

2022 GLOBAL DEBT MONITOR

Highlights

- Global debt fell 10 percentage points of GDP in 2021, the largest one-year fall in the last 70 years, to 247 percent of GDP. In U.S. dollars, global debt reached 235 trillion last year.
- Public debt dropped to 96 percent of GDP, supported by the economic rebound and high inflation.
- Non-financial private debt declined to 153 percent of GDP in 2021, driven by lower corporate debt.
- This is the inaugural edition of the Global Debt Monitor. It discusses key trends in public and non-financial private debt worldwide based on the 2022 Update of the IMF Global Debt Database.

Global Debt Developments¹

Total world debt (public plus non-financial private debt stocks) declined 10 percentage points of GDP in 2021, to 247 percent of GDP (US\$ 235 trillion). This follows the largest one-year increase in global debt in 2020, when it rose 29 percentage points of GDP. The fall in debt accounted for one third of the increase in 2020 (Figure 1).

The world's public debt fell from 100 percent of GDP in 2020 to 96 percent of GDP in 2021, supported by strong real GDP growth, high inflation, and the withdrawal of COVID-19 fiscal support measures (Table 1).

Meanwhile, world's non-financial private debt dropped from 160 percent of GDP in 2020 to 153 percent of GDP in 2021, driven by lower corporate debt (Table 2). The drop in corporate debt (4.2 percent of GDP) was larger than that of household debt (1.4 percentage points).

The debt changes were heterogeneous across country groups:

- The largest decline in debt was among *advanced economies* (AEs). Total debt declined on average by 10 percentage points of GDP, to 292 percent of GDP in 2021, driven by similar falls in public and

private debt-to-GDP ratios. The latter was driven by a drop of 4 percentage points of GDP in non-financial corporate debt. Household debt fell by 2 percentage points of GDP.

- The fall in debt among *emerging markets* (EMs) was driven by private debt. Total debt-to-GDP fell, on average, 7 percentage points to 192 percent of GDP in 2021, matched by a reduction of similar size in private debt to 130 percent of GDP. EMs' public debt remained broadly stable around 64 percent of GDP. However, these ratios are heavily influenced by China. For the group of emerging markets excluding China (EMs ex-China), public and private debt fell, respectively, 4 and 6 percentage points of GDP. As a result, total debt in EMs ex-China fell to 130 percent of GDP in 2021.
- Contrary to other countries, total debt increased in *low-income developing countries* (LIDCs) to 88 percent of GDP in 2021. Public debt remained close to 49 percent of GDP while non-financial private debt-to-GDP ratio rose, on average, 2 percentage points to 40 percent. (See Tables 1 and 2 for debt ratios since 2007.)

¹ Prepared by Roberto Perrelli (team leader), Youssouf Womer, and Chenlu Zhang, with assistance from Meron Kiendrebeogo, Virat Singh, Zhonghao Wei, Andrew Haile, and under the guidance of Paulo Medas.

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Global Debt Drivers

The decline in the world's debt-to-GDP ratios was chiefly driven by a sharp rise in nominal GDP in the largest economies. While fiscal deficits declined in 2021, as many countries withdrew fiscal support to firms and households and collected more revenues, they remained relatively large and continued pushing public debt up in all country groups ([October 2022 Fiscal Monitor](#)). What drove debt ratios down was mainly rising nominal GDP. For instance, real GDP growth helped to reduce G-20 public debt on average by near 4½ percentage points of GDP while high inflation pushed debt ratios down by about 5 percent of GDP. Public debt in 2021 was above 2019 in all income groups (Figure 2).

