WHO/EIP/02.47

NATIONAL HEALTH ACCOUNTS:

CONCEPTS, DATA SOURCES AND METHODOLOGY

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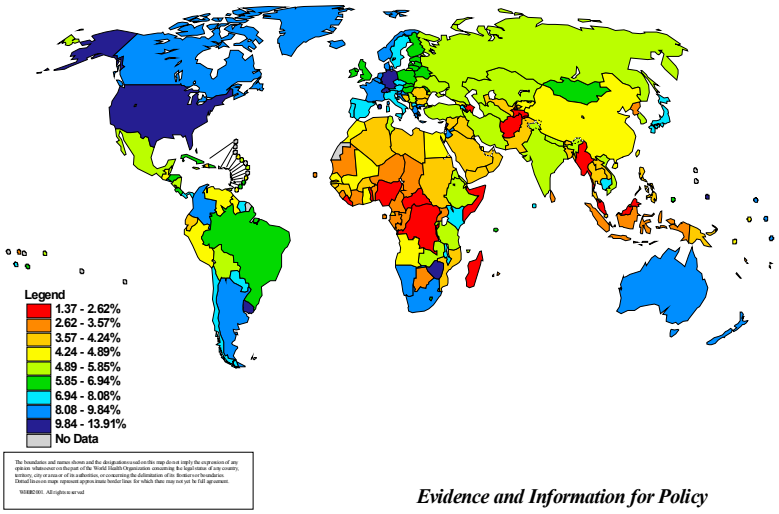
I. CONCEPTS

A. Purpose

National health accounts (NHA) constitute the systematic, comprehensive and consistent monitoring of resource flows in a country's health system. They are designed to facilitate the successful implementation of health system goals by its stewards. Stewards of the health system are entrusted to provide an optimal package of goods and services to maintain and enhance the health of individuals and populations, be responsive to their legitimate expectations and protect them from an unfair financial burden. NHA trace for any given year all the resources that flow through the health system over time and across countries.

NHA are often the only information about national spending levels in health, both in absolute and relative terms. Figure 1 exhibits health spending relative to national resources proxied by GDP. Time series information permits the use of NHA as a standard management tool for situation analysis, planning, monitoring and evaluation purposes. This includes the assessment of a health system's effectiveness, the monitoring of the impact of recently introduced health reforms, and the reporting of structural changes as well as developments generated by new policies.

Figure 1 Health Spending as a share of GDP



NHA are designed to capture the full range of information contained in these resource flows and to reflect the main functions of health care financing: resource mobilisation and allocation, pooling and insurance, purchasing of care, and the distribution of benefits. NHA enable stakeholders to identify policy concerns and to simulate the impact of solutions to the problems monitored. NHA address four basic sets of questions: where do resources come from, where do they go, what kinds of services and goods do they purchase and whom do they benefit?

The state of data availability in the world remains limited. The practical utility for policy makers is to have a tool in hand that models the complex interactions that occur from the moment funds are allocated to the health system to the moment it reaches a beneficiary. NHA trascribe them into a traceable flow.

B. BASIC PRINCIPLES OF NHA

NHA are constructed to disaggregate complex problems into a sequence of discrete matrices (or discrete tables in the case of time series) in which all agents and transactions of the health care system are uniquely classified. The construction of NHA obeys exacting rules. As a statistical system, the NHA process entails respect of ten major attributes ranging from policy sensitivity to comprehensiveness to timeliness. Their simultaneous pursuit is difficult because several are seemingly contradictory. The essential attributes of NHA are sumarized in Annex 1.

WHO NHA methodology, as with the OECD system of health accounts, embodies most of the principles of the System of National Accounts 1993 of the United Nations (SNA93).

NHA are a sequence of identities:

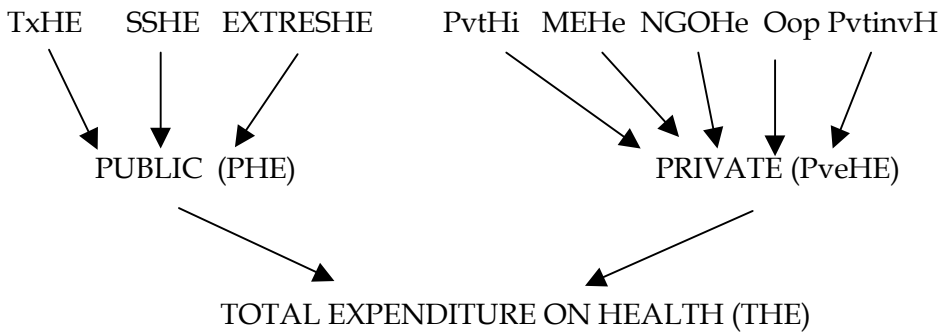
The expenditure and production identities are expressed in value terms using standard economic principles as follows:

V = Q*P where:

V =Value of what is spent (including consumption and investment that is financed during the calendar or fiscal year in concern)
Q = Quantity (volume)
P = Price

The nominal value and, where not available, the imputed value of resources funded and spent in a health system are equal to the sum of the value of all goods and services delivered. Each health good and service is attributed a price which multiplied by the total quantity of that good and service is the estimated total value. Adjustments to quality are made by defining particular attributes of the goods and services for which differences in prices can be explained.

The WHR 2001 is presented in the form of a financing tree as follows:



Total expenditure on health (THE) aggregates public outlays on health (PHE) and private outlays on health (PvtHE) such that:

THE = PHE + PvtHE

- Public outlays on health comprises tax-funded health expenditure (TxHE), Social Security (SSHE) and External Resources (EXTRESHE) such that:

  PHE = TxHE + SSHE + EXTRESHE

- Tax-funded Health Expenditure are all public outlays by territorial governments -central, federal, provincial, regional, state, district, municipal, and local- for interventions in health. External resources transmitted or social security obtained in part via these territorial entities are excluded in order to avoid double-counting. In other words, attributions are made net of inter-government transfer flows. However, they do include subsidies to producers of medical goods and services, transfer payments to households to offset medical care costs, extra-budgetary funds and investment in medical facilities. TxHE is currently obtained as a residual for most countries.

- Social Security on Health is the premiums paid by employees and employers for compulsory schemes of medical care and medical goods for a sizeable group of population. Tax-funded subsidies to social security are netted out to avoid double counting. Likewise, pension contributions in social security are also netted out.

- External Resources are loans and grants for medical care and medical goods channelled through the Ministry of Health or other public agencies. Grants in-kind refer to capital equipment, pharmaceutical supplies and vaccines, and technical assistance such as experts. Grants to non-governmental organisations are accounted for as private expenditure but, in practice, they are not always easily separated from public grants[1].

[1] One of the most sizeable sources of health funds in countries with high emigration, such as the Commonwealth of Dominica, and the Philippines, is remittances to remaining relatives to pay for particularly high cost health services such as elective surgery.

- Private outlays (PvtHE) integrate health insurance (PvtHI) and prepaid schemes, mandated enterprise health expenditure (MEHE), expenditure on health through non-profit health services (NGOHE) and direct payments or out-of-pocket expenditure in health goods (Oop) which include co-payment as well as direct disbursements by uninsured individuals. Net of these categories, a residual remains from total private outlays, which accounts for information not captured by the other headings, including private investment in health services (PvtInvH).

PvtHE = PvtHI + MEHE + NGOHE + Oop + other (including PvtInvH).

Only Oop and PvtHI as a percentage of OvtHE are reported in the WHR 2001. Therefore, the sum of the two columns does not necessarily add up to 100% of PvtHE.

- Private Health Insurance are the premiums collected from employers, households or sometimes other agents to prepay medical and paramedical benefits, including the operating costs of these schemes.

- Out-of-pocket spending is direct outlays of households including gratuities and payments in-kind made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or to the enhancement of the health status of individuals or population groups. These outlays include the payments made to public services, non-profit institutions or non-governmental organisations by households.

