



# International Monetary Fund

## Statistics Department

### ***Government Finance Statistics: Compilation Guide for Developing Economies***

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# Outline

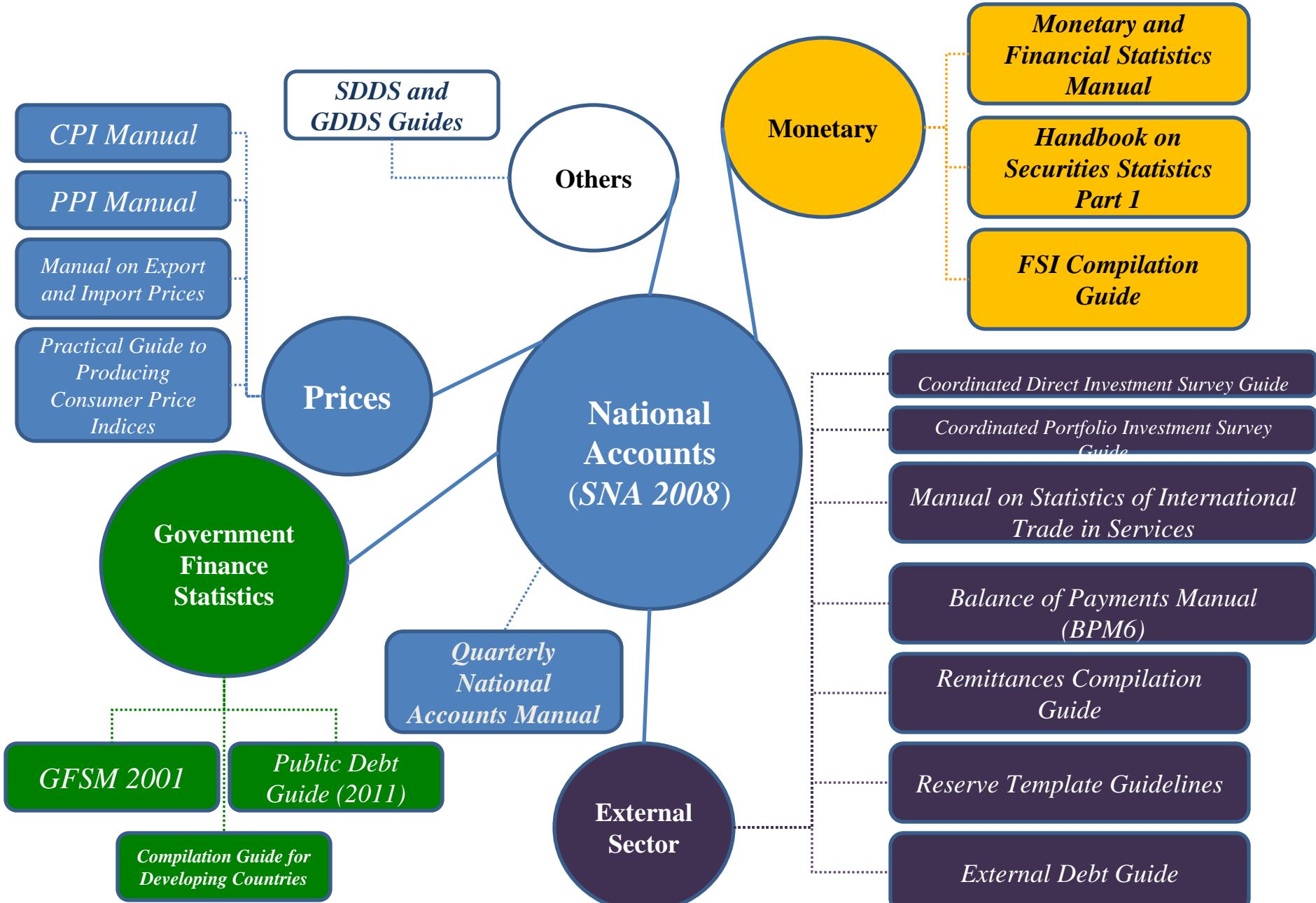
1. Background on the *Government Finance Statistics: Compilation Guide for Developing Economies*
2. Structure of the *Compilation Guide*:
  - a. Coverage of the Government Finance Statistics System
  - b. Flows, Stocks, and Accounting Rules
  - c. Integrated Framework
  - d. Classification of Revenue, Expense, Assets and Liabilities, and Other Economic Flows
3. Health expenditures: A Summary Look at the International Monetary Fund *Government Finance Statistics Yearbook* database
4. Ongoing cooperation projects with the Inter-American Development Bank and with the World Health Organization

# 1. Background on the *Government Finance Statistics: Compilation Guide for Developing Economies*

- A new approach by the IMF Statistics Department to assist developing countries to compile government finance statistics.
- It is based on many years of technical assistance and training to member countries.
- It was funded by the United Kingdom's Department for International Development (DFID) under its Enhanced Data Dissemination Initiative for Africa.
- It is consistent with the *Government Finance Statistics Manual 2001 (GFSM 2001)* and thus largely consistent with the *System of National Accounts 2008 (2008 SNA)*.



# Consistency



## 2. Structure of the Compilation Guide

The concepts and the theoretical framework of the Compilation Guide follows those of standards-based macroeconomic statistics:



"How close to the truth do you want to come, sir?"

- Institutional units
- Institutional sectors
- Residency
- Corporations
- General Government
- Transactions
- Stocks and Flows
- Accrual basis versus cash recording
- Valuation
- Consistency

## 2. Structure of the Compilation Guide

- An institutional unit is the minimal building block in statistics.
- Definition: An economic entity that is capable, in its own right, of owning assets, incurring liabilities, and engaging in economic transactions with other entities.
- They are broadly classified as:



Households



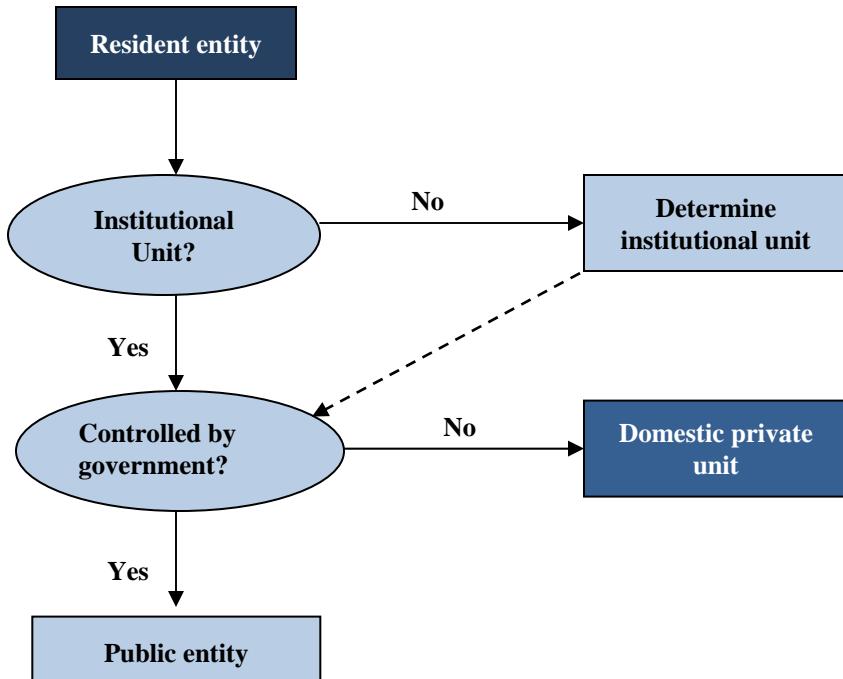
Legal or social entities

- We also need to identify whether institutional units are **RESIDENTS** of a country or not.
- An institutional unit is resident in a country if it has a center of economic interest in the economic territory of that country.