Likewise, exceptional growth and inflation rates helped to reduce private sector debt around the world. For instance, among G-20 countries, on average, the economic rebound shaved off near 7 percent of GDP while inflation pushed debt downwards by more than 6½ percentage points of GDP, partly compensating for the rise in 2020 (Figure 3). The exceptional impact of growth and inflation during the COVID-19 pandemic becomes more evident when we contrast it with the historical distributions of their joint contributions to debt. Prior to the pandemic, these distributions were narrower and closer to zero. During 2020 they widened and shifted upwards, increasing debt-to-GDP ratios. In 2021, they moved in the opposite direction but still with large variation within and across country groups (Figure 4).

Deleveraging in Household and NFC Debt

Private debt patterns diverged substantially between AEs and EMs. For instance, in the decade prior to the COVID-19 pandemic, households in AEs experienced a gradual but consistent deleveraging process that brought their debt down from 81 percent of GDP in 2009 to 73 percent of GDP in 2019 (Figure 5). Meanwhile, household debt in EMs continued

growing, reaching 41 percent of GDP at the pandemic onset. Albeit starting from a low base, household debt in China more than doubled, ending 2019 at 56 percent of GDP.

During the same period, non-financial corporate debt in advanced economies remained high, ending 2019 at 92 percent of GDP—1 percentage point of GDP higher than in 2009. In contrast, corporate indebtedness in EMs went up from 64 percent of GDP in 2009 to 90 percent of GDP in 2019 (Figure 6). The steady increase in EMs non-financial corporate debt between the Global Financial Crisis and the pandemic onset was driven by China, where it rose around 30 pp, reaching 134 percent of GDP in 2019.

Debt Transparency

Fiscal transparency – the comprehensiveness, clarity, reliability, timeliness, and relevance of public reporting on the past, present, and future state of public finances – is critical for effective fiscal management and accountability.² One element is debt transparency, which is fundamental to promoting sustainable borrowing and lending practices and provide a comprehensive view of government's outstanding debt and contingent liabilities. It informs debt restructuring processes and supports accountability for the use of public resources.

The debt landscape has become more complex, with the increased diversity of creditors, the emergence of new forms of lending, and the wider use of confidentiality clauses ([Suarez et. al., 2021](#)). The adequacy of debt reporting and disclosure is not keeping up with debt complexity. Current legal frameworks have few provisions for debt disclosure and reporting. Some countries have a narrow set of instruments in their legal definition of debt, covering only securities and loans and leaving out more complex debt instruments. In many countries, especially LIDCs, only central government debt is

² See IMF's [Fiscal Transparency Code](#) (2019).

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reported, leaving out important public debt issuers such as state-owned enterprises, local and subnational governments, and extrabudgetary bodies.

More generally, inadequate reporting on debt, as well as other contingent liabilities, undermines good fiscal management and accountability. Lack of transparency prevents an appropriate assessment of risks, undermines investor confidence, and increases borrowing costs. In some cases, unreported debt represents a large fraction of GDP, posing risks to debt sustainability.

The IMF Global Debt Database (GDD) contributes to improve debt transparency at the global level. It provides a timely and accurate disclosure of debt to the general public, for a wide range of countries. It also allows for cross-country comparison given we strive to use common standards as much as data allows. This unique dataset covers private and public debt for 190 countries, with information dating back to the 1950s. It offers multiple debt series with different coverages, and more than doubles the number of countries of existing private debt datasets. The database is subject to regular checks through bilateral consultations with country officials and IMF country desk.

Frequently Asked Questions

What is the IMF Global Debt Database (GDD)?

The IMF Global Debt Database (GDD) is a dataset covering private and public debt for virtually the entire world (190 countries) dating back to the 1950s. The GDD is the result of a multiyear investigative process that started with the October 2016 Fiscal Monitor, which pioneered the expansion of private debt series to a global sample.

Where can I find the original paper that conceived the GDD?

Please refer to Mbaye, S., Moreno-Badia, M., and K. Chae. 2018. [“Global Debt Database: Methodology and Sources,”](#) IMF Working Paper, International Monetary Fund, Washington, DC.

How the GDD differs from other debt databases?

