## **Country Data and Calculation Notes:**

### 1. ANGUILLA

- 1. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990 1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 2. "Annual Report" Caribbean Development Bank, various issues.
- 3. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 4. "Monthly Bulletin of Statistics", United Nations, Various issues.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington DC, various years.

### **Notes:**

Public health expenditure data for 1990-1995 were taken from source 1 listed above. These expenditures only include recurrent expenditures and therefore represent an under estimation of public spending. Public expenditure for 1996-1998 are estimates. Earlier public health spending comes from sources 3 and 5 above. Other economic variables (GDP, exchange rates, population, etc.) come from sources 2, 3, 4 and 5. No information on private expenditures was obtained and therefore private expenditures were estimated from the regional health spending elasticity, government health expenditures and per capita GDP. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 2. ANTIGUA & BARBUDA

- 1. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 2. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 3. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 4. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad)

### **Notes:**

Public health expenditure data for 1990-1995 were taken from source 1 listed above. These expenditures

only include recurrent expenditures and therefore represent an under estimation of public spending. Public expenditure for 1996-1998 are estimates. The source for Central Government Health Expenditures before 1990 came from sources 3 and 4. Source 4 is described as being recurrent health expenditures; total Central government health expenditures were not provided. Other economic variables (GDP, exchange rates, population, etc.) come from source 2. No information on private expenditures was obtained and therefore private expenditures were estimated from the regional health spending elasticity, government health expenditures and per capita GDP.

# 3. ARGENTINA

- 1. "El Gasto en Salud en Argentina y su Metodo de Calculo" F. Tobar et al. Instituto Universitario ISALUD. Programa de Investigación Aplicada. Buenos Aires Diciembre de 2000.
- 2. "Matriz de Gasto y Financiamiento de Sector Salud Ano 1997. Resultos Preliminares" Ministerio de Salud. Secretaria de Politicas y Regulacion Sanitaria. Proyecto de Desarrollo de Politicas y Regulacion de los Seguros de Salud. Proyecto ARG/96018 (Financiado por el prestamo BIRF 4004/AR).
- 3. "Cuadro 4.1 (Gasto Publico Consolidado por finalidad y Funcion, 1980-1999), Cuadro 4.2 (Gasto Publico del Gobierno Nacional por finalidad y Funcion, 1980-1999), Cuadro 4.3 (Gasto Publico de los Gobiernos Provinciales y GCBA por finalidad y Funcion, 1980-1999), y Cuadro 4.4 (Gasto Publico de los Gobiernos Municipales por finalidad y Funcion, 1980-1999)" Direccion Nacional de Programacion del Gasto Social-Secretaria de Programacion Economica y Regional. Down loaded from website 07/18/2000.
- 4. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 5. Flood, C. Harriague, M. Gasparini, L. Velez, B. "El Gasto Publico Social Y su Impacto Redistributivo" Secretaria de Programacion Economica, Ministerio de Economia Y Obras Y Servicios Publicos. Buenos Aires, Argentina (1994)

Other sources of health expenditure data in Argentina.

- 6. OPS/PAHO "Health in the Americas" vol II, 1998 Edition. Sci. Pub. No. 569 pp36-38.
- 7. CEPAL/ECLAC, "Estructura del Gasto de Consumo de los Hogares en America Latina" Santiago de Chile, 1995
- 8. Gonzalez Garcia, Ginez. "La Reforma del sistema de Salud de la Argentina" in La economia de la Salud en la Reforma del Sector. Jornadas Internacionalales de Economia de la Salud. Asociacion de Economia de la Salud, Buenos Aires Argentina, 1996
- 9. Gonzalez Garcia, G., Abadie, P., LLovet, J.J., Ramos, S., "El Gasto en Salud y en Medicamentos, Argentina 1985". HVMANTAS-CEDES Buenos Aires, Argentina 1989.
- 10. Centrangolo, O., Damill, M., Katz, J., Lerner, L., Ramos, S. "Desregulación y Salud: Un Análisis de la Reforma del Sistema de Obras Sociales" Documento de Trabajo No. 2., Buenos Aires, Argentina, agosto de 1992.

- 11. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, Argentina 1985/86, División de Estadística y Proyecciones.
- 12. INDEC, "Encuesta de Gastos and Ingresos de los Hogares 1985-1986" Instituto Nacional de Estadisticas y Censos, Secretaria de Panificacion, Presidencia de la Nacion, Republica Argentina.
- 13. Dieguez H., Llach J.J., Petrecolla A., "El Gasto Publico Social". PRONATASS-ITID. Buenos Aires, (1990). \*\*\*We were unable to locate a copy of this study\*\*\*

The greatest problem in dealing with Argentina is that there is a wealth of data, calculated using a variety of different methodologies, with largely conflicting results. Data for health expenditures from 1995-1999 were taken from source 1 above (tables 6-10 in the text). These figures agree in aggregate with the data provided in source 2, but at the agency level there are small discrepancies that need to be examined and a decision made as to the most appropriate source to use. These figures disagree with consolidated public health expenditures calculated by source 3 due to differences in the methodologies used. The private expenditures derived from sources 1 and 2 are also lower than what would be obtained from a direct application of the results of the 1996/97 Household expenditure survey, but adjust for household spending into public institutions. The GFS was not used here as the main source for data on government expenditures, because it contained insufficient information on state and local expenditures, and had nothing on the Obras Sociales (Social Insurance). Flood et.al (1994) was the primary source for public expenditures from 1980-1994 and for private health expenditure for 1985/86 and 1991. The basis for their estimations was the 1985/86 survey, but their work reflects some adjustments based on new GDP information and extrapolations to a national expenditure level. Estimates for Private Expenditure for 1980-1984 and 1986-1990 are extrapolated from the data in Flood et. al. The adjustments made by Flood et. all results in levels of health expenditure as a share of GDP that are significantly below what would be suggested by the survey itself and should be interpreted with some caution. Data from 1992-1994 were extrapolated from the data in source 1 for 1995. Other economic variables (GDP, exchange rates, population, etc.) come from source 4.

### 4. ARUBA

- 1. "Table A.2. Expenditures per household 1998." This table was sent by email to PAHO from the Central Bureau of Statistics of Aruba without the specific title and sources, but represents the results of a 1998 household budgetary survey.
- 2. "Table of Government Final Consumption Expenditure Health and Social Services" This table was sent by email to PAHO from the Central Bureau of Statistics without the specific title and sources.
- 3. "Kingdom of the Netherlands Aruba: Recent Economic Developments: IMF staff Country Report No. 99/51. June 1999.
- 4. "Country Report" Economist Intelligence Unit, various issues.
- 5. "Annual Report" Caribbean Development Bank, various issues.

- 6. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 7. "Health Situation in the Americas: Basic Indicators 1996", Health Situation Analysis Program, Division of Health and Human Development, Pan American Health Organization.

Public health expenditure data for Aruba is difficult to find. The CBS of Aruba provided the data for Government for 1995-1997, listed in source 2 but this data includes social services. Source 3 contained a note on p23 which indicated that the Social Insurance Bank (SVB) of Aruba covered 24% of national health care costs, while the government covered 61% and private insurance and out-of-pocket the final 15%. They also provide SVB's health expenditures on page 24. This data allowed us to calculate estimates for public expenditures for 1993 – 1998 for comparative purposes. These estimates are used for public expenditures 1993, 1994, and 1998. Private expenditure for Aruba for 1993-1997 was extrapolated from the survey data for 1998 derived from source 1 but generally agrees with the 15% private expenditures noted above in source 3. Other economic variables (GDP, exchange rates, population, etc) come from sources 4, 5, 6 and 7. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 5. BAHAMAS

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 3. "Quarterly Review" Central Bank of The Bahamas, March 1992, Vol 19, no.1
- 4. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.

Other sources of health expenditure and macroeconomic data in The Bahamas:

- 5. "Country Report" Economist Intelligence Unit, various issues.
- 6. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad).
- 7. "Annual Report" Caribbean Development Bank, various issues.

