

IMF Working Paper

A Historical Public Debt Database

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IMF Working Paper

Fiscal Affairs Department

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Abstract

This Working Paper should not be reported as representing the views of the IMF. The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

This paper describes the compilation of the first truly comprehensive database on gross government debt-to-GDP ratios, covering nearly the entire IMF membership (174 countries) and spanning an exceptionally long time period. The database was constructed by bringing together a number of other datasets and information from original sources. For the most recent years, the data are linked to the IMF World Economic Outlook (WEO) database to facilitate regular updates. The paper discusses the evolution of debt-to-GDP ratios across country groups for several decades, episodes of debt spikes and reversals, and a pattern of negative correlation between debt and growth.

Link to Data

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Keywords: Historical Debt, Public Debt, Gross Debt, Debt-to-GDP, Debt Database.

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I. INTRODUCTION

In the wake of the global financial crisis, there has been strong, renewed interest in the behavior of public debt, especially in advanced economies. However, empirical work on debt cycles and debt sustainability has been constrained in the past by lack of public debt datasets covering long time periods and a wide group of countries. The most widely used sources of cross-country public debt data are the International Financial Statistics (IFS) and Government Finance Statistics (GFS) databases published by the IMF; and the Global Development Finance (GDF) dataset of the World Bank. Other regional and institutional bodies, such as the Organization for Economic Cooperation and Development (OECD) and the UN Economic Commission for Latin America (ECLAC), also compile and make available sovereign debt data for various groups of countries. These sources, however, do not reach far back in time. In addition, although researchers have collected data on public debt, these databases were often limited to a small set of countries, did not cover a long time horizon, or were not subsequently updated.

This paper describes the compilation of the first truly comprehensive historical public debt database (HPDD) covering gross government debt-to-GDP ratios for nearly the entire country membership of the IMF and spanning a long time period. The HPDD covers 174 countries and starts from 1880 for most G-7 countries and a few other advanced and emerging economies, and from 1920 for additional advanced and emerging economies.² For low-income countries (LICs), data coverage generally starts in 1970. The HPDD was compiled by bringing together a number of other databases of individual researchers or institutional bodies, as well as information from official government publications and publications of the League of Nations and the United Nations. For the most recent years, data are linked to the IMF's World Economic Outlook (WEO) database, facilitating regular updates going forward. The definitions of debt and income variables are documented, along with the time and country coverage of the underlying datasets. The HPDD is available publicly in electronic format on the Fiscal Monitor Webpage of IMF.ORG.³

The paper is organized as follows. The next section surveys existing data sources on public debt. Section III describes the datasets and sources used in compiling the HPDD and the methodology for assembling information from these sources. Section IV provides summary statistics and assesses broad public debt trends by various country groupings. Section V discusses the way forward, in terms of expanding time and country coverage in the HPDD, as well as providing additional information on debt composition, and possibly, other fiscal indicators.

² Data start prior to 1880 for the United States (1791), the United Kingdom (1830), New Zealand (1860), Italy (1861), Canada (1867), and Japan (1870).

³ See <http://www.imf.org/external/ns/cs.aspx?id=262>.

II. REVIEW OF EXISTING DATA SOURCES

Obtaining comprehensive data and information on public debt is challenging. Data availability is limited along the dimensions of time, country coverage, and debt completeness. For example, data on *external* public debt for developing countries are generally available from the GDF dataset. However, the GDF does not cover advanced economies, and separates public and private components of external debt only for long-term debt. Similarly, the IFS database starts in 1970, but data are available for just a handful of countries in the early years. As noted, datasets of regional or institutional bodies cover public debt for subsets of countries and also typically start in more recent periods.

A number of researchers have compiled public sector debt data, either as an end goal or to address specific research questions. For example, to investigate the impact of domestic debt on growth, Abbas and Christensen (2010) collected data on 144 LICs and emerging economies for 1970–2007. They relied mainly on IFS data and focused on banking sector claims on central governments. Flandreau and Zumer (2004) analyzed the “first era of globalization” (1880–1913) and its evolution by collecting public debt-to-GDP data for 15 European countries and two Latin American countries, relying on a variety of data sources. Jaimovich and Panizza (2010) collected central government debt information for 100 countries, covering a diverse set of advanced, emerging, transition, and sub-Saharan African countries over the period 1970–2005. They relied on a range of sources and definitions with the goal of analyzing the residual term in debt dynamics not explained by overall deficits. Another notable contribution is Missale (2000), which covers 18 advanced economies during 1960–96. Finally, Reinhart and Rogoff (2009) analyzed episodes of debt cycles and financial crises for 70 countries spanning an exceptionally long time period, occasionally employing interpolations and other data transformations to build continuous data series. These series are available in “chartbook” form in Reinhart and Rogoff (2010).

Two other papers focus specifically on building sovereign debt datasets. Jeanne and Guscina (2006) collected data on emerging economy public debt, with details on the jurisdiction of issuance, maturity, currency, and indexation. The data cover 19 emerging economies during 1980–2002 and were compiled mainly from official publications, supplemented by information from questionnaires to country authorities and IMF data. Cowan, Levy-Yeyati, Panizza, and Sturzenegger (2006) constructed a database to highlight trends in the level and composition of public debt in the Americas, while analyzing debt dollarization. Their data cover 29 countries in the region, and for comparison, three economies from outside; the time coverage is 1980–2005.

The HPDD extends this body of work by compiling the widest available public debt data, in terms of countries covered and the time period, while preserving the data series as they were collected from original sources. The HPDD provides detailed documentation on coverage and sources, and the database is made available in electronic format. Finally, the HPDD will

be regularly updated through links to the IMF WEO database and supplemented with additional information, where available, to fill gaps.⁴

III. DATA SOURCES AND METHODOLOGY

This section describes the data sources used in compiling the HPDD and the methodology employed to construct continuous series, including the approach used to link country series from different databases and the treatment of breaks when transitioning from one series to another.

A. Data Sources

The dataset constitutes an unbalanced panel of 174 countries over the period 1791-2009.⁵ In constructing the dataset, we relied on various sources for series on debt, GDP, and debt-to-GDP ratios. These included statistical handbooks—for example, of the League of Nations and the United Nations—official government publications, and databases compiled by researchers and international organizations.

The HPDD aims to cover public debt at the general government level.⁶ The distinction between general and central government coverage, however, was difficult to ascertain further back in time, especially in relation to the treatment of extrabudgetary funds. Therefore, and given the lack of public debt data at the general government level for many countries, particularly in the earlier periods, debt data for the central government were used as an alternative.

Public debt data for the earliest period were compiled from official government publications for several G-7 countries, including for the United States (from 1791), the United Kingdom (from 1830), Italy (from 1861), Canada (from 1867), and Japan (from 1870). Data for other countries were also available during 1880-1913 from Flandreau and Zumer (2004). Government publications were used for other advanced economies, including New Zealand (from 1860) and the Netherlands (from 1914). In the period after 1914 through 1970, debt data were generally drawn from the League of Nations and/or the United Nations statistical

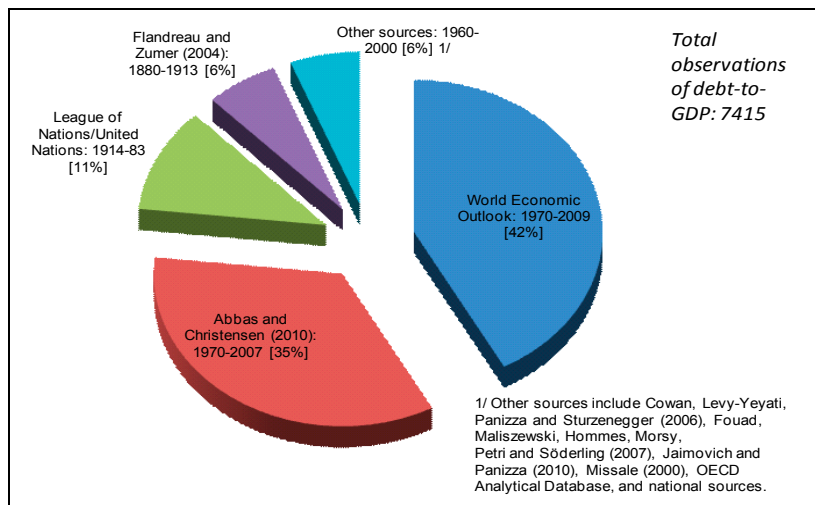
⁴ The IMF Statistics Department and the World Bank will launch an online Public Sector Debt Statistics Database in December 2010 based on the forthcoming Public Sector Debt Statistics Guide (see <http://www.tffs.org/PSDStoc.htm>). The database will facilitate timely, quarterly dissemination of contemporary debt data for the public sector, with countries participating voluntarily and encouraged to provide a detailed breakdown of debt information (e.g., by term, currency of denomination, and residency).

