



# ASIA'S FISCAL CHALLENGE

FINANCING THE SOCIAL PROTECTION AGENDA  
OF THE SUSTAINABLE DEVELOPMENT GOALS

Edited by Sri Wening Handayani

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OCTOBER 2018



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# Contents

<b>Tables, Figures, and Boxes</b>	iv
<b>Foreword</b>	vii
<b>Acknowledgments</b>	viii
<b>Abbreviations</b>	ix
<b>Contributors</b>	x
<b>Overview</b>	1
<i>Sri Wening Handayani and Michael Cichon</i>	
<b>1 The Social Protection Agenda of the Sustainable Development Goals and Its Fiscal Challenge</b>	10
<i>Michael Cichon</i>	
<b>2 Mongolia</b>	50
<i>Ludovico Carraro</i>	
<b>3 Myanmar</b>	73
<i>Mariana Infante Villarroel</i>	
<b>4 Timor-Leste</b>	103
<i>André F. Bongestabs</i>	
<b>5 Social Assistance</b>	132
<i>Franziska Gassmann</i>	
<b>6 Health Care</b>	168
<i>Axel Weber, Michael Cichon, Eduardo P. Banzon, and Karlo Paolo P. Paredes</i>	
<b>7 Social Insurance</b>	186
<i>Krzysztof Hagemeyer</i>	
<b>Appendixes</b>	
1 Sustainable Development Goals, Governance, and Outcome Targets Constituting the Social Protection Agenda of the Sustainable Development Goals	210
2 A Robust, Two-Step Modeling Methodology	214
3 Statistical Tables	241

# Tables, Figures, and Boxes

## Tables

O.1	Assessment of Likely Fiscal Stress Invoked by the Social Protection Agenda of the Sustainable Development Goals	8
1.1	Four Major Categories of Social Protection System	12
1.2	Projected 16-Country Composition of Sustainable Development Goal-Related Social Protection Requirements for 2030	19
1.3	Estimated Long-Term Average Resource Requirement to Close the Social Protection–Sustainable Development Goal Gap, 2015–2030	23
1.4	Earlier Revenue Increase and Projected Additional Resource Requirements to Close the Social Protection Gap, 16 Countries	26
1.5	Projected Government Surpluses/Deficits under Alternative Revenue Assumptions, Lower Estimate for 2030	28
1.6	Projected Government Surpluses/Deficits under Alternative Revenue Assumptions, Upper Estimate for 2030	29
1.7	Central Indicators of Expected Fiscal Stress after Closing the Social Protection Gap at the End of the Projections Period (2030)	30
1.8	An Alternative Fiscal Scenario, 2015–2030	32
2.1	Expenditure on Social Insurance and Social Assistance, 2010–2015	55
2.2	Identified Gaps in Meeting the Sustainable Development Goals’ Social Protection Agenda	59
2.3	Key Policies to Close Gaps in Meeting the Sustainable Development Goals’ Social Protection Agenda	64
2.4	Three Cost Scenarios for Closing the Sustainable Development Goal Expenditure Gap	66
3.1	Summary of Main Public Social Protection Schemes	75
3.2	Social Protection Provision, Gaps, and Options	82
3.3	Policy Options to Close Demand-Side Social Protection Gaps in Myanmar	85
4.1	Summary of Main Public Social Protection Schemes, 2015	106
4.2	Social Protection Gaps and Strategies	113
4.3	Summary of Adapted Model Social Transfer Options	120
5.1	Estimated Costs of Closing the Income and Sustainable Development Goal-Related Gaps	153

6.1	Selected Health Financing Indicators in 16 Focus Countries, Latest Available Year	172
6.2	World Health Organization-Recommended Service Coverage Indicators, Latest Available Year	176
6.3	Estimation of the Resource Requirements to Close the Health Protection Gaps in Selected Asian Countries, 2015	181
7.1	Scope of Statutory Coverage by Statutory Schemes in Sample Countries	192
7.2	Old-Age Pension Beneficiaries as Percentage of Population over Statutory Pensionable Age	193
7.3	Old-Age Pensions—Key Features of Main Extension Programs and Estimates of Legal Coverage	195
7.4	Employment Injury—Key Features of Main Programs and Estimates of Legal Coverage	199
7.5	Share of Wage and Salary Earners in Total Employment, 2015	201
7.6	Estimates of Social Insurance Coverage Gaps, 2015 or Latest Available	202
7.7	Assumed Increase in Social Insurance Coverage and Estimated Poverty Reduction Effects of Expanding Share of Employment Covered by Social Insurance and by Extending Coverage by Contributory Pensions through 2030	206

## Figures

1.1	Total Estimated Cost of Closing the Social Protection Gap by 2030	18
1.2	Projected Composition by Country of Sustainable Development Goal-Related Social Protection Requirements for 2030	20
1.3	Estimated Trends in Resource Requirements to Close the Social Protection Gap, 2015–2030	22
1.4	Total Estimated Cost of Closing the Social Protection Gap by 2030, 15 Countries	25
3.1	Social Assistance Spending, Selected Asian Countries, 2013	77
3.2	Spending on Education and Health	83
3.3	Social Assistance Spending, Selected Asian Countries, 2030	90
3.4	Government Revenue as Percentage of Gross Domestic Product 2009–2013, Selected East and Southeast Asian Countries	95
3.5	Tax Revenues and Gross Domestic Product per Capita, Selected Southeast Asian Countries, 2014	95
4.1	Public Expenditure on Social Assistance, Education, Health, and Infrastructure, as a Share of Non-Oil Gross Domestic Product, 2005–2015	107
4.2	Poverty Headcount and Gap, by National and International Poverty Lines	108

4.3	Composition of Social Protection Additional Required Resources by Type, Three Estimates, 2030	121
5.1	Poverty Trends Based on National Poverty Lines	135
5.2	Monetary versus Multidimensional Poverty, Latest Years	136
5.3	Contribution of Dimensions to Multidimensional Poverty, Latest Years	137
5.4	Stunting Disparities for Children Under-5, Latest Years	138
5.5	Coverage of the Population and of the Poor with Social Assistance	142
5.6	Distribution of Cash Transfers to the Poor	143
5.7	Share of Benefits in Total Household Consumption of the Poor	144
5.8	Poverty Reduction Effect	145
5.9	Pension Coverage	147
5.10	Expected Demographic Trends	149
6.1	The Universal Health Coverage Cube	169
6.2	Selected Health Financing Indicators in the 16 Focus Countries, Latest Available Year	173
6.3	Total Health Expenditure as a Share of Gross Domestic Product, 2014	177
7.1	Estimated Reduction of Poverty Due to Extension of Social Insurance Coverage to All Employees, 16 Asian Countries, 2015–2030	205

### Boxes

1.1	Output and Outcome Targets	14
1.2	Assumptions	15
2.1	A Combination of Two Benefits to Tackle Poverty	62
3.1	Better Poverty Data to Inform Program Design Options in Myanmar	86
7.1	Fiscal Space and Social Protection	191



# Foreword

In the last few years, many developing member countries (DMCs) of the Asian Development Bank (ADB) have expanded their social protection programs, helping to improve the well-being of the poor and vulnerable in Asia, and to lower the numbers of those living in extreme poverty and of the socially excluded. From 2009 to 2015, Asian countries increased their social protection expenditure from 3.4% to 4.2% of gross domestic product.

Yet despite these gains, many DMCs still face considerable challenges, particularly in creating the sustainable financing needed for their social welfare programs. Such financing is the bedrock for the success of the social protection agendas of both the United Nations Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development, and of ADB's Strategy 2030.

The analysis of the fiscal requirements to achieve social protection systems is the focus of this publication. The work finds that most Asian countries will have to build well-functioning, targeted social assistance programs into their main policy pillars to achieve the social protection agenda of the SDGs. A few countries can afford universal coverage of social programs. Either way, governments must start to act with greater vigor.

As policy makers in Asia continue to refine and expand their social protection programs, this publication—via its detailed analysis of the social protection activities of 16 focus countries—offers a small contribution and base for them to strengthen their financial and fiscal administration over the next decade. It also urges development partners to focus their support on countries in greatest need for upgrading the design and management of their social protection programs.



**Woochong Um**

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The idea for this book came during the writing of the ADB publication, *Social Protection for Informal Workers in Asia*, where preliminary financial analysis was conducted for several countries in Asia. This was followed by a meeting in Seoul, Republic of Korea, held with the ADB Institute in February 2017. Government representatives from 16 countries, consultants, development partners from the International Labour Organization and the Organisation for Economic Co-operation and Development, and academe shared their views on the individual papers.

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# Abbreviations

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
CMP	Child Money Program (Mongolia)
DMC	developing member country
EU	European Union
GDP	gross domestic product
ILO	International Labour Organization
IMF	International Monetary Fund
Lao PDR	Lao People's Democratic Republic
MOE	Ministry of Education
MOSWRR	Ministry of Social Welfare, Relief and Resettlement (Myanmar)
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OOP	out of pocket
PPP	purchasing power parity
PRC	People's Republic of China
SAII	Subsídio de Apoio a Idosos e Invalidos (Allowance for the Elderly and Persons with Disabilities)
SDG	Sustainable Development Goal
SHP	social health protection
SISCA	Serviço Integrado de Saúde Comunitária (Integrated Community Health Services)
SSL	Social Security Law (Myanmar)
SSMCS	Social Security Medical Care Scheme (Myanmar)
UHC	universal health coverage
UN	United Nations
WFP	World Food Programme
WHO	World Health Organization

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# Overview

*Sri Wening Handayani and Michael Cichon*

## Social Protection and Sustainable Development Goals

In September 2015, the United Nations (UN) summit adopted a new set of global markers for development—the Sustainable Development Goals (SDGs)—to be achieved by the end of 2030. These goals set out to complete unfinished business of the Millennium Development Goals.

The SDGs have an explicit social protection agenda which consists of a subset of the 17 goals and 169 targets (UN 2015; Appendix 1). Analysis of the fiscal requirements to achieve that agenda—or to close the “social protection gap”—is the focus of this work. But can Asia’s lagging countries close that gap by 2030? “Yes, if ....” seems to be the right response—cautiously optimistic provided that these countries pursue certain avenues, adapted to their own conditions, societal demands, and fiscal capacity.

This publication aims to support the developing member countries of the Asian Development Bank (ADB) in prioritizing its investments in social protection, particularly in financial and fiscal administration over the next decade and a half. It will help DMCs to focus on improving the design and management of social protection schemes—and even entire national social protection systems, or the design of new transfer schemes—on countries in greatest need of expanding social protection systems. It will also help ADB and other development partners provide support to DMCs. Such support will range from planning and management assistance, capacity building for fiscal and general governance of social protection schemes, to temporary financial support for urgently needed income security and health security programs.

In addition, this work aims to generate knowledge and offer analysis that will support the DMCs in adhering to the social protection agenda, in what is hoped is a small—but significant—step to improving social protection in Asia.

The analytical underpinnings of this study are grounded in four dimensions of the comprehensive social protection agenda of the SDGs—the provision of cash

transfers for income security, health services, education services, and other essential goods and services. Twenty-seven targets of 11 SDGs define those four dimensions.

Social protection systems are here defined as combined cash transfer and goods and service delivery schemes aiming to guarantee income security and access to essential health care. Income security is considered achieved if all residents have access to essential goods and services. However, social protection can only be truly complete when transfers and infrastructure complement each other so that all people actually have access to essential goods and services of adequate quality.

Meeting the SDGs will inevitably require action and investments in laws and regulations, and administrative structures, by ADB's DMCs. Detailed cost estimates and fiscal space analyses for full compliance with the SDG requirements should be undertaken in each country soon to set medium- to long-term financial plans.

## The Assessment

ADB commissioned a pilot study in late 2015 (Cichon 2016), partly to show the need for medium- and long-term budgetary planning in its DMCs. The study developed a methodology (Appendix 2), which provided an outline of these expected fiscal requirements in a sample of 10 Asian countries. It found that complying with the social protection agenda by 2030 would present heavy fiscal challenges for most of the 10 Asian countries, but also judged them generally manageable.

This study extends the pilot study to 16 countries—Azerbaijan, Cambodia, India, Indonesia, Kazakhstan, the Lao People's Democratic Republic (Lao PDR), Malaysia, Mongolia, Myanmar, Nepal, the People's Republic of China (PRC), the Philippines, Sri Lanka, Thailand, Timor-Leste, and Viet Nam—which together account for 86% of the total population of DMCs in Asia. It also explores the possible options to mobilize new public resources for social protection; analyzes the possible contributions of different types of social protection systems (i.e., means-tested social assistance schemes, universal transfer schemes, and social insurance schemes) to close social protection gaps; and tests the theoretical findings in three country case studies.

In refining that study and extending it to 16 Asian countries, this publication finds largely similar results. Of our 16 focus countries, seven have more than

one-fifth of their population living below their national poverty line. Some 9% (330 million) of the population of Asia and the Pacific lives in extreme poverty.

## The Report

Based on the general analysis of Chapter 1, three country cases (Chapters 2–4) were chosen to represent, to the extent possible, the large range of social development challenges faced by countries in the region. Mongolia represents a case where the transition to a democratic system began about 25 years ago and where the adherence to the social protection agenda of the SDGs is expected to cause only slight “fiscal stress” (see Chapter 1). Myanmar is at the beginning of a political, economic, and social transition process and the expected fiscal stress caused by pursuing a comprehensive social protection agenda is expected to be substantial but manageable by good social governance. Timor-Leste represents a case with major governance challenges. The state and nation-building process is just about 15 years old, and the country faces dire fiscal stress and the enormous economic challenges.

Chapters 5–7 explore options to close the affiliated gaps in population coverage and in adequacy of protection, reviewing the potential contributions of three systems: social assistance, health care, and social insurance systems (notably pensions and other social insurance cash benefit programs).

## Results

In a nutshell, if the 16 focus countries introduce (or expand) social protection to meet the SDG targets by 2030, they will be well on the way to achieving the 11 goals and 27 targets. Such investments in social protection are also expected to raise economic growth rates, based on historical evidence.

Extrapolating recent fiscal trends, a “static” scenario to 2030 to close the social protection gap suggests that only four of the 16 countries will face major fiscal challenges (Cambodia, Myanmar, the Lao PDR, and Timor-Leste), on a lower (less onerous) expenditure estimate. Six countries will have to open up new fiscal space (India, Indonesia, Kazakhstan, Nepal, the Philippines, and Sri Lanka) to meet the lower estimate requirements.<sup>1</sup> Another six countries should be able to meet the agenda without major effort, with their estimated

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<sup>1</sup> The definition of lower and upper cost estimates can be found in Chapter 1, page 7.

fiscal deficit after closure of the social protection gap being probably lower than 5% of gross domestic product (GDP): Azerbaijan, Malaysia, Mongolia, the PRC, Thailand, and Viet Nam.

## Social Assistance

Of the 16 focus countries, seven have more than one-fifth of their population living below their national poverty line. Some 9% (330 million) of the population of Asia and the Pacific lives in extreme poverty.

To combat poverty, tax-financed means-tested social assistance or tax-financed universal income transfers in cash or in kind are the most important social protection tools. Yet the coverage of all forms of transfers to the poorest population quintiles among these 16 countries is far from complete in most.<sup>2</sup> Coverage of cash transfers is generally far lower.<sup>3</sup> This means that large shares of the poor are still excluded from social assistance. Overall, transfers cover about one-fifth of the amount needed to eradicate extreme poverty. Social assistance and universal benefit transfers represent as little as 5% of average household consumption of the poorest quintile in the focus countries (Azerbaijan and Mongolia aside). Unsurprisingly, the poverty reduction effect of many social assistance programs is minimal, even tokenistic.

## Health Care

Use of health-care services exposes families to financial risks. The SDGs refer to achieving universal health coverage (UHC)—all people receiving high-quality, essential health-care services they need without being exposed to financial hardship—which requires good service coverage and financial risk protection. The poor particularly are vulnerable to financial risks. The World Health Organization recommends reducing out-of-pocket (OOP) spending to 20% of total health expenditure to reduce the risk of impoverishment from catastrophic health spending. In the 16 focus countries, 14 have OOP spending of more than 30%. OOP spending is regressive and can potentially push people (more deeply) into poverty.

