Guide to the New Generations & Gender Contextual Database

Version date: 09 July 2019

Table of Content

1. Introduction ........................................................................................................................ 2
2. The new list of indicators .................................................................................................... 2
3. The new online platform ..................................................................................................... 3
   3.1 Selecting an indicator ................................................................................................. 3
   3.2 Metadata .................................................................................................................... 6
   3.3 Making graphs ............................................................................................................ 8
   3.4 Export outputs .......................................................................................................... 9
4. Looking ahead .................................................................................................................... 9
1. Introduction
The Contextual Database (CDB) of the Generations & Gender Programme (GGP) offers open access to comparable, aggregated contextual data for 60 European, North American and Asian countries. The data can be used in macro-level analyses or in conjunction with the individual level data of the Generations & Gender Surveys (GGS). The database is available here: https://www.ggp-i.org/data/ggp-contextual-database/.

The CDB was established in the early 2000’s under the coordination of the Max Planck Institute of Demographic Research (MPIDR)¹. The French National Institute for Demographic Studies (INED) maintains the database since 2018¹. The list of contextual indicators was revised, and a new online platform was launched. This guide describes how these developments came about. It shows the renewed content and the key functionalities of the new online tool. It ends with an outlook on future development.

The renewed CDB aims to provide a unique forefront tool for researchers interested in demographic trends in a global perspective. To this end, it allows to produce tabulations and graphs of key up-to-date contextual indicators about demographic, economic, gender, and welfare-related issues.

2. The new list of indicators
Under the MPIDR coordination, data collection for countries participating in the GGP was carried out by partner institutions in the respective countries. It contained close to 250 indicators, including national, sub-national indicators and descriptions of policies. The CDB coordination team complemented these data collections with different sources, including international databases of supranational organizations or research consortiums, and made them available in an online platform². As a result, for the same indicator a variety of (national and international) sources were used, depending on the countries and time periods.

Since the French National Institute for Demographic Studies (INED) took the lead in 2018, a set of 35 “core” indicators were identified for regular updating. The data is now compiled exclusively from international databases and is restricted to country level (sub-national data and descriptions of policies are no longer gathered). We try to use only one source for each indicator. This allows rapid update of the data with limited resources.

The new list of core indicators was chosen in collaboration with the GGP Central Coordination team and in consultation with a panel of demographic researchers. The following criteria were used: (1) indicators should help explain or understand demographic trends; (2) indicators should be widely available and therefore be easily updated (ideally annually); (3) indicators should be available for a large number of countries as opposed to only European Union member states or only OECD countries.

The new list of core indicators draws from three main domains of macro-level indicators that, broadly speaking, help explain or understand demographic trends – especially in the context of developed countries with low fertility in a global perspective:

¹ See the database website at https://www.ggp-i.org/data/ggp-contextual-database/ for the list of people involved.
² For more information see:
- Economic domain: e.g. the influence of economic development on fertility, or the impact of unemployment on the life course trajectories of young adults;
- Gender domain: e.g. the impact of gender equality on fertility;
- Welfare and education domain: e.g. the role of social protection and education systems on fertility.

In addition, a fourth domain includes summary demographic indicators. To help identify the indicators to be included in the core list, we consulted the Global Sustainable Development Goals Indicators Database (https://unstats.un.org/sdgs/indicators/database/), as well as other international databases. For some indicators, e.g., the crude divorce rate and the global gender gap index, we provide longer time series than those available in other international databases. For these indicators, our offer is, therefore, unique.

The indicators from the pre-2018 platform (the one developed by the MPIDR) not included in the new core list may still be found in “The Generations & Gender Contextual Database Archive”. Most of these indicators were prepared between 2010 and 2011. This group of indicators will no longer be updated. It includes data at the national level, and, wherever possible, at the sub-national level that can be linked to the GGS data.

In addition to quantitative indicators, we include a collection of complementary sources of national and sub-national contextual indicators and of “qualitative” descriptions of national policies. This list will be completed in the second half of 2019.

### 3. The new online platform

In order to transfer the database to INED, we had to implement a new online platform for technical reasons. Instead of developing a tailor-made product, we preferred a software already in use in other institutions. Five software were considered and tested (i.e., Beyond 2020, Nesstar, Eurostat Data Explorer, .Stat and PX-WEB). We decided to implement PX-Web (https://www.scb.se/en/services/statistical-programs-for-px-files/), the software developed by Statistics Sweden and used by other national statistical institutes (e.g., Statistics Norway, Statistics Lithuania), and international organizations (e.g., UNECE database). This software is free (also the updates) and it is compliant with international standards. We could get in contact with the users’ community and learn from their experience. PX-Web is based on PC-Axis file formats, which consist of keywords that describe the content of the data. The following sub-sections offer an overview of main functionalities of PXWeb software.