### **Notes:**

Source 1 provides the data for Central government health expenditures from 1980-1998 with the exception of 1987 (which is from source 3) and 1994 which is an estimate based on adjacent years. Source 4 provided the data for household health expenditures between 1980 and 1988 and the data from 1989-1998 is estimated by using the regional income elasticity of health. Other economic variables (GDP, exchange rates, population, etc) come from source 2. The GDP deflator used for this country is the USA deflator. See the discussion

under the heading: Other Calculation Issues in the main body of the text.

## 6. BARBADOS

- 1. Central Bank of Barbados, "Economic and Financial Statistics" Barbados, Jan 1993, July 1996, and July 2001 issues.
- 2. "Annual Report" Caribbean Development Bank, various issues.
- 3. "Report on Household Budgetary Survey 1998-1999" Barbados Statistical Service Department, undated.

#### **Notes:**

Source 1 provided the data for both central government health expenditures and the share of household spending for health (household budgetary surveys taken in 1980, and 1994 provide the share of spending that goes to health and the weight of these items in the retail price index). The 1994 weight was used to estimate private expenditures, but this needs to be viewed with caution: the 1994 weight of 3.8 includes personal care with medical expenditures. The 1998/99 Household budgetary survey is now available and partial data from that survey suggests that households spend at least 2.6 percent on medical care, but unfortunately only a small part of the survey report was released to PAHO and part of the survey relating to expenditures on Drugs and private insurance was missing from the documentation. When this becomes available the data should be reestimated using a household share of expenditure somewhere between 3.8 and 2.6. Other economic variables (GDP, exchange rates, population, etc) come from source 2. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

### 7. BELIZE

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. Fairclough, E.H., UK Technical Cooperation Officer "The Belize Household Expenditure Survey, 1980" Central Planning Unit of Belize.
- 3. "International Financial Statistics Yearbook", International Monetary Fund, Washington, D. C., various issues.

#### **Notes:**

Source 1 provides the data for Central government health expenditures from 1980-1998 with the exception of 1986, 1987 and 1998 which are estimated based on adjacent years. Source 2 provided the data for household health expenditures for 1980 and the data from 1981-1998 are estimated by extrapolating from 1980 using the regional income elasticity of health. Other economic variables (GDP, exchange rates, population, etc.) come from source 3.

## 8. BERMUDA

- 1. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 2. "The Household Expenditure Survey, 1982" Statistical Department, Ministry of Finance of Bermuda. Hamilton Bermuda 1982.
- 3. "Country Report" Economist Intelligence Unit, various issues.
- 4. "World Statistics Pocketbook" United Nations, New York, 1999.
- 5. "Monthly Bulletin of Statistics", United Nations, Various issues.

Source 1 provided data on Central Government expenditure on health between 1980 and 1992, with 1993 and 1994 estimated from 1992. Source 2 provided the data for household health expenditures for 1982 and the data from 1980-1994 are estimated by extrapolating from the 1982 survey using the regional income elasticity of health. Other economic variables (GDP, exchange rates, population, etc.) come from sources 3, 4, and 5. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 9. BOLIVIA

- 1. "Health Sector Funding and Expenditure Accounts" Marina Carenas, Ministerio de Salud y Prevision Social, Boliva, 2000.
- 2. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 3. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 4. "Estructura del Gasto de Consumo de los Hogares en America Latina" CEPAL/ECLAC, Santiago de Chile, 1995
- 5. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 6. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in Bolivia:

- 7. "Bolivia: estadisticas Economicas del Sector Salud. Una Ayuda Memoria Preliminar" Morales, R. La Paz, Bolivia, 1995
- 8. "Gasto Nacional y Financiamiento Del Sector Salud en Bolivia" Cardinas Robles, M. Darras, C. Working paper of Unidad de Analisis de Politicas Sociales (UDAPSO), in collaboration with PAHO-Bolivia, La Paz, Bolivia, 1994

- 9. "Tabulaciones especiales de la Encuesta, Bolivia 1990", CEPAL/ECLAC. División de Estadística y Proyecciones.
- 10. "Estudio Sobre Cuentas Nacionales de Financiamiento y Gasto en Sauld: Revision y Actualizacion" Ministerio de Salud y Prevision Social, Unidad de Reforma de Salud, La Paz, Bolivia, June 1998

The greatest problem in dealing with Boliva, like Argentina before, is that there is a wealth of data which has been calculated using a variety of different methodologies, with different results. Data for all health expenditures from 1995-1998 (Public, Private and Social Security) were taken from source 1. Source 2 provided the public expenditure data for 1980-1994 (1985 was estimated), with information on Social security coming from source 3. Private expenditures 1992-1994 were estimated from 1995 data using the regional health elasticity. Source 4 provided data on household spending in 1990, and this data was used to estimate 1991 and 1989. 1980 through 1986 data on private spending comes from source 6 (except 1981 which is estimated). Other economic variables (GDP, exchange rates, population, etc.) come from source 6.

## 10. BRAZIL

- 1. Medici, A.C. "Gastos com Saude nsa tres Esferas de Governo: 1980-1990" in "O Financiamento Da Saude no Brasil: Serie Economia e Financiamento no.4", Representacao do Brasil, Brasilia, 1994
- 2. World Bank, "The Organization, Delivery and Financing of Health Care in Brazil: Agenda for the 90's". World Bank Report no. 12655-BR, Washington DC 1994.
- 3. Piola, S.F. Vianna, S.M. "Reavaliando O Gasto Publico em Saude" in "O Financiamento Da Saude no Brasil: Serie Economia e Financiamento no.4", Representacao do Brasil, Brasilia, 1994
- 4. Piola, S.F. Vianna, S.M. Pinheiro, V.C. "Gasto Social Federal E Investimento na Infancia", UNICEF, Brazil, 1993
- 5. Tables from Unpublished technical note sent to PAHO titled "Nota da Assessoria Economica do Ministerio da Saude" received Nov. 1998 from the Ministry of Health of Brazil.
- 6. Cunha Fernandes, M.A. (coordenador), et. al. "Gasto Social Consolidado 1995" Instituto de Pesquisa Economica Aplicada. Brasilia, June 1998
- 7. Ministerio da Saude "Tables: Gastos Do Ministerio da Saude", Ministerio da Saude, Secretaria Executiva, Subsecretaria de Planejamento e Orcamento. Provided to PAHO in September 2000.
- 8. "Estudio Economico de America Latina y El Caribe 1995-1996" Comision Economica Para America Latina Y El Caribe, Naciones Unidas, Santiago de Chile 1996
- 9. DIEESE "Pesquisa de Orcamentos Familiares (POF) 1994/1995" Departamento Intersindical de

Estatistica e Estudios Socio-Economicos, Brazil August 1996

- 10. CEPAL/ECLAC, "Estructura del Gasto de Consumo de los Hogares en America Latina" Santiago de Chile, 1995
- 11. IBGE, "Pesquisa De Orcamentos Familiares 1995-1996. Primeiros Resultados, Regioes Metropolitanas Brasilia DF Municipio de Goiania"
- 12. <a href="http://www.abramge.com.br">http://www.abramge.com.br</a> Web page of the Associacion Brasilena de Medicina de Grupo de Empresas
- 13. <a href="http://www.abraspe.org.br">http://www.abraspe.org.br</a> Web page of the Associacion Brasilena de Saude Propia de las Empresas
- 14. <a href="http://www.ans.gov.br">http://www.ans.gov.br</a> Web page of the Agencia nacional de Saude Suplementar
- 15. http://www.unimed.com.br/
- 16. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in Brazil:

- 17. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 18. Webpages of the Ministerio Da Saude.
- COSEMS/NESCON/MS/FNS "Financiamento do Sistema Unico de Saude no Brasil" Prgrama de Capacitacao de Gestores do SUS.
- 20. Ministerio de Saude, "Gastos Totais com Saúde No Brasil, Em 1989" Serie Planejamento: CGPS-02/92. Min. da Saude, Secretaria Executiva Coordenação Geral de Planejamento Setorial, Brasilia 1992.
- 21. Ministerio da Saúde "Gastos Em Saúde Nos Estados do Nordeste e em Minas Gerais: 1981-1988" Serie Planejamento CGPS-01/92, Min. da Saúde, Secretaria Executiva Coordenação Geral de Planejamento Setorial, Brasilia 1992.
- 22. Andre, Paulo, T.A., "ENDEF, Estudio Nacional de Despesa Familiar" Report prepared for the World Bank Expert Group Meeting on Living Standards Measurement, Washington D. C. Feb. 25-29 1980.
- 23. Medici, A.C. "Gastos com Saude nsa tres Esferas de Governo: 1980-1990" in "O Financiamento Da Saude no Brasil: Serie Economia e Financiamento no.4", Representação do Brasil, Brasilia, 1994

