ODA grant equivalent measure – short technical note

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Introduction

1. The OECD Development Assistance Committee (DAC) has introduced a change to the methodology to calculate Official Development Assistance (ODA), which affects loans. From 2018, the ODA value of loans to the official sector (developing country governments, their agencies and multilaterals) is to be calculated using a grant equivalent measure rather than the cash flow methodology that has been used in previous years.

2. The introduction follows a decision taken by the DAC in 2014[1] to adopt this approach to measuring ODA, which is designed to allow loans to be compared more transparently alongside grants and incentivise lending to least developed countries. The change was highlighted in a previous edition of Statistics on International Development[2] and this note aims to provide users with an explanation of the grant equivalent methodology and the differences with the previous cash flow measure of ODA.

Official loans for ODA

3. The ODA grant equivalent measure affects loans to the official sector which pass the tests for ODA scoring as set out below:

Key Definition: Official Development Assistance

Official Development Assistance is defined as resource flows to developing countries and multilateral organisations, which are provided by official agencies where each transaction meets the following tests:

i. It is administered with the promotion of the economic development and welfare of developing country as its main objective; and
ii. It is concessional in character, which implies a grant element of at least
   - 45 per cent for bilateral loans to the official sector of Least Developed Countries and other Low Income Countries (calculated at a discount rate of 9 per cent)
   - 15 per cent for bilateral loans to the official sector of Lower Middle Income Countries (calculated at a discount rate of 7 per cent)
   - 10 per cent for bilateral loans to the official sector Upper Middle Income Countries (calculated at a discount rate of 6 per cent)
   - 10 per cent for multilateral loans to multilateral institutions calculated a discount rate of 5 per cent for global institutions and multilateral development banks, and 6 per cent for other organisations, including sub-sub-regional organisations.

Grants are wholly concessional by definition and have a grant element of 100 per cent.

(the current list ODA recipient countries is http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC_List_ODA_Recipients2018to2020_flows_En.pdf)

[1] See the Communiqué of December 2014 DAC High Level Meeting for the decision on the grant equivalent changehttp://www.oecd.org/dac/OECD%20DAC%20HLM%20Communique.pdf

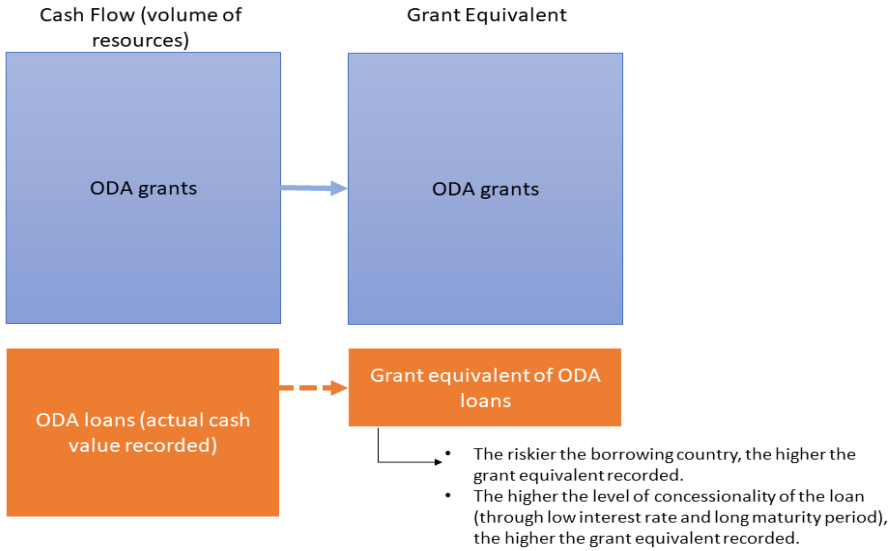
[2] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/771136/Statistics-on-International-Development-Final-UK-Aid-Spend-2017-jan-revisions.pdf.

How does the grant equivalent work?

4. For loans to the official sector, the grant equivalent in ODA is obtained by multiplying the annual spend on the loan by the loan's grant element, which is calculated at the time of the loan commitment[3]. The grant element is calculated as the difference between the face value of the loan and the present value of the repayments the borrower will make over the lifetime of the loan, as a percentage of the face value. Four factors determine the grant element: the interest rate; grace period (i.e. the time from the commitment to the first repayment date of the loan); maturity (the time from the commitment to the last date the loan is expected to be repaid); and discount rate (which is used to determine the present value of future repayments).

