendly or ODA-like cannot be assessed by only using financial criteria such as the grant element. In view of these constraints on assessing the concessionality of South-South flows, the following section provides broad guidelines for the information needed to assess the quality of SSC flows and associated policy recommendations.

5. ASSESSMENT OF THE QUALITY OF SOUTH-SOUTH BILATERAL CONCESSIONAL FINANCE

This paper has so far analysed publicly available information in the literature relating to SSC and relevant online databases. Some long-held confusion regarding SSC, especially regarding its quality, prevails because many aspects are still a mystery. The key questions that remain unanswered include whether SSC flows should be assessed by the same methodology as loans from DAC members, how the concessionality criteria may be altered for SSC flows, how Southern providers can be encouraged to publish timely, comprehensive data on their assistance and whether recipients are assessing the impacts of SSC loans and traditional loans separately to delineate the differences. In assessing SSC flows, this paper has highlighted certain aspects that require further discussion within the international development community. Some broad guidelines for assessing the quality of South-South bilateral concessional finance, which should be acknowledged as a priority, are articulated in Table 10 based on the findings of the case studies in Section 4. The guidelines are for assessing the process that transfers SSC flows and the outcomes of these flows in terms of the impacts on the economies of recipients from micro and macro perspectives. These guidelines fall under the following four themes: (i) project evaluation of projects financed by SSC flows; (ii) macroeconomic effects of SSC flows; (iii) linkages with special features of SSC flows; and (iv) data constraints in assessing SSC flows.

Table 9: Quality assessment guidelines for South-South bilateral concessional finance

Process assessment framework			
Criteria for assessment	Focus of analysis	Possible source of information	Availability of information
Solicited or unsolicited aid flows	To understand if the financial flow was demand-driven or philanthropically provided	News reports; key informant interviews; review of relevant documents;	Available
Time lag in each step of project implementation	To estimate the efficiency in processing committed financial flows	The signing date from an official document like a memorandum of understanding or financial agreement; news reports	Available
Terms and conditions	To measure the concessionality of the funds provided	Financial agreement	Not all terms and conditions are known
Project selection	To understand if there was competitive bidding or a preferential choice in selecting the project, project contractor (the company) and project management consultant	Request for tender	Unavailable
Disbursement of funds	To analyse the progress of disbursing the necessary funds and the reasons for delays (if any)	Financial documents from banks	Available
Procurement and use of resources	To analyse the utilisation of resources and to estimate the opportunity cost of procuring resources from the providing country rather than domestic firms and sources	Relevant ministry; interview with project management consultant	Unavailable
Outcome assessment framework			

ASSESSMENT OF THE QUALITY OF SOUTH-SOUTH BILATERAL CONCESSIONAL FINANCE

Project evaluation and accountability mechanism	To analyse the financial sustainability of the project and keep record of mutual accountability of both countries involved	Financial reports; implementation reports	Unavailable
Implication for the livelihoods of people in the recipient country	To estimate the macroeconomic effect of the funds (e.g., job creation, change in standard of living, growth in the relevant sector in terms of output and income generated)	Macroeconomic analysis reports; news reports; household and income expenditure survey reports	Unavailable
Local development in the area of the project	To analyse the local economic impact (e.g., the implication of new infrastructure for productivity, the contribution of ancillary services to growth)	Project progress report	Unavailable
Debt sustainability of recipient country	To analyse the implication for debt sustainability of the recipient country when several different financial obligations are imposed on it	Statistical reports on debt	Unavailable
Existence of reporting and monitoring mechanism	To analyse mutual accountability for the project	All reporting documents	Unavailable
Data constraints	To outline the constraints to making necessary data and information available and construct methods to overcome them	All available documents on data and information in the public domain or upon request	Project-level information is available and includes dates

Sources: Authors' compilation based on the case studies in section 4.

These guidelines have been articulated based on the information available on India and China¹⁵. They highlight the basic information needed for quality assessment. The six criteria that make up the process-assessment framework are for analysing the process by which funds are transferred and projects are selected. The six criteria that comprise the outcome-assessment framework are for assessing the microeconomic and macroeconomic impacts of SSC flows. The fourth column of Table 10 shows the availability of information on the respective criteria for Indian and Chinese LoCs, largely as an example.

Recently, the Network of Southern Think Tanks (NeST), produced a conceptual framework for SSC that included quality assessment indicators for the process of SSC under the following broad themes: national ownership; horizontality and solidarity; capacity-development, sustainability and learning; transparency, accountability and information management; inclusive partnership, citizen's ownership and empowerment; and assessing SSC in a global arena (see NeST, 2015). This framework, however, aims to monitor the constitution of SSC rather than specific modalities of concessional finance.

The guidelines proposed in this paper require globally accepted benchmarks for each criterion to classify the quality of SSC flows. The international development community would require more information and discussion to arrive at consensual decisions regarding such benchmarks. These quality assessment guidelines for South-South bilateral concessional finance can initiate this discussion. Most important, in order to estimate the macroeconomic effect of the funds to determine the implication for people's livelihoods in the recipient country, certain project evaluation techniques must be applied. It would be pertinent to also analyse the synergies among project selection, project implementation and a project's impacts on human and infrastructure development in Southern countries.