It differs in three major ways. First, where most debt datasets either provide long series with a narrow and changing definition of debt or comprehensive debt concepts over a short period, the GDD adopts a multidimensional approach by offering multiple debt series with different coverages, thus ensuring consistency across time. Second, it more than doubles the

cross-sectional dimension of existing private debt datasets. Finally, the integrity of the data has been checked through bilateral consultations with officials and IMF country desks of all countries in the sample.

The GDD reports data for both public and private debt covering the largest number of countries (compared to other databases) and the longest time dimension. The 2022 update covers 190 countries for the period 1950-2021. Adequate debt data are typically lacking for many emerging market and low-income countries. This is particularly the case for SOE and private sector debt. The GDD provides the largest coverage of public and private corporations debt data for these countries.

Existing datasets focus either on country coverage, favoring exhaustivity of the debt definition, or on time coverage, prioritizing how far back can we go. By focusing on the post-WW2 period, the GDD ensures data homogeneity both over time and across countries compared to alternative datasets with longer time series. Moreover, the GDD relies on primary sources, while alternative databases, especially those produced by researchers, rely on secondary sources to collect debt data.

The reported debt series are compiled without recourse to extrapolation, interpolation, or auxiliary regressions. Original data series are adjusted for differences in definition and coverage whenever feasible.

How often is the Global Debt Database updated?

The GDD is updated annually in December of the following year of latest data availability. So, for instance, the 2021 update is launched in December 2022. This is done to ensure that the highest amount of accuracy. For example:

- Advanced economies typically finalize their annual data 6 months after the end of each year. Emerging Markets may take up to 9 months to finalize their annual data. Low-Income Developing Countries and Frontier economies can take up to a whole year, or even two, in some cases, to finalize their end of year data.
- In some instances, the data sources the GDD draws upon to collect both the latest and the revised historical series are no longer updated by national authorities or institutional databases, like the Bank for International Settlements (BIS), Eurostat, International Financial Statistics (IFS). We strive to evaluate viable alternatives and methods to update the series to the latest available year.

Which public debt series are available in the GDD?

The public debt series corresponds to gross debt and aims at covering all debt instruments owed by the general and/or central government, as defined in the IMF's Public Debt Statistics: Guide for Compilers 2011. The GDD covers central government debt, general government debt, and non-financial public sector debt. Public debt refers to gross debt owed by the general and/or central government, as defined in the IMF's Public Debt Statistics: Guide for Compilers 2011. It covers the following instruments: (i) loans; (ii) debt securities; (iii) currency and deposits; (iv) insurance, pension, and standardized guarantee schemes; (v) other accounts payable; and (vi) and special drawing rights. SOE debt is in most cases excluded from the GDD, except in countries where public debt series cover the nonfinancial public sector/public sector (in which

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cases, the debt of SOEs is included in the public sector) or private debt series come from financial accounts (in which case, SOEs are included in private debt series).

Which private debt series are available in the GDD?

The GDD reports on household and non-financial private corporate debt. Private sector debt is defined as the gross outstanding stock of all liabilities that are debt instruments, in line with the System of National Accounts 2008. Cross-border debt flows are considered. Comparability is achieved by making sure that each debt series refers to a single institutional unit. To ensure accuracy of the debt data, a comprehensive validation exercise is conducted with IMF country desks and officials. Data discrepancies are addressed by consulting country officials, statisticians, and other data compilers (e.g. BIS, OECD, World Bank).

How is public debt in the Global Debt Database calculated?

The GDD builds on the IMF's Historical Public Debt Database (HPDD) (Abbas and others, 2011) improving it along three dimensions. First, it reports separate series for general and central government debt. In addition, it includes data on the nonfinancial public sector and public sector (subject to data availability). Second, it fills in more than three-quarters of existing breaks in the HPDD series by relying on a wider range of sources and distinguishing between central and general government debt. The dataset has on average about fourteen more years of continuous series relative to the HPDD. Third, the GDD expands the HPDD's country coverage by ten—mostly low-income developing countries.