<sup>2</sup> Coverage rates by all forms of transfers in cash or in kind in the bottom quintile exceed 85% in Azerbaijan, Indonesia, Malaysia, Mongolia, and Thailand, but only 40%–50% of the poorest quintile are social assistance beneficiaries in Kazakhstan, Nepal, and Sri Lanka.

<sup>3</sup> In Kazakhstan, Nepal, and Thailand, for example, less than 5% of the population in the poorest quintile receives any form of cash transfers.

Countries need to shift OOP to prepayment either by expanding the level of public spending or by pooling funds in a national health insurance system. Countries' options include expanding their fiscal space for health, strategic purchasing, and stronger regulations.

## Social Insurance

Social insurance schemes are primarily designed to protect formal sector workers, and their dependents, during and after their economically active life. The main contingencies covered are sickness, maternity, unemployment, invalidity, loss of the breadwinner's income, and old age. In countries with high levels of informality in the labor market, coverage is often particularly low. As a central indicator of coverage, the International Labour Organization (ILO) estimates that only 26.5% of Asia's working-age population contributes to any social insurance pension scheme. On our estimates for the sample countries, only the pension schemes in Azerbaijan, Kazakhstan, Malaysia, Mongolia, the PRC, and Viet Nam reach more than half of employees, and in the Philippines, Sri Lanka, and Thailand, about half.

These rates are, of course, an indicator of entitlement to future coverage. Present coverage (the share of retired people receiving a social insurance pension) is also low: above 60% in Mongolia, and 30%–60% in Azerbaijan and the PRC.

## Closing Financing Gaps

Reality checks in three country case studies—Mongolia, Myanmar, and Timor-Leste—show that these societies should be able to adapt their social protection systems to facilitate often difficult economic and social transitions, even with tight budgetary purse strings. Their main challenge may well be setting up and running a coherent system rather than securing necessary resources.

While a few countries may have to make difficult choices between social protection priorities, most countries can at least theoretically achieve the SDG agenda according to the lower estimate without having to make trade-offs among different social protection investments. Except for Cambodia, the Lao PDR, Myanmar, and Timor-Leste, the often painful choices between investments in social cash transfers, education, health, and other essential goods and services can probably be avoided and a well-balanced set can be financed.

Six countries will have to open up new fiscal space (India, Indonesia, Kazakhstan, Nepal, the Philippines, and Sri Lanka) to meet the lower estimate requirements. In all save Nepal, bringing up their revenues to the regional average will likely abolish their fiscal stress.

Another six countries should be able to meet the agenda without major effort, i.e., their overall deficit will probably be lower than 5% of GDP even after they introduce new transfers: Azerbaijan, Malaysia, Mongolia, the PRC, Thailand, and Viet Nam. Lifting the revenue–GDP ratio to the regional average will virtually abolish fiscal stress in Malaysia and Thailand.

Finally, almost all countries can use existing fiscal instruments to increase their revenues without dramatically increasing their tax rates or introducing new taxes. Only the first four countries (Azerbaijan, Malaysia, Mongolia, and the PRC) might have to increase their tax rates to meet the resource requirements of the lower estimate.

A “dynamic” scenario also offers an upbeat interpretation. It assumes that, after a certain time lag, the formal employment rate and tax revenues increase once basic investments in social protection are made, largely stemming from gains in health status, nutritional status, and educational outcomes and, in turn, workforce productivity. Under that assumption, the predicted fiscal deficit—after the SDG-related social protection gap is closed—falls considerably relative to the static scenario. Even after a quite short period, investments in social protection begin to pay off and the systems start to pay for themselves, hence the net fiscal burden of social transfers gradually falls. By inverse logic, this demonstrates that *not* investing in social protection could have severe long-term opportunity costs.

The overall assessment of the resource requirements in the various chapters makes it obvious that—for the time being—the majority of countries in Asia will have to make a well-functioning, preferably non-means-tested social assistance scheme one of the major policy pillars when trying to achieve the social protection agenda of the SDGs. A few other countries can afford a more universal approach to social protection. Either way, governments have to take action, starting soon.

They need, for example, to revamp policy and open new fiscal space. Governments will need to be involved in drafting and executing new laws and regulations (or revising current ones) and in building new administrative setups (or again, upgrading present ones). And, as these measures will have budgetary consequences, they should now start undertaking detailed cost estimates and fiscal space analysis. Most major social protection policy changes require

budgetary investment in implementing new (or extending current) benefit systems, likewise demanding financial resources be mobilized or reallocated, which in turn requires, beyond long-term fiscal planning, sound financial governance.

## Fiscal Action

Public resources for social protection have to be increased in all countries and that means, most likely, government revenues will have to be increased. While most of these hikes appear bearable by all international and regional standards, the financial, logistical, and conceptual planning for extending social protection and essential goods and services has to start now if countries want to achieve the social protection agenda of the SDGs by end of 2030.

Table O.1 summarizes the findings on the fiscal stress that countries will face if they set out to achieve the social protection agenda of the SDGs. Fiscal action is most urgently required by Cambodia, the Lao PDR, Myanmar, and Timor-Leste.

Essential sources of revenue mobilization for the countries in the study are, in rough descending order, increasing the tax effort (including, for some countries, raising tax rates), reallocating energy subsidies, and reallocating natural resource taxes. In particular, Myanmar, Nepal, the Philippines, and Thailand could generate considerable revenues from stricter tax enforcement. Potential revenues from increased tax effort and reallocation of energy subsidies alone could close the resource gap of the lower estimates in 12 of 15 countries (excluding Timor-Leste).<sup>4</sup>

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<sup>4</sup> The ADB and Asian Development Bank Institute Learning Program on *Financing Social Protection for Sustainable Development Goals* held in Seoul, Republic of Korea, on 15-16 February 2017 discussed stopping illicit financial flows, taxing remittances of migrants, or reallocating existing government revenues to social protection, the latter including reducing social protection expenditures for civil servants. Some of these options will be administratively difficult to implement, others politically challenging. Cutting waste in public spending, and occasional temporary borrowing (only for financing programs' start-up costs, not regular benefit payments) received general support.

**Table O.1: Assessment of Likely Fiscal Stress Invoked by the Social Protection Agenda of the Sustainable Development Goals**

Countries without any or with low expected fiscal stress	Countries with manageable expected fiscal stress	Countries with major expected fiscal stress
= relative stress < 10%	= relative stress between 10% and 20%	= relative stress > 20%
PRC	Azerbaijan	Cambodia
India	Malaysia	Lao PDR
Indonesia	Mongolia	Myanmar
Kazakhstan	Nepal	Timor-Leste
Philippines	Viet Nam	
Sri Lanka		
Thailand		

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: The underlying calculations include the assumption that countries whose tax-gross domestic product (GDP) ratio is presently below the regional average of 21.5% of GDP (i.e., Cambodia, India, Indonesia, Kazakhstan, the Lao PDR, Malaysia, Nepal, the Philippines, Sri Lanka, Timor-Leste, and Thailand) increase their ratios to the regional level before the additional fiscal demands of closing the Sustainable Development Goal-related social protection gap are calculated.

Source: Authors' calculations.

## Recommendations

The message is simple: the 16 governments can take these measures, if they want to achieve the social protection agenda of the SDGs. All of them can, with effort, afford to do so. But none can afford *not* to do so.

A four-point to-do list for governments, development partners, and civil society emerges from this publication:

- Immediately start long-term fiscal and financial planning for implementing the social protection agenda of the SDGs;
- Create national policy dialogues on the shape of national social protection systems;
- Start national social protection reviews and budgeting processes, as well as public expenditure and revenue reviews, immediately; and
- Create the capacity for sound national social protection planning, administration, and financial and fiscal management.



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# The Social Protection Agenda of the Sustainable Development Goals and Its Fiscal Challenge

*Michael Cichon*

This chapter sets the quantitative stage for the following chapters. It presents the general order of magnitude of the fiscal requirements that selected developing member countries (DMCs) of the Asian Development Bank (ADB) will face when they seek to meet the social protection-related targets of the Sustainable Development Goals (SDGs). In doing so, it estimates the financial cost of closing the SDG-related social protection gap. It also provides background for the analyses in the following chapters, which explore how additional resources for closing national social protection gaps in Asia can be mobilized and how specific social protection subprograms—such as social assistance, social insurance, and health care—can help close these gaps.

It first discusses what we mean by the “social protection agenda” of the SDGs, then develops a budgeting methodology to estimate the resource requirements and the affiliated potential fiscal challenges that the agenda presents. It applies it to a sample of 16 of ADB’s DMCs,<sup>5</sup> which have around 86% of the population of all DMCs. The chapter concludes that the challenges will be substantial, but manageable, in most of the 16 DMCs.

Four countries will face major fiscal challenges if they want to adhere to the social protection agenda of the SDGs: Cambodia, the Lao People’s Democratic Republic (Lao PDR), Myanmar, and Timor-Leste. They will probably have to make hard choices and prioritize their social protection measures. Timor-Leste will face the biggest challenge and will probably remain dependent on some form of support from development partners for some time to come.

Six DMCs may have to open up new fiscal space—India, Indonesia, Kazakhstan, Nepal, the Philippines, and Sri Lanka—to meet the requirements of a rather

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<sup>5</sup> Azerbaijan, Cambodia, India, Indonesia, Kazakhstan, the Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, the People’s Republic of China (PRC), the Philippines, Sri Lanka, Thailand, Timor-Leste, and Viet Nam.

modest but complete social protection system. They will probably have to bring their revenues up to the regional average to close the social protection gap.

Another six DMCs—Azerbaijan, Malaysia, Mongolia, the People’s Republic of China (PRC), Thailand, and Viet Nam—should be able to meet the social protection agenda of the SDGs without major effort, i.e., their overall deficit will likely be lower than 5% of gross domestic product (GDP) even after they have introduced the necessary new transfers (in cash or in kind).

Seven of the sample countries—India, Indonesia, Kazakhstan, the Philippines, the PRC, Sri Lanka, and Thailand—may well have the fiscal space to introduce even higher levels of social protection, i.e., universal benefits for children and the elderly and self-targeted benefits for the unemployed, if they can maintain their present level of revenue or can increase it to the current regional average.

In short, 15 of the 16 DMCs will no doubt be able to make substantial progress by 2030 toward achieving the social protection targets set by the SDGs. Of those 15 DMCs, 12 will probably be able to complete the entire social protection agenda of the SDGs, provided that they mobilize additional resources, starting soon.

## The Social Protection Agenda of the Sustainable Development Goals

Drawing on, but going beyond the definitions of social protection of ADB and the International Labour Organization (ILO) in Annex 1.1 to fit the agenda of the SDGs, we focus on four dimensions of social protection (Table 1.1). We analyze which components of the new SDGs have a direct relationship to social protection and which together make up the *social protection agenda of the SDGs*. Among the 17 SDGs, 11 have a direct link to social protection systems—in other words, national social protection systems can help to achieve 11 out of 17 SDGs. Twenty-seven of these social protection-related targets belonging to these 11 goals have a link to social protection (Annex 1.2): 14 are *output targets* and 13 *outcome targets* (Box 1.1; and see Appendix 1).

Some of the output targets are difficult to quantify and have negligible financial consequence or are included in other targets. Due to the financial weights of the required output action, the study will focus on targets where adherence has direct, non-negligible, and quantifiable financial repercussions. These “costed” targets are grouped into four major categories (Table 1.1).

**Table 1.1: Four Major Categories of Social Protection System**

Category	Sustainable Development Goal Targets
Social cash transfers	<p><b>Target 1.3</b>—Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.</p> <p><b>Target 8.5</b>—By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.</p>
Health care	<p><b>Target 3.8</b>—Achieve universal health coverage, including financial risk protection; access to quality essential health-care services; and access to safe, effective, quality and affordable essential medicines and vaccines for all.</p>
Education	<p><b>Target 4.1</b>—By 2030, ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes.</p> <p><b>Target 4.2</b>—By 2030, ensure that all girls and boys have access to quality early childhood development, care, and preprimary education so that they are ready for primary education.</p>
Other essential services	<p><b>Target 6.1</b>—By 2030, achieve universal and equitable access to safe and affordable drinking water for all.</p> <p><b>Target 6.2</b>—By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.</p> <p><b>Target 7.1</b>—By 2030, ensure universal access to affordable, reliable, and modern energy services.</p> <p><b>Target 11.1</b>—By 2030, ensure access for all to adequate, safe, and affordable housing and basic services and upgrade slums.</p>

Source: Author.

## Methodology

The general objective of this methodology (explained in detail in Appendix 2 and summarized in the rest of this section) is to estimate the government resources that are required to close the gaps in the SDG-related social protection targets through 2030. The costings also implicitly answer the question to what extent and at what cost social protection systems can theoretically contribute to achieving the targets of the SDGs.

The methodology is an abbreviated social budget methodology that essentially undertakes deterministic scenario projections. “Cost” or “resource requirement” estimates are provided for 2015–2030 and anchored on long-term economic and demographic scenarios. Some of the costings had to resort to innovative estimation protocols since the databases were not complete in some of the countries and data were rarely available in the required disaggregation.<sup>6</sup> Detailed quantitative assumptions (with the results per country of the model calculations) are in the country tables in Appendix 3.

### Basic Modeling Principle

The estimates of the national resources needed to close the SDG-related social expenditure gaps are anchored on demographic, economic, and budget scenarios built for the projection period through 2030, with 2015 the first year of the projection period. The objective here is to create a structural mapping of “normal” economic, fiscal, and labor market performance after the global financial crisis. That mapping does not rely on the singular economic performance of the last observation year (2014) but rather on “average” behavior and developments since the end of the financial crisis (2010). The only dynamized parameter is demographic development.

All actuarial and budget models for social protection, such as the ILO’s actuarial and social budget models as well as the World Bank’s PROST model, that seek to undertake long-term projections of social protection benefit expenditure and public revenues follow a similar modeling philosophy (Cichon, Hagemeyer, and Scholz 2001; Scholz, Cichon, and Hagemeyer 2000; World Bank 2010). The European Commission (EU 2015) uses similar static approaches to assess the impact of aging on social expenditure.

When interpreting our modeling results, one should not lose sight of the fact that these are the results of sufficiently detailed but relatively simple deterministic social-budgeting exercises. They are thus the result of one reasonable scenario in a continuum of possible scenarios of the behavior of people, governments, and economies through 2030.

On this conceptual basis, the expected additional public resource requirements to close the social protection gap are estimated. Keeping labor market

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<sup>6</sup> The financial analyses developed a robust analytical response to data imperfections and policy uncertainties similar to those developed for an ADB background paper on financing social protection in Asia. See M. Cichon and D. Cichon. 2016.

### Box 1.1: Output and Outcome Targets

**Output targets** demand a concrete form of action. Such targets are, for example, the implementation of “nationally appropriate social protection systems” (target 1.3) or the achievement of universal health coverage (target 3.8). Output targets require—by their nature—specific government action. That action can help to achieve a number of outcome targets. These output targets are the concrete mechanisms linking action to outcomes that were missing in the formulation of Millennium Development Goal targets and indicators.

**Outcome targets** describe desired states of social affairs at the end of the Sustainable Development Goal period, i.e., by 2030. Such targets are, for example, the eradication of poverty (target 1.1) or hunger (target 2.1) by 2030. The achievement of these targets can be brought about by a variety of different means.

The impact matrix in Annex 1.2 lists the principal relationship between the 14 output targets and the 13 outcome targets. It shows that each output target impacts on a number of outcome targets and each outcome target is affected by more than one output target. It can safely be assumed that, if all 14 output targets were met, then automatically all 13 outcome targets listed in the matrix will be achieved.

Source: Author.

participation, formal employment rates, productivity, and revenue–GDP ratios constant ensures rather conservative assumptions on the whole (Box 1.2).

### Calculating Resource Requirements

The methodology to calculate the resource requirements generally proceeds in two steps. In step 1, the resource requirement for the year 2030 as the end point of the projection period (from 2015 to 2030) is estimated. By definition, the resource requirement is equivalent to the additional government expenditure that is required to fill the respective protection gap plus the administrative costs that are incurred for the operation of the schemes that are designed to close the protection gap. It is assumed that the closure of the protection gaps, as indicated by resource requirements, will proceed gradually until 2030. By 2030, the “stationary state,” i.e., a state of affairs when full closure of the protection gap is achieved, will be reached.

## Box 1.2: Assumptions

**Demographic scenarios:** The size and structure of the population of the countries in the sample are assumed to develop in line with the medium variant of the United Nations population projections.

