

FINANCING GLOBAL HEALTH 2012:

THE END OF THE GOLDEN AGE?

INSTITUTE FOR HEALTH METRICS AND EVALUATION

UNIVERSITY OF WASHINGTON



This report was prepared by the Institute for Health Metrics and Evaluation (IHME) through core funding from the Bill & Melinda Gates Foundation. The views expressed are those of the authors.

The contents of this publication may be reproduced and redistributed in whole or in part, provided the intended use is for noncommercial purposes, the contents are not altered, and full acknowledgment is given to IHME. This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. To view a copy of this license, please visit <http://creativecommons.org/licenses/by-nc-nd/3.0/>.

For any usage that falls outside of these license restrictions, please contact IHME Communications at comms@healthmetricsandevaluation.org.

Citation: Institute for Health Metrics and Evaluation.
Financing Global Health 2012: The End of the Golden Age?
Seattle, WA: IHME, 2012.

Institute for Health Metrics and Evaluation
2301 Fifth Ave., Suite 600
Seattle, WA 98121
USA
www.healthmetricsandevaluation.org

To request copies of this report, please contact:
Telephone: +1-206-897-2800
Fax: +1-206-897-2899
Email: comms@healthmetricsandevaluation.org

Printed in the United States of America

ISBN 978-0-9840910-5-8

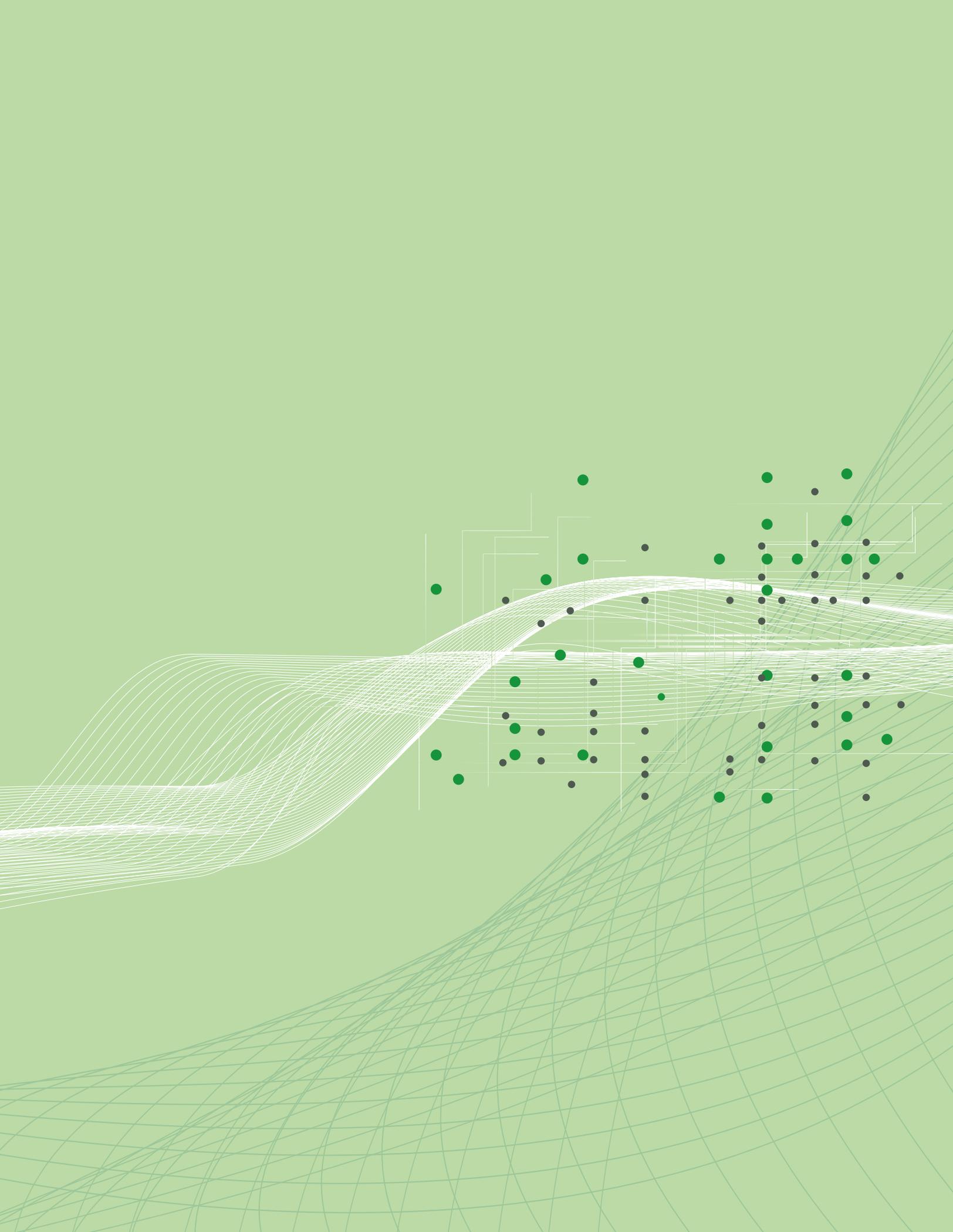
© 2012 Institute for Health Metrics and Evaluation