To measure the relative weight of the health component of government expenditure and cross-country differences in the relative level of public resources allocated to health, WHR2000 and WHR2001 present public expenditure on health as a share of General Government Expenditure. Total expenditure is measured against GDP, a proxy of relative consumption estimates of total and public expenditure per capita. Figures are presented both at official exchange rates and in international dollars.[2]

NHA show the flow of financing from a source of funding to a particular use, to a user of that expenditure or to beneficiaries following a standard classification of health expenditure. Six dimensions are considered:

- Financing sources - defined as resources that enter initially into the health system for health goods and services, whether from tax-based, social security, other private entities such as firms, NGOs, households, or other entities (principally funding from external resources);

[2] The international dollar is a proxy currency unit which represents the purchasing power in a given economy that a US$1 has in the US economy. Often, in developing countries, the value at this purchasing equivalent level is substantially higher than is that of official exchange rates: i.e. a US$ buys a lot more of the goods and services locally than what the official exchange rate indicates. The reverse may occur in some OECD countries where one US$ may actually purchase less goods and services than what the official exchange rate would indicate.

- Financing agents - defined as institutions receiving and managing funds from financing sources to pay for or purchase health goods and services, including social security schemes, ministries of health, medical private insurance, NGOs and firms. Households, who bear a large share of the total health bill, are added to round-up to total expenditure although they do not exert an intermediary function;

- Providers - defined as entities who receive financial resources and use those resources to produce health goods and services, include public and private hospitals, clinics, nursing homes, community health centres, private practices, etc.

- Functions - defined as the categories of goods and services consumed, include inpatient services, ambulatory services, public health interventions, etc. Health-related functions, part of the total, refer to investment, training and R&D;

- Cost of Factors of Production (often referred to as "line items") - defined as the type of resources allocated to health care. It includes variables such as labour, drugs and pharmaceuticals, medical equipment, etc. May be;

- Beneficiaries - defined through distributional tables in which the value of goods and services produced are classified according to: geographic boundaries, demographic characteristics, economic strata and disease categories/interventions.[3].

Some additonal characteristics of NHA are important to note. First, the NHA matrices link the flow of funds between two dimensions for a given year. In many cases, a single type of expenditure can be associated with a number of the functions simultaneously; households, for instance, are the source of out-of-pockets payments, of social and private medical insurance. Second, the dimensions to be analyzed depend on national priorities and on strategic answers sought by stakeholders. Dimensions additional to those referred to above can be. Finally, time series information permit a better understanding of structural change and are required for forecasting. NHA are system specific and have to be cast in terms of the needs of the system under consideration

C. Selected Uses

The WHR2000 singled out stewardship as the overarching umbrella function, of all other functions in generating good health systems performance. Stewardship requires intelligence and vision. Detailed health financing information enables policy makers to organise a strategic vision around measured resources, to better monitor the implementation of interventions and to evaluate the outcome of the policies adopted. The flow-of-funds information contained in the National Health Accounts permits policy makers to identify whether financing is in line with policy priorities. It also enables policy makers to determine where effective levers for policy change lie. Although NHA are essential for evidence-based policy-making, they are not

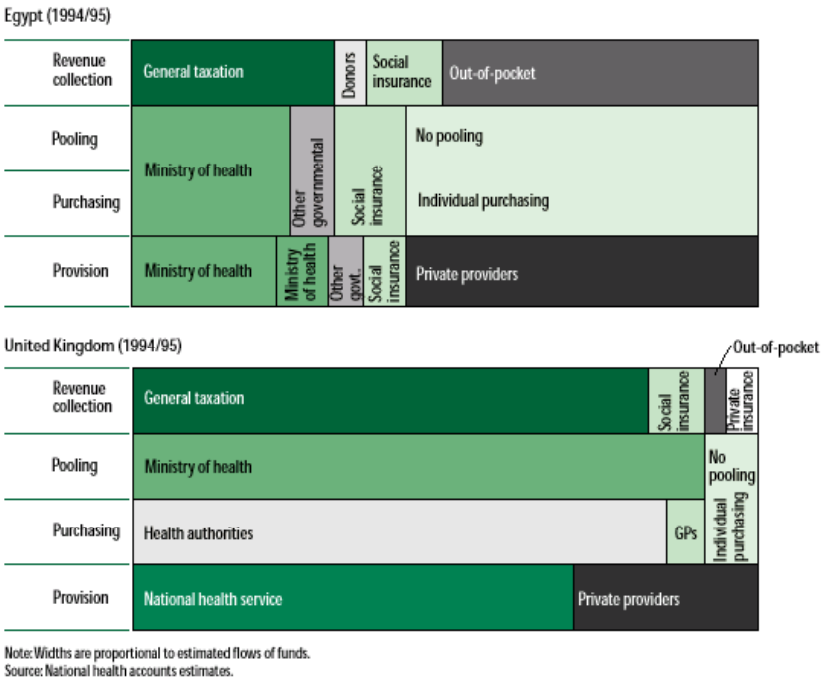
[3] These dimensions are reflected in the upcoming provisional Producers' Guidelines which WHO/The World Bank /OECD /USAID-PHR expect to release shortly[19].

sufficient. NHA remain a measurement tool and do not displace the need for other types of information and discretionary decisions by policy makers. Nevertheless, some examples of how NHA information can or has been used for policy purposes are described below.

Availability of information on NHA facilitated negotiations when the Guatemala, Peace Agreements were on the agenda. With the information available, a time frame to increase public spending from 0.87% of GDP in 1995 to 1.31% by the year 2000 thus enabling social development for targeted population groups. The changes for the 1996-2000 plan included the channelling of two thirds of public resources to preventive care and to monitor targeted health improvements[1].

NHA information on *financing sources, financing agents, functions* or *providers* can provide snap shot comparisons between countries. For example, public policy reforms in Egypt need to address the private sector both as a financing source as well as a financing agent because of the high level of out-of-pocket expenditure. Public policy reforms of the type implemented in the United Kingdom may not be effective in Egypt. (Figure 2) shows. The NHA study for Morocco[2] is being used as the basis for the national debate on health insurance reform. Lebanon exhibits high health expenditure as percentage of GDP by any standard and relatively low HALE[4] relative to neighbouring countries. When the evidence emerged, the head of government made it a national priority to address the problem[2,3]. In Zimbabwe, the government enacted budget changes on the evidence of high medical care costs.

Figure 2 Structure of Health System Financing and Provision



[4] HALE – Healthy Life Expectancy measured by WHO, is based on life expectancy adjusted for time spent in poor health.

The Sri Lanka National Health Accounts demonstrate the importance of separating the information both by private and public funding and provision. In Figure 3 expenditure on inpatient curative care and outpatient curative care is fairly evenly split - 25% for the former and 27% for the latter. However, most of the government expenditure goes to fund inpatient care and very little to outpatient care even when deliverable in public facilities (67% to 1%). On the contrary, non-government expenditure is concentrated on outpatient curative care and on pharmaceuticals[4]. This situation is similar in Bangladesh. This may explain that, in spite of a relatively low share of GDP spent on health (3.2% in 1997) and high (50%) out-of-pocket outlays, catastrophic costs (inpatient care) in Sri Lanka are not as high as would be expected and HALE level is one of the highest in SE Asia at 61 years [5]. A similar scenario is observed in Ecuador, where public expenditure accounts for 54% and out of pocket (Oop) 46% of total outlays. Public expenditure on health is also concentrated on hospitals and Oop is mainly channelled to in-patient public providers (67% of total Oop on in-patient expenditure). In the meanwhile expenditure for out-patient care is primarily spent on private providers (almost 90%) of which , 54% is spent in pharmaceutical products. A policy review on the pharmaceutical sector could lead to solutions to reduce the financial burden for health financing for the lower income groups . The Ecuatorian pattern is also linked to low catastrophic expenditure even for low income groups[6]. As in Sri Lanka, catastrophic expenses remain low as public funds are mainly assigned to inpatient care and private funds to outpatient care