#### 3.1 Selecting an indicator

The main menu offers an easy access to key contextual indicators sorted by topic (i.e., demography, economy, gender, welfare and education), and to the “The Generations & Gender Contextual Database Archive” section (figure 1).

![Fig. 1 - Select a database](image)

Once users have selected a database, they can obtain the data in three steps.
Step 1 “Choose table”: Select from an expanded list of contextual indicators and/or type to search for it (figure 2).

Step 2 “Choose variable”: Choose for which countries and other relevant variables (e.g., sex and year) the indicator should be loaded (figures 3 and 4).

It is possible to select geographic classifications (figure 4) following the code used in the GGP survey to identify the place of residence of an interviewed person. This makes it easy to match extracted macro data with the GGP survey data. In addition to the GGP codes, NUTS and OECD coding schemes are available. In “The Generations & Gender Contextual Database Archive”, also the German codes AGS (Amtlicher Gemeindeschlüssel) are available (for German sub-national levels only).
Two summary tables are also available, one for the country level indicators (called “ReferenceAreasCountries”) and another one for the regional level indicators (called “ReferenceAreasRegions”), containing all the geographic entities covered in the CDB and the corresponding geographic codes (figure 5). These tables are available for download in XLS in the “About table” section. In this table, the variable “Identifier” is a numeric identifier specifically created for the CDB. This identifier also appears in certain types of exports from the database (e.g., XLSX). Through this variable, it is possible to merge the “ReferenceAreas” tables to the exports from the database. This will allow having, for the exported indicator, all the geographic codes systems at the same time.

---

3 This is produced through an algorithm associating two digits for each NUTS (or OECD when NUTS is not available) geographical level. For example, for Paris NUTS 3, the CDB identifier is 20 02 01 02 (i.e., “20” for NUTS 0 “France”, “20 02” for NUTS 1 “Île de France”, “20 02 01” for NUTS 2 “Île de France”, and “20 02 01 02” for Paris NUTS 3).
From the “Select variable” screen a variety of icons are available to help choose variable values:

- Opens a new page to search for specific values; from this page, it is possible to search for values or for “codes” (which stands for CDB geographic identifier)
- Select all values
- Deselect all values
- Sort ascending
- Sort descending
- Search value from groups, i.e., from geographic classifications

Another search functionality available for each variable, with the option of limiting the search to the beginning of rows.

**Step 3 “Show table”:** Show the results, customize your selection and table settings, save the table, create graphs, etc. (figure 6).

![Fig. 6 – Result table of an indicator selection.](image)

**3.2 Metadata**

The CDB is rich of metadata on each indicator. The main information (i.e., source(s) used, citation guidelines and indicator definition) pops up in a separate window as soon as we pass from step 2 to step 3 of the selection process (section 3.1). By clicking on the “About table” section (figure 7) users can access the whole information. This includes: contact and general information (e.g., unit, reference time, creation date), and footnotes, i.e., source(s) used, relevant web links, citation guidelines, indicator definition, link to the excel file including all the reference areas and their ID codes, notes related to specific data entries. The latter
includes metadata on e.g., breaks in series, geographic coverage, calculations. These notes can also be accessed by clicking on the relevant data entry (figure 8). All these metadata can be exported together with the selected data in the output file (figure 11).

**Fig. 7 – Indicator metadata available by clicking on “About table”**

**Fig. 8 – Window documenting the notes on a specific data entry**
The metadata linked to each data entry of the group “The Generations & Gender Contextual Database Archive” also include information on the data source used (just like in the pre-2018 platform). Indeed, in this group, for the same indicator data sources often vary, depending on the country and/or the year. For some indicators of this group, the metadata for each data entry are only provided in a downloadable file available in the “About table” section. When we used data provided by GGP national teams, we also indicate the list of National Data Collectors.

3.3 Making graphs

Users can choose to visualize the data in a variety of graphic options, e.g. bar charts (figure 9) and line charts (figure 10).

![Customize the charts (e.g., title, height, label orientation)](image)

**Fig. 9 – Example of a bar chart**

![Global Gender Gap Index by Country (Engl. Name/Nat. Name) and Year](image)

**Fig. 10 – Example of a line chart**
3.4 Export outputs
A variety of table formats is available for saving selected tables. This includes: CSV, PX-file, XML, XLSX, etc. The majority of exports also include indicator metadata and footnotes, as well as the CDB numeric ID associated to each geographic entity (figure 11).

![Fig. 11 – Extract of an XLSX file exported from the new CDB](image)

4. Looking ahead
The new “core” list of indicators will be updated at the beginning of each year. We are also open to enrich this list with new indicators, especially following the needs of researchers using GGS data. The new round of GGP surveys, that will start in the 2020’s, will implement a new questionnaire. This may bring up the need for new contextual indicators. Similarly, if necessary, we will extend the geographic coverage of the CDB so to include new countries that will carry out the GGP survey.

In order to improve the database we particularly welcome feedbacks from users. Please address your feedbacks to arianna.caporali@ined.fr.