¹⁵ The cases studies for Brazil and South Africa were not considered because little information was found on the terms and conditions of the loans that they provide.

6. CONCLUSION

Concessional finance from various Southern providers has been rising. While together SSC flows constituted only about 12-13 percent of all resource flows to developing countries in 2011, concessional finance is the most essential source of external funds for alleviating poverty and meeting the new Sustainable Development Goals in the poorest countries. Developing countries have untapped resources that can be used for development, and SSC flows are reliable because they are apparently targeted to leverage these resources in ways that offer mutual benefits. This is why South-South financial flows are often more preferable for recipient countries than loans with policy conditions.

However, Southern providers are more concerned with the microeconomic success of the projects that they are financing, for which recipient countries need to scale up efforts for appropriate follow-up and review. This paper demonstrates how difficult it is to assess the concessionality of Southern loans and concurrently assess the microeconomic and macroeconomic impacts of such assistance. The international development community needs to redirect its focus to articulating a new benchmark for “good performance” of South-South financial flows and acknowledging that SSC has the most potential to support the achievement of the Sustainable Development Goals.

Traditional ODA, while facing competition from other sources, is still a major source of concessional finance. SSC flows are an emerging source and much remains to be done in improving information and focusing such flows on national and international development priorities. Common incentives for providers and recipients could help channel all different forms of SCC and shape a collective understanding of SCC. Improvements in data and information, sensitisation through global and national forums, and the establishment of an assessment framework unique to the OECD and World Bank/IMF and customised to features of South-South concessional finance would also be helpful.

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ANNEX

Table A1: Descriptions of SSC as offered in different sources

Source	Actors	Objectives	Principles	Modalities
United Nations (2003), Revised Guidelines for the Review of Policies and Procedures Concerning Technical Cooperation Among Developing Countries	Technical cooperation among developing countries should be initiated, organised and managed by developing countries themselves, with their governments playing leading roles, while involving public and private institutions, non-governmental organisations and individuals.	Technical cooperation among developing countries is a process whereby two or more developing countries pursue their individual or collective development through cooperative exchanges.	Technical cooperation among developing countries is multidimensional in scope and can therefore include all sectors and all kinds of technical cooperation activities among developing countries, whether bilateral or multilateral, sub-regional, regional or inter-regional in character.	Developing countries exchange knowledge, skills, resources and technical know-how.
United Nations (2010), Nairobi outcome document of the High-level United Nations Conference on South-South Cooperation	SSC is a common endeavour of peoples and countries of the South. SSC embraces a multi-stakeholder approach, including non-governmental organisations, the private sector, civil society, academia and other actors that contribute to meeting development challenges and objectives in line with national development strategies and plans.	The objective of SSC is to enhance local capacity in developing countries by supporting local abilities, institutions, expertise and human resources, and national systems, where appropriate, in contribution to national development priorities.	SSC was born out of shared experiences and sympathies, based on common objectives and solidarity, and guided by, inter alia, the principles of respect for national sovereignty and ownership, free from any condition. SSC should not be seen as ODA. It is a partnership among equals based on solidarity. SSC takes place on the occasion of a request from a developing country and it is stressed that SSC is not a substitute for, but rather a complement to, North-South cooperation.	SSC takes different and evolving forms, including the sharing of knowledge and experience, training, technology transfer, financial and monetary cooperation and in-kind contributions.
United Nations (2012), Framework of operational guidelines on United Nations support to South-South and triangular cooperation	Governments, regional organisations, civil society, academia and the private sector.	Pursue the partners' individual and/or shared national capacity-development objectives through exchanges and inter-regional collective actions.	Equality and mutual benefit to both partners involved. SSC should be considered a complement to, rather than a substitute for, North-South cooperation.	Evidence from actual experience shows that in addition to the sharing of knowledge and experience, SSC increasingly involves collective actions by multiple countries at the global and regional levels in the pursuit of mutually beneficial development, as seen in the building of economically vibrant regional communities, joint initiatives to address cross-border issues and a collective voice to enhance bargaining power in multilateral negotiations.

