



Comparative Study on Development Cooperation Strategies: Focusing on G20 Emerging Economies

Estimating China's Foreign Aid II: 2014 Update

Naohiro Kitano

No. 131 June 2016





JICA Research Institute

Use and dissemination of this working paper is encouraged; however, the JICA Research Institute requests due acknowledgement and a copy of any publication for which this working paper has provided input. The views expressed in this paper are those of the author(s) and do not necessarily represent the official positions of either the JICA Research Institute or JICA.

JICA Research Institute 10-5 Ichigaya Honmura-cho Shinjuku-ku Tokyo 162-8433 JAPAN TEL: +81-3-3269-3374 FAX: +81-3-3269-2054

Estimating China's Foreign Aid II: 2014 Update

Naohiro Kitano^{*}

Abstract

This paper aims to present updated estimates of China's foreign aid between 2001 and 2014 as a proxy for China's Official Development Assistance (ODA) as defined by the OECD-DAC, and to compare the results with the ODA of other DAC members. An estimation process is introduced which has been modified from the one proposed in the previous work (see Kitano and Harada 2014). China's net foreign aid increased steadily from US\$ 5.2 billion in 2012 to US\$ 5.4 billion in 2013 (the previous estimates of US\$ 5.7 billion and US\$ 7.1 billion were downwardly revised) and unexpectedly dropped to US\$ 4.9 billion in 2014. Since 2013, China has maintained its ranking at number 9. China's bilateral foreign aid has been relatively less significant. As a reference, it is estimated that net disbursements of preferential export buyer's credits decreased from US\$ 4.9 billion in 2012 to US\$ 4.7 billion in 2013 (the previous estimate amounting to US\$ 7.0 billion was downwardly revised), and increased again to US\$ 6.1 billion in 2014. China's foreign aid is expected to increase and catch up with the top five DAC members in the foreseeable future.

Keywords: China, foreign aid, development finance, ODA, concessional loans, OECD-DAC

^{*} Director, JICA Research Institute, Japan International Cooperation Agency (JICA) (Kitano.Naohiro@jica.go.jp)

This paper is part of the JICA Research Institute's research project, "Comparative Study on Development Cooperation Strategies: Focusing on G20 Emerging Economies." I would particularly like to thank Yukinori Harada, my former colleague, for his significant contribution as co-author of the JICA-RI Working Paper No.78, upon which this paper was based. I would like to thank many researchers and practitioners for providing valuable suggestions and information. Those include Deborah Bräutigam, Christophe Bahuet, David Shambaugh, Richard Bush III, Nathaniel Ahrens, Erica Downs, Yukon Huang, Adrian Ng'asi, Yan Wang, Thomas Fues, Wonhyuk Lim, Roger Nord, Wenjie Chen, and Richard Manning. I express appreciation to Yasutami Shimomura, Jin Sato, Keiichi Tsunekawa, Akihiko Tanaka, Akio Hosono, and Hiroaki Shiga for their comments and advice. I also thank Sachiko Mitsumori, Yasuhiko Sato, and Aiko Oki for the support they gave me while I was completing this paper. I acknowledge that I am solely responsible for the interpretation of sources and for any errors in this paper. The views expressed in this paper do not necessarily reflect those of JICA.

1. Introduction

This paper aims to present updated estimates of China's foreign aid volumes between 2001 and 2014 as a proxy for China's Official Development Assistance (ODA) defined by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD), and to compare the results with the ODA of other DAC members. I draw on budget data from the websites of 50 departments¹ and from other relevant organizations within China, as well as from other relevant sources of information. The estimation process I have chosen to use has been modified from the one proposed in the previous work of Kitano and Harada 2014² so that I have been able to revise and update the previous estimates for the period between 2001 and 2014.

The previous work showed that China's net foreign aid has grown rapidly since 2004, reaching US\$ 7.1 billion in 2013. The share of bilateral aid is much larger than that of multilateral aid. The results have presented a relatively realistic view of China's foreign aid; its ranking had been moderate, ranking below number 13 until 2008, before moving rapidly up to number 6 in 2012. As a point of reference, the net disbursement of preferential export buyer's credits was estimated to have been US\$ 7.0 billion in 2013.

What distinguishes this estimate from Chinese government's official figures and other estimates, is that as a practical definition of China's foreign aid it first introduces the concept of net and gross disbursements of foreign aid (net and gross foreign aid), in a way that is as comparable as possible to that for the net and gross disbursements of ODA. Secondly, the estimate includes multilateral aid within the total aid, and thirdly, disaggregated

¹ In this paper, 'departments' refers to Ministries, Commissions, Administrations, Institutions, and Offices under the State Council.

² Kitano and Harada, 2014, "Estimating China's foreign aid 2001-2013," JICA Research Institute (JICA-RI) Working Paper, No. 78, originated during the process of writing Kitano (2014). It was later published online in the Journal of International Development in March 2015 (Kitano and Harada 2015). In this paper, the terms "Kitano and Harada (2014),""the previous work," "the previous estimates," "the previous scenario," or "the previous paper," all refer to Kitano and Harada (2014).

department-level budget data sets are used to estimate grants and interest-free loans as well as multilateral aid.

The results of the previous work were presented on a number of occasions and a number of comments and suggestions were offered;³ some examples of these are as follows: An estimate of 0.072% as China's net ODA/GNI ratio⁴ in 2012 may be too high; the expected annual growth rate of China's foreign aid in the previous scenario, which is 15%,⁵ is too high and should be level with the GDP growth rate; it is important to capture the volume of development finance and include not only foreign aid but also other official flows; the previous work did not provide regional or sector analysis (Zhang, Gu, and Chen 2015).

I have incorporated some of those comments and suggestions into the present paper. For example, in the previous work the annual rate of increase in gross disbursements of concessional loans provided by the Export-Import Bank of China (China Eximbank) was simply assumed based on the average annual rate of increase of 33% from 2006 to 2011. To incorporate the abovementioned comments on net ODA/GNI ratio and the expected annual growth rate of China's foreign aid contained in the previous work, I have introduced a

³ The seminars during which feedback was offered include a seminar on "Estimating China's Foreign Aid" co-hosted in Beijing by the Institute of International Development Cooperation of Chinese Academy of International Trade and Economic Cooperation (CAITEC) and the JICA China Office on November 26, 2014 (http://jica-ri.jica.go.jp/topic/post_159.html [all of the URLs in these footnotes were accessed on April 3, 2016.]); a roundtable hosted by the Center for Strategic and International Studies (CSIS) on February 3, 2015 (http://jica-ri.jica.go.jp/topic/post_176.html); a Joint Symposium by the German Development Institute (DIE) and the JICA Research Institute JICA-RI "Evolving Perspectives on the Post-2015 Agenda: The Role of Emerging Economies and OECD Countries" on March 19, 2015 (http://jica-ri.jica.go.jp/topic/post_141.html); an internal seminar at USAID on April 9, 2015; the 2015 Conference "Researching China's Overseas Finance and Aid: What, Why, How, Where and How Much?" hosted by the China Africa Research Initiative (CARI) at Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hoskins University on April 10, 2015

⁽http://www.sais-cari.org/event-details/2015/4/10/chinese-overseas-finance-conference-2015); "China's Overseas Development Policy in a World 'Beyond Aid'" hosted by the Asia Foundation in Bangkok on June 9-10, 2015

⁽https://asiafoundation.org/resources/pdfs/ChinasOverseasDevelopmentPolicyRoundTableReport2015FI NAL.pdf); and many other seminars and briefings in Japan.

⁴ "Regarding the ranking in terms of net ODA/GNI ratio, China (0.07) is 29th in 2012," Kitano and Harada, 2014, 11: footnote 27.

⁵ "If China's net foreign aid continues to increase by 15% annually, it will exceed France's current (2013) ODA level in 2017," (Kitano and Harada 2014, 11)

modified process for estimating the gross disbursements of concessional loans in 2012, 2013, and 2014. I found that there might be weak regularity within a cumulative amount of the framework loan agreement ("the framework agreement"), the project loan agreement ("the loan agreement"), and the gross disbursement of concessional loans:⁶ the cumulative amount of the gross disbursements of concessional loans in a given year is similar to that of the loan agreement signed two years ago, which is in turn similar to that of the framework agreement from one year prior to that. This weak regularity has been used to estimate the gross disbursements of concessional loans in this paper.

As a result of introducing this modified estimation process, it was found that China's foreign aid volumes in 2012 and 2013 were significantly smaller than the previous estimates - China's ranking was number 10 in 2012 and number 9 in 2013, rather than number 6 as it was estimated in the previous work. Furthermore, the estimate made in 2014 implied that China's foreign aid had decreased from 2013. If these results are close to accurate, the current estimates carry significant weight.

The rest of this paper proceeds as follows: Section two will review recent official documents and relevant literature. Section three will reiterate the definition of China's foreign aid as a proxy for ODA. Section four will show the estimation process I employed in this paper. Section five will present the revised and updated estimates of China's net and gross disbursements of foreign aid (net and gross foreign aid) through the estimation process and compare the results of this paper with the estimates given in the previous paper, the official figure given by China, and the DAC's estimates. Section six will compare the results with the net and gross disbursements of ODA extended by DAC members. Section seven concludes the paper.

⁶ In relation to concessional loans, China Eximbank signs a project loan agreement with the borrower based on the framework loan agreement signed between the Chinese government and the government of the borrowing country, (see http://english.eximbank.gov.cn/tm/en-TCN/index_640.html [accessed on June 14, 2016]).

2. Recent official documents and relevant literature

"The 2011 White Paper" on China's foreign aid (Information Office of the State Council, 2011) was published in 2011, and was then followed by "the 2014 White Paper" (Information Office of the State Council, 2014) released in 2014. The 2014 White Paper stated that the aggregate amount of China's foreign aid from 2010 to 2012 was RMB 89.34 billion (US\$ 13.7 billion).⁷ Even though the 2014 White Paper provided more information than the 2011 White Paper,⁸ there is still room for improvement; for example, the 2014 White Paper does not present the annual amount of China's foreign aid, the disaggregated amount by country and sector, or the consolidated amount of all forms of assistance described in the document as being covered not only by the foreign aid budget but also other budget items.⁹

In November 2014, the Ministry of Commerce (MOFCOM) released "Measures for the Administration of Foreign Aid (For Trial Implementation)."¹⁰ According to MOFCOM, this was the first comprehensive departmental regulation on the management of foreign assistance.¹¹ In this document, the term "foreign aid" refers to those activities which provide economic, technical, material, human resources, and administrative support to recipient

⁷ Here the three year average for exchange rates of US\$/RMB 6.5147 is used. This consists of a grant of RMB 32.32 billion (US\$ 5.0 billion), interest-free loans RMB 7.26 billion (US\$ 1.1 billion), and concessional loans RMB 49.76 billion (US\$ 7.6 billion). With regard to regional distribution, Africa (51.8%) and Asia (30.5%) remain the two largest recipient regions.

⁸ The 2014 White Paper not only succeeded the 2011 White Paper's framework but also included a description of the activities of other departments and non-governmental organizations, regional cooperation frameworks such as the Forum on China-Africa Cooperation (FOCAC), and support through the development assistance programs of multilateral organizations, such as the United Nations Development Programme (UNDP).

⁹ For example, as described in the 2014 White Paper, from 2010 to 2012, China contributed RMB 1.76 billion (US\$ 0.3 billion) to development assistance programs initiated by various UN agencies. However, these contributions are categorized as budget items for international organizations, not as budget items for foreign aid. For more details, see Section 4.

¹⁰ As to UNDP China's unofficial translation not being proofread by MOFCOM, see http://www.cn.undp.org/content/china/en/home/library/south-south-cooperation/measures-for-the-admini stration-of-foreign-aid-.html (accessed March 21, 2016).

