Committee of Experts on Public Administration

Basic data on Government Expenditure and Taxation

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Basic data on Government Expenditure and Taxation
Introduction

- The public sector consist of government, which operates outside the market, plus public enterprises that operate in the market.

- Government consumption is a subset of total government expenditure and includes all levels of government. However, there are two definitions to government consumption

  - **Broad: government consumption expenditure**

  - **Narrow (collective consumption): actual government consumption**

- Gross Domestic Price (GDP) is supposedly measured "at market prices", but government services are measured at cost (example of broadcast radio).

- The report will show that, measured in domestic prices, the ratio of government consumption to GDP has shown convergence but little trend since 1990.

- One must keep in mind that relative prices vary from country to country, when measuring the components of GDP in the domestic prices of the country.

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Introduction

- Purchasing Power Parity (PPP) estimates correct for difference in relative price, measuring GDP as though costs of goods and services were the same everywhere.

- With domestic prices, government consumption/GDP much higher in developed countries.

- With PPP prices, government consumption/GDP much higher in developing countries.

- The ratio of taxes to GDP is often referred to as a measure of "tax burden" but this term is a misnomer, for two reasons.

    - Governments can burden citizens without collecting a cent in taxes

    - Tax ratios take no account of benefits received from government expenditure

- "Government Expenditure" typically reported are consolidated accounts of central governments

- Compilation of consolidated general government accounts, especially expenditure by function, should be a priority.

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Government Consumption

- The famous accounting identity of elementary macroeconomics is,

  » GDP=C+I+G+(X-M)

- GDP is the sum of

  - C (Private Consumption)

  - I (Gross Investments)

  - G (Government Consumption)

  - X-M (Net Exports)

- Governments consumption is poorly understood in part because the System of National Accounts (SNA), provides us with two definitions

  - Narrow: **actual final consumption of government**

  - Broad: **government final consumption expenditure**

- The current version of Penn World Trade (PWT) contains what appears to be a serious defect: it fails to apply a consistent definition to government consumption.

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Government Consumption

- PWT 6.1 reports for the year 1990-2000 the following estimates of government consumption in Sweden as a percentage of GDP:

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
24.9	25.0	26.0	7.7	7.4	6.8	6.9	6.8	6.6	6.6	23.9

- There is no reason to believe that government consumption in Sweden fell sharply in 1993 and then rose, equally sharply, in the year 2000.

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Government Consumption

Table 1 shows government consumption as a percentage of GDP in domestic and PPP prices, various country groups, 2000*

Median Values

	Number of Countries	Domestic Prices	Relative price of government consumption	PPP Prices
Complete Sample	119	15.6	.72	20.8
Developed Countries	24	18.9	1.13	16.2
Transitional economies	14	18.5	.65	26.4
Developing countries	81	13.7	.60	21.0
Africa	32	13.9	.70	20.9
Latin America and the Caribbean	28	14.6	.60	21.2
Asia and Oceania	21	11.4	.54	24.2

* Earlier years for 10 countries

Source: IMF International Financial Statistics and PWT 6.1 data by country

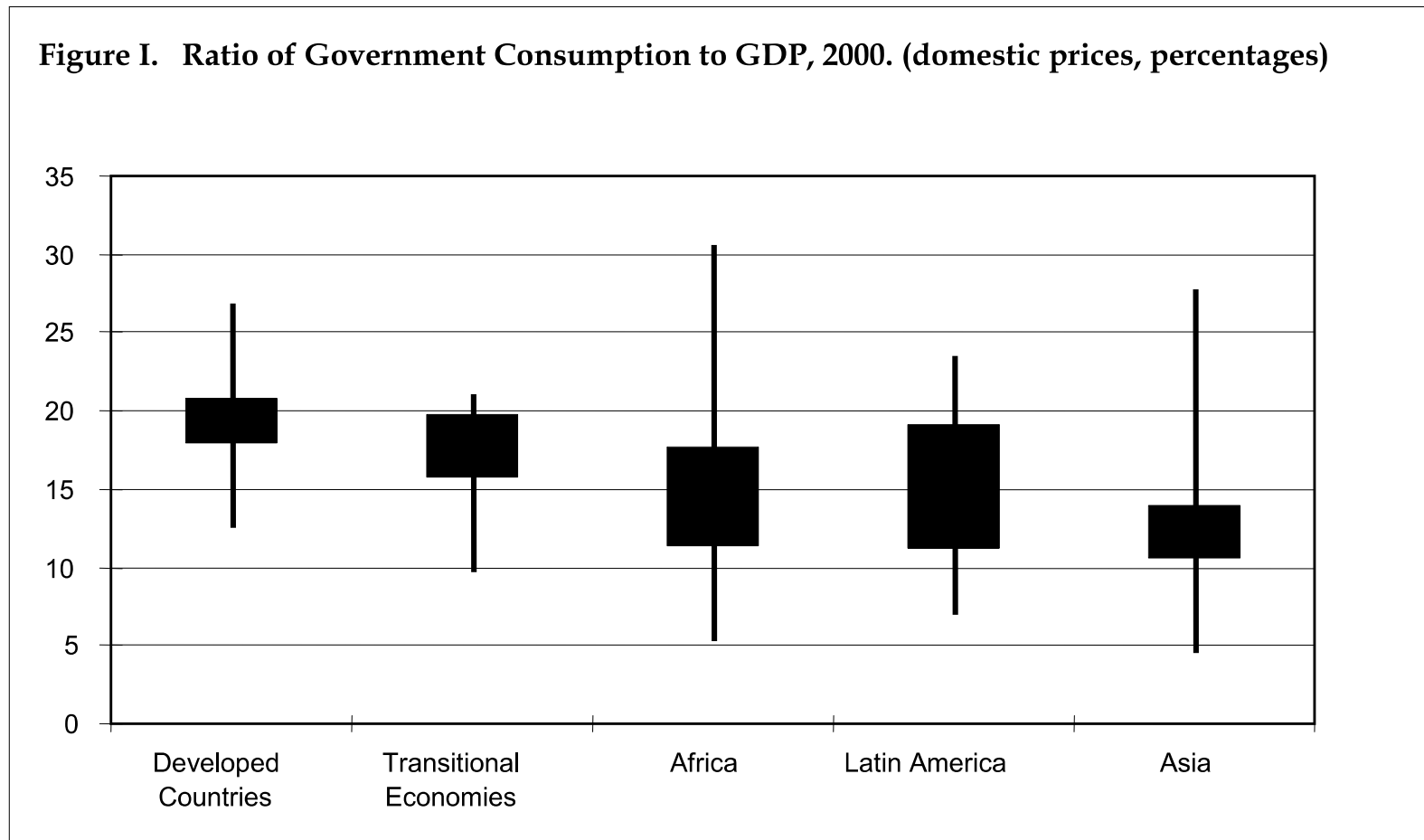Available at www.unpan.org/statistical_databasepublicsector.asp