5. By comparison under the cash flow methodology, which was the previous way of measuring ODA loans, loans must convey a grant element of at least 25 per cent calculated at a discount rate of 10 per cent to count as ODA. They are also measured on a cash basis: i.e. when the cash value of the loan is advanced it is recorded as a positive flow and when loan repayments are made it is a negative flow. Loans recorded as private sector instruments continue to be reported this way in ODA. Figure 1 illustrates the relationship between cash flow and grant equivalent ODA.

Figure 1: Grant equivalent and cash flow (volume of resources)



Source: OECD Converged statistical reporting directives for the creditor reporting system (CRS) and the Annual Questionnaire

6. The OECD DAC have developed a tool that allows ODA reporters to calculate the grant equivalent for loans to the official sector, found here[4]. This note shows three manually calculated examples to illustrate the grant equivalent methodology. The cash value of the loan extended is £1 million in each case, however the loan terms are more favourable to the borrower in Cases 2 and 3. Table 1 summarises these terms, the grant element and the amount of ODA under the grant equivalent method for each case. The calculations are included in Annex 1.

[3] See OECD Working Paper 339, https://www.oecd-ilibrary.org/development/the-grant-element-method-of-measuring-the-concessionality-of-loans-and-debt-relief_19e4b706-en

[4] See the grant element calculator http://www.oecd.org/dac/stats/dac-glossary.htm#Grant_Element

Table 1: Illustrative examples of the grant equivalent methodology for a loan of £1 million.

Examples	Grant Element (GE) (%)	ODA grant equivalent = GE x Loan
Case 1 - A loan of £1m, annual rate of int. (AR) 3.5%, grace period (GP) 1 year, market rate 5% (used for discounting to present values); maturity 10 years.	11.6	£115,826
Case 2 – Loan £1m, AR 2%; GP=1 year. market rate 5%; maturity 10 years.	23.2	£231,652
Case 3 - as Case 2, but GP 2 years.	25.1	£250,700

7. Table 1 shows that grant equivalent ODA is highest in Case 3, due to the combination of a lower interest rate relative to the market rate and a longer grace period (compared with Case 1 and Case 2). The grant equivalent methodology takes account of the cost of servicing the loan upfront as reflected in the present value calculation (see col G in the example calculations in Annex 1). The present value calculation reflects the risk to the lender, where loans to low income countries are riskier than middle income countries. Poorer countries attract a higher discount rate and therefore a higher percentage of the loan which counts as ODA.

8. By contrast, the cash flow measure records the payments made at the time. In the examples, £1 million counts as a positive ODA flow when the loan is extended (Jan 2018) and negative ODA is recorded when the principal repayment of £1 million is made (Jan 2028), so that over the life of the loan the net ODA value will be zero.

How does the grant equivalent affect 2018 ODA?

9. Official loans are those to a developing country or a development organisation such as the multilaterals eligible for unearmarked funding. Table 2 shows the main differences between the grant equivalent and cash flow measures for provisional UK aid spend in 2018. Grant equivalent ODA is marginally lower than cash flow. In 2018, the UK only had one official multilateral loan and a small amount of official loan reflows (from loans to both multilateral and countries[5]). Other features to note are:

    - The official multilateral loan disbursement was to the IMF-Poverty Reduction and Growth Trust (IMF-PRGT). In 2018 IMF-PRGT used £26 million ODA under the grant equivalent, (headline ODA measure for 2018) compared with £83 million ODA under the cash flow measure. Comparing cash flows, IMF-PRGT used £83 million of UK ODA in 2018 compared with £726m in 2017.
    - There were no official bilateral loan disbursements in 2018 and so grant equivalent and cash flow ODA are both zero.
    - Since our only official loan disbursement was to a multilateral, our bilateral time series of country and sector spend is not affected by the grant equivalent measure.
    - Official loan reflows are not included under the grant equivalent measure. In 2018, these equated to £18 million.
    - Private loans (including reflows) are not currently affected by the grant equivalent measure.

