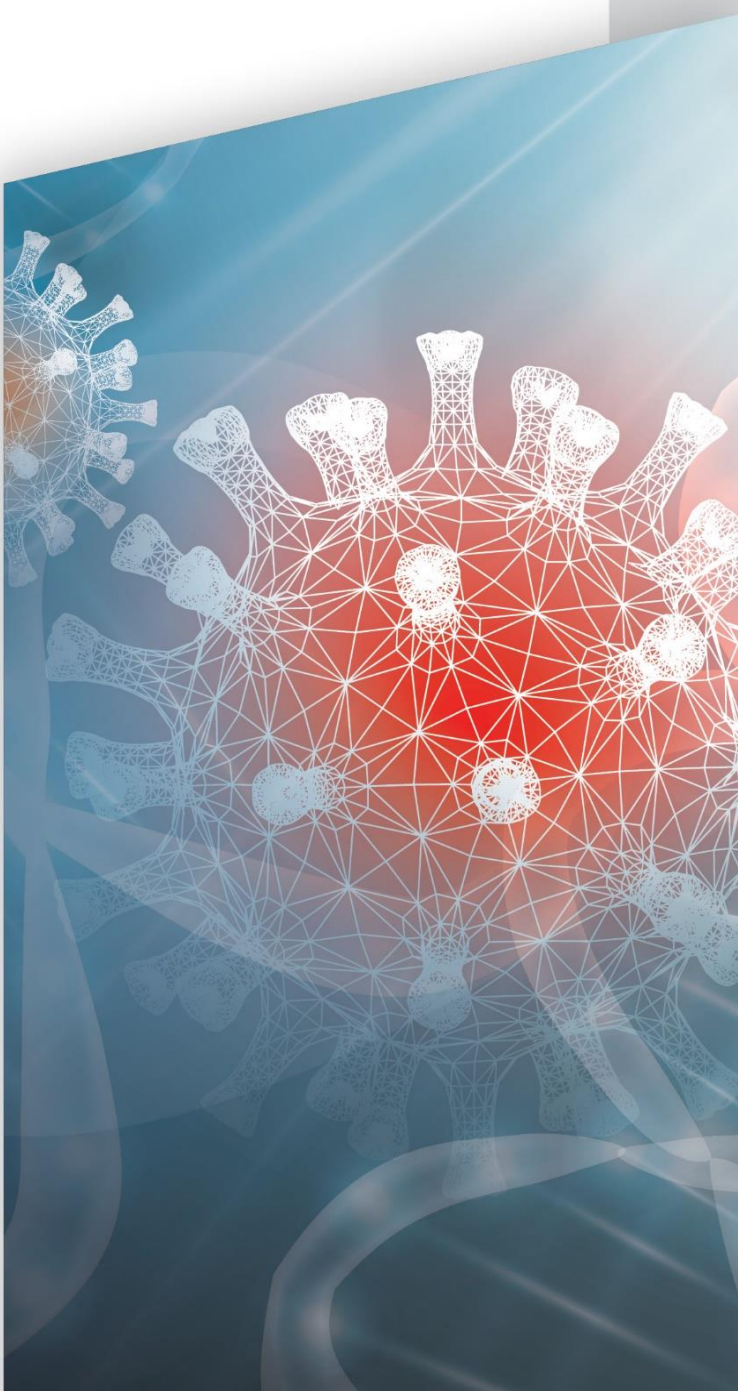
UNITED NATIONS DEVELOPMENT ACCOUNT PROJECT

COVID-19 RESPONSE

September 2022

COVID-19
Response and Recovery
Mobilizing financial resources for development

DA-COVID-19 project led by Debt and Development Finance Branch, Division on Globalization and Development Strategies (DDFB/DGDS)



UNITED NATIONS
UNCTAD

September 2022

User Manual: UNCTAD Sustainable Development Finance Assessment Framework Policy Dashboard

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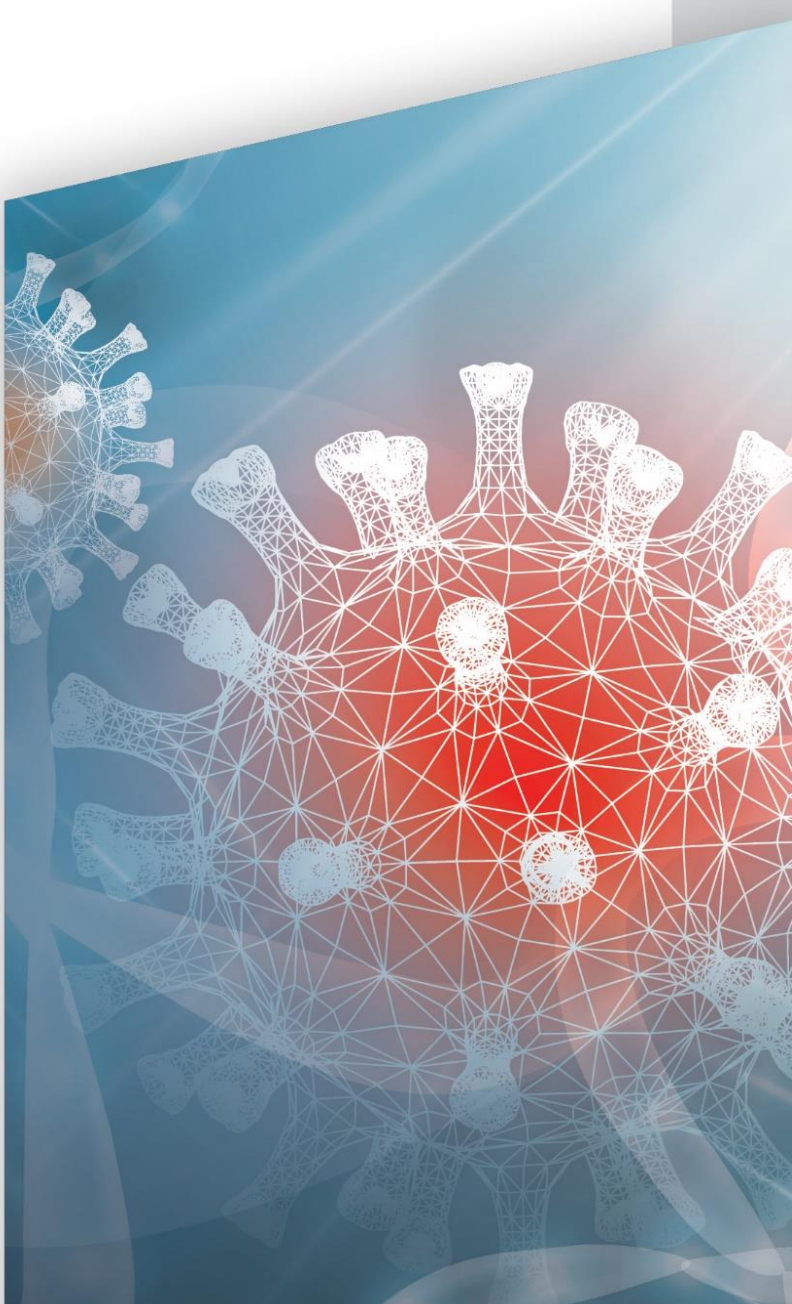

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About the COVID-19 Response and Recovery project

This paper is an output from the project “Response and Recovery: Mobilising financial resources for development in the time of COVID-19”, which is co-ordinated by the Debt and Development Finance Branch of UNCTAD and jointly implemented with ECA, ECLAC and ESCAP. This project is one of the five UN Development Account short-term projects launched in May 2020 in response to the COVID-19 crisis.

In this paper, a framework to assess external debt and financial sustainability and public sector sustainability through the lens of the achievement of the Sustainable Development Goals (SDGs) is presented. The approach differs in some key areas from the International Monetary Fund’s (IMF) Debt Sustainability Analysis (DSA), placing external constraints and the resulting possible growth rate at centre stage. This in turn provides information on the fiscal space available to policy makers with which to achieve the SDGs through public investment.

Abstract

This user manual i) introduces the theoretical foundation of the UNCTAD Sustainable Development Finance Assessment Framework Policy Dashboard, ii) demonstrates how the dashboard was built, and iii) provides a step-by-step guideline to adapt the SDFA policy dashboard to other countries. The SDFA dashboard determines trends in the sustainability of their external, public sector and integrated financial positions. Moreover, it allows policymakers in the selected country to assess the impact of different policy choices on financial sustainability.

For more detailed information on the SDFA dashboard and the tool, please contact:

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1. Introduction

This user manual has three main goals: First, to introduce the user to the theoretical foundation of the UNCTAD Sustainable Development Finance Assessment Framework Policy Dashboard (section 2). Second, demonstrate how the dashboard was built (sections 3 and 4. Third, provide a step-by-step guideline to adapt the SDFA policy dashboard to other countries (section 5).

The UNCTAD SDFA Framework Policy Dashboard was developed with two purposes in mind, namely:

i) To apply historical data for a selected country to the model in order to determine trends in the sustainability of their external, public sector and integrated financial positions.
ii) To allow policymakers in the selected country to assess the impact of different policy choices on financial sustainability going forward by changing assumptions relating to the future path of the model's key variables.

These objectives are reflected in the structure of the SDFA Framework Policy Dashboard – which was developed in Microsoft Excel to make it easier for countries to use in assessing their own performance.

2. The theoretical underpinnings of the SDFA Framework

The Sustainable Development Finance Assessment (SDFA) Framework was developed for UNCTAD by Gustavo Bhering and Carlos Schonerwald da Silva in 2021. It draws on Thirlwall (1979) in recognising the importance of the balance of payments constraint facing most developing countries. The balance of payments position of small, open economies is typically the main constraint to their long-run ability to grow since it imposes a limit on aggregate demand to which aggregate supply is usually forced to adapt. This adaptation often occurs at levels of long-run aggregate supply that are not consistent with full employment. In this view, raising a country's growth rate in a way that is consistent with balance of payments equilibrium can only be achieved through structural changes that serve to raise its income elasticity of exports and/or reduce the income elasticity of its imports over the longer term. Although a balance of payments constraint can be eased by capital inflows, McCombie & Thirlwall (1997) argue that capital inflows alone cannot permit an individual country to increase its growth rate by very much or for very long.