<p>United Nations Economic and Social Council (2014), Trends and progress in international development cooperation</p>	<p>Decentralised development cooperation has moved notably from a donor-recipient model to collaborative peer-to-peer engagement of local and regional governments, their associations and multilateral actors.</p>	<p>To facilitate the cost-effective and targeted delivery of services, directly responding to challenges that affect the lives of citizens. SSC benefits from close proximity, local ownership and a sense of accountability, though monitoring is home-grown and in its infancy. It also faces challenges to scaling up successes and aligning with national priorities.</p>	<p>SSC takes place with principles that include the following: diversity of approaches; horizontality, as a voluntary process and mutually agreed relationship; equal distribution of benefits; non-conditionality; comprehensive vision, cultivating the capacity for longer-term sustained development; results orientation, aimed at enhancing mutual benefits and promoting win-win outcomes and complementarities; flexibility, in ways of sharing development experiences and knowledge; and visibility, with a focus on concrete results and through demand-driven projects that target country needs.</p>	<p>SSC offers options for developing countries to benefit from solutions that are cost-effective and worked out in similar development contexts. Southern partners are making efforts to better measure and evaluate their cooperation, going beyond mere quantification in monetary terms.</p>
<p>OECD (2014b), Development Co-operation Report 2014: Mobilising Resources for Sustainable Development</p>	<p>Over recent years, SSC has evolved significantly, with a deepening of engagement across a range of sectors, from trade to investment and technology development. It has also moved beyond traditional government-to-government cooperation to involve the private sector, civil society and other non-state actors.</p>	<p>The objective of SSC is to end dependence on long-established financial mechanisms by searching for new financing options.</p>	<p>In order to spread and sustain this cooperation, partners should continue to embrace the two basic principles of egalitarianism and mutual benefit. It needs to be ensured that these are balanced, win-win partnerships through which benefits are shared among all development partners.</p>	<p>SSC involves the exchange of resources, technology and knowledge among developing countries, also known as countries of the global South. New approaches to financing are emerging, including currency exchange, South-South trust funds and development banks such as the BRICS Development Bank (now called the New Development Bank) and Asian Infrastructure Bank.</p>

Source: Authors' compilation from different sources.

Table A2: Composition of China's ODA (US\$ millions)

Top recipients	Angola	Congo	Ghana	Ethiopia
Total ODA-like flows	147.3	16.7	1,497.0	8,490.0
Loan	94.1	1.3	528.0	42.9
% of total	63.9	7.8	35.3	0.5
Grant	3.2	15.4	843.1	5,917.5
% of total	2.2	92.2	56.3	69.7

Source: Authors' calculations based on the database available at china.aiddata.org.

Table A3: Grant Element Calculation Formulas

Criteria	Equal Principal Payments	Annuity	Lump sum repayment
OECD Method	$GE = 100 * (1 - ZG - ZM - ZX)$ where $ZG = (R1 * (1 - 1/C1) / (A * D))$ $ZM = (1/NR) * (1/C1) * ((1 - 1/C2) / D)$ $ZX = (R2 / (A * NR)) * (1/C1) * ((1/C2) - 1 + D * NR) / (D * D)$	$GE = 100 * (1 - ZG - ZX)$ where $ZG = R1 * (1 - 1/C1) / (A * D)$ $ZM = 1 / (-1) + 1$ $ZX = (R2/A) * ZM * (1/C1) * ((1 - 1/C2) / D)$	$GE = 100 * (1 - (1 + R2 * G) /)$
World Bank Method ^a	$GE = 100 * [1 - (R/A)/D] * \left[1 - \left(\frac{\frac{1}{(1+D)^{A*INT}} - \frac{1}{(1+D)^{A*M}}}{(A*M - A*INT) * D} \right) \right]$	$GE = 100 * (1 - ZG - ZX)$ where $ZG = R * (1 - 1/C1) / (A * D)$ $ZM = 1 / (-1) + 1$ $ZX = (R/A) * ZM * (1/C1) * ((1 - 1/C2) / D)$	$GE = 100 * (1 - (1 + R * M) /)$

Notes:

^a The formulae for World Bank Method has been given assuming same interest rate for the whole period.

^b The first bracket corresponds to the difference between the interest rate and the discount rate; The second bracket corresponds to the repayment profile.

Variables entering in the formulae:

M= Maturity

G= Grace Period

A= Number of repayments per year

INT= Interval between the commitment date and the first repayment date minus the interval between two successive repayments = G - 1/A

DR = Repayment duration = M - INT

I = Discount rate

R1 = Interest rate during grace period

R2 = Interest rate during repayment period

R= Interest rate when R1= R2

D = Discount rate per period = () - 1

NR = Total number of repayments = A * DR

C1 =

C2 =

GE= Grant Element

Source: Collated and adapted from OECD (2013a) and World Bank (n.d.b).

Table A4: South Africa's Industrial Development Corporation projects

Country	Sector
Angola	Energy
Botswana	Tourism
Democratic Republic of the Congo	Franchising
Ethiopia	Agriculture and agro-processing
Ghana	Information and communications technology, tourism
Kenya	Energy, agriculture and agro-processing
Malawi	Franchising, agriculture and agro-processing
Mauritius	Information and communications technology
Mozambique	Agriculture and agro-processing, mining, energy and franchising
Namibia	Manufacturing, agriculture and agro-processing, mining
Senegal	Infrastructure
Sudan	Infrastructure
Swaziland	Financial services, agriculture and agro-processing, manufacturing
Tanzania	Agriculture and agro-processing
Uganda	Tourism
Zambia	Health care, transport and logistics
Zimbabwe	Financial services, mining

Source: Compiled from Grobbelaar (2014).



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