⁵ Data on public debt are not available for a handful of countries, including Afghanistan, Iraq, Kiribati, Kosovo, Timor-Leste, and Somalia.

⁶ The general government sector consists of all government units and all nonmarket nonprofit institutions that are controlled and mainly financed by government units, comprising the central, state, and local governments. The general government sector does not include public corporations or quasi-corporations.

handbooks. Besides Flandreau and Zumer (2004), other researcher databases were used, notably, Missale (2000), for some advanced countries during 1960–96, and Abbas and Christensen (2010), for a large number of developing and emerging economies after 1970. Other sources to fill gaps were Jaimovich and Panizza (2010), Cowen et al. (2006), and Fouad et al. (2007), the last of which covers 19 Middle Eastern and Central Asian countries during 1990–2005. The remaining data sources include the OECD (from 1980) and the IMF WEO from the mid-1990s, with the exception of a few emerging economies and LICs, for which WEO public debt data are only available from the mid-2000s. Figure 1 provides a breakdown of the share of all annual country observations obtained from these various sources.

**Figure 1. Distribution of HPDD Debt-to-GDP Observations by Data Source
(Share in total data-points)**



Source: HPDD.

For most countries, data on GDP were not available before 1914, and therefore, proxy variables, such as Gross National Product (GNP) or Net National Product (NNP), were used for computing debt ratios in the earlier years. From 1914 through 1980, GDP data for most countries were mainly sourced from Mitchell (2003).⁷ Government publications were also used for collecting GDP data for some countries, including Canada, Italy, Japan, the Netherlands, New Zealand, the United Kingdom, and the United States. For some Latin American countries, GDP data were taken from the Oxford Latin American Economic History database, which covers 1900–2000. GDP data were also drawn from the OECD for some member countries beginning in 1960. Starting from the mid-1990s, GDP data for almost all countries were taken from the IMF WEO.

⁷ For the United States, GNP data were available from Mitchell (2003) from 1791 through 1900.

A detailed description of the various databases and sources employed in constructing the HPDD, including country coverage, period coverage, variables and definitions, is provided in Appendix Table 1. Appendix Table 2 documents the data sources used, over different time horizons, for each country.

B. Methodology

In most cases, the independence date for each country (reported in Appendix Table 2) provided the relevant benchmark for our data collection efforts. In some cases, such as Finland, Dominica, Grenada, Papua New Guinea, New Zealand, Norway, Slovakia, and Zimbabwe, debt data were available for a few years in advance of independence years and appeared consistent with the trend in later years. These data were retained. Similarly, data were also available and included for Austria-Hungary (reported under Austria) and Czechoslovakia (reported under Czech Republic).

The dataset was compiled without recourse to extrapolation, interpolation, or auxiliary regressions. Given the range of sources used, differences in coverage and definitions arose. In many cases, transitions from one source to another were smooth. However, in other instances, there were either step differences between series or differences in the implied direction of the underlying debt ratio. In such situations, breaks were implemented in the HPDD. These are clearly highlighted in the dataset.⁸

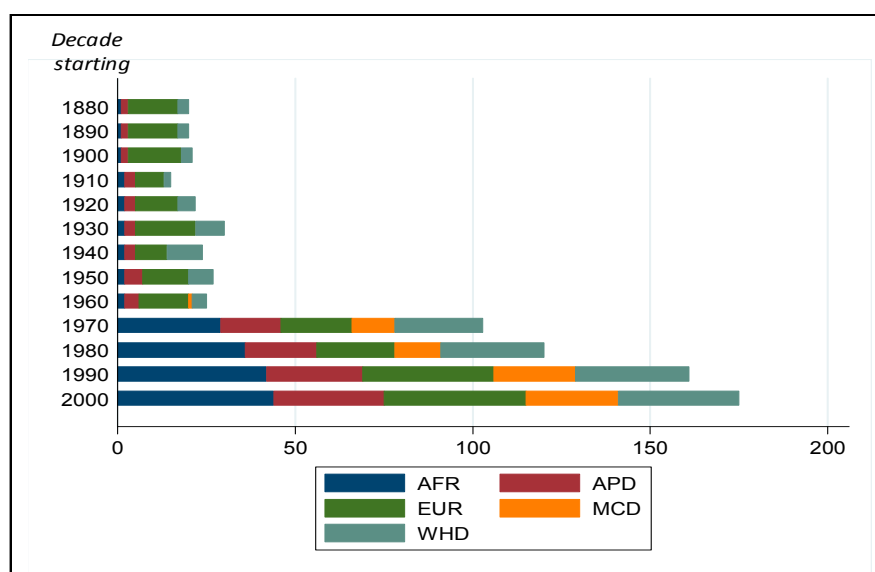
To facilitate comparison of various country groups over time, medians and PPP GDP-weighted averages were computed. We did not use simple averages, as they may result in indicators that are biased by outliers; some countries had episodes when debt ratios reached triple-or even four-digit levels. The construction of a PPP GDP series, going back more than 100 years, involved two datasets: (i) the IMF WEO database on PPP GDP which goes back about 30 years but has continuous coverage for all 174 countries; and (ii) the Maddison (2010) dataset on real GDP (based on international Geary-Khamis dollars) for about 140 countries over a long time period, but with gaps, and ending in 2008. In the HPDD, we used the Maddison series for 140 countries, and filled in the remaining countries from the WEO database through 2008. We estimated the 2009 data using growth rates from the WEO PPP GDP series.

⁸ A total of 81 breaks were implemented in 58 countries, with a maximum of four breaks per country for only a couple of countries. The majority of breaks were applied to minimize step differences in the debt ratio series when transitioning from one data source to another.

IV. DESCRIPTIVE STATISTICS AND PUBLIC DEBT TRENDS

The HPDD builds on the aforementioned data sources to provide exceptional country coverage, especially after 1970 (Figure 2).⁹ At the start of the 1880–2009 period, debt ratios could be identified for about 20 countries, mainly in Europe. The sample size rises significantly in 1970, when Abbas and Christensen (2010) and the IMF WEO bring in several Latin American LICs and most post-colonial states in Africa, Asia and the Middle East.¹⁰ Another wave of new countries, in Central and Eastern Europe and Central Asia, comes on board in the 1990s, following the breakup of the Soviet Union and Yugoslavia.

Figure 2. Number of Countries with Identified Public Debt-to-GDP Data, by Decade^{1/}
(In number of countries, by region)



1/ Countries were included in a particular decade if they had 5 or more years of debt-to-GDP data in that decade.

Source: HPDD.

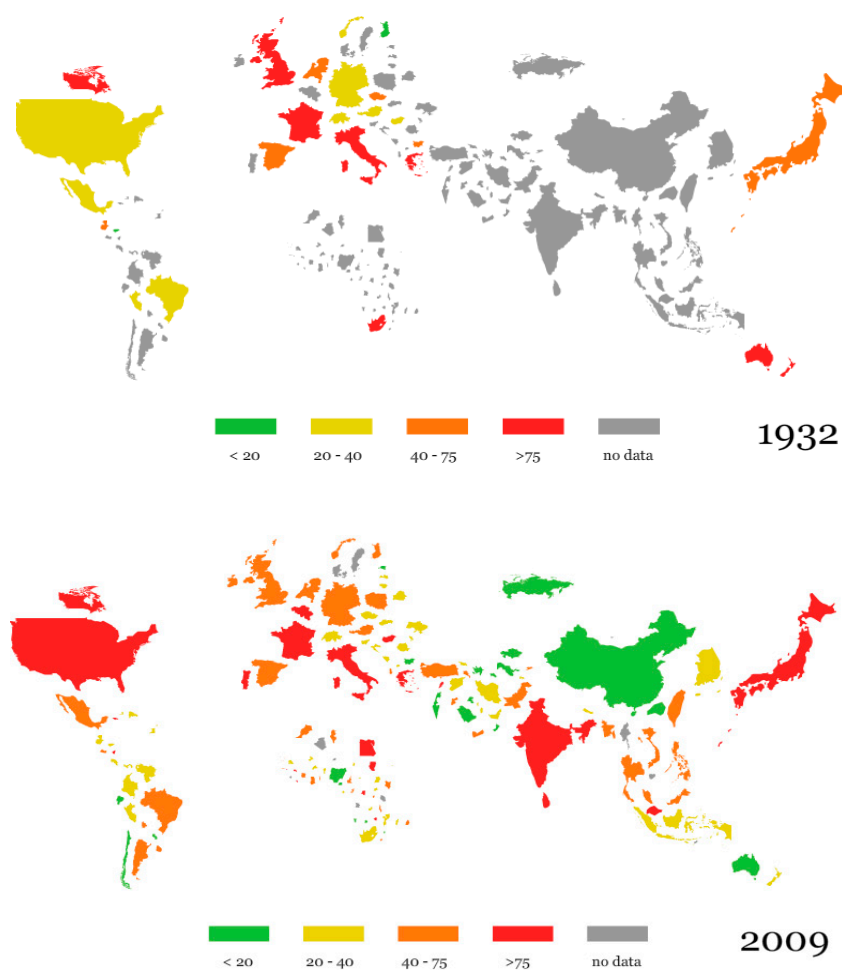
The HPDD facilitates a range of notable comparisons, both across time and country groups. This includes a comparison of the Great Depression of 1929–32 with the current period marked by the global financial crisis. Presenting debt data in two heat maps indicates that the implications of the current crisis for public debt appear to be graver, in spite of a less