How is private debt in the Global Debt Database calculated?

The GDD's approach to compiling private debt statistics builds and improves upon the methodology developed by the BIS (Dembiermont, Drehmann, and Muksakunratana 2013). The original BIS sample was expanded to include 158 countries. Private debt is defined in as the gross outstanding stock of all liabilities that are debt instruments, in line with the System of National Accounts 2008. In practice only a handful of countries provide an exhaustive coverage of the above instruments, dating back to the 1950s. Adding to this problem, financial innovation and the emergence of new debt-like obligations and types of creditors (e.g. shadow banking) may not be captured in official statistics. Thus, we also compile an alternative measure of private debt that focuses on the core debt instruments, i.e., loans and debt securities. This narrower definition of private debt mirrors that of the BIS's database and helps to expand the GDD's coverage considerably.

How does the GDD calculate the aggregate debt to GDP ratio for a country group or for the world?

For any given year, the aggregate debt-to-GDP ratio for a country group is computed as a GDP-weighted average of individual countries' debt-to-GDP ratios. For example, let d_i denote the debt to GDP ratio of country i and d the aggregate debt ratio for the country group, and Y_i^{USD} refer to each country's GDP converted in U.S. dollar using the period average exchange rate. Then:

$$d = \sum_i d_i \frac{Y_i^{USD}}{\sum_i Y_i^{USD}}$$

In other words, if A_i is the period average exchange rate, the aggregate debt ratio can be expressed as

$$d = \sum_i \frac{D_i}{Y_i} \frac{Y_i A_i}{\sum_i Y_i A_i}$$

Using the GDP-weighted average is one of the reasons why adding up all countries' debt ratios does not necessarily give the global ratio. Unless individual countries have equal weights ($d_i = d_j, \forall i \neq j$), the sum of individual debt ratios will differ from the aggregate number ($\sum d_i \neq d$). Also, the aggregate debt ratio is not necessarily equal to total debt divided by total GDP, both expressed in USD ($d \neq \frac{D^{USD}}{Y^{USD}}$). The weighted average debt to GDP ratio can change due to changes in debt ratios and/or changes in GDP weights. Finally, depending on the influence of missing data, subcomponents of total debt (for example, private and public debt) may not sum up to the total.

What is data transparency and how the GDD enhance it?

Broadly speaking, debt transparency is the timely disclosure or reporting of debt to the general public. It is the knowledge of how much debt is owned by whom to whom and with which instruments and conditions. Improving data transparency has important benefits not only for creditors but also for borrowers. By providing timely and accurate disclosure of public and private debt to the general public, for wide range of countries, the GDD helps to enhance data transparency.

Who could we contact if we have questions about the GDD?

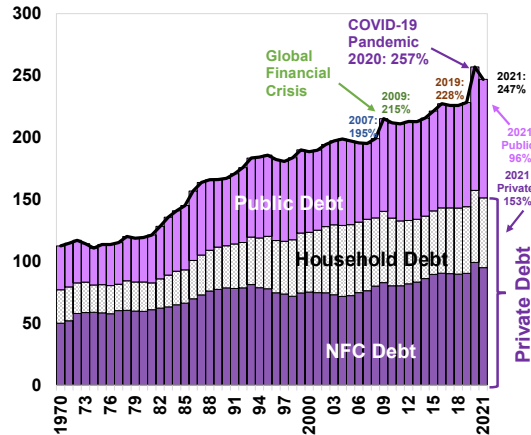
For further queries, please refer to the [GDD webpage](#) in the IMF website or send an e-mail to IMF-GDD@imf.org.

