

Principal Global Indicators

Innovation in communication of
official statistics



International Monetary Fund

Saurabh Gupta

May 23-25, 2011

Background

- The PGI website provides
 - Cross-country data for the G-20 + 5 FSB-Non-G20 economies
 - Data presented in comparable units of measure
 - Access through on-line database with historical data

Background

Apr 2009

Dec 2009

Mar 2011

Background

1

Dec 2009

Mar 2011

Principal Global Indicators (PGI) data set is created to “facilitate the monitoring of economic and financial developments” of the G-20

Background

PGI web site

Website of the Inter-Agency Group on Economic and Financial Statistics

The PGI website presents data for the Group of 20 (G-20) to facilitate the monitoring of economic and financial developments for these systemically important economies. Launched in response to the on-going financial and economic crisis, it is hosted by the IMF, and is a joint undertaking of the Inter-Agency Group on Economic and Financial Statistics: Bank for International Settlements (BIS), European Central Bank (ECB), Eurostat, the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the United Nations (UN), and the World Bank (WB).



Principal Global Indicators | Data Mapper | Additional Data Sources

- Industrial production
- Retail turnover
- Goods: exports f.o.b.
- Goods: imports c.i.f.
- Current account
- International investment position (IIP) - net
- External debt
- Short-term external debt
- Gross official reserves
- Domestic credit (consolidated balance sheet of the banking sector)
- Short-term interest rate
- Long-term interest rate
- Share prices
- Consumer confidence
- Business confidence
- Oil price
- Exchange rates
- Concepts by Country**
- Argentina
- Australia
- Brazil
- Canada
- China, P.R.: Mainland
- Euro Area
- France
- Germany
- India
- Indonesia
- Italy

Current Query: Gross Domestic Product (GDP) Volume

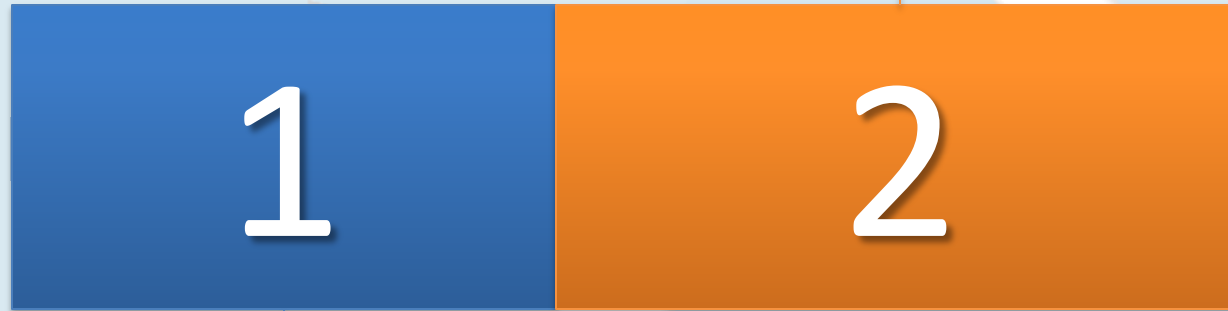
data extracted on 2011/03/21 14:12 from IMF.Stat