Pasinetti (1981, 1993) who developed a structural economic dynamics (SED) approach to explain uneven multi-sectoral development, notes that income elasticities vary across different products and change over time in response to changing per capita incomes. These changing income elasticities provide differing opportunities for sectors to grow as the resulting expansion of demand is not equally spread over all sectors. Since there are also differing import elasticities associated with each sector there are balance of payments implications of these structural changes in the composition of output. However, as noted by Thirlwall (1979), in a modern open

economy the external balance of payments constraint on the growth of overall demand applies, irrespective of how proportional that growth's impact is across different sectors. This also has implications for public sector debt sustainability: the external constraint on growth also constrains tax collections and the ability to service public sector liabilities.

The UNCTAD SDFA framework uses an understanding of the accounting relationships between various stocks and flows used in the formulation of balance of payments, fiscal and national accounts data to develop key indicators of external and public sector financial sustainability. It has three components:

iii) Financial sustainability conditions for external finance;
iv) Financial sustainability conditions for public sector finances; and
v) Integrated financial sustainability conditions for both external and public sector finances.

Each of these components is examined in the following sections.

2.1 Financial sustainability conditions for external finance

Imbalances in flows on the external account give rise to foreign liabilities and debts for some economies and foreign assets and credits for others. If the stock of net external liabilities (foreign liabilities less foreign assets) increases faster than that country's capacity to repay those liabilities (represented by foreign currency earnings derived from exports of goods and services and remittances) it suggests that the rate at which the country concerned is accumulating net external liabilities is becoming relatively less sustainable[1].

The value of foreign liabilities and foreign assets vary over time due to both newly incurred liabilities and newly acquired assets, as well as changes in their respective stock valuations. The SDFA framework takes account of this by incorporating these valuation changes – including those caused by exchange rate movements - into its calculation of net external liabilities. In practice this means that in a given period (**t**), the change in net external liabilities (∆**NEL**) will be the result of subtracting the values of exports of goods and services (**X**), remittances (**RMT**), and net income from abroad plus any holding gains or losses (**NIFA***) from the value of imports of goods and service (**M**).

$$\boldsymbol{\Delta NEL = M_t - X_t - RMT_t - NIFA_t^*}$$

This means that – for a given import elasticity - external financial sustainability will neither deteriorate nor improve if the rate of growth in net external liabilities is the same as the rate of growth in exports plus remittances. If, however, the growth in net external liabilities is faster than the growth in exports plus remittances, the external

[1] It should be noted that, contrary to standard Balance of Payments practice, the model frames Net External Liabilities and Current Account deficits as positive values and Net External Assets and Current Account surpluses as negative values.

financial sustainability of the economy concerned will be deteriorating. Conversely, if it is slower, external financial sustainability will be improving. This sustainability condition can be expressed as follows:

$$\frac{\boldsymbol{M - X^*}}{\boldsymbol{X^*}} = \left(\frac{\boldsymbol{g_{X^*} - r}}{\boldsymbol{1 + g_{X^*}}}\right)\frac{\boldsymbol{NEL}}{\boldsymbol{X^*}}$$

Where **M** represents imports of goods and services; **X*** is exports plus remittances; $\mathbf{g_{X^*}}$ is the growth in exports plus remittances; **r** is the average cost of net external liabilities; and **NEL** are net external liabilities. In practice this means that if a country has a current account deficit, the rate of growth in exports ($\mathbf{g_{X^*}}$) must be faster than the weighted average cost of external liabilities minus the weighted average return on external assets (**r**). For as long as it is not, the country concerned will be moving away from having net external liabilities that it can service sustainably. If, however, the rate of growth in exports consistently exceeds the average cost of net external liabilities it implies that the country can allow net external liabilities to rise (i.e. foreign liabilities increase faster than foreign assets) without threatening external financial sustainability. Effectively the country could increase imports (and support a higher rate of economic growth in the process) without becoming financially unsustainable.

There are additional nuances that can impact on this sustainability condition. For example, foreign currency denominated net external debt has implications for export earnings that are different to local currency denominated net external debt. It is also possible that a country may be unable to fully-finance a current account deficit with inflows through the capital and financial accounts of the balance of payments. This will impose a hard constraint on the level of imports.

2.2 Financial sustainability conditions for public sector finance

The public sector comprises the different tiers of government as well as state-owned enterprises and other state-controlled entities. Its spending is typically financed through a combination of taxation, levies and user charges, borrowing (either domestically or internationally) and changes to the monetary base. While there is great variation in and no universally-accepted limit to the extent to which the public sector of a particular country can incur liabilities, some countries may adopt fiscal rules that limit the extent of public sector borrowing and the purposes for which borrowed funds can be used. Most capital market lenders will also impose effective limits on borrowing through variations in the price, repayment period and value of lending based on the perceived risk of default.

Since the SDFA framework takes account of public sector net liabilities rather than simply debt, it is necessary to account for variations (holding gains and losses) in the stock values of both public sector liabilities and public sector assets over time[2]. In

[2] It should be noted that, contrary to standard practice, the SDFA model frames both public sector deficits and Net Public Sector Liabilities as positive values while public sector surpluses and Net Public Sector Assets have negative values.

essence, the financial position of a country's public sector will be moving away from sustainability if the rate at which its public sector net liabilities (**PSNL**) increases is faster than the rate of growth of an indicator that reflects the capacity for servicing and repayment of those liabilities. The SDFA has chosen to use the GDP (**Y**) for this purpose, but it could have chosen to use a narrower indicator such as taxes collected. This choice would be material if the capacity for tax collection of the country concerned was not aligned with the economic base and changed over time. For example, if the prevailing tax base represented a subset of all the economic activity and expanded at a slower rate than the GDP the use of the GDP as an indicator of repayment capacity would tend to overstate the public sector financial sustainability of the country concerned. This risk may be more pronounced in economies with large informal sectors, narrow tax bases and poorly developed tax collection systems.

The SDFA framework public sector financial sustainability boundary condition is given as:

$$\frac{\boldsymbol{G + F - T_0}}{\boldsymbol{Y}} = \left(\frac{\boldsymbol{g - \beta}}{\boldsymbol{1 + g}}\right)\frac{\boldsymbol{PSNL}}{\boldsymbol{Y}}$$

Where **G** represents government spending excluding transfer payments, **F** represents fiscal transfer payments; **T** is taxes and other sources of revenue, **g** is the growth in real GDP, **β** is the weighted average real cost of public sector net liabilities; **PSNL** is public sector net liabilities and **Y** represents the GDP. In essence, what this means is that, in the presence of a fiscal deficit [i.e. (**G** + **F**) > **T**], public sector financial stability will be improving if the rate of growth in real GDP (**g**) is greater than the rate of growth in the weighted average real cost of public sector net liabilities (**β**), and deteriorating if **g** is less than **β**.

2.3 Integrated financial sustainability conditions for both external and public sector finance

The final component of the SDFA seeks to integrate the external and public sector debt sustainability constraints into a unified model. From the perspective of the external debt constraint, for a given import elasticity the level of output of the economy will require a corresponding level of imports and growth in the level of output will require that imports also grow. However, if this growth in imports is not matched by a corresponding growth in exports plus remittances, net external liabilities will increase. There is, therefore, a rate of growth in both exports and imports that is consistent with external debt sustainability and that level of growth in imports also imposes a constraint on the growth in output. If the rate of growth in output is higher than this sustainable rate of growth in imports and exports, then imports will also need to grow at a faster rate. Since exports are exogenously determined, this will mean that net external liabilities will increase – moving the country away from an external financial position that is sustainable over the longer term.

The public sector financial sustainability condition can then be restated as:

$$\frac{G + F - T_0}{Y} = \left(\frac{g_{BP} - \beta}{1 + g_{BP}}\right)\frac{PSNL}{Y}$$

Where $\mathbf{g_{BP}}$ represents that growth in exports and imports that is consistent with external debt sustainability and an associated rate of growth in output. All the other elements of the integrated sustainability condition are as given in relation to the public sector financial sustainability condition. In essence, the integrated financial sustainability condition means that public sector net liabilities will only be sustainable over the long term if the rate of growth in exports plus remittances and imports that is consistent with external financial sustainability (i.e. $\mathbf{g_{BP}}$) exceeds the weighted average cost of public sector net liabilities (i.e. $\boldsymbol{\beta}$).

3. A note on data

There is great variation in both the range of data that countries collect and publish and in how particular variables are calculated. While international reporting standards – such as the International Monetary Fund's Sixth Edition (BPM6) of the Balance of Payments and International Investment Position Manual – exist, there are still significant differences in the extent which countries comply with these standards. This makes the consistent application of the model to different countries difficult.

To circumvent this problem, the SDFA Framework Policy Dashboard suggests that data is sourced from international organisations such as the IMF and the World Bank. However, these organisations cannot always compensate for differences and shortcomings in the way that countries collect data and define and calculate variables. As a result, these sources may have required model data for a particular country for only a limited period (which impacts the ability to assess historical trends), or not have particular data series at all (which necessitates the choice of alternative sources and proxy variables that may impact the accuracy and value of the SDFA framework model to a greater or lesser extent). These problems tend to become more common when lower income and less developed countries are selected because they often have poorly-developed statistical systems.

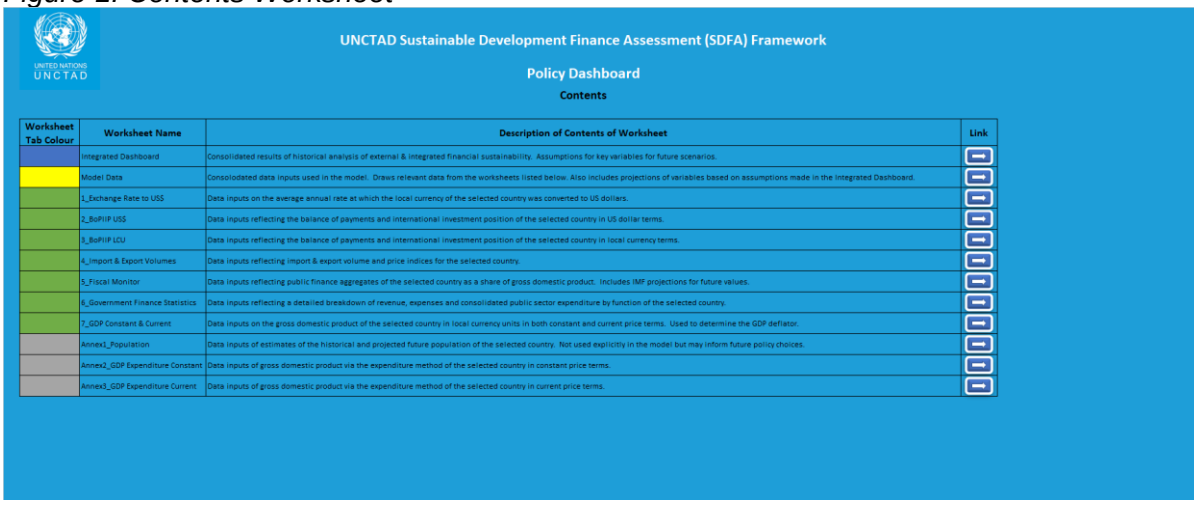
While the number of variables that are inputs into the model is relatively limited, some need to be calculated using additional variables. The data from international organisations also tends to be "packaged" and is often easier to download as a set – rather than as individual time series.