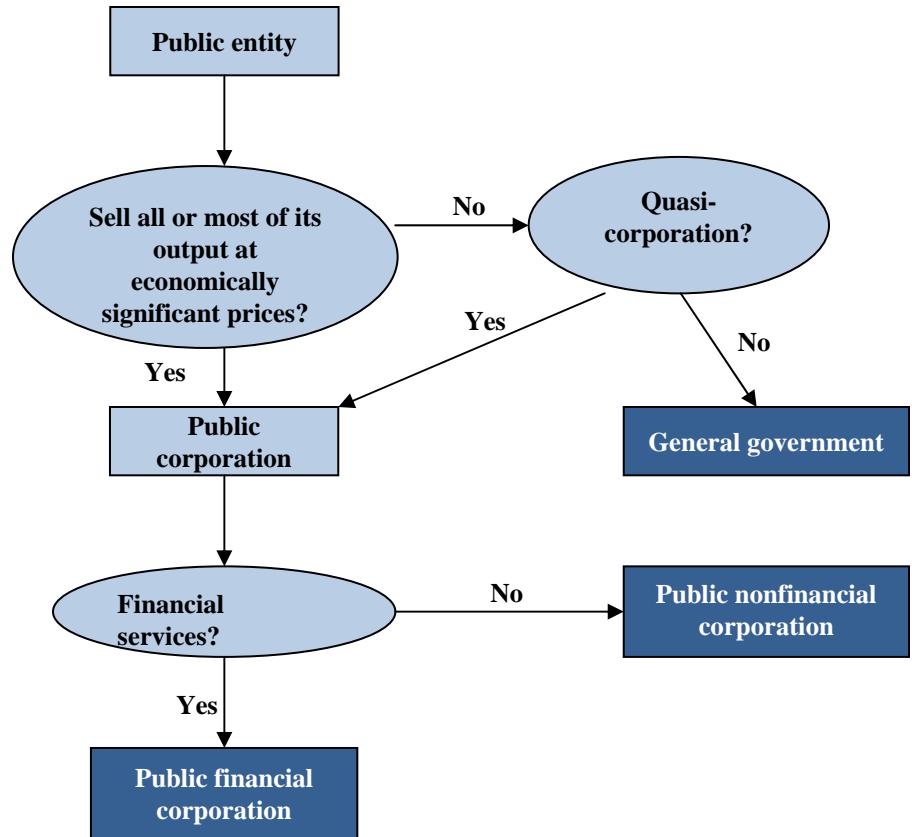
- Corporations
- Quasi-corporations
- Nonprofit institutions
- Government units

## 2. Structure of the Compilation Guide

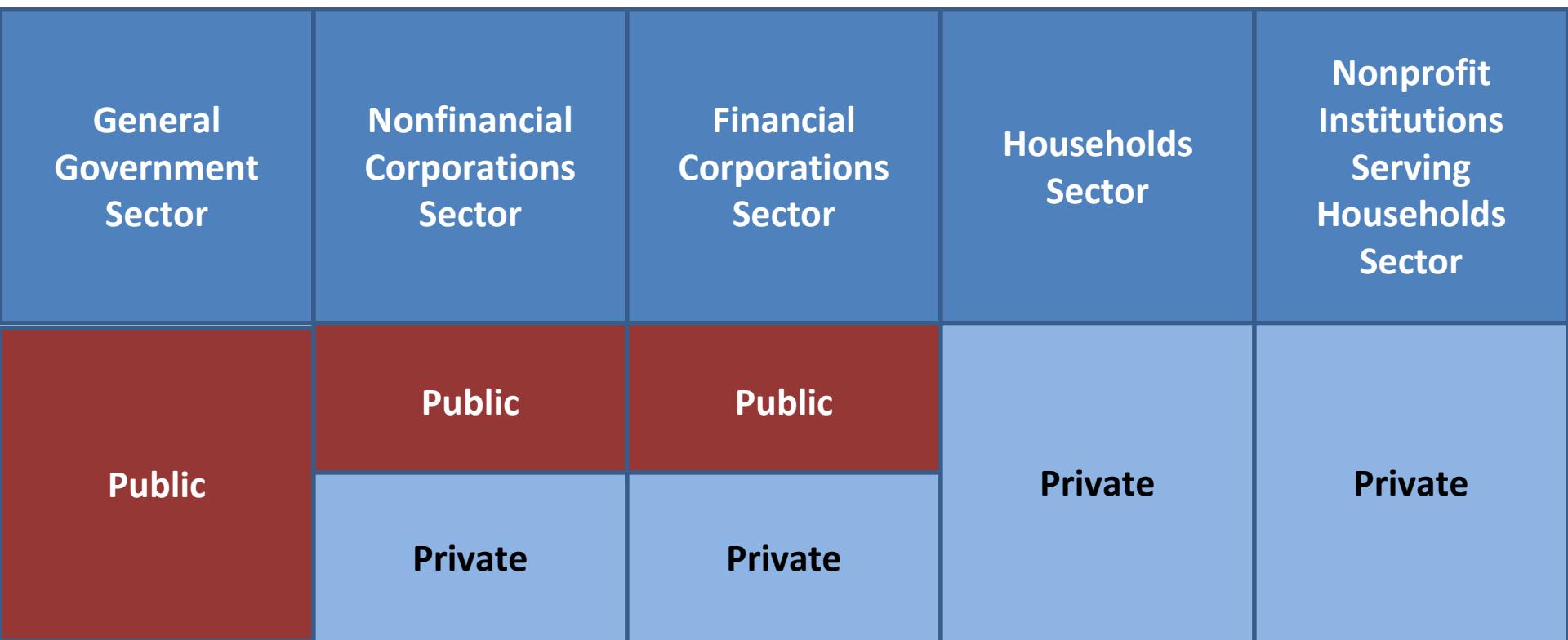
### Classifying institutional units (1<sup>st</sup>. part)