Figure 3 Private and Public Health Expenditures by Functions; Sri Lanka

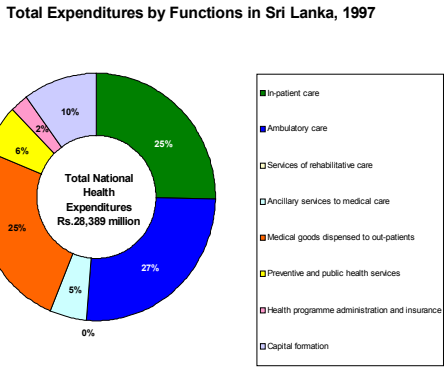


Figure 3.1: Total Government Expenditures by Function in Sri Lanka, 1997

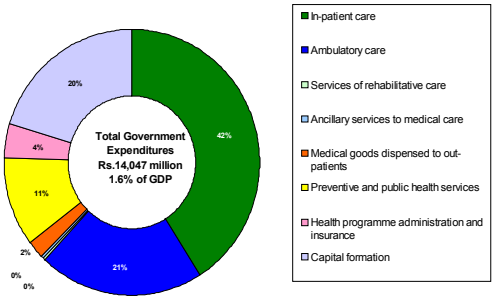
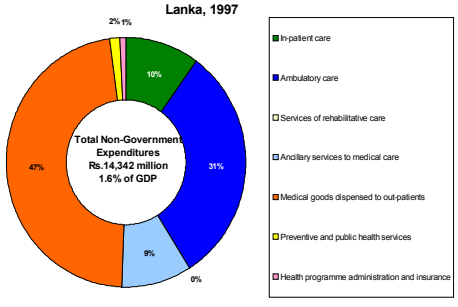


Figure 3.2: Total Non-Government Expenditures by Function in Sri Lanka, 1997



NHA tables can be constructed to link financing sources or agents to *cost of factors of production*. This information can help policymakers assess whether there is an appropriate allocation of funds on personnel, on pharmaceuticals, on equipment, etc.

Spending trends by *function* and by *disease category* are particularly relevant for OECD countries where expenditure restraint has risen as a high national priority. By using national health accounts information, a study on health costs was carried out in the Netherlands. The study identified outlays by *function* (hospitals, nursing homes, inpatient psychiatric care, and institutions for mentally disabled people) and by demographic strata (age groups, sex, and 34 diagnostic groups). As in many other OECD countries, health costs in the Netherlands rises exponentially at some point above age 50[5]. Furthermore, all mental disorders together cover 28.4% of the healthcare budget in the examined diagnostic groups. Based on evidence, any expenditure restraining policies would have to directly take into account the evolution of the risk of disability and increasing longevity of its population [7]. As many developing countries also enter into a stage of demographic transition, distributional analysis could simulate the impact on health systems.

NHA tables can be constructed to reveal the *beneficiaries* of health expenditure, addressing *distributional equity* and effectiveness issues. Such tables reveal to policy makers whether scarce resources are actually spent on national priorities. For example, NHA information can be designed to evaluate whether sufficient funds are being allocated to address a major disease or are being adequately targeted to disadvantaged groups.

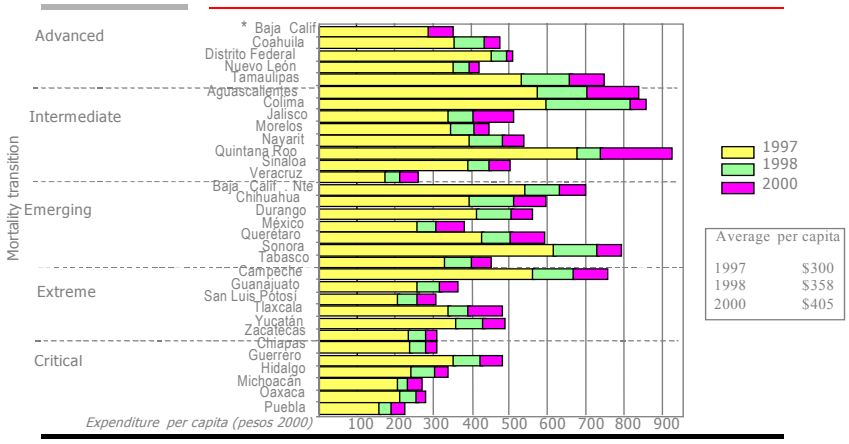
Beneficiary groups can be constructed by *disease categories* or by *interventions*. As major epidemics burden the capacity of many poor countries to finance their health system, external funders are looking at efficient ways to channel funds to address specific diseases. A NHA study on Rwanda in 1998 helped to assess that, while 10% of all health expenditure were spent on prevention and treatment of HIV/AIDS, more than 90% of that amount came from out-of-pocket payments by seropositive patients. 11% of the Rwandan adult population are estimated to be infected with HIV. Although bilateral and international agencies finance half of the total health budget of Rwanda, only 6% of that are targeted specifically to HIV services and activities. Most of it is channelled for prevention activities. The Rwandan review concluded that, while national funding should continue to emphasize support for prevention activities, there is an urgent need to address the high burden of out-of-pocket costs of the seropositive individuals. In addition, the low utilization rate by the poor because of inability to pay for even a medical visit had to be corrected. USAID/PHR/WHO are following up to support pre-payment schemes in a pilot region to alleviate the burden of financing for the poor. This highly subsided pilot program helped to increase the utilization rate fivefold in the catchment area and increased community awareness through participation [8]. A number of financing studies on HIV/AIDS in Latin America (ONUSIDA/SIDALAC)[6] have demonstrated the usefulness of National Health Accounts to monitor the effectiveness of interventions targeted to address the epidemic.

[5] A few detailed studies, notably in France, point out that per capita expenditure rise steeply through the 75-85 age brackets, then slightly decreases. Today there are about 100,000 centenarians living in Europe. American and Swiss studies point to a high concentration in the last few months of life.

[6] ONUSIDA/SIDLAC is UNAIDS/AIDs program of the Economic Commission for Latin America in Spanish

NHA geographical distribution analysis demonstrate that some regions are disproportionately penalized over others in the allocation of public funds. Mexico's political strategy, like in many countries where universal coverage has not been achieved, was to ensure that limited public resources benefit the poor. A careful review, using national health accounts data, revealed that, contrary to policy intention, the allocation of resources for the uninsured population disfavoured the states with greater epidemiological challenges. Figure 4 shows changes in budget allocated designed to modify the original situation. Figure 5 shows clearly the inequity in the distribution of per capita expenditure on health. Health spending in the northern states is almost nine times higher than in southern states. Within the states, urban areas are favoured over rural areas [9].

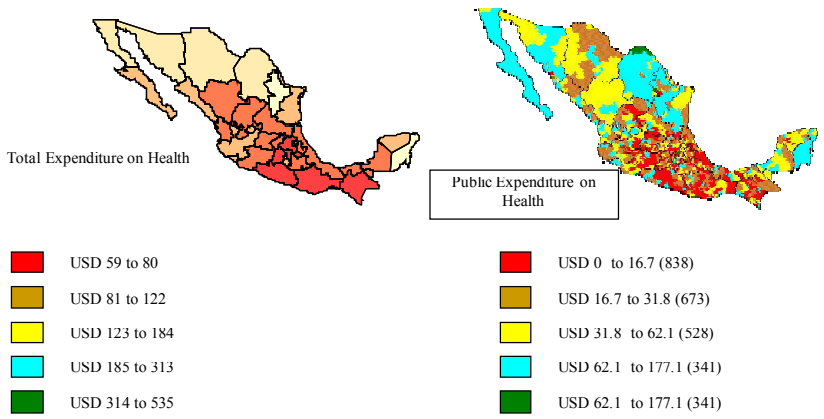
Figure 4 Public Health Expenditures by Regions Classified by Mortality Level in Mexico



There has been a growing international concern on the effectiveness of international aid particularly as debt servicing has caused in a number countries net outflows of resources. Debt relief negotiations for five of the HIPC[7] countries were facilitated by the fact that they had undertaken NHA studies which suggests a better continuous monitoring capacity.

[7] HIPC – Heavily Indebted Poor Countries: a term used by the IMF and The World Bank coordinated initiative which identified a number of HIPC countries with good governance to be considered for debt relief.

Figure 5 Per Capita Expenditure on Health by Region in Mexico, 1995



Source: Frenk, Julio and Gonzalez, E. Strategic Use of National Health Accounts in Mexico. Keynote Speech at NHA Symposium at IHEA Conference, York, July 2001. 2001. www.phrproject.com

DATA SOURCES

In compiling the NHA tables for the WHR2000 and the WHR 2001 for 1997 and for 1997 (revised) and 1998 respectively, WHO used several hundred sources of which the main ones have been:

- Organization for Economic Cooperation and Development, *OECD Health Data 2000 and OECD Health Data 2001* [10]. There is an agreement between WHO and OECD to share information so that duplicate requests would not be sent to Member countries.