4. The structure and contents of the Policy Dashboard in the Excel Workbook

4.1 Contents

The names and contents of the various Worksheets that make up the UNCTAD SDFA Framework Policy Dashboard Workbook are shown in the **Contents** Worksheet (reproduced below). Hyperlinks to each Worksheet are included. There are links back to the Contents in Cell A1 of each Worksheet, which contains the icon .

Figure 1: Contents Worksheet



UNCTAD Sustainable Development Finance Assessment (SDFA) Framework

Policy Dashboard

Contents

Worksheet Tab Colour	Worksheet Name	Description of Contents of Worksheet	Link
	Integrated Dashboard	Consolidated results of historical analysis of external & integrated financial sustainability. Assumptions for key variables for future scenarios.	
	Model Data	Consolidated data inputs used in the model. Draws relevant data from the worksheets listed below. Also includes projections of variables based on assumptions made in the Integrated Dashboard.	
	1_Exchange Rate to US$	Data inputs on the average annual rate at which the local currency of the selected country was converted to US dollars.	
	2_BoPIIP US$	Data inputs reflecting the balance of payments and international investment position of the selected country in US dollar terms.	
	3_BoPIIP LCU	Data inputs reflecting the balance of payments and international investment position of the selected country in local currency terms.	
	4_Import & Export Volumes	Data inputs reflecting import & export volume and price indices for the selected country.	
	5_Fiscal Monitor	Data inputs reflecting public finance aggregates of the selected country as a share of gross domestic product. Includes IMF projections for future values.	
	6_Government Finance Statistics	Data inputs reflecting a detailed breakdown of revenue, expenses and consolidated public sector expenditure by function of the selected country.	
	7_GDP Constant & Current	Data inputs on the gross domestic product of the selected country in local currency units in both constant and current price terms. Used to determine the GDP deflator.	
	Annex1_Population	Data inputs of estimates of the historical and projected future population of the selected country. Not used explicitly in the model but may inform future policy choices.	
	Annex2_GDP Expenditure Constant	Data inputs of gross domestic product via the expenditure method of the selected country in constant price terms.	
	Annex3_GDP Expenditure Current	Data inputs of gross domestic product via the expenditure method of the selected country in current price terms.	

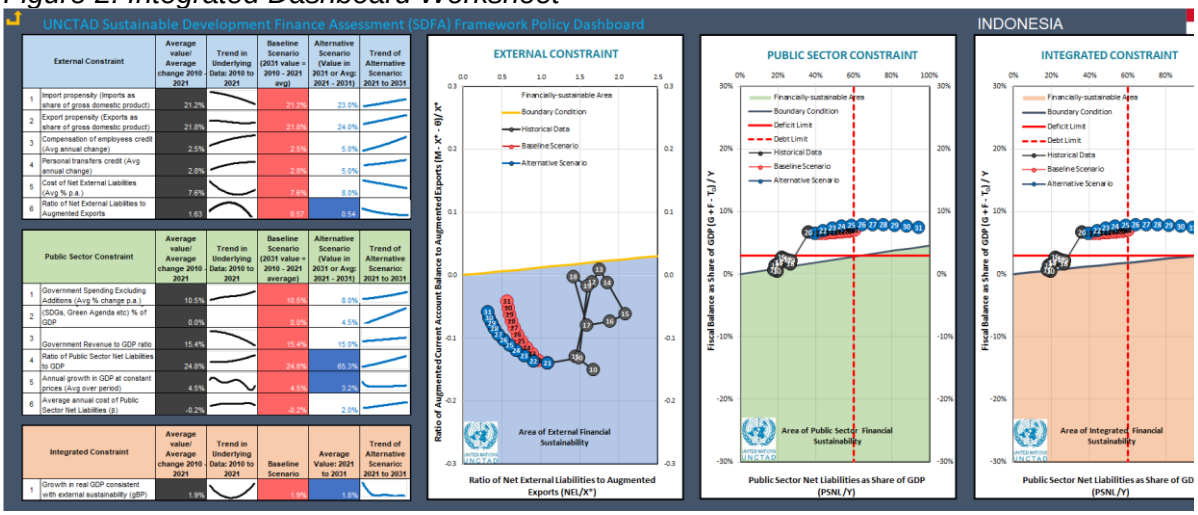
4.2 Integrated Dashboard

Once the Workbook has been populated with the required data for the selected country, the **Integrated Dashboard** becomes the primary interface for users of the UNCTAD SDFA Framework Policy Dashboard. It allows users to observe the application of historical data to **the External, Public Sector and Integrated Constraints**, and to assess the future impact of policy choices relating to key variables of the SDFA Model.

This Worksheet reflects historical averages and trends for key variables used in the External, Public Sector and Integrated sustainability assessments. It makes provision for two forward-looking scenarios:

i) A **Baseline Scenario** that assumes that the same averages derived from the historical analysis will persist going forward; and
ii) An **Alternative Scenario** that allows the user to make policy and other assumptions that will change key model variables over the forecast period. The assumptions made reflect the value for the end of the forecast period (e.g. 2031). The intervening forecast values are generally calculated using the compound average annual change between the last (most recent) historical value and the last year of the forecast.

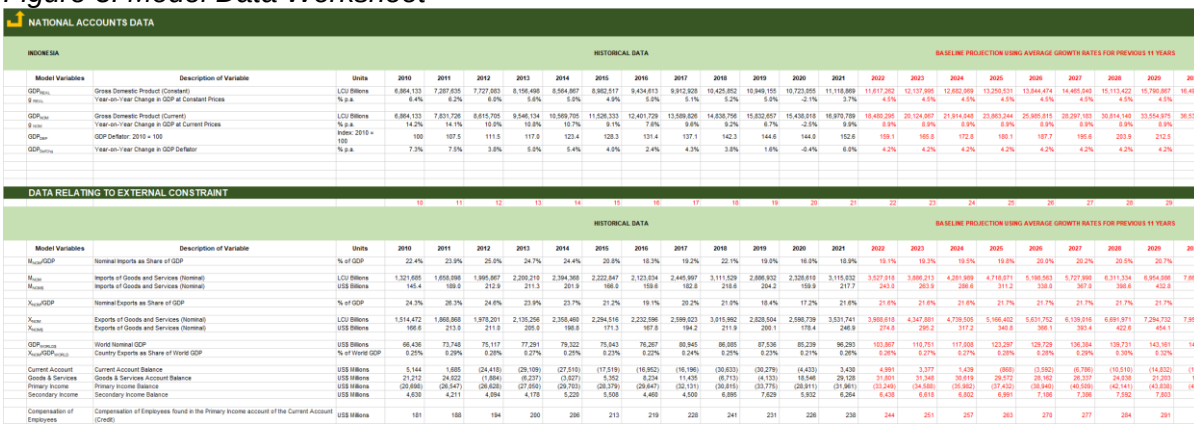
Figure 2: Integrated Dashboard Worksheet



4.3 Model Data

The **Model Data** Worksheet (tab highlighted yellow) is a consolidation of the data required for all the elements of the UNCTAD SDFA Framework Policy Dashboard. It collects relevant data from all the Worksheets that are listed below and then also projects the data for the Baseline and Alternative scenarios. In the former case this is determined from long term averages of the historical data, and in the latter case it arises from the assumptions made in the Integrated Dashboard.

Figure 3: Model Data Worksheet



4.4 Core data

The worksheets described below host information that is incorporated into the **Model Data** Worksheet. When adapting the SDFA Policy Dashboard to a new country, the user must adjust the required data in the **seven** worksheets listed below. All the worksheets that need to be populated with data relevant to the selected country have green tabs.

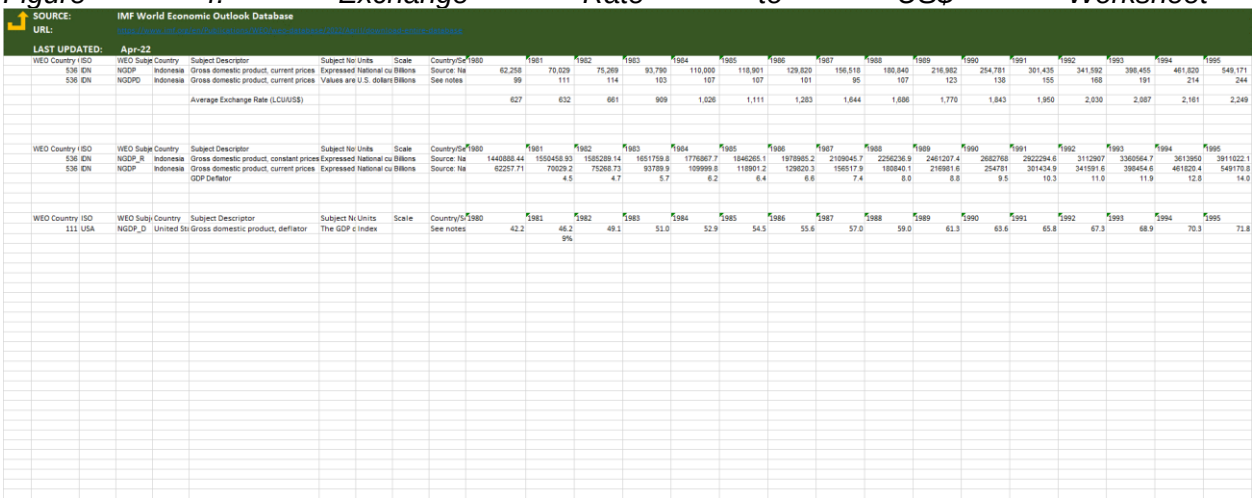
4.4.1 Exchange Rate to US$

The **Exchange Rate to US$** Worksheet contains data that reflects the average annual rate of exchange between the local currency and the United States dollar. This data is used to convert values from LCUs to US$ and from US$ to LCUs where required. This Worksheet also includes a GDP deflator calculation.