⁹ Regions are grouped according to the five IMF regional departments: Western Hemisphere Department (WHD), European Department (EUR), African Department (AFR), Asia and Pacific Department (APD), and Middle-East and Central Asia Department (MCD). Please refer to the IMF website (www.imf.org) for details on country groupings by department.

¹⁰ There were 118 independent countries prior to 1970 in our dataset. However, for some of these countries, large data gaps exist. For example, the start date of data for China is 1984. For Russia, aside from the pre-WW1 coverage (1885–1913), data were available from 1992 onward, after the end of the Soviet period. Other countries with notable gaps in the post-1970 period include Brazil, Hungary, Romania, and Saudi Arabia.

dramatic growth impact at present as compared with the Great Depression (Figure 3). This reflects—at least in part—a much weaker starting point at the outset of the current episode—debt ratios were 20 percentage points of GDP higher, on average, in advanced G-20 countries in 2007 (PPP-GDP-weighted average) than in 1928—and a more significant impact of crisis-related factors that were broadly similar across the two periods, namely a sharp drop in revenues (due in both cases to the collapse in activity, asset prices, and financial sector profits) and the provision of stimulus and financial sector support.¹¹

Figure 3. A Tale of Two Crises: The Great Depression (1932) and the Global Financial Crisis (2009)
(color-coding represents debt-to-GDP ratios)¹²



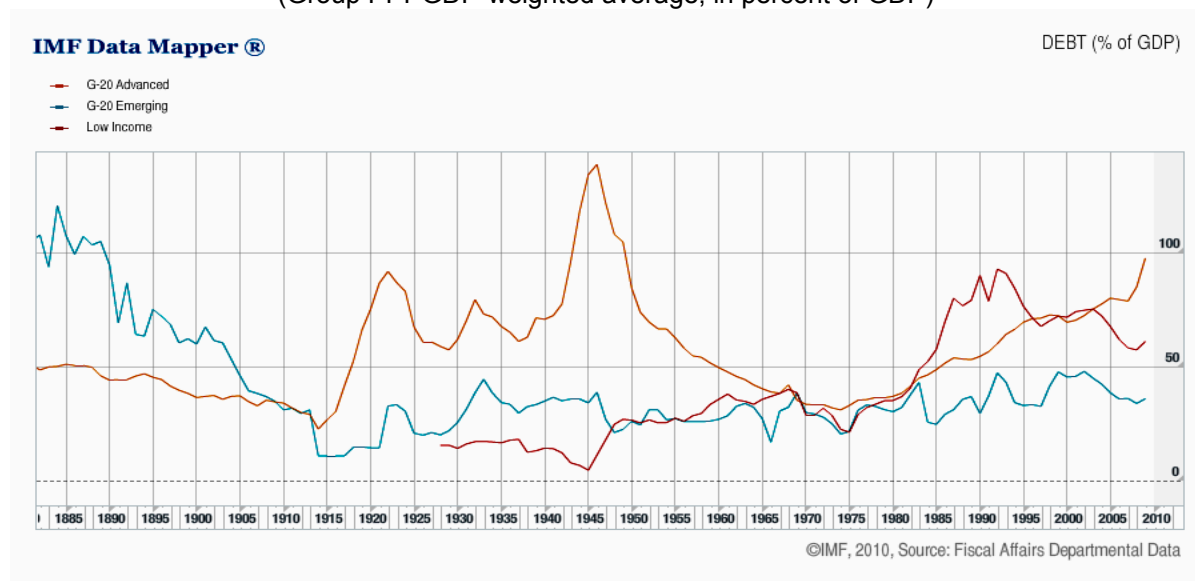
Source: HPDD; country sizes are proportional to their 2009 GDP level (in PPP terms).

¹¹ The G-20 advanced countries are Australia, Canada, France, Germany, Italy, Japan, Korea, the United Kingdom, and the United States.

¹² Country size in Figure 3 is scaled according to 2009 PPP GDP.

Debt levels in the advanced economies now covered by the G-20 group averaged 55 percent of GDP over 1880–2009, although episodes of much higher debt ratios have been common. During the first era of financial globalization (1880–1913), debt ratios in both G-20 advanced and emerging economies (for which data are available) trended down (Figure 4). World War I and the fiscal crises that followed produced a debt spike in advanced economies. Reductions in debt through the 1920s were followed by two further spikes linked to the Great Depression (early 1930s) and World War II (1941–45), the latter taking the (PPPGDP-weighted) average debt ratio well above 100 percent of GDP. By 1960, however, the advanced G-20 economy average debt ratio declined to 50 percent of GDP, due to rapid growth and inflation. Average advanced G-20 economy debt ratios trended down further through the early 1970s; however, debt began to accumulate starting in the mid-1970s, with the end of the Bretton Woods system of exchange rates and two oil price shocks. This upward trend continued until the current global financial crisis.

Figure 4. Debt-to-GDP Ratios Across Country Groups, 1880–2009
(Group PPPGDP-weighted average, in percent of GDP)



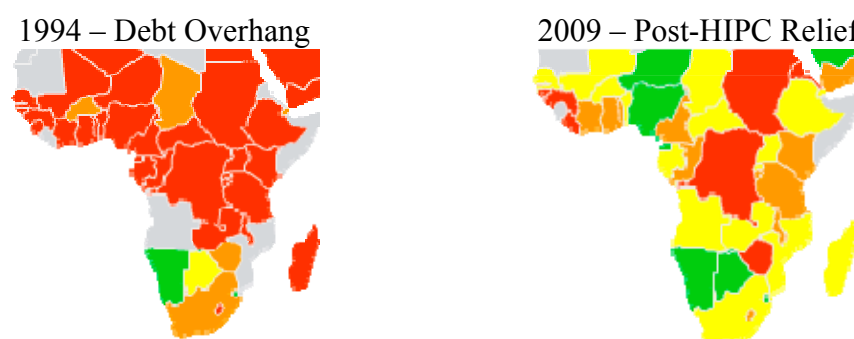
Source: HPDD.

Emerging countries and LICs exhibited lower average debt ratios over the same period, although they were more volatile. The average debt level for non-advanced economies was 44 percent of GDP during 1880–2009, 11 percentage points of GDP lower than the average for advanced economies, but with a standard deviation of 24.4 percentage points of GDP, as opposed to 19.9 percentage points for advanced economies.¹³ Volatility has been particularly pronounced in G-20 emerging economies, occasionally connected with crises (e.g., in Latin

¹³ As such, the coefficient of variation for advanced economies was 0.36 as opposed to 0.55 for the rest.

America in the early 1980s and in Asia in the late 1990s).¹⁴ For LICs, the pattern has been one of a sharp debt buildup through the 1980s and a reduction over the past 15 years, including in the context of the Highly Indebted Poor Country (HIPC) and Multilateral Debt Relief Initiatives (MDRI). For sub-Saharan Africa, heat maps for 1994 and 2009 illustrate this story (Figure 5).