**Economic and labor market scenarios:** Real gross domestic product (GDP) growth for 2015 is calculated as the geometric mean of the “post crisis” growth rates from 2010 to 2014 and then kept constant throughout the projection period. The same principle applies to the GDP deflator, price inflation, and productivity (GDP per employed person) during the projection period. Assuming GDP growth rates and productivity rates render unemployment rates a dependent variable. In some cases, growth and productivity rates have to be corrected downward to avoid that the model returns negative unemployment. Wage inflation is calculated as productivity plus inflation. Minimum wages are adjusted in line with general wage inflation.

**Labor market scenarios:** Labor force participation are derived from International Labour Organization (ILO) data for the latest available year before 2015. The rates are kept constant during the projection period. Likewise, the proportion of informal employment at total employment (using ILO data on “vulnerable employment”) is kept constant throughout the projection period.

**Poverty:** The national poverty lines are established for 2015 and then adjusted in line with the rate of change of GDP per capita to avoid the “disappearance” of poverty due to the non-adjustment of national poverty lines to the general progression of living standards. Poverty headcounts are reduced or increased by changes in projected formal employment. This is a pragmatic simulation of a key “trickle-down” effect of economic growth.

**Fiscal scenarios:** General government revenue and expenditure (measured as shares of GDP) are calculated on the basis of Asian Development Bank time series data for 1990 to 2014. The starting value for 2015 is forecast by a linear regression. The values are then kept constant (in % of GDP) throughout the projection period. Alternative scenarios about the growth of revenues and expenditure are possible (and are undertaken in one sensitivity test), but the scenario chosen here appeared to be the most conservative.

**Sensitivity tests:** All the static assumptions made above can be released to test the sensitivity of the model to assume variations of labor market behavior, fiscal policy, or economic developments, among other things. Sensitivity analyses are

**Box 1.2** *continued*

normally used to test the robustness of the model results and are, to some extent, a substitute for the modeling of the stochastic behavior of key model parameters. Two such scenario analyses are undertaken in the section “Two Sensitivity Tests” in Figure 1.3.

Source: Author.

We estimate the fiscal impact of two alternative options to close the social protection gaps. For social transfer targets<sup>7</sup> we establish:

- a *lower estimate* for resource requirements that assumes the filling of the protection gaps through a perfectly targeted social assistance scheme and
- an *upper estimate* that assumes the filling of the gap through universal transfers to children and elderly and an employment guarantee scheme for the population in active age.

In step 2, the projected gradual increase of the required resources between the starting point in 2015 (when the required resources are zero as no new transfer scheme is in operation yet) and the maturation point in 2030 (when the full resource gap is filled through full operational schemes) is modeled for indicative purposes. The model used is an abbreviated social budgeting methodology to illustrate a possible progression of the new additional financial requirements triggered by adherence to the SDGs. This methodology uses an assumed standard maturation function that describes the maturation patterns of social protection benefit schemes.

The trends in the additional resources required to gradually fill the total resource gap through 2030 are displayed as a sequence of additionally required annual government social expenditures expressed as a percentage of GDP. Modeling the possible progression throughout the maturation phase over 2015–2030 simply serves to demonstrate that the fiscal burden does not hit governments all at once, but will probably slowly increase during the first third of the projection period, then likely pick up speed during the middle third of the period and gradually approach the stationary state in the last third of the period. The progression's

<sup>7</sup> Targets 1.3, 3.8, and the public works component of Target 8.5 (Appendix 3).



possible shape is illustrative only and should not be overinterpreted as accurate projection results. However, assuming a pattern of the cost progression from zero to the stationary state allows one to make a technical estimate of average resource requirements throughout the 15 years.

The estimated expenditure–GDP ratios also indicate the *maximum* increase in the tax–GDP ratio that countries would have to implement if they want to hit the social protection-related SDG targets. Governments could probably cut the size of the tax increases by reallocating present public expenditures between other government spending and social protection.

## Results

The following sections describe the projected size of the resource gap in 2030 and its composition, as well as a possible development of the (maximum) fiscal burden over the next one and a half decades. The final section offers some fiscal space analysis and puts the size of the fiscal challenges into a time and international perspective. Detailed results per country of the model calculations are in Appendix 3.

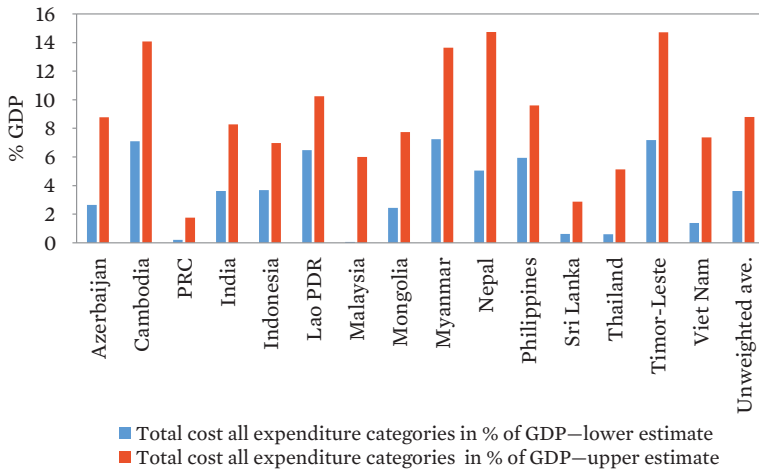
### Projected Sustainable Development Goal Resource Requirements in the Stationary State: For Most Countries, a Low-Cost Approach Is Well Within Reach

Figure 1.1 shows the resource requirements of the social protection agenda of the SDGs—the cost to close the protection gaps—as projected for 2030 as a percentage of GDP. The difference between the unweighted averages of the lower and upper estimates is 5% of GDP (i.e., 8.5% of GDP versus 3.5% of GDP).<sup>8</sup> This indicates that, for the majority of countries at least, a low-cost approach to closing the protection gap of the SDG social protection agenda is well within reach.

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<sup>8</sup> This difference is exclusively due to the different assumptions concerning national cash social protection programs. The lower estimates are based on the assumption that the social protection cash transfer gaps (which—as defined here—constitute a component part of the entirety of the social protection agenda for the SDGs) are “filled” by means-tested social assistance benefits. The upper estimates assume that the social protection gaps will be closed by universal or self-targeted tax-financed benefits (such as universal child grants, employment guarantee schemes, and universal pensions).

**Figure 1.1: Total Estimated Cost of Closing the Social Protection Gap by 2030 (% of GDP)**



GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's projections.

The results of the lower and the upper estimates also show considerable challenges for some countries, while others seem to face additional, bearable resource requirements. Cambodia, the Lao PDR, Myanmar, and Timor-Leste will most likely face resource requirements of 6.0%–7.5% of GDP in the lower estimate. In the upper estimate, the requirement would reach a probably prohibitive 10%–15% for these countries plus Nepal. Eleven countries will face additional requirements of below 5% to 5.5% of GDP in the lower estimate. In the upper estimate, the resource requirements for 11 countries are expected to lie below 10% of GDP.

While some countries will have to pursue a low-cost strategy (the lower estimate), others (such as Kazakhstan, Malaysia, the PRC, Sri Lanka, and Thailand) could opt to close the protection gap by at least some higher cost–benefit systems (the upper estimate).

Table 1.2 disaggregates the resource requirements for the ultimate SDG-related resource requirements (in 2030) into the four main dimensions of social protection: cash transfers, education, health, and other essential services.

**Table 1.2: Projected 16-Country Composition of Sustainable Development Goal-Related Social Protection Requirements for 2030**  
(% of total gap)

	Education	Other Essential Services	Health Care	Social Protection Cash Transfers	Total (% of GDP)
Lower estimate	38.5	2.2	34.0	25.3	3.5
Upper estimate	15.6	0.9	13.8	69.6	8.5

GDP = gross domestic product.

Note: Simple average for 16 countries.

Source: Author's calculations.

In the lower estimate, the education gap has the biggest share, followed by health care and social protection cash transfers. The gap on this last dimension is only about 1% of GDP (Appendix 3, Table A3.17), indicating the affordability of basic social protection transfers in most countries. The low share of other essential services is essentially because some countries had no data on current spending (including Indonesia, Kazakhstan, the Lao PDR, Myanmar, and Viet Nam) and so no realistic long-term projections were possible. If countries were to opt for a low-cost strategy, almost three-quarters of the overall resource requirement would come from current gaps in education and health care.

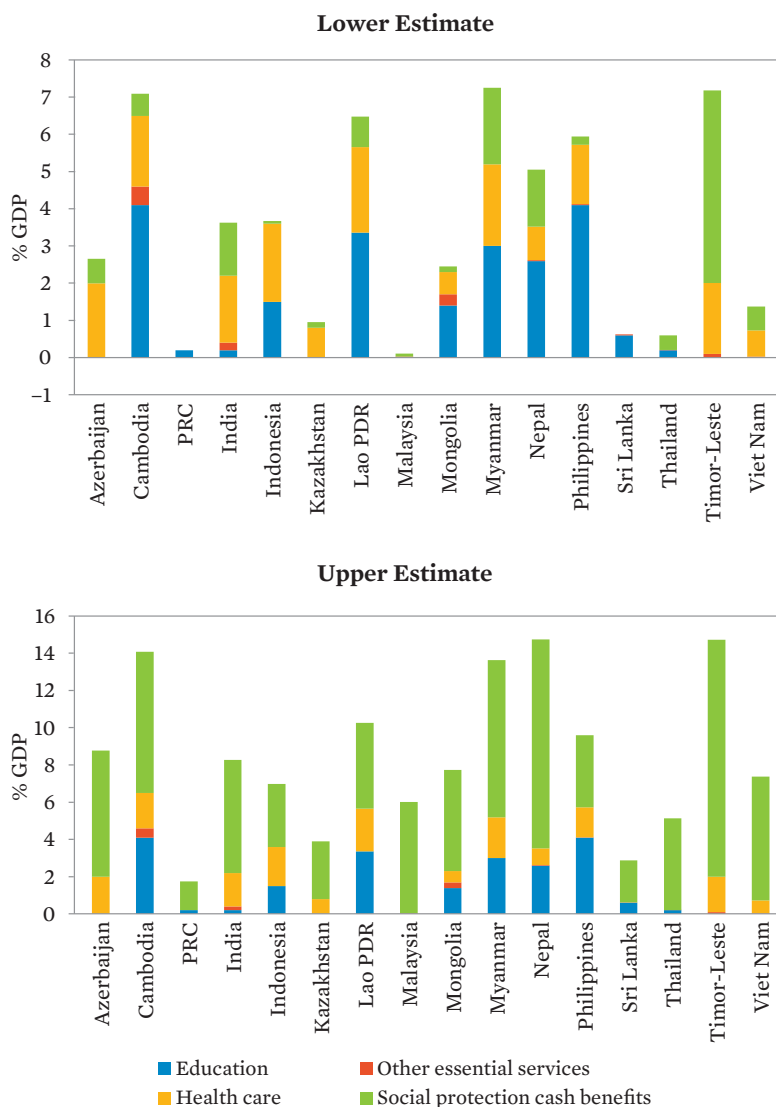
In the upper estimate, the picture switches. Due to costly universal social protection benefits, social protection cash transfers dominate the overall resource gap and account for more than two-thirds of expected total resources in the stationary state, followed by education and health.

Figure 1.2 shows considerable variation across countries in the four dimensions of the overall resource requirements. While in the lower estimate, Cambodia, the Lao PDR, Myanmar, and the Philippines have education gaps of more than 3% of GDP; Azerbaijan, India, Indonesia, Kazakhstan, Malaysia, Mongolia, the PRC, Sri Lanka, Thailand, Timor-Leste, and Viet Nam have virtually no (or very small) gaps of under 1.5% of GDP. Again in the lower estimate, Azerbaijan, Cambodia, Indonesia, Kazakhstan, Malaysia, Mongolia, the Philippines, Sri Lanka, Thailand, and Viet Nam show virtually no (or very small) social protection gaps (under 0.6% of GDP). All countries except Indonesia, the Lao PDR, and Myanmar have health gaps under 2% of GDP in the lower estimate.

In the upper estimate, social transfer gaps appear in all countries but show a wide variation, from 1.5% of GDP in the PRC and 12.7% in Timor-Leste. The category

**Figure 1.2: Projected Composition by Country of Sustainable Development Goal-Related Social Protection Requirements for 2030**

(% of total gap)



GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's calculations.

“other essential social services” shows a relatively small variance at a low overall level between and 0 and 0.5% of GDP in both variants. However, the estimates for other essential services are more uncertain than the other categories as this database subset is notoriously weak in the international databases.

The variation of the results in the gap structure and their general data-related uncertainties show—as expected—that internationally comparable projections can deliver first indications of the size of the fiscal challenges for individual countries, but cannot replace detailed national studies of future financial requirements and infrastructure investments.

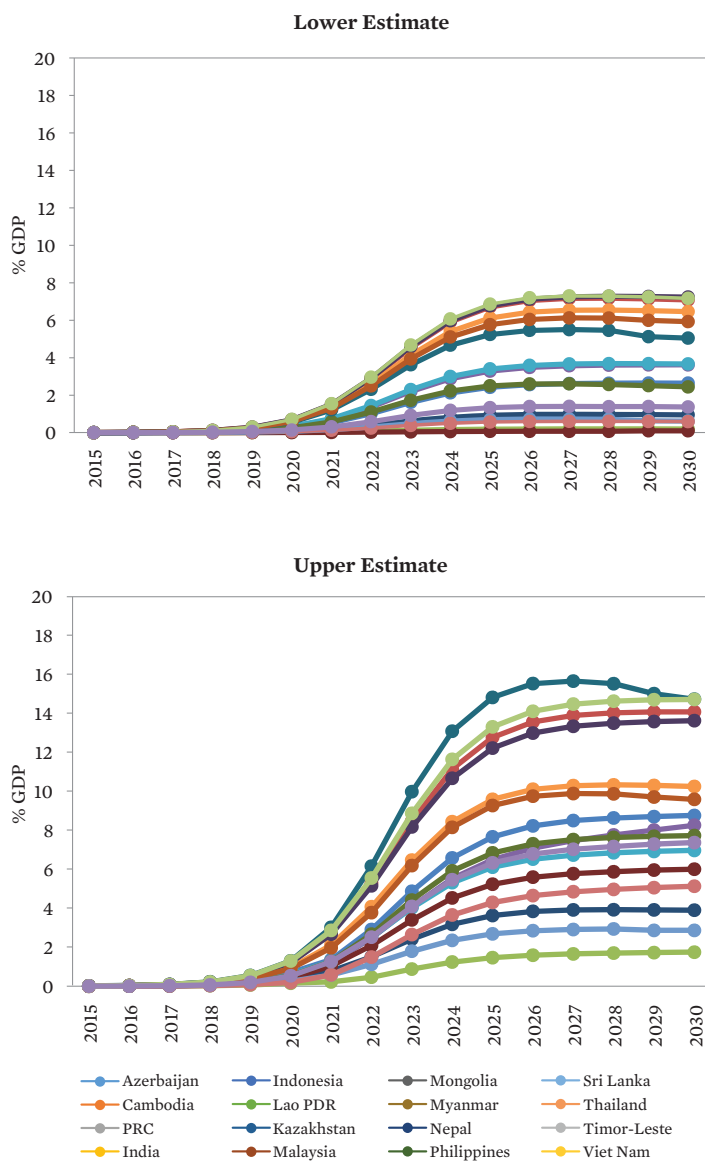
### Possible Trends in Resource Requirements in the Projection Period

No government investment reaches its stationary state immediately, as no public social policy measure will be able to reach out to the total population at once, nor will the benefit system reach its full benefit level immediately. All expenditure related to government social policy investments will mature *gradually*, partly to head off fiscal stress (see below) at the end of the period.

How fast that is depends partly on the quality of government administration, the size and sequence of budgetary allocations, and the time it takes to reach out to remote or difficult-to-reach population groups. Infrastructure investments cannot be made overnight—a decade might easily lapse between the initial planning of a new hospital, school, road, or water delivery network and full operation. In similar vein, from the start of the planning of a new social benefit until it reaches all potential beneficiaries in all regions may well require a decade or more (based on international experience).