The average exchange rate is determined from the IMF World Economic Outlook database using the estimates of gross domestic product at current prices in both LCU and US$ terms. This database can be accessed using the URL contained in the Worksheet. **It is important to ensure that the units relating to the LCU data (millions, billions, trillions) is correctly reflected in the exchange rate calculation**.

The GDP deflator is calculated using the gross domestic product in LCUs in both current and constant price terms.

Figure 4: Exchange Rate to US$ Worksheet



SOURCE: IMF World Economic Outlook Database
URL: https://www.imf.org/en/Publications/WEO/weo-database/2022/April/download-entire-database
LAST UPDATED: Apr-22

WEO Country	ISO	WEO Subje	Country	Subject Descriptor	Subject No	Units	Scale	Country/Se	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
536	IDN	NGDP	Indonesia	Gross domestic product, current prices	Expressed	National cu	Billions	Source: Na	62,258	70,029	75,269	93,790	110,000	118,901	129,820	156,518	180,840	216,982	254,781	301,435	341,592	398,455	461,820	549,171
536	IDN	NGDPD	Indonesia	Gross domestic product, current prices	Values are	U.S. dollars	Billions	See notes	99	111	114	103	107	107	101	95	107	123	138	155	168	191	214	244
				Average Exchange Rate (LCU/US$)					627	632	661	909	1,026	1,111	1,283	1,644	1,686	1,770	1,843	1,950	2,030	2,087	2,161	2,249

WEO Country	ISO	WEO Subje	Country	Subject Descriptor	Subject No	Units	Scale	Country/Se	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
536	IDN	NGDP_R	Indonesia	Gross domestic product, constant prices	Expressed	National cu	Billions	Source: Na	1440888.44	1550458.93	1585289.14	1651759.8	1776867.7	1846265.1	1978985.2	2109045.7	2256236.9	2461207.4	2682768	2922294.6	3112907	3360564.7	3613950	3911022.1
536	IDN	NGDP	Indonesia	Gross domestic product, current prices	Expressed	National cu	Billions	Source: Na	62257.71	70029.2	75268.73	93789.9	109999.8	118901.2	129820.3	156517.9	180840.1	216981.6	254781	301434.9	341591.6	398454.6	461820.4	549170.8
				GDP Deflator					4.5	4.7	5.7	6.2	6.4	6.6	7.4	8.0	8.8	9.5	10.3	11.0	11.9	12.8	14.0	

WEO Country	ISO	WEO Subj	Country	Subject Descriptor	Subject No	Units	Scale	Country/Se	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
111	USA	NGDP_D	United Sta	Gross domestic product, deflator	The GDP c	Index		See notes	42.2	46.2	49.1	51.0	52.9	54.5	55.6	57.0	59.0	61.3	63.6	65.8	67.3	68.9	70.3	71.8
										9%														

4.4.2 BoPIIP US$

The **BoPIIP US$** Worksheet contains data that relates to the selected country's Balance of Payments and International Investment Position expressed in United States dollars. Where possible this data should be sourced from the IMF Balance of Payments and International Investment Position database as it consistently applies the BPM6 standards and thereby ensures some level of inter-country comparability.

After accessing the relevant database using the URL contained in the Worksheet it is important to first ascertain the reporting status of the selected country. This can be determined by clicking on the link on the upper righthand side of the web page titled **Economies Reporting on BPM6 Basis** which then downloads a PDF document that lists start date of participating economies in relations to both Balance of Payments (BOP BPM6 Basis Start Date) and International Investment Position (IIP BPM6 Basis Start Date) data.

After determining that the selected country is included the user should:

i) Click on the **Query** tab on the top centre-left of the web page, then click on the  icon next to the **Country** tab (third item on the left) and then select the country from the dropdown list. Select **OK**.

ii) Then select the  icon next to the **Time** tab on the left of the web page (first of three selectable items). Select the **Timeline** tab and then de-select the Quarterly data and ensure that sufficient available annual data is selected to provide for a reasonable historical trend analysis. Select **Apply**. Then close the Filter-Time box.

iii) Then select the **Export** tab and download the Excel file.

iv) Select the data in the downloaded file **up to the line that reflects the Net International Investment Position** and paste it over the data in the existing BoPIIP US$ Worksheet.

Figure 5: BoPIIP US$ Worksheet

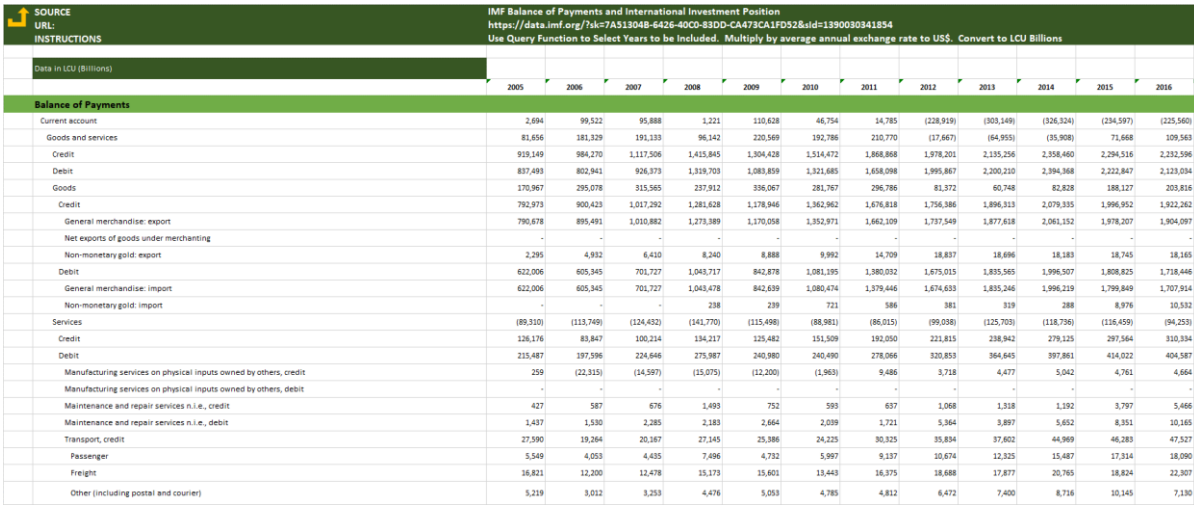
SOURCE	IMF Balance of Payments and International Investment Position											
URL:												
INSTRUCTIONS	Use Query Function to Select Years to be Included											
Data in US Dollars (Millions)												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Balance of Payments												
Current account	278	10,859	10,491	126	10,628	5,144	1,685	(24,418)	(29,109)	(27,510)	(17,519)	(16,952)
Goods and services	8,411	19,786	20,912	9,918	21,191	21,212	24,022	(1,884)	(6,237)	(3,027)	5,352	8,234
Credit	94,680	107,400	122,266	146,055	125,322	166,636	212,997	211,007	205,033	198,824	171,345	167,793
Debit	86,268	87,614	101,354	136,137	104,131	145,424	188,975	212,891	211,270	201,851	165,993	159,559
Goods	17,611	32,198	34,526	24,542	32,287	31,003	33,825	8,680	5,833	6,983	14,049	15,318
Credit	81,682	98,251	111,301	132,210	113,266	149,966	191,109	187,347	182,089	175,293	149,124	144,470
General merchandise: export	81,446	97,713	110,600	131,360	112,413	148,866	189,432	185,337	180,294	173,760	147,725	143,105
Net exports of goods under merchanting						-	-	-	-			
Non-monetary gold: export	236	538	701	850	854	1,099	1,676	2,009	1,795	1,533	1,400	1,365
Debit	64,071	66,053	76,775	107,667	80,979	118,963	157,284	178,667	176,256	168,310	135,076	129,152
General merchandise: import	64,071	66,053	76,775	107,643	80,956	118,884	157,217	178,626	176,225	168,286	134,406	128,360
Non-monetary gold: import	-	-	-	25	23	79	67	41	31	24	670	792
Services	(9,200)	(12,412)	(13,614)	(14,625)	(11,096)	(9,791)	(9,803)	(10,564)	(12,070)	(10,010)	(8,697)	(7,084)
Credit	12,997	9,149	10,964	13,845	12,056	16,670	21,888	23,660	22,944	23,531	22,221	23,324
Debit	22,197	21,561	24,578	28,470	23,152	26,461	31,691	34,224	35,014	33,541	30,918	30,407
Manufacturing services on physical inputs owned by others, credit	27	(2,435)	(1,597)	(1,555)	(1,172)	(216)	1,081	397	430	425	356	351
Manufacturing services on physical inputs owned by others, debit	-	-	-	-	-							
Maintenance and repair services n.i.e., credit	44	64	74	154	72	65	73	114	127	100	284	411
Maintenance and repair services n.i.e., debit	148	167	250	225	256	224	196	572	374	476	624	764
Transport, credit	2,842	2,102	2,206	2,800	2,439	2,665	3,456	3,822	3,611	3,791	3,456	3,572
Passenger	572	442	485	773	455	660	1,041	1,139	1,183	1,306	1,293	1,360
Freight	1,733	1,331	1,365	1,565	1,499	1,479	1,866	1,993	1,717	1,751	1,406	1,676
Other (including postal and courier)	538	329	356	462	485	526	548	690	711	735	758	536

4.4.3 BoPIIP LCU

The **BoPIIP LCU** Worksheet contains the same data as shown in the BoPIIP US$ Worksheet except that is converted to local currency units. Once **the Exchange Rate to US$** Worksheet has been updated the conversion should happen automatically. However, it is important to ensure that the time frames reflected in each Worksheet are the same. It should be noted that the default calculation converts the data from

millions of US$ to billions of LCUs.

