How to prepare detailed Muskoka2 analyses of aid for RMNCH in a single country

Webinar recorded Tuesday 27 July, 2021

on behalf of the Countdown to 2030 Health Financing Data Analysis Centre

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with Peter Binyaruka & Josephine Borghi
Aim

To show how to prepare and use a Muskoka2 Country-Specific Excel Workbook to allow more detailed analyses of aid for RMNCH in individual countries

- This webinar is designed to follow two previous webinars from the Health Financing Data Analysis Centre – please watch them first!

- Future webinars will discuss domestic financing and equity
Overview of this webinar

• Muskoka2 Country-Specific Workbooks vs. Muskoka2 Global Workbook

• Walk through how to prepare a detailed Muskoka2 Uganda workbook (using OECD CRS website and Excel)
  • Preparing the Muskoka2 Country-Specific Excel Workbook
  • Downloading and preparing raw CRS data
  • Transferring the raw CRS data into the Muskoka2 Excel Workbook
  • Preparing analyses and figures

• Q&A
Raw data on external financing: the CRS

• The Organization for Economic Co-operation and Development maintains the Creditor Reporting System (CRS), the main source for external financing – or “aid” data

• Data are reported by:
  • 49 bilateral (i.e. country) donors
  • 42 multilateral donors (i.e. institutions such as UN agencies)
  • 36 private donors

• Relatively complete data for years 2002-19; more complete in more recent years

• 200,000 – 300,000 data points per year (!!!)

• Covers all sectors (not just health)

• The CRS categorises aid for the health, water and sanitation, and humanitarian sectors according to sub-sectoral areas . . . but NOT in ways that permit straightforward estimates of aid for RMNCH
Muskoka2 estimates of aid for RMNCH

- Muskoka2 is an algorithm applied to the CRS database
- Generates estimates of the monetary value of aid for:
  - Maternal and newborn health
  - Child health (age 1-59 months)
  - Reproductive health (of non-pregnant women)
- Includes aid directed towards reproductive health and family planning, but also relevant shares of aid directed towards HIV, malaria, TB, basic health care, health systems, water and sanitation, humanitarian aid, and general budget support → recognises the value of the wider health system in promoting RMNCH
- Accessible as an Excel workbook
The Muskoka 2 Global dataset

- Muskoka2 “Global” dataset includes key data for all recipients (i.e. millions of records) for the 2002-19 period, summarized into an Excel dataset of ~230,000 records

- **Indicators produced:**
  - Total aid for . . .
  - RH
  - MNH
  - CH
  - RMNCH
  - Aid per relevant population:
    - Aid for RH per woman of reproductive age
    - Aid for MNH per birth
    - Aid for CH per child under 5

- **Estimates disaggregated by:**
  - Year
  - Donor
  - Recipient country or region
  - Sub-sectoral “purpose”
  - Flow type (ODA* grants, ODA* loans, private)

- **All values reflect disbursements in constant US $**

*ODA=Official development assistance
The Muskoka 2 Country dataset: Uganda

- Slight variation on the global dataset, allowing more in-depth exploration

- Includes all records and all variables from the CRS for a single recipient (i.e. Uganda):
  ~32,000 records for Uganda for the period 2010-19
  - Vastly fewer records than the ~230,000 records in the full Global Workbook
  - However, contains many additional variables, including:
    - Project title
    - Short description
    - Long description
    - Channel of delivery (Recipient gov’t, local NGO, INGO, UN, etc)
    - Modality (Project, basket funds, sector budget support, general budget support, etc)

- NB: Muskoka2 estimates designed to be reasonably accurate for individual countries and years, but not down to the level of individual projects
Where to find the Muskoka2 datasets
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The Health Financing Data & Analysis Centre (DAC):
- Monitors global aid flows for reproductive, maternal, newborn and child health (RMNCH) using the Muskoka2 algorithm, an automated algorithm that estimates levels of aid for reproductive health, maternal and newborn health, and child health.
- Undertakes country-level tracking and analysis of financing for health and RMNCH.
- Considers new methods for more efficient and timely tracking of domestic funds at country level.
- Provides capacity development for country-level financial analysis.
- Creates a depository of financing data for use by countries and funding agencies.

Key indicators related to financing are available in Countdown country profiles.

This webinar presents an overview of the health financing analysis for RMNCH.

Background Resources and Materials

- WHO Global Health Expenditures Database
- AidData
- Creditor Reporting System (CRS) of the OECD

Tools & Resources
Where to find the Muskoka2 datasets
Where to find the Muskoka2 datasets
Steps for preparing the Muskoka2 Uganda Workbook

1. Prepare the Muskoka2 Country-Specific Excel Workbook to receive the detailed CRS data on Uganda
2. Download and prepare raw CRS data on Uganda
3. Transfer the prepared CRS data on Uganda into the Muskoka2 Excel Workbook and implement Muskoka2 algorithm
4. Prepare analyses and figures
Changes to the Muskoka2 Global Workbook

• Update the “Start” tab

• Delete yellow “Core contributions” tab – it cannot be used for analyses of individual countries

• In the yellow “Analysis-reg + unspec” yellow tabs, copy and paste values for the pivot tables

• In the green “CRS detailed data” sheet, delete all the data (being careful NOT to delete the yellow formulae cells in row 4)
### 1. Prepare the Muskoka2 Country-Specific Excel Workbook

The table below contains data for different countries and years. The table includes columns for 'Year', 'Country', 'Regional dish', 'Donor type', 'Country income group', 'Regional dish constant [USD millions]', 'Low inc', 'Lower mi', 'Middle mi', 'Upper mi', 'Regional mi', 'Country Income group', 'Regional dish constant [USD millions]', 'Low inc', and 'Lower mi'. The data should be updated to reflect current values.