Figure 1.3 illustrates possible trends in the national resources needed to close the SDG-related social protection gaps in 2015–2030, but the expenditure curves are only indicative as the underlying maturation patterns have been chosen arbitrarily. The purpose of these assumptions is to show that governments will not face sudden, steep extra expenditure—spending will gradually build up, giving breathing space to governments to plan and execute their fiscal measures, whether new or restructured. For the sake of argument, it is assumed that of full stationary state expenditure, 20% is reached in year 7; 40% in year 8; 60% in year 9; and 80% in year 10 (two-thirds of the projection period). After year 10, expenditure gradually approaches maturity-level expenditure in 2030. (More details on the methodology are provided in Appendix 2.)

**Figure 1.3: Estimated Trends in Resource Requirements to Close the Social Protection Gap, 2015–2030**  
(% of projected GDP)



GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's calculations.

The resource requirement trends can be condensed into one central indicator—the ratio of the sum of the present value of all projected expenditure during the projection period and the sum of the present value of all projected future GDPs during the projection period (see Appendix 2). This indicator can be interpreted as the average resource requirement in 2015–2030.

A further interpretation of the indicator is that, if a government increased its tax–GDP ratio by the lower or upper estimate figure in Table 1.3—or freed the equivalent resources from its present expenditure portfolio on a constant basis throughout the projection period—the entire additional expected expenditure could probably be financed by the calculated average shares of GDP throughout the projection period.

**Table 1.3: Estimated Long-Term Average Resource Requirement to Close the Social Protection–Sustainable Development Goal Gap, 2015–2030**  
(% of projected GDP)

Country	Lower Estimate	Upper Estimate
Azerbaijan	1.4	4.4
Cambodia	4.4	8.6
PRC	0.1	1.0
India	2.0	4.1
Indonesia	2.2	4.0
Kazakhstan	0.5	2.1
Lao PDR	4.1	6.5
Malaysia	0.0	3.4
Mongolia	1.6	4.5
Myanmar	4.6	8.5
Nepal	3.0	8.5
Philippines	3.5	5.6
Sri Lanka	0.4	1.7
Thailand	0.3	2.5
Timor-Leste	4.4	8.6
Viet Nam	0.8	4.0
Simple average, upper estimate	2.1	4.9

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's calculations.

The level of the average resource requirements is much lower than the final expenditure in the stationary state. The indicator implicitly embodies an ideal state of governance. It indicates that—if governments were undertaking proper long-term financial planning, and were to increase their resources for social protection immediately at the start of the planning period in anticipation of future expenditure, and built reserves or reduced present deficits—the new fiscal burden could probably be kept at the average level indicated in Table 1.3. In turn, this would mean that the expected level of new fiscal burdens or the necessary reallocations could be kept much more manageable relative to the fiscal stress that governments would face at the end of the projection period.

These generalizations again show the limitations of a study that is based on internationally accessible data and that cannot enter into detailed country analysis. Before the actual financial planning in a country can begin, the state of the national infrastructure, the quality and capacity of the national benefit and service delivery administrations, the national capacity to collect taxes, and the function of existing social transfer schemes have to be studied in detail. This requires national studies, which must largely be based on national “legwork.”

Still, the above indicators allow a quick assessment of the overall long-term resource requirements and a quick comparison of the costs of alternative policy options.

## A Fiscal Space Analysis

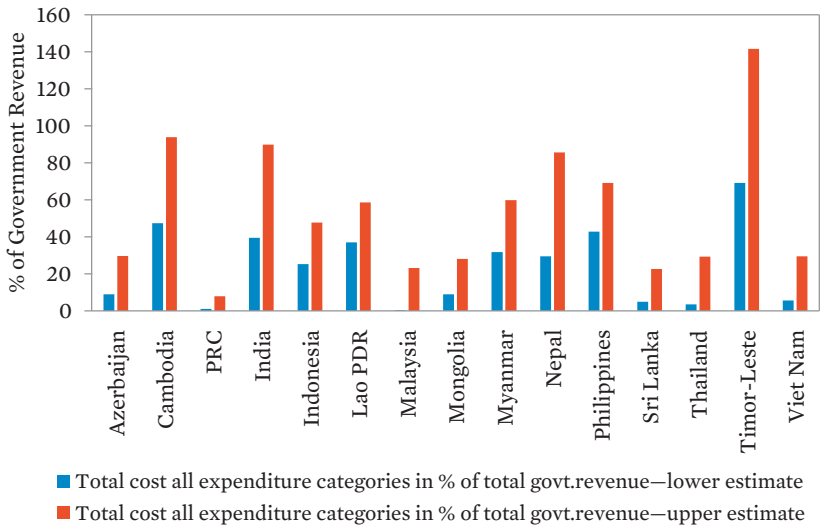
Translating the total resource requirements for closing the SDG-related social protection gap into hypothetical shares of government revenues at the stationary state, Figure 1.4 illustrates the potential size of the fiscal challenge facing the 16 countries.

Even in the lower estimate, complying with the SDG targets by 2030 would probably require vast additional revenue mobilization or a major reshuffling of existing expenditure, or both, in the majority of countries. The upper estimate presents an even more stark picture.

The results appear sobering at first sight but are, to some extent, a consequence of the upshot of the conservative assumptions made for future government revenue projections—that is, the modeling exercise projects the revenue–GDP ratio for 2015 by extending the trend for 1990 to 2014 by 1 year and then *keeps the ratio constant through 2030*. This is obviously a very prudent static exercise which



**Figure 1.4: Total Estimated Cost of Closing the Social Protection Gap by 2030, 15 Countries**  
(% of government revenue)



Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's calculations.

does not take into account the more dynamic revenue development in some countries throughout the previous decades. In reality, ratios may well increase, either by governments creating new sources of revenues, by increasing the rates of existing taxes, or by improving tax collection.

Some countries at least may well be able to increase their revenues. Table 1.4 demonstrates how the level of government revenues increased or decreased in the sample countries in 2005–2014 and compares these changes with the additional resource requirement in the lower and upper estimates. Even if one assumes that the complete resource requirements in the lower estimates have to be met by additional resources (i.e., reshuffling existing resources would not be possible), it appears that 10 of the 16 countries may be able to accommodate the additional resource requirements of at least the lower estimate.

Cambodia and Mongolia may still face additional resource requirements of around 2% of GDP. They could meet these either by maintaining the speed of

**Table 1.4: Earlier Revenue Increase and Projected Additional Resource Requirements to Close the Social Protection Gap, 16 Countries**  
(% GDP)

Country	Total Government Revenue in % of GDP 2005	Total Government Revenue in % of GDP 2014	Increase (or Decrease) in % Points of GDP 2005–2014	Percentage Point Increase of Government Revenues Required to Meet the SDG Targets— <i>Lower Estimate</i> 2015–2030	Percentage Point Increase of Government Revenues Required to Meet the SDG Targets— <i>Upper Estimate</i> 2015–2030
Azerbaijan	16.3	31.2	14.9	2.6	8.8
Cambodia	10.6	15.6	5.0	7.1	14.1
PRC	17.1	22.1	5.0	0.2	1.7
India <sup>a</sup>	9.7	9.3	-0.4	3.6	8.3
Indonesia <sup>a</sup>	17.8	14.7	-3.1	3.7	7.0
Kazakhstan	27.6	13.9	-13.7	1.0	3.9
Lao PDR <sup>a</sup>	11.7	18.3	6.6	6.5	10.3
Malaysia	19.6	19.9	0.3	0.1	6.0
Mongolia	27.4	27.8	0.4	2.5	7.7
Myanmar	14.2	28.5	14.3	7.2	13.6
Nepal	11.9	18.3	6.4	5.1	14.7
Philippines	14.4	15.1	0.7	5.9	9.6
Sri Lanka <sup>a</sup>	15.5	12.3	-3.2	0.6	2.9
Thailand	17.3	17.5	0.2	0.6	5.1
Timor-Leste <sup>b</sup>	22.3	10.4	-11.9	7.2	14.7
Viet Nam <sup>a</sup>	25.7	21.8	3.9	1.4	7.4
<b>Simple average</b>			<b>5.6</b>	<b>3.5</b>	<b>8.5</b>

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China, SDG = Sustainable Development Goal.

<sup>a</sup> Assuming that the trend can be reversed.

<sup>b</sup> Value for 2010 and estimated for 2014, assuming that the negative trend can be reversed.

Sources: ADB (2015) and author's calculations.

revenue increase seen in 2005–2014 or by returning to the 2005 revenue–GDP ratio. (Cambodia's government revenue is very low.) Myanmar's revenue already increased in 2005–2014 by 14.3 percentage points of GDP, reaching 28.5% of GDP. It seems impossible that the additional resource requirement of 7.2% of GDP could be met by further revenue increases, even if the country seems set to enter

a boom phase. The Philippines would have to make further substantial efforts to increase its revenue–GDP ratio, but it seems to have some fiscal space as there is no apparent reason why its ratio should be so much lower than those in Malaysia, Thailand, and Viet Nam. The same holds true for India to a lesser extent, with its particularly low level of government revenue. In the upper estimate, considerable resource gaps would remain in at least five of the 16 countries.

The table has already hinted at a fundamental problem—very low revenue–GDP ratios in some countries. If the revenues of all countries with revenue below the average revenue–GDP ratio of all ADB’s developing member countries (21.5% in 2014) increased to that average, the SDG-related resource gaps could be largely closed, as shown in Tables 1.5 and 1.6, which give the results of that exercise. The tables compare the effect of the alternative increased revenue scenarios with that of the standard estimates which largely kept the historical revenue levels constant. (Its assumed revenue ratios are those assumed for the modeling exercise and are not identical to those used for Table 1.4.)

The lower estimate (Table 1.5) shows that, except for Cambodia, the Lao PDR, Mongolia, and Myanmar, countries would expect to see deficits of around or below 5% of GDP, or no deficit at all by 2030. If the average revenue–GDP ratio could be increased by about 3 percentage points (the average in all countries except Myanmar with a positive increase in the revenue–GDP ratio over 2005–2014), the deficit in 10 of the 16 countries would almost disappear.

In the upper estimate (Table 1.6), the expected long-term deficits appear prohibitive in eight of the 16 countries. Little would change if average revenues could be lifted by the average increase over the last decade (3 percentage points of GDP). Timor-Leste remains atypical, as its revenue base seems to have collapsed in recent years (Chapter 4).

How much fiscal stress would the scenarios developed here cause for the 16 sample countries? Table 1.7 elucidates. “Absolute” fiscal stress indicates the extent to which projected government expenditure are expected to exceed projected “normal” (average) regional level of revenue or the national level (if the latter is higher than the normal level). The first two columns of Table 1.7 are thus identical with the last columns in Tables 2.5 and 2.6, indicating the absolute fiscal stress under the lower and upper estimates. “Relative” fiscal stress is the ratio of absolute fiscal stress to expected average or normal levels of revenue. (The two indicators are defined in detail in Appendix 2.)

**Table 1.5: Projected Government Surpluses/Deficits under Alternative Revenue Assumptions, Lower Estimate for 2030**

Country	Project Government Finances in 2030 without Closure of the SDG Gap (Status Quo) LOWER Estimate			Project Government Finances in 2030 after Closure of SDG Gap LOWER Estimate			Project Government Finances if Revenues Were to Be Increased to 21.5% of GDP (Average ADB Developing Member Countries in Asia) if Lower under Status Quo		
	Government Revenue in % of GDP	Government Expenditure in % of GDP	Deficit/Surplus in % of GDP	Government Revenue in % of GDP	Government Expenditure in % of GDP	Deficit/Surplus in % of GDP	Government Revenue in % of GDP	Government Expenditure in % of GDP	Deficit/Surplus in % of GDP
Azerbaijan	29.6	31.9	-2.3	29.6	34.5	-4.9	29.6	34.5	-4.9
Cambodia	15.0	20.9	-5.9	15.0	28.0	-13.0	21.5	28.0	-6.5
PRC	22.4	23.5	-1.1	22.4	23.7	-1.3	22.4	23.7	-1.3
India	9.2	13.8	-4.6	9.2	17.4	-8.2	21.5	17.4	4.1
Indonesia	14.6	16.6	-2.0	14.6	20.3	-5.7	21.5	20.3	1.2
Kazakhstan	14.0	19.7	-5.7	14.0	20.7	-6.7	21.5	20.7	0.8
Lao PDR	17.5	25.2	-7.7	17.5	31.7	-14.2	21.5	31.7	-10.2
Malaysia	19.6	24.2	-4.6	19.6	24.3	-4.7	21.5	24.3	-2.8
Mongolia	27.6	28.2	-0.6	27.6	30.7	-3.1	27.6	30.7	-3.1
Myanmar	22.8	27.5	-4.7	22.8	34.7	-11.9	22.8	34.7	-11.9
Nepal	17.2	18.5	-1.6	17.2	23.9	-6.7	21.5	23.9	-2.4
Philippines	13.9	15.6	-1.7	13.9	21.5	-7.6	21.5	21.5	0.0
Sri Lanka	12.7	19.3	-6.6	12.7	19.9	-7.2	21.5	19.9	1.6
Thailand	17.5	20.5	-3.0	17.5	21.1	-3.6	21.5	21.1	0.4
Timor-Leste	10.4	44.3	-33.9	10.4	51.5	-41.1	21.5	51.5	-30.0
Viet Nam	25.1	27.6	-2.5	25.1	29.0	-3.9	25.1	29.0	-3.9

ADB = Asian Development Bank, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China, SDG = Sustainable Development Goal.

Sources: ADB Key Indicators for Asia and the Pacific, table RT 8.3, author's calculations.

**Table 1.6: Projected Government Surpluses/Deficits under Alternative Revenue Assumptions, Upper Estimate for 2030**

Country	Project Government Finances in 2030 without Closure of the SDG Gap (Status Quo)				Project Government Finances in 2030 after Closure of SDG Gap LOWER Estimate				Project Government Finances if Revenues Were to Be Increased to 21.5% of GDP (Average ADB Developing Member Countries in Asia) if Lower under Status Quo					
	Government Expenditure in % of GDP		Deficit/Surplus in % of GDP		Government Expenditure in % of GDP		Deficit/Surplus in % of GDP		Government Revenue in % of GDP		Government Expenditure in % of GDP		Deficit/Surplus in % of GDP	
	Government Revenue in % of GDP	Government Expenditure in % of GDP	Deficit/Surplus in % of GDP	Deficit/Surplus in % of GDP	Government Revenue in % of GDP	Government Expenditure in % of GDP	Deficit/Surplus in % of GDP	Deficit/Surplus in % of GDP	Government Revenue in % of GDP	Government Expenditure in % of GDP	Government Revenue in % of GDP	Government Expenditure in % of GDP	Deficit/Surplus in % of GDP	Deficit/Surplus in % of GDP
Azerbaijan	29.6	31.9	-2.3	-2.3	29.6	40.7	40.7	-11.1	29.6	40.7	29.6	40.7	-11.1	-11.1
Cambodia	15.0	20.9	-5.9	-5.9	15.0	35.0	35.0	-20.0	21.5	35.0	21.5	35.0	-13.5	-13.5
PRC	22.4	23.5	-1.1	-1.1	22.4	25.2	25.2	-2.8	22.4	25.2	22.4	25.2	-2.8	-2.8
India	9.2	13.8	-4.6	-4.6	9.2	22.1	22.1	-12.9	21.5	22.1	21.5	22.1	-0.6	-0.6
Indonesia	14.6	16.6	-2.0	-2.0	14.6	23.6	23.6	-9.0	21.5	23.6	21.5	23.6	-2.1	-2.1
Kazakhstan	14.0	19.7	-5.7	-5.7	14.0	23.6	23.6	-9.6	21.5	23.6	21.5	23.6	-2.1	-2.1
Lao PDR	17.5	25.2	-7.7	-7.7	17.5	35.5	35.5	-18.0	21.5	35.5	21.5	35.5	-14.0	-14.0
Malaysia	19.6	24.2	-4.6	-4.6	19.6	30.2	30.2	-10.6	21.5	30.2	21.5	30.2	-8.7	-8.7
Mongolia	27.6	28.2	-0.6	-0.6	27.6	35.9	35.9	-8.3	27.6	35.9	27.6	35.9	-8.3	-8.3
Myanmar	22.8	27.5	-4.7	-4.7	22.8	41.1	41.1	-18.3	22.8	41.1	22.8	41.1	-18.3	-18.3
Nepal	17.2	18.5	-1.6	-1.6	17.2	33.5	33.5	-16.3	21.5	33.5	21.5	33.5	-12.0	-12.0
Philippines	13.9	15.6	-1.7	-1.7	13.9	25.2	25.2	-11.3	21.5	25.2	21.5	25.2	-3.7	-3.7
Sri Lanka	12.7	19.3	-6.6	-6.6	12.7	22.2	22.2	-9.5	21.5	22.2	21.5	22.2	-0.7	-0.7
Thailand	17.5	20.5	-3.0	-3.0	17.5	25.6	25.6	-8.1	21.5	25.6	21.5	25.6	-4.1	-4.1
Timor-Leste	10.4	44.3	-33.9	-33.9	10.4	59.0	59.0	-48.6	21.5	59.0	21.5	59.0	-37.5	-37.5
Viet Nam	25.1	27.6	-2.5	-2.5	25.1	35.0	35.0	-9.9	25.1	35.0	25.1	35.0	-9.9	-9.9

ADB = Asian Development Bank, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China, SDG = Sustainable Development Goal.