- National Health Accounts reports, available for some 30 non-OECD countries, though often only for a single year. In many cases these provide detailed information for an earlier year requiring extrapolation to 1997 and 1998 (few of the around 30 countries produce NHA on a recurrent basis).

- In other countries all accessible national or international reports quantifying specific categories of health expenditure were used. Different types of information is available for a further 50 countries. The information source, which vary by country, include: national accounts; statistical yearbooks; expenditure reports of the Ministry of Finance, Ministry of Health, Social Security institutions, and international funding agencies; national reports of selected industries such as private medical insurance and pharmaceutical trade; NGO reports; household expenditure surveys; censuses; and administrative records. Estimations only using this information tend to underestimate expenditure as information on other entities which have some but limited activities on health are not captured; e.g. training of health practitioners sponsored by the Ministry of Education. International reports, such as International Monetary Fund (IMF) *Government Financial Statistics*, United Nations (UN) *National Accounts*, compilations of household survey reports by the International Labour Organization (ILO), The World Bank (WB), and The Economic Commission for Latin America (ECLAC) have been used. Other useful sources include the WB and the regional bank

health sector or project reports which are usually country specific. Most are, however, confidential and have not been easy to access. Altogether these reports provide additional information for some 130 countries onpublic and private expenditure and again rarely both together. Double counting and/or under-estimation is thus an important risk; so careful scrutiny and selective use of the data becomes critical.

As with any secondary data retrieved from various sources, validation on its reliability is an essential step. WHO in reporting on 191 countries established a network of contacts with governments and with country experts at local level or internationally to validate the reliability of the data obtained from secondary sources.

II. AN ABRIDGED METHODOLOGICAL OVERVIEW

A. FRAMEWORK

In 1998/9, WHO decided to report on an annual basis selected National Health Accounts aggregated as a public service to Member States. This entailed a massive data collection endeavour. The first table of expenditure on health in 1997 for the 191 Member States was reported in annex 8 of the *World Health Report 2000* [11]. In annex 5 of the *World Health Report 2001,* columns with information on public health expenditure financed through external resources and on private expenditure financed through pooling mechanism have been added, as well as revised 1997 and 1998 data for the variables contained in the previous Report [12]. As more data are made available, a five year time series and selected indicators by function and providers are expected to eventually be regular features of forthcoming issue of the *World Health Report*.

B. DEFINITIONS

1. Boundaries

The boundaries of the health system defined by WHO encompass the primary intention to improve the health status of the population together with responsiveness to the legitimate expectations of and financial protection of the population it serves. The NHA approaches this definition, capturing all expenditure related to health status enhancement (individuals and population groups), either through personal and collective interventions. All expenditure must be recorded within a standard category classification. These categories are by definition mutually exclusive. Currently, NHA classifications[8] are broken down such that, depending on data availability and national priorities, categories and sub-categories can be omitted without compromise to the comparability and validity of the information. A health system is defined to include all institutions involved in the provision of health goods and services. For example, beyond health authorities, entities involved in the monitoring of clean water, for example, may be included.

[8] Available in a template form at WHO for the national authority of the country concerned.

2. Time Frame

NHA capture expenditure over a twelve-month period, based on calendar year unless otherwise stated. Expenditure are recorded based on national currency, current prices and on an accrual basis, i.e. when resources are consumed and not when actual payments are made. For a situation analysis, a NHA-type exercise that covers only one year produces valuable financial information. For strategic policy planning purposes, monitoring and evaluation, time series information is critical. NHA accounting must become routine before they can be regularly used with confidence for policy making.

3. Minimum Requirements

Health expenditure information is normally available both at a micro level for various levels of health spending and at a macro level in statistical reports in a number of international publications [13-16]. A minimum basic set of national health expenditure should include public and private expenditure and a sub-category breakdown to the extent feasible. For information to have basic domestic policy relevance, further breakdowns to the components of the public and private expenditure, particularly that of tax-based and out-of-pocket is required. Information between national aggregates and individual in-country reports need to be reconcilable for the information to be valid and comparable.

C. ADJUSTMENTS FOR INCOMPLETE DATA

In 60 + countries reliable orders of magnitude of expenditure on health have been recorded and reported either through the OECD or through the production of National Health Accounts studies. This data were recorded in the appropriate categories with little or no modification.

When the only data available for specific categories were either incomplete or outdated, standard projection techniques using extrapolation are applied. WHO is standardizing a range of imputations so that gradually countries that have not developed their own NHA can replicate them. In the future, uncertainty intervals may be applied so that the variation in the reliability of the data can be clearly indicated.

In the case of a handful of small or politically isolated countries, very little data is available from national sources. Extrapolations were made from macro-data.

As national health accounting remains a relatively new field outside of the OECD, the most reliable source of clarification of conflicting information remains with national experts. Issues of double-counting as well as incomplete reporting remain serious concerns. For several years, each round of NHA estimations for the world is likely to bring about major changes in ratios published previously. Some will reflect

genuine structural change but a larger number will reflect a wider access to more appropriate data.

The key sponsors of NHA in developing countries, including WHO, are completing a Producer's Guide for low-and-middle income countries. Hopefully, it will clarify many of the uncertainties for national statistics when classifying data. In the meantime, regional and other networks of professionals have been a resourceful way of resolving queries and concerns in country specific cases.

III. CONCLUDING OBSERVATIONS

NHA has a central role to play in supporting stewardship and decision-making by both policy makers and stakeholders. There is, however, a lack of estimates in most countries of the world. By reporting on the basic elements of NHA, WHO has shown how such indicators can provide a useful policy reference even in cases when data gaps are large. This effort has the aim to encourage countries to develop and use (even crude) NHA estimates in order to ensure a keener perception of resource use in the health systems [17].

The initial estimates have been developed through available off-the-shelf statistics with collaboration from national administrations and international networks and contacts. However, a wider knowledge of published material and a stepped-up effort to develop NHA in a hundred countries in the near future will lead to better understanding and use of the emerging NHA indicators.

National accounting and national health accounting are evolving entities. Each newcomer must assess its specific monitoring requirements and create matrices or tables adapted to these requirements. It would be important to take advantage and , use international experience and ready-made classifications as shortcuts and cost-saving devices. Nevertheless, although sharing experiences has been found to facilitate the process, it does not substitute for rigorous analysis which observe the main attributes of NHA as described in Annex 1.

Although SNA accounting rules are to be followed, country specific conditions require adjustments to the still non-definitive methodology. WHO's efforts have consisted in borrowing existing statistics and accounting rules with value added. Accuracy will, however, only be reached through collaborative work and "national" NHA exercises.

Many financial analysis have been conducted in the world. The difference with NHA is that these are comprehensive, recurrent, standardized and comparable. To become a timely policy-making tool, the accumulated learning experiences should be shared. A better accuracy and better use of results should be the outcome of the collective progressive efforts for better health systems.

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ANNEX 1

The essential attributes of NHA are:

- Policy sensitivity: NHA seek to identify and quantify parameters, as well as to focus on providing information describing components of the health system susceptible of changes through interventions designed to improve selected facets of the system's effectiveness;

- Comprehensiveness: NHA strive to monitor all the health field expenditure, provision, inputs and outputs, intermediate and final outputs, financing flows of the institutions / and of the functions that make up a health system;

- Consistency: internal coherence and avoidance of contradictions are achieved through standardised classifications, explicit identities and exacting accounting rules;

- Bookkeeping + imputations: an accounting system does not stop at integrating dispersed data from a variety of institutional sources. When an economic function performed by the system is not quantified in the available sources of information, the relevant order of magnitude must be simulated and entered alongside;

- Standardisation: the application of identical rules is a requisite for analyses over time and across countries. At individual country level, this process yields economies of scale in supplying ready-made concepts, definitions, nomenclatures and other methodological devices;

- Multidimensionality: the expenditure analysis is not relevant per se but in terms relative to the population needs to be satisfied and to the institutions to which they refer. This entails that expenditure information needs to be complemented with non-financial information of a demographic, epidemiological, service utilisation nature, as well as by stocks of human, tangible and intangible capital;

- Accuracy: the levels and time series reflect arbitrages between completeness and accuracy, since large data sets built for diverse purposes, according to different methodologies and for different dates/or periods have to be combined;

- Timeliness: while survey data are structural information whose behavioural relationships evolve only slowly, trends of selected components of NHA may exhibit rapid and deep changes. The balance between timeliness and accuracy may be struck by an arbitrage in which the added value of new information is weighted against the consequences of delayed action by policy-making bodies;

- Recurrence: behavioural monitoring is assured only through a continuous estimation. Continuity of estimates is the only way to judge if results of estimates are exceptional or expected. Continuity entails the benefits of a

learning curve to improve the quality of the estimates and diminish the costs of producing them: single year's syntheses are a financial survey or analysis, not a NHA;

- Distributions: the amount of resources consumed or funds spent is the initial synthesis established. An essential policy dimension is to cater to strata of consumers of health goods and services, of health functions, of care providers, as well as to balance inputs for the production of health goods and services and to balance health funding [18].