Figure 5. Debt-to-GDP Ratios in Sub-Saharan Africa, 1994 and 2009
(in percent of GDP)

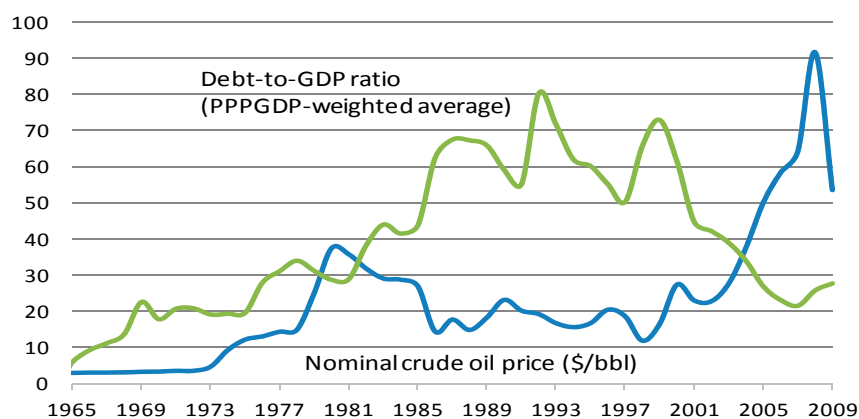


Note: Red represents public debt >75 percent of GDP; orange 40-75 percent; yellow 20-40 percent; and green <20 percent.

Source: HPDD.

For oil producers, debt ratios were inversely correlated with oil prices over 1965–2009 (Figure 6). This link would have been more muted if fiscal surpluses and deficits mostly translated into savings buildups and drawdowns rather than gross debt reduction or increases.

Figure 6. Commodity Prices and Public Debt, the Case of Oil Producers
(Debt ratios in percent of GDP, oil prices in \$/bbl)



Oil producers include: Norway, Bolivia, Ecuador, Mexico, Venezuela, Trinidad and Tobago, Bahrain, Iran, Kuwait, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen, Brunei Dar-us-Salaam, Indonesia, Vietnam, Algeria, Angola, Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon, Nigeria, Sudan, Azerbaijan, Kazakhstan and the Russian Federation.

Source: HPDD; and crude oil price data is from

http://inflationdata.com/inflation/inflation_rate/historical_oil_prices_table.asp

¹⁴ The G-20 emerging countries are Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, and Turkey.

Finally, the HPDD sheds light on one of the leading issues of the day: the relationship between debt and growth. Separating countries into fast-, medium-, or slow-paced growers over 1885–2009, we find an intuitive pattern.¹⁵ Fast growers consistently registered low debt ratios, while slow growers carried the highest debts for much of the sample period (Figure 7, upper panel). Further light is shed on the debt-growth relationship by a bubble chart that compares debt ratios and (total) PPP GDP (Figure 7, lower panel). If debt and growth are inversely related, the bubble movements should follow one of two directions: north-west (rising debt and falling income) or south-east (rising incomes and falling debt). We find that this pattern— captured by the black arrows— generally applies for advanced, emerging and low income countries. There is, however, one notable exception: advanced economies experienced rising incomes from 1970–2007 despite rising public debt ratios. It is not clear whether this represented a structural break from the expected pattern, or rather an anomaly that has now been “corrected” by the crisis.

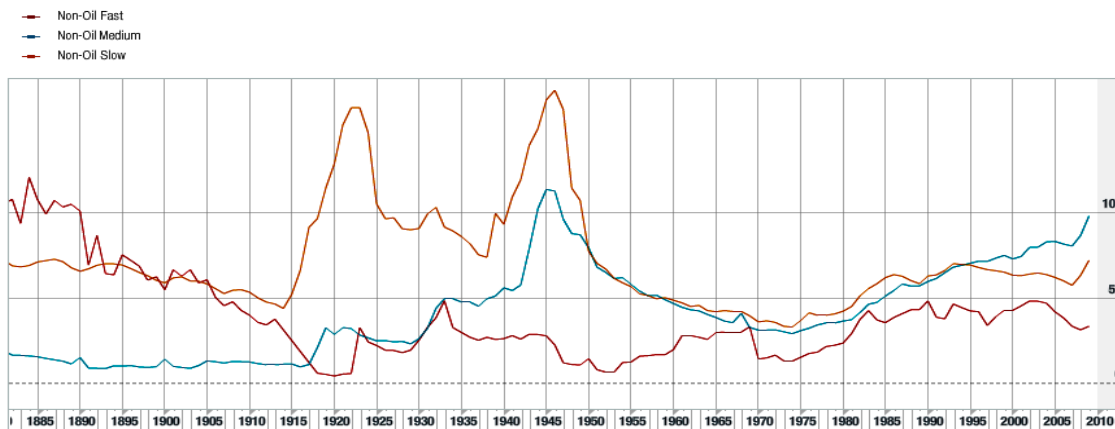
This section concludes with a few “interesting facts” emerging from the HPDD and showcasing the richness of the database. The largest single-year debt ratio increases (in percentage points) for the G-20 advanced countries occurred in two years associated with World War I and II—by 22 percentage points of GDP in 1944 and by 14 percentage points in 1919—and also in 2009, when public debt rose by 13 percentage points of GDP. The largest single-year declines occurred in 1969 (-7 percentage points) and 2000 (-3 percentage points). Further, based on a subsample of 34 countries for which debt data were identified for more than 50 years of coverage during 1880–2009, the country with the lowest median ratio was Finland (15 percent of GDP). The only country that did not breach a debt level of 60 percent of GDP was Colombia, which registered an average debt ratio of 25 percent of GDP, with a maximum of 47 percent of GDP.

¹⁵ To categorize countries by speed of economic growth, we computed the average PPP GDP growth rate for each country over the 1880–2009 period. This cross-section of average growth rates was then used to split countries into three terciles: fast growth countries (with average growth rates ≥ 4 percent), and slow growth countries (with average growth rates ≤ 3 percent). Countries with medium growth refer to those with average growth rates in between the two thresholds.

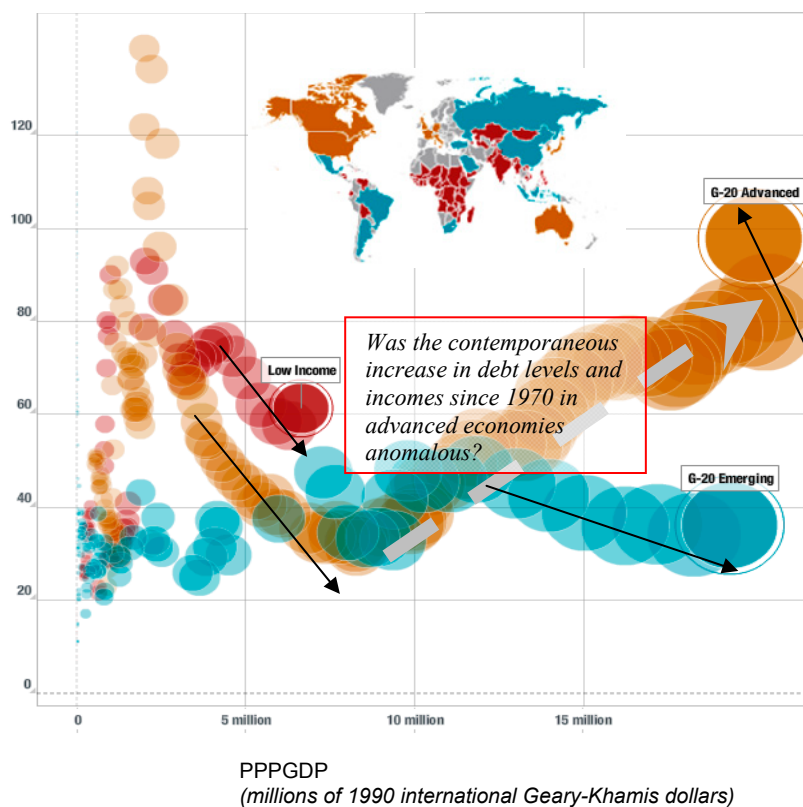
Figure 7. Fast Growers Maintained Low Public Debts
(PPP-GDP weighted average debt-to-GDP ratios by country groups)

IMF Data Mapper ®

DEBT (% of GDP)



PUBLIC DEBT
(percent of GDP, PPPGDP-weighted)



Source: debt ratios are from HPDD; Maddison (2010) and WEO were used for PPPGDP.

V. WAY FORWARD

Looking ahead, the primary aim is to expand the years and countries covered in the HPDD, as additional sources are identified. Notification of any omissions or supplementary sources is welcome and would be fully acknowledged.¹⁶ Moreover, given that in several cases, lack of GDP data inhibited computation of debt-to-GDP ratios, particularly in the earlier periods (see Table 1), efforts will be made to fill such gaps through careful extrapolation of the GDP series.