[5] Official loans to developing countries are known as Sovereign Loans

Table 2: Main difference between grant equivalent and cash flow ODA in 2018, £ million[a]

	Grant Equivalent (GE) (Headline)	Cash Flow (CF)	Change (GE-CF)	% change
by main delivery channel				
Total Bilateral ODA	**9,263**	**9,251**	**+12**	**+0.1%**
of which:				
Official loan spend[b]	0	0	0	0.0%
Official loan reflows[c]	0	-12	+12	-100.0%
Total Multilateral ODA				
of which:	**5,289**	**5,340**	**-51**	**-1.0%**
Official loan spend[b]	26	83	-57	-68.7%
Official loan reflows[c]	0	-6	+6	-100.0%
Total UK ODA	**14,552**	**14,591**	**-39**	**-0.3%**
by department and other contributors				
DFID[d]	10,897	10,878	+18	+0.2%
Non-DFID departments	2,963	2,963	0	0.0%
Other contributors of ODA[e]	692	749	-57	-7.7%
Total UK ODA	***14,552***	***14,591***	***-39***	**-0.3%**

[a] Table does not include private loans as these are unaffected by the GE measure

[b] only the grant element of the loan disbursement is recorded for GE

[c] official loan reflows do not count with grant equivalent

[d] bilateral and multilateral loan reflows are not counted in DFID's GE ODA

[e] includes the Grant element of the loan to the IMF-PRGT in the grant equivalent headline

The UK's commitment to spend 0.7% of Gross National Income is measured on the headline ODA measure for a given year.

The impact if the Grant Equivalent methodology was applied in 2017

10. In 2017 the headline measure of ODA was on a cash flow basis. However, the grant equivalent methodology when applied to 2017 data provides useful information for comparison purposes with ODA for 2018. Table 3 sets this out for bilateral and multilateral ODA and by department. It shows that in 2017, the grant equivalent methodology would have had a more significant impact than in 2018 due to the higher volume of loans – it would have been about £750 million (5.4%) lower than the cash flow estimate. By department, DFID and other contributors (through the IMF loan) would have been affected by the methodology change, while the spend of departments other than DFID would not because ODA spend did not take the form of loans.

Table 3: Impact of the Grant equivalent methodology (if applied in 2017), £ million

	Grant equivalent (GE)	Cash flow (CF) (Headline)	Change (GE-CF)	% change
by main delivery channel				
Total Bilateral ODA	**8,796**	**8,803**	**-6**	**-0.1%**
of which:				
loan spend	4	11	-6	-54.5%
Total Multilateral ODA	**4,509**	**5,256**	**-747**	**-14.2%**
of which:				
IMF loan spend	240	726	-486	-66.9%
World Bank loan spend	559	820	-261	-31.8%
Total UK ODA	**13,306**	**14,059**	**-753**	**-5.4%**
by department and other contributors				
DFID[a]	9,836	10,104	-268	-2.7%
Non-DFID departments	2,580	2,580	0	0.0%
Other contributors of ODA[b]	890	1,376	-486	-35.3%

Total UK ODA	**13,306**	**14,059**	**-753**	**-5.4%**

Table may not sum due to rounding

[a] Includes the bilateral loan and the loan to the World Bank, which were both administered by DFID

[b] includes the loan to the IMF

Changes between 2017 and 2018 ODA -using the same methodology

11. For those components of ODA that include loans, the change to the grant equivalent headline in 2018 represents a break from the previous cash flow methodology. While it is possible to compare the headline measures between 2017 and 2018, users might be interested in comparisons provided on a consistent basis for those components – either in grant equivalent or cash flow. This is set out in Table 4 below

Table 4: Comparison of how the grant equivalent and cash flow methodologies would affect the year on year changes in UK ODA, 2017-2018, £ million

	Grant equivalent ODA				Cash flow ODA			
	2017	2018 (Headline)	Change	%chg	2017 (Headline)	2018	Change	%chg
by main delivery channel								
Total Bilateral ODA	8,796	9,263	467	5.3%	8,803	9,251	448	5.1%
Total Multilateral ODA	4,509	5,289	780	17.3%	5,256	5,340	84	1.6%
Total UK ODA	**13,306**	**14,552**	**1,246**	**9.4%**	**14,059**	**14,591**	**532**	**3.8%**
by department and other contributors								
DFID	9,836	10,897	1,061	10.8%	10,104	10,878	774	7.7%
Non-DFID departments	2,580	2,963	383	14.9%	2,580	2,963	383	14.9%
Other contributors	890	692	-198	-22.3%	1,376	749	-627	-45.6%
Total UK ODA	**13,306**	**14,552**	**1,246**	**9.4%**	**14,059**	**14,591**	**532**	**3.8%**

12. Further details on the grant equivalent methodology in ODA is provided in the reporting statistical directives[6] and via the OECD online calculator[4]. If you have any questions or would like to provide us with feedback on the ODA spend statistics, please contact us at: e-mail: statistics@dfid.gov.uk, , Telephone: 020 7023 0497.