Sources: ADB Key Indicators for Asia and the Pacific, table RT 8.3, author's calculations.

**Table 1.7: Central Indicators of Expected Fiscal Stress after Closing the Social Protection Gap at the End of the Projections Period (2030)**

Country	Absolute Fiscal Stress (Deficit After Closure of Gap in % of GDP)— <i>Lower Estimate</i>	Absolute Fiscal Stress (Deficit After Closure of Gap in % of GDP)— <i>Upper Estimate</i>	Relative Fiscal Stress <sup>a</sup> (Percentage-Point Increase of “Normal” Government Revenues Required to Meet the SDG Targets)— <i>Lower Estimate</i>	Relative Fiscal Stress (Percentage-Point Increase of “Normal” Government Revenues Required to Meet the SDG Targets)— <i>Upper Estimate</i>
Azerbaijan	-4.9	-11.1	16.7	37.4
Cambodia	-6.5	-13.5	30.2	62.7
PRC	-1.3	-2.8	5.8	12.7
India	4.1	-0.6	(19.0)	2.6
Indonesia	1.2	-2.1	(5.7)	9.6
Kazakhstan	0.8	-2.1	(3.9)	9.8
Lao PDR	-10.2	-14.0	47.3	64.9
Malaysia	-2.8	-8.7	13.0	40.5
Mongolia	-3.1	-8.3	11.1	30.2
Myanmar	-11.9	-18.3	52.4	80.4
Nepal	-2.4	-12.0	10.9	56.0
Philippines	0.0	-3.7	0.2	17.2
Sri Lanka	1.6	-0.7	(7.3)	3.1
Thailand	0.4	-4.1	(1.9)	19.2
Timor-Leste	-30.0	-37.5	139.4	174.5
Viet Nam	-3.9	-9.9	15.4	39.3

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China, SDG = Sustainable Development Goal.

<sup>a</sup> Figures in parentheses indicate the contrary of fiscal stress, i.e., theoretical space for further expenditures.

Source: Author's calculations.

On the lower estimate, if we assume that relative fiscal stress of about 15%–20% is bearable in 2030, the expected fiscal stress in 12 of 16 countries would be manageable. On the upper estimate, only seven of 16 countries (India, Indonesia, Kazakhstan, the Philippines, the PRC, Sri Lanka, and Thailand) are expected to

have manageable fiscal pressure. It is implicitly assumed that six out of these seven countries would in any case increase their revenues to the “normal” average for the region.

## Two Sensitivity Tests

All the earlier scenarios are static exercises that assume that economic performance and government finances will change little to 2030. This is obviously a major drawback as economics—as most walks of life—is rarely considerate enough to follow static assumptions. Governments respond to deficits and to changing political demands, and economic performance reacts to investments in infrastructure and people. The following two sensitivity tests release some of the critical static assumptions.

### Test One: Assuming Linear Increases of Government Revenues during the Projection Period

The first alternative scenario assumes that, independently of economic growth, governments continue to increase their revenues as they did on average in 1990–2014,<sup>9</sup> while their expenditure stays constant at the 2015 share of GDP. For countries where the model predicts falling revenue and expenditure, it is assumed that 2015 is a turning point in fiscal development, and the expenditure and revenue increase again at the same average pace as they decreased during the observation period 1990–2014.

This sensitivity test confirms that even under long-term more dynamic revenue assumptions, three (Cambodia, the Lao PDR, and Timor-Leste) of the four countries facing major financing challenges (relative fiscal stress of over 20% in the lower estimate) under the basic scenario will also face major challenges in the sensitivity test scenario. Table 1.8 shows the result of the exercise. It compares the predicted government deficits of the base scenario before and after close of the social protection gaps (as already shown in Tables 1.5 and 1.6) with the estimated fiscal balances (after the closure of the gaps) under the sensitivity test. The resulting deficits in most countries are reduced sharply due to the modeled revenue increase. In the lower estimate, the number of countries that could face a deficit of over 3% of GDP in the lower estimate drops from 14 to eight, and in the upper estimate from 15 to 13. The results of this sensitivity test confirm

<sup>9</sup> The projected alternative revenue figures (in % of GDP) are the result of an extended ordinary least squares regression on the basis of revenue trends in 1990–2014.

Table 1.8: An Alternative Fiscal Scenario, 2015–2030

Country	Base Scenario with Static Revenue Assumptions		Sensitivity Test with Dynamic Revenue Assumptions	Base Scenario with Static Revenue Assumptions		Sensitivity Test with Dynamic Revenue Assumptions
	Deficit/Surplus in % of GDP Before Gap Closure	Deficit/Surplus in % of GDP After Gap Closure	Deficit/Surplus in % of GDP After Gap Closure	Deficit/Surplus in % of GDP Before Gap Closure	Deficit/Surplus in % of GDP After Gap Closure	Deficit/Surplus in % of GDP After Gap Closure
Azerbaijan	-2.3	-4.9	1.4	-2.3	-11.1	-4.7
Cambodia	-5.9	-13.0	-6.8	-5.9	-20.0	-13.8
PRC	-1.1	-1.3	5.1	-1.1	-2.8	-3.6
India	-4.6	-8.2	-7.5	-4.6	-12.9	-12.1
Indonesia	-2.0	-5.7	-3.4	-2.0	-9.0	-6.7
Kazakhstan	-5.7	-6.7	0.9	-5.7	-9.6	-2.1
Lao PDR	-7.7	-14.2	-9.3	-7.7	-18.0	-13.1
Malaysia	-4.6	-4.7	-2.8	-4.6	-10.6	-8.7
Mongolia	-0.6	-3.1	2.9	-0.6	-8.3	-2.3
Myanmar	-4.7	-11.9	-0.5	-4.7	-18.3	-6.9
Nepal	-1.6	-6.7	-1.0	-1.6	-16.3	-10.7
Philippines	-1.7	-7.6	-5.7	-1.7	-11.3	-9.3
Sri Lanka	-6.6	-7.2	-4.1	-6.6	-9.5	-6.3
Thailand	-3.0	-3.6	-3.3	-3.0	-8.1	-7.8
Timor-Leste	-33.9	-41.1	-35.9	-33.9	-48.6	-43.5
Viet Nam	-2.5	-3.9	0.3	-2.5	-9.9	-5.7

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's calculations.

that the modeling procedure and result are relatively robust when identifying countries that will face major financing challenges.

## Test Two: Demonstrating the Potential Returns of Investment in Social Protection

The second sensitivity test incorporates an alternative economic scenario in our base model. It assumes that in response to new, heavy government investment to close the SDG-related social protection gap, economic performance will improve



in future. That appears reasonable since the investment will be feeding into higher productivity and greater formal sector employment. Social expenditure will therefore change—relative to the base model—through reduced poverty among other factors.

Because the elasticity of economic growth and fiscal balances to this new investment is unknown and cannot be calculated, a simple simulation exercise should suffice here to demonstrate the potential effects of this increased investment.

We take the country with the biggest projected fiscal stress after the SDG-related gap is closed—Myanmar—as an example. (Atypical Timor-Leste is excluded.) We assume that the social investment will mainly pay off in the form of increases in formal employment through better health care, improved food security through social protection, better education, and improved water and sanitation.

Let us assume that with a time lag of 10 years Myanmar's formal employment rate increases each year by 4%,<sup>10</sup> reaching 16% instead of the conservatively assumed 12% in the status quo model. We also assume that the tax base, and hence government revenue, will increase by half that rate (2% a year) relative to the status quo level.

The reasoning behind this implicit elasticity assumption is that only part of government revenue will be affected by increased formalization—Myanmar's revenue from state-owned enterprises in particular is unlikely to be affected as these are assumed to already have a formalized workforce. Revenue from state-owned enterprises accounts for about 50% of government revenue. All other types of resources are assumed to be lifted by greater formal employment. The likely positive effect on the economic growth rate is ignored as the assumed growth rate (of 8.4% a year) is already very high by any standard.

Under these assumptions after Myanmar closes the social protection gap, the predicted deficit in the lower estimate drops from 11.9% to 9.1%. The relative fiscal stress falls from 52% to about 35%. The latter rate is still not perfect, but indicates that part of the investment in social protection could begin to pay for itself already by the end of the projection period.

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<sup>10</sup> This corresponds to the observed rate of increase of the share of nonformal employment in Thailand in 1990–2000, when the country went through a rapid formalization process after introducing formal social security.

Similar reductions of fiscal stress can be expected for all other countries. This country scenario also demonstrates that not investing in social protection can have severe long-term opportunity costs for poverty, general welfare, and long-run economic growth. The size of that effect merits much greater in-depth research.

## Conclusions

The results of the analysis can be summarized as follows. For the lower estimate, it can be tentatively concluded that<sup>11</sup>

- Four countries (Cambodia, the Lao PDR, Myanmar, and Timor-Leste) in our 16-country sample will face major fiscal challenges if they want to adhere to the social protection agenda of the SDGs. They will no doubt have to make hard choices and prioritize their social protection measure. Timor-Leste will face the biggest challenge and probably remain dependent on some form of official development assistance for some time. Cambodia could opt for introducing the social protection cash transfers and close its health protection gap, and largely finance that by increasing the revenue–GDP ratio to the regional average. This last measure will likely not be enough for the Lao PDR and Myanmar, which will also have to choose which social protection measure to prioritize.
- Other countries may have to make some effort to open new fiscal space, including India, Indonesia, Kazakhstan, Nepal, the Philippines, and Sri Lanka, to meet the lower-estimate requirements. They would all abolish their fiscal stress if they brought up their revenue–GDP ratio to the regional average (Nepal aside, where relative fiscal stress would still be around 11%).
- Six countries should be able to meet the social protection agenda of the SDGs without major effort, i.e., their overall deficit would be lower than 5% of GDP even after they introduced essential new benefits in cash or in kind. These countries are Azerbaijan, Malaysia, Mongolia, the PRC, Thailand, and Viet Nam. Lifting the revenue–GDP ratio to the regional average would virtually abolish fiscal stress in Malaysia and Thailand.
- Four countries—Azerbaijan, Mongolia, the PRC, and Viet Nam—would probably need no major additional resources to secure at least a basic

<sup>11</sup> As only a handful of countries are in any position to achieve the upper estimate (see above), that is not discussed here.

level of social protection. They would likely achieve that level if they increased the deficit somewhat and reallocated existing resources.

- Seven countries seem to have the fiscal space to introduce even higher social protection, such as universal benefits for children and the elderly, and self-targeted benefits for the unemployed, if they can maintain their present revenue–GDP ratio or can increase it to the present regional average. These countries are India, Indonesia, Kazakhstan, the Philippines, the PRC, Sri Lanka, and Thailand.

These are, on the whole, good results. In short, 15 of the 16 countries will likely, by their own means, make substantial progress by 2030 toward the SDG-related social protection targets. (One will no doubt need some official development assistance.) Twelve of the 15 countries will probably do the same if they take steps to mobilize additional resources. Success boils down to mustering political will and starting the financial and logistical planning as soon as possible.

Other good news is that 12 of the 16 countries should be able to avoid making a hard choice between the four dimensions—social protection cash transfers, education, health, and other essential goods and services—and finance a well-balanced, coherent set of measures encompassing all four of them, though their societies each needs to find a mechanism to achieve a rational balance among the four dimensions.

The four countries lacking, at least foreseeably, the fiscal space to finance this complete agenda will need to make difficult choices between the four dimensions, working through a similar mechanism, in a huge—even daunting—challenge. Annex 1.3 offers some suggestions on how the 16 countries might meet their particular challenges.

The results of this chapter’s scenarios are reasons enough for governments to start planning the finances and designing the benefits. But regardless of how close to reality these or similar estimates turn out to be, without long-term social budgeting the SDG-related social protection gaps are unlikely to close. Real changes in social conditions require premeditated policy changes—and policy changes require long-term budgetary commitment.

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## Annex 1.1: Defining Social Protection

The Operational Plan of the Asian Development Bank (ADB 2013, p. 1) has:

Social protection is the set of policies and programs designed to reduce poverty and vulnerability by promoting labor markets functioning, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption and loss of income. Social protection comprises three major categories: social assistance, social insurance, and labor market programs.

Social protection is justified in the ADB development strategy by, among others, the following statement (ADB 2013, p. 1):

Investment in social protection improves the productive capacity of individuals, thereby contributing to inclusive, equitable, and sustainable economic growth. Social protection is also a useful tool for promoting achievement of the Millennium Development Goals (MDGs) related to poverty, education, and health. Deliberations within Asia and the Pacific on the Post-2015 development framework have highlighted an important role for social protection. Growing regional and global recognition of the importance of social protection was exemplified in the approval of a landmark international labor standard calling for the provision of essential health care and benefits and basic income security.<sup>12</sup>

The definition pragmatically encompasses social insurance schemes, social assistance schemes, and labor market programs. It bases itself on the institutional aggregates of social protection. The justification of social protection clearly links it to compliance with global development goals, i.e., the MDGs and their successors (the Sustainable Development Goals [SDGs]), and the Social Protection Floors Recommendation, 2012 (No. 202) of the International Labour Organization (ILO).<sup>13</sup>

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<sup>12</sup> ILO Recommendation No. 202 of 2012.

<sup>13</sup> According to Recommendation No. 202, national social protection floors should comprise at least the following four social security guarantees: access to a nationally defined set of goods and services, constituting essential health care, including maternity care, that meets the criteria of availability, accessibility, acceptability, and quality; basic income security for children, at least at a nationally defined minimum level, providing access to nutrition, education, care, and any other necessary goods and services; basic income security, at least at a nationally defined minimum level, for persons in active age who are unable to earn sufficient income, in particular in cases of sickness, unemployment, maternity, and disability; and basic income security, at least at a nationally defined minimum level, for older persons.

The definition of basic social protection in this ILO recommendation refers to a basic level of social protection—the social protection “floor”—that should be available to all and upon which higher levels of social security should be built for as many people as possible, as soon as possible (ILO 2012). Given that, at present, 73% of the global population does not have access to comprehensive basic social protection, an SDG social protection agenda should obviously prioritize rolling out comprehensive basic protection to all people.

The term “guarantees” underlines that the focus is on the outcome in terms of social security that can be achieved by different types of benefits and different types of schemes (i.e., social insurance, social assistance, or labor market measures) rather than concrete means or benefits.

However, most importantly, Recommendation No. 202 formulates a protection objective: According to Article 4 of the Recommendation “these guarantees should ensure that all in need have access to essential health care and basic income security which together secure effective access to goods and services defined as necessary at the national level.” This formulation also was a way to canvas the definition of the floor as a combination of income security provided through cash transfers and in-kind transfers and/or in the form of access to essential social services as listed in Articles 11–13 of the International Covenant on Economic, Social and Cultural Rights.

This definition of social protection—while clearly intended in Recommendation No. 202 and also implied in the definition of ADB—is much wider than the definition commonly used. However, it solves an old dilemma: social protection systems mostly provide cash benefits and secure access to services generally only in the case of health care or nursing care services. Cash transfers are meant to enable the recipients to purchase necessary goods and services and hence should implicitly ensure access to essential goods and services that are not provided in kind. What social protection schemes—providing cash benefits only—can never ensure alone is the actual availability of all essential goods and services. Others—generally public institutions—have to ensure that the delivery infrastructure for essential goods and services is available and functioning. Hence, social protection is only really complete and effective when in kind transfer through an adequate delivery infrastructure complement each other in such a way, that all people have de facto access to essential goods and services of adequate quality.