Economic Concept		Gross Domestic Product (Volume)																				
Unit Of Measure		Percent Change over Previous Period, Seasonally Adjusted																				
Frequency		Annual										Quarterly										
Time		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008				2009			2010			
		▲▼	▲▼	▲▼	▲▼	▲▼	▲▼	▲▼	▲▼	▲▼	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	
Country and Group	Data Source																					
Australia <i>i</i>	OECD Main Economic Indicators <i>i</i>	3.4	2.7	3.9	3.6	3.3	3.5	2.4	4.8	2.4	1.4	1.0	0.5	0.5	-1.0	1.0	0.3	0.7	0.6	0.7	1.1	0.2
Brazil <i>i</i>		4.3	1.3	2.7	1.2	5.7	3.2	4.0	6.1	5.2	-0.6	1.8	1.9	1.6	-4.4	-1.9	2.0	2.6	2.1	2.3	1.8	0.5
Canada <i>i</i>		5.2	1.8	2.9	1.9	3.1	3.0	2.8	2.2	0.5	-2.5	-0.2	0.0	0.1	-0.8	-1.8	-0.7	0.2	1.2	1.4	0.6	0.3
Euro Area <i>i</i>		4.0	1.9	1.0	0.8	1.9	1.8	3.2	2.8	0.3	-4.0	0.7	-0.4	-0.5	-1.8	-2.5	-0.1	0.4	0.2	0.4	1.0	0.4
France <i>i</i>		3.9	1.9	1.0	1.1	2.5	1.9	2.2	2.4	0.2	-2.6	0.5	-0.7	-0.3	-1.5	-1.5	0.1	0.2	0.8	0.2	0.7	0.4
Germany <i>i</i>		3.2	1.2	0.0	-0.2	1.2	0.8	3.4	2.7	1.0	-4.7	1.4	-0.7	-0.5	-2.2	-3.4	0.5	0.7	0.3	0.6	2.3	0.7
India <i>i</i>		5.7	3.9	4.6	6.9	7.7	9.0	9.6	9.9	6.4	5.7	0.8	0.9	0.8	0.8	1.5	2.0	1.8	2.1	5.0
Indonesia <i>i</i>		5.3	3.6	4.6	4.8	5.0	5.7	5.5	6.3	6.1	4.6	1.8	1.7	1.5	0.2	1.1	1.3	1.5	1.5	1.3	1.7	1.1
Italy <i>i</i>		3.7	1.8	0.5	0.0	1.5	0.7	2.0	1.5	-1.3	-5.0	0.4	-0.7	-1.1	-2.0	-2.9	-0.3	0.4	-0.1	0.4	0.5	0.2
Japan <i>i</i>		2.9	0.2	0.3	1.4	2.7	1.9	2.0	2.4	-1.2	-6.3	0.3	-0.7	-1.2	-3.1	-5.4	2.7	-0.3	1.4	1.7	0.8	1.1
Korea, Republic of <i>i</i>		8.8	4.0	7.2	2.8	4.6	4.0	5.2	5.1	2.3	0.2	1.2	0.3	-0.1	-4.5	0.2	2.4	3.2	0.2	2.1	1.4	0.7
Mexico <i>i</i>		6.6	-0.2	0.8	1.4	4.1	3.2	5.2	3.3	1.5	-6.1	0.7	-0.3	0.1	-1.4	-7.0	0.2	2.7	2.2	-0.1	2.3	0.7
Russian Federation <i>i</i>		10.1	5.1	4.7	7.3	7.2	6.4	8.2	8.5	5.2	-7.9	2.7	1.1	-0.7	-4.2	-5.4	-0.9	1.6	1.8	0.8	1.1	..
South Africa <i>i</i>	International Financial Statistics (IFS) <i>i</i>	4.2	2.7	3.7	2.9	4.6	5.3	5.6	5.6	3.6	-1.7	0.7	1.2	0.2	-0.5	-1.5	-0.7	0.2	0.8	1.1	0.7	0.6
Turkey <i>i</i>	OECD Main Economic Indicators <i>i</i>	6.8	-5.7	6.2	5.3	9.4	8.4	6.9	4.7	0.7	-4.7	1.3	-1.6	-0.6	-5.6	-5.5	4.7	3.7	1.8	0.4	3.7	..
United Kingdom <i>i</i>		3.9	2.5	2.1	2.8	3.0	2.2	2.8	2.7	-0.1	-5.0	0.5	-0.3	-0.9	-2.1	-2.3	-0.8	-0.3	0.4	0.5	1.2	0.8
United States <i>i</i>		4.1	1.1	1.8	2.5	3.6	3.1	2.7	2.0	0.0	-2.6	-0.2	0.2	-1.0	-1.7	-1.2	-0.2	0.4	1.2	0.9	0.4	0.6



Background

Website is enhanced to include map visualizations of key indicators - utilizes a RESTful SDMX web service to share data