FINANCING GLOBAL HEALTH 2012:

THE END OF THE GOLDEN AGE?

PAGE CONTENTS

3	About IHME
3	About <i>Financing Global Health 2012</i>
4	Research team
4	Acknowledgments
5	Acronyms
6	List of figures and tables
7	Executive summary
10	Introduction
12	Chapter 1: Overview of development assistance for health trends
19	Chapter 2: Recipients of development assistance for health
24	Chapter 3: Development assistance for health to specific health focus areas
37	Chapter 4: Sources of development assistance for health
42	Chapter 5: Government health expenditure
46	Conclusion
47	References
52	Annex A: Methods
55	Annex B: Statistics



ABOUT IHME

The Institute for Health Metrics and Evaluation (IHME) is an independent global health research center at the University of Washington that provides rigorous and comparable measurement of the world's most important health problems and evaluates the strategies used to address them. IHME makes this information freely

available so that policymakers have the evidence they need to make informed decisions about how to allocate resources to best improve population health.

For more information, please visit <http://www.healthmetricsandevaluation.org>.

ABOUT *FINANCING GLOBAL HEALTH 2012*

The 2012 edition of *Financing Global Health* is IHME's fourth annual report on the subject of global health expenditure. Tracking development assistance for health (DAH) and government health expenditure (GHE) is a key part of IHME's research agenda. Every year, IHME commits a considerable amount of resources to collecting and analyzing DAH and GHE data. These estimates provide decision-makers and other global health stakeholders with an overview of the extent of funds devoted to health. This report ensures decisions can be informed by the most accurate and up-to-date data. When funding gaps and investment opportunities are identified in a timely manner, the global health community is better able to respond.

In this year's report, IHME built on its past data collection and analysis efforts to monitor the resources made available through DAH and GHE in 2012.

- **Development assistance for health:** IHME collected information from entities that contributed to DAH from 1990 to 2012. Annual reports, publicly available data, and information acquired via correspondence feed into IHME's DAH dataset. Some data are verified through conversations with the respective organizations. All data are then processed into a useable format. Our dataset is complete up to 2010. Some data are available for 2011 and 2012, but not for all organizations tracked. When 2011 or 2012 data are not available, we use statistical models to analyze budget data and historical trends to produce preliminary estimates.
- **Government health expenditure:** Data produced by the World Health Organization for the period of 1995 to 2010 are used to estimate GHE. IHME analyzes this dataset to approximate how much governments spend on health-related activities, how these expenditures change over time, and to what extent DAH impacts government spending.