Figure 6: BoPIIP LCU Worksheet



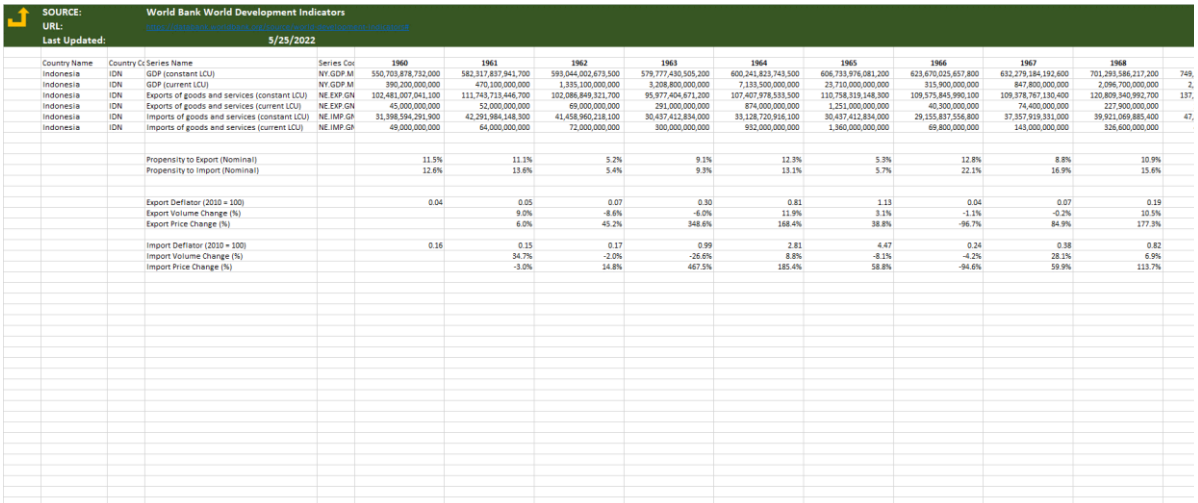
SOURCE	IMF Balance of Payments and International Investment Position											
URL:	https://data.imf.org/?sk=7A51304B-6426-40C0-83DD-CA473CA1FD52&sid=1390030341854											
INSTRUCTIONS	Use Query Function to Select Years to be Included. Multiply by average annual exchange rate to US$. Convert to LCU Billions											
Data in LCU (Billions)												
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Balance of Payments												
Current account	2,694	99,522	95,888	1,221	110,628	46,754	14,785	(228,919)	(303,149)	(326,324)	(234,597)	(225,560)
Goods and services	81,656	181,329	191,133	96,142	220,569	192,786	210,770	(17,667)	(64,955)	(35,908)	71,668	109,563
Credit	919,149	984,270	1,117,506	1,415,845	1,304,428	1,514,472	1,868,868	1,978,201	2,135,256	2,358,460	2,294,516	2,232,596
Debit	837,493	802,941	926,373	1,319,703	1,083,859	1,321,685	1,658,098	1,995,867	2,200,210	2,394,368	2,222,847	2,123,034
Goods	170,967	295,078	315,565	237,912	336,067	281,767	296,786	81,372	60,748	82,828	188,127	203,816
Credit	792,973	900,423	1,017,292	1,281,628	1,178,946	1,362,962	1,676,818	1,756,386	1,896,313	2,079,335	1,996,952	1,922,262
General merchandise: export	790,678	895,491	1,010,882	1,273,389	1,170,058	1,352,971	1,662,109	1,737,549	1,877,618	2,061,152	1,978,207	1,904,097
Net exports of goods under merchanting	-	-	-	-	-	-	-	-	-	-	-	-
Non-monetary gold: export	2,295	4,932	6,410	8,240	8,888	9,992	14,709	18,837	18,696	18,183	18,745	18,165
Debit	622,006	605,345	701,727	1,043,717	842,878	1,081,195	1,380,032	1,675,015	1,835,565	1,996,507	1,808,825	1,718,446
General merchandise: import	622,006	605,345	701,727	1,043,478	842,639	1,080,474	1,379,446	1,674,633	1,835,246	1,996,219	1,799,849	1,707,914
Non-monetary gold: import	-	-	-	238	239	721	586	381	319	288	8,976	10,532
Services	(89,310)	(113,749)	(124,432)	(141,770)	(115,498)	(88,981)	(86,015)	(99,038)	(125,703)	(118,736)	(116,459)	(94,253)
Credit	126,176	83,847	100,214	134,217	125,482	151,509	192,050	221,815	238,942	279,125	297,564	310,334
Debit	215,487	197,596	224,646	275,987	240,980	240,490	278,066	320,853	364,645	397,861	414,022	404,587
Manufacturing services on physical inputs owned by others, credit	259	(22,315)	(14,597)	(15,075)	(12,200)	(1,963)	9,486	3,718	4,477	5,042	4,761	4,664
Manufacturing services on physical inputs owned by others, debit	-	-	-	-	-	-	-	-	-	-	-	-
Maintenance and repair services n.i.e., credit	427	587	676	1,493	752	593	637	1,068	1,318	1,192	3,797	5,466
Maintenance and repair services n.i.e., debit	1,437	1,530	2,285	2,183	2,664	2,039	1,721	5,364	3,897	5,652	8,351	10,165
Transport, credit	27,590	19,264	20,167	27,145	25,386	24,225	30,325	35,834	37,602	44,969	46,283	47,527
Passenger	5,549	4,053	4,435	7,496	4,732	5,997	9,137	10,674	12,325	15,487	17,314	18,090
Freight	16,821	12,200	12,478	15,173	15,601	13,443	16,375	18,688	17,877	20,765	18,824	22,307
Other (including postal and courier)	5,219	3,012	3,253	4,476	5,053	4,785	4,812	6,472	7,400	8,716	10,145	7,130

4.4.4 Import & Export Volumes

The **Import & Export Volumes & Price** Worksheet contains historical data reflecting the current price and constant price values for gross domestic product, imports and exports of the selected country. These are used to calculate the import and export propensities as well as the price and volume changes in imports and exports.

The required data is sourced from the World Bank World Development Indicators. After entering the URL shown in the Worksheet it is necessary to select the country, the series required and the data timeframe. The series are listed alphabetically and should be selected in accordance with the series names listed in the Worksheet. Once the required data has been downloaded and pasted into the Worksheet in the required place, the export and import propensities and price and volumes changes are calculated automatically.

Figure 7: Import & Export Volumes Worksheet



SOURCE:	World Bank World Development Indicators												
URL:													
Last Updated:	5/25/2022												
Country Name	Country Co	Series Name	Series Coc	1960	1961	1962	1963	1964	1965	1966	1967	1968	
Indonesia	IDN	GDP (constant LCU)	NY.GDP.M	550,703,878,732,000	582,317,837,941,700	593,044,002,673,500	579,777,430,505,200	600,241,823,743,500	606,733,976,081,200	623,670,025,657,800	632,279,184,192,600	701,293,586,217,200	749,
Indonesia	IDN	GDP (current LCU)	NY.GDP.M	390,200,000,000	470,100,000,000	1,335,100,000,000	3,208,800,000,000	7,133,500,000,000	23,710,000,000,000	315,900,000,000	847,800,000,000	2,096,700,000,000	2,
Indonesia	IDN	Exports of goods and services (constant LCU)	NE.EXP.GN	102,481,007,041,100	111,743,713,446,700	102,086,849,321,700	95,977,404,671,200	107,407,978,533,500	110,758,319,148,300	109,575,845,990,100	109,378,767,130,400	120,809,340,992,700	137,
Indonesia	IDN	Exports of goods and services (current LCU)	NE.EXP.GN	45,000,000,000	52,000,000,000	69,000,000,000	291,000,000,000	874,000,000,000	1,251,000,000,000	40,300,000,000	74,400,000,000	227,900,000,000	
Indonesia	IDN	Imports of goods and services (constant LCU)	NE.IMP.GN	31,398,594,291,900	42,291,984,148,300	41,458,960,218,100	30,437,412,834,000	33,128,720,916,100	30,437,412,834,000	29,155,837,556,800	37,357,919,331,000	39,921,069,885,400	47,
Indonesia	IDN	Imports of goods and services (current LCU)	NE.IMP.GN	49,000,000,000	64,000,000,000	72,000,000,000	300,000,000,000	932,000,000,000	1,360,000,000,000	69,800,000,000	143,000,000,000	326,600,000,000	
		Propensity to Export (Nominal)		11.5%	11.1%	5.2%	9.1%	12.3%	5.3%	12.8%	8.8%	10.9%	
		Propensity to Import (Nominal)		12.6%	13.6%	5.4%	9.3%	13.1%	5.7%	22.1%	16.9%	15.6%	
		Export Deflator (2010 = 100)		0.04	0.05	0.07	0.30	0.81	1.13	0.04	0.07	0.19	
		Export Volume Change (%)			9.0%	-8.6%	-6.0%	11.9%	3.1%	-1.1%	-0.2%	10.5%	
		Export Price Change (%)			6.0%	45.2%	348.6%	168.4%	38.8%	-96.7%	84.9%	177.3%	
		Import Deflator (2010 = 100)		0.16	0.15	0.17	0.99	2.81	4.47	0.24	0.38	0.82	
		Import Volume Change (%)			34.7%	-2.0%	-26.6%	8.8%	-8.1%	-4.2%	28.1%	6.9%	
		Import Price Change (%)			-3.0%	14.8%	467.5%	185.4%	58.8%	-94.6%	59.9%	113.7%	

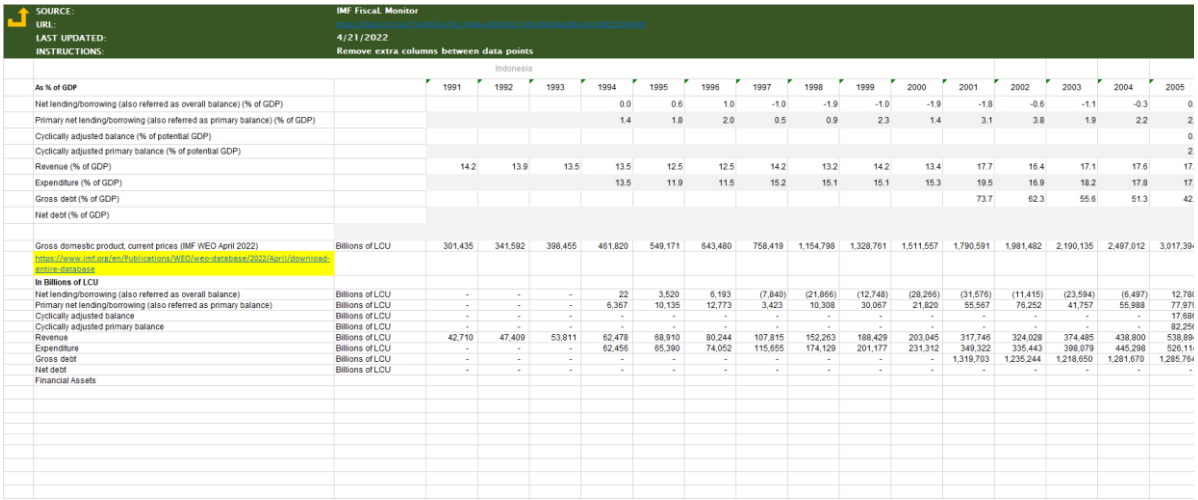
4.4.5 Fiscal Monitor

The **Fiscal Monitor** Worksheet contains key fiscal sector indicators and projections that are expressed as a share of the selected country's nominal gross domestic product. The data is sourced from the IMF Fiscal Monitor database. Depending on the country selected, the data may, or may not, include figures for the ratio of Net Debt to GDP. If it is not included, and this data cannot be sourced elsewhere, the Gross Debt to GDP ratio can be used.