¹¹ See MOFCOM's media briefing on this regulation,

http://english.mofcom.gov.cn/article/newsrelease/press/201412/20141200851923.shtml (accessed May 8, 2016.)

countries, supported by the Chinese government's "financial resources for foreign aid."¹² The forms of foreign aid outlined in this document are similar to those in the 2011 and 2014 White Papers; namely, grants, interest-free loans, and concessional loans. The regulations stipulate that MOFCOM is, in conjunction with the relevant departments under the State Council, responsible for formulating mid- to long-term foreign aid policy and country aid strategies, which shall be implemented upon approval. MOFCOM is responsible for collecting, collating, and preparing statistical material on foreign aid. The release of this document is a significant step towards enhancing China's institutionalization of aid mechanisms. However, due to the definition of "foreign aid" mentioned above, MOFCOM was unable to consolidate other relevant forms of assistance covered by other budget items, such as "international organizations." In the next section, the definition of foreign aid proposed in this paper will be compared with MOFCOM's official definition.

The DAC (OECD 2015) estimated China's gross concessional flows for development cooperation including bilateral cooperation and developmental funds channeled through multilateral organizations. The former was estimated based on the budget data (the final accounts of central-level public budget expenditure for foreign aid) from China's Ministry of Finance, while the latter was estimated based on information from those multilateral organizations. My estimates have several differences with the DAC's estimates: firstly, the net disbursements of concessional loans have been included; secondly, as was the case for multilateral foreign aid, budget data from the Chinese government rather than information from multilateral organizations was used so that bilateral and multilateral foreign aid data could be compiled in a coherent manner.

A number of relevant articles concerning China's foreign aid have recently been published. Some of the articles have tried to capture not only foreign aid but also other types of

¹² These financial resources are categorized as budget items for foreign aid.

development finance. Using the previous work as one of her information sources, Snell (2015) tried to estimate China's inbound and outbound development finance, where foreign aid was part of the total volume, and to evaluate the objectives and impact of these flows. Hwang, Bräutigam, and Eom (2016) have constructed a commitment-based database of Chinese loans in Africa between 2000 and 2014, granted mainly by China Eximbank, China Development Bank (CDB), and Chinese contractors. The database shows that loan amounts increased steadily over that period. The authors also found that China Eximbank's annual commitment amounts were smaller than those of the World Bank loans and they predicted that, in the near future, the former will exceed the latter.

Pigato and Tang (2015) reviewed the latest information available on trade and foreign direct investment (FDI) flows between China and Sub-Saharan Africa (SSA), as well as Chinese loans to SSA. Bräutigam and Gallagher (2014) attempted to capture the volume of "commodity-backed" or "resource-secured" loans in Africa and Latin America. With regard to the concessionality of China's foreign aid, Harada presented his findings that the lending terms of China's development finance are not as concessional as that of the DAC members.¹³

Several pieces of literature have focused on sectoral analyses in specific regions (Bräutigam 2015; Gransow 2015). Researchers, such as Lin and Wang (2015), have discussed China's development finance within the context of the future direction of its development cooperation, while Fues and Ye (2014) focused on the Post-2015 Agenda for Global Development from the perspective of China and Europe and discussed the issues relating to development finance.

In Kitano and Harada (2014), the authors pointed out that several recipient countries categorize concessional loans and preferential export buyer's credits as ODA loans. From the

¹³ See panel 3B: Comparisons of the 2015 Conference: "Researching China's Overseas Finance and Aid: What, Why, How, Where and How Much?" hosted by the China Africa Research Initiative (CARI) at Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hoskins University on April 10, 2015. http://www.sais-cari.org/event-details/2015/4/10/chinese-overseas-finance-conference-2015 (accessed April 3, 2016).

perspective of the recipient countries, Kitano (2015) introduced three case studies, namely Cambodia, Tajikistan, and Sri Lanka. Using Chinese development cooperation data reported by eleven countries during the 2013 Global Partnership for Effective Development Cooperation monitoring process, UNDP China (2015) studied the ways in which China's development cooperation data was managed within the respective countries.

3. Definition of China's foreign aid

Following Kitano and Harada (2014), in this paper China's foreign aid is defined as the net and gross disbursements of foreign aid (net and gross foreign aid) consisting of: (1) grants and interest-free loans¹⁴ managed by the Ministry of Commerce (MOFCOM); (2) grants managed by other departments responsible for foreign aid; (3) scholarships provided by the Ministry of Education to students from other developing countries; (4) the estimated amount of interest subsidies on concessional loans which is deducted from the total amount of aid; (5) the net and gross disbursements of concessional loans as bilateral foreign aid; and (6) multilateral foreign aid, which is defined as the cumulative amount of expenditure by departments and other relevant

¹⁴ According to the 2011 and 2014 White Papers, interest-free loans which had a tenure of 20 years, including five years of use, a five year grace period, and a ten year repayment period, were canceled totaling approximately RMB 27 billion (US\$ 4.3 billion, using the annual average exchange rate in 2012: 6.3123 RMB/US\$) incurred by mature interest-free loans, which is about one-third of what China had committed. This implies that only part of the mature interest-free loans has been repaid by borrowing countries and that China most likely continues to cancel debts. While interest-free loans currently continue to be provided to other developing countries with relatively good economic conditions, the total volume is said to be relatively small. In a similar manner to grants, the disbursements of interest-free loans are 100% financed by central government expenditure. For the reasons mentioned above, and for the convenience of estimation, interest-free loans were treated as though they were grants. Thus, the amount of the abovementioned debt relief for interest-free loans was not included in the total amount of aid. So far there has not been any evidence that China Eximbank canceled debts incurred by mature concessional loans. There is only one exception - that the Chinese government announced in 2009 to convert China Eximbank's concessional loans to Afghanistan amounting USD 75 million into a grant (see http://tr.china-embassy.org/chn/xwdt/t655748.htm [in Chinese]. Accessed May 21, 2016). In 2002, China made a commitment to provide foreign assistance to Afghanistan amounting to US\$ 150 million for the next 5 years, half of which was grant and the rest of which was concessional loans (see http://af.mofcom.gov.cn/article/zxhz/201501/20150100879514.shtml [in Chinese]. Accessed May 21, 2016). However, this was not considered in the present estimations as the amount is limited.

organizations with a budget for international organizations, adjusted by the DAC-defined coefficients for core contributions.

What distinguishes these estimates from MOFCOM's official definition of foreign aid is that the MOFCOM definition does not cover points (3), (4), (6) or part of (2) above. Further, MOFCOM's official figures are aggregated amounts and in the case of grant and interest-free loans, they are most likely commitment-based. Additionally, in the case of concessional loans, they are most likely to be framework agreement-based rather than disbursement-based.¹⁵

4. Process used for estimating China's foreign aid

This section will outline the process I used to estimate China's net and gross foreign aid from 2001 to 2014, which was based on the definition presented in the previous section. Comprehensive spreadsheets were compiled in order to make the most of statistics and information from a large number of sources in a systematic way. Table 1 presents a detailed summary of the estimation process. The figures in bold were extracted from publicly accessible statistics and information, those in italics were obtained from graphs, those highlighted in gray were critical figures estimated by the setting of assumptions, and the remaining figures (neither in bold, italics, nor highlighted in gray) were calculated from other columns. Figures from 2001 to 2011 and those from 2012 to 2014 were estimated using a different process. As mentioned in section one, at various seminars comments were offered

¹⁵ As discussed in the previous work, Citing Chen (2010), Hu and Huang (2012) explained that by the end of 2009, the Chinese government had signed framework agreements for concessional loans totaling RMB 77 billion, and China Eximbank had signed concessional loans totaling RMB 59.4 billion, to support 325 projects in 76 countries. Since the cumulative amount of RMB 73.55 billion for concessional loans in 2009 mentioned in the 2011 White Paper is close to the abovementioned cumulative total of the signed framework agreements, I assume that the figure for concessional loans in the 2011 White Paper is also assumed to be framework agreement-based. As is also the case for grants and interest-free loans, the figures in the 2011 and 2014 White Papers are assumed to be commitment-based rather than disbursement-based. As I will discuss in Section four, disbursement-based figures for grant and interest-free loans come from the final accounts on public budget expenditure from relevant departments and other organizations, while those for concessional loans come from various sources.

on the net ODA/GNI ratio and the expected annual growth rate of China's foreign aid as discussed in the previous work; these comments have been incorporated into the current estimation process. It was found that there might be weak regularity in terms of time lag among cumulative amounts of the framework agreement, loan agreement, and gross disbursement of concessional loans: the cumulative amount of gross disbursements of concessional loans in a given year is similar to that of the loan agreements signed two years ago, which is similar to that of the framework agreement from one year prior to that. This weak regularity was then used to estimate the gross disbursements of concessional loans in 2012, 2013, and 2014, as follows:

Column (1), "Final account of central level public budget expenditure for foreign aid," was obtained from the Finance Yearbook of China for 2002 and 2003, and the website of the Ministry of Finance.¹⁶ Column (2), "Sum of final account of central level public budget expenditure for foreign aid and gross disbursement of concessional loans" was obtained from a bar graph.¹⁷ Column (3), "Outstanding amount of two preferential facilities"¹⁸ by China Eximbank was inferred from a line graph without scale.¹⁹ The figures for 2009 and 2012 in Column (4), "Cumulative amount of framework agreement for concessional loans" are given from the 2011 and 2014 White Papers. Then, I first estimated the figure for 2010 in Column (5), "Framework agreement for concessional loans," assuming the figure for 2010 in Column (18), "Grants and interest-free loans by Ministry of Commerce" as the commitment-based amount of grants and interest-free loans in 2010, and multiplying it by the ratio of the cumulative amount

¹⁶ See http://yss.mof.gov.cn/zhengwuxinxi/caizhengshuju/ [in Chinese] (accessed February 21, 2016).

¹⁷ This bar graph was uploaded as part of a presentation on the website of UN ESCAP Sub-regional Office for East and North-East Asia (SRO-ENEA). See

http://www.unescap.org/sites/default/files/Session1_Li_China.pdf (accessed March 2 2016). ¹⁸ China Eximbank's two preferential facilities consist of concessional loans and preferential export

buyer's credits.

¹⁹ This line graph was included in a presentation uploaded on the website of China International Contractors Association. See

http://www.chinca.org/cms/html/2013im/col515/2013-12/03/20131203151208795226928_1.html [in Chinese] (accessed March 2, 2016).

of the framework agreement for concessional loans (RMB 49.76 billion) divided by the cumulative amount of grants and interest-free loans by the Ministry of Commerce (RMB 39.58 billion) from 2010 to 2012, as stated in the 2014 White Paper.²⁰ I then estimated figures for 2009, 2011, 2012, and 2013 using the inferred rate of increase between 2009 and 2013, which was 11%.²¹ Regarding the figure for 2014, in order to incorporate one of the comments mentioned in section one that the expected annual growth rate of China's foreign aid in the previous scenario, which was 15%, was too high and should be at the level of the GDP growth rate, the annual rate of increase in 2014 was assumed to be 7%, which was the same range of China's GDP growth (7.3% in 2014).²² The figure for 2009 contained in Column (6), "Cumulative amount of concessional loans signed" was given as RMB 59.4 billion, based on Hu and Huang (2012). I then inferred the figure for 2009 in Column (7), "Concessional loans signed," through multiplying the figure for 2009 in Column (6) by the ratio of the figure for 2009 in Column (5) divided by the figure for 2009 in Column (4). The figures from 2010 to 2014 in Column (7) were inferred by assuming the rates of increase to be set by 30%, 6%, 10%, 10% and 10% for 2010, 2011, 2012, 2013, and 2014 respectively, based on the weak regularity mentioned above.

Figures from 2002 to 2011 in Column (8), "Gross disbursement of concessional loans" were calculated by subtracting Column (1) from Column (2). Figures for 2001 came from the China Eximbank 2001 Annual Report in which annual gross disbursements from concessional loans from 1996 to 2001 were recorded. Figures from 2012 to 2014 were inferred by assuming the rate of increase in Column (7) as 7%, 7%, and 5% for 2012, 2013, and 2014 respectively,

 $^{^{20}}$ As discussed previously, this figure in the 2014 White Paper is most likely commitment-based rather than disbursement-based.