References

- Abbas, S. A., N. Belhocine, A. El-Ganainy, and M. Horton, 2011. [A Historical Public Debt Database](#). *IMF Economic Review*, 59(4) 717–42.
- Dembiermont, C., M. Drehmann, and S. Muksakunratana, 2013. [How Much Does the Private Sector Really Borrow? A New Database for Total Credit to the Private Non-Financial Sector](#). *BIS Quarterly Review*, March, pp. 65-81.
- IMF, 2019, [Fiscal Transparency Code](#). Washington, DC: International Monetary Fund.
- Mbaye, S., Moreno-Badia, M., and K. Chae. 2018. ["Global Debt Database: Methodology and Sources,"](#) IMF Working Paper, International Monetary Fund, Washington, DC.
- Suarez, K. V., K. Alex-Okoh, and G. L. Pardo. (2021). [Legal Foundations of Public Debt Transparency: Aligning the Law with Good Practices](#). IMF PFM Blog.

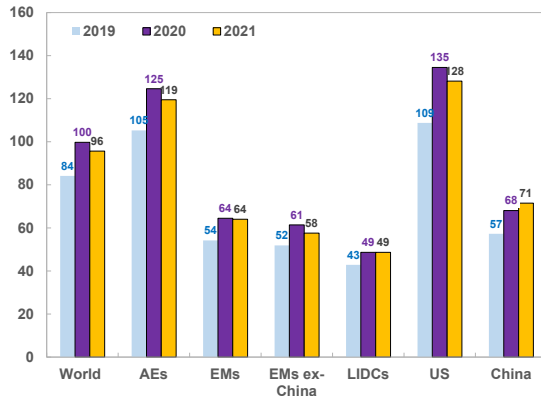
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Figure 1. Global Public and Private Debt, 1970–2021 (Percent of GDP, weighted averages)



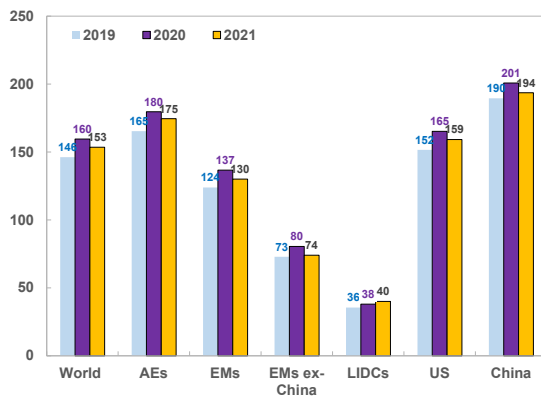
Source: IMF Global Debt Database, 2022

Figure 2. Public Debt Ratios by Country Group, 2019–2021 (Percent of GDP, weighted averages)



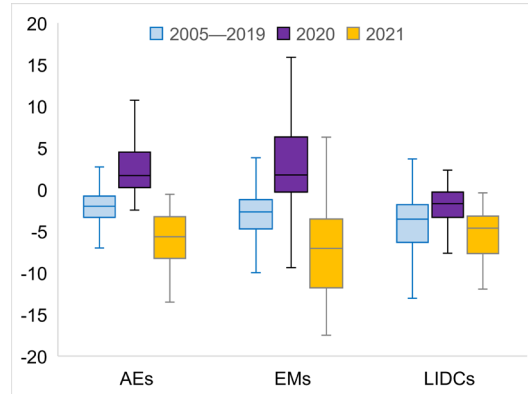
Source: IMF Global Debt Database, 2022

Figure 3. Private Debt Ratios by Country Group, 2019–21 (Percent of GDP, weighted averages)



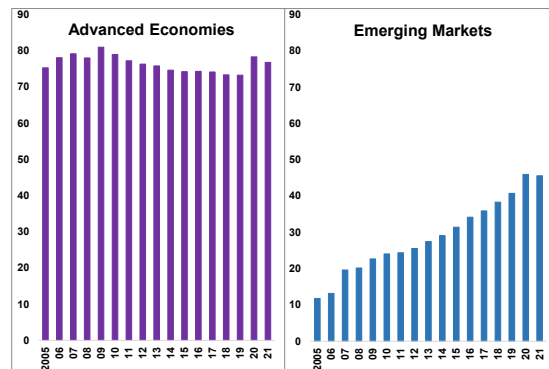
Source: IMF Global Debt Database, 2022

Figure 4. Historical Contributions of Growth and Inflation to Public Debt Changes, 2005–21 (Joint contributions to debt changes, in percent of GDP)