#### **Notes:**

Brazil has a large wealth of data sources on health expenditures, but in many respects this complicates the issue of obtaining data. There is little consistency in the methodologies used to calculate the figures provided by the multiple government agencies and technical reports, and overlapping series are often inconsistent. Caution should be exercised when using these figures in recognition of this fact. The Government Finance

Statistics of the IMF was not used here as the main source for data on government expenditures, because it contained insufficient information on state and local expenditures, and nothing on Social Insurance. Source 1 was the primary source for public health expenditure data for Brazil from 1980-1990, however, in order to estimate Social Security expenditures, it was necessary to combine this information with details from Source 2 above. In source 1, values for Federal expenditures on health included social security expenditures which would have been spent at the federal level and transfers to state and local levels (which can also be allocated to social security). Source 2, on page 36, reports the percentage distribution of Federal funds to the Social Security scheme. Combining these two, we allocated the indicated percentage of federal expenditures to Social Security. Data on Public expenditures from 1991-1993 come from sources 3 and 4. Data for 1994 and 1995 were derived from sources 5 and 6, although State and Municipal spending for 1994 are estimates. Data for 1996-2000 were provided by source 7, with estimations for State and Municipal spending based on 1995 The private health expenditure estimates for direct expenditures (household out-of-pocket) are based on the survey data from sources 8, 9, 10, and 11. Years not directly covered by a survey were estimated using the methodologies outlined in the first section of this document. Data for private indirect expenditures were based on revenue data taken from private insurance organization listed in sources 12, 13, 14, & 15, and from the household surveys in sources 8, 9, 10, and 11. For years in which there was no data on revenues by private insurance companies, survey data on household private insurance expenditures were used as a minimum level. This likely represents a significant underestimation of these expenditures since employers often pay the greater share the premiums for private insurance. For years in which private insurance data were available, household survey data on expenditures for private insurance were discarded to avoid double counting these expenditures. Other economic variables (GDP, exchange rates, population, etc.) come from source 16.

## 11. CANADA

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "OECD Health Data 2000, A Comparative Analysis of 29 Health Systems". OECD/CREDES
- 3. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

#### **Notes:**

Data on public expenditures were taken primarily from source 1. Similar estimates of National health expenditure can be found in the data in source 2, and it is possible that the figures compiled may be even more accurate than those of source 1, however, the decentralization of expenditure is not well captured in this database and given that this is a critical feature of the health expenditure in Canada, it was preferable to use the breakdown available in the the first source. Municipal expenditures were estimated for 1994, and all public expenditures were estimated for 1995, 1998, 1999. These estimations were based on average expenditures in close years (adjusted for GDP growth). Private expenditures are taken from source 2. Other economic variables (GDP, exchange rates, population, etc.) come from source 3.

# **12. CAYMAN ISLANDS**

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 3. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 4. Cayman Islands " Household Income and Expenditure Survey (HIES), July 1992" prepared by the Government Statistic Office
- 5. Cayman Islands "Government of the Cayman Islands, Household Expenditure Survey: Report on the survey conducted April 1983 to March 1984" Prepared by Govt. Statistics Unit, Department of Finance / Development.
- 6. "Country Report" Economist Intelligence Unit, various issues.
- 7. "Annual Report" Caribbean Development Bank, various issues.
- 8. Caribbean Development Bank, "Annual Economic Report 1994: Cayman Islands" Caribbean Development Bank, St. Michael, Barbados, West Indies.

### **Notes:**

Public health expenditure data for 1983-1989 were taken from source 1. Public health expenditure data for 1990-1995 were taken from source 2 listed above. These expenditures only include recurrent expenditures and therefore represent an under estimation of public spending. Public expenditure for 1996-1997 are estimates. Private health expenditure data is taken from two surveys, Sources 4 and 5 for the years 1984 and 1991 respectively. Private expenditures for other years were estimated using the methodologies outlined in the report. Other economic variables (GDP, exchange rates, population, etc.) come from sources 6, 7, and 8. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 13. CHILE

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. Solimano, G. et al, "La Salud en Chile: Trascender la Dicotomia Estado Mercado" Propuesta de Proyecto del Centro de Analisis de Politicas Publicas y la Escuela de Salud Publica, Universidad de Chile. Nov 2000.
- 3. Portales Coya, P. " Modelo de Salud Previsional Chileno" Sintesis de exposicion efectuada en ls reunion

technica de la Conferencia Interamericana de Seguridad Social, Sub-Region III - Cono Sur, Reformas Estructurales y Seguridad Social, Asuncion, Paraguay, December 1994.

- 4. CEPAL/ECLAC, "Estructura del Gasto de Consumo de los Hogares en America Latina" Santiago de Chile, 1995
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues

Other sources of health expenditure and macroeconomic data in Chile:

- 6. Capitulo Chile. Salud en las Americas 1998, Organizacion Panamericana de la Salud, 1998.
- 7. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 8. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, Chile 1977/78, División de Estadística y Proyecciones.
- 9. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, Chile 1987/88, División de Estadística y Proyecciones.

#### **Notes:**

The central government expenditure in Chile for 1980-1989 is derived from the data in source 1. This data is aggregate public expenditures and includes the expenditures through public social insurance (most importantly FONASA). Source 2 provided information on public expenditures from 1990-1999 in constant These figures were deflated to nominal values using a preliminary deflator for 1999, and 1999 values. should be re-evaluated when a new deflator is available. Source 2 also provided private indirect expenditures for 1990-1999 (which again were deflated to nominal values). Private indirect expenditures before 1990 are obtained from source 3. Private direct expenditures were estimated from data in source 4 for 1987/88. Household health expenditures for Chile involves a country specific estimation because of some difficulties in making sources consistent and separating out data from the different sources. The last processed survey in Chile for 1987/88, showed that households spent 3.95% of their budget on health, or about 2.4% of GDP. The data from source 3 noted above reports private spending in the same year of 1.21% of GDP. discrepancy may result from two separate data issues. One common problem noted already with household surveys, is that they rarely distinguish between household health expenditures that were reimbursed and those that were not. For most countries in the region the under-development of the insurance industry means that this isn't likely to be much of a problem, but Chile has a developed insurance system and this is likely to make a big difference. In all likelihood, a significant percentage of the expenditures listed in the survey were On the other hand, source 3 uses the expenditures of 35 different private insurers in the reimbursed. ISAPRES system as the basis of private expenditures. While this presumably includes the copayments made by beneficiaries at the point of service, it is specifically noted that there is no data on out of pocket expenditures by the uninsured population, nor would these figures include over the counter medicines, or outof-plan health expenditures by those insured. There may be a current study taking place to establish the size of direct, non-reimbursed health expenditures, which will hopefully clarify this area. In the meantime, the estimation procedure used here was to estimate private household expenditures using estimation procedure 4. Private health insurance expenditures from source 3 were then subtracted from this amount, to provide an estimate of household direct spending. Other economic variables (GDP, exchange rates, population, etc.) come from sources 5.

## 14. COLOMBIA

- 1. Velez, C.E. "Gasto Social y Desigualidad. Logros y extravios", Mision Social, Departamento Nacional de Planeacion, Santafe de Bogata, 1995
- 2. "Colombia Sana: Apertura a la Salud 1991-1994" Seria Memoria No.2, Ministerio de Salud . (no date on document)
- 3. Tablas: "Gasto en Salud segun Agentes Y componentes Publicos y Privado: Resumen periodo 11993-1999" Departamento Nacional de Planeacion, Proyecto Cuentas de Salud de Colombia
- 4. "Country Report" Economist Intelligence Unit, various issues.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in Colombia:

- 6. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 7. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 8. PAHO/OPS (PWR/COL) "Colombia" 1st draft of the 1994 Chapter for Colombia for "Condiciones de SAlud en las Américas" 1994 edition.
- 9. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, Colombia 1984/85, División de Estadística y Proyecciones.