²¹ I estimated this rate at which the cumulative amount of the framework agreement for concessional loans from 2010 to 2012 in Column (5) nearly equal to the corresponding figure (RMB 49.76 billion) in the 2014 White Paper.

²² IMF (2016) World Economic Outlook Update

https://www.imf.org/external/pubs/ft/weo/2016/update/01/pdf/0116.pdf (accessed March 11 2016).

based on the weak regularity mentioned above.²³ Column (10), "Repayment of concessional loans" was estimated using data in Column (8) by assuming that a condition of the loan was a 15 year repayment period with a 5 year grace period. Column (11), "Net disbursement of concessional loans" was obtained by subtracting Column (10) from Column (8). Column (12), "Outstanding amount of concessional loans" was calculated by adding this year's figure in Column (11) to the previous year's figure in Column (12). Column (13), "Subsidies for concessional loans," were estimated by assuming that one third of the interest rate difference between the lending rate of concessional loans and the RMB benchmark loan interest rate has been subsidized by the government.²⁴ Figures from 2001 to 2011 in Column (14), "Outstanding amount of preferential export buyer's credits" were calculated by subtracting Column (12) from Column (3). Those from 2012 to 2014 were derived by subtracting the outstanding amount of export buyer's credits in each annual report of the China Eximbank from the sum of the outstanding amount of export buyer's credits and preferential export buyer's credits. Figures in Column (15), "Net disbursement of preferential export buyer's credits" were calculated by subtracting the previous year's figure from the current year's figure in Column (14). Column (16), "Repayment of preferential export buyer's credits" was estimated using data in Column (14), and assuming the loan conditions of a 15 year repayment

²³ In Kitano and Harada (2014), the average annual rate of increase of gross disbursement of concessional loans from 2006 to 2011 (33%) was used to estimate the figures in 2012 and 2013.

²⁴ According to the 2014 White Paper, the difference between the lending rate of concessional loans and the RMB benchmark loan interest rate (for loans with more than 5 years of repayment period). promulgated by the People's Bank of China is to be subsidized by the government. Since this subsidy is an internal transfer, it must be deducted from total amount of foreign aid (Kobayashi and Shimomura 2013). "Audit results of budget implementation and other government revenue and expenditure of the Ministry of Commerce for the year 2012" issued by the National Audit Office disclosed aid data for Foreign concessional loans assistance and the interest subsidy which was RMB 0.99 billion while my estimate of the interest subsidy in 2012 was RMB 2.92 billion.

⁽Available from http://www.audit.gov.cn/n1992130/n1992150/n1992500/n3296930.files/n3297153.pdf under http://www.audit.gov.cn/n1992130/n1992150/n1992500/3296930.html [in Chinese] [accessed March 5 2016]). Thus it is assumed that one third of the interest rate difference has been subsidized by the government. As for preferential export buyer's credits, it is assumed that the interest rate difference has been entirely cross-subsidized.

period with a 5 year grace period. Column (17), "Gross disbursement of preferential export buyer's credits" ²⁵ was calculated by adding Column (15) and Column (16) together.

There are 11 departments and other relevant organizations²⁶ that have the budget sub-item, "Foreign aid (20203)," while 50 have the budget sub-item, "International organizations (20204)" under the budget item, "Foreign affairs (202)" for at least one year between 2010 to 2014.²⁷ The figures in Column (18), "Grants and interest-free loans by the Ministry of Commerce" between 2010 and 2014 were obtained from the final departmental accounts on public budget expenditure from the Ministry of Commerce (MOFCOM). Figures between 2001 and 2009 were derived through the assumption that 90% of the final account of the central level public budget expenditure for foreign aid Column (1) was appropriated to and implemented by MOFCOM (Grimm et al. 2011). Figures from 2010 to 2014 Column (19), "Grants by other departments," consist of the National Health and Family Planning Commission (the former Ministry of Health), which has jurisdiction over the Chinese medical teams working abroad, and several other departments.²⁸ Figures from 2010 to 2014 were obtained from the

²⁶ Those departments and other relevant organizations are categorized as Ministries and Commissions, Special Organization, and Organizations directly under the State Council, Administrative Offices under the State Council, Institutions directly under the State Council, State Bureaus administered by Ministries or Commissions, Advisory and Coordinating Organs under the State Council, Departments of the Communist Party of China (CPC) Central Committee, Institutions directly under the CPC Central Committee, Subsidiaries of institutions directly under the CPC Central Committee, and Mass Organization Agencies under the administration of the authorized State Council departments. (For example, see http://www.china.org.cn/china/leadership/node_7178530.htm#a1, http://www.scopsr.gov.cn/zybw/ [in Chinese],

²⁵ As for the positioning of Column (8), "Gross disbursement of concessional loans," Column (17), "Gross disbursement of preferential export buyer's credits," Column (12), "Outstanding amount of concessional loans," Column (14), "Outstanding amount of preferential export buyer's credits," and Column (3) "Outstanding amount of two preferential facilities" in China Eximbank's account, share percentages of the gross disbursement of concessional loans and preferential export buyer's credits in 2014, were a relatively small 2% and 4% respectively; even the percentages of outstanding amount were 5% and 9% respectively. (See Annex Table 1.)

http://www.lawinfochina.com/display.aspx?lib=law&id=5613&CGid=, etc. [accessed March 19, 2016]). Some of these sources do not disclose budget documents.

²⁷ As for budget items, for example, see www.minhe.gov.cn/images/2015033115150590.xls [in Chinese] (accessed March 19, 2016).

²⁸ Other relevant departments include the Ministry of Science and Technology, the National Development and Reform Commission (NDRC), the Ministry of Education (MOE), and the Ministry of Agriculture (MOA), the Ministry of Civil Affairs (MOCA), the State Oceanic Administration (SOA), and the State Administration of Cultural Heritage (SACH). Foreign aid budgets were also appropriated

foreign aid expenditure in the final accounts of the relevant departments. It was assumed that from 2001 to 2009, grants for other departments were 3% of the final account of central level public budget expenditure for foreign aid (See Annex Table 2).

Column (20), "Scholarships for foreign students from other developing countries by the Ministry of Education," was estimated based on the assumption that two-thirds of foreign students receiving Chinese government scholarships are from other developing countries. Thus, in the final accounts of the Ministry of Education from 2008 to 2014, two-thirds of the total expenditure for scholarships for foreign students studying in China (budget second sub-item (2050602)) was identified as foreign aid. The ratio of scholarships for foreign students from other developing countries divided by the final account of central-level public budget expenditure for foreign aid (Column (1)), which was 2% in 2008, was used to estimate the figures from 2001 to 2007.

In relation to China's multilateral foreign aid, the DAC defines multilateral ODA as contributions to multilateral agencies active in the development on the DAC List of ODA-eligible International Organizations.²⁹ If an agency's core-funded activities are only in part development-related, the coefficients for core contributions are determined to assess the share which corresponds to their development activities. The DAC (OECD 2015) estimated China's development-oriented contributions to and through multilateral organizations as a three year average between 2011 and 2013 mainly based on the websites of multilateral organizations. Referring to the DAC's estimates, I attempted to estimate China's multilateral foreign aid based on China's budget information.

to the All-China Women's Federation (ACWF) and the Red Cross Society of China (RCSC) (only in 2013) occasionally. These departments have released their budgets and final accounts including foreign aid expenditure on their websites.

²⁹ See OECD (2013) and http://www.oecd.org/dac/stats/annex2.htm for the latest list (accessed March 16, 2016).

Column (21), "Final account of central government public budget expenditure for international organizations"³⁰ was obtained from the website of the Ministry of Finance and covers figures from 2007 to 2014. I assumed that from 2001 to 2007, budget expenditure for international organizations had increased annually by 10%, which is an actual average rate of increase between 2008 and 2013, reached through back calculation from 2007. Column (22), "Sum of final account of department public budget expenditure for international organizations" shows the sum of the final account of public budget expenditure from 2010 to 2014 for 50 departments and other relevant organizations described above. It is assumed that the figures from 2001 to 2009 are equal to those in Column (16). Based on Table 49.3 in OECD (2015), I have selected 20 listed multilateral organizations³¹ and verified China's annual contributions from 2010 to 2014 based on publicly available documents such as the annual reports for each organization. I have attempted to identify 12 out of the 50 departments within the Chinese government which are responsible for the abovementioned multilateral organizations.³² Except

³⁰ Budget sub-item, "International organizations (20204)" includes a second budget sub-item, "Membership dues to international organizations (2020401)," "Donations to international organizations (2020402)," "Peace-keeping operations (2020403)," "Capital increase and contribution to funds in international organizations (2020404)," and "Other expenditure to international organizations (2020405)."

³¹ The 20 listed multilateral organizations include United Nations regular budget and United Nations Department of Peacekeeping Operations (UNDPKO), the World Bank Group, the International Fund for Agricultural Development (IFAD), Asian Development Bank (ADB), the Global Environment Fund (GEF), The Inter-American Development Bank (IDB), the African Development Bank (AfDB), the United Nations Children's Fund (UNICEF), the United Nations Development Program (UNDP), the United Nations Industrial Development Organization (UNIDO), the United Nations Conference on Trade and Development (UNCTAD), the Food and Agriculture Organization (FAO), the World Food Program, the World Health Organization (WHO), the Global Fund to Fight AIDS, Tuberculosis and Malaria, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Labour Organization (ILO), the United Nations Environment Program (UNEP), the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD), the International Atomic Energy Agency (IAEA), and the United Nations Office on Drugs and Crime (UNODC).

³² The 12 departments include the Ministry of Foreign Affairs (MOFA), the Ministry of Finance (MOF), the People's Bank of China (PBC), the Ministry of Commerce (MOFCOM), the Ministry of Agriculture (MOA), the National Health and Family Planning Commission (NHFPC), the Ministry of Human Resources and Social Security (MOHRSS), the Ministry of Education (MOE), the Ministry of Environmental Protection (MEP), the State Forestry Administration (SFA), Industry and Information Technology (MIIT), and the Ministry of Public Security (MPS).

for the Ministry of Public Security (MPS), these departments are among the top 12 departments in terms of budget expenditure amounts for 2014.

Next, using the publicly available documents from multilateral organizations, I compared the sum of the annual contributions derived for each respective department with each department's final accounts of public budget expenditure for international organizations. In some cases, the former was larger than the latter; this is possibly attributable to a lack of budget figures for particular years. There were also cases where the former was smaller than the latter because a department's accounts may have included budget expenditure for other international organizations which I have not been able to identify. Thus, I have checked each year's budget expenditure figures for each department and adjusted them where necessary. Finally, I calculated the core contributions for each department using the coefficients in the DAC List of ODA-eligible International Organizations. As for the other 38 departments, I assume a coefficient for core contributions of 30%.³³ The estimates from 2010 to 2014 are shown in Column (23), "Sum of final account of department public budget expenditure for international organizations: Adjusted" (For details, see Annex Table 3). The figures from 2001 to 2009 were estimated by using the figures in Column (22) and assuming a coefficient for core contributions of 30%.

Based on the estimation process described above, Column (A), "Bilateral: Grants and interest-free loans," was derived by adding Columns (18), (19), and (20), and deducting Column (13). Column (B), "Bilateral: Net disbursement of concessional loans," is equal to Column (11). Column (C), which is the sum of Columns (A) and (B), shows the bilateral net foreign aid, while Column (D), "Multilateral: Government expenditure for international organizations" presents the estimated amount of multilateral foreign aid which is equal to Column (23). Column (E),

³³ Among the 38 departments and other organizations, the coefficient of the Civil Aviation Administration of China (CAAC) is assumed to be 0% since CAAC is responsible for the International Civil Aviation Organization (ICAO) which is not listed in the DAC List of ODA-eligible International Organizations.