### Classifying institutional units (2<sup>nd</sup>. part)



## 2. Structure of the Compilation Guide

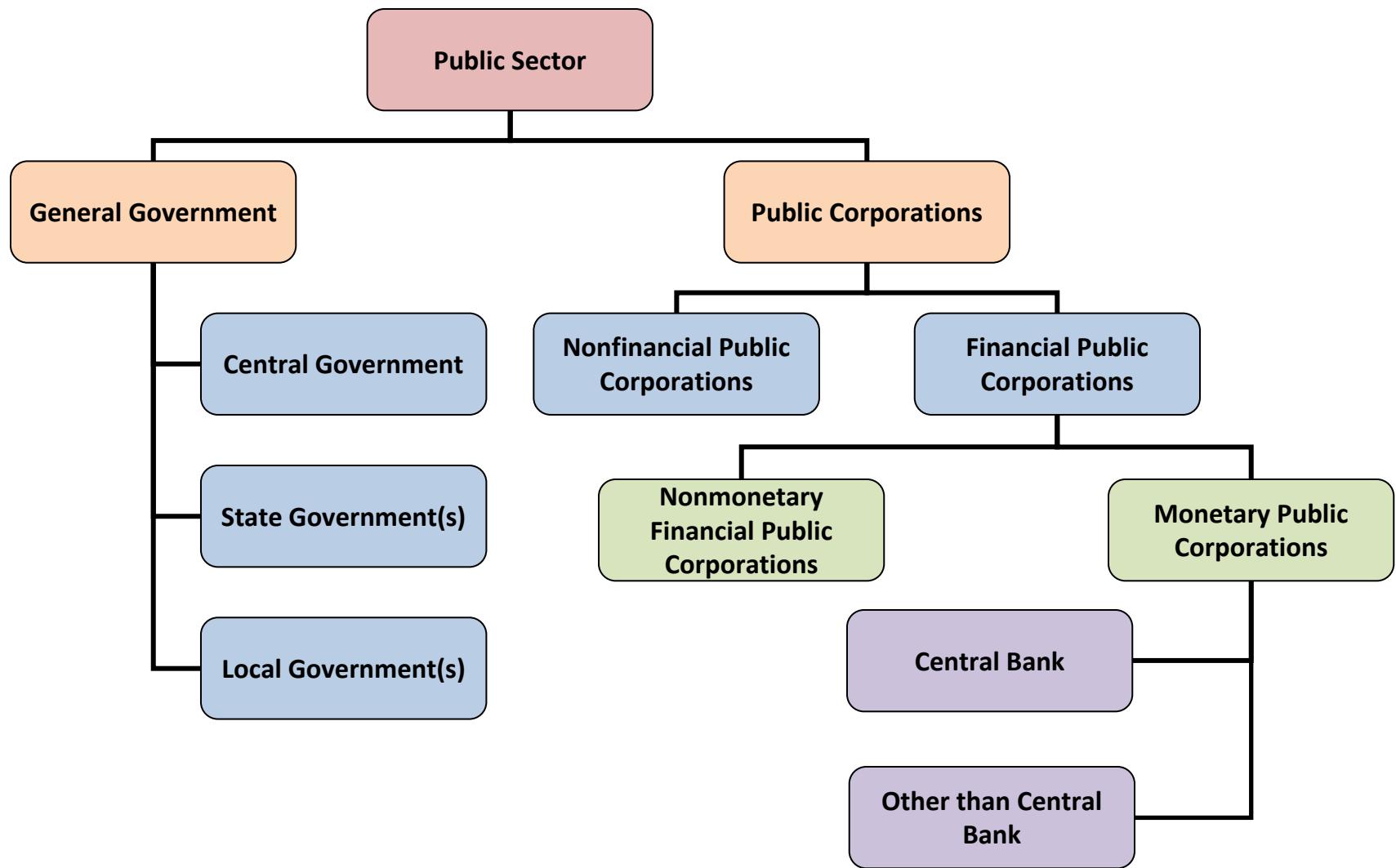


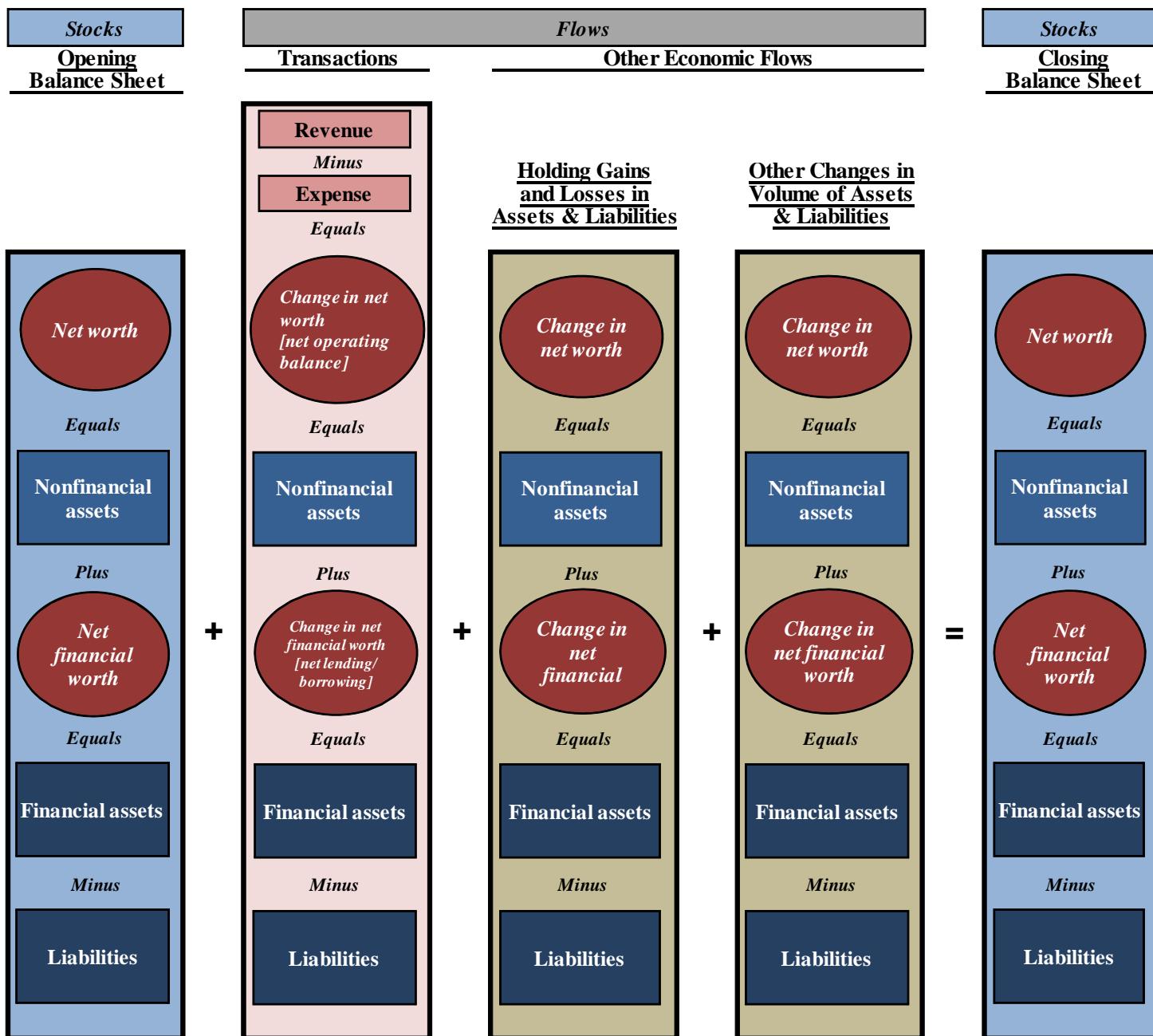
## 2. Structure of the Compilation Guide

- Economic stocks are recorded in balance sheet at the beginning and end of the accounting period.
- Stocks are connected with flows:  
$$S_0 + F = S_1$$
- Assets are defined by ownership and economic benefits. There are financial and nonfinancial assets.
- Accrual basis of recording is recommended
- Consolidation is advised (elimination of all transactions and debtor-creditor relationships between two institutional units belong to the same sector or subsector.)

- Flows reflect the exchange, transfer, creation, transformation, or extinction of economic value.
- There are two types of flows: Transactions and Other Economic Flows.
- Transactions are interactions based on mutual agreement.
- Valuation: All assets and liabilities should be valued at current market prices (*2008 SNA, GFSM 2001*).