Annex 1.2

Annex 1.2 Table: Impact Matrix of Sustainable Development Goal Social Protection Targets

Output targets	Outcome targets												
	1.1 Eradicate Extreme Poverty (1)	1.2 Reduce Poverty by Half (2)	1.5 Reduce Vulnerability to Climate-Change Events (3)	2.1 End Hunger (4)	2.2 End Malnutrition (5)	3.1 Reduce Maternal Mortality to Below 70 per 100,000 (6)	3.2 Reduce Neonatal Mortality to 12 per 1,000 and Under-5 Mortality to 25 per 1,000 (7)	3.4 Reduce Prematurity from Noncommunicable Diseases (8)	3.7 Ensure Universal Access to Reproductive Health Care (9)	10.1 Sustain Income Growth of the Bottom 40% Higher Than the Average (10)	10.2 Promote Social, Economic, and Political Inclusion and Losses (11)	11.5 Reduce Disaster-Related Deaths to Climate Hazards (12)	13.1 Strengthen Resilience to Climate Hazards (13)
1.3 Implement social protection, including floors (1)	X	X	X	X	X	X	X			X	X	X	X
1.4 Ensure access to basic services (2)	X	X	X	X	X	X	X			X	X		X
3.8 Achieve universal health coverage (3)		X				X	X	X	X				
4.1 Ensure completion of free primary and secondary education (4)	X	X			X								X

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Annex 1.2 Table continued

Output targets		Outcome targets														
		1.1 Eradicate Extreme Poverty Targets (1)	1.2 Reduce Poverty by Half (2)	1.5 Reduce Vulnerability to Climate-Events (3)	2.1 End Hunger (4)	2.2 End Malnutrition (5)	3.1 Reduce Maternal Mortality to Below 70 per 100,000 (6)	3.2 Reduce Neonatal Mortality to 12 per 1,000 and Under-5 Mortality to 25 per 1,000 (7)	3.4 Reduce Prematurity from Mortality from Noncommunicable Diseases (8)	3.7 Ensure Universal Access to Reproductive Health Care (9)	10.1 Sustain Income Growth of the Bottom 40% Higher Than the Average (10)	10.2 Promote Social and Political Inclusion (11)	11.5 Reduce Disaster-Related Deaths and Losses (12)	13.1 Strengthen Resilience to Climate Hazards (13)		
Social Transfer Targets	4.2 Ensure access to primary education (5)	X						X			X					
	4.5 Ensure equal access to education for the vulnerable (6)	X	X			X		X			X		X			X
	5.4 Recognize unpaid care and domestic work (7)									X				X		X
	5.6 Ensure universal access to sexual and reproductive health rights (8)	X	X								X					

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Annex 1.2 Table continued

Output targets		Outcome targets												
		1.1 Eradicate Extreme Poverty (1)	1.2 Reduce Poverty by Half (2)	1.5 Reduce Vulnerability to Climate Change Events (3)	2.1 End Hunger (4)	2.2 End Malnutrition (5)	3.1 Reduce Maternal Mortality to Below 70 per 100,000 (6)	3.2 Reduce Neonatal Mortality to 12 per 1,000 and Under-5 Mortality to 25 per 1,000 (7)	3.4 Reduce Prematurity from Mortality to 3.7 (8)	3.7 Ensure Universal Access to Reproductive Health Care (9)	10.1 Sustain Income Growth of the Bottom 40% Higher Than the Average (10)	10.2 Promote Social, Economic, and Political Inclusion (11)	11.5 Reduce Disaster-Related Deaths and Losses (12)	13.1 Strengthen Resilience to Climate Hazards (13)
Social Transfer Targets	6.1 Achieve universal access to safe drinking water (9)	X	X		X	X					X	X	X	X
	6.2 Achieve access to sanitation for all (10)	X	X			X					X	X	X	X
	7.1 Ensure universal access to modern energy (11)	X	X	X	X						X	X	X	X
8.5 Achieve full employment and decent work (12)		X	X		X	X					X	X	X	X
	10.4 Adopt policies for greater equality (13)	X	X		X	X					X	X	X	X

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Annex 1.2 Table continued

Output targets		Outcome targets													
		1.1 Eradicate Extreme Poverty (1)	1.2 Reduce Poverty by Half (2)	1.5 Reduce Vulnerability to Climate Change Events (3)	2.1 End Hunger (4)	2.2 End Malnutrition (5)	3.1 Reduce Maternal Mortality to Below 70 per 100,000 (6)	3.2 Reduce Neonatal Mortality to 12 per 1,000 and Under-5 Mortality to 25 per 1,000 (7)	3.4 Reduce Prematurity from Mortality from Noncommunicable Diseases (8)	3.7 Universal Access to Reproductive Health Care (9)	10.1 Sustain Income Growth of the Bottom 40% Than the Average (10)	10.2 Promote Social, Economic, and Political Inclusion (11)	11.5 Reduce Disaster-Related Deaths and Losses (12)	13.1 Strengthen Resilience to Climate Hazards (13)	
Social Transfer Targets	11.1 Ensure access to adequate housing (14)	X	X						X						

Source: Author.

## Annex 1.3: Creating Additional Fiscal Space<sup>14</sup>

### Introduction

This annex sets a foundation for estimating the fiscal space<sup>15</sup> needed to meet the social protection agenda of the Sustainable Development Goals (SDGs) for the 16 sample Asian countries by 2030, projecting gradually rising fiscal spending. But what are the sources, fiscal and otherwise?

Taxes generate relatively few resources in low-income countries, which generally have large rural (and informalized) populations and very few high-income individuals. So although progressive direct income taxation is in theory an option, its scope is limited in these countries (Barrientos 2008). The Report of the Advisory Group for the Social Protection Floors (Bachelet 2011), for example, combined its recommendation that the expansion of fiscal space should be based on progressive taxation with one that low-income countries should receive international aid to start collecting the resources for social protection.

In any shift to greater taxation, governments need to consider, in particular, its redistributive scope and impact on economic growth, which present a trade-off between direct and indirect taxation. Indirect taxation has a negative effect on income distribution, but is less counterproductive for economic growth than direct taxation.

Closing the fiscal social protection gap needs more than taxation, but other sources, such as moves by global and regional institutions to lower tax evasion, are constrained by low state capacity and weak international cooperation. An alternative is to reduce energy subsidies, which recently came to \$4.8 trillion worldwide, and to \$2.9 trillion in Asia and the Pacific (Coady et al. 2015).

The 16 countries can reach at least the lower estimates of social protection financing needs. Primarily, a greater tax effort (with some countries reducing energy subsidies) can meet a significant share of agenda financing, but only a few countries should increase tax rates. Natural resources offer some, but limited, scope.

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<sup>14</sup> This annex is a distillation of Villa (2017).

<sup>15</sup> This annex uses “fiscal space” as defined by Heller (2005) to refer to “the availability of budgetary room that allows a government to provide resources.”

Annex 1.3 Table: Social Protection in Sustainable Development Goals Deficit and Proposed Revenues

Country	Social Protection-SDGs Deficit (% of GDP)			New Revenues to Cover Social Protection Financing Gap (% of the GDP)									
	Lower Estimate	Upper Estimate	Natural Resources	Energy Subsidies (Pretax)	Energy Subsidies (Posttax)	VAT Effort	CIT Effort	PIT Effort	Raising VAT	Raising CIT	Raising PIT	Total	
Azerbaijan	2.6	8.77	5.0	3.8	-	-	-	-	-	-	-	8.8	
Cambodia	4.0	14.1	1.0	0.0	0.3	1.8	0.7	0.2	2.1	0.6	0.3	7.0	
PRC	0.2	1.7	1.0	0.1	0.6	-	-	-	-	-	-	1.7	
India	6.6	11.3	1.0	1.7	4.9	0.4	0.5	0.2	-	-	-	8.7	
Indonesia	3.7	7.0	1.0	5.3	-	0.4	0.3	-	-	-	-	7.0	
Kazakhstan	1.0	3.9	3.9	-	-	-	-	-	-	-	-	3.9	
Lao PDR	6.5	10.3	3.0	-	-	1.3	0.3	0.6	1.3	-	-	6.5	
Malaysia	0.1	6.0	1.0	-	-	-	1.9	0.5	-	-	-	3.4	
Mongolia	2.5	7.7	4.0	-	3.0	0.7	-	-	-	-	-	7.7	
Myanmar	7.2	13.6	2.0	0.0	0.6	-	1.8	2.3	0.5	-	-	7.2	
Nepal	5.1	14.7	1.0	-	0.6	1.2	0.2	2.8	-	-	-	5.8	
Philippines	5.9	9.6	-	-	0.9	1.4	2.2	1.3	0.9	-	-	6.6	
Sri Lanka	0.6	2.9	-	0.5	0.6	1.1	0.4	0.1	-	-	-	2.7	
Thailand	0.6	5.1	-	0.3	2.2	2.1	1.4	-	-	-	-	6.0	
Timor-Leste	7.2	14.7	-	-	-	3.1	3.8	1.3	-	-	-	8.2	
Viet Nam	1.4	7.4	1.0	0.7	0.3	0.3	0.3	0.0	-	-	-	2.7	

CIT = corporate income tax, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PIT = personal income tax, PRC = People's Republic of China, SDG = Sustainable Development Goal, VAT = value-added tax.

Source: Author's calculations.

## Final Calculations to Close the Social Protection Gap

These calculations for achieving the social protection agenda of the SDGs consider the following:

- Current conditions, such as macroeconomic context, prices, and institutional capacity, are kept constant.
- Natural resources are considered to contribute with at least 1% of GDP for each 5% of the GDP of natural resource rents.
- Energy subsidies are considered to contribute with total pretax subsidies and 50% of posttax subsidies.
- Countries can make tax efforts to collect at least 50% of forgone taxes from what has been calculated in the shadow economy. The total amount of forgone taxes is estimated to vary in the 16 countries from around 14% of GDP for the People's Republic of China (PRC) and Viet Nam to around 11% for Azerbaijan and Thailand (Schneider et al. 2010, ESCAP 2016). When the lower gap estimates cannot be reached, the tax efforts must lead to 100% tax collection.
- Taxes are fully raised to the maximum proposed level.

Annex 1.3 Table presents the calculations. The first two columns show the lower and upper estimates of additional social protection spending demanded and identified in the chapter. Together, these calculations suggest that all countries can implement strategies to fill the social protection gap of the SDGs. Reduction or cessation of energy subsidies and, for some countries, new revenues from natural resources can provide a generous measure of the financing sources, but tax efforts are essential. Few countries (Azerbaijan, Cambodia, Indonesia, Kazakhstan, and Mongolia) can reach the upper estimate, but all of them can reach the lower estimate even without raising current tax rates.

## How the 16 Countries Can Fill the Social Protection Gap of the Sustainable Development Goals

**Azerbaijan.** The demand for additional resources in this country requires only the taxation of national resources for at least 5% of the GDP and the elimination of pretax energy sources. If this is done, there is no need for increasing existing tax rates. Further tax efforts would allow the country to mobilize additional resources.

**Cambodia.** The country will struggle to mobilize resources to fill the gap, but it is in a position to easily reach the lower estimate of 4.0% of GDP. It should be collecting additional taxes, making tax efforts that account for 2.7% of GDP, and increasing tax revenues for 3% of GDP. Value-added tax (VAT) is the tax contributing most to fill the gap.

**India.** A significant demand for resources leads the country to rely strongly on the reduction of pretax and posttax energy subsidies. Additional tax efforts accounting for 1.1% of GDP are required to at least reach the lower estimate.

**Indonesia.** A large amount of pretax energy subsidies is still due to be reduced. This would allow Indonesia to reach at least the lower estimate of the social protection gap. Additional tax efforts can allow the country to reach the upper estimate.

**Kazakhstan.** As a global oil exporter, the country needs to strengthen its revenues from natural resources to fill the social protection gap.

**Lao People's Democratic Republic.** The country can take advantage of its natural resources to fill 50% of the social protection gap of the SDGs. Further tax efforts are needed to reach the lower estimate, which can facilitate 2.2% of GDP. A VAT is suggested to collect 1.3% of GDP.

**Malaysia.** Natural resource rents and tax effort are needed to reach a middle level between the lower- and upper-level estimates of the social protection gap. In particular, the country will need to focus strongly on corporate income tax as the main source of revenues.

**Mongolia.** The country can mobilize resources to close the upper estimate of social protection gap. Natural resource rents and posttax energy subsidies can facilitate the required resources.

**Myanmar.** The social protection gap indicates a lower estimate of 7.2% of GDP, which can be filled with 2% of GDP from natural resources. Personal and corporate income taxes are also important sources of financing, although the country needs to establish a VAT that collects at least 0.5% of GDP.

**Nepal.** A lower gap estimate can be reached by reducing posttax energy subsidies. A strong tax effort needs to be made to collect at least 4.2% of GDP, while raising VAT can help the country collect an additional 0.5% of GDP.



**People's Republic of China.** The social protection agenda of the PRC for the SDGs demands a lower estimate of only 0.2% of GDP. The PRC can reach even the upper estimate by collecting taxes from natural resources and pretax and posttax energy subsidies. The country is not in need of increasing existing tax rates.

**Philippines.** As a net natural resources importer, the country is suggested to rely on taxes. Posttax subsidy taxes can be reduced to an amount of 3% of GDP. Tax efforts can be made to collect 4.3% of GDP, especially from corporate income tax. The country can also raise VAT to reach and surpass the lower gap estimate.

**Sri Lanka.** A lower estimate can be reached by reducing pretax and posttax energy subsidies. However, other tax resources can be mobilized to reach the upper estimate.

**Thailand.** Pretax and posttax energy subsidies can contribute to mobilize resources up to the lower estimate. Further tax efforts, with a focus on VAT, can help the country reach the upper estimate.

**Timor-Leste.** Although no data on taxes is available, the country can reach the lower estimates by equalizing the tax collection to regional averages.

**Viet Nam.** A lower estimate can be reached with a combination of natural resource rents and a reduction of pretax and posttax energy subsidies. Additional tax efforts can help the country mobilize resources beyond the lower estimate.

# 2

## Mongolia

*Ludovico Carraro*

Since Mongolia started its transition from command to a market economy at the beginning of the 1990s, the country's conditions have changed radically: in 1990–2015, gross domestic product (GDP) at constant prices increased three times and more than doubled in per capita terms, to about \$4,000 (about \$12,000 at purchasing power parity).

The country also made impressive progress on many of the Millennium Development Goals, in particular reducing income poverty and malnutrition (stunting) sharply, cutting the maternal mortality ratio by 75% and the infant and child mortality rate by 80% of their 1990 figures, and substantially improving education. It also made progress in improving access to water and sanitation, but difficulties remain.

Poverty has also declined rapidly in recent years: on comparable statistics, the share of the population below the national poverty line fell from 38.8% in 2010 to 21.6% in 2014 (see [www.1212.mn](http://www.1212.mn)), helped by favorable macroeconomic conditions.

Mongolia also has a good architecture for social insurance and social assistance, with high population coverage, as well captured by the Social Protection Index in ADB (2011) and Byambaa (2016). And even though economic growth has virtually stalled due to declines in commodity prices and the slowing economies of the Russian Federation and the People's Republic of China (PRC), prospects are good. Still, the government has to properly manage available resources to deal with vicissitudes of the economic cycle and volatile economic conditions, given that a sizable share of the economy depends on mining, influenced heavily by global economic conditions.<sup>16</sup>

As a small contribution to that end, the chapter compares costs and financing strategy using lower and upper cost estimates as a way to verify and test the approach outlined in Chapter 1 and to provide a more in-depth assessment of the

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<sup>16</sup> Oyu Tolgoi, a huge copper and gold mine, alone accounted for 50% of GDP in investment in its first phase of development between 2010 and 2013.

reality in Mongolia. The main finding is that the government will need to spend about 5% (see Table 2.4, on p. 57) of GDP to reach the social protection targets of the Sustainable Development Goals (SDGs). This rate is high but feasible, and requires substantial efforts to build a solid medium- to long-term financial planning framework.