"Total net foreign aid" equals the sum of Columns (C) and (D). Column (F), "Bilateral: Gross disbursement of concessional loans" is equal to Column (9). Column (G), "Total gross foreign aid," which is the sum of Columns (A) and (F), shows the gross bilateral foreign aid and Column (H), "Total: Gross foreign aid" equals the sum of Columns (G) and (D).

Finally, the net and gross disbursements of preferential export buyer's credits are listed in Column (I) which is equal to Column (15) and in Column (J) which is equal to Column (17).

5. Results of the estimation

Figures 1 and 2, which are derived from Table 1, depict China's estimated net and gross foreign aid in US\$ terms. Table 2 shows the comparison of these estimates with the previous estimates, MOFCOM's official figure, and the DAC's estimates. Net foreign aid is estimated to have been US\$ 5.2 billion in 2012, US\$ 5.4 billion in 2013, and US\$ 4.9 billion in 2014. Compared with the previous estimates of Kitano and Harada (2014), figures were either upwardly or downwardly revised from 2001 to 2013. In particular, the previous estimate of the net foreign aid in 2012 and 2013 amounting to US\$ 5.7 billion and US\$ 7.1 billion was downwardly revised to US\$ 5.2 billion and US\$ 5.7 billion respectively due to the fact that net disbursements of concessional loans were significantly downwardly revised from US\$ 2.6 billion to US\$ 2.0 billion in 2012 and from US\$ 3.5 billion to US\$ 2.1 billion in 2013 respectively as a result of the introduction of the modified estimation process.

These results show several findings; first, it is rather surprising that net foreign aid has increased steadily since 2001; however, it decreased in 2014 when compared with 2013. Looking at the figures in detail, the grants and interest-free loans in bilateral foreign aid were downwardly estimated for two consecutive years from 2012 to 2014. The "Audit results of budget implementation and other government revenues and expenditures of the Ministry of Commerce for the year 2014" issued by the National Audit Office (NAO) pointed out the reasons why MOFCOM's final account on public budget expenditure for foreign aid consisting

of grants and interest-free loans was smaller than the original public expenditure budget in 2014 were:³⁴ that verification of feasibility studies of part of the projects at the project approval stage were not sufficient, there were time differences between some of projects' planned and actual disbursement schedules, and in some cases project budgets were released late.³⁵ The NAO audit report did not provide any further evidence on this issue. However, there is some secondary evidence. For example, at the media briefing on "Measures for the Administration of Foreign Aid (For Trial Implementation)" organized by MOFCOM, MOFCOM officials emphasized the same point: the importance of management of the approval stages of the project.³⁶ This suggests that some projects might perform unsatisfactorily because of a lack of sufficient verification of the feasibility of studies in the approval stages, which may have partly caused a downward trend in grants and interest-free loans.

Second, the rate of increase in the gross disbursements of concessional loans dropped from 75% in 2009 to 13% in 2011: it then continued to decrease to 5% in 2014. This can be attributed to the change in the estimation process.³⁷

Third, as for multilateral foreign aid, final accounts on public budget expenditure for international organizations by the Ministry of Finance increased in 2013 and decreased significantly in 2014 (see Annex Table 3). This was due to the fact that China had already completed the capital increase for the World Bank's 2010 shareholding realignment: Selective Capital Increase (SCI) for the International Bank for Reconstruction and Development (IBRD)

³⁴ This brought about a decrease in grants and interest-free loans in 2014.

 ³⁵ See http://www.audit.gov.cn/n5/n25/c67488/part/31322.pdf [in Chinese] (accessed March 19, 2016).
 ³⁶ See MOFCOM's media briefing on this regulation at

http://english.mofcom.gov.cn/article/newsrelease/press/201412/20141200851923.shtml (accessed May 8, 2016).

³⁷ In the previous estimates, it was assumed that the annual rate of increase in gross disbursement of concessional loans was set at 33% for 2012 and 2013; this assumption was based on the fact that the average annual rate of increase from 2006 to 2011 was 33%.

– a reform of voting power.³⁸

In 2014, the share of bilateral foreign aid is much larger, at 93%, than that of previous year due to a 6 percentage point decrease in multilateral foreign aid. The proportion of concessional loans to total foreign aid is 43%. The difference between net foreign aid (Figure 1) and gross foreign aid (Figure 2) is still minimal, since the repayment of concessional loans was a relatively low 3% of outstanding loan amounts in 2014.

As a reference point, the net disbursements of preferential export buyer's credits, which some recipient countries treat as ODA, are estimated to have totaled US\$ 4.9 billion in 2012, US\$ 4.7 billion in 2013, and US\$ 6.1 billion in 2014. The revised figure in 2013 was substantially smaller than the previous estimate which was US\$ 7.0 billion and was a decrease from the previous year.³⁹ The figure in 2014 exceeded the amount of total net foreign aid. If this figure is combined as net concessional flows, the totals are estimated to have reached US\$ 11.0 billion in 2014.

The results above were then compared with MOFCOM's aggregated official figure for foreign aid from 2010 to 2012 in the 2014 White Paper (Information Office of the State Council (2014)) and the DAC's estimates⁴⁰ (Table 2). Despite the fact that the definitions differ between my estimates and MOFCOM's official figures as described in Section two, Column (G), "Bilateral gross foreign aid," consisting of grants, interest-free loans, and gross disbursements of concessional loans, could be compared with MOFCOM's figures consisting of commitment-based grants, interest-free loans, and the framework agreement-based

³⁸ See http://www.mof.gov.cn/zhengwuxinxi/caizhengshuju/201507/t20150716_1330771.html and http://siteresources.worldbank.org/DEVCOMMINT/Documentation/22553921/DC2010-006(E)Voice.pd f (accessed March 19, 2016).

³⁹ In Kitano and Harada (2014), the "Sum of outstanding amount of concessional loans and preferential export buyer's credits" by China Eximbank from 2012 to 2013 was estimated based on an average annual rate of increase of 39% from 2006 to 2011.

⁴⁰ See "Table 33a Estimates of gross concessional flows for development co-operation ("ODA-like" flows) from OECD Key Partners" in

http://www.oecd.org/dac/stats/statisticsonresourceflowstodevelopingcountries.htm (Accessed June 24, 2016).

concessional loans: both are similar in magnitude in terms of aggregated figures from 2010 to 2012,⁴¹ accounting for US\$ 13.2 billion and US\$ 13.7 billion respectively. Next, my estimates and the DAC's estimates are compared. The major difference between the two is that the DAC's estimates do not include net or gross disbursements of concessional loans shown in Column (A), "Bilateral: Net disbursement of concessional loans" or Column (F), "Bilateral: Gross disbursement of concessional loans." Thus, the figures in the column, "DAC: Total" are smaller than the figures in Column (E), "Total: Net foreign aid" or Column (H), "Total: Gross foreign aid."

6. Comparison with selected DAC members

This section will compare the previously stated estimates of China's foreign aid with the ODA to DAC members. Table 3 shows the ranking in terms of net ODA and net foreign aid. In the previous estimates, China was ranked at either number 16 or number 17 until 2006, then moved up to number 14 in 2007 and to number 11 in 2011. China then sat at number 6 in both 2012 and 2013. However, the results of this paper suggest that China actually moved up to number 10 in 2012 and to number 9 in 2013. In 2014, China kept its ranking at number 9 just behind Norway, Sweden, and the Netherlands. China's net ODA/GNI ratio in 2012 was estimated as 0.066% which is smaller than the previous estimate of 0.072%. The ratio then dropped to 0.060% in 2013 and 0.049% in 2014. With regards to the ranking, China was ranked at 29 in 2014.⁴²

Figure 3 compares the trend of China's net foreign aid to trends in net ODA provided by a selected group of DAC members: France, Germany, Japan, the Netherlands, Norway, South Korea, Sweden, the UK, and the US. China's level of net foreign aid was similar to that of South Korea, the second Asian member of the DAC, until 2005 when it increased sharply as China

⁴¹ To-date, MOFCOM has not disclosed the foreign aid volumes for 2013 and 2014.

⁴² See "Development aid in 2015 continues to grow despite costs for in-donor refugees" on the OECD website, https://www.oecd.org/dac/stats/ODA-2015-detailed-summary.pdf (accessed May 25, 2016).

began to catch up with high-ranking countries.

In terms of gross ODA shown in Figure 4, China's gross foreign aid is almost equal to its net foreign aid which was estimated to have decreased between 2013 and 2014, as shown in Figure 3. Until 2013, Japan was second to the US but in 2014, it went down to 4th position. Figures 5 and 6 further disaggregate these comparisons. Figure 5 compares China's bilateral net foreign aid with the ODA of selected DAC members, while Figure 6 compares multilateral net foreign aid with ODA. In 2014, China's bilateral net foreign aid was closer to the net ODA of Japan and France, while its multilateral foreign aid was much smaller in comparison to the top five DAC members, and was smaller than the level for South Korea in 2014.

7. Conclusion

This paper attempted to revise and update the estimates of China's foreign aid from 2001 to 2014, and to compare the results with the ODA of DAC members based on the previous work. The results have presented an unexpected view of China's foreign aid. Net foreign aid is estimated to have decreased from US\$ 5.4 billion in 2013 to US\$ 4.9 billion in 2014. My estimates of 2012 and 2013 were significantly smaller than the previous estimates which were US\$ 5.7 billion and US\$ 7.1 billion respectively. However, those figures need to be used with considerable caution which may overestimate or underestimate the actual figures depending on the rate of increase in gross disbursement of concessional loans.

Since 2013, China has been ranked at number 9, while in terms of net bilateral aid, its ranking has been number 6, next to Japan and France, since 2012. Importantly, the net disbursements of preferential export buyer's credits are estimated to have totaled US\$ 4.7 billion in 2013 and US\$ 6.1 billion in 2014. My estimate for 2013 was also significantly smaller than the previous estimates which was US\$ 7.1 billion and was a decrease from the previous year.

With the announcement of a number of new initiatives and commitments,⁴³ the Chinese government has recently engaged more proactively in international development. As outlined in the 13th Five-Year Plan (2016-2020),⁴⁴ the total amount of China's aid is expected to increase significantly and catch up with some of the top five DAC members in the foreseeable future. It is therefore important for the international community to carefully examine the magnitude of China's foreign aid.

Lastly, I would like to outline a number of future research topics relating my work. The first possible area of research is the disaggregation of China's foreign aid by regions/countries and sectors. The second area of research is to examine whether the paid in capital to the AIIB, the disbursed amount from the AGTF,⁴⁵ and other new commitments from the Chinese Government, part of which are listed in footnote 43 could be counted as foreign aid, and if so to estimate them annually. The third research topic is to estimate foreign aid based on the DAC's revised system for measuring development finance. At the DAC high level

⁴³ For example, in March 2013, IDB and the People's Bank of China (PBC) approved the establishment of the China Co-financing Fund for Latin America and the Caribbean (CCF), a facility with US\$2 billion to support public and private sector projects in the region. In October 2013, China proposed the establishment of the Asian Infrastructure Investment Bank (AIIB). Almost at the same time, a concept of 21st Century Maritime Silk Road (later evolved into the Belt and Road Initiative or One Belt One Road) to promote maritime cooperation was offered. In April 2014, the AfDB approved the establishment of the Africa Growing Together Fund (AGTF) sponsored by PBC. The Silk Road Fund, with the first installment of US\$ 10 billion, was established in December 2014 to provide investment and financing support for trade and economic cooperation and connectivity under the framework of the Belt and Road Initiative. In July 2015, China signed cooperation agreements with the OECD and joined the OECD Development Centre. China also signed an agreement with the World Bank to establish the first trust fund amounting to US\$ 50 million to help reduce poverty. At the United Nations Sustainable Development Summit in September 2015, China announced the establishment of an assistance fund for South-South cooperation with an initial pledge of US\$ 2 billion, and an international development knowledge center. At the same time, China announced that it would set up a China South-South Climate Cooperation Fund amounting US\$ 3.1 billion to help developing countries tackle climate change. During the Johannesburg Summit of the Forum on China-Africa Cooperation (FOCAC) in December, 2016, China offered US\$ 60 billion in funding, including US\$ 5 billion worth of grant assistance and interest-free loans, and US\$ 35 billion in preferential loans and export credits on more favorable terms. At the beginning of 2016, AIIB was declared open for business. ⁴⁴ See http://ghs.ndrc.gov.cn/zttp/135ghbzgz/ [in Chinese] (accessed April 3, 2016).