#### Notes:

Public expenditure data for 1980-1992 were derived from source 1 above. Private expenditure for the same period was taken from source 2. Public and Private expenditure data from 1993-1999 were taken from source 3. Other economic variables (GDP, exchange rates, population, etc.) come from sources 4 and 5.

# 15. COSTA RICA

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 2. Social Security Expenditure Tables produced by Dr. Edgar Barrillas for the Public Policy and Health Program, Division of Health and Human Development, Pan American Health Organization, 1993.

- 3. Tables provided by OPS/COR from National Health Accounts Estimates (2000?) Table source notes that data was developed from data of the Central Bank and the corresponding Institutions.
- 4. "Estructura del Gasto de Consumo de los Hogares en America Latina" CEPAL/ECLAC, Santiago de Chile, 1995
- 5. "Country Report" Economist Intelligence Unit, various issues.
- 6. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

- 7. "Änuario 1995: Programa 2000-servicios Medicos, S.E.M." Caja Costarricense de Seguro Social, Gerencia Division Financiera, Direccion Financiero Contable, Seccion de Costos Hospitalarios. Costa Rica, October 1996
- 8. Abel Smith, B., in "Recurred Costs in the Health Sector: Problems and Policy Options in Three Countries." WHO. Geneva 1989.
- 9. Ministerio de Economía, Industria y Comercio, "Encuesta Nacional de Ingresos y Gastos de los Hogares 1987-88," Avance de Resultados, Dirección de Estadística y Censos, San José, Costa Rica.

#### **Notes:**

Public expenditure data for 1980-1984 were derived primarily from source 1 above, with additional calculations to separate out social security derived from data in source 2. Public expenditure data from 1984 to 1998 -- including Ministry of health, the Costa Rican Social Security Fund, The National Insurance Institute, and the Municipalities, but excluding the Costa Rican Water and Sanitation Fund -- were taken from source 3. Private expenditure for 1987 and 1988 were obtained from source 4 and private expenditures for all other years were estimated from the 1987/88 data using methodologies described in the text. Other economic variables (GDP, exchange rates, population, etc.) come from sources 5 and 6.

## **16. CUBA**

- 1. Ministerio de Salud Publica, "Analysis Del Sector Salud En Cuba" MINSAP with collaboration of PAHO, Havana Cuba December 1995.
- 2. Ministerio de Finanzas y Precios, "Gestion Evolucion y Effectos de Sistema de Salud Cubano" prepared by D. G. Hernandez for presentation at the workshop 'Aspectos Macroeconomicos de la Eficiencia en Salud' Habana Cuba, Feb. 1999.
- 3. "Country Report" Economist Intelligence Unit, various issues.
- 4. "Statistical Yearbook for Latin America and the Caribbean" The Economic Commission for Latin America and the Caribbean, various issues.
- 5. "Statistical Yearbook" United Nations, various issues.

Public expenditure data for 1981 comes from source 1. Public expenditure data for 1985-1997 is obtained from source 2. Private expenditures are estimates based on GDP per capita and public expenditures as described in the methodology section of the report. Other economic variables (GDP, exchange rates, population, etc.) come from sources 3, 4, and 5. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

### 17. DOMINICA

- 1. Theodore, Karl "Private Corporate Health Expenditure in Caricom Countries: context and Measurement. A Health Economics Policy Study of Dominica, Jamaica, St. Vincent and Trinidad and Tobago". Health Economics Unit, University of the West Indies, Draft Report, May 1997
- 2. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 3. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 4. "Country Report" Economist Intelligence Unit, various issues.

Other sources of health expenditure and macroeconomic data in:

5. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad)

#### **Notes:**

Public health expenditure data for the years 1982-1989 were taken from source 1 above, and for 1990-1995 this data was taken from source 2. The data for 1990-1995 expenditures only include recurrent expenditures and therefore represent an under estimation of public spending, which accounts for the slight decrease in public expenditures compared to previous years. 1996 public expenditure is estimated by projecting from previous years data. Private expenditures are estimated from the regional elasticity, government expenditures and per capita GDP using the methodology illustrated in the text.. Other economic variables (GDP, exchange rates, population, etc.) come from sources 3 and 4. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 18. DOMINICAN REPUBLIC

- 1. Rathe, M. "Salud y Equidad: Una mirada al financiamiento de la Salud en la Republica Dominicana" Macro International 2000.
- 2. Guzman, R. et al., "Estructura Economica, Funcional y Regional de Gasto Publico Social en la

Republica Dominicana (1978-1997), ONAPLAN (1998)

- 3. Del Rosario Mota, Gumersindo "Estructura del consumo, Nutrición y Línea de Pobreza en la República Dominicana: Estudioi basado en la Encuesta de Ingresos y Gastos de las Familias, 1984." Dpto. de Estudios Económicos, Subdirección de Encuesta de Hogares y Análisis de Coyuntura, Banco Central de Reserva de República Dominicana, Mimeo, Feb. 1991.
- 4. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

- 6. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 7. Officina de Coordinacion Technica/Commission Nacional de Salud. "Salud, Una Vision de Futuro: Marco de Referncia para la Reforma del Sector Salud" OCT/CNS. 1995
- 8. Rathe, M. "Cuentas Nacionales de Salud: Un Analisis del Financiamento del Sistema de Salud de la Republica Dominicana. Informe Final, Santo Domingo July 1998.
- 9. Banco Central de la Republica Dominicana, "Cuentas Nacionales de Salud Del Sector Publico en Republica Dominicana. Año 1995", Dept. de Cuentas Nacionales y Estadisticas Economicas. Banco Central. Sto. Domingo, R.D. 1997.

#### Notes:

Public expenditure data for the Dominican Republic between 1980 and 1997 is taken from source 1 above (which was based on data from source 2). While the data for public expenditures are available from 1989-1998 in source 6, these data were not used because we were unable to separate spending by social security from other Government spending (in fact data between 1991 and 1993 include social security spending). Private expenditure data for the periods 1980–1983, and 1985-1990 are estimated using the methodology described in the text from survey data from 1984 from source 3, and from data for 1991-1994 from source 4 above. Private data for 1996 are obtained from source 1 and vallues for 1995 and 1997-1998 are estimated from data for 1996. Other economic variables (GDP, exchange rates, population, etc.) come from sources 4 and 5.

# 19. ECUADOR

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. Lasprilla, E. Cisneros,O. Paspuel,M. Granada, J. Garofalo, S. Lasprilla C. "Situacion Actual y Tendencias Del Gasto Y Financiamiento del Sector de la Salud en el Ecuador" Informe Preliminar, in

- collaboration with PAHO, Quito August 1995.
- 3. Lasprilla, E., "Ecuador: Información Macroeconomica y Gastos en Salud" Presented to the Mnistry of Health, Quito July 1995
- 4. CEPAR "Cuentas Nacionales de Gast en Salud : Ecuador 1995" Quito Ecuador, 1998
- 5. CEPAR, Tabulations of National Health Accounts Matriz 5: Produced November 9,2000.
- 6. CEPAL/ECLAC, "Estructura del Gasto de Consumo de los Hogares en America Latina" Santiago de Chile, 1995
- 7. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 8. "Country Report" Economist Intelligence Unit, various issues.
- 9. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

- 10. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 11. Social Security Expenditure Tables produced for the Public Policy and Health Program, Division of Health and Human Development, Pan American Health Organization, 1993.
- 12. Lasprilla, E., "Gasto y Financiamiento del Sector Salud -- Ecuador 1996" OPS, 1997
- Instituto Nacional de Estadística y Censos "Encuesta de Hogares: Modelo de Presupuestos Familiares, Area Urbana. Tomo I: Resumen Nacional." INEC, República del Ecuador, septiembre-octubre-noviembre 1991.

#### **Notes:**

Public expenditure data for 1980-1990 are taken from source 1. Public Expenditure data for 1991-1993 are taken from source 2, data for 1994 are derived from source 3 with adjustments for newer GDP information. Public data for 1995 comes from source 4, and for 1997 from source 5. Data for 1996 and for 1998 are estimations from 1995 and 1997. Private health expenditure data for 1980-1990 are taken from source 2. The data for 1991 are derived from the household survey data reported in source 6 which agrees in large part with the 1991 data in source 2. Private data for 1992-1993 are taken from source 7, data for 1994 are derived from source 3. Private data for 1995 comes from source 4, and for 1997 from source 5. Data for 1996 and for 1998 are estimations from 1995 and 1997. Other economic variables (GDP, exchange rates, population, etc.) come from sources 8 and 9.