Annex 2

National Health Accounts Estimates for 191 WHO Member States for 1998

	Percentage Shares: HE = Health Expenditure, T = Total, P = Public, Pvt = Private, GGE = General Government Expenditure, SocSec = Social Security, GenRev = General Revenue (Tax Funded), ExtRes = External Resources, Ins = Insurance, OOP = Out of Pocket Spending									Per Capita Expenditures in PPP Dollars		
Country	THE/GDP	PHE/THE	PvtHE/THE	PHE/GGE	SocSec/ THE	GenRev/ PHE	ExtRes/PHE	PvtIns/PvtHE	OOP/PvtH E	THE	PHE	OOP
Afghanistan	1.6%	57.7%	42.3%	4.2%	0.0%	96.2%	3.8%	0.0%	42.3%	11.1	6.4	97.8
Albania	3.7%	70.2%	29.8%	8.7%	13.9%	77.9%	2.3%	45.1%	16.4%	128.4	90.1	65.9
Algeria	4.1%	80.2%	19.8%	12.4%	53.5%	33.3%	0.0%	0.0%	19.8%	147.7	118.5	854.1
Andorra	10.6%	89.0%	11.0%	24.8%	59.3%	33.4%	0.0%	0.0%	11.0%	2225.9	1981.5	17.6
Angola	4.6%	53.8%	46.2%	6.4%	0.0%	87.5%	12.5%	0.0%	46.2%	60.3	32.5	345.2
Antigua and Barbuda	5.3%	63.3%	36.7%	15.0%	0.0%	91.2%	8.8%	0.0%	36.7%	526.8	333.6	12.9
Argentina	8.1%	55.0%	45.0%	20.0%	32.7%	40.4%	0.2%	24.8%	33.9%	1025.2	563.4	12552.3
Armenia	7.4%	42.9%	57.1%	13.0%	0.0%	88.8%	11.3%	0.0%	57.1%	174.4	74.7	377.6
Australia	8.6%	70.1%	30.1%	16.8%	0.0%	100.0%	0.0%	24.8%	16.1%	2079.6	1457.2	6277.1
Austria	8.0%	71.8%	28.2%	11.2%	42.8%	40.4%	0.0%	25.9%	16.6%	1919.1	1377.5	2577.3
Azerbaijan	2.5%	73.1%	26.9%	6.5%	0.0%	92.1%	7.9%	0.0%	26.9%	49.2	35.9	104.9
Bahamas	6.8%	55.8%	44.2%	16.0%	0.0%	100.0%	0.0%	0.0%	41.1%	918.1	512.7	111.8
Bahrain	4.7%	70.6%	29.4%	10.0%	0.0%	100.0%	0.0%	10.0%	26.5%	614.3	433.6	100.0
Bangladesh	3.8%	36.5%	63.5%	6.9%	0.0%	89.0%	11.0%	0.0%	59.6%	42.5	15.5	3338.4
Barbados	6.4%	61.1%	38.9%	11.8%	0.0%	100.0%	0.0%	19.5%	31.4%	869.5	530.9	72.5
Belarus	6.1%	86.1%	13.9%	11.9%	0.0%	99.1%	0.9%	0.0%	13.9%	477.3	411.1	678.7
Belgium	8.6%	71.2%	28.8%	12.0%	62.6%	12.0%	0.0%	7.0%	13.8%	2121.6	1510.2	2997.0
Belize	5.9%	59.5%	40.5%	10.4%	0.0%	97.7%	2.3%	0.0%	40.5%	294.0	174.8	25.9
Benin	3.2%	49.4%	50.6%	6.3%	0.0%	83.4%	16.6%	0.0%	50.6%	24.2	12.0	72.9
Bhutan	3.8%	90.3%	9.7%	12.2%	0.0%	72.6%	27.4%	0.0%	9.7%	70.9	64.0	4.4
Bolivia	5.0%	65.6%	34.4%	10.0%	42.5%	25.8%	9.4%	7.9%	29.5%	119.2	78.2	279.6
Bosnia and Herzegovina	3.9%	57.1%	42.9%	6.4%	0.0%	71.3%	28.8%	0.0%	42.9%	205.5	117.4	324.3
Botswana	3.5%	70.8%	29.3%	5.5%	0.0%	98.9%	1.1%	48.0%	12.1%	207.1	146.6	37.7
Brazil	6.9%	48.2%	51.8%	9.0%	0.0%	100.0%	0.0%	53.2%	24.2%	469.9	226.4	18913.9
Brunei Darussalam	5.7%	43.5%	56.5%	5.0%	0.0%	100.0%	0.0%	0.0%	56.5%	986.7	429.0	175.7
Bulgaria	4.1%	78.3%	21.7%	8.1%	11.2%	85.7%	0.0%	0.0%	20.3%	160.5	125.7	265.0
Burkina Faso	4.0%	67.7%	32.3%	10.6%	0.0%	68.1%	31.9%	0.0%	32.3%	31.7	21.4	112.3
Burundi	2.3%	41.2%	58.8%	3.9%	0.0%	66.3%	33.7%	0.0%	58.8%	11.2	4.6	40.6
Cambodia	7.2%	8.4%	91.6%	6.1%	0.0%	34.1%	65.9%	0.0%	91.6%	53.8	4.5	612.2
Cameroon	2.7%	30.9%	69.1%	5.6%	0.0%	57.4%	42.6%	0.0%	55.8%	33.1	10.2	263.2
Canada	9.3%	70.1%	29.9%	14.7%	1.2%	98.3%	0.0%	37.5%	16.6%	2362.5	1656.8	11856.0