⁴⁵ In April 2014, the AfDB approved the establishment of the AGTF, a US\$ 2 billion co-financing fund, sponsored by PBC. The resources from the AGTF are available for a period of ten years and can be used alongside the AfDB's own resources to finance eligible sovereign (80%) and non-sovereign (20%) guaranteed projects in Africa.

See http://www.afdb.org/fileadmin/uploads/afdb/Documents/Financial-Information/Investor (accessed April 3, 2016).

meeting (DAC-HLM) held in December 2014,⁴⁶ DAC members agreed to modernize the reporting of concessional loans by introducing a grant equivalent system.⁴⁷ The Principles of ODA modernization on Private Sector Instruments and the boundaries of ODA in the field of peace and security were also agreed by DAC members at the DAC-HLM in February 2016. The final research topic aims to estimate China's development finance in accordance with the definition of Total Official Support for Sustainable Development (TOSSD), which has been under discussion in the international community.⁴⁸

⁴⁶ The DAC High Level Meeting Communiqué 16 December 2014,

http://www.oecd.org/dac/OECD%20DAC%20HLM%20Communique.pdf (accessed April 3, 2016). ⁴⁷ In this new reporting system, the ODA credit that is counted and reported will be higher for a grant than for a loan. Among loans which pass the tests for ODA scoring, more concessional loans, rather than less, will earn greater ODA credit. DAC members further decided to assess concessionality based on differentiated discount rates consisting of a base factor, which will be the IMF discount rate (currently 5%), and an adjustment factor of 1% for upper middle-income countries (UMICs), 2% for lower middleincome countries (LMICs) and 4% for the least developed countries (LDCs) and other low-income countries (LICs). To ensure that loans to LDCs and other LICs are provided on highly concessional terms, only loans with a grant element of at least 45% will be reportable as ODA. In order to be reportable as ODA, loans to LMICs need to have a grant element of at least 15%, and those to UMICs at least 10%. This will have a certain impact on China's foreign aid especially to LDCs.

⁴⁸ As for the ongoing discussion on TOSSD,

see http://www.oecd.org/dac/financing-sustainable-development/tossd.htm (accessed April 25, 2016).

References

- Bräutigam, Deborah. 2011. "Aid 'with Chinese characteristics': Chinese aid and development finance meet the OECD-DAC regime." *Journal of International Development* 23 (5): 752–64.
 - . 2015. Will Africa Feed China?. Oxford University Press.
- Bräutigam, Deborah, and Kevin P. Gallagher. 2014. "Bartering Globalization: China's Commodity-backed Finance in Africa and Latin America." *Global Policy* 5 (3): 346-52.
- Chen, Meng. 2010. "Zhongguo zhengfu qianshu yuanwai youhui daikuan 770 yi yuan renminbi. [Chinese government signed concessional loans totally amounting to RMB 77 billion]." *Guoji zaixian, Zhongguo guoji guangbo dianshi wangluotai* [CRI (China Radio International) online in China International Broadcasting Network]. Accessed May 8, 2016. http://www.china.com.cn/news/txt/2010-08/13/content_20702843.html.
- Export-Import Bank of China. 2012. The Export-Import Bank of China Annual Report 2011. ______. 2015. The Export-Import Bank of China Annual Report 2014.
- Fues, Thomas, and Jiang Ye. (eds.) 2014. United Nations Post-2015 Agenda for Global Development: Perspectives from China and Europe. Bonn: Deutsches Institut f
 ür Entwicklungspolitik (DIE). Accessed April 2, 2016. https://www.die-gdi.de/uploads/media/Studies_84.pdf.
- Gransow, Bettina. 2015. "Chinese Infrastructure Investment in Latin America—an Assessment of Strategies, Actors and Risks." *Journal of Chinese Political Science* 20 (3): 267-87.
- Hu, Jianmei, and Meibo Huang. 2012. "Zhongguo zhengfu duiwai youhui daikuan de xianzhuang ji qianjing [The present situation of the Chinese government's concessional loan and its perspective]." *Guoji Luntan* [International Forum] 14 (1): 49–54.
- Hwang, Jyhjong , Deborah Bräutigam, and Janet Eom. 2016. How Chinese Money is Transforming Africa: It's Not What You Think. SAIS-CARI Policy Brief 11/2016.
 Washington, D.C.: SAIS China Africa Research Initiative (SAIS-CARI). Accessed May 8, 2016.

http://static1.squarespace.com/static/5652847de4b033f56d2bdc29/t/571a2daf20c64744b8 87cf7c/1461333522495/China+Africa+Loans+Briefing+Paper_SAIS+CARi.pdf.

Information Office of the State Council. 2011. *China's Foreign Aid*. Beijing: Foreign Language Press.

———. 2014. *China's Foreign Aid (2014)*. Beijing: Foreign Language Press. International Monetary Fund. 2016. *World Economic Outlook Update*.

http://www.imf.org/external/pubs/ft/weo/2016/update/01/. Accessed June 2, 2016.

- Kitano, Naohiro. 2014. "China's foreign aid at a transitional stage." Asian Economic Policy Review 9 (2): 301–17.
- Kitano, Naohiro, and Yukinori Harada. 2014. "Estimating China's Foreign Aid 2001-2013." JICA-RI Working Paper No. 78. Tokyo: JICA Research Institute. Accessed March 29, 2016.

https://jica-ri.jica.go.jp/publication/assets/JICA-RI_WP_No.78_2014.pdf.

- ——. 2015. "Estimating China's Foreign Aid 20010-2013." *Journal of International Development* (Published online in Wiley Online Libraryon-line).
- Accessed March 29, 2016. http://onlinelibrary.wiley.com/doi/10.1002/jid.3081/pdf. Kitano, Naohiro. 2015. "Estimating China's Foreign Aid." Presentation material presented at "China Foreign Aid Roundtable" hosted by the Asia Foundation in Bangkok on June 9, 2015. Accessed April 2, 2016.

http://jica-ri.jica.go.jp/event/assets/20150609_presentation_kitano_01.pdf.

Kobayashi, Takaaki, and Yasutami Shimomura. 2013. "Aid volume in a historical perspective." In *A Study of China's Foreign Aid* edited by Shimomura, Yasutami and Hideo Ohashi . 46–57. Basingstoke: Palgrave Macmillan.

- Lin, Justin Yifu, and Yan Wang. 2015. "China's Contribution to Development Cooperation: Ideas, Opportunities and Finances." FERDI Working Paper No. P119. Paris: Fondation pour les Etudes et Recherches sur le Développement Internationa. Accessed April 2, 2016. http://www.ferdi.fr/sites/www.ferdi.fr/files/publication/fichiers/wp119_lin-wang_paper_fo r_ferdi_web_1.pdf.
- Ministry of Commerce. 2014. "Duiwai yuanzhu guangli banfa (shixing). [Measures for Management of Foreign Aid (For Trial Implementation)]." Accessed March 29, 2016. http://www.mofcom.gov.cn/article/b/c/201411/20141100799438.shtml.
- OECD. 2008. "OECD DAC Statistics: a brief introduction. Factsheet." July. Paris: OECD. Accessed May 29, 2014. http://www.oecd.org/dac/stats/43544160.pdf.

—. 2013. "Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire." DCD/DAC(2013)15/FINAL. Paris: OECD. http://www.oecd.org/dac/stats/documentupload/DCD-DAC(2013)15-FINAL-ENG.pdf with "Addenda to the Converged Statistical Reporting Directives" Accessed April 2, 2016.

http://www.oecd.org/dac/stats/addenda-converged-statistical-reporting-directives.htm. ——. 2014. "Development Finance: Modernising Official Development Assistance (ODA)." Paris: OECD. Accessed April 2, 2016.

http://www.oecd.org/dac/externalfinancingfordevelopment/documentupload/ERG%20S1%20Jan%202014%20-%20Options%20for%20Modernising%20the%20ODA%20Measure%20DCD-DAC-2014-3-ENG.pdf.

- . 2015. Development Co-operation Report 2015: *Ending Poverty*. Paris: OECD.
 . 2016. "DAC High Level Meeting Communiqué." Accessed April 2, 2016. http://www.oecd.org/dac/DAC-HLM-Communique-2016.pdf.
- Pigato, Miria, and Wenxia Tang. 2015. "China and Africa: Expanding Economic Ties in an Evolving Global Context." World Bank Group Working Paper. Washington, DC: World Bank. Accessed April 2, 2016.

http://www.worldbank.org/content/dam/Worldbank/Event/Africa/Investing%20in%20Afri ca%20Forum/2015/investing-in-africa-forum-china-and-africa-expanding-economic-ties-i n-an-evolving-global-context.pdf.

- Snell, Sabrina. 2015. "China's Development Finance: Outbound, Inbound, and Future Trends in Financial Statecraft." Staff Research Report. Wanshington, DC: U.S.-China Economic and Security Review Commission. Accessed March 29, 2016. http://origin.www.uscc.gov/sites/default/files/Research/China%E2%80%99s%20Develop ment%20Finance.pdf.
- UNDP China. 2015. Demand-Driven Data: How Partner Countries are Gathering Chinese Development Cooperation Information. Beijing: UNDP China. Accessed April 2, 2016. http://www.aidtransparency.net/wp-content/uploads/2015/11/Paper-9-Demand-Driven-Dat a-How-Partner-Countries-are-Gathering-Chinese-Development-Cooperation-Information. pdf.
- Zhang, Yanbing, Jing Gu, and Yunnan Chen. 2015. China's Engagement in International Development Cooperation: The State of the Debates. IDS Evidence Report No. 116. IDS Evidence Report Brighton: Institute of Development Studies. Accessed April 2, 2016. http://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/5838/ER116_ChinasEng agementinInternationalDevelopmentCooperationTheStateoftheDebate.pdf.