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- ## Key findings from table:

  - The share of government consumption in GDP, in domestic prices, tended to be larger in the developed than in developing countries

  - The share of government consumption in GDP, in PPP prices, tended to be larger in developing than in developed countries

- ## The next three figures summarizes the data using "box and whisker" diagrams.

  - Each box plot contains a vertical line drawn from the lowest value in the series to the highest value

  - The bottom of the box marks the twenty fifth percentile and the top of the box marks the seventy-fifth percentile.
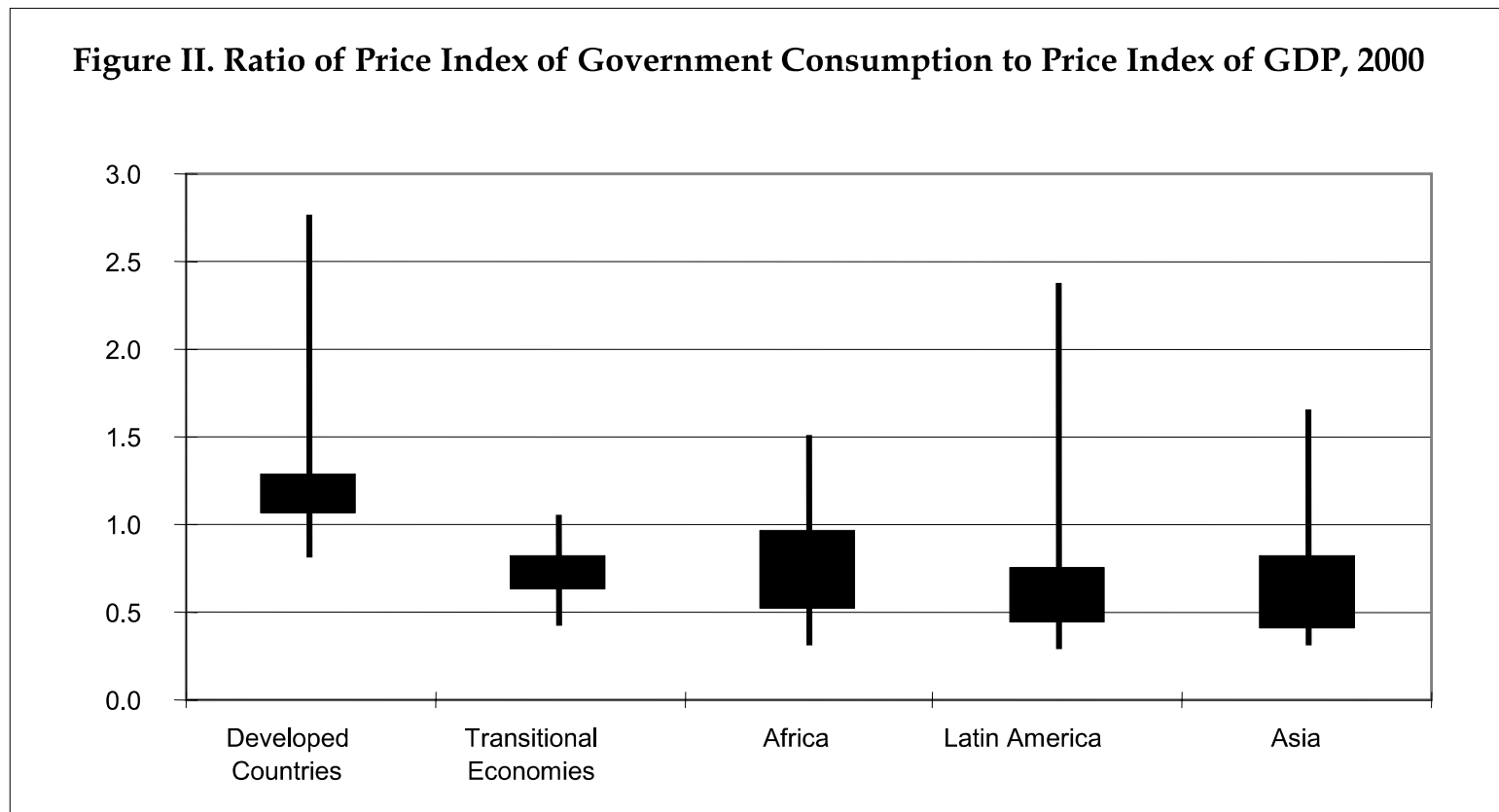
Basic data on Government Expenditure and Taxation
Government Consumption