The Fiscal Monitor data is accessed by entering the URL listed in the Worksheet. The user must then select the **By Country** tab at the top left of the web page and then choose the country required from the drop-down list.

The export data  icon to the right of the data table must then be selected. For some reason the data downloaded from this source includes blank columns between each year of data which must be removed prior to pasting the data in the Worksheet.

Figure 8: Fiscal Monitor Worksheet



SOURCE:	IMF Fiscal Monitor															
URL:																
LAST UPDATED:	4/21/2022															
INSTRUCTIONS:	Remove extra columns between data points															
	Indonesia															
As % of GDP		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Net lending/borrowing (also referred as overall balance) (% of GDP)					0.0	0.6	1.0	-1.0	-1.9	-1.0	-1.9	-1.8	-0.6	-1.1	-0.3	0
Primary net lending/borrowing (also referred as primary balance) (% of GDP)					1.4	1.8	2.0	0.5	0.9	2.3	1.4	3.1	3.8	1.9	2.2	2
Cyclically adjusted balance (% of potential GDP)																0
Cyclically adjusted primary balance (% of potential GDP)																2
Revenue (% of GDP)		14.2	13.9	13.5	13.5	12.5	12.5	14.2	13.2	14.2	13.4	17.7	16.4	17.1	17.6	17
Expenditure (% of GDP)					13.5	11.9	11.5	15.2	15.1	15.1	15.3	19.5	16.9	18.2	17.8	17
Gross debt (% of GDP)												73.7	62.3	55.6	51.3	42
Net debt (% of GDP)																
Gross domestic product, current prices (IMF WEO April 2022)	Billions of LCU	301,435	341,592	398,455	461,820	549,171	643,480	758,419	1,154,798	1,328,761	1,511,557	1,790,591	1,981,482	2,190,135	2,497,012	3,017,39
https://www.imf.org/en/Publications/WEO/weo-database/2022/April/download-entire-database																
In Billions of LCU																
Net lending/borrowing (also referred as overall balance)	Billions of LCU	-	-	-	22	3,520	6,193	(7,840)	(21,866)	(12,748)	(28,266)	(31,576)	(11,415)	(23,594)	(6,497)	12,78
Primary net lending/borrowing (also referred as primary balance)	Billions of LCU	-	-	-	6,367	10,135	12,773	3,423	10,308	30,067	21,820	55,567	76,252	41,757	55,988	77,97
Cyclically adjusted balance	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17,68
Cyclically adjusted primary balance	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82,25
Revenue	Billions of LCU	42,710	47,409	53,811	62,478	68,910	80,244	107,815	152,263	188,429	203,045	317,746	324,028	374,485	438,800	538,89
Expenditure	Billions of LCU	-	-	-	62,456	65,390	74,052	115,655	174,129	201,177	231,312	349,322	335,443	398,079	445,298	526,11
Gross debt	Billions of LCU	-	-	-	-	-	-	-	-	-	-	1,319,703	1,235,244	1,218,650	1,281,670	1,285,76
Net debt	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financial Assets																

4.4.6 Government Finance Statistics

The **Government Finance Statistics** Worksheet contains data on the sources and use of public sector revenue. The Worksheet includes three sets of data that are all sourced from the IMF Government Finance Statistics database, namely:

i) A detailed revenue breakdown;
ii) A detailed expense breakdown; and
iii) A breakdown of the Classification of Functions of Government (COFOG) expenditure.

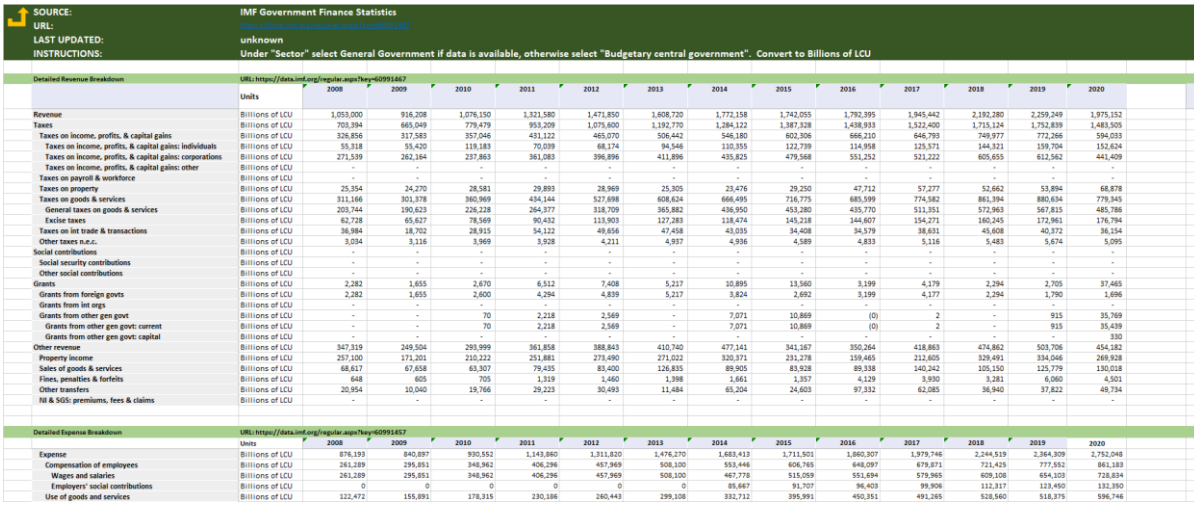
While much of this data is not used as a direct input into the SDFA Model, it provides important context to aspects such as possible additional public sector spending that could be linked to meeting Sustainable Development Goals or climate change targets.

Use the URLs listed for each section of data. In relation to the **Detailed Revenue Breakdown**:

i) Select the country from the drop-down list using the **Country** tab.
ii) With the **Sector** tab, first try to select **General Government**. If the selected country does not have data on general government revenue and expenditure, select **Budgetary Central Government**.
iii) Keep the **Unit** tab on the **Domestic Currency** default.
iv) For the **Year** tab, ensure that the period covered is sufficient to allow for a reasonable historical trend analysis. The default is typically for ten years or more, which should be sufficient.
v) Export the data to an Excel file and then paste the relevant data into the Worksheet.

Repeat these steps for the **Detailed Expense Breakdown** and the **Functional Expenditures (COFOG)** sections.