RESEARCH TEAM

(Listed alphabetically)

Benjamin PC Brooks, BS

*Post-Bachelor Fellow
IHME*

Joseph Dieleman, MA

*Research Assistant
IHME*

Joseph Frostad, BA

*Post-Bachelor Fellow
IHME*

Casey Graves, BA

*Data Analyst
IHME*

Annie Haakenstad, MA

*Project Officer
IHME*

Michael Hanlon, PhD

*Lecturer, Global Health
IHME*

Rouselle Lavado, PhD

*Post-Graduate Fellow
IHME*

Katherine Leach-Kemon, MPH

*Data Development Manager
IHME*

Christopher JL Murray, MD DPhil

*Institute Director and Professor, Global Health
IHME*

Annette Tardif, MA

*Data Analyst
IHME*

ACKNOWLEDGMENTS

We extend our deepest appreciation to current and former members of the Health Financing Advisory Panel who have provided valuable guidance on our research efforts. We are grateful to past authors of this report for developing and refining the analytical foundation upon which this work is based. We would like to acknowledge the staff members of the numerous development agencies, public-private partnerships, international organizations, non-governmental organizations, and foundations who responded to our data requests and questions. We greatly appreciate their time and assistance.

The IHME community contributed greatly to the production of this year's report. In particular, we thank IHME's Board for their continued leadership, William Heisel for his editorial guidance, Patricia Kiyono and Brian Childress for editing and managing production, and Brent Anderson for program coordination.

Finally, we would like to extend our gratitude to the Bill & Melinda Gates Foundation for generously funding IHME and for its consistent support of this research and report.

ACRONYMS

AMFm	Affordable Medicines Facility – malaria	MDG	Millennium Development Goal
ARV	Antiretroviral	MNCH	Maternal, newborn, and child health
BMGF	Bill & Melinda Gates Foundation	NCD	Noncommunicable disease
DAH	Development assistance for health	NGO	Non-governmental organization
DAH-G	Development assistance for health channeled to governments	ODA	Official development assistance
DAH-NG	Development assistance for health channeled to non-governmental sectors	OECD	Organisation for Economic Co-operation and Development
DALY	Disability-adjusted life year	OECD-DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
DFID	UK Department for International Development	PAHO	Pan American Health Organization
DRC	Democratic Republic of the Congo	PEPFAR	US President's Emergency Plan for AIDS Relief
EC	European Commission	PMTCT	Preventing mother-to-child transmission of HIV
G8	Group of Eight	TB	Tuberculosis
GAVI	GAVI Alliance (formerly the Global Alliance for Vaccines and Immunisation)	UK	United Kingdom
GBD 2010	Global Burden of Diseases, Injuries, and Risk Factors 2010 Study	UN	United Nations
GDP	Gross domestic product	UNAIDS	Joint United Nations Programme on HIV/AIDS
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria	UNFPA	United Nations Population Fund
GHE	Government health expenditure	UNICEF	United Nations Children's Fund
GHE-A	Government health expenditure as agent	US	United States
GHE-S	Government health expenditure as source	USAID	United States Agency for International Development
HIV/AIDS	Human immunodeficiency virus/acquired immune deficiency syndrome	WHO	World Health Organization
IBRD	International Bank for Reconstruction and Development		
IDA	International Development Association		
IHME	Institute for Health Metrics and Evaluation		