## The Current Social Protection System

### Social Insurance

The basis of the contributory system is the 1994 Social Insurance Law, since revised several times, but that essentially requires compulsory payments from all those in formal employment and voluntary payments from the self-employed, and makes guarantees on pension payments for those reaching pension age, unemployment benefits, maternity benefits, and sickness and accident insurance. The social insurance fund is only partly supported by contributions, and the deficit is covered by the state budget. In 2012, 25% of all fund expenditure was met by subsidies from the budget (Social Insurance General Office 2013).

Mongolia has five social insurance funds (see Table 2.1, on p. 46). The pension fund covers retirement, disability, and survivors' pensions. The short-term benefit insurance includes temporary loss of work ability, maternity benefits, and funeral costs. Occupational injury and disease covers disability and dependents' pensions, and rehabilitation support. The number of voluntary insurers has increased and, in 2015, covered about 20% of those making contributions, up from 10% in 2010. An estimated 80% of the labor force makes social insurance contributions,<sup>17</sup> with the main gaps among herders, the self-employed, and informal workers.

The pension system is “pay as you go” (but there are plans to reform it into a three-tier program). The retirement age is 60 for men and 55 for women, but some people can retire even younger.

All people aged 60 and above declare that they receive a pension, based on the 2014 Household Socio-Economic Survey. (The exact estimate is about 98%, and

<sup>17</sup> This was estimated using data reported in the National Statistical Office website ([www.1212.mn](http://www.1212.mn)) considering those making national insurance contributions and the economically active. The ABND (2014) provides estimates that are about 10% lower, due to both a lower numerator and a higher denominator; Neuland (2016) estimates that, in 2015, 85% of the economically active were contributing to the social insurance fund.

half of those not receiving a pension are employed, suggesting that, in practice, the system is universal and the balance could simply be due to reporting errors in age or income.) Universality is confirmed by data from the Social Insurance General Office (2013), which showed full coverage of those of pension age.

Two pension systems operate: the defined benefit pension system, which applies to those born before 1960; and the notional defined contribution scheme, introduced in 1999 for people born in and after 1960. In both, contributions are 14% of salary (split equally between employer and employee), and 10% of declared income under voluntary schemes for the self-employed. Almost all pensioners receive pensions from the defined benefit scheme, and starting from 2015, a few thousand women (about 7,000) should have received pensions under the more recent system (ABND 2014). In 2013, 94% of those contributing were doing so into the notional defined contribution scheme. For those born in and after 1960, the replacement rate is computed based on the amount of contributions paid (ABND 2014). This is expected to lead to a reduction of pension benefits, though there will still be a minimum guaranteed pension (20% of the average wage, which in 2015 was about 83% of the minimum wage and 8% higher than the poverty line).

However, because of the potential substantial cut in pension payments for those born in and after 1960, some transitional arrangements have been made for those born from 1960 to 1979, but any deep reform has been postponed. The challenge reflects an increased projected financial gap stemming from a combination of low retirement age, increased elderly population, and low contributions relative to benefits provided (World Bank 2011). This gap will need to be bridged by fiscal subsidies unless corrective policies are adopted.

Social health insurance population coverage is very high, 94% in 2013 (Munkhzul 2014). It is subsidized for certain vulnerable groups by the state (children under 16 or up to 18 if in secondary school, elderly with only pension income, mothers until the child is 2, persons with disabilities, those in the army, and people receiving food stamps) (Law on Health Insurance 2015).

Industrial accident and occupational disease insurance provides for the possibility of disability, dependents' pension in case of death, temporary disability, and rehabilitation. Unemployment insurance provides unemployment benefit of at least 75% of the minimum wage for up to a maximum of 76 days and then covers the costs of skills training and retraining.

## Social Assistance

The social insurance system is complemented by social assistance programs defined in the Social Welfare Law of 2012, and the Child Money Program (CMP) defined in the Law of the Human Development Fund (HDF) in 2009. Social assistance is directed to vulnerable groups defined in Article 3 of the Social Welfare Law, including the elderly without a social insurance pension, persons with disabilities from birth, particular groups of people perceived to be vulnerable (orphans, children at risk, single parents with many children, and people who made “special contributions,” such as those with many children and war veterans), and households identified as poor (based on a proxy means test) and whose details are held in a central database, i.e., the Living Standards Assessment Database (LSAD).

Social assistance consists of cash transfers (pensions and allowances) and of services (social welfare and development). The main cash transfers are social welfare pensions for persons with disabilities and other vulnerable groups (the elderly without a social insurance pension), social welfare allowances (caregiver allowance, payments for people in need of permanent care), cash allowances for pregnant and breastfeeding mothers, special contributions for the elderly and persons with disabilities, and a food stamp program for households meeting a proxy means test.

The HDF redistributes mining revenue for development of the whole country, but since 2012 particularly for child benefits (Byambaa 2016). The CMP is currently defined in the law of the HDF as one of the main uses of the Fund, but started earlier and it has a controversial history. It started in 2005 as a conditional cash transfer for poor households, but with poor targeting and under political pressure, it became an almost universal benefit. During elections in 2008, the two main political parties escalated social protection commitments, including the promises of higher cash transfers. In 2010, payments were stopped completely due to the global economic and financial crisis, but after a quick economic recovery, payments were then made to all Mongolian citizens, including children. These were stopped again in 2012, and later in the year, a child benefit for all children under 18 was reintroduced (Hodges et al. 2007; Byambaa 2013, 2016; ABND 2014).

Under subsequent fiscal pressures, in January 2016, it became compulsory to be registered in the LSAD—a database containing selected information and enabling to make a proxy means test assessment—to receive the child benefit. The government elected in the summer of 2016 has maintained the CMP only

for about 65% of children, using the LSAD to identify poorer households, despite declaring that the CMP remains a “right for all children.” Moreover, since 2012, the nominal value of the benefit has stayed unchanged against a considerable drop in purchasing power.

Although with small budgets, there are some programs for the unemployed, notably public works for temporary activities such as road repairs and forest management. Expenditure in 2015 was MNT3.8 billion,<sup>18</sup> benefiting about 23,500 workers. Mongolia also has job mediation and advisory services, vocational training and skills retraining, and employment promotion activities for persons with disabilities. These programs’ budget was MNT7.9 billion in 2015 (about 0.09% of government expenditure) (Byambaa 2016).

The social assistance system is fragmented, complicated, and in some cases, duplicative and inconsistent. This suggests possibilities to simplify and streamline administration, and to consolidate some of the spending (Carraro, Byambaa, and Marzi 2016).

Carraro and Byambaa (2016) explored possible reforms to simplify the administration and reduce some of the duplications, notably reducing the allowances of “honored mothers,” harmonizing fragmented benefits and services for the elderly and persons with disabilities (linked to a more comprehensive disability assessment), better linking and coordinating some of the benefits for mothers and children, and gradually reducing the weight of “merit benefits.”<sup>19</sup>

## Expenditure on Social Insurance and Social Assistance

Table 2.1 provides a summary of expenditure. Volatility in social assistance expenditure—a high increase in 2011 and 2012—stems mainly from payments through the HDF. Not all allowances and payments maintain their purchasing power over time, and increases relate more to the election cycle than price or wage increases. Some allowances are also extremely low: in 2015 relative to the official poverty line and to the minimum wage, the social welfare pension was 80% and 65%, the caregiver allowance 37% and 30%, and child benefit 13% and 10%. Poverty-targeted benefits have low coverage (food stamps) and low amounts (CMP and food stamps).

<sup>18</sup> In 2015, the average exchange rate for \$1 was about MNT1,970. In January 2017, due to the deteriorating economic situation, the average exchange rate to the dollar was MNT2,488.38.

<sup>19</sup> Merit benefits are paid to senior citizens who made special contributions, such as war veterans, labor heroes, and other honors. They receive financial monthly allowances and are also entitled to certain reimbursements for transport costs and for fuel or central heating.

**Table 2.1: Expenditure on Social Insurance and Social Assistance, 2010–2015**  
(MNT billion, current prices)

	2010	2011	2012	2013	2014	2015
<b>Social insurance</b>						
Pension (retirement, disability, and survivor)	371	453	732	822	999	1,211
Benefit (maternity, loss of work ability, funeral)	25	32	49	59	78	90
Health	103	92	119	126	177	205
Industrial accident and occupational disease	19	22	32	29	29	31
Unemployment	14	9	12	18	18	23
<b>Total</b>	<b>531</b>	<b>607</b>	<b>943</b>	<b>1,054</b>	<b>1,301</b>	<b>1,560</b>
<b>% of GDP</b>	<b>5.45</b>	<b>4.61</b>	<b>5.65</b>	<b>5.50</b>	<b>5.85</b>	<b>6.74</b>
<b>Social assistance</b>						
Social welfare pension	28	36	66	79	82	86
Social welfare allowances and benefits	13	37	58	84	84	95
Community-based social welfare	1	3	4	5	7	2
Concessions and assistance for the elderly	8	10	11	14	19	22
Concessions and assistance for the disabled	5	5	5	8	9	9
Pregnant and breastfeeding women	16	21	32	38	38	39
Honored mothers	16	30	28	28	28	28
Special merits	6	5	5	5	5	5
New Child Money Program	0	0	53	229	238	247
Other money disbursed through the Human Development Fund	277	733	694	28	0	0
Other population benefits	1	0	0	0	0	0
<b>Total</b>	<b>371</b>	<b>881</b>	<b>957</b>	<b>519</b>	<b>512</b>	<b>533</b>
<b>% of GDP</b>	<b>3.80</b>	<b>6.69</b>	<b>5.73</b>	<b>2.71</b>	<b>2.30</b>	<b>2.30</b>

GDP = gross domestic product, MNT = togrog.

Sources: Carraro, Byambaa, and Marzi (2016); www.1212.mn (accessed November 2016); and World Bank, World Development Indicators, for GDP (accessed October 2016).

## Gap Analysis

### Health

Basic universal health services are provided to everyone regardless of health insurance contributions and cover pregnancy and delivery care, routine immunization, primary health care, tuberculosis treatment, and sanitation and disinfection services. There are concerns, however, over the quality and narrow list of services, and barriers that prevent access, especially among the poor. On top of these, the health insurance package offers inpatient and outpatient care services, diagnostic tests, prescription drugs, rehabilitation services in sanatoria, and palliative care. The list of essential medicines is short, though, and in rural areas especially, drug availability is an issue (WHO and MOH 2012).

Yet despite the high coverage of the basic health services and health insurance, out-of-pocket (OOP) expenditure is still too high, at 41.6% in 2014, and an estimated 5.5% of households incur catastrophic health expenditures (Dorjdagva et al. 2016). Moreover, challenges remain in health insurance coverage of certain population subgroups, in particular herders, the unemployed, the self-employed, and generally those working in the informal sector.

In short, to achieve universal health protection the government needs to improve quality of services, reach full coverage for health insurance, and reduce the share of OOP expenditure. The health system is also still biased to hospitals rather than primary health care, human resources are weak with a low ratio of nurses to doctors, and there is a need to better regulate medicines and the private sector (WHO and MOH 2012, WHO 2013, ADB 2014).

The government has already taken some steps. It adopted a new law on Health Insurance in 2015, which replaced the 1994 Law on Citizens Health Insurance. Major changes included an increase in government-subsidized contributions, which are now set to be 2% of the minimum wage,<sup>20</sup> and thus equivalent to compulsory contributions of 2% of wages from the employer and 2% from the employee. For children and students, the subsidized contribution is set at 1% of the minimum wage.

This should rebalance the current transfer that occurs from employment contributions to the use of subsidized users: in 2012, 83.5% of the revenue was coming from employers and employee contributions, who in turn were benefiting

<sup>20</sup> Annual contributions increased from MNT8,000 to MNT46,000.



from 17.1% of expenditure, whereas subsidized contributions of vulnerable groups were 12.6% of the revenue, but received 62.9% of the expenditure (Munkhzul 2014).

While maintaining its redistributive nature, higher contributions for vulnerable groups made by the state should provide a more balanced contribution as well as higher revenues for the social insurance fund. In turn, higher revenues should allow a gradual increase in the package of services provided by health insurance, which, from 2016, has already in fact been extended to include new services and drugs prescribed in *aimag* (province) and urban district hospitals. (Previously, this applied only at the primary care level.) A new provision was also made to ensure that unused entitlements of family members can be transferred to those who require more assistance.

Public health expenditure, as a share of GDP, was 2.9% in 2014 and at similar levels in earlier years (ADB 2016), but this excludes of course the higher contribution subsidy for the social insurance fund that was legislated in 2015, which may come to around 0.2% of GDP.

## Education

Mongolia has gaps primarily in the quality of primary and secondary education, coverage of preprimary school, and support for inclusive education for children with disabilities. Some government initiatives try to address them, specifically more kindergartens, attempts to reduce the number of school shifts (i.e., by building more schools), and in greater provision of inclusive education for children with disabilities. These points are now analyzed in more detail.

The education system is free for all at the primary and secondary levels. In the last few years, the school system was reformed, taking it in steps from a 10-year to a 12-year system, compulsory up to grade 10. The school system provides free textbooks to all primary school children, and to many children in secondary school. Since 2006, the Ministry of Education, the Ministry of Health, and the Ministry of Food and Agriculture have run the School Lunch Program in primary schools, covering about 256,000 children in 2015, at a cost of MNT600 per pupil a day (Byambaa 2016). In 2014, the gross enrollment rate was 102 in primary school and 91 in secondary school, with girls having higher secondary school enrollment than boys (World Bank 2016).

Preprimary education is provided through a network of public and private kindergartens, but places are usually insufficient. Recent legislation provides subsidies to registered private kindergartens for each child, but nursery provision is inadequate, especially in rural areas and the capital city.

There is little information on the quality of education, which is likely affected by the need for many children to attend school on different shifts, especially in Ulaanbaatar, where many schools operate two or even three shifts (ADB 2014).

Government expenditure on education, as a share of GDP, is only reported through 2011 in the World Development Indicators—4.6% that year—and was at similar levels in previous years. ADB (2016) reported very low expenditure in 2012—1.7% of GDP—but then expenditures of 8.7% in 2013 and 8.9% in 2014.

## Other Essential Goods and Services

Mongolia is struggling in the other essential goods and services important for achieving the social protection-related SDGs, partly because of considerable internal migration from rural areas to the main cities, notably Ulaanbaatar, and to some extent Darkhaan-Uul and Erdenet. Such migration swells the slums around these cities, where provision of services is being gradually extended (Neve et al. 2017). Another reason is because access to improved water sources and sanitation, for example, is difficult for the large share of the population maintaining a nomadic lifestyle: some 45% of households live in *gers* (traditional tents) (NSO 2016). Furthermore, in such a lifestyle heating and cooking still rely heavily on solid fuels, which generate very high indoor pollution and significant health risks—pneumonia, stroke, heart disease, chronic obstructive pulmonary disease, lung cancer, etc.<sup>21</sup> This is particularly acute in winter, when the very harsh climate requires substantial use of such fuels.

In Ulaanbaatar particularly, costs for essential services, such as heating and water, are far higher in *ger* areas than apartment areas. Because of the high cost, water consumption is below the minimum recommended consumption.

The shares of population using improved drinking water sources and improved sanitation have improved, but in rural areas, an estimated 27.8% still practice open defecation. In urban areas, the share of population with access to improved drinking water sources has been declining, even though the share of the urban population living in slums has fallen. Almost half the urban population has access

<sup>21</sup> See [http://www.who.int/indoorair/health\\_impacts/disease/en/](http://www.who.int/indoorair/health_impacts/disease/en/) and Allen et al. (2013).

**Table 2.2: Identified Gaps in Meeting the Sustainable Development Goals' Social Protection Agenda**

SDG Target	Existing Programs	Social Protection Gap
<b>Appropriate social protection systems, including floor (1.3)</b>	Overall social insurance and social protection system	Multiple
Universal health coverage (demand side)	Basic health care, free for all, and a social health insurance package	Some groups still do not have social health insurance, the health insurance package is limited, and private out-of-pocket spending is high
Children	Child Money Program (all children below 18, recently about 65% coverage), education free of charge, free textbooks in primary and partly in secondary schools, free school meals	Amount of Child Money Program is low and not regularly updated
Maternity	Insurance and cash transfer	Further increase social insurance coverage
<b>Working age (sickness, unemployment, full employment and decent work, 8.5)</b>	Insurance and food stamps	Lack of social insurance coverage among self-employed and informal workers; inadequate support for caregivers
Disability	Social insurance and social welfare transfer	Need to simplify the system and improve disability assessment
Old age	All people of pension age receive support	Challenges of future sustainability of the system, need to simplify access to services
<b>Universal health coverage (supply side, 3.8)</b>	National public health services	Need to improve infrastructure, equipment, and skills
<b>Access to education (supply side, 4.1, 4.2, 4.5)</b>	National public system of schools, for preprimary subsidies for private institutions	Need to improve quality of education; provide extra services for some vulnerable groups
<b>Other essential goods and services (supply side, 6.1, 6.2, 7.1, 11.1)</b>	Public infrastructure	Need to significantly improve access to water, sanitation, and solid-fuel alternatives

SDG = Sustainable Development Goal.