## 2. Structure of the Compilation Guide



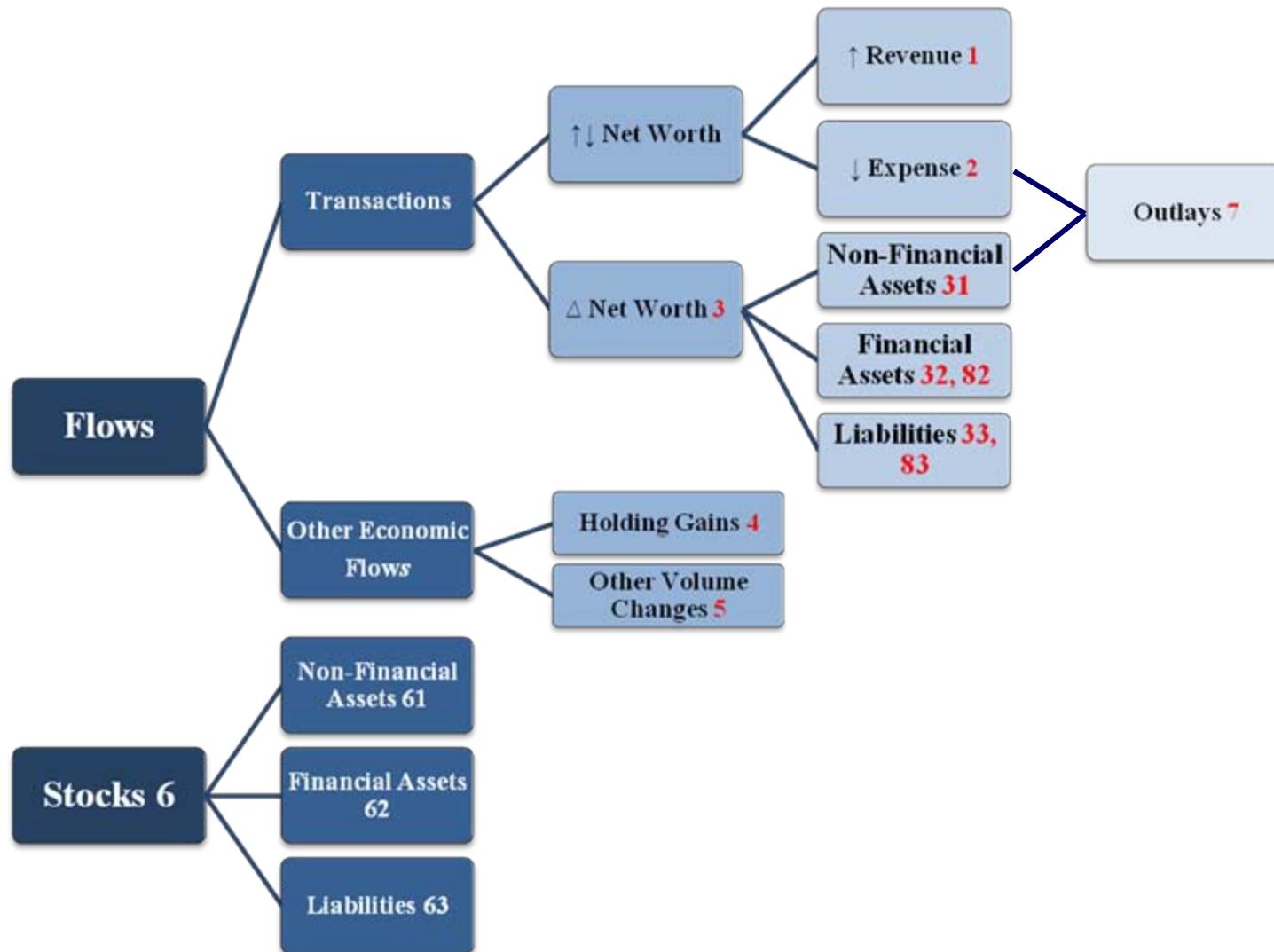


## 2. Structure of the Compilation Guide

- This integrated framework is captured in the *Government Finance Statistics Yearbook* in four statements:
  1. Statement of sources and uses of cash
  2. Statement of government operations
  3. Statement of other economic flows
  4. Balance sheet

$$\text{score is } \hat{y} = b_0 + b_1 x$$
$$\sigma = \sqrt{\frac{1}{n-2} \sum (x - \bar{x})^2}$$
$$= \sqrt{\frac{1}{12-2} \cdot 18.12} = \sqrt{1.812} = 1.34$$

## 2. Structure of the Compilation Guide



## 2. Structure of the Compilation Guide

### Expenditures: Expense + Net acquisition of Nonfinancial Assets (Economic classification)

Compensation of employees

Use of goods and services

Consumption of fixed capital

Interest

Subsidies

Grants

Social benefits

Other expense

Net acquisition of nonfinancial assets

### Expenditures: Expense + Net acquisition of Nonfinancial Assets (Functional classification) - COFOG

General public services

Defense

Public order and safety

Economic affairs

Environmental protection

Housing and community amenities

**Health**

**Of which: Outpatient, hospital, and public health services**

Recreation, culture, and religion

Education

Social protection



## 2. Structure of the Compilation Guide

### ANNUAL GFS QUESTIONNAIRE

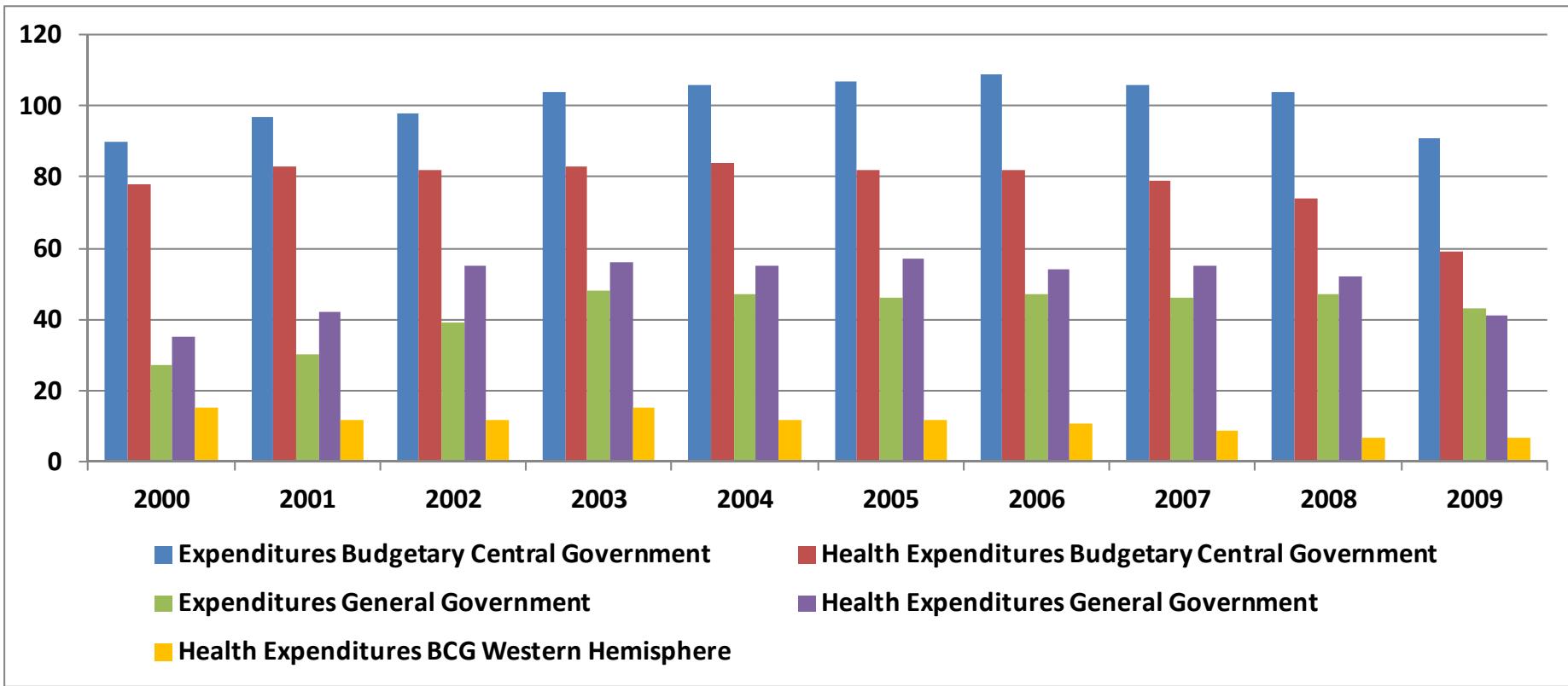
**TABLE 7**

OUTLAYS BY FUNCTIONS OF GOVERNMENT		2009				
		Central Government <sup>a/</sup>	State Governments	Local Governments	Consolidation Column	General Government <sup>b/</sup>
			(5)	(6)	(7)	(8)
Accounting method:		A	A	A	A	A
<b>7</b>	<b>TOTAL OUTLAYS .....</b>	<b>340,190.0</b>	<b>184,750.0</b>	<b>29,143.0</b>	<b>-92,732.0</b>	<b>461,351.0</b>
<b>701</b>	<b>General public services .....</b>	<b>73,178.0</b>	<b>15,054.0</b>	<b>6,972.0</b>	<b>-48,057.0</b>	<b>47,147.0</b>
7017	Public debt transactions .....	11,497.0	6,682.0	369.0	-167.0	18,381.0
7018	Transfers of general character bet	....	....	....	....	0.0
<b>702</b>	<b>Defense .....</b>	<b>21,932.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>21,932.0</b>
<b>703</b>	<b>Public order and safety .....</b>	<b>3,558.0</b>	<b>18,015.0</b>	<b>599.0</b>	<b>-402.0</b>	<b>21,770.0</b>
<b>704</b>	<b>Economic affairs .....</b>	<b>24,513.0</b>	<b>33,040.0</b>	<b>8,533.0</b>	<b>-8,113.0</b>	<b>57,973.0</b>
7042	Agriculture, forestry, fishing, and	2,709.0	3,576.0	54.0	-664.0	5,675.0
7043	Fuel and energy .....	5,850.0	1,632.0	15.0	-92.0	7,405.0
7044	Mining, manufacturing, and cons	1,882.0	686.0	376.0	-2.0	2,942.0
7045	Transport .....	6,962.0	23,927.0	7,037.0	-7,246.0	30,680.0
7046	Communication .....	504.0	18.0	1.0	0.0	523.0
<b>705</b>	<b>Environmental protection .....</b>	<b>1,768.0</b>	<b>3,065.0</b>	<b>2,942.0</b>	<b>-463.0</b>	<b>7,312.0</b>
<b>706</b>	<b>Housing and community amen</b>	<b>3,985.0</b>	<b>9,566.0</b>	<b>3,286.0</b>	<b>-4,303.0</b>	<b>12,534.0</b>
<b>707</b>	<b>Health .....</b>	<b>49,153.0</b>	<b>45,980.0</b>	<b>313.0</b>	<b>-14,281.0</b>	<b>81,165.0</b>
7072	Outpatient services .....	18,544.0	7,315.0	33.0	-24.0	25,868.0
7073	Hospital services .....	12,468.0	35,438.0	32.0	-11,471.0	36,467.0
7074	Public health services .....	18,140.0	3,227.0	248.0	-2,784.0	18,831.0
<b>708</b>	<b>Recreation, culture and religio</b>	<b>2,906.0</b>	<b>3,185.0</b>	<b>4,841.0</b>	<b>-212.0</b>	<b>10,720.0</b>
<b>709</b>	<b>Education .....</b>	<b>34,167.0</b>	<b>44,138.0</b>	<b>134.0</b>	<b>-13,865.0</b>	<b>64,574.0</b>
7091	Pre-primary and primary educat	....	....	....	....	....
7092	Secondary education .....	....	....	....	....	....
7094	Tertiary education .....	....	....	....	....	....
<b>710</b>	<b>Social protection .....</b>	<b>125,030.0</b>	<b>12,707.0</b>	<b>1,523.0</b>	<b>-3,036.0</b>	<b>136,224.0</b>