LIST OF FIGURES AND TABLES

PAGE FIGURE

12	1	Resource flows for DAH
13	2	DAH by channel of assistance, 1990-2012
15	3	Change in DAH by channel of assistance, 1990-2001
16	4	Change in DAH by channel of assistance, 2001-2010
17	5	Change in DAH by channel of assistance, 2010-2012
19	6	DAH by focus region, 1990-2010
21	7	Total DAH, 2008-2010
21	8	Top 10 country recipients of DAH by channel of assistance, 2008-2010
22	9	Total DAH per all-cause DALY, 2008-2010
23	10	Top 20 countries by 2010 all-cause burden of disease versus cumulative 2008-2010 DAH
24	11	DAH for HIV/AIDS; maternal, newborn, and child health; malaria; tuberculosis; noncommunicable diseases; and health sector support, 1990-2010
26	12	DAH for HIV/AIDS by channel of assistance, 1990-2010
26	13	HIV/AIDS DAH, 2008-2010, per related DALY, 2010
27	14	Top 20 countries by 2010 HIV/AIDS burden of disease versus cumulative 2008-2010 HIV/AIDS DAH
28	15	DAH for maternal, newborn, and child health by channel of assistance, 1990-2010
28	16	Maternal, newborn, and child health DAH, 2008-2010, per related DALY, 2010
29	17	Top 20 countries by 2010 maternal, newborn, and child health burden of disease versus cumulative 2008-2010 MNCH DAH
30	18	DAH for malaria by channel of assistance, 1990-2010
30	19	Malaria DAH, 2008-2010, per related DALY, 2010
31	20	Top 20 countries by 2010 malaria burden of disease versus cumulative 2008-2010 malaria DAH
32	21	DAH for tuberculosis by channel of assistance, 1990-2010
32	22	Tuberculosis DAH, 2008-2010, per related DALY, 2010
33	23	Top 20 countries by 2010 tuberculosis (TB) burden of disease versus cumulative 2008-2010 TB DAH
34	24	DAH for noncommunicable diseases by channel of assistance, 1990-2010
34	25	Noncommunicable diseases DAH, 2008-2010, per related DALY, 2010
35	26	DAH for health sector support by channel of assistance, 1990-2010
37	27	DAH by source of funding, 1990-2010
38	28	DAH as a percentage of gross domestic product, 2010
39	29	Public sector DAH (donor-country-specific) by channel of assistance, 2010
40	30	Total overseas health expenditure by US NGOs, 1990-2012
43	31	GHE-S by Global Burden of Disease developing region, 1995-2010
43	32	DAH-G by Global Burden of Disease developing region, 1995-2010
44	33	DAH-NG by Global Burden of Disease developing region, 1995-2010
44	34	DAH-G as a percentage of GHE, 2008-2010

PAGE TABLE

18	1	Select total DAH and ODA, 1990-2011
41	2	US NGOs with the highest cumulative overseas health expenditures, 2006-2009

EXECUTIVE SUMMARY

This year's *Financing Global Health* report confirms what many involved in development assistance for health (DAH) expected: After reaching a historic high in 2010, total DAH fell in 2011. However, the relatively small size of the drop is encouraging. Rather than falling sharply as expected, over the past two years DAH has been sustained at levels of spending that would have been inconceivable a decade ago. Despite continued macroeconomic stress, the international community continues to respond to the enduring need for health and health system support across the developing world.

Over the past 20 years, DAH has undergone three major phases of growth. From 1990 to 2001, a "moderate-growth" phase occurred in which annualized growth was a stable but modest 5.9%. Over this period, DAH nearly doubled, growing from \$5.7 billion in 1990 to \$10.8 billion in 2001. After 2001, DAH entered the quickly expanding "rapid-growth" period. Growth exceeded 11.2% on an annualized basis between 2001 and 2010 and almost tripled from 2001, climbing to \$28.2 billion in 2010. However, the advent of the financial crisis has led to stagnation in absolute DAH spending recently and the debut of the most recent "no-growth" phase starting in 2010. A total of \$28.1 billion was disbursed in 2012, a \$53 million drop from 2010. Irrespective of the recent plateau in spending, the long-term trajectory of DAH demonstrates the firm commitment of development assistance partners to realizing positive health outcomes around the world.

Examining the "rapid-growth" phase more closely reveals that the rise in DAH was driven by investments in several key areas. While spending increased in almost all health focus areas, this period was characterized by intensified efforts to combat HIV/AIDS, tuberculosis, and malaria. The launch of the Global Fund to Fight AIDS, Tuberculosis and Malaria and the GAVI Alliance (GAVI) propelled DAH growth higher from their respective inceptions to 2010. Support for non-governmental organizations also rose at a rapid clip as their role in DAH evolved from the turn of the century onward. During this stage, DAH provided to all regions increased, although sub-Saharan Africa received an increasing share of DAH vis-à-vis other regions of the world.

The recent stagnation of total DAH in the "no-growth" phase has not occurred without shifts within the

spending envelope. While the level of DAH was maintained from 2010 to 2012, some organizations spent more and others spent less. Throughout the report, the Institute for Health Metrics and Evaluation (IHME) explores the mix of sources, channels, recipients, and health focus areas that have made up these shifts. Also, while IHME's analytical work primarily focuses on DAH, this is not meant to eclipse the prominent role of government health expenditure (GHE); trends in GHE are also assessed in Chapter 5 of this report.