### 20. EL SALVADOR

1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various

issues.

## 2. WHO, National Health Accounts Tables,

- 3. Rubio, G.M. et. al., "Estimacion de Gasto Nacional en Salud en El Salvador Durante 1996", Ministerio de Salud. El Salvador 1998.
- 4. Rubio, G.M. et. al., "Estimacion de Gasto Nacional en Salud en El Salvador Durante 1997", Ministerio de Salud, El Salvador 2000.
- 5. Rubio, G.M. et. al., "Cuentas Nacionales de Salud, El Salvador", Presentation 11-Dec. 2000, Ministerio de Salud, El Salvador.
- 6. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, El Salvador 1990/91, División de Estadística y Proyecciones.
- 7. El Salvador NHA team presentation of report., "Estimacion de Gasto Nacional en Salud en El Salvador Durante 1996", Presented at the LAC NHA meeting in the Dominican republic 1997.
- 8. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

- 9. Social Security Expenditure Tables produced for the Public Policy and Health Program, Division of Health and Human Development, Pan American Health Organization, 1993.
- 10. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 11. ISSS. "Estadisticas 1992" Instituto Salvadoreno del Seguro Social (ISSS), El Salvador 1992

#### **Notes:**

Central government health expenditures for 1980-1996 are obtained from source 1. While Social security data was obtained from the National Health Accounts data for El Salvador produced by WHO in source 2. Sources 3, 4, and 5 respectively provided the data for public and private health expenditure data for 1996-1998, although source 5 notes that 1998 data is preliminary, and therefor the data in our database is noted as an estimation. Private expenditure data from 1980-1989 is estimated from the 1990/1991 survey used for 1990 and 1991 from source 6. And data for 1992-1995 is taken from the presentation listed in source 7. Other economic variables (GDP, exchange rates, population, etc.) come from source 8.

### 21. FRENCH GUIANA

- 1. "L'indice Mensuel Des Prix la Consommation: Premiers Resultats Decembre 1995", INSEE. Antilles-Guyane .
- 2. "Statistical Yearbook" United Nations, various issues.

3. "Monthly Bulletin of Statistics", United Nations, Various issues.

### **Notes:**

No data was obtained for public health expenditures in this territory, which is a department of France. Private health expenditure data for 1991 is based on the household survey used to calcualate weights for the CPI for 1995 (source 1)), assuming that private consumption is about 70% of GDP. Private expenditures for 1980 and 1982-1990 are estimated using the 1991 figure and the regional elasticity. Other economic variables (GDP, exchange rates, population, etc.) come from sources 2 and 3. The GDP deflator used for this department is the French deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 22. GRENADA

- 1. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad)
- 2. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 3. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 4. "Monthly Bulletin of Statistics", United Nations, Various issues.

### **Notes:**

Public expenditure data for 1985-1987 and 1989 are taken from data provided by source 1 above. Public health expenditure data for 1990-1995 were taken from source 2. These expenditures only include recurrent expenditures and therefore represent an under estimation of public spending.

Other economic variables (GDP, exchange rates, population, etc.) come from sources 2, 3 and 4. No information on private expenditures was obtained and therefore private expenditures were estimated from the regional health spending elasticity, government health expenditures and per capita GDP.

## 23. GUADELOUPE

- 1. "L'indice Mensuel Des Prix la Consommation: Premiers Resultats Decembre 1995", INSEE. Antilles-Guyane .
- 2. "Statistical Yearbook for Latin America and the Caribbean" The Economic Commission for Latin America and the Caribbean, various issues.
- 3. "Statistical Yearbook" United Nations, various issues.

No data was obtained for public health expenditures in this territory, which is a department of France. Private health expenditure data for 1993 is based on the household survey used to calcualate weights for the CPI for 1995 (source 1)), assuming that private consumption is about 70% of GDP. Private expenditures for 1980-1992 are estimated using the 1993 figure and the regional elasticity. Other economic variables (GDP, exchange rates, population, etc.) come from sources 2 and 3. The GDP deflator used for this department is the French deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text

## 24. GUATEMALA

Other sources of health expenditure and macroeconomic data in:

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "Social Security Expenditure Tables" produced for the Public Policy and Health Program, Division of Health and Human Development, Pan American Health Organization, 1993.
- 3. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 4. Ministerio de Salud, "Cuentas Nacionales de Salud 1995-1997. Republic de Guatemala, 1998.
- 5. Ministerio de Salud, "Cuentas Nacionales de Salud 1998. Republic de Guatemala, 2000.
- CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, Guatemala 1979/81, División de Estadística y Proyecciones.
- 7. INEC, "Encuesta Nacional de Ingresos y Gastos Familiares 1998-1999.
- 8. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

#### **Notes:**

Central Government expenditures from 1980-1994 are taken from source 1 above. Social security expenditures from this time are derived from sources 2 and 3. Public expenditure data (including social security) from 1995-1998 are taken from sources 4 and 5, but data for 1998 was preliminary and is therefore entered as estimates in the tables. Private expenditure data in 1980 and 1981 are taken from the household survey in source 6. Private data from 1982-1989 are estimated from the 1980/81 survey using the regional elasticity, growth in GDP and government expenditures. Private expenditure data for 1998 are derived from the household survey above in source 7, and private expenditure data from 1990-1997 are estimated from the 1998 survey using the same methodology. Private indirect figures for 1995 and 1998 come from sources 4 and 5 above. Other economic variables (GDP, exchange rates, population, etc.) come from source 8.

Other sources of health expenditure and macroeconomic data in:

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "Government Expenditures on Health in Guyana, 1985-1996" Prepared by U.K. Kou, Ministry of Health, June 1996.
- 3. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 4. "Means Tables: Guyana Living Standards Measurements Survey (GLSMS) 1992" Poverty and Human Resources Division, The World Bank, May 16, 1995.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 6. "Country Report" Economist Intelligence Unit, various issues.

#### **Notes:**

Central Government health expenditure for 1980-1984 is taken from Source 1 above. Data for 1985-1996 comes from source 2, and Social Security data for 1980 and 1983-1989 comes from source 3 above. Private health expenditures for 1992 are derived from household health spending data contained in a preliminary report of the Guyana LSMS listed in source 4. Private expenditure data for 1980-1991 and 1993-1998 are estimated from the 1992 data using the methodology described in the text.. Other economic variables (GDP, exchange rates, population, etc.) come from sources 5 and 6.

## **26.** HAITI

- 1. "Statistical Yearbook for Latin America and the Caribbean" The Economic Commission for Latin America and the Caribbean, various issues.
- 2. P. Lefebvre, "Note Technique: Les Depenses Publiques pour la Sante" Ministère de la Sante Publique et de la Population, (no Date listed).
- 3. F. Andre & J. Buttari, "Examen des depenses publiques d'Haiti" Note no. 8. Prepared for the World Bank, March 1997.
- 4. "Country Report" Economist Intelligence Unit, various issues.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

### **Notes:**

Public Health expenditures for 1980-1982, 1985, and 1987-1988 come from source 1. Public expenditures on health between 1989 and 1994 come from source 2. Both public and private health expenditure between 1995 and 1997 are taken from source 3. The data from source 3 are used to estimate all figures for 1998, and for

the private health expenditure estimates between 1980 and 1994. Other economic variables (GDP, exchange rates, population, etc.) come from sources 4 and 5.

## 27. HONDURAS

- 1. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 2. Social Security Expenditure Tables produced for the Public Policy and Health Program, Division of Health and Human Development, Pan American Health Organization, 1993.
- 3. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 4. World Bank. "Como Lograr Salud para Todos: Acceso, Eficiencia y Equidad en el Salud de Honduras", Feb. 1998
- 5. "Cuentas Nacionales de Salud: Modulo Gobeirno Central" Republica de Honduras, Secretaria de Salud, Unidad de Planeamiento y Evaluación de la Gestion. Tegucigalpa, Honduras 2000.
- 6. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

7. "Encuesta Nacional sobre las Condiciones de Vida de los Hogares; 1979-1979." Dirección General de Estadística y Censos.