Country	THE/GDP	PHE/THE	PvtHE/THE	PHE/GGE	SocSec/ THE	GenRev/ PHE	ExtRes/PHE	PvtIns/PvtHE	OOP/PvtH E	THE	PHE	OOP
Cape Verde	2.6%	69.0%	31.0%	4.3%	0.0%	67.3%	32.7%	0.0%	31.0%	82.6	57.0	10.5
Central African Republic	2.4%	48.9%	51.1%	3.8%	0.0%	72.9%	27.1%	0.0%	39.9%	20.6	10.1	29.4
Chad	2.9%	78.6%	21.4%	12.6%	0.0%	65.7%	34.3%	0.0%	21.4%	19.1	15.0	30.4
Chile	7.5%	39.6%	60.4%	12.4%	30.0%	54.3%	0.4%	33.8%	40.0%	664.4	263.4	3937.8
China	4.5%	38.8%	61.2%	12.8%	31.1%	19.3%	0.6%	0.0%	49.0%	143.0	55.5	87939.7
Colombia	9.3%	54.8%	45.2%	17.4%	21.1%	61.3%	0.2%	38.6%	27.7%	413.1	226.6	4658.6
Comoros	4.9%	71.8%	28.2%	9.4%	0.0%	76.0%	24.0%	0.0%	28.2%	39.6	28.5	7.4
Congo	3.0%	67.2%	32.8%	4.3%	0.0%	80.3%	19.7%	0.0%	32.8%	48.4	32.6	45.1
Cook Islands	5.6%	66.7%	33.3%	10.9%	0.0%	100.0%	0.0%	0.0%	33.3%	442.7	295.1	2.8
Costa Rica	6.8%	77.4%	22.6%	20.7%	69.2%	9.9%	0.6%	3.0%	21.9%	459.5	355.7	386.7
Côte d'Ivoire	2.9%	46.7%	53.3%	6.0%	0.0%	82.3%	17.7%	14.0%	45.9%	49.7	23.2	350.4
Croatia	8.8%	81.7%	18.3%	13.7%	70.3%	13.9%	0.0%	0.0%	18.3%	622.6	508.8	529.5
Cuba	6.4%	87.6%	12.4%	10.3%	17.0%	80.5%	0.1%	0.0%	12.4%	300.2	263.0	413.0
Cyprus	6.3%	37.9%	62.1%	6.4%	30.3%	20.0%	0.0%	0.0%	60.0%	965.7	366.3	446.2
Czech Republic	7.1%	91.9%	8.1%	15.0%	82.8%	9.8%	0.0%	0.0%	8.1%	945.9	868.9	793.1
Democratic People's Republic of Korea	3.0%	83.5%	16.5%	5.5%	0.0%	99.1%	1.1%	0.0%	16.5%	29.8	24.9	107.9
Democratic Republic of the Congo	1.7%	74.1%	25.9%	13.5%	0.0%	92.2%	7.8%	0.0%	25.9%	46.5	34.4	583.3
Denmark	8.3%	81.9%	18.1%	12.5%	0.0%	100.0%	0.0%	8.2%	16.6%	2137.3	1750.6	1877.5
Djibouti	4.9%	46.3%	53.7%	5.9%	0.0%	95.8%	4.3%	0.0%	16.0%	88.5	41.0	8.4
Dominica	5.8%	70.0%	32.5%	11.1%	0.0%	96.4%	3.6%	15.4%	27.5%	299.7	209.8	5.9
Dominican Republic	6.5%	28.3%	71.7%	10.2%	6.2%	74.3%	3.7%	14.2%	54.6%	240.2	68.0	1062.8
Ecuador	3.6%	45.9%	54.1%	6.8%	20.2%	53.5%	2.4%	10.3%	34.5%	119.0	54.6	500.2
Egypt	4.6%	30.8%	69.2%	4.4%	12.2%	55.2%	5.3%	0.4%	64.9%	143.7	44.3	6106.9
El Salvador	8.3%	42.5%	57.5%	22.0%	17.7%	47.1%	6.8%	3.3%	55.6%	342.8	145.8	1149.4
Equatorial Guinea	4.2%	59.4%	40.6%	8.3%	0.0%	81.3%	18.7%	0.0%	40.6%	121.4	72.1	21.3
Eritrea	5.4%	65.9%	33.7%	4.5%	0.0%	82.6%	17.4%	0.0%	33.7%	46.7	30.8	53.7
Estonia	6.0%	86.3%	13.7%	13.3%	66.7%	21.2%	1.7%	0.0%	13.2%	515.8	445.3	97.3
Ethiopia	5.2%	46.6%	53.4%	9.5%	0.0%	85.9%	14.1%	0.0%	46.0%	27.6	12.9	760.6
Fiji	4.1%	65.4%	34.6%	6.9%	0.0%	87.1%	12.9%	0.0%	34.6%	170.1	111.2	46.9
Finland	6.9%	76.3%	23.7%	10.5%	15.1%	80.2%	0.0%	10.5%	19.6%	1571.4	1198.2	1585.4
France	9.3%	76.1%	23.9%	13.6%	73.6%	3.2%	0.0%	52.7%	10.3%	2075.1	1578.7	12560.3

Country	THE/GDP	PHE/THE	PvtHE/THE	PHE/GGE	SocSec/ THE	GenRev/ PHE	ExtRes/PHE	PvtIns/PvtHE	OOP/PvtH E	THE	PHE	OOP
Gabon	3.0%	66.7%	33.3%	6.4%	0.0%	92.9%	7.1%	0.0%	33.3%	181.4	120.9	70.6
Gambia	3.2%	78.2%	21.8%	12.0%	0.0%	82.6%	17.4%	0.0%	21.8%	48.2	37.7	12.9
Georgia	4.8%	7.2%	92.8%	2.4%	0.0%	80.0%	20.0%	0.0%	92.8%	172.9	12.4	850.0
Germany	10.3%	75.8%	24.2%	16.4%	69.4%	8.3%	0.0%	29.5%	12.8%	2385.1	1807.6	25027.6
Ghana	4.3%	54.0%	46.0%	9.0%	0.0%	77.3%	22.7%	0.0%	46.0%	96.4	52.0	820.2
Greece	8.4%	56.3%	43.7%	9.3%	22.0%	61.0%	0.0%	5.2%	38.3%	1219.8	687.2	4938.5
Grenada	4.5%	65.1%	37.2%	10.6%	0.0%	96.4%	0.0%	0.0%	37.2%	285.4	185.8	9.9
Guatemala	4.4%	47.5%	52.5%	14.0%	26.2%	37.9%	6.9%	4.5%	49.0%	168.4	79.9	890.9
Guinea	3.6%	60.4%	39.6%	12.9%	0.0%	73.2%	26.8%	0.0%	39.6%	54.7	33.0	170.5
Guinea-Bissau	4.0%	65.1%	34.9%	1.9%	0.0%	76.9%	23.1%	0.0%	34.9%	27.3	17.8	10.9
Guyana	4.5%	82.4%	17.6%	8.6%	0.0%	99.4%	0.6%	0.0%	17.6%	114.5	94.3	15.2
Haiti	3.6%	28.5%	71.5%	9.7%	0.0%	66.7%	33.3%	0.0%	28.7%	37.7	10.8	85.6
Honduras	6.4%	60.8%	39.2%	18.9%	6.0%	84.6%	5.6%	0.2%	35.9%	132.7	80.6	290.2
Hungary	6.8%	76.5%	23.5%	9.7%	29.0%	62.0%	0.0%	0.0%	11.8%	741.9	567.7	878.4
Iceland	8.4%	83.9%	16.1%	21.0%	25.0%	70.2%	0.0%	0.0%	16.1%	2275.3	1909.7	100.6
India	5.1%	18.0%	82.0%	5.6%	0.0%	96.4%	3.6%	0.0%	79.8%	109.8	19.8	85526.3
Indonesia	2.7%	25.5%	74.5%	3.3%	5.3%	60.3%	18.9%	3.9%	71.6%	53.6	13.7	7927.9
Iran, Islamic Republic of	5.7%	48.6%	51.4%	9.9%	18.4%	62.1%	0.0%	0.0%	51.4%	397.1	193.1	13890.1
Iraq	4.2%	59.1%	40.9%	13.5%	0.0%	100.0%	0.0%	0.0%	40.9%	209.5	123.8	1863.6
Ireland	6.8%	76.8%	23.2%	15.7%	6.9%	91.0%	0.0%	35.7%	11.4%	1593.4	1223.4	676.8
Israel	8.8%	66.8%	33.2%	12.0%	0.0%	100.0%	0.0%	0.0%	27.9%	1606.3	1073.3	2589.6
Italy	7.7%	71.9%	28.1%	11.4%	0.1%	99.9%	0.0%	4.7%	24.5%	1711.7	1230.5	24114.6
Jamaica	5.5%	53.0%	47.0%	8.1%	0.0%	96.4%	3.6%	7.3%	22.8%	265.1	140.5	153.5
Japan	7.5%	78.1%	21.9%	13.6%	69.7%	10.8%	0.0%	1.3%	17.0%	1763.4	1377.2	38018.6
Jordan	8.5%	62.1%	37.9%	14.4%	0.0%	97.4%	3.0%	0.0%	31.3%	347.3	215.8	506.7
Kazakhstan	5.7%	70.6%	29.4%	13.4%	20.0%	70.7%	1.1%	0.0%	29.4%	214.3	151.4	1029.8
Kenya	7.6%	28.1%	71.9%	7.8%	3.8%	59.9%	26.5%	4.5%	53.4%	104.3	29.3	1635.5
Kiribati	8.3%	100.0%	0.0%	11.8%	0.0%	100.0%	0.0%	#DIV/0!	0.0%	137.2	137.2	0.0
Kuwait	4.0%	87.2%	12.8%	8.0%	0.0%	100.0%	0.0%	0.0%	12.8%	537.3	468.6	121.9
Kyrgyzstan	4.5%	63.9%	36.1%	10.1%	3.0%	85.7%	9.5%	0.0%	36.1%	105.5	67.5	181.5