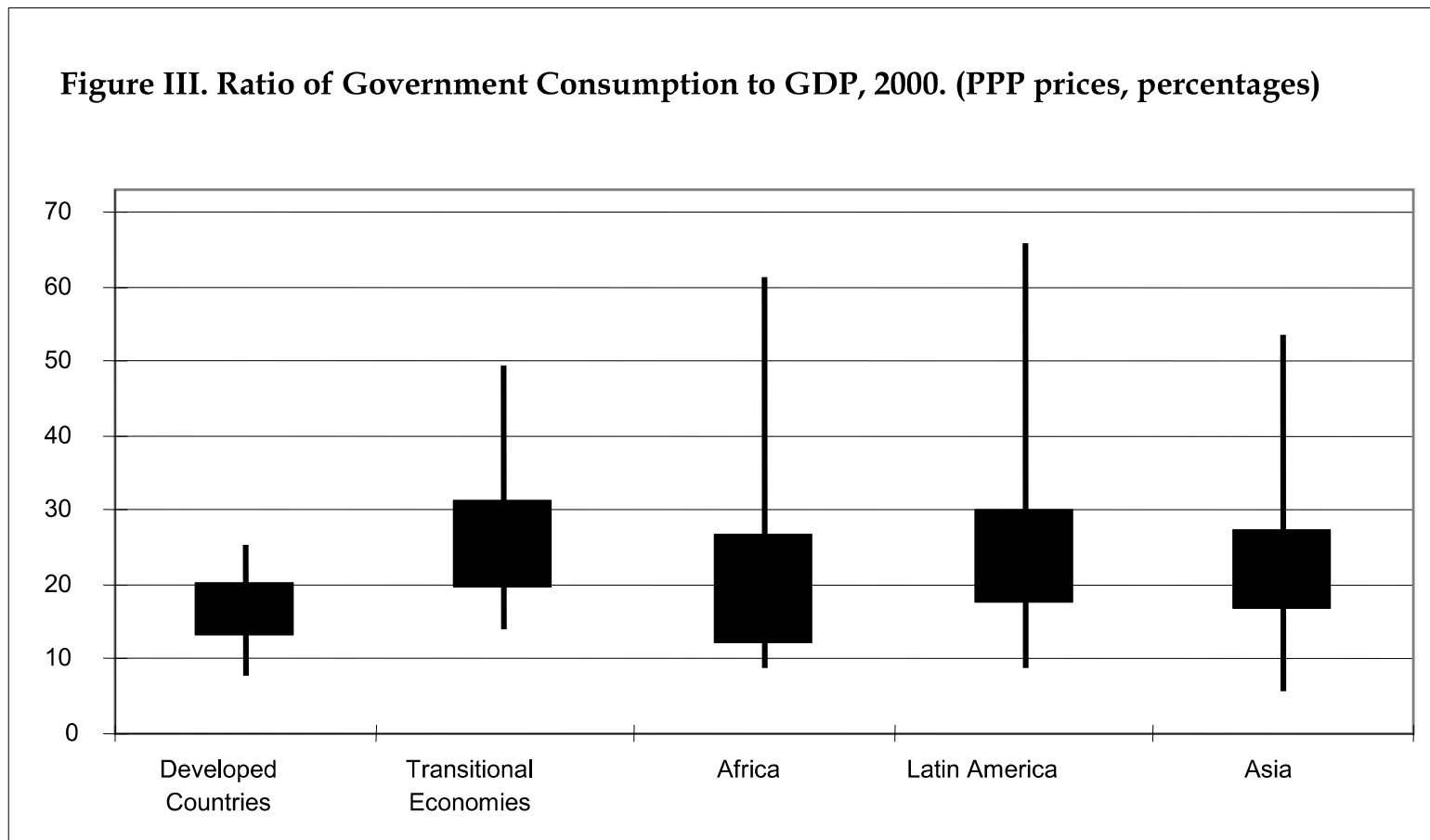**Figure I.   Ratio of Government Consumption to GDP, 2000. (domestic prices, percentages)**