The key findings of *Financing Global Health 2012: The End of the Golden Age?* include:

Development assistance for health

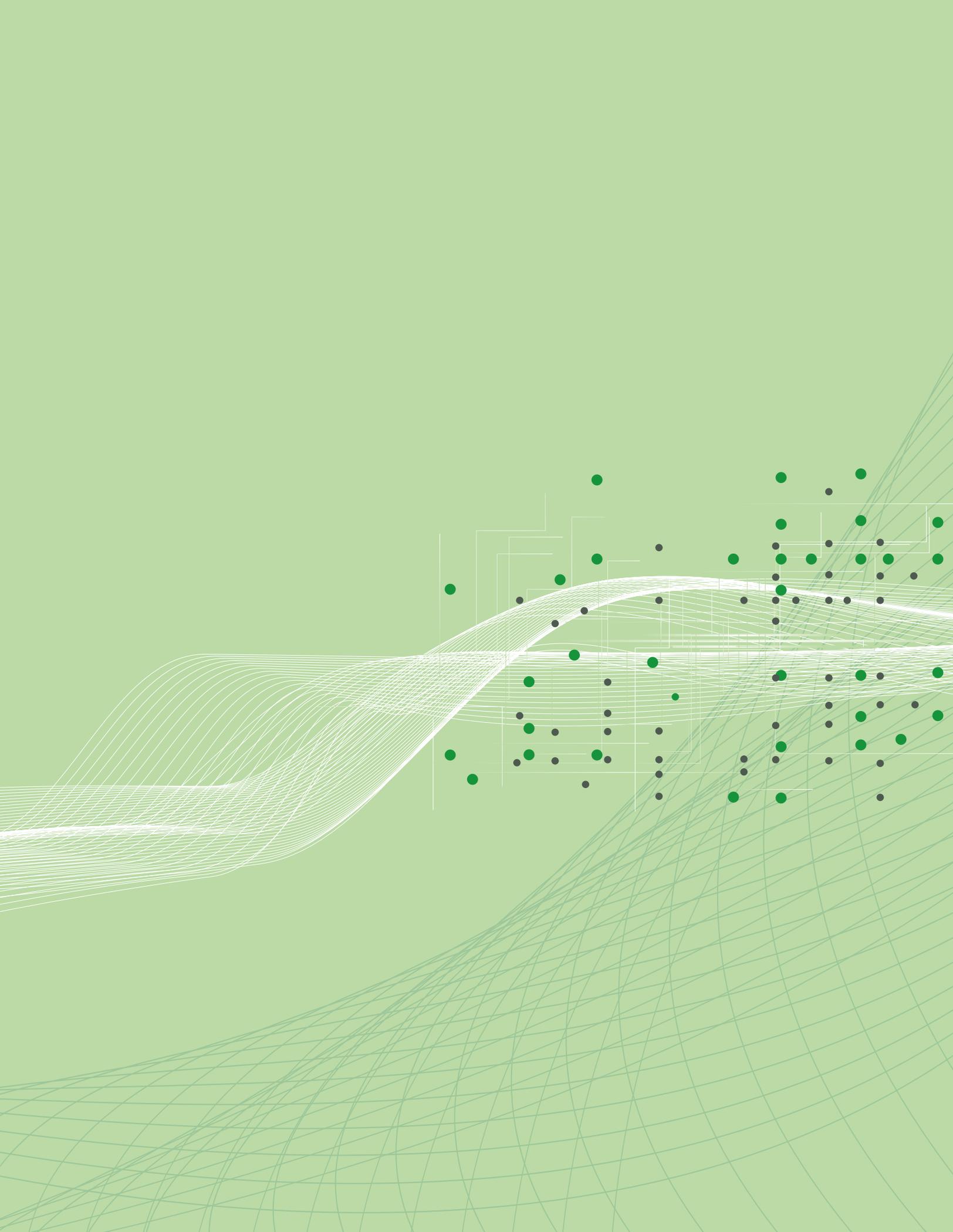
- According to IHME's preliminary estimates, total DAH in 2012 amounted to \$28.1 billion.ⁱ The 2012 year-over-year increase in DAH was 2.5%.
- In 2012, the DAH channeled through bilateral agencies decreased 4.4%. Among the six largest bilateral channels of DAH, only the spending by the United Kingdom and Australia increased from 2011 to 2012, at rates of 2.3% and 8.1%, respectively.
- GAVI continued to have very strong rates of growth. In 2012, expenditure by GAVI reached an estimated \$1.76 billion in 2012, a 41.9% increase over 2011.
- The sub-Saharan African region received the largest share of DAH. In 2010 (the most recent year for which recipient-level estimates are available), sub-Saharan Africa's share was \$8.1 billion, or 28.7% of total DAH.
- Many of the countries with the highest disease burdens do not receive the most DAH. Of the top 20 countries with the highest all-cause disability-adjusted life years (DALYs), only 12 are among the top 20 recipients of DAH. However, seven of the remaining eight countries are classified as middle income by the World Bank.
- With respect to the DAH allocated to specific health focus areas, DAH for HIV/AIDS, tuberculosis, and maternal, newborn, and child health continued to grow through 2010 (the most recent year for which focus area estimates are available). DAH for health sector support, noncommunicable diseases, and malaria fell slightly from 2009 to 2010.