## **Notes:**

Central Government health expenditures and Private household health expenditures for 1980-1986 are taken from source 1 above. Data for Social security for 1981 and 1983-1991 and 1994, were taken from sources 2 and 3. Public and private health expenditure data for 1995 was taken from source 4. Public data for 1998 was taken from source 5. Public data for 1996 and 1997 was estimated based on 1995 and 1998 data, and private expenditure data for 1996, 1997, and 1998 was estimated from 1995 private expenditure data using the techniques discussed in the text. Other economic variables (GDP, exchange rates, population, etc.) come from sources 1 and 6.

### 28. JAMAICA

- 1. Planning Institute of Jamaica (P.I.O.J.), "Economic and Social Survey", Kingston, Jamaica, Volumes for the years 1984-2000.
- 2. "Health Financing in Jamaica: Current Situation and Strategies" Health Reform Unit of the Ministry of Health for PAHO/UNDP Policy Round table on Financing Health care with Special Reference to Helath Coverage and Access. Kingston, Jamaica Feb. 10-11, 1998. DRAFT.

- 3. Statistical Institute of Jamaica (STATIN) "Jamaica Survey of Living Conditions, July 1989". Kingston, Jamaica 1989.
- 4. STATIN "Jamaica Survey of Living Conditions, November 1989." Kingston, Jamaica 1991.
- 5. PIOJ, "Jamaica Survey of Living Conditions, November 1989." Kingston, Jamaica 1992.
- 6. STATIN, "Jamaica Survey of Living Conditions, November 1990." Kingston, Jamaica 1992.
- 7. PIOJ, "Jamaica Survey of Living Conditions, Analytical Review 1990." Kingston, Jamaica 1992.
- 8. PIOJ, "Jamaica Survey of Living Conditions, Report 1991." Kingston, Jamaica 1992.
- 9. PIOJ, "Jamaica Survey of Living Conditions, Report 1992." Kingston, Jamaica 1993
- 10. PIOJ, "Jamaica Survey of Living Conditions, Report 1993." Kingston, Jamaica 1994
- 11. PIOJ, "Jamaica Survey of Living Conditions, Report 1994." Kingston, Jamaica 1995
- 12. PIOJ, "Jamaica Survey of Living Conditions, Report 1995." Kingston, Jamaica 1996
- 13. PIOJ, "Jamaica Survey of Living Conditions, Report 1996." Kingston, Jamaica 1997
- 14. PIOJ, "Jamaica Survey of Living Conditions, Report 1997." Kingston, Jamaica 1998
- 15. PIOJ, "Jamaica Survey of Living Conditions, Report 1998." Kingston, Jamaica 1999
- 16. Bicknell, W.J. "Jamaican Helath Sector Assessment: Policy Implications and Recommendations". A report prepared for the Ministry of Health under Touche Ross Management Consultants, as part of the Clinical and Epidemiological Strategies component of the Health Services Rationalization Project funded by the Government of Jamaica and the Inter-American Development Bank. September 30, 1994
- 17. Theodore, Karl "Private Corporate Health Expenditure in Caricom Countries: context and Measurement. A Health Economics Policy Study of Dominica, Jamaica, St. Vincent and Trinidad and Tobago". Health Economics Unit, University of the West Indies, Draft Report, May 1997
- 18. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

The fiscal year in Jamaica does not coincide with the calendar year, and therefore public expenditure data that is reported in official documents as , for example, 1993/1994, is allocated to the year 1993 and so on. Public expenditures on health are derived from source 1 and 2. Household health expenditures for 1989-1998 are taken from the yearly household survey data reported in sources 3-15. In addition 1984 data comes from a household budgetary survey described in source 3. Household health expenditures for 1980-1983 and 1985-1988 are estimated from the 1984 and 1998 survey data. Private insurance and other private health expenditures for 1993 are taken from source 16, and these data are used to estimate 1994 data. Private insurance and other private health expenditures for 1995 are taken from source 17, and these data are used to estimate 1996-1998 data. Other economic variables (GDP, exchange rates, population, etc.) come from

### 29. MARTINIQUE

- 1. "L'indice Mensuel Des Prix la Consommation: Premiers Resultats Decembre 1995", INSEE. Antilles-Guyane .
- 2. "Statistical Yearbook for Latin America and the Caribbean" The Economic Commission for Latin America and the Caribbean, various issues.
- 3. "Statistical Yearbook" United Nations, various issues.

#### **Notes:**

No data was obtained for public health expenditures in this territory, which is a department of France. Private health expenditure data for 1991 is based on the household survey used to calcualate weights for the CPI for 1992-1994 (source 1), assuming that private consumption is about 70% of GDP. Private expenditures for 1980 and 1982-1991 are estimated using the 1992 figure and the regional elasticity. Other economic variables (GDP, exchange rates, population, etc.) come from sources 2 and 3. The GDP deflator used for this department is the French deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## **30. MEXICO**

- 1. SSI/ DGEI"Boletin de Informacion Estadistica" Recursos y Servicios, Sistema Nacional de Salud. Numero 11, 1991.
- Tables: FUNSALUD "Presupuesto Ejercido por Programa e Institucion 1991-1997" prepared as part of the documents of the Mexican National Health Accounts. Provided as part of a personal communication August 2000Fundacion Mexicana para la Salud, Mexico 1998. (Note: data derived from SSI/ DGEI"Boletin de Informacion Estadistica" Recursos y Servicios, Sistema Nacional de Salud. Numeros 11-17).
- 3. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 4. INEGI. "Sistema de Cuentas Nacionales de Mexico: Cuentas de Bienes y Servicios 1988-1998" Cuadro 31. Instituto Nacional de Estadistica Geografica e Informacion.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

6. FUNSALUD, "Cuentas Nacionales de Salud". Fundacion Mexicana para la Salud, Mexico 1998.

- 7. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, <u>México 1975</u>, División de Estadística y Proyecciones.
- 8. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, <u>México 1983/84</u>, División de Estadística y Proyecciones.
- 9. Instituto Nacional de Estadística Geografía e Informática, "Gastos en Cuidados Medicos y Conservación de la Salud: Encuesta Nacional de Ingreso, Gasto de los Hogares." México City, México (no date given).

Public health expenditure data for 1980-1990 is taken from source 1 above. Note that the figures presented in Central overnment expenditures include State, Local and Social Security expenditures. Public expenditures for 1991-1998 are taken from source 2. Private Health Expenditures for 1980-1987 are taken from source 3 and data for 1988-1998 are taken from source 4. Other economic variables (GDP, exchange rates, population, etc.) come from source 5.

# 31. MONTSERRAT

- 1. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad)
- 2. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 3. "Country Report" Economist Intelligence Unit, various issues.
- 4. "Annual Report" Caribbean Development Bank, various issues.
- 5. "Statistical Yearbook" United Nations, various issues.

#### **Notes:**

Public health expenditures for 1980 and 1985-1989 were taken from source 1, while the data for public health expenditure data for 1990-1995 were taken from source 2 listed above. These expenditures only include recurrent expenditures and therefore represent an under estimation of public spending. Public spending for 1996-1998 were estimated from 1995 data. Private expenditure data was estimated using the methodology described in the text. Other economic variables (GDP, exchange rates, population, etc.) come from sources3, 4, and 5. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 32. NETHERLAND ANTILLES

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "Country Report" Economist Intelligence Unit, various issues.
- 3. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 4. "Statistical Yearbook" United Nations, various issues.

Public health expenditure data for 1980 – 1995 is taken from source 1 above. Data for 1996-1998 are estimated from 1995 data. Private expenditure data was estimated using the methodology described in the text for countries withno available private expenditure data. Other economic variables (GDP, exchange rates, population, etc.) come from sources2, 3, and 4. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 33. NICARAGUA

- 1. Organizacion Panamericana de la Salud "Nicaragua: El Gasto Nacional en Salud Evaluacion del Periodo 1980-1992" Documento preliminar para la discusion, Managua Nicaragua Diciembre 1992.
- 2. PAHO/WHO Interoffice Memorandum Reference: NIC/HSP/28.00/4076.01. "Envio de Indicadores de Cuentas Nacionales en Salud de Nicaragua" Containing MINSA's adjustments to the NHA data developed at WHO.
- 3. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 4. "Country Report" Economist Intelligence Unit, various issues.