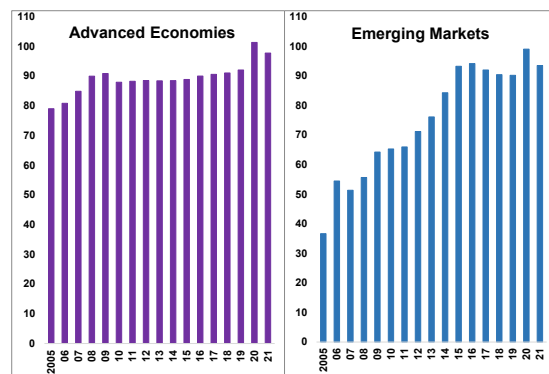
Source: IMF Global Debt Database, 2022; IMF World Economic Outlook; and staff calculations.

Figure 5. Household Debt in Advanced Economies and Emerging Markets, 2005–21 (Percent of GDP, weighted averages)



Source: IMF Global Debt Database, 2022

Figure 6. Non-Financial Corporate Debt in Advanced Economies and Emerging Markets, 2005–21 (Percent of GDP, weighted averages)



Source: IMF Global Debt Database, 2022

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Table 1. Global Public Debt, 2007–21
(Percent of GDP, weighted averages)

	2007	2008	2009	2010	Average 2011-18	2019	2020	2021
World	61.1	64.0	74.7	76.9	80.9	84.1	99.8	96.0
Advanced Economies	71.7	78.4	91.7	98.1	105.2	105.2	124.7	119.5
Euro Area	66.0	69.7	80.4	86.0	92.1	85.8	99.4	97.8
Japan	172.8	180.7	198.7	205.7	229.1	236.1	259.1	262.1
United Kingdom	41.4	49.0	62.8	74.0	84.1	83.8	102.5	102.8
United States	64.6	73.5	86.7	95.2	104.7	108.8	134.5	128.1
Emerging Market Economies	35.0	32.9	38.5	37.4	43.5	54.1	64.5	64.5
China	29.2	27.2	34.6	33.9	42.6	57.2	68.0	71.5
Others	36.7	34.7	40.0	38.8	43.9	51.7	61.5	58.5
Low-Income Developing Countries	28.8	27.1	29.6	28.0	34.7	42.7	48.6	48.5

Source: IMF Global Debt Database, 2022

Table 2. Global Private Debt, 2007–21
(Percent of GDP, weighted averages)

	2007	2008	2009	2010	Average 2011-18	2019	2020	2021
World	136.1	137.3	142.7	137.2	140.3	145.8	158.9	152.8
Advanced Economies	164.1	168.0	171.9	166.9	164.2	165.2	179.5	174.2
Euro Area	153.5	159.2	167.2	166.7	164.5	160.9	174.8	169.3
Japan	159.4	164.4	170.9	163.0	158.1	163.8	182.5	185.2
United Kingdom	175.6	185.7	185.4	177.7	163.2	154.8	169.1	157.8
United States	169.2	168.8	167.5	159.0	151.0	151.5	164.9	158.7
Emerging Market Economies	67.8	71.4	81.8	83.9	107.4	123.1	135.1	128.8
China	105.8	105.8	127.8	138.4	169.4	189.5	200.8	193.6
Others	56.2	59.9	62.8	62.0	69.0	71.5	77.5	71.0
Low-Income Developing Countries	19.4	21.4	24.3	24.0	27.6	34.4	36.9	38.9

Source: IMF Global Debt Database, 2022