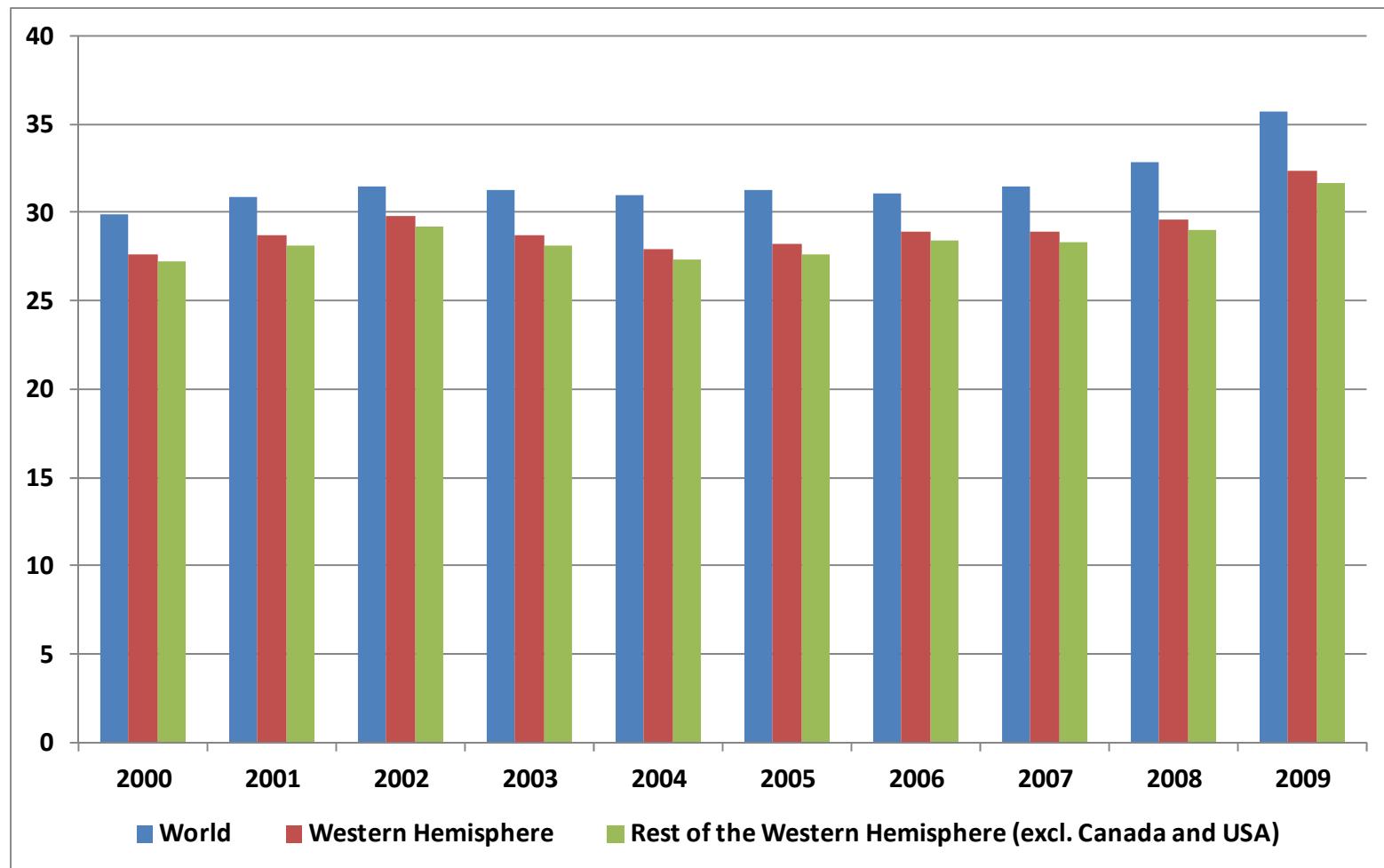
**Extract from table 7 of GFS questionnaire**

# Number of Countries in the *Government Finance Statistics Yearbook* Database



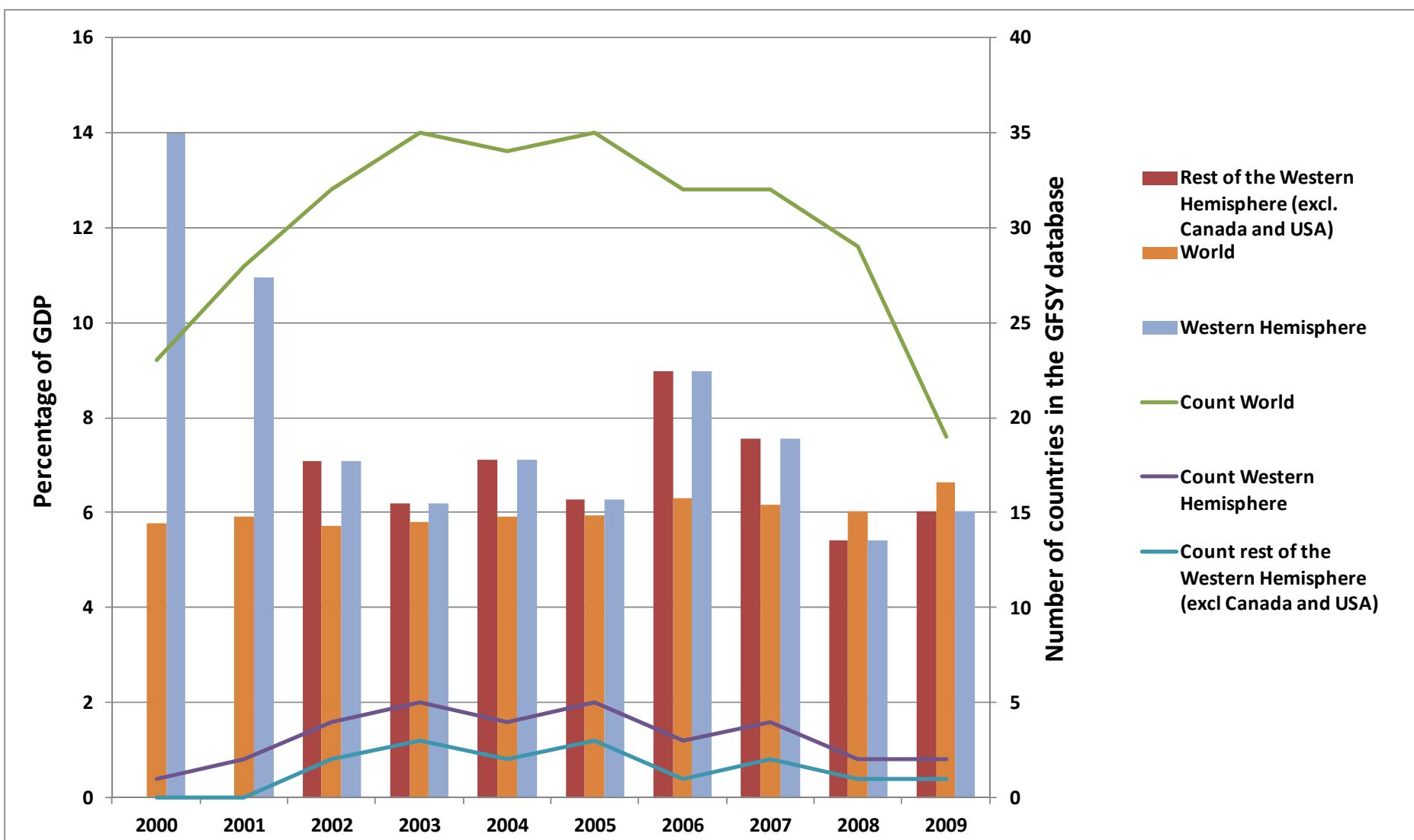
Source: IMF *Government Finance Statistics Yearbook* database