Table 1. Process of estimating China's net and gross foreign aid (1/2)

RMB million

Year	Final	Sum of final	Out-	Cumu-	Erame-	Cumu-	Conces-	Gross	Cumula-	Renav-	Net	Out-	Subsi-	Out-	Net	Renav-	Gross	Grants	Grants by	Scholar-	Final	Sum of final	Sum of final
. ou.	account of	account of	standing	lative	work	lative	sional	disburse-	tive	ment of	disburse-	standing	dies for	standing	disburse-	ment of	disburse-	and	other	ships for	account of	account of	account of
	central	central level	amount of	amount of	agree-	amount of	loans	ment of	disburse-	conces-	ment of	amount	conces-	amount	ment of	preferen-	ment of	interest	depart -	foreign	central	department	department
	level public	general public	two	frame-	ment for	conces-	signed (7)	conces-	ment of	sional	conces-	of	sional	of	preferen-	tial	preferen-	-free	ments	students	government	public	public
	budget ex-	budget ex-	preferen-	work	conces-	sional	5	sional	conces-	loans	sional	conces-	loans	preferen-	tial	export	tial	loans by	and	from other	public	budget ex-	budget ex-
	penditure	penditure for	tial	agree-	sional	loans		loans	sional	(10)	loans	sional	(13)	tial	export	buyer's	export	Ministry	relevant	developing	budget ex-	penditures	penditures
	for foreign	foreign aid	facilities	ment for	loans (5)	signed (6)		(8)=(2)-	loans (9)		(11)=(8)	loans		export	buyer's	credits	buyer's	of Com-	ograni-	countries by	penditure for	for inter-	for inter-
	aid	and gross	(3)	conces-				(1)			- (10)	(12)		buyer's	credits	(16)	credits	merce	zations	the Ministry	inter-	national	national
	(1)	disburse-ment		sional										credits	(15)		(17)=	(18)	(19)	of Education	national	organi-	organi-
		of con-		loans										(14) = (3)-			(15)+			(20)	organi-	zations	zations:
		cessional loans	6	(4)										(12)			(16)				zations	(22)	Adjusted
		(2)																			(21)		(23)
2001	4,711		5,000					1,060	3,803	19	1,041	3,784	47	1,216	1,216		1,216	4,240	141	94	1,831	1,831	549
2002	5,003	6,200	0 8,000					1,197	5,000	78	1,119	4,903	54	3,097	1,881		1,881	4,503	150	100	2,014	2,014	604
2003	5,223	6,500	10,300					1,277	6,277	133	1,144	6,047	66	4,253	1,156		1,156	4,701	157	104	2,215	2,215	665
2004	6,069	7,600	13,700					1,531	7,808	199	1,332	7,380	82	6,320	2,068		2,068	5,462	182	121	2,437	2,437	731
2005	7,470	9,400	22,000					1,930	9,730	2/4	1,000	9,035	109	9,200	2,944	122	2,944	7 412	224	149	2,001	2,001	004
2000	11 154	17,300	32,900					6 246	19 247	500	2,003	17,910	285	14 336	3 354	310	3 664	10 039	247	202	2,949	2,949	973
2008	12,559	17,600	43,400					5.041	24,288	628	4,413	22.077	374	21.323	6,987	425	7,412	11,303	377	332	3.568	3.568	1.070
2009	13,296	22,100	57,100	73,550	13,409	59,400	10,830	8,804	33,092	781	8,023	30,101	345	27,000	5,677	632	6,309	11,966	399	437	3,622	3,622	1,087
2010	13,611	25,600	84,600	88,434	14,884	73,479	14,079	11,989	45,081	974	11,015	41,116	478	43,484	16,485	926	17,411	11,839	462	534	4,316	4,338	1,959
2011	15,898	29,400	120,000	104,956	16,522	88,402	14,923	13,502	58,583	1,281	12,221	53,337	773	66,663	23,179	1,110	24,289	15,178	510	613	4,833	4,292	1,985
2012	16,695			123,310	18,339	104,817	16,416	14,447	73,030	1,847	12,600	65,937	972	97,329	30,666	1,477	32,142	17,014	666	1,034	7,230	4,984	2,667
2013	17,049			143,666	20,356	122,874	18,057	15,458	88,489	2,296	13,162	79,099	1,068	126,232	28,903	2,218	31,121	15,206	659	1,125	5,619	7,979	4,501
2014	18,457			165,448	21,781	142,737	19,863	16,231	104,720	3,110	13,121	92,220	1,231	163,705	37,473	2,849	40,322	14,203	674	1,301	7,372	7,363	2,211
Rate c	f Increase		1		-	r							r —							r		r	
2002	6%		60%					13%	31%	309%	8%	30%	16%	155%	55%		55%	6%	6%	6%	10%	10%	10%
2003	4%	5%	5 29%					7%	26%	71%	2%	23%	21%	37%	-39%		-39%	4%	4%	4%	10%	10%	10%
2004	16%	17%	33%					20%	24%	50%	16%	22%	24%	49%	79%		79%	16%	16%	16%	10%	10%	10%
2005	23%	24%	34%					26%	25%	38%	24%	22%	33%	47%	42%		42%	23%	23%	23%	10%	10%	10%
2006	10%	22%	5 25%					69%	34%	39%	74%	32%	45%	19%	-42%		-38%	10%	10%	10%	10%	10%	10%
2007	35%	51%	6 40%					91%	48%	31%	99%	48%	81%	31%	95%	155%	99%	35%	35%	22%	10%	10%	10%
2008	13%	1%	36%					-19%	26%	26%	-23%	25%	31%	49%	108%	37%	102%	13%	13%	65%	10%	10%	10%
2009	6%	26%	32%					75%	36%	24%	82%	36%	-8%	27%	-19%	49%	-15%	6%	6%	32%	2%	2%	2%
2010	2%	16%	48%	20%	11%	24%	30%	36%	36%	25%	37%	37%	38%	61%	190%	47%	176%	-1%	16%	22%	19%	20%	80%
2011	17%	15%	5 4 2%	19%	11%	20%	6%	13%	30%	32%	11%	30%	62%	53%	41%	20%	40%	28%	10%	15%	12%	-1%	1%
2012	5%			17%	11%	19%	10%	7%	25%	44%	3%	24%	26%	46%	32%	33%	32%	12%	31%	69%	50%	16%	34%
2013	2%			17%	11%	17%	10%	7%	21%	24%	4%	20%	10%	30%	-6%	50%	-3%	-11%	-1%	9%	-22%	60%	69%
2014	8%			15%	7%	16%	10%	5%	18%	35%	0%	17%	15%	30%	30%	28%	30%	-7%	2%	16%	31%	-8%	-51%

Note: Figures in bold were extracted from publicly accessible statistics and information: those in italics were obtained from graphs, those highlighted by gray were critical figures estimated by the setting of assumptions, and the remaining figures, neither in bold, italics, nor highlighted by gray were calculated from other columns.

Sources: Finance Yearbook of China 2002 and 2003, Chinese government relevant websites, etc.

Table 1. Process of	f estimating	China's net and	gross	foreign aid	(2/2)
---------------------	--------------	-----------------	-------	-------------	-------

_						RMB million	ו <u> </u>						US\$ Million
Year	Bi-lateral	Bi-	Bi-	Multi-	Total:	For refe-	Year	Bi-	Bi-	Bi-	Multi-	Total:	For refe-
	:Grants	lateral:	lateral:	lateral:	Net	rence:		lateral:	lateral:	lateral:	lateral:	Net	rence:
	and	Net	Net	Govern-	foreign	Net		Grants	Net	Net	Inter-	foreign	Net
	interest-	disburse	foreign	ment ex-	aid	disburse-		and	disburse	foreign	national	aid	disburse-
	free	-ment of	aid	pendi-	(E)=(C)	ment of		interest-	-ment of	aid	organiza	(E)	ment of
	loans	conces-	(C)	ture for	+ (D)	preferen-		free	conces-	(C)	tions		preferen-
	(A) = (18)	sional	= (A) +	inter-		tial export		loans	sional		(D)		tial export
	+(19)+	loans	(B)	national		buyer's		(A)	loans				buyer's
	(20)-(13)	(B)		organi-		credits			(B)				credits
		=(11)		Zations		(1) = (15)							(1)
				(D) = (23)		1.010		505	100				
2001	4,429	1,041	5,470	549	6,019	1,216	2001	535	120	700	50	721	147
2002	4,699	1,119	5,818	604	6,422	1,881	2002	508	135	703	73	776	227
2003	4,090	1,144	0,040	721	0,705	1,150	2003	592	100	730	00	010	250
2004	5,004	1,552	7,010	201	0.447	2,008	2004	007	202	1 055	00	930	250
2005	0,907	1,000	0,043	004	9,447	2,944	2005	000	202	1,000	90	1,100	215
2000	10,007	2,003	16,000	072	17,433	2 254	2000	902	302	2 1.02	100	1,404	213
2007	11,290	5,740	16,050	973	17,009	5,554	2007	1,333	700	2,100	120	2,230	1 005
2000	12 457	4,413	20,491	1,070	21 567	5,907	2008	1,073	1 174	2,310	154	2,404	1,005
2009	12,407	0,023	20,401	1,067	25,333	16 485	2009	1,024	1,174	2,990	280	3,137	2 /35
2010	12,550	12 221	23,374	1,959	20,000	22 170	2010	2 402	1,027	4 205	203	4 602	2,433
2011	17 7/1	12,221	21,149	2,667	29,733	23,179	2011	2,403	1,091	4,293	422	5 220	3,307
2012	15 023	12,000	20,085	2,007	33,000	28 003	2012	2,011	2 124	4,007	422	5,229	4,656
2013	14 946	13,102	28,003	2 211	30 277	37 473	2013	2,370	2,124	4,034	360	4 928	6 100
2014	14,040	10,121	20,007	2,211	50,211	57,475	Share		2,100	7,000	500	4,520	0,100
								percentage	200/	070/	4.00/	4000/	0.00/
							2013	47%	39%	87%	13%	100%	86%
							2014	49%	43%	93%	1%	100%	124%
Year	Bi-lateral	Bi-	Bi-	Multi-	Total:	For refe-	Year	Bi-	Bi-	Bi-	Multi-	Total:	For
	:Grants	lateral:	lateral:	lateral:	Gross	rence:		lateral:	lateral:	lateral:	lateral:	Gross	reference
	and	Gross	Gross	Govern-	foreign	Gross		Grants	Gross	Gross	Inter-	foreign	: Gross
	interest-	disburse	foreign	ment ex-	aid	disburse-		and	disburse	foreign	national	aid	disburse-
	free	-ment of	aid	pendi-	(H)=(G)	ment of		interest-	-ment of	aid	organi-	(H)	ment of
	loans	conce-	(G)	ture for	+ (D)	preferen-		free	conces-	(G)	zations		preferen-
	(A) = (18)	ssional	=(A) +	inter-		tial export		loans	sional		(D)		tial export
	+(19)+	Ioans	(F)	national		buyer's		(A)	ioans				buyer's
	(20)-(13)	(F) _(0)		organi-		(1) - (17)			(F)				
		=(9)		(D) = (23)		(J) = (17)							(5)
2001	4 4 2 9	1 060	5 489	(D)=(23) 549	6.038	1 216	2001	535	128	663	66	729	147
2002	4 600	1 107	5 896	604	6 500	1,210	2002	568	145	712	73	785	227
2002	4 896	1,107	6 173	665	6,838	1,001	2002	592	154	746	80	826	140
2003	4,030	1,277	7.215	721	7.046	2,069	2003	607	104	070	00	020	250
2004	5,004	1,031	0.017	201	7,940	2,008	2004	007	100	1 000	00	1 1 9 6	250
2005	0,907	1,930	0,917	004	9,722	2,944	2005	000	230	1,000	90	1,100	309
2006	7,667	3,263	10,930	688	11,815	1,839	2006	962	409	1,371	111	1,482	231
2007	10,290	6,246	16,536	973	17,509	3,664	2007	1,353	821	2,174	128	2,302	482
2008	4 * * * *	I 5 041	16679	1070	1/740	7 / 12	2008	1.675	725	2,400	154	2,554	1.067
00000	11,638	0,041	10,010	1,010	17,745	7,412	0000			<u> </u>		C	
2009	11,638 12,457	8,804	21,261	1,070	22,348	6,309	2009	1,824	1,289	3,112	159	3,271	924
2009 2010	11,638 12,457 12,358	8,804 11,989	21,261 24,347	1,010 1,087 1,959	22,348 26,307	6,309 17,411	2009 2010	1,824 1,825	1,289 1,771	3,112 3,596	159 289	3,271 3,886	924 2,572
2009 2010 2011	11,638 12,457 12,358 15,528	8,804 11,989 13,502	21,261 24,347 29,030	1,010 1,087 1,959 1,985	22,348 26,307 31,015	6,309 17,411 24,289	2009 2010 2011	1,824 1,825 2,403	1,289 1,771 2,090	3,112 3,596 4,493	159 289 307	3,271 3,886 4,800	924 2,572 3,759
2009 2010 2011 2012	11,638 12,457 12,358 15,528 17,741	8,804 11,989 13,502 14,447	21,261 24,347 29,030 32,188	1,070 1,087 1,959 1,985 2,667	22,348 26,307 31,015 34,855	7,412 6,309 17,411 24,289 32,142	2009 2010 2011 2012	1,824 1,825 2,403 2,811	1,289 1,771 2,090 2,289	3,112 3,596 4,493 5,099	159 289 307 422	3,271 3,886 4,800 5,522	924 2,572 3,759 5,092
2009 2010 2011 2012 2013	11,638 12,457 12,358 15,528 17,741 15,923	8,804 11,989 13,502 14,447 15,458	21,261 24,347 29,030 32,188 31,381	1,070 1,087 1,959 1,985 2,667 4,501	22,348 26,307 31,015 34,855 35,882	6,309 17,411 24,289 32,142 31,121	2009 2010 2011 2012 2013	1,824 1,825 2,403 2,811 2,570	1,289 1,771 2,090 2,289 2,495	3,112 3,596 4,493 5,099 5,065	159 289 307 422 726	3,271 3,886 4,800 5,522 5,791	924 2,572 3,759 5,092 5,023