Mar 2011

Principal Global Indicators (PGI) data set is created to “facilitate the monitoring of economic and financial developments” of the G-20

Background

Principal Global Indicators

Product of the Inter-Agency Group on Economic & Financial Statistics

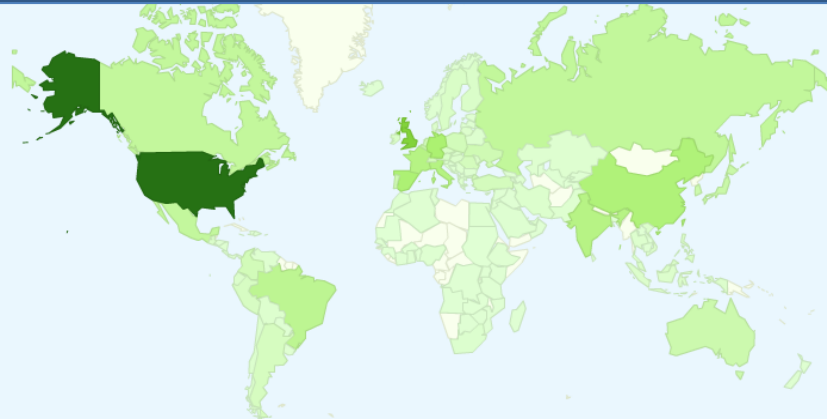
PGI Data Explorer is [now available on iTunes](#) for the iPad, iPhone and iPod Touch! [Learn more](#) about the app.



Background

Usage statistics

Over 300 visits per day,
7 days a week



10,032 visits came from 143 countries/territories

Detail Level: [City](#) | [Country/Territory](#) | [Sub Continent Region](#) | [Continent](#) Dimension: [None](#)

Site Usage [Goal Set 1](#)

Visits		Pages/Visit		Avg. Time on Site		% New Visits	
10,032		1.18		00:09:29		69.33%	
% of Site Total: 100.00%		Site Avg: 1.18 (0.00%)		Site Avg: 00:09:29 (0.00%)		Site Avg: 71.13% (-2.54%)	
Detail Level: Country/Territory		Visits ↓	Pages/Visit	Avg. Time on Site			
1.	United States	1,658	1.19	00:10:14			
2.	United Kingdom	776	1.19	00:08:00			
3.	Germany	482	1.16	00:04:25			
4.	Spain	470	1.23	00:07:00			
5.	China	444	1.16	00:17:00			
6.	Italy	401	1.22	00:07:46			
7.	France	390	1.15	00:08:37			
8.	India	383	1.14	00:14:33			
9.	Brazil	320	1.26	00:08:11			
10.	Russia	276	1.21	00:06:57			



Background

Website is enhanced to include map visualizations of key indicators - utilizes a RESTful SDMX web service to share data

1

2

3

Principal Global Indicators (PGI) data set is created to “facilitate the monitoring of economic and financial developments” of the G-20

IMF Statistics department sponsors a mobile application based on the PGI dataset

PGI Mobile: Approach & Design

- Utilize existing infrastructure as much as possible
- Limit maintenance
- Make it easy to add new indicators, data sources and datasets

How it works

Service enables changes to the dataset to seamlessly flow to all effected products