ⁱAll dollar figures in this report are reported in 2010 US dollars.

Government health expenditure

- Even at the peak of DAH in 2010, the spending by governments on health as sourced domestically (GHE-S) was \$521 billion, which was more than 18 times higher than total DAH in the same year. GHE-S grew 6% from 2009 to 2010 (the most recent year for which estimates are available).
- Governments in East Asia – primarily China – disbursed the most on health, at \$159.6 billion in 2010.
- Across the globe, the share of DAH funneled to governments (DAH-G) as a part of total spending by governments on health was typically less than 10%. However, in certain countries in Asia and Western and Southern Africa, DAH-G amounted to more than half of total government health expenditure.

The evolution of DAH over the past two decades illustrates the cumulative effect of a large number of decision-makers prioritizing population health. Major changes in the global health landscape have transpired during this time. The shifts in growth and spending emphasize the continued importance of tracking these funding flows, which ensures that decision-makers can make choices about resource allocation with full information.



INTRODUCTION

Into 2012, the global economic and financial crisis continued to have an impact on development assistance for health (DAH). Donor governments and the entities they fund are facing pressure to cut budgets across all sectors. The Netherlands, Japan, Canada, Spain, and Italy are all projected to cut development aid over 2011 to 2013.¹⁻⁶ In fact, the majority of Organisation for Economic Co-operation and Development (OECD) countries have made cuts to aid budgets since 2011.⁷ A brief assessment by the Development Policy Centre finds that very few countries will be able to meet the 0.7% gross domestic product (GDP) aid spending target, although a few remain committed to that goal.⁷ The enduring impact of the crisis is reflected in our 2011 and 2012 preliminary estimates of DAH, which indicate that after a decade-long “golden age” of rapid growth, DAH has leveled off.

The mobilization of funds at the international level over the past decade has been crucial to accelerating progress toward the Millennium Development Goals (MDGs). In an assessment of Avahan, an HIV-prevention initiative in India, greater spending was significantly associated with reduced HIV rates.⁸ An evaluation of Mexico’s Human Development Program Oportunidades shows that the program helped change health behaviors that led to improved health outcomes.⁹ The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) reports to have supported the purchase of 200 million insecticide-treated bed nets.¹⁰ Recent research published in *PLoS Medicine* finds that significant reductions in child mortality have accompanied the recent scale-up in insecticide-treated bed nets.¹¹ While these successes are notable, further efforts are needed to achieve the 2015 MDG targets. Consequently, these gains are overshadowed by concern about the potential for lower levels of DAH in the future.