Table 2. Comparison of estimates of China's net foreign aid: with the previous estimates,

MOFCOM's official figures and DAC's estimates

TICC	L:11	lion
USA	UII	поп

Year	Bi- lateral: Grants and interest - free loans (A)	Bi- lateral: Net disburs- ement of conces- sional loans (B)	Bi- lateral: Net foreign aid (C) = (A) + (B)	Bi- lateral: Gross disburse- ment of conces- sional loans (F)	Bi- lateral: Gross foreign aid (G) = (A) + (F)	Multi- lateral: Inter- national organi- zations (D)	Total: Net foreign aid (E)=(C) +(D)	Total: Gross foreign aid (H) =(G) + (D)	MOFCOM: Grants (commit- ments)	MOFCOM: Interest- free loans (commit- ments)	MOFCOM: Conces- sional loans (Frame- work agree- ments)	MOFCOM: Total	DAC: Bi- lateral coope- ration	DAC: Develop- mental funds chan- neled through multi- lateral organi-	DAC: Total	For refer- ence: Net disburse- ment of preferen- tial export buyer's credits (I)
														zations		
(1) Estimat	tes in this	paper	•									• • • •	<u></u>			
2010	1.8	1.6	3.5	1.8	3.6	0.3	3.7	3.9					2.0	0.6	2.6	2.4
2011	2.4	1.9	4.3	2.1	4.5	0.3	4.6	4.8					2.5	0.3	2.8	3.6
2012	2.8	2.0	4.8	2.3	5.1	0.4	5.2	5.5					2.6	0.5	3.1	4.9
2013	2.6	2.1	4.7	2.5	5.1	0.7	5.4	5.8					2.8	0.2	3.0	4.7
2014	2.4	2.1	4.6	2.6	5.1	0.4	4.9	5.4					3.0	0.4	3.4	6.1
Total (2010-12)	7.0	5.5	12.6	6.1	13.2	1.0	13.6	14.2	5.0	1.1	7.6	13.7	7.1	1.4	8.5	10.9
(2) Previou	us estimat	es														
2010	1.7	1.6	3.4	1.8	3.5	0.3	3.6	3.8								2.4
2011	2.3	1.9	4.2	2.1	4.4	0.3	4.5	4.7								3.6
2012	2.8	2.6	5.3	2.8	5.6	0.4	5.7	6.0								4.9
2013	2.9	3.5	6.4	3.9	6.8	0.7	7.1	7.5								7.0
(3)=(1)-(2)															
2010	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1								0.0
2011	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1								0.0
2012	0.0	-0.6	-0.5	-0.6	-0.5	0.0	-0.5	-0.5								-0.0
2013	-0.3	-1.4	-1.7	-1.4	-1.7	0.0	-1.7	-1.7								-2.4

Note: Figures in the Column "DAC: Bilateral cooperation" were derived from Column (1), "Final account of central level public budget expenditure for foreign aid" in Table 1.

Sources: Table 1; Kitano and Harada (2014); Information Office of the State Council (2014) (the 2014 White Paper) for MOFCOM's official figures; and Table 33a: "Estimates of gross concessional flows for development co-operation ("ODA-like" flows) from OECD Key Partners" in http://www.oecd.org/dac/stats/statisticsonresourceflowstodevelopingcountries.htm (Accessed June 24, 2016.) and Table 1 (Column (1)) for DAC's estimates.

															A mount
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	in 2014
	2001	2002	2005	2004	2005	2000	2007	2000	2007	2010	2011	2012	2013	2014	(US\$
															billion)
1	US	33.10													
2	Japan	Japan	Japan	Japan	Japan	UK	Germany	Germany	France	UK	Germany	UK	UK	UK	19.31
3	Germany	France	France	France	UK	Japan	France	UK	Germany	Germany	UK	Germany	Germany	Germany	16.57
4	UK	Germany	Germany	UK	Germany	France	UK	France	UK	France	France	France	Japan	France	10.62
5	France	UK	UK	Germany	France	Germany	Japan	Japan	Japan	Japan	Japan	Japan	France	Japan	9.27
6	Netherlands	Spain	Netherlands	Netherlands	Canada	Sweden	Sweden	6.23							
7	Spain	Italy	Italy	Sweden	Italy	Sweden	Spain	Spain	Netherlands	Spain	Sweden	Netherlands	Norway	Netherlands	5.57
8	Sweden	Sweden	Sweden	Canada	Canada	Spain	Sweden	Italy	Sweden	Canada	Canada	Australia	Netherlands	Norway	5.09
9	Denmark	Canada	Norway	Italy	Sweden	Canada	Canada	Canada	Norway	Sweden	Australia	Sweden	China	China	4.93
10	Italy	Spain	Canada	Spain	Spain	Italy	Italy	Sweden	Canada	Norway	Norway	China	Canada	Australia	4.38
11	Canada	Norway	Spain	Norway	Norway	Norway	Norway	Norway	Italy	Australia	China	Norway	Australia	Canada	4.24
12	Norway	Denmark	Belgium	Denmark	Denmark	Denmark	Australia	Australia	China	China	Italy	Switzerland	Italy	Italy	4.01
13	Switzerland	Belgium	Denmark	Switzerland	Belgium	Australia	Denmark	Denmark	Denmark	Belgium	Spain	Italy	Switzerland	Switzerland	3.52
14	Australia	Australia	Switzerland	Belgium	Switzerland	Belgium	China	China	Australia	Italy	Switzerland	Denmark	Denmark	Denmark	3.00
15	Belgium	Switzerland	Australia	Australia	Australia	Switzerland	Belgium	Belgium	Belgium	Denmark	Denmark	Belgium	Belgium	Belgium	2.45
16	China	China	China	Portugal	Austria	Austria	Austria	Switzerland	Switzerland	Switzerland	Belgium	Spain	Spain	Spain	1.88
17	Austria	Austria	Finland	China	China	China	Switzerland	Austria	Finland	Finland	Finland	Korea	Korea	Korea	1.86
18	Finland	Finland	Austria	Finland	Finland	Ireland	Ireland	Ireland	Austria	Austria	Korea	Finland	Finland	Finland	1.63
19	Ireland	Ireland	Ireland	Austria	Korea	Finland	Finland	Finland	Ireland	Korea	Austria	Austria	Austria	Austria	1.23
20	Portugal	Portugal	Korea	Ireland	Ireland	Korea	Korea	Korea	Korea	Ireland	Ireland	Ireland	Ireland	Ireland	0.82
21	Korea	Korea	Greece	Korea	Greece	Greece	Greece	Greece	Greece	Portugal	Portugal	Portugal	Portugal	New Zealand	0.51
22	Greece	Greece	Portugal	Greece	Portugal	Portugal	Portugal	Portugal	Portugal	Greece	Greece	New Zealand	Poland	Poland	0.45
23	Luxembourg	Luxembourg	Luxembourg	Luxembourg	New Zealand	Poland	Luxembourg	Luxembourg	Luxembourg	Luxembourg	New Zealand	Poland	New Zealand	Portugal	0.43
24	New Zealand	New Zealand	New Zealand	New Zealand	Luxembourg	Luxembourg	Poland	Poland	Poland	Poland	Poland	Luxembourg	Luxembourg	Luxembourg	0.42
25	Poland	Czech	Czech	Poland	Poland	New Zealand	Luxembourg	Greece	Greece	Greece	0.25				
26	Czech	Poland	Poland	Czech	0.21										
27	Iceland	Iceland	Iceland	Slovak	0.08										
28	Slovak	Slovak	Slovak	Iceland	Slovenia	0.06									
29					Iceland	0.04									

Table 3. Ranking on DAC members' net ODA and China's net foreign aid

Sources: OECD International Development Statistics and Table 1.

Figure 1. Estimated China's net foreign aid



Source: Table 1.





Source: Table 1





Sources: OECD International Development Statistics and Table 1.





Sources: OECD International Development Statistics and Table 1.

Figure 5. Comparison of DAC member's net ODA and China's net foreign aid (Bilateral)



Sources: OECD International Development Statistics and Table 1.

Figure 6. Comparison of DAC member's net ODA and China's net foreign aid (Multilateral)



Gross	disburseme	nt of China	a Eximbar	ık loans			R	MB million	Outsta	Inding amou	unt of Chin	na Eximba	nk loans			F	RMB million
Year	Export	Export	Import	Conces-	Preferen-	Sum of conces-	Remaing	On-	Year	Export	Export	Import	Conces-	Preferen-	Sum of conces-	Remaing	On-
	supplier's	buyer's	credits	sional	tial export	sional loans and	amount	balance-		supplier's	buyer's	credits	sional	tial export	sional loans and	amount	balance-
	credits	credits	(C)	loans	buyer's	preferen-tial export	(G)=(H)-	sheet		credits	credits	(K)	loans	buyer's	preferen-tial export	(O)=(P)-	sheet total
	(A)	(B)		(D) = (8)	credits	buyer's credits	(A)-(B)-	total		(I)	(J)		(L)	credits	buyer's credits	(l)-(J)-(K)-	(P)
					(E) = (17)	(F)=(D)+(E)	(C)-(F)	(H)					=(12)	(M) =	(N)=(L)+(M)=(3)	(N)	
														(14)			
2001	41,760	40		1,060	1,216	2,276	324	44,400	2001	64,700	1,747		3,784	1,216	5,000	-15	71,432
2002	42,823	75		1,197	1,881	3,078	324	46,300	2002	78,200	1,779		4,903	3,097	8,000	-49	87,930
2003	59,020	1,091		1,277	1,156	2,433	177	62,720	2003	89,840	2,336		6,047	4,253	10,300	88	102,564
2004	62,150	3,312		1,531	2,068	3,599	189	69,250	2004	105,270	4,687		7,380	6,320	13,700	226	123,883
2005	82,420	7,224		1,930	2,944	4,874	23,742	118,260	2005	124,810	10,427		9,035	9,265	18,300	22,450	175,987
2006	102,791	13,089	7,261	3,263	1,839	5,102	3,257	131,500	2006	159,990	23,825	7,261	11,918	10,982	22,900	17,694	231,670
2007	123,944	17,391	39,248	6,246	3,664	9,910	5,507	196,000	2007	198,100	37,619	37,900	17,664	14,336	32,000	15,435	321,054
2008	130,040	18,271	115,625	5,041	7,412	12,453	19,746	296,135	2008	233,539	49,927	101,565	22,077	21,323	43,400	22,809	451,240
2009	173,085	29,453	96,508	8,804	6,309	15,113	54,241	368,400	2009	281,504	74,756	131,188	30,101	27,000	57,100	56,252	600,800
2010	144,221	32,630	98,469	11,989	17,411	29,400	45,280	350,000	2010	300,307	97,956	169,684	41,116	43,484	84,600	65,253	717,800
2011	169,492	43,901	118,005	13,502	24,289	37,791	109,511	478,700	2011	347,753	126,923	209,210	53,337	66,663	120,000	123,614	927,500
2012	175,365	42,539	154,837	14,447	32,142	46,589	226,870	646,200	2012	378,443	158,671	270,185	65,937	97,329	163,266	236,235	1,206,800
2013	192,409	54,298	176,985	15,458	31,121	46,579	333,613	803,884	2013	399,559	189,768	330,706	79,099	126,232	205,331	357,536	1,482,900
2014	178,598	59,443	194,904	16,231	40,322	56,553	431,502	921,000	2014	410,412	222,295	388,820	92,220	163,705	255,925	509,848	1,787,300
Rate c	f increase								Rate o	of increase							
2010	-17%	11%	2%	36%	176%	95%	-17%	-5%	2010	7%	31%	29%	37%	61%	48%	16%	19%
2011	18%	35%	20%	13%	40%	29%	142%	37%	2011	16%	30%	23%	30%	53%	42%	89%	29%
2012	3%	-3%	31%	7%	32%	23%	107%	35%	2012	9%	25%	29%	24%	46%	36%	91%	30%
2013	10%	28%	14%	7%	-3%	0%	47%	24%	2013	6%	20%	22%	20%	30%	26%	51%	23%
2014	-7%	9%	10%	5%	30%	21%	29%	15%	2014	3%	17%	18%	17%	30%	25%	43%	21%
Share	percentage								Share	percentage)						
2010	41%	9%	28%	3%	5%	8%	13%	100%	2010	42%	14%	24%	6%	6%	12%	9%	100%
2011	35%	9%	25%	3%	5%	8%	23%	100%	2011	37%	14%	23%	6%	7%	13%	13%	100%
2012	27%	7%	24%	2%	5%	7%	35%	100%	2012	31%	13%	22%	5%	8%	14%	20%	100%
2013	24%	7%	22%	2%	4%	6%	42%	100%	2013	27%	13%	22%	5%	9%	14%	24%	100%
2014	19%	6%	21%	2%	4%	6%	47%	100%	2014	23%	12%	22%	5%	9%	14%	29%	100%