Other sources of health expenditure and macroeconomic data in:

- 5. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- Ministerio de Salud. "Estudio de Fuentes de Financiamiento y Gasto en Salud 1995-1996, Republic de Nicaragua, 1998
- 7. Nicaragua, "Encuesta de Ingresos y Gastos, 1984" Ciudad de Managua, Instituto Nicaraguense de Estadísitcas y Censos (INEC).

## **Notes:**

Public and Private health expenditure data for 1980-1992 were taken from Source 1 above. Data for 1993-1999 are derived from source 2, but because the data changed was provided as percentages of GDP, the data were converted into millions of local currency using GDP from source 3. Other economic variables (GDP,

exchange rates, population, etc.) come from sources 3 and 4..

## 34. PANAMA

1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

# 2. Xxxxxxx PANAMA BOOK

- 3. WHO, National Health Accounts Tables for Panama.
- 4. Panama, "Encuesta sobre las Condiciones de Vida de las Familias, Ciudad de Panama: Año 1983/84".
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

- CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, <u>Panama 1983/84</u>, División de Estadística y Proyecciones.
- 7. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.

#### **Notes:**

Gentral Government health expenditure data for 1980 – 1997 are taken from source 1 above. Social Security expenditures for 1980-1997 are taken from Sources 2 and 3. All public health expenditure data for for 1998 and 1999 are estimated from trends in 1995 and 1996. Private health expenditure data for 1983 and 1984 are derived from the household survey in source 4. And data on private health expenditures for all other years are estimated from the survey data using the methodology outlined in the text. Other economic variables (GDP, exchange rates, population, etc.) come from source 5.

## 35. PARAGUAY

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. Social Security Expenditure Tables produced for the Public Policy and Health Program, Division of Health and Human Development, Pan American Health Organization, 1993.
- 3. "Analisis Del Sector Salud del Paraguay" Consejo Nacional de Salud, Ministerio de Salud Publica y Bienestar Social, Asuncion, Paraguay. Junio 1988.

4. xxxxxxxxxx

5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

#### Notes:

Gentral Government health expenditure data for 1980 – 1987 and 1989-1993 is taken from source 1 above (figures for 1988 are estimated from proximal years). Social Security expenditures for 1990-1993 are taken from Source 2. Public Expenditure data Data for 1994-1996 are taken from source 3. Figures for 1997-1999 come from source 4.. Private expenditure data was available for 1995-1999 from source (4?) (although 1995 indirect expenditures were estimated from 1996 data) and was used to estimate data for 1980-1994. with the methodology described in the text. Other economic variables (GDP, exchange rates, population, etc.) come from source 5.

### **36. PERU**

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. Programma Fortaleciemiento de los Servicios de Salud, "Cuentas Nacionales en Salud: Revision y Actualizacion del Financiamiento de Sector Salud, Flujos Financieros de Ingresos y Gastos en Salud 1995-1996." Peru 1997.

# 3. xxxxx, "Cuentas Nacionales en Salud" Peru 2000.

- 4. Social Security Expenditure Tables produced for the Public Policy and Health Program, Division of Health and Human Development, Pan American Health Organization, 1993.
- 5. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 6. "Analisis de Financiamiento de Sector Salud: resumen ejecutivo del informe final extendido" Consorcio ESAN/AUPHA/SEVERS/FUNSALUD, Ministerio de Salud, Lima Peru, Sept. 1996.
- "Encuesta Nacional de Hogares Sobre Medicion de Niveles de Vida ENNIV (1985-1986): Analisis de resultados" Direccion General de Censos y Encuestas, Direccion General de Indicadores Economicos y Sociales, Instituto Nacional de Estadisticos, Lima Peru. Abril 1988.
- 8. "Encuesta Nacional de Hogares Sobre Medicion de Niveles de Vida ENNIV II (1991)" Instituto Nacional de Estadisticos, Lima Peru.
- 9. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 10. "Statistical Yearbook for Latin America and the Caribbean" The Economic Commission for Latin America and the Caribbean, various issues.

Other sources of health expenditure and macroeconomic data in:

- 11. Petrera M. and Manrique L. "Inventario de las Encuestas de Hogares y de Salud: Peru 1968-1992" Background report prepared for the Public Policy and Health Program, PAHO. 1993.
- 12. Suarez, R. "Public and Private Expenditure in Health Services in Peru: 1980-1992" Report prepared for LA1HR of the Latin American & Caribbean Division of The World Bank. Draft September 1993.

Gentral Government health expenditure data for 1980 – 1994 is taken from source 1 above. Public health expenditure data for 1995-1998 are taken from sources 2 and 3 above, with 1999 data estimated from 1998 data. Social Security expenditures for 1981, 1983, 1985-1991 are taken from Sources 4 and 5 and from 1992-1995 from source 6. Private expenditure data was available for 1985 and 1986 from source 7 and was used to estimate data for 1980-1984 and 1987-1988 with the methodology described in the text. Private data for 1990 and 1991 came from the Survey in source 8 and data from 1995-1998 was taken from sources 2 and 3 and used to estimate private expenditures for 1992-1994. Other economic variables (GDP, exchange rates, population, etc.) come from sources 9 and 10.

# 37. PUERTO RICO

1. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.

#### **Notes:**

There was no public health expenditure data available to the researchers for this territory. Private expenditure data for 1980-1992 came from source 1. Data for 1993 and 1994 were estimated from 1992 figures. Other economic data (GDP, population, etc..) was taken from source 1 as well. The GDP deflator used for this territory is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

### 38. SAINT KITTS AND NEVIS

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad)
- 3. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 4. "Country Report" Economist Intelligence Unit, various issues.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Public health spending for 1985-1987 comes from source 1. Data for 1988 and 1989 are taken from source 2, and data on public health expenditures from 1990-1995 are taken from source 3. Data for 1996-1998 are estimations projected from 1995. Public health expenditure for 1990-1995 only include recurrent expenditures and therefore represent an under estimation of public spending. No information on private expenditures was obtained and therefore private expenditures were estimated from the regional health spending elasticity, government health expenditures and per capita GDP. Other economic variables (GDP, exchange rates, population, etc.) come from sources 4 and 5. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## **39. SAINT LUCIA**

- 1. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad)
- 2. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 3. Stanton Russel, S., Gwynne, G. and Trisolini, M. "Health Care Financing in St. Lucia and the Costs of Victoria Hospital." Health Care Financing in Latin America and the Caribbean, Research Report No. 5. Stony Brook N. Y. May 1988.
- 4. "Country Report" Economist Intelligence Unit, various issues.
- 5. "Statistical Yearbook for Latin America and the Caribbean" The Economic Commission for Latin America and the Caribbean, various issues.
- 6. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

# **Notes:**

Public health spending for 1980 and 1985-1987 comes from source 1. Data for 1988 and 1989 are estimations, and data on public health expenditures from 1990-1995 are taken from source 2. Public health expenditure for 1990-1995 only include recurrent expenditures and therefore represent an under estimation of public spending. Information on private expenditures was obtained from reported household survey results in source 3 for 1982 and all other years were estimated from that figure using the regional elasticity, per capita GDP, and where available, government expenditures as described I the methodology segment of the text. Other economic variables (GDP, exchange rates, population, etc.) come from sources 4, 5 and 6.

### 40. SAINT VINCIENT AND THE GRENADINES

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "Country Report" Economist Intelligence Unit, various issues.
- 3. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

- 4. Theodore, Karl "Private Corporate Health Expenditure in Caricom Countries: context and Measurement. A Health Economics Policy Study of Dominica, Jamaica, St. Vincent and Trinidad and Tobago". Health Economics Unit, University of the West Indies, Draft Report, May 1997
- 5. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.

#### **Notes:**

Public health spending for 1980-1998 comes from source 1. No information on private expenditures was obtained and therefore private expenditures were estimated from the regional health spending elasticity, government health expenditures and per capita GDP. Other economic variables (GDP, exchange rates, population, etc.) come from sources 2 and 3.