Table 1. Candidates for Potential Augmentation of HPDD Coverage

Country	Year of independence	Start date of data in current HPDD	Period for which data on debt, but not GDP, are available
Advanced economies			
Austria	1156	1880	1919-1923
Belgium	1831	1880	1914-1923
Canada	1867	1926	1867-1925
Germany	1871	1880	1914-1924
Greece	1829	1884	1920-1927
Ireland	1921	1929	1923-1928
Portugal	1140	1880	1913-1945
Emerging and advancing economies			
Bulgaria	1878	1924	1914-1923
Bolivia	1825	1970	1914-1949
Chile	1810	1940	1914-1939
Colombia	1810	1936	1923-1935
Costa Rica	1821	1950	1914-1949
Ecuador	1822	1970	1914-1938
Egypt	1922	1954	1929-1950
El Salvador	1821	1939	1924-1938
Guatemala	1821	1923	1914-1922
Nicaragua	1821	1970	1914-1945
Panama	1903	1953	1915-1944
Paraguay	1811	1970	1927-1947
Romania	1881	1914	1928-1941
Uruguay	1825	1970	1914-1948
Venezuela	1811	1970	1914-1949

Source: HPDD.

In addition, attempts will be made to fill in major gaps in the nominal debt series, possibly by utilizing data on fiscal deficits for the interceding years. For instance, relatively large gaps exist for a number of countries during the periods 1913–1939 and 1952–1970, which could be potentially populated using such methods. Finally, it might be possible to split public debt data into domestic and external components, and eventually, to expand the database to provide data on revenues, expenditures, and deficits.

¹⁶ Suggestions can be sent to the authors (see the email addresses on the cover page of this paper).

Appendix Table 1. Description of the Database Sources

Database	Reference	Country Coverage	Period	Headline	Definitions and Comments
Abbas and Christensen	Abbas, S.M. A. and J. E. Christensen (2010). "The Role of Domestic Debt Markets in Economic Growth: An Empirical Investigation for Low-Income Countries and Emerging Markets", IMF Staff Papers.	144 Developing and Emerging Countries	<u>1970-2007</u>	Gross Government Debt/GDP	Refers to central government debt.
Canada - Official Government Publication	Canada Year Book Historical Collection website accessed in July 2010. http://www65.statcan.gc.ca/acymb_r000-eng.htm	Canada	<u>1867-1976</u>	Gross Federal Debt	Consolidated government is the general term used for the consolidation of the data of the federal government, provincial and territorial general governments, local governments and non-autonomous pension plans.
CLYPS	Cowan K., Levy-Yeyati E., Panizza U. and Sturzenegger F. (2006). Sovereign debt in the Americas: new data and stylized facts, RES Working Paper No. 577, Inter-American Development Bank, Research Department, Washington, DC, United States.	Argentina, Bahamas, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, New Zealand, Nicaragua, Pakistan, Panama, Paraguay, Peru, South Africa, Trinidad and Tobago, United States, Uruguay, Venezuela (29 Countries).	<u>1980-2005</u>	Gross Public Debt	Total central government gross debt includes total external and domestic debt.
Flandreau and Zumer	Flandreau M. and F. Zumer (2004). The Making of Global Finance 1880-1913. Development Centre Studies, OECD.	Austria, Argentina, Belgium, Brazil, Denmark, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Russia, Spain, Sweden, Switzerland, U.K. (17 Countries).	<u>1880-1913</u>	Nominal Public Debt / GDP	The debt figures reported combine both short-term and long-term debt of the central government.

Appendix Table 1. Description of the Database Sources (Cont.)

Database	Reference	Country Coverage	Period	Headline	Definitions and Comments
Fouad et al.	Fouad M., W. Maliszewski, M. Hommes, H. Morsy, M. Petri, and L. Söderling (2007). "Public Debt and Fiscal Vulnerability in the Middle East", IMF Working Paper 07/12, IMF.	Middle-Eastern countries (19 countries).	<u>1990-2005</u>	Could refer to either public sector debt, general government debt or central government debt.	Standard GFSM (2001) definitions.
France - Official Government Publication	INSEE - Department Comptes Nationaux	France	<u>1949-1977</u>	Total Central Government Debt	Central government debt
Germany - Official Government Publication	Statistisches Bundesamt Deutschland	Germany	<u>1950-1975</u>	General Government Debt	Credit Market Debt and Loans for strengthening cash resources of public budgets
Italy - Official Government Publication	Bank D'Italia: Francese, Maura, and Angelo Pace. "Questioni Di Economia E Finanza." Banca D'Italia, Occasional Papers 31 (2008).	Italy	<u>1861-2009</u>	Total Consolidated Debt of Public Administrations	Comprises total consolidated gross debt across all sectors of the public administration.
Jaimovich and Panizza	Jaimovich D. and U. Panizza (2010) "Public debt around the world: a new data set of central government debt," Applied Economics Letters, Taylor and Francis Journals, vol. 17(1), pages 19-24.	100 Advanced and Emerging Countries	<u>1970-2005</u>	Gross Public Debt / GDP	Refers to the central government.
Japan - Official Government Publication	Hundred-Year Statistics Book of the Japanese Economy (1966). Bank of Japan and Ministry of Finance Editors.	1914-1964 (UN/MIT); 1965-1976 (UN/OECD); 1977-1992 (MISS/OECD); 1993-2005 (WEO/OECD); 2005-2009 (WEO)	<u>1870-2009</u>	Central Government Debt	Includes bonds, financial bills, and borrowings (including those held in special accounts, some of which are classified as public corporations.)
LON	League of Nations Archives (1927-1931, 1933-1938, 1940-1941, 1943, 1945)	LON Member Countries	<u>1919-1930</u>	Central Government Public Debt	Public debt refers to the amount outstanding at the end of the financial year. The public debt statements of the various countries show some differences in the budget accounts. The statements may refer to total gross liabilities of the government as recorded in the balance sheet of the state, or only to some of these liabilities. Public debt figures were available as gross or net debt. Only gross debt data were collected.

Appendix Table 1. Description of the Database Sources (Cont.)

Database	Reference	Country Coverage	Period	Headline	Definitions and Comments
Missale	Missale, Alessandro (2000) Public Debt Management. Oxford: Oxford University Press.	1880 - 1913 (EHNET); 1924-1958 (UN/MIT); 1959-1976 (UN/OECD); 1977-1989 (MISS/OECD); 1990-1996 (OECD); 1997-2005 (WEO/OECD); 2005-2009 (WEO)	<u>1960-1996</u>	Total Government Debt/GDP	Refers to the central government.
Mitchell	B. R. Mitchell (2003) International Historical Statistics: 1750-2000. Basingstoke and New York: Palgrave Macmillan, 4th edn. Several Editions: Africa, Asia and Oceania; Europe; and The Americas.	Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Colombia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong, India, Indonesia, Ireland, Israel, Italy, Japan, Kenya, Korea, Malaysia, Mexico, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Portugal, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, United Kingdom, United States (46 Countries).	<u>1870-2000</u>	GDP, GNP, NMP, NNP.	Comprises GDP, CF (capital formation: gross excluding stocks), GNP (gross national product), NMP (net material product), NNP (net national product (i.e. national income)). NNP is calculated for the material production sectors only, and excludes most of the service sectors, which are part of GDP. NNP is the total market value of all final goods and services produced by residents in a country or other polity during a given period (gross national product or GNP) minus depreciation. The main sources used are official, including the United Nations, Yearbooks of National Accounts Statistics and National Income Statistics (Statistics of National Income and Expenditure, International Financial Statistics.) Some national publications were also used.
Netherlands - Official Government Publication - Debt	Dutch State Treasury Agency website accessed in June 2010. http://www.dsta.nl/english/News/Statistical_Information	The Netherlands	<u>1914-1989</u>	Central Government Debt	Includes money market and capital market debt.
Netherlands - Official Government Publication - GDP	Centraal Bureau voor de Statistiek (2001). "Tweehonderd jaar statistiek in tijdreeksen 1800-1999".	The Netherlands	<u>1800-1999</u>	GDP	GDP at market prices.

Appendix Table 1. Description of the Database Sources (Cont.)