Annex Table 1: Disbursement and outstanding amount of China Eximbank loans

Notes: 1. This table shows the positioning of Table 1: Column (8), "Gross disbursement of concessional loans," Column (17), "Gross disbursement of preferential export buyer's credits," Column (12), "Outstanding amount of concessional loans," Column (14), "Outstanding amount of preferential export buyer's credits," and Column (3) "Outstanding amount of two preferential facilities" in China Eximbank's account. Figures in bold were extracted from publicly accessible statistics and information, those in italics were obtained from graphs, those highlighted in gray were critical figures estimated by setting assumptions, and the remaining figures, neither in bold, italics, nor highlighted in gray were calculated from other columns.

2. The remaining amount might include trade finance, innovative businesses, and special state loans which are stated in Export-Import Bank of China (2014). I infer that special state loans refer to "package loan cooperation model" described in Export-Import Bank of China (2011). *Sources:* Annual reports of China Eximbank and Table 1.

Annex Table 2: Grants by other departments and relevant organizations

RMB million

	National	Ministry	National	Ministry	Ministry	Ministry	State	State	All-China	Red	Sub-
	Health	of	Devel-	of Edu-	of Agri-	of Civil	Oceanic	Admin-	wom-	Cross	total
	and	Science	opment	cation	culture	Affairs	Admini-	istration	en's	Society	
	Family	and	Reform	(MOE)	(MOA)	(MOCA)	stration	of	feder-	of China	
	Plan-	Tech-	Com-				(SOA)	Cultural	ation	(RCSC)	
	ning	nology	mission					Heritage	(ACWF)		
	Com-	(MOST)	(NDRC)					(SACH)			
	mission										
	(NHFPC)										
2001											141
2002											150
2003											157
2004											182
2005											224
2006											247
2007		23		8							335
2008		61		6							377
2009		42		20							399
2010	401	45		10				1	5		462
2011	426	73		10				2			510
2012	474	74	100	11				3	5		666
2013	509	72	62	11	0.44			1		3	659
2014	540	82	40	6	0.02	0	2	1	2		674

Notes: 1. This table is a breakdown of Column (19) "Grants by other departments and relevant organizations" in Table 1.

Figures in bold were extracted from publicly accessible statistics and information; those not in bold were estimated.

Sources: Chinese government relevant websites.

Annex Table 3: Process of estimating China's multilateral foreign aid

														l	JS\$ million
Year	Total	Sub-	Ministry	Ministry	People's	Ministry of	Ministry	National	Ministry of	Ministry	Ministry	State	Ministry	Ministry	Sub-
	(C)=	total	of	of	Bank of	Com-	of Agri-	Health	Human Re-	of	of	Forestry	of	of Public	total for
	(A) +	(A) =	Foreign	Finance	China	merce	culture	and	sources	Educa-	Environ-	Admini-	Industry	Security	other
	(B)	Sum	Affairs	(MOF)	(PBC)	(MOFCOM)	(MOA)	Family	and Social	tion	mental	stration	and	(MPS)	depart -
		from	(MOFA)	(2)	(3)	(4)	(5)	Planning	Security	(MOE)	Protec-	(SFA)	Infor-	(12)	ments
		(1) to	(1)					Commis-	(MOHRSS)	(8)	tion	(10)	mation		and
		(12)						sion	(7)		(MEP)		Tech-		relevant
								(NHFPC)			(9)		nology		organi-
								(6)					(MIIT)		zations
													(11)		(B)
2010	641	621	403	116	0	28	30	16	10	12	2	2	3	0	19
2011	664	640	401	121	0	31	31	21	14	12	2	2	4	0	25
2012	790	760	411	236	0	31	25	22	13	15	2	2	4	0	29
2013	1,288	1,260	583	491	50	40	27	22	13	21	4	4	4	1	28
2014	1,199	1,158	864	83	37	43	39	34	23	21	5	5	4	1	40
Adjuste	d			r	r					r	1		r	<u>ا</u>	JS\$ million
2010	289	284	47	116	43	28	19	13	6	7	2	2	1	0	5
2011	307	301	47	121	43	31	20	17	8	7	2	2	1	0	6
2012	422	415	48	236	43	31	16	18	8	9	2	2	1	0	8
2013	726	719	73	491	50	40	17	18	8	13	4	4	1	1	7
2014	360	350	97	83	37	43	24	28	14	13	5	5	1	1	10
				r	1					1			1	R	MB million
2010	1,959	1,926	321	784	294	188	131	88	42	47	11	11	7	1	33
2011	1,985	1,944	304	783	281	202	128	110	55	47	11	12	9	1	41
2012	2,667	2,619	304	1,489	275	196	100	114	48	56	11	15	9	3	48
2013	4,501	4,456	452	3,039	308	245	106	112	50	79	25	25	9	6	45
2014	2,211	2,147	597	507	229	261	148	170	85	79	28	28	9	6	63

Notes: 1. This table is a breakdown of Column (23) "Sum of final account of department public budget expenditures for international organizations: Adjusted" in Table 1. The information presented here is incomplete.

2. The relationship between each department and that of the corresponding international organizations are assumed as follows (percentages in parentheses are coefficients for core contributions): (1) Ministry of Foreign Affairs (MOFA): United Nations regular budget (18%), UN Department of Peacekeeping Operations (UNDPKO) (7%), and rest of the expenditure as other unidentified organizations (100% assumed by author); (2) Ministry of Finance (MOF): World Bank Group (100%) including capital increase in the International Bank for Reconstruction and Development (IBRD) and International Finance Corporation (IFC) along with the voting reform, Sixteenth Replenishment of the International Development Association (IDA 16), and Trust Funds such as the Knowledge for Change Program (KCP) and Multi Donor Trust Fund for the South-South Experience Exchange Between Practitioners, 8th and 9th replenishments of International Fund for Agricultural Development (IFAD) (100%), the Asian Development Bank (ADB) (100%) including the 10th and 11th replenishments of the Asian Development Fund (ADF X and XI) and the capital increase of Ordinary Capital Resources (OCR), and the Global Environment Fund (GEF) (100%); (3) People's Bank of China (PBC): Fund for Special Operations (FSO) of Inter-American Development Bank (IDB) (100%), the African Development Bank (AfDB) including the 6th General Capital Increase (GCI-VI) and the 10th, 11th, and 12th replenishment of the African Development Fund (ADF) (100%); (4) Ministry of Commerce (MOFCOM): UN Children's Fund (UNICEF) (100%), UN Development Program (UNDP) (100%), the UN Industrial Development Organization (UNIDO) (100%), UN Conference on Trade and Development (UNCTAD) Trust Fund (100%), Peace Building Fund (100%), Donor contributions to World Health Organization (WHO)'s Ebola response (100%), UN Ebola Response Multi-Partner Trust Fund (Ebola Response MPTF) (100%) and other unidentified organizations (100% assumed by authors); (5) Ministry of Agriculture (MOA): Food and Agriculture Organization (FAO) (51%) and World Food Program (100%); (6) National Health and Family Planning Commission (NHFPC): World Health Organization (WHO) (76%), and Global Fund to Fight AIDS, Tuberculosis and Malaria (100%); (7) Ministry of Education (MOE): UN Educational, Scientific and Cultural Organization (UNESCO) (60%); (8) Ministry of Human Resources and Social Security (MOHRSS): International Labour Organization (ILO) (60%); (9) Ministry of Environment (MEP): UN Environment Program (UNEP)'s Environment Fund (100%) and other funds (100%), and other unidentified organizations (100%); (10) State Forestry Administration (SFA): UN Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD) and other unidentified organizations (100%); (11) Ministry of Industry and Information Technology (MIIT): International Atomic Energy Agency (IAEA) (33%); (12) Ministry of Public Security (MPS): UN Office on Drugs and Crime (UNODC) (100%), and other departments and relevant organizations (30% assumed by authors).

Sources: The websites of 50 departments and relevant organizations, Table 49.3 in OECD (2015) and OECD (2013).

Abstract (in Japanese)

要約

本稿は、中国の対外援助額を、経済協力開発機構(OECD)の開発援助委員会(DAC)が 定めた政府開発援助(ODA)の定義と出来るだけ整合するように2014年まで更新し、 DAC加盟国のODA額と比較した。推計方法は前回(Kitano and Harada (2014))から 変更を加えた。本推計によれば、中国のネットベースの対外援助額は2012年の約52 億ドルから2013年には約54億ドル(前回の推計値約57億ドル、約71億ドルをそれ ぞれ下方修正)に増加したものの、2014年には約49億ドルに減少した。DAC加盟国の ODA額との比較では、中国のランクは2013年以来第9位であった。二国間援助額では 2012年以来、日本、フランスに次いで第6位である。多国間援助の規模は相対的に小 さい。参考までに、その他の開発資金である優遇バイヤーズクレジットを推計すると、 2013年約47億ドル(前回の推計値70億ドルを下方修正)、2014年約61億ドルであっ た。中国は近い将来、二国間援助額、多国間援助額ともに増加し、DACトップ5レベ ルになることが見込まれる。



JICA Research Institute

Working Papers from the same research project

"Comparative Study on Development Cooperation Strategies: Focusing on G20 Emerging Economies"

JICA-RI Working Paper No. 78 Estimating China's Foreign Aid 2001 - 2013 Naohiro Kitano and Yukinori Harada

JICA-RI Working Paper No. 82 Management of the International Development Aid System and the Creation of Political Space for China: The Case of Tanzania Mitsuaki Furukawa

JICA-RI Working Paper No. 87 The Benefits of Unification Failure: Re-examining the Evolution of Economic Cooperation in Japan Jin Sato

JICA-RI Working Paper No. 88 Chains of Knowledge Creation and Emerging Donors Yasutami Shimomura and Wang Ping

JICA-RI Working Paper No. 106 Convergence of Aid Models in Emerging Donors? Learning Processes, Norms and Identities, and Recipients Hisahiro Kondoh

JICA-RI Working Paper No. 125 India's Unique Role in the Enhancement of Democratic Governance as a Model of Constitutional Democracy Hiroaki Shiga



JICA Research Institute

JICA-RI Working Paper No. 126 Potential and Challenges for Emerging Development Partners: The Case of Indonesia Akio Hosono