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Government Consumption

Figure II. Ratio of Price Index of Government Consumption to Price Index of GDP, 2000

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Figure III. Ratio of Government Consumption to GDP, 2000. (PPP prices, percentages)

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Government Consumption

Table 2 shows government consumption as a percentage of GDP in domestic prices, various country groups 1990, 1996, 2002

Median Values

	Number of Countries	1990	1996	2002*
Complete Sample	114		15.3	15.7
Less transitional economies	101	15.2	14.3	15.6
Developed Countries	24	18.9	19.4	19.1
Transitional economies	13		20.0	18.0
Developing countries	77	14.2	12.7	14.0
Africa	26	15.1	12.8	14.7
Latin America and the Caribbean	25	12.9	13.4	14.6
Asia and Oceania	26	12.2	11.7	13.0

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Figure IV. Full Sample: ratio of government consumption to GDP in domestic prices, percentages, 101 countries

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Figure V. Developed Countries: Ratio of Government Consumption to GDP (percentages, domestic prices, 24 countries)

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Government Consumption

Figure VI. Transitional Economies: Ratio of Government Consumption to GDP (percentages,domestic prices, 13 countries)

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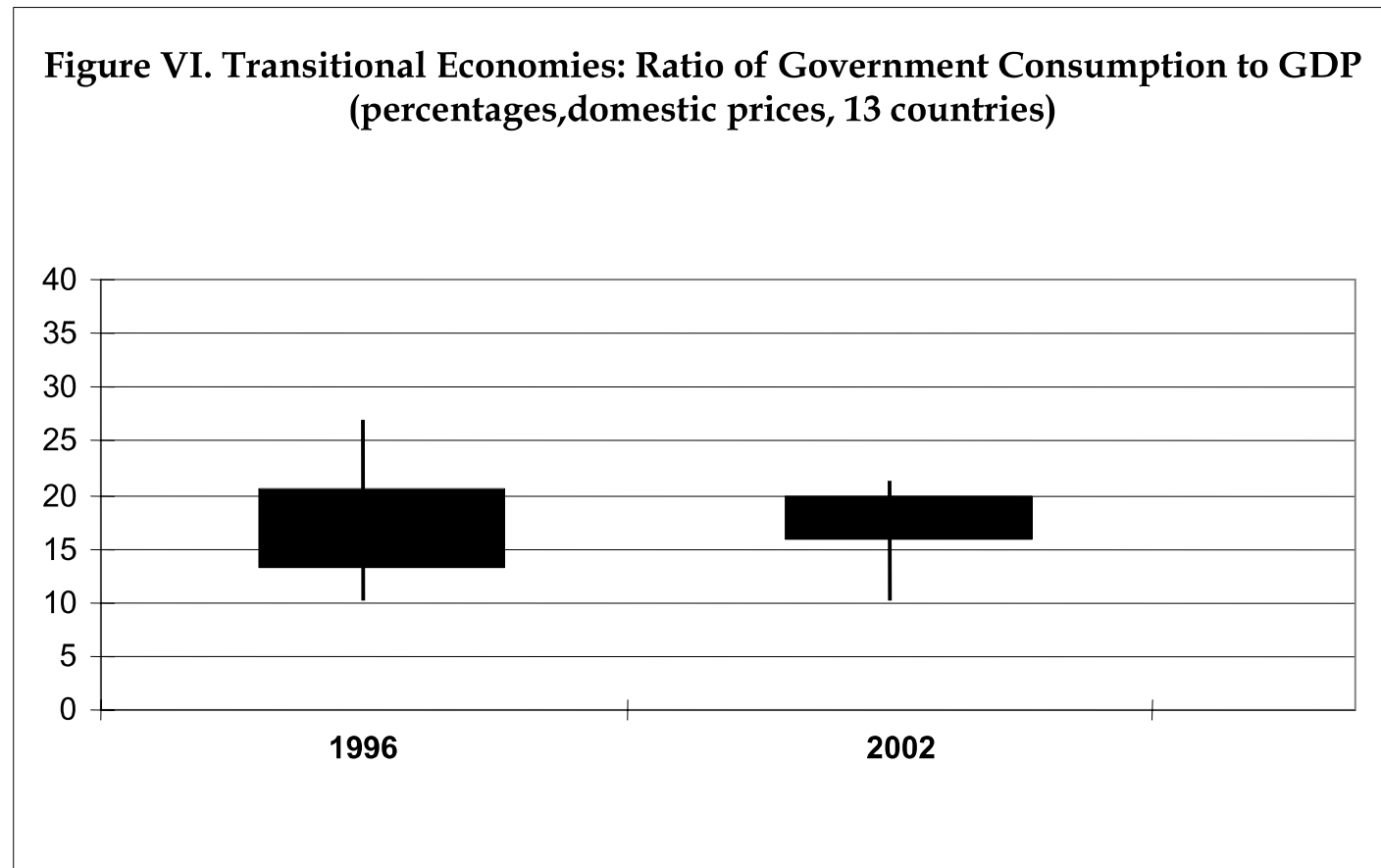# Basic data on Government Expenditure and Taxation
Government Consumption