# Average Ratio of General Government Expenditures to GDP



Source: IMF *Government Finance Statistics Yearbook 2010*, *World Economic Outlook October 2011*

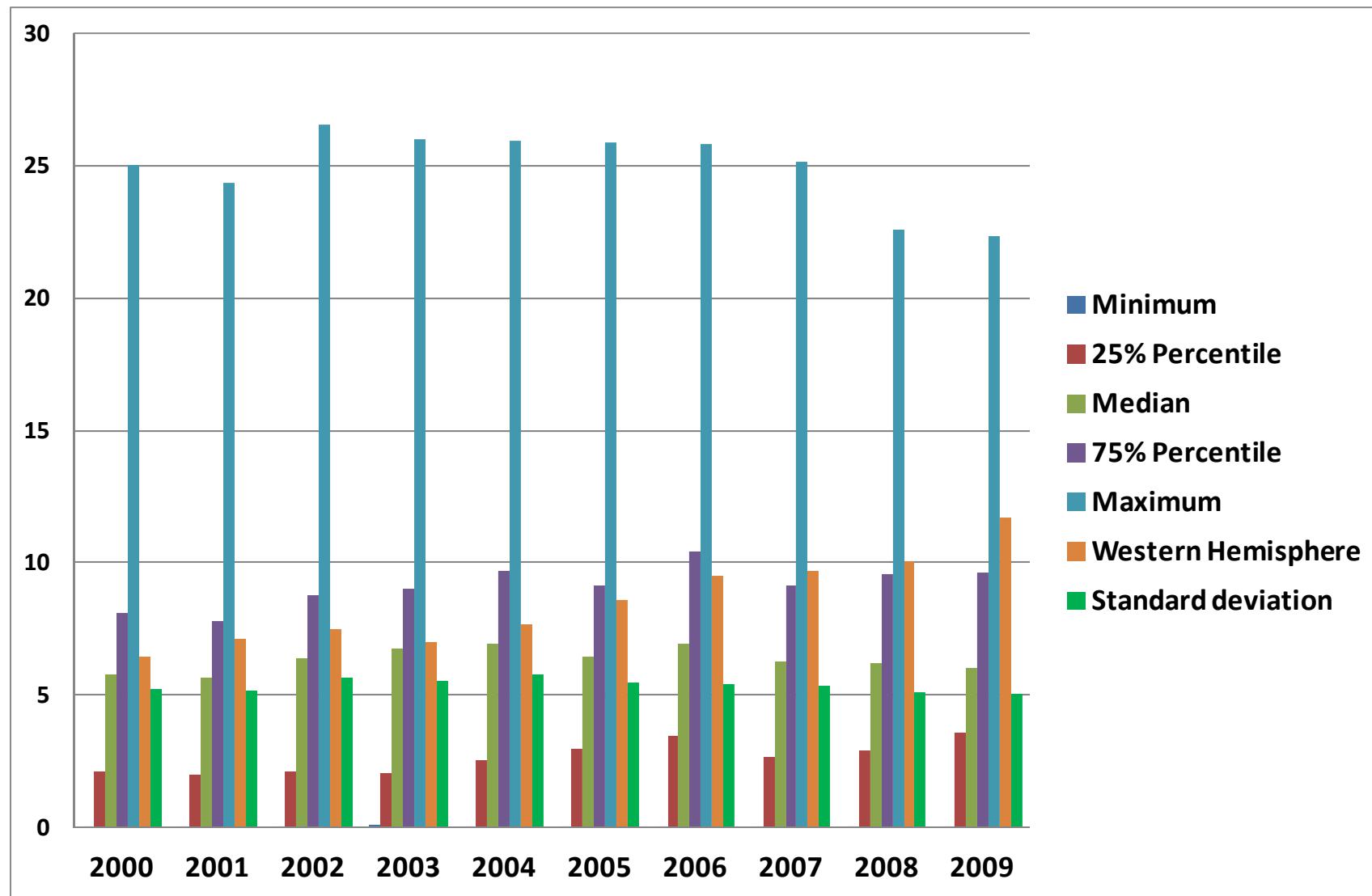
# Average Ratio of Health Expenditures to GDP – General Government