### 41. SURINAME

- 1. "Statistical Yearbook for Latin America and the Caribbean" The Economic Commission for Latin America and the Caribbean, various issues.
- 2. Tables of Recurrent Government Health Expenditures for English speaking Caribbean Countries, provided to PAHO by Researchers in the Health Economics Unit of the University of the West Indies, Trinidad)
- 3. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 4. "Health Situation in the Americas: Basic Indicators 1996", Health Situation Analysis Program, Division of Health and Human Development, Pan American Health Organization.
- 5. "Health Care Financing Assessment: Republic of Suriname" Presentation at the Policy Round Table on Health Care Financing, Kingston Jamaica. Feb 10-11, 1998.
- 6. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC , various issues.
- 7. "Country Report" Economist Intelligence Unit, various issues.

Collecting data for Suriname presented significant difficulties since there was little official published data available for outside researhers. This situation is complicated by the economic diffuculties that produced significant currency fluctuations and made obtaining consistent figures extremely difficult. Data on Central Government health expenditures for those years available between 1980 and 1992 (1993 is estimated from 1992) are taken from sources 1 and 2. The data provided in source 2 are described as being recurrent health expenditures and are probably an underestimation. Data for Social Secutiry expenditures between 1980 and 1989 come from source 3. The Public data for 1994 are taken from data provided by the country for source 4. Public and Private data for 1996 are taken from the data in source 5, and private expenditure data for all other years are estimated from 1996 data using the methodology in the text. Other economic variables (GDP, exchange rates, population, etc.) come from sources 6 and 7, but since there was no GDP deflator for 1995 and 1996 an approximation was used which was taken fom CPI data in source 6 (This only effects data presented in constant figure).

## 42. TRINIDAD AND TOBAGO

- 1. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 2. Theodore, Karl "Private Corporate Health Expenditure in Caricom Countries: context and Measurement. A Health Economics Policy Study of Dominica, Jamaica, St. Vincent and Trinidad and Tobago". Health Economics Unit, University of the West Indies, Draft Report, May 1997
- 3. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 4. "Household Budgetary Survey 1981/1982 Report no.1" Central Statistical Office, Republic of Trinidad and Tobago.
- 5. "Country Report" Economist Intelligence Unit, various issues.
- 6. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Other sources of health expenditure and macroeconomic data in:

- 7. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 8. Theodore, K., "Towards a Mixed System of Health Financing in Trinidad and Tobago." Report prepared for the Pan American Health Organization, November 1986.

#### **Notes:**

Public health expenditures for 1980-1995 were taken from source 1 listed above. Public spending for 1996 comes from source 2, and 1997-1998 were estimated from trends in the previous three years. Data on social insurance expenditures come from source 3 for 1980-1989. Private expenditure data for 1981 and 1982 is taken from the survey in source 4, and all other private expenditure is estimated from the 1981/82 data. Other economic variables (GDP, exchange rates, population, etc.) come from sources 5 and 6.

# 43. TURKS AND CAICOS

- 1. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 2. "Country Report" Economist Intelligence Unit, various issues.
- 3. "Statistical Yearbook" United Nations, various issues.
- 4. "Country Report" Economist Intelligence Unit, various issues.

#### **Notes:**

Public health expenditures for 1990-1995 were taken from source 1 listed above. These expenditures only include recurrent expenditures and therefore represent an under estimation of public spending. Public spending for 1996-1998 were estimated from 1995 data. There was no source of Private expenditure data and therefore the figures were estimated using the smethodology described in the text for countries with public expenditure data but with no household survey data. Other economic variables (GDP, exchange rates, population, etc.) come from sources 2, 3, and 4. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

### 44. UNITED STATES OF AMERICA

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.
- 2. "OECD Health Data 2000, A Comparative Analysis of 29 Health Systems". OECD/CREDES
- 3. "Statistical Abstract of the United States 1995: The national data book" US department of Commerce, Economics and Statistic Administration, Bureau of the Census 115<sup>th</sup> Edition.
- 4. "Health Care Financing Review: Medicaid and Medicare Statistical Suppliment, 1995" Health Care Financing Administration. 1996.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

# **Notes:**

Public health expenditures for 1980-1998 were taken from source 1 listed above. Public expenditures for 1999 and 2000 were taken from source 2 (state and local expenditure data for 1999 are estimations). Private health expenditure data for 1980-1993 was obtained from source 3 and 1994 was estimated from 1993 data. Private data for 1995 was obtained from source 4, and data for 1996-1999 was obtained from source 2. Other economic variables (GDP, exchange rates, population, etc.) come from source 5.

## 45. URUGUAY

- 1. "Government Finance Statistics Yearbook", International Monetary Fund, Washington, DC, various issues
- 2. "The Cost of Social Security", International Labour Organization, Issues 12, 13 and 14.
- 3. "Cuentas Nacionales en Salud en el Uruguay" Proyecto Fortalecimiento Institucional Sector Salud, Ministerio de Salud Publico, Montevideo Uruguay, Abril 2000.
- CEPAL/ECLAC. Tabulaciones especiales de la Encuesta, <u>Uruguay 1982/83</u>, División de Estadística y Proyecciones.
- 5. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

#### **Notes:**

Central government health expenditures for 1980-1996 were taken from source 1 listed above. Public expenditures for 1997 and 1998 were taken from source 3. Municipal expenditures for 1990-1996 were esimated from 1997 data in source 3. Social Insurance expenditures for 1980, 1984-1990 were taken from source 2, and figures for 1991-1996 were estimated from 1997 data. Private health expenditure data for 1982 and 1983 were obtained from source 4 and used to estimate private expenditures for 1980, 1981, and 1984. Private expenditure figures for 1997 and 1998 was taken from data in source 3 and used to estimated data for 1985-1996. Other economic variables (GDP, exchange rates, population, etc.) come from source 5.

## 46. VENEZUELA

- 1. P. Curcio "Analisis del gasto en salud y su impacto sobre los indicadores de salud" Anexo I. Proyecto Salud-MSAS-BID-BM, Venezuela. No date listed.
- 2. P. Curcio "Analisis del Financiamiento de la salud en Venezuela" Cuadro I. Venezuela. No date listed.
- 3. CEPAL/ECLAC. Tabulaciones especiales de la Encuesta Nacional de Ingresos y Gastos Familiares 1986 (Urbana), Venezuela 1986, División de Estadística y Proyecciones.
- 14. CEPAL/ECLAC, "Estructura del Gasto de Consumo de los Hogares en America Latina" Santiago de Chile, 1995
- 4. "International Financial Statistics Yearbook", International Monetary Fund, Washington, DC, various issues.

Public health expenditures for 1980-1994 were taken from source 1 listed above. Public expenditures for 1995 - 1999 were taken from source 2. Private health expenditure data for 1986 was obtained from the survey in source 3, and Source 4 provided the survey data for 1988 and 1989. Private expenditure data for 1980-1985 and 1987 were estimated from the 1986 data, and private expenditures for 1990- 1999 were estimated from 1989 data. Other economic variables (GDP, exchange rates, population, etc.) come from source 4.

## 47. VIRGEN ISLANDS (UK)

- 1. "Central Government Finance Statistics of the Lesser Developed Countries" vol XI:1990-1995. Economics and Programming Department, Caribbean Development Bank, April 1997.
- 2. "National Accounts Statistics: Main Aggregates and Detailed Tables", United Nations, various issues.
- 3. "Country Report" Economist Intelligence Unit, various issues.
- 4. "Statistical Yearbook" United Nations, various issues.

#### **Notes:**

Public health expenditure data for 1990-1995 were taken from source 1 listed above. These expenditures only include recurrent expenditures and therefore represent an under estimation of public spending. Public expenditure for 1996-1998 are estimates. Earlier public health spending comes from source 2. Other economic variables (GDP, exchange rates, population, etc.) come from sources 2, 3, and 4. No information on private expenditures was obtained and therefore private expenditures were estimated from the regional health spending elasticity, government health expenditures and per capita GDP. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.

## 48. VIRGEN ISLANDS (USA)

1. "Monthly Bulletin of Statistics", United Nations, Various issues.

## Notes:

Source 1 above provided the only information that could be obtained for the US Virgen Islands. The GDP deflator used for this country is the USA deflator. See the discussion under the heading: *Other Calculation Issues* in the main body of the text.