Figure VII. Developing Countries: Ratio of Government Consumption to GDP.
(percentages, domestic prices, 77 countries)

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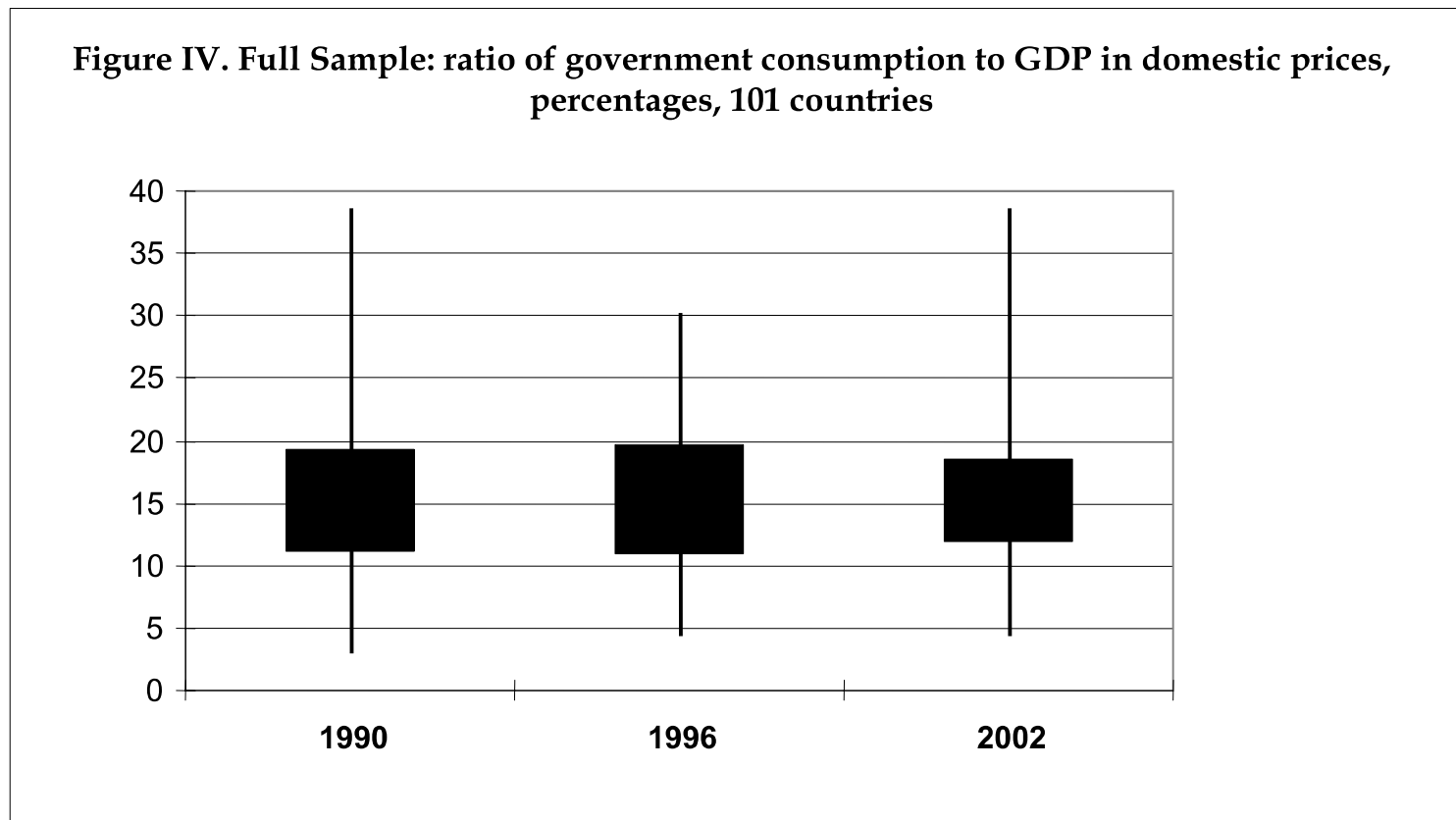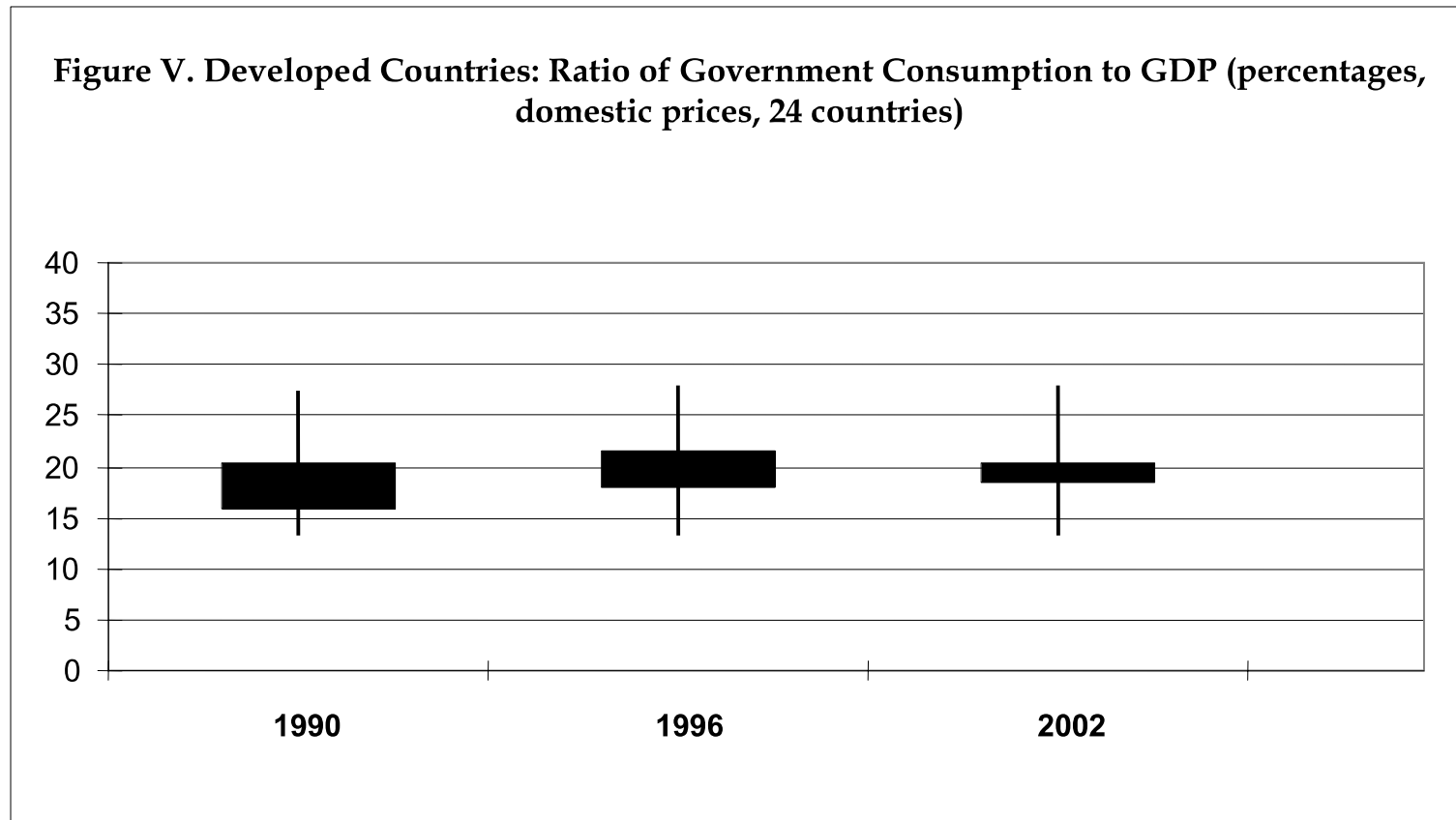
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Central Government Expenditure