Database	Reference	Country Coverage	Period	Headline	Definitions and Comments
New Zealand - Official Government Publication	Statistics New Zealand website on Long Term Data Series (LTDS) accessed in June 2010. http://www.stats.govt.nz/	New Zealand	<u>1860-2000</u>	Central Government Debt and GDP.	Central government debt refers to total consolidated gross central government debt.
OECD	OECD (2009) Central Government Debt - Country Tables 2009. Organization for Economic Cooperation and Development, Paris, France.	OECD Member Countries (30 Countries).	<u>1990-2009</u>	Gross Public Debt (Maastricht Criterion)	General government gross debt according to the convergence criteria set out in the Maastricht Treaty comprises currency, bills and short-term bonds, other short-term loans and other medium- and long term loans and bonds. Debt is consolidated within the general government. Financial liabilities like trade credits extended to the government are not included. Debt is in nominal values. Gross debt according to this criterion does not include trade credits and advances, and government bonds are valued at nominal value.
Oxford Latin American Economic History Database	Oxford Latin American Economic History Database (OxLAD), Latin American Center, Oxford University (2003).	Argentina, Chile, Cuba, El Salvador, Honduras, Panama, Uruguay, Bolivia, Colombia, Dominican Republic, Guatemala, Mexico, Paraguay, Venezuela, Brazil, Costa Rica, Ecuador, Haiti, Nicaragua, Peru (20 Countries).	<u>1990-2000</u>	GDP	Nominal GDP in local currency units.
UN	United Nations Statistical Yearbooks (1948-1949, 1952, 1958, 1965, 1973, 1986).	UN Member Countries	<u>1919 - 1983</u>	Central Government Public Debt	With the exception of the USSR, the budgetary accounts figures refer to central government. Whereas the figures shown for each country are normally comparable - unless there has been a change in the method of accounting - there are constraints on comparability among the figures across countries. This is due to differences (1) in the proportion between public and private activities; (2) in the proportion between the activities of public, central, regional, local and other public bodies; (3) in the methods of accounting. Figures for the estimates and budgetary accounts in some countries are, as a principle, reported on a gross basis; in others they are on a net basis.

Appendix Table 1. Description of the Database Sources (Concl.)

Database	Reference	Country Coverage	Period	Headline	Definitions and Comments
United Kingdom Historical Statistics	B.R.Mitchell, British Historical Statistics Chapter XVI (CUP 1988); and Office for National Statistics of the United Kingdom (ONS), available at: http://www.statistics.gov.uk/default.asp	United Kingdom	<u>1830-1980</u>	General Government Debt	Nominal amount of the Unredeemed Capital of the Public Debt of the United Kingdom at the end of each financial year (1691-1980). All figures of the total national debt refer to the sum of funded and unfunded debt, regardless of whether the financial years are the same for both. All statistics since 1919 exclude the amounts of Funding Loan and Victory Bonds tendered for duties under section 3(3) of the War Loan Act (1919) and held by the National Debt Commissioners. From 1940 the amount of funded debt has changed very little and it is not shown separately from unfunded debt.
United States Historical Statistics	Historical Statistics of the United States (2006) Edited by Susan B. Carter, S. S. Gartner, M. R. Haines, A. L. Olmstead, R. Sutch, G. Wright. Cambridge University Press.	United States	<u>1791-2007</u>	Federal Government Debt	Figures represent gross federal debt outstanding.
WEO Database	World Economic Outlook (2010). International Monetary Fund, April 2010.	IMF Member Countries (187 Countries).	<u>1977-2009</u>	General Government Gross Debt	Gross debt consists of all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future. This includes debt liabilities in the form of SDRs, currency and deposits, debt securities, loans, insurance, pensions and standardized guarantee schemes, and other accounts payable. Thus, all liabilities in the <i>GFSM 2001</i> system are debt, except for equity and investment fund shares and financial derivatives and employee stock options. Debt can be valued at current market, nominal, or face values.

Appendix Table 2. Sources of Data on Debt, GDP, and Debt-to-GDP Ratio by Country

Country	Independence	Sources 1/ 2/
Albania	1912	1994-1999 (AC); 2000-2009 (WEO)
Algeria	1962	1970-2007 (AC)
Angola	1975	1995-2004 (AC); 2004-2009 (WEO)
Antigua & Barbuda	1981	1998-2009 (WEO)
Argentina	1816	1884-1913(EHNET); 1934-1962 (UN/OXLAD); 1971-1988 (AC); 1990-1996 (CLYPS); 1997-2009 (WEO)
Armenia	1991	1994-2006 (AC); 2007-2009 (WEO)
Australia	1901	1914-1964 (UN/MIT); 1965-1976 (UN/OECD); 1977-1992 (MISS/OECD); 1993-2005 (WEO/OECD); 2005-2009 (WEO)
Austria	1156	1880 - 1913 (EHNET); 1924-1958 (UN/MIT); 1959-1976 (UN/OECD); 1977-1989 (MISS/OECD); 1990-1996 (OECD); 1997-2005 (WEO/OECD); 2005-2009 (WEO)
Azerbaijan, Rep. of	1991	1993-2000 (AC); 2001-2009 (WEO)
Bahamas, The	1973	1991-2009 (WEO)
Bahrain, Kingdom of	1971	1974-1989 (AC); 1991-2009 (WEO)
Bangladesh	1971	1974-1989 (AC); 1990-2009 (WEO)
Barbados	1966	1970-1995 (AC); 1996-2009 (WEO)
Belarus	1991	1994-2005 (AC); 2006-2009 (WEO)
Belgium	1831	1880-1913 (EHNET); 1924-1969 (UN/MIT); 1970-1988 (JP); 1990-1998 (OECD); 1999-2005 (OECD/WEO); 2006-2009 (WEO)
Belize	1981	1976-1997 (AC); 1998-2009 (WEO)
Benin	1960	1970-2006 (AC); 2008-2009 (WEO)
Bhutan	1949	1993 (WEO); 1994-2000 (AC); 2001-2009 (WEO)
Bolivia	1825	1970-2004 (AC); 2005-2009 (WEO)
Bosnia & Herzegovina	1992	1998-2009 (WEO)
Botswana	1966	1972-2000 (AC); 2001-2009 (WEO)
Brazil	1822	1880-1913 (EHNET); 1923-1951 (UN/OXLAD); 1978-1993 (AC); 1994-2000 (CLYPS); 2001-2009 (WEO)
Brunei Darussalam	1984	2001-2007 (AC)
Bulgaria	1878	1924-1928 (UN/MIT); 1929 -1943 (LON/MIT); 1944-1945 (UN/MIT); 1992-1999 (AC); 2001-2009 (WEO)
Burkina Faso	1960	1976-2001 (AC); 2002-2009 (WEO)
Burundi	1962	1970-1993 (AC); 1994-2009 (WEO)
Cambodia	1953	1996-2009 (WEO)
Cameroon	1960	1970-2002 (AC); 2003-2009 (WEO)
Canada	1867	1926-1949 (Canada Govt); 1950-1978 (Canada Govt/WEO); 1979-2009 (WEO)
Cape Verde	1975	1981-2005 (AC); 2007-2009 (WEO)
Central African Rep.	1960	1970-1999 (AC); 2000-2009 (WEO)
Chad	1960	1970-2004 (AC); 2005-2009 (WEO)
Chile	1810	1940-1947 (UN/OXLAD); 1970-1998 (AC); 2000-2009 (WEO)
China,P.R.: Mainland	221 BC	1984-1999 (WEO)
China,P.R.:Hong Kong	None	2005-2009 (WEO)
Colombia	1810	1936-1946 (UN/OXLAD); 1970-1989 (AC); 1990-1995 (CLYPS); 1997-2009 (WEO)
Comoros	1975	1982-2007 (AC); 2008-2009 (WEO)
Congo, Republic of	1960	1970-1993 (AC); 1994-2009 (WEO)
Costa Rica	1821	1950-1969 (UN/MIT); 1970-1998 (AC); 2000-2009 (WEO)
Côte d'Ivoire	1960	1970-1975 (UN/WEO); 1979-2003 (AC); 2004-2009 (WEO)
Croatia	1991	1994-2004 (AC); 2005-2009 (WEO)
Cyprus	1960	1973-1994 (AC); 1995-2009 (WEO)
Czech Republic	1993	1920-1937(UN/MIT); 1995-2005 (OECD); 2006-2009 (WEO)
Denmark	1849	1880-1913 (EHNET); 1914-1963 (UN/MIT); 1976-1996 (MISS/MIT); 1998-2009 (WEO)

Appendix Table 2. Sources of Data on Debt, GDP, and Debt-to-GDP Ratio by Country (Cont.)