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Regional dish</th>
<th>Donor type</th>
<th>Country income group</th>
<th>Regional dish constant [USD millions]</th>
<th>Low inc</th>
<th>Lower mi</th>
<th>Middle mi</th>
<th>Upper mi</th>
<th>Regional mi</th>
<th>Country Income group</th>
<th>Regional dish constant [USD millions]</th>
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</thead>
<tbody>
<tr>
<td>2019</td>
<td>Austria</td>
<td>Medical serv.</td>
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<td>Low inc</td>
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</tbody>
</table>

**Note:** The table above illustrates the structure of the workbook. Each row represents a different entry for a specific year, country, and regional dish, along with various financial and donor-related data. To update the workbook, ensure all entries are correctly updated to reflect the latest data available.
1. Prepare the Muskoka2 Country-Specific Excel Workbook
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Summary

• We have just:
  • Prepared the Muskoka2 Global Workbook to receive the detailed Uganda data

• Next:
  • Download the raw data from the CRS as .txt files
  • Unzip the .txt files
  • Import the .txt files into Excel and save as Excel Binary workbooks
  • Delete data for all recipients except Uganda to reduce size of datasets

2. Download and prepare raw CRS data on Uganda
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Good data management practice:
Save these .txt files in unedited format as a backup.

These .txt files need to be opened in Excel and saved as Excel files, which we edit.

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Click cell A2, Hold down Shift + click on the right arrow until the final column with data is selected.
Click cell A2, Hold down Shift + click on the right arrow until the final column with data is selected

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| 2019 | 2 Belgium | 22 Belgian Investment Company for Developin | 285 Uganda | 10003 South of S | 10015 LDCs | 14 Other Offi | 1 | 21 | 421 | 0.830345 | 0.94548 |

2. Download and prepare raw CRS data on Uganda
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This is likely to be more records than for any earlier years.

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Summary

• **We have just:**
  • Imported the .txt file with all countries’ data for 2019 into Excel
  • Filtered the data so that Uganda’s data is **NOT** shown
  • Deleted data for all other recipients, reducing the file from 292,716 records to 4,030 records
  • Added two blank rows to the top (reasons will become clear later!)
  • Saved as Excel Binary Workbook

• **Next:**
  • Repeat all of these steps for each year of data, 2010-2018!
2. Download and prepare raw CRS data on Uganda
Summary

• We now have:
  • 10 Excel workbooks, each one containing all records in the CRS for all sectors for one year (for the years 2010-19)

• Next:
  • Combine 10 files into a single file (on a single sheet)
    ➢ Need to double check that the columns for all the separate years’ data files are in the same order
  • Rearrange columns so that they are in the correct order to paste into the Muskoka2 Excel workbook
2. Download and prepare raw CRS data on Uganda
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Open CRS 2019 workbook

Select and copy all of row 3

2. Download and prepare raw CRS data on Uganda
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<th>Year</th>
<th>DonorCode</th>
<th>DonorName</th>
<th>DonorAgency</th>
<th>DonorAcronym</th>
<th>CRSID</th>
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</table>
2. Download and prepare raw CRS data on Uganda
Copy formula in cell A1 across row 1 to CM1

Obviously, all the cells in row 3 = row 2 in this workbook!

2. Download and prepare raw CRS data on Uganda
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</tbody>
</table>

Paste rows 1 and 2 from the CRS 2019 file into (the blank) rows 1 and 2 of the CRS 2018 file.
2. Download and prepare raw CRS data on Uganda
Check that the formula in A1 is referring to the correct cells.

→ It should be checking whether the column headers for CRS 2018 in row 3 match the column headers from CRS 2019, which have just been pasted into row 2.

2. Download and prepare raw CRS data on Uganda.
Check that there are only 1s in row 1 → otherwise, it will be necessary to re-order the columns in CRS 2018 so that they match the column order in CRS 2019.

Now repeat this column checking exercise for CRS 2010 – CRS 2017!

2. Download and prepare raw CRS data on Uganda.
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<table>
<thead>
<tr>
<th>Year</th>
<th>Donor Code</th>
<th>Donor</th>
<th>Agency Code</th>
<th>Agency</th>
<th>Project Code</th>
<th>Project Number</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Norway</td>
<td>2.0E+09</td>
<td>Q2A</td>
<td>15-04</td>
<td>3</td>
<td>285</td>
</tr>
<tr>
<td>2017</td>
<td>302</td>
<td>United States</td>
<td>2.0E+09</td>
<td>Millennium Challenge Corporation</td>
<td>Q2A-12-07</td>
<td>3</td>
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</tr>
<tr>
<td>2017</td>
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<td>Swedish International Development Agency</td>
<td>PK17/123C</td>
<td>3</td>
<td>285</td>
</tr>
</tbody>
</table>

2. Download and prepare raw CRS data on Uganda
Summary

• **We now have:**
  
  • 10 Excel workbooks, each one containing all records in the CRS for Uganda for all sectors for one year (for the years 2010-19)
  
  • We have checked that the columns are all identical and in an identical order across all the years

• **Next:**
  
  • Combine 10 files into a single file (on a single sheet)
  
  • Rearrange columns so that they are in the correct order to paste into the Muskoka2 Excel workbook
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Summary

• We now have:
  • A single Excel workbook containing all 31,695 records in the CRS for Uganda for all sectors and all flow types for the years 2010-19

• Next:
  • Rearrange columns so that they are in the correct order to paste into the Muskoka2 Excel workbook

3. Transfer the prepared CRS data on Uganda into the Muskoka2 Excel Workbook and implement Muskoka2 algorithm