Country	THE/GDP	PHE/THE	PvtHE/THE	PHE/GGE	SocSec/ THE	GenRev/ PHE	ExtRes/PHE	PvtIns/PvtHE	OOP/PvtH E	THE	PHE	OOP
Lao People's Democratic Republic	4.1%	37.1%	62.9%	5.7%	0.2%	87.2%	12.1%	0.0%	62.9%	50.1	18.6	158.6
Latvia	6.7%	61.8%	38.2%	9.6%	30.3%	50.3%	0.7%	0.0%	38.2%	427.5	264.3	400.0
Lebanon	11.6%	18.0%	82.0%	6.4%	2.6%	76.9%	8.4%	13.6%	69.7%	594.1	106.8	1532.9
Lesotho	6.0%	78.3%	21.7%	10.8%	0.0%	81.9%	18.1%	0.0%	21.7%	76.4	59.8	32.8
Liberia	2.4%	66.0%	34.0%	7.7%	0.0%	83.9%	17.7%	0.0%	34.0%	23.6	15.6	20.1
Libyan Arab Jamahiriya	3.9%	47.5%	52.3%	2.7%	0.0%	100.0%	0.0%	0.0%	47.5%	290.9	138.3	700.0
Lithuania	6.6%	73.0%	27.0%	14.8%	65.6%	10.1%	0.0%	0.0%	24.6%	460.4	335.9	419.2
Luxembourg	6.0%	92.4%	7.6%	12.7%	76.4%	17.3%	0.0%	21.5%	4.4%	2215.0	2047.1	41.5
Madagascar	2.3%	57.8%	42.2%	7.7%	0.0%	83.2%	16.8%	0.0%	42.2%	20.0	11.5	126.9
Malawi	7.2%	50.3%	49.7%	14.5%	0.0%	67.5%	32.5%	2.2%	17.0%	33.5	16.8	61.0
Malaysia	2.5%	57.7%	42.3%	6.0%	0.0%	98.5%	1.5%	0.0%	42.3%	168.5	97.2	1523.1
Maldives	7.2%	72.4%	27.6%	10.1%	0.0%	91.9%	8.1%	0.0%	27.6%	210.5	152.4	15.9
Mali	4.4%	46.5%	53.5%	8.3%	0.0%	75.6%	24.4%	0.0%	46.7%	25.8	12.0	129.1
Malta	8.4%	69.3%	30.7%	14.1%	43.0%	38.0%	0.0%	0.0%	30.7%	1135.9	787.2	134.6
Marshall Islands	9.9%	55.6%	33.3%	13.2%	0.0%	60.0%	40.0%	0.0%	33.3%	192.3	106.8	3.8
Mauritania	3.3%	69.1%	30.9%	10.5%	0.0%	79.4%	20.6%	0.0%	30.9%	37.9	26.2	29.3
Mauritius	3.4%	51.8%	48.2%	7.1%	0.0%	80.2%	19.8%	0.0%	48.2%	280.5	145.4	154.4
Mexico	5.3%	48.0%	52.0%	7.2%	33.8%	29.5%	0.0%	4.0%	47.9%	442.7	212.4	20332.5
Micronesia, Federated States of	10.7%	54.2%	45.8%	11.2%	0.0%	61.5%	38.5%	0.0%	16.7%	369.3	200.1	7.0
Monaco	7.2%	49.3%	50.7%	17.9%	46.4%	5.9%	0.0%	0.0%	50.7%	1628.4	802.4	27.3
Mongolia	6.2%	65.4%	34.6%	14.7%	26.0%	55.3%	4.8%	0.0%	25.8%	88.3	57.7	56.7
Morocco	4.4%	30.0%	70.0%	3.9%	2.6%	89.8%	1.7%	23.2%	53.7%	144.8	43.5	2237.1
Mozambique	3.8%	57.7%	42.3%	11.1%	0.0%	38.7%	61.3%	0.0%	17.6%	24.6	14.2	76.1
Myanmar	1.5%	15.1%	84.9%	3.9%	0.4%	93.7%	3.5%	0.0%	84.9%	32.0	4.8	1209.2
Namibia	8.2%	54.3%	45.7%	12.0%	0.0%	93.2%	6.8%	91.3%	1.3%	337.4	183.1	7.6
Nauru	3.9%	100.0%	0.0%	8.0%	0.0%	100.0%	0.0%	#DIV/0!	0.0%	413.2	413.2	0.0
Nepal	5.4%	23.5%	76.5%	6.2%	0.0%	66.2%	33.8%	0.0%	55.4%	58.1	13.7	707.0
Netherlands	8.7%	68.6%	31.4%	12.9%	64.5%	6.0%	0.0%	55.7%	8.0%	2056.0	1411.2	2583.7
New Zealand	8.1%	77.0%	23.0%	13.5%	0.0%	100.0%	0.0%	27.7%	16.6%	1469.3	1131.9	906.1
Nicaragua	5.7%	62.8%	37.2%	22.3%	11.1%	66.5%	15.9%	0.0%	37.2%	139.3	87.5	249.0
Niger	3.0%	48.6%	51.4%	5.5%	0.0%	63.8%	36.2%	0.0%	41.3%	17.3	8.4	72.1

Country	THE/GDP	PHE/THE	PvtHE/THE	PHE/GGE	SocSec/ THE	GenRev/ PHE	ExtRes/PHE	PvtIns/PvtHE	OOP/PvtH E	THE	PHE	OOP
Nigeria	2.1%	39.4%	60.6%	5.1%	0.0%	60.5%	39.5%	0.0%	60.6%	18.3	7.2	1194.4
Niue	5.9%	100.0%	0.0%	11.1%	0.0%	100.0%	0.0%	#DIV/0!	0.0%	267.4	267.4	0.0
Norway	8.6%	82.8%	17.2%	14.8%	0.0%	100.0%	0.0%	0.0%	15.6%	2245.6	1859.9	1551.6
Oman	3.6%	81.8%	18.2%	7.3%	0.0%	100.0%	0.0%	0.0%	9.6%	346.8	283.7	79.2
Pakistan	4.0%	23.6%	76.4%	3.1%	13.0%	41.4%	3.4%	0.0%	76.4%	67.1	15.8	6858.8
Palau	6.2%	87.5%	12.5%	8.8%	0.0%	85.7%	14.3%	0.0%	12.5%	408.8	357.7	1.0
Panama	7.5%	68.8%	31.1%	18.4%	42.6%	37.5%	0.6%	16.9%	24.0%	424.6	292.1	281.7
Papua New Guinea	3.9%	91.3%	8.7%	12.3%	0.0%	68.5%	22.3%	3.8%	8.0%	79.4	72.5	29.3
Paraguay	7.3%	37.7%	62.3%	14.9%	16.9%	38.1%	17.0%	12.0%	48.1%	282.5	106.4	709.9
Peru	4.4%	57.2%	42.8%	11.0%	25.1%	52.7%	3.4%	6.9%	34.3%	196.8	112.5	1672.5
Philippines	3.6%	42.4%	57.6%	6.6%	3.7%	84.7%	6.4%	3.4%	48.0%	143.8	60.9	5014.0
Poland	6.4%	65.4%	34.6%	9.4%	0.0%	100.0%	0.0%	0.0%	34.6%	534.0	349.1	7142.4
Portugal	7.7%	66.9%	33.1%	12.2%	5.7%	92.0%	0.0%	5.3%	22.5%	1216.5	814.4	2728.6
Qatar	4.4%	76.6%	23.4%	7.8%	0.0%	100.0%	0.0%	0.0%	5.7%	920.2	705.3	28.5
Republic of Korea	5.1%	46.2%	53.8%	9.6%	34.4%	25.5%	0.0%	12.9%	41.6%	579.9	268.1	11109.6
Republic of Moldova	6.6%	67.9%	31.9%	11.9%	0.0%	96.2%	3.8%	0.0%	31.9%	125.0	84.9	172.0
Romania	3.8%	56.9%	43.1%	7.9%	12.3%	77.4%	0.9%	0.0%	43.1%	237.9	135.3	2309.1
Russian Federation	5.7%	70.1%	29.9%	12.3%	57.3%	16.5%	1.7%	0.0%	25.5%	320.1	224.3	11994.6
Rwanda	5.0%	37.2%	62.8%	9.8%	0.3%	24.3%	74.9%	0.2%	32.6%	38.5	14.3	80.7
Saint Kitts and Nevis	4.7%	67.6%	32.4%	11.0%	0.0%	92.0%	8.0%	0.0%	32.4%	533.0	360.1	6.7
Saint Lucia	4.4%	65.8%	34.2%	8.9%	0.0%	95.8%	2.1%	0.0%	34.2%	257.3	169.2	12.7
Saint Vincent and the Grenadines	6.0%	62.7%	37.3%	9.8%	0.0%	100.0%	0.0%	0.0%	37.3%	322.0	202.0	13.2
Samoa	3.6%	69.6%	30.4%	12.8%	0.0%	87.5%	6.3%	0.0%	30.4%	108.6	75.6	5.2
San Marino	7.7%	85.7%	14.3%	10.1%	81.1%	5.4%	0.0%	0.0%	14.3%	1673.8	1434.7	6.2
Sao Tome and Principe	2.9%	67.9%	32.1%	3.6%	0.0%	80.9%	19.1%	0.0%	32.1%	24.8	16.8	1.1
Saudi Arabia	4.1%	77.5%	22.5%	10.9%	0.0%	100.0%	0.0%	9.5%	8.6%	458.4	355.2	744.2
Senegal	4.5%	58.4%	41.6%	13.1%	0.0%	86.9%	13.1%	0.0%	41.6%	49.7	29.1	185.1
Seychelles	6.9%	69.1%	30.4%	7.9%	0.0%	73.0%	27.0%	0.0%	23.0%	808.5	558.8	14.2
Sierra Leone	2.8%	40.4%	59.6%	7.3%	0.0%	78.6%	21.4%	0.0%	59.6%	21.8	8.8	54.3
Singapore	3.6%	35.4%	64.6%	2.6%	7.3%	100.0%	0.0%	0.0%	64.6%	744.3	263.2	1833.1
Slovakia	6.3%	90.7%	9.3%	12.5%	66.6%	26.6%	0.1%	0.0%	7.9%	651.9	591.6	276.9
Slovenia	8.7%	78.7%	21.3%	15.6%	77.6%	1.4%	0.0%	49.1%	10.8%	1339.7	1054.9	288.7
Solomon Islands	4.4%	96.1%	3.9%	11.4%	0.0%	82.2%	17.8%	0.0%	0.0%	91.8	88.2	0.0
Somalia	2.0%	62.4%	37.6%	4.5%	0.0%	81.5%	18.5%	0.0%	37.6%	11.0	6.9	33.4
South Africa	8.7%	43.6%	56.4%	11.6%	0.0%	99.7%	0.3%	75.8%	12.6%	529.8	231.0	2813.9