Source: IMF Government Finance Statistics Yearbook 2010

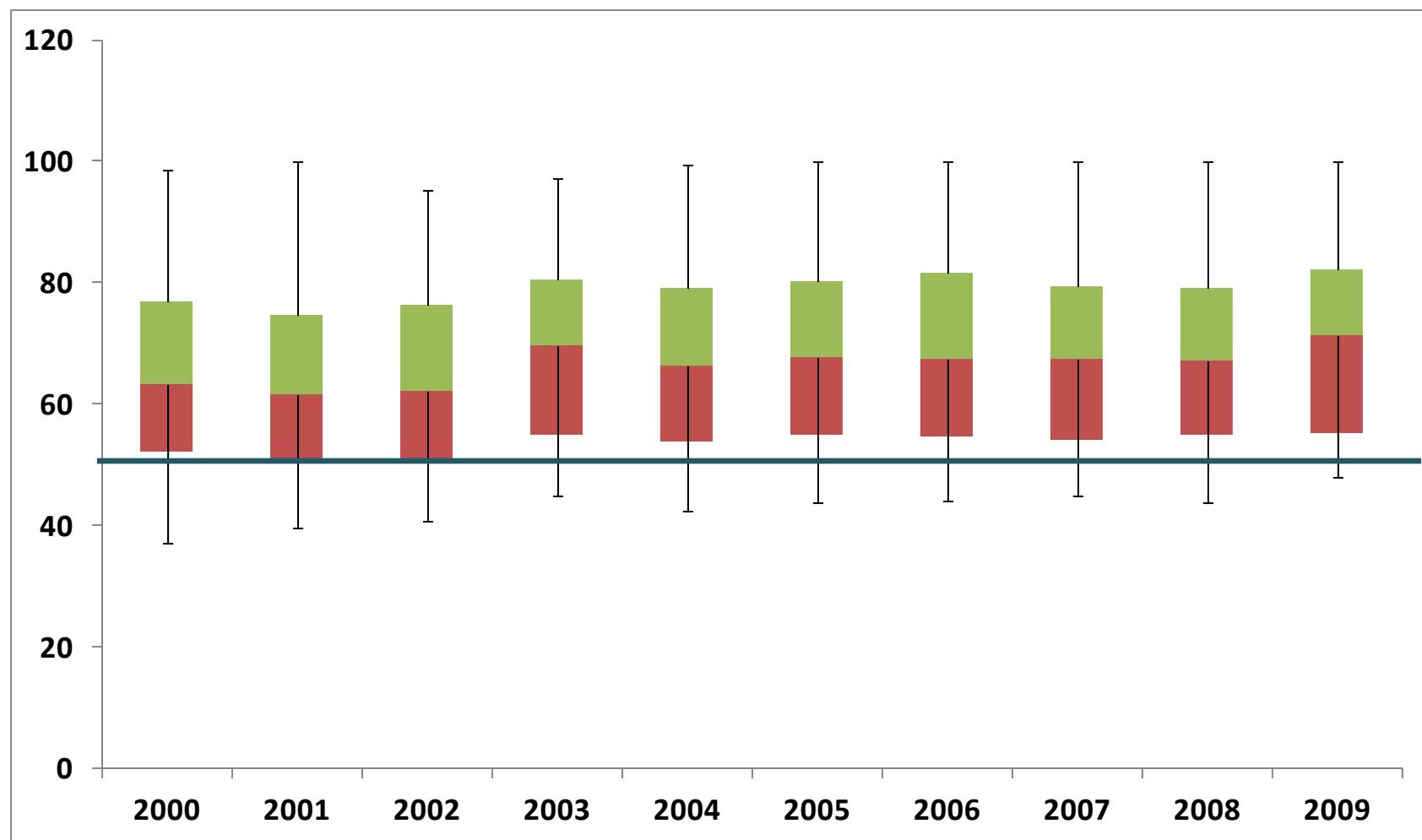


# Distribution of Average Ratio of Health to Total Expenditures: Budgetary Central Government



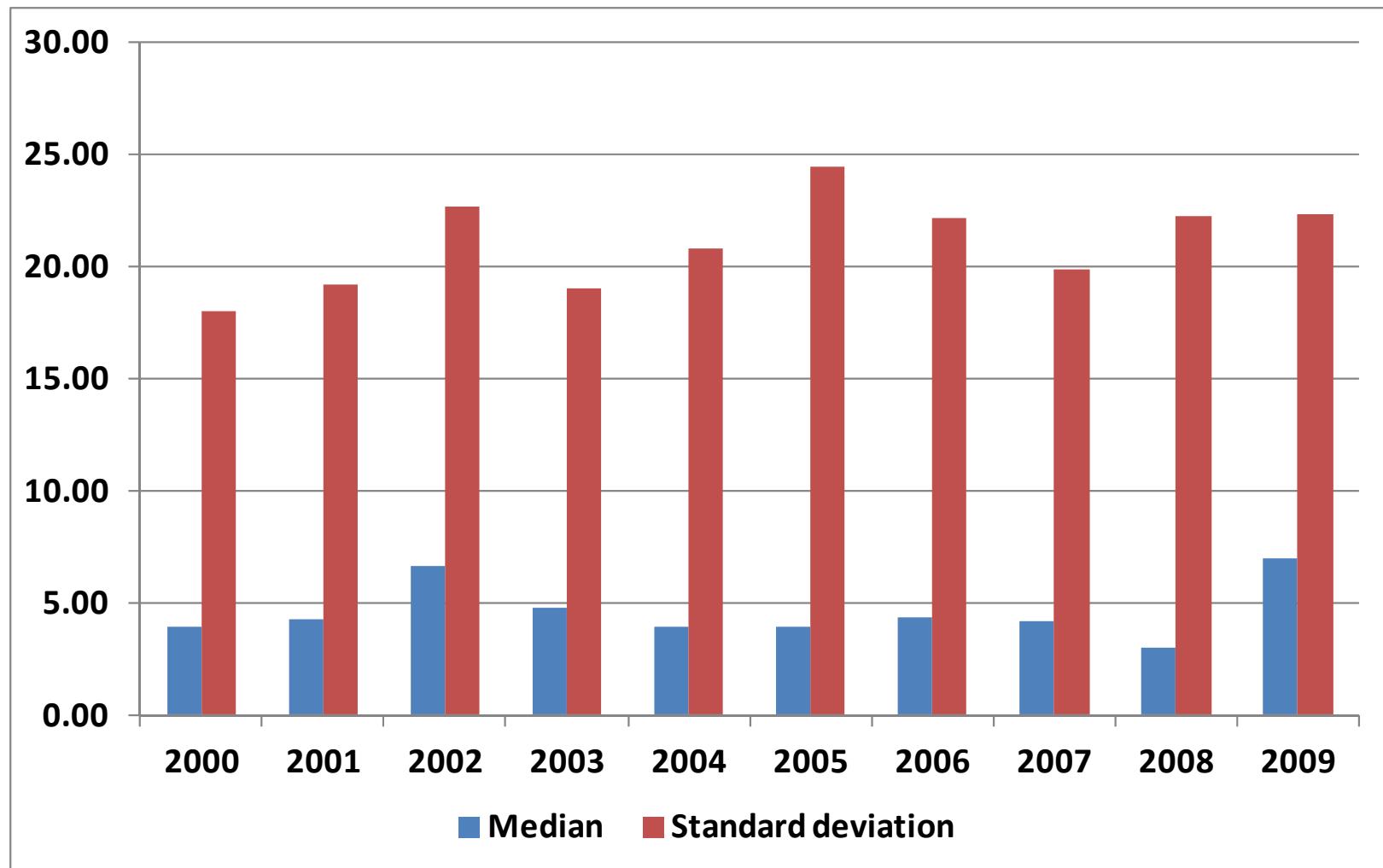
Source: IMF *Government Finance Statistics Yearbook 2010*

# Distribution of the Ratio of the Budgetary Central Govt. Expenditures to General Government Expenditures



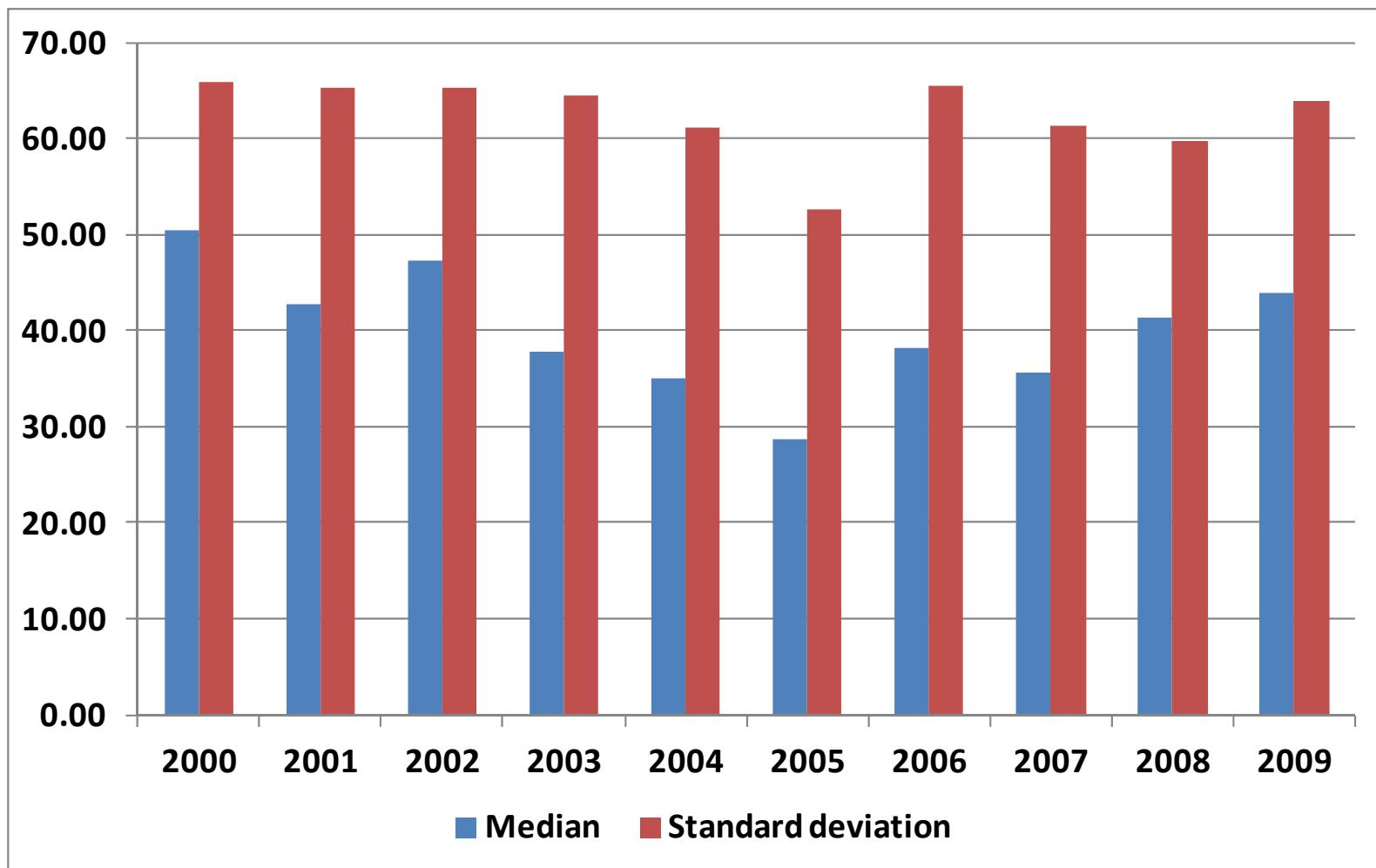
Source: IMF *Government Finance Statistics Yearbook 2010*