As will be illustrated throughout *Financing Global Health 2012*, DAH has progressed through three distinct phases of growth. From 1990 to 2001, increases were modest and stable as DAH progressed through a “moderate-growth” phase. From 2001 to 2010, a “rapid-growth” phase took hold. This phase was propelled by the launch of new organizations dedicated to improving population health and health systems, as well as enhanced support on the part of traditional bilateral and multilateral partners. Finally,

more recently, DAH has entered a “no-growth” phase. DAH appears to have plateaued since its peak in 2010.

The pace of growth and the shifts in the composition of DAH have coincided with considerable changes in the macroeconomic landscape. Over the past decade, a number of developing countries have grown steadily, many of them attaining upper-middle income status. Meanwhile, OECD countries have recently faced economic hardships. While developed-country governments work to rein in spending, developing countries have managed to maintain their economic gains. Some recipient countries have themselves begun providing development assistance.

Traditional DAH channels are being forced to recalibrate policies and practices to adapt to a new global health financing landscape. As more low-income countries graduate to middle-income status, different countries become eligible to apply through the different funding mechanisms of the World Bank, GFATM, the GAVI Alliance (GAVI), and other DAH partners. This new reality is particularly pertinent given upcoming replenishment cycles. In 2013, the World Bank’s International Development Association (IDA), GFATM, and others will return to donor countries to refresh their funding pools. For some channels, a shrinking number of eligible countries will require the reconsideration of objectives and operating principles.

This evolution in funding is occurring as new information emerges about epidemiological profiles around the world. The Global Burden of Diseases, Injuries, and Risk Factors 2010 Study (GBD 2010), published in *The Lancet* in December 2012, revealed that while the world’s population is living longer, more and more people are suffering from noncommunicable diseases (NCDs) and injuries.¹² GBD 2010 was a comprehensive, multiyear research endeavor that engaged almost 500 collaborators to produce comparable estimates for more than 291 conditions and injuries and 67 risk factors. GBD 2010 also showed that ischemic heart disease was the leading cause of burden in 2010, followed by lower respiratory infections, diarrheal disease, and HIV/AIDS. Malaria and tuberculosis (TB) continue to make up a substantial proportion of the global burden. In fact, another recent study by the Institute for Health Metrics and Evaluation (IHME) found that malaria affects adult mortality significantly more than previously thought.¹³

GBD 2010 also found that child mortality and maternal disorders have declined, although one-fourth of the global burden is still due to disease and injuries in children under 5 years of age. Finally, mental health disorders and injuries are increasingly contributing to the global burden. In terms of the top causes, road injuries increased from a ranking of 12th to 10th (34% increase), while major depressive disorder increased from 15th to 11th (37% increase).

The information produced by GBD 2010 has led to a number of significant improvements in this edition of *Financing Global Health*. GBD 2010's comprehensive and comparable estimates of disability-adjusted life years (DALYs) considerably augment the precision with which we can relate the burden of disease to DAH. DALYs combine years of life lived with disability (YLDs, or years of life spent in a health state that is less than ideal) and years of life lost due to premature mortality (YLLs). DALYs serve as a comparable measurement of the impact of diseases and injuries across countries. This report pairs DALYs with DAH to assess DAH allocated

per DALY. Furthermore, while the World Bank's regional classifications are employed throughout the report, we also use GBD regions. The 21 GBD regions were developed to represent epidemiological profiles, based on levels of adult mortality, under-5 mortality, and the major drivers of health outcomes. For expositional convenience, these GBD regions are combined into super-regions throughout this report.

This year's report consists of chapters that emphasize the most important characteristics of DAH. Chapter 1 focuses on the broad trends in DAH and features our 2012 estimates as well as portrays changes in spending over time. In Chapter 2, we assess DAH by the destination of funds, and recipient-level trends are explored. Chapter 3 examines the diseases and other health focus areas targeted by DAH. In Chapter 4, we report the sources of DAH by country and channel. Lastly, in Chapter 5, we report trends in government health expenditure (GHE) in the developing world. A discussion of the methods of analysis and data collection can be found in Annex A, and Annex B contains the data itself.