Country	THE/GDP	PHE/THE	PvtHE/THE	PHE/GGE	SocSec/ THE	GenRev/ PHE	ExtRes/PHE	PvtIns/PvtHE	OOP/PvtH E	THE	PHE	OOP
Spain	7.0%	76.8%	23.2%	14.3%	9.0%	88.3%	0.0%	23.6%	17.7%	1214.8	932.5	8594.2
Sri Lanka	3.4%	51.3%	48.7%	5.8%	0.0%	96.0%	4.0%	1.0%	48.3%	99.0	50.7	886.9
Sudan	4.2%	24.1%	75.9%	4.4%	0.0%	99.2%	0.8%	0.0%	75.9%	59.7	14.4	1349.9
Suriname	7.1%	62.2%	37.8%	14.1%	26.2%	22.7%	35.2%	0.0%	37.8%	225.1	140.0	35.2
Swaziland	3.7%	72.0%	28.0%	8.0%	0.0%	76.7%	23.3%	0.0%	28.0%	166.0	119.5	41.4
Sweden	7.9%	83.8%	16.2%	11.4%	0.0%	100.0%	0.0%	0.0%	16.2%	1730.6	1450.2	2483.4
Switzerland	10.6%	54.9%	45.1%	10.4%	39.6%	27.7%	0.0%	23.8%	32.8%	2867.6	1573.3	6734.7
Syrian Arab Republic	4.0%	51.5%	48.5%	7.1%	0.0%	99.9%	0.1%	0.0%	48.5%	109.3	56.3	814.7
Tajikistan	2.3%	61.5%	38.5%	8.2%	0.0%	97.5%	2.5%	0.0%	38.5%	37.4	23.0	85.9
Thailand	3.9%	61.4%	38.6%	13.3%	5.1%	91.6%	0.1%	15.0%	32.7%	197.2	121.1	3948.8
The former Yugoslav Republic of Macedonia	8.0%	87.6%	12.4%	19.9%	81.0%	7.2%	0.4%	0.0%	12.4%	354.9	311.0	88.2
Togo	2.4%	50.0%	50.0%	4.3%	0.0%	83.2%	16.8%	0.0%	50.0%	31.3	15.6	66.4
Tonga	7.7%	44.4%	55.6%	13.8%	0.0%	100.0%	12.5%	0.0%	55.6%	266.2	118.3	14.5
Trinidad and Tobago	5.2%	44.2%	55.8%	6.9%	0.0%	100.0%	0.0%	5.6%	49.0%	397.7	175.8	250.0
Tunisia	5.3%	41.3%	58.7%	7.0%	16.5%	60.0%	0.0%	0.0%	53.7%	310.9	128.5	1547.6
Turkey	4.9%	71.9%	28.1%	11.5%	31.5%	56.2%	0.0%	0.2%	28.0%	326.0	234.5	5892.5
Turkmenistan	5.5%	79.2%	20.8%	16.7%	4.2%	93.2%	1.6%	0.0%	20.8%	172.3	136.4	162.6
Tuvalu	9.5%	50.0%	50.0%	5.0%	0.0%	100.0%	0.0%	0.0%	50.0%	303.0	151.5	1.7
Uganda	3.5%	38.2%	61.8%	9.3%	0.0%	51.2%	48.8%	0.5%	33.5%	29.6	11.3	217.8
Ukraine	5.0%	71.1%	28.9%	8.0%	0.0%	99.5%	0.5%	0.0%	28.9%	157.1	111.7	2307.7
United Arab Emirates	4.1%	79.7%	20.3%	7.4%	0.0%	100.0%	0.0%	19.9%	13.1%	738.6	588.8	243.3
United Kingdom	6.8%	83.3%	16.7%	14.3%	9.8%	88.2%	0.0%	20.8%	11.1%	1512.5	1260.3	9966.2
United Republic of Tanzania	4.9%	48.5%	51.5%	14.9%	0.0%	56.1%	43.9%	0.0%	44.5%	20.5	9.9	304.9
United States of America	12.9%	44.8%	55.2%	16.9%	14.9%	66.8%	0.0%	60.7%	15.6%	4055.3	1817.0	176120.0
Uruguay	10.2%	46.4%	53.6%	14.2%	24.6%	46.4%	0.6%	63.7%	19.4%	942.9	437.8	602.3
Uzbekistan	4.1%	82.9%	17.1%	10.3%	0.0%	99.2%	0.8%	0.0%	17.1%	96.5	80.0	397.3
Vanuatu	3.3%	63.6%	36.4%	9.6%	0.0%	51.7%	48.3%	0.0%	36.4%	95.3	60.6	6.5
Venezuela, Bolivarian Republic of	4.9%	53.1%	46.9%	10.9%	15.2%	71.4%	0.0%	5.2%	44.5%	286.0	151.8	2956.3
Viet Nam	5.2%	23.9%	76.1%	6.3%	0.0%	94.7%	5.3%	0.0%	76.1%	111.7	26.7	6468.7
Yemen	3.9%	39.1%	60.9%	3.9%	0.0%	89.2%	10.8%	0.0%	60.9%	49.2	19.2	506.9
Yugoslavia	5.6%	50.9%	49.1%	10.5%	0.0%	99.9%	0.1%	0.0%	49.1%	232.5	118.5	1206.8
Zambia	5.6%	57.3%	42.7%	12.6%	0.0%	57.0%	43.0%	0.0%	31.9%	44.6	25.5	141.4
Zimbabwe	10.8%	55.9%	44.1%	17.0%	0.0%	69.2%	30.8%	16.4%	33.2%	242.3	135.3	979.3