Country	Independence	Sources
Djibouti	1977	1993-2003 (AC); 2004-2009 (WEO)
Dominica	1978	1975-1989 (AC); 1990-2009 (WEO)
Dominican Republic	1844	1950-1955 (UN/MIT); 1970-2002 (AC); 2003-2009 (WEO)
Ecuador	1822	1970-2000 (AC); 2001-2009 (WEO)
Egypt	1922	1954-1957 (UN/MIT); 1970-2001 (AC); 2003-2009 (WEO)
El Salvador	1821	1939-1963 (UN/MIT); 1970-1996 (AC); 2000-2009 (WEO)
Equatorial Guinea	1968	1985-1992 (AC); 1993-2009 (WEO)
Eritrea	1993	1995-2002 (AC); 2004-2009 (WEO)
Estonia	1991	1995-2009 (WEO)
Ethiopia	2000 years	1970-1992 (AC); WEO (1993-2009)
Fiji	1970	1970-1988 (AC); 1990-2009 (WEO)
Finland	1917	1914-1946 (UN/MIT); 1961-1978 (UN/OECD); 1981-2009 (WEO)
France	486	1880-1912 (EHNET); 1920-1932 (UN/MIT); 1949-1977 (French Govt./MIT); 1980-2009 (WEO)
Gabon	1965	1970-1999 (AC); 2000-2009 (WEO)
Gambia, The	1965	1976-2001 (AC); 2002-2009 (WEO)
Georgia	1991	1995-2003 (AC); 2004-2009 (WEO)
Germany	1871	1880-1913 (EHNET); 1925-1938 (UN/MIT); 1950-1975 (German Govt./WEO); 1977-2009 (WEO)
Ghana	1957	1970-1989 (AC); 1991-2009 (WEO)
Greece	1829	1884-1913 (EHNET); 1928-1975 (UN/MIT); 1979-2009 (WEO)
Grenada	1974	1970-1995 (AC); 1996-2009 (WEO)
Guatemala	1821	1923-1968 (UN/MIT); 1970-1998 (AC); 2000-2009 (WEO)
Guinea	1958	1990-2009 (WEO)
Guinea-Bissau	1973	1986-2005 (AC); 2006-2009 (WEO)
Guyana	1966	1970-2000 (AC); 2001-2009 (WEO)
Haiti	1804	1953-1956 (UN); 1970-1999 (AC); 2000-2009 (WEO)
Honduras	1821	1928-1945 (LON/MIT); 1970-2004 (AC); 2005-2009 (WEO)
Hungary	1001	1930-1943 (LON/MIT); 1982-1992 (AC); 1995-2009 (WEO)
Iceland	1944	1972-1975 (JP); 1976-1979 (UN/OECD); 1981-2001 (WEO/OECD); 2002-2009 (WEO)
India	1947	1948-1982 (UN/MIT); 1991-2009 (WEO)
Indonesia	1945	1971-1980 (UN/MIT); 1981-1999 (AC); 2000-2009 (WEO)
Iran, I.R. of	1979	1980-1999 (AC); 2000-2009 (WEO)
Ireland	1921	1929-1946 (UN); 1954-1959 (UN/MIT); 1960-1989 (MISS/OECD); 1990-2008 (OECD); 2009 (WEO)
Israel	1948	1970-2002 (AC); 2003-2009 (WEO)
Italy	1861	1861-1993 (Italy Govt); 1994-2009 (WEO)
Jamaica	1962	1970-1994 (AC); 1996-2009 (WEO)
Japan	660 BC	1875-1949 (Japan Govt); 1950-1979 (Japan Govt/WEO); 1980-2009 (WEO)
Jordan	1946	1970-1989 (JP); 1990-2009 (WEO)
Kazakhstan	1991	1993-2001 (AC); 2002-2009 (WEO)
Kenya	1963	1970-1976 (UN/MIT); 1979-1997 (AC); 1998-2009 (WEO)
Korea, Republic of	1945	1970-1996 (AC); 1997-2009 (WEO)
Kuwait	1961	1971-1989 (AC); 1991-2009 (WEO)
Kyrgyz Republic	1991	1995-2005 (AC); 2006-2009 (WEO)
Laos People's Dem.Rep	1949	1989-2002 (AC); 2003-2009 (WEO)
Latvia	1991	1994-2005 (AC); 2006-2009 (WEO)
Lebanon	1943	1970-1987 (AC); 1990-1999 (JP); 2000-2001 (WEO)

Appendix Table 2. Sources of Data on Debt, GDP, and Debt-to-GDP Ratio by Country (Cont.)

Country	Independence	Sources
Lesotho	1966	1974-1990 (AC); 1992-2009 (WEO)
Liberia	1847	1978-1983 (UN); 2000-2005 (AC); 2008-2009 (WEO)
Lithuania	1990	1994-1999 (AC); 2000-2009 (WEO)
Luxembourg	1839	1974-1989 (JP); 1991-1995 (OECD); 1996-2009 (WEO)
Macedonia, FYR	1991	1995-1998 (AC); 2000-2009 (WEO)
Madagascar	1960	1974-1989 (AC); 1991-2009 (WEO)
Malawi	1964	1970-2001 (AC); 2003-2009 (WEO)
Malaysia	1957	1970-1989 (AC); 1991-2009 (WEO)
Maldives	1965	1978-2007 (AC)
Mali	1960	1970-1999 (AC); 2000-2009 (WEO)
Malta	1964	1995-2009 (WEO)
Mauritius	1968	1970-1999 (AC); 2001-2009 (WEO)
Mexico	1810	1914-1968 (UN/OXLAD); 1970-1980 (AC); 1982-1996 (CLYPS); 1997-2009 (WEO)
Moldova	1991	1995-2009 (WEO)
Mongolia	1921	1992-2007 (AC)
Montenegro	2006	2003-2009 (WEO)
Morocco	1956	1970-1997 (AC); 1998-2009 (WEO)
Mozambique	1975	2000-2009 (WEO)
Myanmar	1948	1970-1994 (AC); 1995-2009 (WEO)
Namibia	1990	1993-2009 (WEO)
Nepal	1768	1970-1999 (AC); 2000-2009 (WEO)
Netherlands	1579	1880-1913 (EHNET); 1914-1939 (UN/Netherlands Govt); 1960-1999 (OECD); 2001-2009 (WEO)
New Zealand	1907	1860-1998 (New Zealand Govt); 2000-2009 (WEO)
Nicaragua	1821	1970-2004 (AC); 2005-2009 (WEO)
Niger	1958	1970-1998 (AC); 1999-2009 (WEO)
Nigeria	1960	1970-2001 (AC); 2002-2009 (WEO)
Norway	1905	1880-1913 (EHNET); 1914-1980 (UN/MIT); 1983-1998 (WEO/MIT); 1999-2009 (WEO)
Oman	1650	1973-1990 (AC); 1991-2009 (WEO)
Pakistan	1947	1970-1990 (JP); 1994-2009 (WEO)
Panama	1903	1953-1963 (UN/MIT); 1970-1995 (AC); 1996-2009 (WEO)
Papua New Guinea	1975	1973-2007 (AC)
Paraguay	1811	1970-1998 (AC); 1999-2009 (WEO)
Peru	1821	1918-1945 (UN/OXLAD); 1970-2004 (AC); 2006-2009 (WEO)
Philippines	1946	1970-1989 (AC); 1990-2009 (WEO)
Poland	1918	1986-1994 (AC); 1995-2009 (WEO)
Portugal	1140	1880-1912 (EHNET); 1946-1959 (UN); 1960-1975 (UN/OECD); 1980-1989 (JP); 1991-2005 (WEO/OECD); 2006-2009 (WEO)
Qatar	1971	1990-2009 (WEO)
Romania	1881	1914-1979 (UN/MIT); 1980-1999 (CLYPS); 2001-2009 (WEO)
Russian Federation	1991	1885-1913 (EHNET); 1992-1999 (JP); 2000-2009 (WEO)
Rwanda	1962	1970-1994 (AC); 1995-2009 (WEO)
Samoa	1962	1970-2007 (AC)
São Tomé & Príncipe	1975	1995-2001 (AC); 2002-2009 (WEO)
Saudi Arabia	1932	1991-1998 (FO); 1999-2009 (WEO)
Senegal	1960	1970-1999 (AC); 2001-2009 (WEO)
Serbia, Republic of	2006	2000-2009 (WEO)

Appendix Table 2. Sources of Data on Debt, GDP, and Debt-to-GDP Ratio by Country (Concl.)