Figure 9: Government Finance Statistics Worksheet

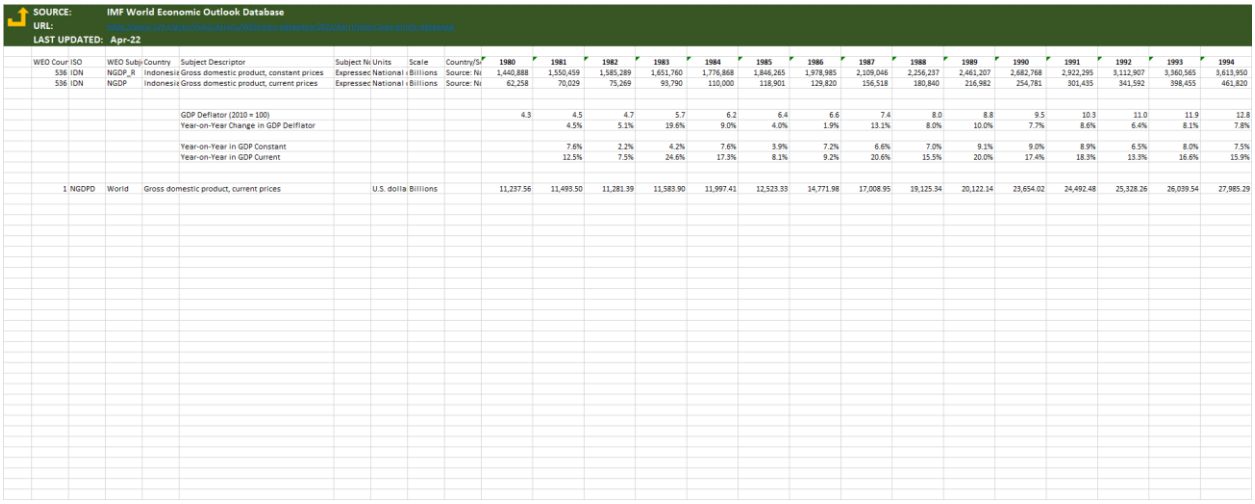


SOURCE:	IMF Government Finance Statistics														
URL:															
LAST UPDATED:	unknown														
INSTRUCTIONS:	Under "Sector" select General Government if data is available, otherwise select "Budgetary central government". Convert to Billions of LCU														
Detailed Revenue Breakdown	URL: https://data.imf.org/regular.aspx?key=60991467														
	Units	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Revenue	Billions of LCU	1,053,000	916,208	1,076,150	1,321,580	1,471,850	1,608,720	1,772,158	1,742,055	1,792,395	1,945,442	2,192,280	2,259,249	1,975,152	
Taxes	Billions of LCU	703,394	665,049	779,479	953,209	1,075,600	1,192,770	1,284,122	1,387,328	1,438,933	1,522,400	1,715,124	1,752,839	1,483,505	
Taxes on income, profits, & capital gains	Billions of LCU	326,856	317,583	357,046	431,122	465,070	506,442	546,180	602,306	666,210	646,793	749,977	772,266	594,033	
Taxes on income, profits, & capital gains: individuals	Billions of LCU	55,318	55,420	118,183	70,039	68,174	94,546	110,355	122,739	114,958	125,571	144,321	159,704	152,624	
Taxes on income, profits, & capital gains: corporations	Billions of LCU	271,539	262,164	237,863	361,083	396,896	411,896	435,825	479,568	551,252	521,222	605,655	612,562	441,409	
Taxes on income, profits, & capital gains: other	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	
Taxes on payroll & workforce	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	
Taxes on property	Billions of LCU	25,354	24,270	28,581	29,893	28,969	25,305	23,476	29,250	47,712	57,277	52,662	53,894	68,878	
Taxes on goods & services	Billions of LCU	311,166	301,378	360,969	434,144	527,698	608,624	666,495	716,775	685,599	774,582	861,394	880,634	779,345	
General taxes on goods & services	Billions of LCU	203,744	190,623	226,228	264,377	318,709	365,882	436,950	453,280	435,770	511,351	572,963	567,815	485,786	
Excise taxes	Billions of LCU	62,728	65,627	78,569	90,432	113,903	127,283	118,474	145,218	144,607	154,271	160,245	172,961	176,794	
Taxes on int trade & transactions	Billions of LCU	36,984	18,702	28,915	54,122	49,656	47,458	43,035	34,408	34,579	38,631	45,608	40,372	36,154	
Other taxes n.e.c.	Billions of LCU	3,034	3,116	3,969	3,928	4,211	4,937	4,936	4,589	4,833	5,116	5,483	5,674	5,095	
Social contributions	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social security contributions	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other social contributions	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grants	Billions of LCU	2,282	1,655	2,670	6,512	7,408	5,217	10,895	13,560	3,199	4,179	2,294	2,705	37,465	
Grants from foreign govts	Billions of LCU	2,282	1,655	2,600	4,294	4,839	5,217	3,824	2,692	3,199	4,177	2,294	1,790	1,696	
Grants from int orgs	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grants from other gen govt	Billions of LCU	-	-	70	2,218	2,569	-	7,071	10,869	(0)	2	-	915	35,769	
Grants from other gen govt: current	Billions of LCU	-	-	70	2,218	2,569	-	7,071	10,869	(0)	2	-	915	35,439	
Grants from other gen govt: capital	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	330	
Other revenue	Billions of LCU	347,319	249,504	293,999	361,858	388,843	410,740	477,141	341,167	350,264	418,863	474,862	503,706	454,182	
Property income	Billions of LCU	257,100	171,201	210,222	251,881	273,490	271,022	320,371	231,278	159,465	212,605	329,491	334,046	269,928	
Sales of goods & services	Billions of LCU	68,617	67,658	63,307	79,435	83,400	126,835	89,905	83,928	89,338	140,242	105,150	125,779	130,018	
Fines, penalties & forfeits	Billions of LCU	648	605	705	1,319	1,460	1,398	1,661	1,357	4,129	3,930	3,281	6,060	4,501	
Other transfers	Billions of LCU	20,954	10,040	19,766	29,223	30,493	11,484	65,204	24,603	97,332	62,085	36,940	37,822	49,734	
Nl & SGS: premiums, fees & claims	Billions of LCU	-	-	-	-	-	-	-	-	-	-	-	-	-	
Detailed Expense Breakdown	URL: https://data.imf.org/regular.aspx?key=60991457														
	Units	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Expense	Billions of LCU	876,193	840,897	930,552	1,143,860	1,311,820	1,476,270	1,683,413	1,711,501	1,860,307	1,979,746	2,244,519	2,364,309	2,752,048	
Compensation of employees	Billions of LCU	261,289	295,851	348,962	406,296	457,969	508,100	553,446	606,765	648,097	679,871	721,425	777,552	861,183	
Wages and salaries	Billions of LCU	261,289	295,851	348,962	406,296	457,969	508,100	467,778	515,059	551,694	579,965	609,108	654,103	728,834	
Employers' social contributions	Billions of LCU	0	0	0	0	0	0	85,667	91,707	96,403	99,906	112,317	123,450	132,350	
Use of goods and services	Billions of LCU	122,472	155,891	178,315	230,186	260,443	299,108	332,712	395,991	450,351	491,265	528,560	518,375	596,746	

4.4.7 GDP Constant & Current

The **GDP Constant & Current** Worksheet contains data that reflects annual changes in the GDP deflator, as well as constant and current price GDP. It also includes data on estimates of the value of World GDP at current prices in US$ terms.

Figure 10: GDP Constant & Current Worksheet



SOURCE: IMF World Economic Outlook Database
URL: https://www.imf.org/en/Publications/WEO/weo-database/2022/April/download-entire-database
LAST UPDATED: Apr-22

WEO Coun	ISO	WEO Subj	Country	Subject Descriptor	Subject No	Units	Scale	Country/S	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
536	IDN	NGDP_R	Indonesia	Gross domestic product, constant prices	Expressed	National c	Billions	Source: Na	1,440,888	1,550,459	1,585,289	1,651,760	1,776,868	1,846,265	1,978,985	2,109,046	2,256,237	2,461,207	2,682,768	2,922,295	3,112,907	3,360,565	3,613,950
536	IDN	NGDP	Indonesia	Gross domestic product, current prices	Expressed	National c	Billions	Source: Na	62,258	70,029	75,269	93,790	110,000	118,901	129,820	156,518	180,840	216,982	254,781	301,435	341,592	398,455	461,820
				GDP Deflator (2010 = 100)					4.3	4.5	4.7	5.7	6.2	6.4	6.6	7.4	8.0	8.8	9.5	10.3	11.0	11.9	12.8
				Year-on-Year Change in GDP Deflator						4.5%	5.1%	19.6%	9.0%	4.0%	1.9%	13.1%	8.0%	10.0%	7.7%	8.6%	6.4%	8.1%	7.8%
				Year-on-Year in GDP Constant						7.6%	2.2%	4.2%	7.6%	3.9%	7.2%	6.6%	7.0%	9.1%	9.0%	8.9%	6.5%	8.0%	7.5%
				Year-on-Year in GDP Current						12.5%	7.5%	24.6%	17.3%	8.1%	9.2%	20.6%	15.5%	20.0%	17.4%	18.3%	13.3%	16.6%	15.9%
1	NGDPD	World	Gross domestic product, current prices			U.S. dolla	Billions		11,237.56	11,493.50	11,281.39	11,583.90	11,997.41	12,523.33	14,771.98	17,008.95	19,125.34	20,122.14	23,654.02	24,492.48	25,328.26	26,039.54	27,985.29

4.5 Contextual Information

The three worksheets described below host information that although is not a variable used directly in the SDFA Model, it may be an important consideration in relation to additional spending requirements by government and expenditure priorities. The three worksheets are referred in the Excel documents as Annex 1, 2 and 3.

4.5.1 Population

The **Population** Worksheet contains historical and projected population data for the selected country. The recommended source for this data is the United Nations Department of Economic and Social Affairs (UN DESA) World Population Prospects (currently the 2019 Revision). This can be supplemented with population estimates by the statistical agencies of the selected country for recent years. UN DESA includes forward projections at five yearly intervals, so it is necessary to construct annual estimates for the interceding years. A compound average annual growth rate can be used for this purpose.

4.5.2 GDP Expenditure Constant

The **GDP Expenditure Constant** Worksheet contains historical data reflecting the gross domestic product of the selected country using the expenditure method in constant price terms in local currency units (LCUs). It is usually sourced from the selected country's statistical office. . This data is often packaged for downloading purposes and it may be easier to include the comprehensive data. The historical time period covered by this data may vary. It is important to try to incorporate at least ten years of historical data to make the trend analysis worthwhile.

4.5.3 GDP Expenditure Current

The **GDP Expenditure Current** Worksheet contains historical data reflecting the gross domestic product of the selected country using the expenditure method in current price terms in local currency units (LCUs). It is usually sourced from the selected country's statistical office. The combination of the constant and current price data can also be used to determine price deflators for the various components of the GDP. This data is often packaged for downloading purposes and it may be easier to include the comprehensive data. The historical time period covered by this data may vary. It is important to try to incorporate at least ten years of historical data to make the trend analysis worthwhile.

5. Process to follow to populate and use the UNCTAD SDFA Framework Policy Dashboard

The following steps should be followed to set up and use the UNCTAD SDFA Framework Policy Dashboard.

i) Open the Excel file titled **SDFA Policy Dashboard 29 August 2022 V1.0**.

ii) Save the file under a **new name** that reflects the country selected.

iii) Populate the Core Data Worksheets (green tabs) (Section 3.4 above) with relevant data. *Optional: populate contextual information worksheet (grey tabs)*. **Ensure that units and dates are correctly captured.**

iv) Ensure that each line of the **Model Data** Worksheet correctly references the correct cell in the correct Worksheet. The years must match. If the format of the data for the country selected differs from that referred to in the Model Data Worksheet make sure that corresponding values match. If the source data does not include a particular time series then ensure that those values are blank in the Model Data Worksheet. Some statistical offices publish data with years running from left to right, while others publish data from right to left. It is important to ensure that there is consistency with other parts of the Workbook and that the correct years are referenced.

v) Ensure that the first year of the Baseline and Alternative scenarios follow on immediately from the last year of available historical data. So, if available data only goes to 2020, the first year of the Baseline and Alternative scenarios must be 2021.

vi) Ensure that the averages calculated relate to the period of the historical data and that the number of periods is correctly reflected in the calculation.

vii) The Model currently reflects fiscal rules relating to both the ratio of the fiscal deficit to GDP and the level of government debt to GDP. If the country selected has fiscal rules (such as deficit or debt limits) ensure that these are correctly reflected in the **Model Data** Worksheet on lines 108 to 110. If the selected country does not have fiscal rules, the values on these lines should be zeroed.