- Central government expenditure includes cash transfers and subsidies,outlays for investments in addition to expenditure on consumption.

- There are three drawbacks to these widely available statistics:

  - The statistics include only transfers to lower levels of government and ignore self-financed expenditures of provincial (state) and municipal governments.

  - They record investment expenditure rather than depreciation of capital.

  - They exclude tax expenditures.

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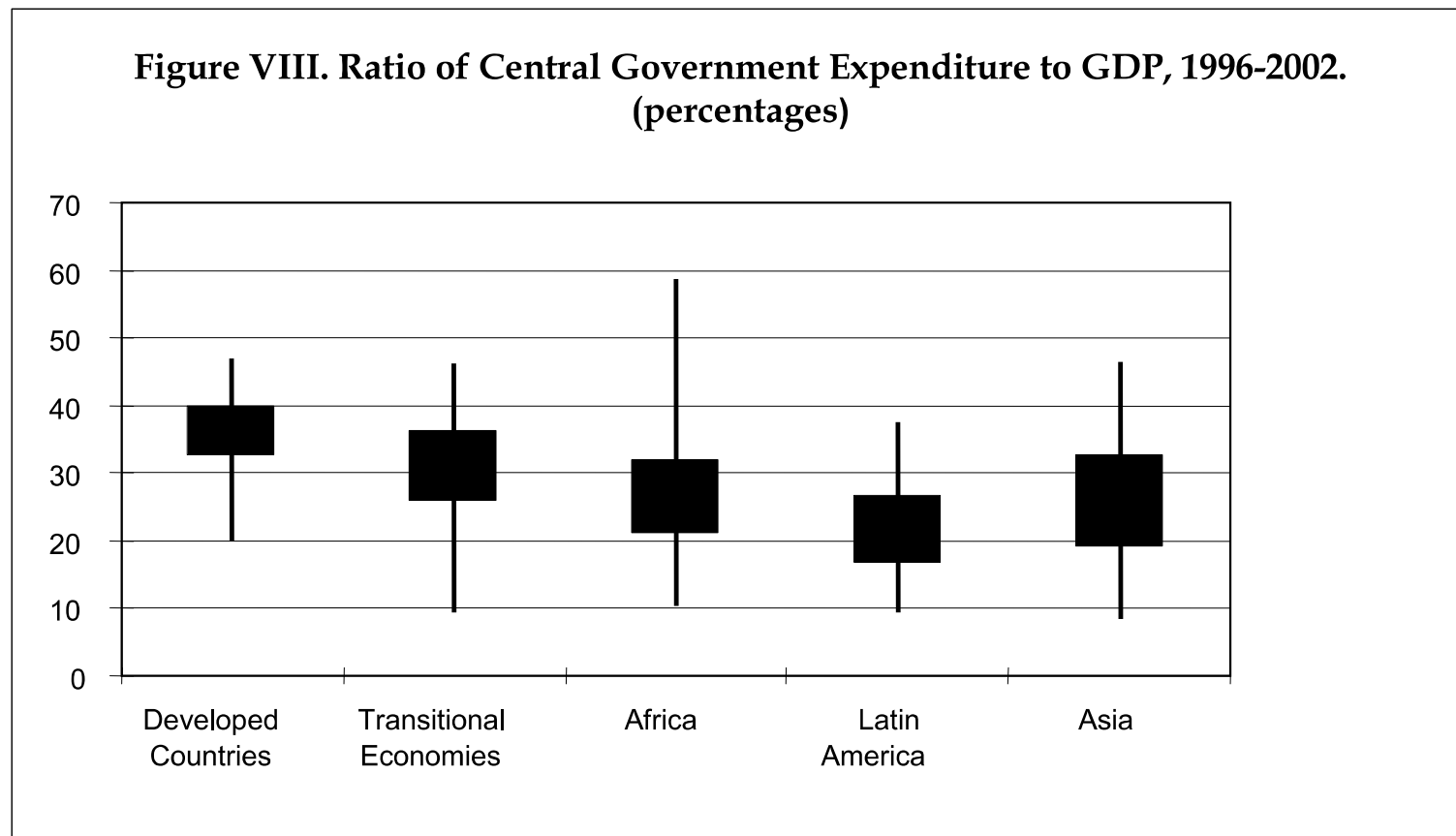
Central Government Expenditure

Table 3 shows the central government expenditure as a percentage of GDP in domestic prices, various country groups

	1990-1995		1996-2002	
	Number of Countries	Median	Number of Countries	Median
Complete Sample	123	28.7	111	29.2
Developed countries	23	39.6	22	36.8
Transitional economies	16	34.9	19	32.3
Developing countries	84	25.2	70	24.1
Africa	30	29.8	23	28.6
Latin America and the Caribbean	25	21.8	19	21.0
Asia and Oceania	29	26.0	28	23.6

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Central Government Expenditure

For the period 1996-2002, developed countries clearly have higher ratios of central government expenditure to GDP than the developing countries.

Figure VIII. Ratio of Central Government Expenditure to GDP, 1996-2002.
(percentages)

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Central Government Tax Revenue

Table 5 shows central government tax revenue as a percentage of GDP in domestic prices, various country groups

(Median Values)	1990-1995		1996-2002	
	Number of Countries	Median	Number of Countries	Median
Complete Sample	123	20.3	111	20.2
Developed countries	24	30.8	23	31.3
Transitional economies	16	28.4	19	25.4
Developing countries	83	17.3	69	15.7
Africa	28	19.2	22	17.4
Latin America and the Caribbean	25	17.3	19	15.2
Asia and Oceania	30	16.6	28	15.2

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Central Government Tax Revenue

- The pattern of the ratios of tax revenue to GDP is similar to the central government expenditure to GDP:

  - Highest in the developed and transitional economies

  - Lowest in the developing countries

Figure IX. Ratio of Central Government Tax Revenue to GDP, 1996-2002. (percentages)

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Central Government Tax Revenue

- **Table 6a** shows the central government tax revenue by the type of tax as a percentage of total tax revenue, various country groups, 1990-2002 averages

(Median Value of simple averages)