Principal Global Indicators | Data Mapper | Additional Data Sources

Table Selections

Current Query: Gross Domestic Product (GDP) Volume

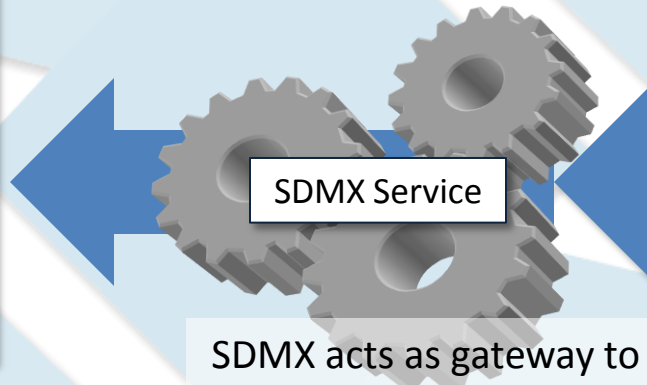
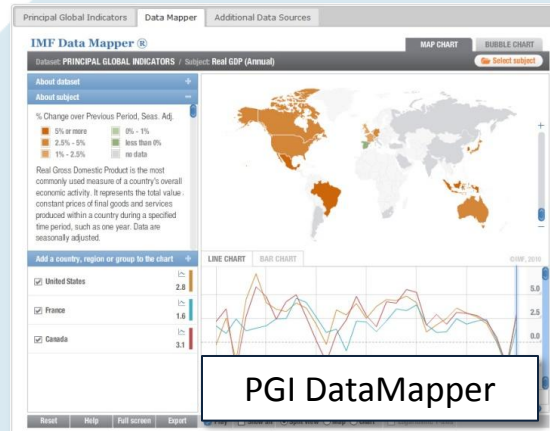
View as: **Table** | **Map** | **Chart** | **Download**

View as: **Table** | **Map** | **Chart** | **Download**

View as: **Table** | **Map** | **Chart** | **Download**

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Algeria	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Australia	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Brazil	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Canada	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
China, P.R.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
France	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Germany	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
India	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

PGI Tables



SDMX acts as gateway to access data in PGI, regardless of format



PGI Dataset contains all data relevant to each of the PGI products



How it works

Service enables changes to the dataset to seamlessly flow to all effected products

Principal Global Indicators | Data Mapper | Additional Data Sources

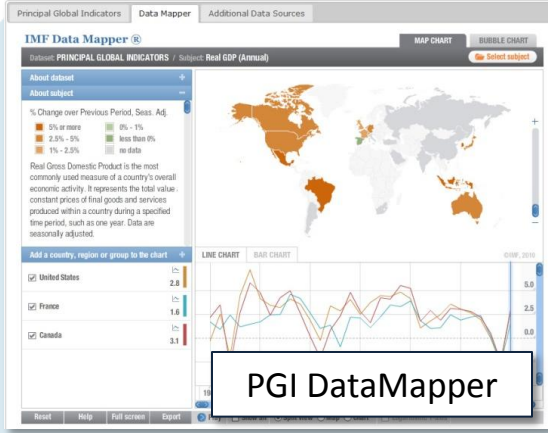
Table Selections

Current Query: Gross Domestic Product (GDP) Volume

Database: PRINCIPAL GLOBAL INDICATORS / Subject: Real GDP (Annual)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Algeria	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Australia	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Brazil	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Canada	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
China, P.R.	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
France	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Germany	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
India	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4

PGI Tables



PGI DataMapper



PGI Mobile

SDMX acts as gateway to access data in PGI, regardless of format

PGI Dataset contains all data relevant to each of the PGI products



SDMX Service



PGI Mobile: End Result

- Users get up-to-date data as it becomes available
- Rendering of the data into tables, charts & graphs occurs on the client device
- Mobile application retrieves data using the SDMX web service

SDMX Benefits



Faster Time to Market

Places Business before Technology

Lower Cost, More Value

Faster Time to Market

- Allows the inter-agency group to more quickly adapt to market demands
- “Disseminate once, use everywhere”
- No need to coordinate the release of data per application, focus only on the dataset

Business before Technology

- Shift of focus from technical needs to functional requirements
- Easy to scale-up– additional series do not require changes to existing architecture