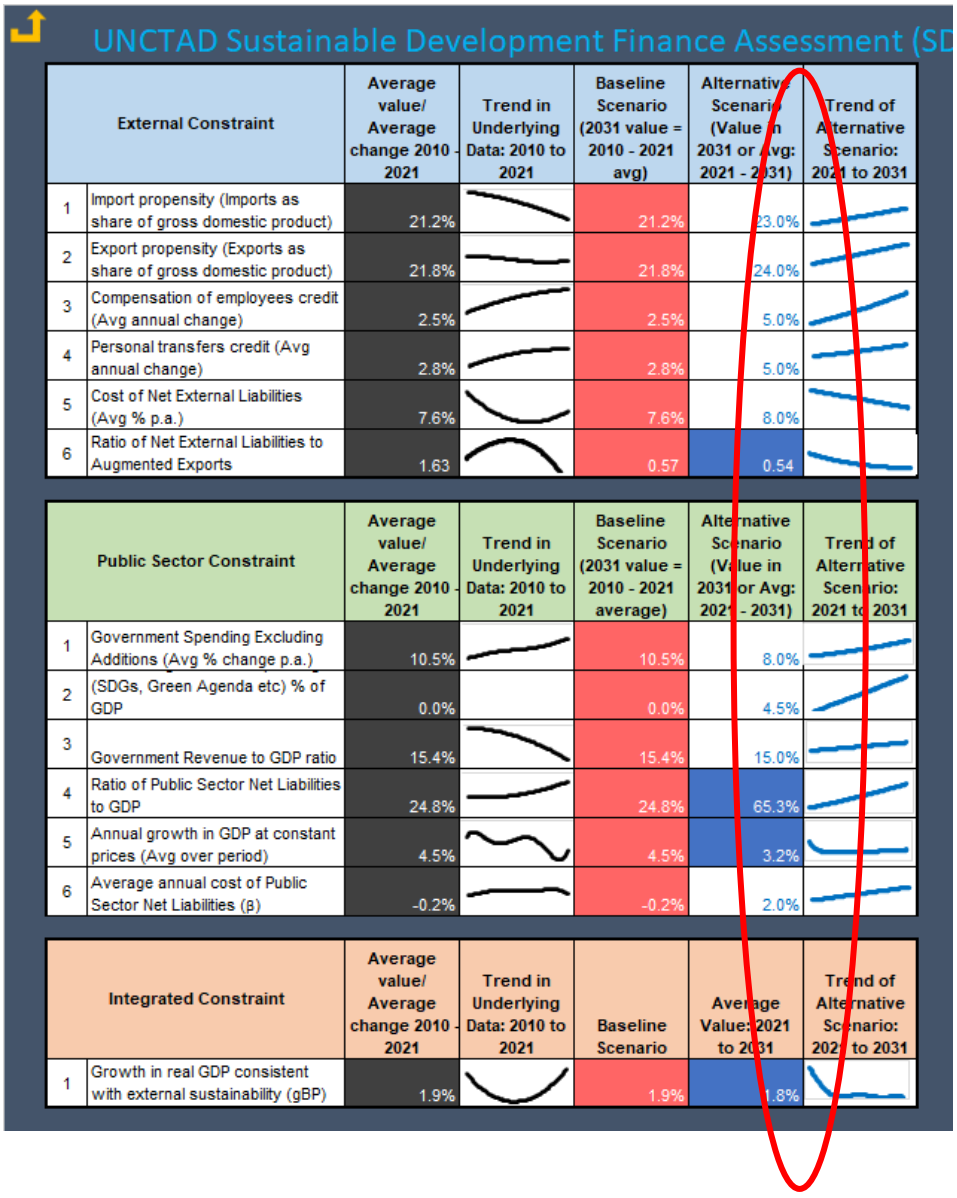
viii) In respect of all ratio calculations (eg. M_{NOM}/GDP, X_{NOM}/GDP, NEL/X*, PSNL/Y) ensure that the currencies (LCUs, US$) and the units (millions, billions, trillions) are consistent.

ix) Once all error messages and gaps in the **Model Data** Worksheet have been addressed the historical averages and trend lines and the Baseline Scenario should accurately reflect in the table of the Integrated Dashboard and it should be possible to "test" the impact of different policy assumptions by changing variables listed in the Alternative Scenario column of the Table (circled in red in the Figure below). The cells with the blue background (e.g. 6. Ratio of Net External Liabilities to Augmented Exports) are the result of assumptions made and cannot be directly changed in the **Integrated Dashboard Worksheet**.

x) Ensure that the name of the selected country is correctly reflected in the Dashboard. The flag of that country can also be included.

xi) **Important information to consider:** Depending on which Alternative Scenario assumptions are changed (i.e in the External Constraint section or the Public Sector Constraint section), there should be changes in the External Constraint and/or the Public Sector Constraint and/or Integrated Constraint figures in the Dashboard. These changes may impact the position of the numbered Alternative Scenario series on the graphical plane and/or the gradient of the Boundary Condition and Area of Financial Sustainability. The extent to which such shifts are noticeable will depend on the size of the changes made in the assumptions and the relative sensitivity of the SDFA Model of the selected country to changes in that variable. Note that the position of the numbered series reflecting the historical and future scenarios in both the Public Sector Constraint and Integrated Constraint will be the same. The only difference between the two graphs will be the gradient of the Boundary Condition and the Area of Financial Sustainability.

Figure 11: Changing policy assumptions in the Integrated Dashboard

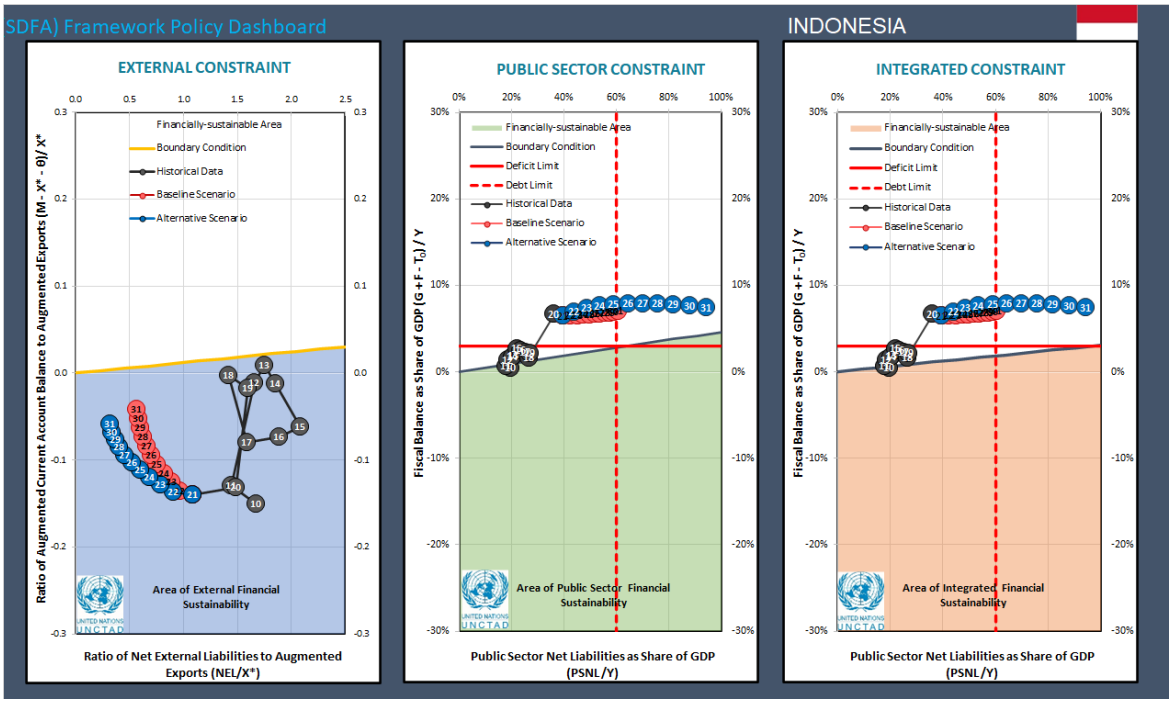


	External Constraint	Average value/ Average change 2010 - 2021	Trend in Underlying Data: 2010 to 2021	Baseline Scenario (2031 value = 2010 - 2021 avg)	Alternative Scenario (Value in 2031 or Avg: 2021 - 2031)	Trend of Alternative Scenario: 2021 to 2031
1	Import propensity (Imports as share of gross domestic product)	21.2%		21.2%	23.0%	
2	Export propensity (Exports as share of gross domestic product)	21.8%		21.8%	24.0%	
3	Compensation of employees credit (Avg annual change)	2.5%		2.5%	5.0%	
4	Personal transfers credit (Avg annual change)	2.8%		2.8%	5.0%	
5	Cost of Net External Liabilities (Avg % p.a.)	7.6%		7.6%	8.0%	
6	Ratio of Net External Liabilities to Augmented Exports	1.63		0.57	0.54	

	Public Sector Constraint	Average value/ Average change 2010 - 2021	Trend in Underlying Data: 2010 to 2021	Baseline Scenario (2031 value = 2010 - 2021 average)	Alternative Scenario (Value in 2031 or Avg: 2021 - 2031)	Trend of Alternative Scenario: 2021 to 2031
1	Government Spending Excluding Additions (Avg % change p.a.)	10.5%		10.5%	8.0%	
2	(SDGs, Green Agenda etc) % of GDP	0.0%		0.0%	4.5%	
3	Government Revenue to GDP ratio	15.4%		15.4%	15.0%	
4	Ratio of Public Sector Net Liabilities to GDP	24.8%		24.8%	65.3%	
5	Annual growth in GDP at constant prices (Avg over period)	4.5%		4.5%	3.2%	
6	Average annual cost of Public Sector Net Liabilities (β)	-0.2%		-0.2%	2.0%	

	Integrated Constraint	Average value/ Average change 2010 - 2021	Trend in Underlying Data: 2010 to 2021	Baseline Scenario	Average Value: 2021 to 2031	Trend of Alternative Scenario: 2021 to 2031
1	Growth in real GDP consistent with external sustainability (gBP)	1.9%		1.9%	1.8%	

Figure 12: Reflecting changing policy assumptions in the Integrated Dashboard



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