Country	Independence	Sources
Seychelles	1976	1980-1999 (AC); 2000-2009 (WEO)
Sierra Leone	1961	1970-2007 (AC)
Singapore	1965	1990-2009 (WEO)
Slovak Republic	1993	1992-2002 (JP); 2003-2004 (OECD); 2005-2009 (WEO)
Slovenia	1991	1993-1994 (JP); 1995-2009 (WEO)
Solomon Islands	1978	1980-2005 (AC); 2006-2009 (WEO)
South Africa	1910	1914-1979 (UN/MIT); 1980-1999 (CLYPS); 2001-2009 (WEO)
Spain	1492	1880-1913 (EHNET); 1918-1981 (UN/MIT); 1982-2009 (WEO)
Sri Lanka	1948	1970-1980 (UN/WEO); 1981-2009 (WEO)
St. Kitts and Nevis	1983	1998-2009 (WEO)
St. Lucia	1979	1981-1989 (AC); 1990-2009 (WEO)
St. Vincent & the Grena	1979	1990-2009 (WEO)
Sudan	1956	1992-2009 (WEO)
Suriname	1975	1990-2009 (WEO)
Swaziland	1968	1970-1989 (AC); 1993-2009 (WEO)
Sweden	1523	1880-1913 (EHNET); 1918-1958 (UN/MIT); 1970-2002 (OECD); 2004-2009 (WEO)
Switzerland	1291	1899-1913 (EHNET); 1929-1956 (UN/MIT); 1971-1981 (OECD); 1983-2009 (WEO)
Syrian Arab Republic	1946	1970-1989 (AC); 1990-2009 (WEO)
Taiwan Prov.of China	None	1997-2009 (WEO)
Tajikistan	1991	1998-2003 (AC); 2004-2009 (WEO)
Tanzania	1964	1970-2005 (AC); 2008-2009 (WEO)
Thailand	1238	1970-1994 (AC); 1996-2009 (WEO)
Togo	1960	1975-2000 (AC); 2001-2009 (WEO)
Tonga	1970	1985-1992 (AC); 1995-2009 (WEO)
Trinidad and Tobago	1962	1980-1997 (JP); 1999-2009 (WEO)
Tunisia	1956	1970-1976 (AC); 1978-2003 (JP); 2004-2009 (WEO)
Turkey	1923	1936-1981 (UN/MIT); 1982-1999 (AC); 2000-2009 (WEO)
Turkmenistan	1991	2000-2009 (WEO)
Uganda	1962	1970-2003 (AC); 2004-2009 (WEO)
United Kingdom	10th century	1830-1978 (UK Govt); 1979-2009 (WEO)
Ukraine	1991	1998-2009 (WEO)
United Arab Emirates	1971	1973-1998 (AC); 1999-2009 (WEO)
Uruguay	1825	1970-2003 (AC); 2004-2009 (WEO)
United States	1776	1791-1997 (US Govt); 1998-2009 (WEO)
Uzbekistan	1991	1998-2009 (WEO)
Vanuatu	1980	1981-2007 (AC)
Venezuela, Rep. Bol.	1811	1970-1991 (AC); 1994-2009 (WEO)
Vietnam	1945	1992-2004 (AC); 2005-2009 (WEO)
Yemen, Republic of	1990	1992-1998 (AC); 1999-2009 (WEO)
Zambia	1964	1970-2003 (AC); 2004-2009 (WEO)
Zimbabwe	1980	1976-1977 (UN/MIT); 1979-2003 (AC); 2005-2009 (WEO)

1/ Where (AC) refers to Abbas and Christensen (2010); (CLYPS) refers to Cowan K. et al. (2006); (EHNET) refers to Flandreau and Zumer (2004), (FO) refers to Fouad et al. (2007); (JP) refers to Jaimovich and Panniza (2010); (LON) refers to League of Nations Statistical Handbooks (Various editions); (MISS) refers to Missale (2000); (MIT) refers to Mitchell (2003); (OECD) refers to the Organization of Economic Co-Operation and Development (2009); WEO refers to the World Economic Outlook (2010); (OXLAD) refers to Oxford Latin American Economic History Database (2003); and (UN) refers to the United Nations Statistical Handbooks (Various editions).

2/ When both debt and GDP series are drawn from the source and/or a debt-to-GDP ratio is directly drawn from a data source, the parenthesis include only that one source. When debt and GDP series are drawn from two different sources, the two sources are cited in the parenthesis with the debt series drawn from the first source, while GDP series is drawn from the second source.

REFERENCES

- Abbas, S.M. A., and J. E. Christensen, 2010, "The Role of Domestic Debt Markets in Economic Growth: An Empirical Investigation for Low-Income Countries and Emerging Markets," *IMF Staff Papers* (Washington: International Monetary Fund).
- Banca D'Italia, Francese, Maura, and Angelo Pace, 2008, *Questioni Di Economia E Finanza*, Occasional Papers 31 (Rome).
- Bank of Japan, and Ministry of Finance, eds., 1966, *Hundred-Year Statistics Book of the Japanese Economy* (Japan).
- Centraal Bureau voor de Statistiek, 2001, *Tweehonderd jaar statistiek in tijdreeksen, 1800–1999*.
- Cowan K., and others, 2006, Sovereign Debt in the Americas: New Data and Stylized Facts, RES Working Paper No. 577 (Washington: Inter-American Development Bank).
- Dutch State Treasury Agency Website accessed in June 2010. Available via the Internet: http://www.dsta.nl/english/News/Statistical_Information.
- Flandreau, M., and F. Zumer, 2004, "The Making of Global Finance 1880–1913, Development Centre Studies" (Paris: OECD).
- Fouad, M., and others, 2007, "Public Debt and Fiscal Vulnerability in the Middle East," IMF Working Paper 07/12 (Washington: International Monetary Fund).
- Guscina, A., and O. Jeanne, 2006, "Government Debt in Emerging Market Countries: A New Dataset," IMF Working Paper 06/08 (Washington: International Monetary Fund).
- Carter, Susan B., and others, eds., 2006, *Historical Statistics of the United States* (Massachusetts: Cambridge University Press).
- International Monetary Fund, 2010, *World Economic Outlook*, April 2010" (Washington).
- _____, 2010, *Government Debt Database*, IMF Fiscal Affairs Department (Washington).
- Jaimovich D., and U. Panizza, 2010, *Public Debt Around the World: A New Data Set of Central Government Debt*, Applied Economics Letters, Taylor and Francis Journals, Vol. 17(1), pp. 19–24.
- League of Nations Archives, 1927–31, 1933–38, 1940–41, 1943, 1945 (Geneva: League of Nations).
- Maddison, Angus, 2010, "[Statistics on World Population, GDP and Per Capita GDP, 1–2008](http://www.ggdc.net/MADDISON/oriindex.htm)." Available via the Internet: <http://www.ggdc.net/MADDISON/oriindex.htm>.

- Missale, Alessandro, 2000, “Public Debt Management” (Oxford: Oxford University Press).
- Mitchell, B. R., 2003, *International Historical Statistics: 1750–2000*, 4th edn. Several Editions: Africa, Asia, and Oceania; Europe; and The Americas (New York: Basingstoke, and Palgrave Macmillan)
- Mitchell, B. R., 1988, *British Historical Statistics*, Chapter XVI (CUP 1988).
- Organization for Economic Cooperation and Development, 2009, “Central Government Debt—Country Tables” (Paris: OECD).
- Oxford Latin American Economic History Database (OxLAD), 2003, Latin American Center (Oxford: Oxford University).
- Reinhart, C., and K. Rogoff, 2009, “This Time is Different: Eight Centuries of Financial Folly” (Princeton, New Jersey: Princeton University Press).
- _____, 2010, “This Time is Different Chartbook: Country Histories on Debt, Default, and Financial Crises,” NBER Working Paper No. 15815.
- Statistics Canada, 2010, *Canada Year Book Historical Collection* website accessed in July 2010. Available via the Internet: http://www65.statcan.gc.ca/acyb_r000-eng.htm.
- Statistics New Zealand, 2010, *Long-Term Data Series (LTDS)* website accessed in June 2010. Available via the Internet: <http://www.stats.govt.nz/>.
- United Nations Statistical Yearbooks, 1948–49, 1952, 1958, 1965, 1973, 1986, (New York: United Nations).