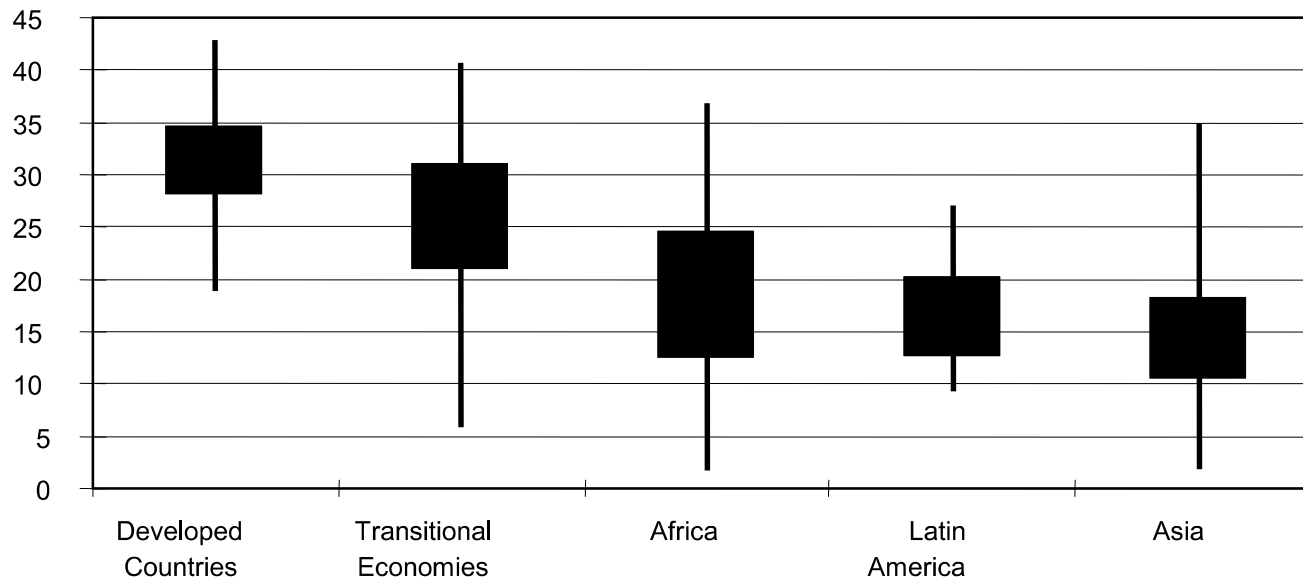|	Number of Countries	Direct taxes	Payroll taxes	Sales taxes	Trade taxes
Complete Sample	139	27.1	5.9	34.8	14.6
Developed countries	24	34.8	28.5	28.1	0.5
Transitional economies	23	17.7	33.3	38.9	6.2
Developing countries	92	27.6	0.7	33.0	24.9
Africa	32	27.2	0.2	30.7	33.0
Latin America and the Caribbean	27	22.1	5.1	38.9	13.7
Asia and Oceania	33	34.1	0.0	34.8	25.6

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Central Government Tax Revenue

- The summary measures reported in table 6a shows a distinct pattern of taxation.

    - Revenues from taxation of international trade was very important for Governments developed countries (Africa and Asia), and less in developed and transitional countries.

    - The share of direct taxes on income and wealth showed less variation, and was low in the transitional economies and Latin America.

    - Payroll taxes were very high in developed and transitional economies and very low in developed countries (Africa and Asia).

    - **The median value in 33 Asian countries was zero.**

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Subnational (local) government expenditure and tax Revenue

Table 7 shows local government expenditure and tax revenue as a percentage of central government expenditure and taxation, averages for 1990-2002

(Median Value)	Government Expenditure			
	Total	**Education**	**Health**	**Tax Revenue**
Median Percentage				
Complete Sample	**31.5**	**185.8**	**69.1**	**14.2**
Developed countries	**38.5**	**185.8**	**78.7**	**21.2**
Transitional economies	**32.1**	**199.0**	**119.4**	**23.3**
Developing countries	**14.5**	**44.4**	**22.9**	**6.7**
Number of Observations				
Complete Sample	**68**	**53**	**53**	**67**
Developed countries	**22**	**17**	**17**	**22**
Transitional economies	**24**	**24**	**24**	**24**
Developing countries	**22**	**12**	**12**	**21**

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Subnational (local) government expenditure and Tax Revenue

Table 8. Highest Ratios of Local to Central Government Expenditure, 1990-2002.			Rank in ratio of local to central government expenditure on		
Rank	Country	Total expenditure (percentage of central government expenditure)	Education	Health	Rank in ratio of local to central government tax revenue
1	Canada	137.1	3	3	3
2	China: mainland	123.1	1	4	2
3	Netherlands Antilles	120.6	29	15	1
4	Switzerland	93.1	24	5	8
5	United States	88.8	25	2	9
6	India	84.5	17	6	7
7	Denmark	80.4	4	32	11
8	Argentina	74.6	11	16	5
9	Australia	72.5	22	22	21
10	Germany	65.3	33	1	14

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Total Government Tax Revenue

Table 9 shows total government tax revenue* as a percentage of GDP in domestic prices, various country groups, 1990-1995 and 1996-2001

	1990-1995		1996-2001		Direction of Change	
	Number of countries	Median	Number of countries	Median	Down↓	Up↑
Separate Sample	56	31.9	53	33.8		
Combined Sample	48	33.5	48	33.8	20	28
Developed countries	21	37.8	21	40.1	3	18
Transitional economies	14	34.7	14	31.4	12	2
Developing countries	13	18.7	13	19.2	5	8

* Sum of local plus central government tax revenue

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Recommendations

Given the **absence of consolidated**, **general government accounts everywhere** and, especially, the **lack of any accounts at all for lower levels of government in most developing countries**, **priority should be given to their compilation**. Accounts of general government expenditure by function would be particularly useful, for they are essential to analysis of the efficiency and efficacy of government expenditure. Once a country compiles such accounts, it can focus attention on remaining problems such as quantification of tax expenditures, estimates of the quasi-fiscal impact of regulation and trade restrictions, and moving public sector accounting from cash to an accrual basis.

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THANK YOU