Lower Cost, More Value

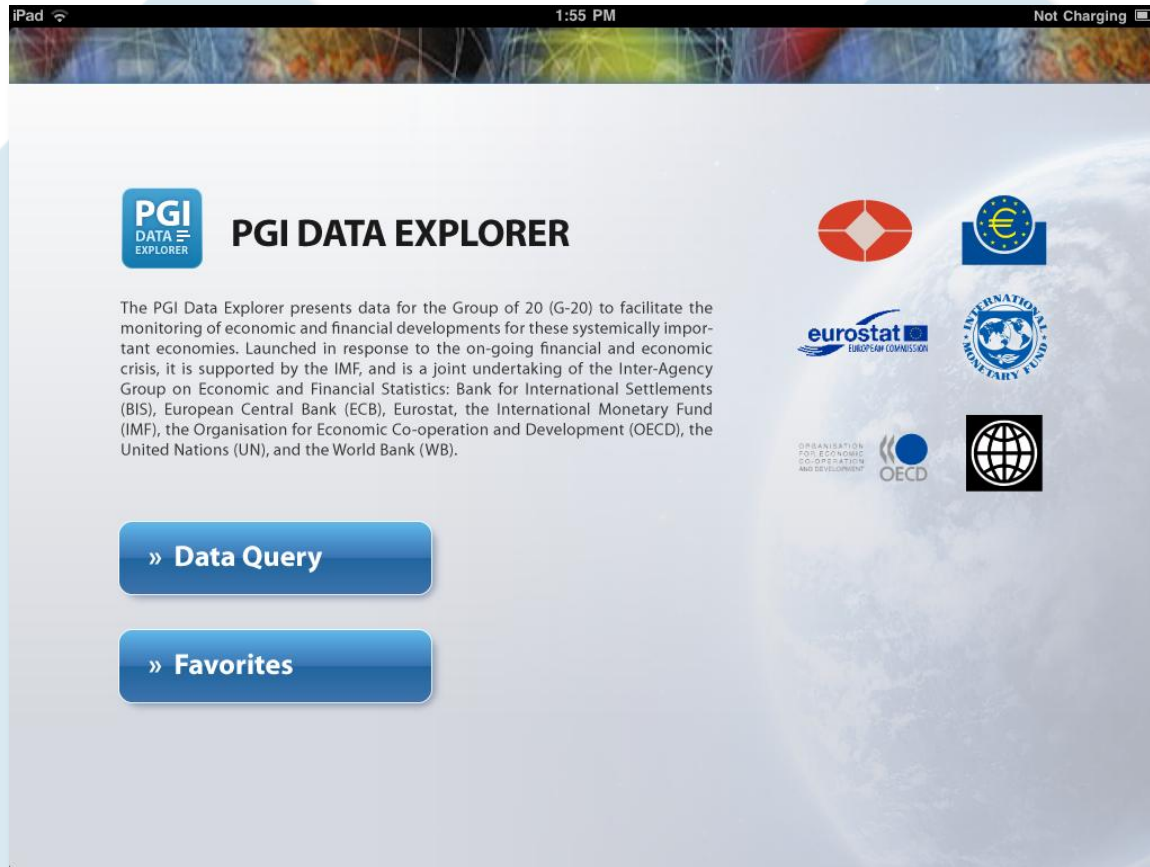
- Decreases development time & costs
- Maintenance is simplified – changes to the structure of the dataset only affects service, not applications using the service
- Additional data sources using SDMX standards can be easily added to the applications

Way Forward for PGI

- Improving the data coverage and timeliness of the PGI
- Increase the access to PGI data by promoting the adoption of SDMX for the dissemination of official statistics

Next Steps for SDMX

- Data collection using SDMX
- SDMX Registry
- Data Structure Definitions



PGI Mobile

iPad, iPhone

WebService for PGI

sdmxws.imf.org/Gateway/QueryPage.aspx?Type=DatasetList



Dot Stat Datawarehouse Exit Gate

SDMX Web Service - User Query Test Interface

Home : Dataset List Query : Get Dataset List

- Home
 - Dataset List Query
 - [Get Dataset List](#)
 - Data Query
 - Data Structure Definition (DSD)
 - Generic Data
 - Compact Data
 - MetaData Query
 - Metadata Structure Definition (MSD)
 - Generic Metadata
 - Dataset
 - Dimension
 - Dimension Member
 - Coordinates
 - Metadata Query 2.1
 - Generic Metadata
 - Structure Set Query (Mapping)
 - IMF to ISO 3166-1-alpha-2
 - IMF to ISO 3166-1-alpha-3
 - IMF to ISO 3166-1-numeric-3
 - Help

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Validate

Download SDMX

SDMX Data