# Ratio of Outpatient Services Expenditures to Health Expenditures



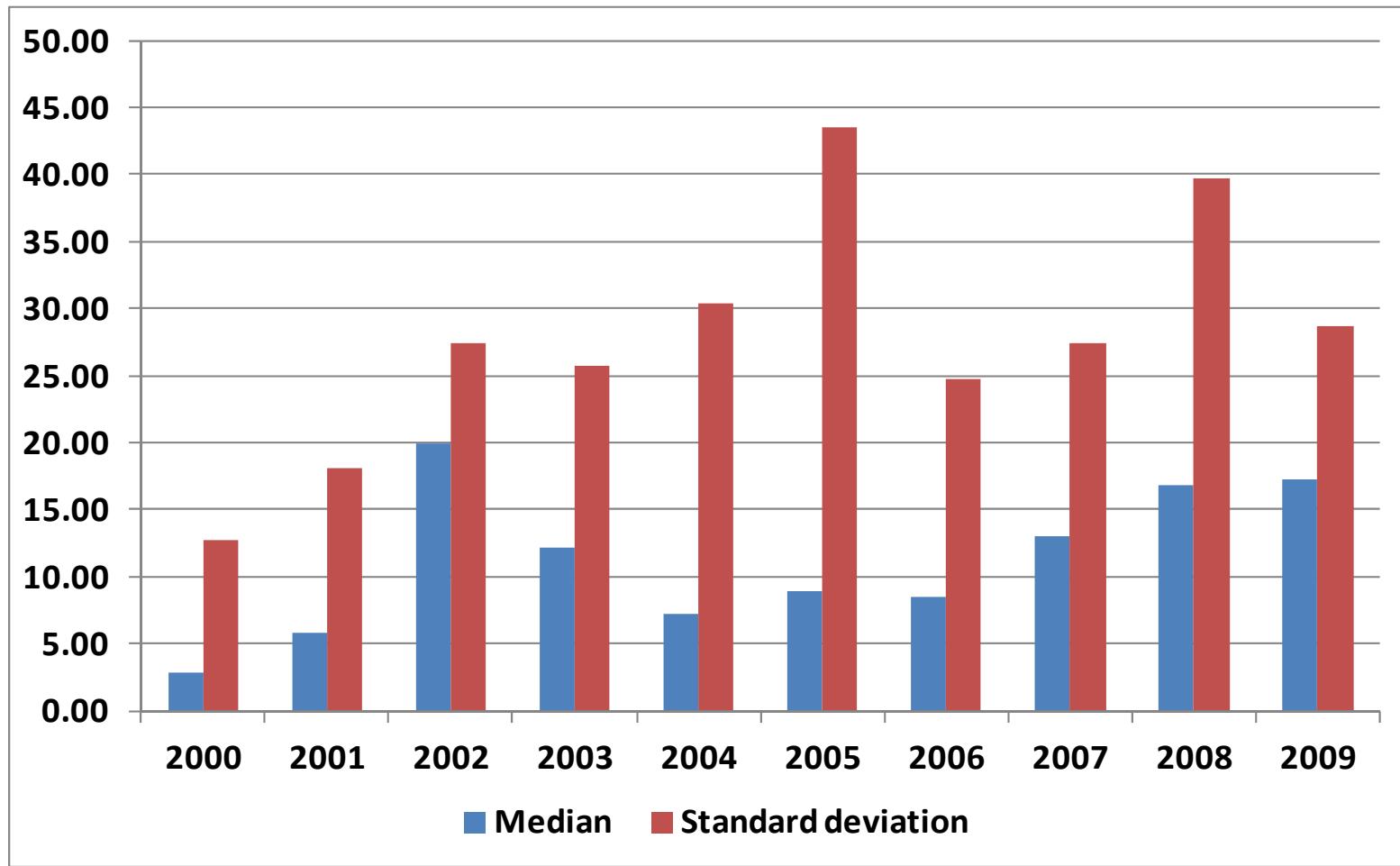
Source: IMF *Government Finance Statistics Yearbook 2010*

# Ratio of Hospital Services Expenditures to Health Expenditures: Budgetary Central Government



Source: IMF *Government Finance Statistics Yearbook 2010*

# Ratio of Public Health Services Expenditures to Health Expenditures: Budgetary Central Government



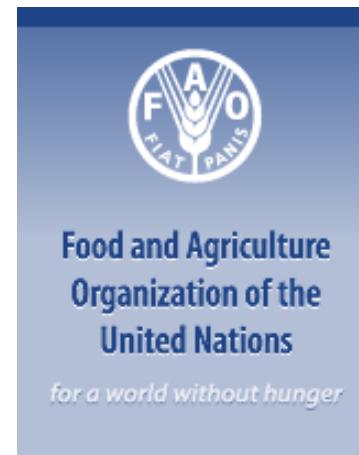
Source: IMF *Government Finance Statistics Yearbook 2010*

# Ongoing Cooperation Projects

- The IMF Statistics Department is currently working on two cooperation projects relevant to health accounts:
  - With the Inter-American Development Bank to compile GFS for local governments.
  - With the World Health Organization and the Food and Agriculture Organization in the development of supplementary questionnaires.



Inter-American Development Bank



# Working with WHO to Develop GFS Health Questionnaire

Draft Supplementary WHO Questionnaire V2

General Government									
Central Government									
	Budgetary (1)	Extrabudgetary (2)	Social Security Funds (3)	Consolidation Column (4)	Central Government a/ (5)	State Govts (6)	Local Govts (7)	Consolidation Column (8)	General Govt b/ (9)
	A	A	A	A	A	A	A	A	A
<b>2 EXPENSE</b>									
<b>2H EXPENSE for health</b>									
<b>of which</b>									
<b>21 Compensation of employees</b>									
<b>21H for health</b>									
<b>22 Use of goods and services</b>									
<b>22H for health</b>									
<b>23 Consumption of fixed capital</b>									
<b>23H for health</b>									
<b>24 Interest</b>									
<b>24H for health</b>									
<b>25 Subsidies</b>									
<b>of which</b>									
<b>25H Subsidies for health</b>									
251H To public corporations									
252H To private enterprises									

# Working with WHO to Develop GFS Health Questionnaire

Budgetary Central Government	Compensation of employees [GFS]	Use of goods and services	Consumption of fixed capital [GFS]	Interest [GFS]	Subsidies	Grants	Social benefits [GFS]	Other expense	Acquisition of nonfinancial assets
<b>7 TOTAL OUTLAYS</b>									
<b>707 Health expenditure (COFOG classification)</b>									
<b>7071 071 - Medical products, appliances and equipment</b>									
70711 0711 - Pharmaceutical products (IS)									
70712 0712 - Other medical products (IS)									
70713 0713 - Therapeutic appliances and equipment (IS)									
<b>7072 072 - Outpatient services</b>									
70721 0721 - General medical services (IS)									
70722 0722 - Specialized medical services (IS)									
70723 0723 - Dental services (IS)									
70724 0724 - Paramedical services (IS)									
<b>7073 073 - Hospital services (IS)</b>									
70731 0731 - General hospital services (IS)									
70732 0732 - Specialized hospital services (IS)									
70733 0733 - Medical and maternity centre services (IS)									
70734 0734 - Nursing and convalescent home services (IS)									
<b>7074 074 - Public health services</b>									
<b>7075 075 - R&amp;D Health</b>									
<b>7076 076 - Health nec</b>									

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# Thank You