Originally published in April 2019, updated with revised figures in December 2019.

[6] See https://one.oecd.org/document/DCD/DAC/STAT(2018)9/FINAL/en/pdf

Annex 1: Illustrative grant equivalent calculation examples.

Case 1: A loan of £1 million is provided to a multilateral development bank. The market rate of interest is 5% (i.e. the discount factor), and the loan is extended at 3.5% interest with the interest being paid every year, and the principal being repaid in a lump sum after 10 years (the maturity). The grace period is a year after which repayments start.

A	B	C	D	E	F	G
Date	Amount advanced	Amount repaid - principal	Amount paid - interest	Total repaid	Discount factor (1.05 per year compounded)	Discounted repayments (Present value)
1.1.2018	1,000,000				1.0000	
1.1.2019			35,000	35,000	1.0500	33,333.33
1.1.2020			35,000	35,000	1.1025	31,746.03
1.1.2021			35,000	35,000	1.1576	30,234.32
1.1.2022			35,000	35,000	1.2155	28,794.59
1.1.2023			35,000	35,000	1.2763	27,423.42
1.1.2024			35,000	35,000	1.3401	26,117.54
1.1.2025			35,000	35,000	1.4071	24,873.85
1.1.2026			35,000	35,000	1.4775	23,689.38
1.1.2027			35,000	35,000	1.5513	22,561.31
1.1.2028		1,000,000	35,000	1,035,000	1.6289	635,400.22
Total						**884,173.98**
Grant equivalent = amount advanced (B) minus total discounted repayments (G)						115,826
Grant element = grant equivalent /loan value =				115826/1000000 =	11.6%	

Case 2: A loan of £1 million is provided to a multilateral development bank. The market rate of interest is 5%, but the loan interest rate has been reduced to 2%. The rest of the loan terms are the same as in **Case 1** – i.e. full repayment of principal and interest is expected after 10 years.

A	B	C	D	E	F	G
Date	Amount advanced	Amount repaid - principal	Amount paid - interest	Total repaid	Discount factor (1.05 per year compounded)	Discounted repayments (Present value)
1.1.2018	1,000,000				1.0000	
1.1.2019			20,000	20,000	1.0500	19,047.62
1.1.2020			20,000	20,000	1.1025	18,140.59
1.1.2021			20,000	20,000	1.1576	17,276.75
1.1.2022			20,000	20,000	1.2155	16,454.05
1.1.2023			20,000	20,000	1.2763	15,670.52
1.1.2024			20,000	20,000	1.3401	14,924.31
1.1.2025			20,000	20,000	1.4071	14,213.63
1.1.2026			20,000	20,000	1.4775	13,536.79
1.1.2027			20,000	20,000	1.5513	12,892.18
1.1.2028		1,000,000	20,000	1,020,000	1.6289	626,191.52
Total						**768,347.95**
Grant equivalent = amount advanced (B) minus total discounted repayments (G)						231,652
Grant element = grant equivalent /loan value =				231652/1000000 =	23.2%	

Case 3: A loan of £1 million is provided to a multilateral development bank. The market rate of interest is 5%, the loan interest rate is 2%, the grace period is 2 years and full repayment of principal and interest is expected after 10 years.

A	B	C	D	E	F	G
Date	Amount advanced	Amount repaid - principal	Amount paid - interest	Total repaid	Discount factor (1.05 per year compounded)	Discounted repayments (Present value)
1.1.2018	1,000,000				1.0000	
1.1.2019				-	1.0500	-
1.1.2020			20,000	20,000	1.1025	18,140.59
1.1.2021			20,000	20,000	1.1576	17,276.75
1.1.2022			20,000	20,000	1.2155	16,454.05
1.1.2023			20,000	20,000	1.2763	15,670.52
1.1.2024			20,000	20,000	1.3401	14,924.31
1.1.2025			20,000	20,000	1.4071	14,213.63
1.1.2026			20,000	20,000	1.4775	13,536.79
1.1.2027			20,000	20,000	1.5513	12,892.18
1.1.2028		1,000,000	20,000	1,020,000	1.6289	626,191.52
Total						**749,300.33**
Grant equivalent = amount advanced (B) minus total discounted repayments (G)						250,700
Grant element = grant equivalent /loan value =				250700/1000000 =	25.1%	