Source: Author's compilation.

to non-solid fuel, but only 10% in rural areas. Overall, 90% of the population has access to electricity, of which 99% is in urban areas (World Bank 2016).

Table 2.2 summarizes for each of the key SDGs targets the key existing programs and services, and the main gaps, notably

- Not everyone is covered by health insurance: the benefit package is limited and does not meet the increasing demands of the population;
- While children receive the CMP, its amount is low and its value is being eroded by inflation;
- Some informal workers and herders are not included in the insurance system, and caregivers' work receives inadequate recognition;
- Health infrastructure, equipment, and quality of services are poor;
- School infrastructure, quality of education services, and the sector's ability to respond to the needs of some vulnerable groups need to improve;
- Access to some other essential goods and services is low; and
- The pension system risks financial sustainability in the future.

## Developing Policies to Close the Gaps

The above gaps are not huge because Mongolia already has in some areas an advanced social protection system, but policies that complement and harmonize the system are needed.

### Social Assistance

#### *Two Scenarios*

Chapter 1 suggested two scenarios—lower and upper estimates—to close the gap in social assistance to ensure that the social protection system guarantees everyone a minimum standard of living equal to the poverty line, thus eliminating poverty. The first addresses income poverty through a cash transfer that perfectly closes the poverty gap and takes all the poor to an income level equal to the poverty line. The second, more expensive scenario, closes the poverty gap by providing universal cash transfers to defined vulnerable groups. The first is the cheaper solution, but it is practically impossible to implement since it would require a perfect targeting and full knowledge of everyone's income. But the second scenario is, in some ways, superfluous as it appears to duplicate many

existing programs.<sup>22</sup> Such transfers and benefits should, however, be indexed and updated annually to maintain their purchasing power, which would require changes in how expenditures and budgets are prepared, including a medium-term framework.

### *A Middle Way Proposal—“Poverty Benefits”*

It would be better to complement the existing benefits to increase coverage and support for those who, despite existing transfers, remain living below the poverty line. The objective would be to ensure that everyone reaches a certain minimum income, which could be achieved building on the existing system, especially as the country has a database with which to identify people eligible for social assistance (the LSAD). This proposal would aim to expand benefits to better support and protect the poor.

It consists, in particular, of increasing coverage and value of existing food stamps and the inclusion of a new social protection transfer for the vulnerable, for which there is already legislation in place in the 2012 Social Welfare Law (Article 3.1.2), but never implemented. Both expanded food stamps and the new transfer would be targeted using the proxy means test database (the LSAD) and together they would need to ensure that the remaining people in poverty would be taken to an income at least equal to the poverty line. We expressly refer to “the vulnerable” because, given the imperfections of the proxy means test, coverage of the new transfer will need to go beyond just “the poor” (Box 2.1). For simplicity, we refer to this new proposed combination of benefits as “poverty benefits.”

### *Reform of Social Insurance*

Some of the social insurance gaps also need to be filled. Notably, to ensure the pension system’s sustainability and universal coverage in the future, the government will want to make the retirement age of men and women the same, now being 55 for women and 60 for men, and then gradually increase it. It should also further expand social insurance payments, and thus coverage, to herders

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<sup>22</sup> For example, pensions reach all people aged 60 and above (almost entirely covered by the contributory scheme) and the minimum provision is well above the 70% of the poverty line suggested in Chapter 1; persons with disabilities receive a social welfare pension equal to 86% of the poverty line; maternity is covered for 4 months at the full wage (for those in compulsory contributions) and at a value of 70% of the declared wages (for those insured through voluntary payments); pregnant and lactating mothers receive payments for 12 months through social assistance benefits (though this is only around 30% of the poverty line); and payments are in place for children (via the CMP) and programs for the extremely poor (food stamps), though these are insufficient.

### Box 2.1: A Combination of Two Benefits to Tackle Poverty

The proposal could be realized via two benefits: one of a relatively high value targeted to people below a threshold, covering a small share of the population; and a second of a lower amount but with higher coverage.

This combination would provide a cost-efficient way to protect the poor given the existing imperfect mechanism to identify them. The amount of transfers could be adjusted to the different subgroups to fully cover the poverty gap.

Mongolia has a proxy means test, which is used here. But in the future, as the economy further formalizes, the government should be able to administer a means test better than the current proxy means test. Efficiency would improve while full coverage of the poor is maintained. The new test would require a new methodology to estimate and account for income derived from livestock, by taking into account the numbers and types of head of livestock owned by households.

Source: Author.

and the self-employed. It has already shown some success in attracting people to the insurance system, specifically maternity insurance, in better linking its databases and in granting more flexibility in payment schedules by, for example, matching the cash flows of herders and other seasonal workers. For these reasons, participation in insurance contributions of the employed should be able to rise further and essentially approach full coverage.<sup>23</sup>

To reach full health insurance coverage, people receiving social assistance (food stamps and the proposed poverty benefits) would be automatically covered by health insurance and their contributions provided by the state. For food stamp beneficiaries not yet covered by health insurance, this system is already in place.

One other reform would be to increase sharply the benefits—currently only about 37% of the poverty line—received by caregivers of persons with disabilities who require full-time assistance. After persons who need constant care have

<sup>23</sup> This estimate assumes that, while people during unemployment will not make contributions, they will when employed and that, overall, people will still make enough minimum payments to ensure a reasonable pension.

been identified and assessed, the benefit should increase to the minimum wage (making them liable to social insurance contributions).

### *Health, Education, and Other Essential Goods and Services*

Social transfers support household income and enable people to acquire a minimum basket of goods and services, but complementary interventions are needed in the provision of public health, education, and other essential goods and services.

To reach the health targets, the strategy of the Ministry of Labor and Social Protection—strengthening and expanding social health insurance—is important for improving health financing, but health-care quality is low. Procurement of services, for example, needs to be upgraded, especially medicines; the transition from hospital-centered provision to better supported primary health-care services continued; and more cost-effective and balanced human resources ensured, particularly through increasing the nurses–doctors ratio.

Any attempt to meet the education targets requires greater resources devoted to quality. Preprimary schools need to increase enrollment, requiring new facilities and well-regulated private providers, especially in the capital city and rural areas. In some areas, primary and secondary education needs to increase (and upgrade current) infrastructure, not so much to lift enrollment but to improve quality by reducing the overcrowding in schools that need to operate more than one shift. Primary and secondary levels should also recruit more teachers and strengthen their training and support facilities, especially for vulnerable groups (including children with disabilities).

In other essential goods and services, too, Mongolia needs to considerably step up its efforts to reach the SDGs. An example of a concrete intervention is to invest in more energy-efficient stoves for *gers*, provide incentives for people to adopt them, and even offer subsidies in some cases.

Table 2.3 summarizes the key policy recommendations.

**Table 2.3: Key Policies to Close Gaps in Meeting the Sustainable Development Goals' Social Protection Agenda**

SDG Governance Target	Policies Required to Close the Gaps
<b>Appropriate social protection systems, including floors (1.3)</b>	
Universal health coverage (demand side)	Further increase population coverage of social health insurance (ensure beneficiaries of social transfers do not need to pay contributions)
Social insurance for short-term benefits, accident, and unemployment	Increase population of working-age population
Social welfare transfers	New social transfers targeted to the poor and vulnerable, need to update regularly the value of all social benefits, increase support for caregivers
Pension for old age persons	Equate women and men pension age, and either increase gradually pension age or increase contribution rates; increase coverage of people paying contributions while in working age
Services for elderly and PWD	Harmonization and simplification of administrative system, link value of social transfers to level of needs and improve disability
<b>Universal health coverage (supply side, 3.8)</b>	Increase financing of social health insurance, rebalance system toward primary health care/away from hospitals, regulate and improve procurement, in particular medicines; improve systems enforcement, M&E
<b>Access to education (supply side, 4.1, 4.2, 4.5)</b>	Increase public kindergartens, improve regulation of private providers or preprimary schools, invest in infrastructure for primary and secondary schools, teacher recruitment and training, M&E
<b>Other essential services (supply side, 6.1, 6.2, 7.1, 11.1)</b>	Household-level interventions to improve access to water and sanitation, infrastructure investment, energy-efficient stoves, etc.

M&E = monitoring and evaluation, PWD = person with disabilities, SDG = Sustainable Development Goal.

Source: Author's compilation.



## Costing the Policy

We estimate the costs of the above policies only for the social transfers, whereas for the supply-side interventions in health, education, and other essential goods and services, we adopt the estimates in Chapter 1.

### Social Assistance

Not all these policies have direct financial costs. For example, while the reform of the pension system is extremely important to ensure future coverage and financial sustainability, given the expected aging of the population, it does not demand any additional budget support. Moreover, reforming the pension system, such as the notional defined contribution scheme, could even lower budget costs.

Similarly, other policies that do not need to be directly costed are interventions aimed at harmonizing and administratively simplifying services for the elderly and persons with disabilities. The same applies to updating social welfare transfers annually to maintain their purchasing power.

The policies that need to be costed relate to new or increased social welfare transfers: the new poverty benefits and expanded and increased payments for caregivers.

The projected cost of the poverty benefits is estimated following the same broad methodology in Chapter 1. We estimate the projected level of poverty in 2030 and identify the budget required to cover the poverty gap that year (Annex 2.1). The simulation estimates that poverty in 2030 could be reduced to just below 10%, with an aggregate poverty gap equivalent to 0.52% of GDP.

However, instead of assuming that perfect targeting could cover the remaining gap, we assume that the relative precision of the current proxy means test is the one observed and the income distribution will have the same relative distribution as seen in the most recent data.<sup>24</sup> We, therefore, estimate that the government could eradicate remaining poverty by 2030 by putting in place two transfers: the first would cover 20% of the population with a per capita transfer value of 16% of the poverty line and cost 0.72% of GDP; for the second, the figures are 40%, 10%, and 0.9%. The first program could essentially be the existing food stamp program.

<sup>24</sup> As discussed earlier, the precision of the targeting approach could be further improved if Mongolia will gradually move from proxy means test to means test, and in this respect, our approach is conservative and could overestimate the actual costs.

A second policy that needs to be costed is the increase in the support provided to caregivers of persons who need constant care. Global estimates of disability prevalence suggest that 15% of the population has some disability, but the percentage of serious disabilities is much smaller and close to 2% (WHO 2011, p. 28), and we take this second figure to indicate people who need constant care. Assuming that each person needs a caregiver, we compute the extra cost of supporting them as the cost of the difference between the minimum wage and the current benefit (30% of the minimum wage). We also take into account that current recipients are about 1.5% of the population. This policy is projected to have a cost of 0.54% of GDP in 2030. The combined cost of the above social transfers would be 2.15% of GDP (Table 2.4).

**Table 2.4: Three Cost Scenarios for Closing the Sustainable Development Goal Expenditure Gap**

Gap	Resource Requirement in 2030 (% of GDP)		
	Lower	Upper	Proposed
Social transfers	0.81	6.08	2.15
Health care	0.6	0.6	0.6
Education	2.2	2.2	2.2
Other essential goods and services	0.3	0.3	0.3
<b>Total expenditure gap</b>	<b>3.91</b>	<b>9.18</b>	<b>5.25</b>

GDP = gross domestic product.

Source: Author's analysis.

This represents an intermediate estimate between the cost provided by a scenario of perfect targeting and one with benefits fully covering certain categories of people. In fact, assuming perfect targeting, whereby transfers are exactly equal to each person's needs to cover the poverty gap existing in 2030, the cost would be 0.81% of GDP (which would exclude changes to caregivers' benefits and any increase in the retirement age). Providing benefits to all children below 15, all people aged 60 or more, and people with disabilities, and offering 100 days of minimum wage to all unemployed would cost 6.08% of GDP, consisting of 2.86% for the child benefit, 1.89% for the old-age benefit, 0.79% for the disability benefit (assuming 5% of persons with disabilities as suggested in Chapter 1), and 0.55% for the employment guarantee scheme for the unemployed (Table 2.4). Combined with the social transfer costs, the total expenditure gap comes to 5.25% of GDP in 2030.

## Conclusions

Three main strategies seem open to the government to fund the required social protection-related SDG expenditure: create a stabilization fund from mining revenues; consolidate some expenditure and assume greater fiscal discipline; and increase revenue collection, including progressive income taxes. Mongolia has already created a Mongolian Development Fund and the Human Development Fund (HDF), but spent the money before it even materialized, partly in electoral promises.

More specifically, on social transfers, the assessment highlights the need to reform the pension system by increasing the retirement age and increasing the number of those that make contributions into the pension fund, protecting the rights of caregivers of persons with severe disabilities by ensuring they receive adequate financial support at a level equal to the minimum wage, and introducing new targeted social transfers for the poor starting by using the current system of the proxy means test but then gradually moving toward a means-tested approach.

For service provision, reaching universal and adequate health-care provision can be achieved via the current government strategy to improve the social health insurance financing. But it also requires continuing the reforms to the health system from hospitals to primary health care, and improving services procurement, particularly medicines.

Education policies should aim to improve quality by improving school facilities and infrastructure, and recruiting more teachers and delivering more training for teachers. Interventions are needed notably to increase provision of preprimary schools, and reduce overcrowding of primary and secondary schools.

Other essential goods and services—access to water, sanitation, electricity, and fuel—require more government expenditure than given at present.

Such policies would cost about 5% of GDP in 2030, to be achieved gradually. A medium- and long-term strategic planning financial framework is needed, as is a stabilization fund soundly financed from mining revenue. Significant, but gradual, increases in budget expenditure should start from 2020 (assuming that the planned mines become operational and commodity prices pick up), allowing by 2025 most of the extra expenditure commitment to be met.

While the extra 5% of GDP is onerous, the country's mining resources make it bearable, but the government should establish financial planning systems and ensure that the resources of the stabilization fund are used properly. It should also set up the fund early to generate the resources. Managing the fund's resources will be tough, and the fund will inevitably come under different demands for use.

In the longer term, the government would want to decrease its fiscal dependence on mining and diversify revenue sources. It should also prepare and renew taxation laws, especially corporate and income tax, introducing progressive tax rates.

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## Annex 2.1: Estimating Poverty Rates in 2030

The key assumption concerns the poverty line. The starting point is the latest poverty line of 2014. We then must decide how the poverty line increases over time, which is ultimately related to how we perceive the social protection-related Sustainable Development Goals (SDGs), i.e., as measuring something more or less absolute.

The poverty line is usually set considering the necessary expenditure required to meet minimum nutritional requirements, against the consumption patterns in the country, and then adding a nonfood component, once again relative to the country's consumption expenditure patterns. When the country's economic conditions improve, the absolute poverty line tends to rise.

In the rest of the book, the decision has been to consider that the poverty line increases together with the per capita gross domestic product (GDP). Indeed, while in the analysis of relatively short periods of time the poverty line increases with inflation, in a longer-term projection, we want to ensure that the poverty line maintains its relative value in relation to the improvement of the general conditions in the country. This inevitably implies that poverty reduction can only come from changes in the relative income distribution. Such distributional change occurs by assuming that employment rates are directly affected by economic growth, and increase in employment is then transferred into a decrease in the number of poor through inclusion in formal employment.

In Mongolia, however, such assumptions make the employment–population ratio increase to unrealistic levels. We, therefore, propose to model employment rates differently. We use the latest 2014 Household Socio-Economic Survey to estimate age-specific employment rates, and apply these rates to the United Nations (UN) *World Population Prospects* for the equivalent age groups. Using such rates we reproduce exactly the employment–population ratio modeled by the International Labour Organization (ILO) for the latest available year.

The demographic change in Mongolia predicts a reduction of the employment–population ratio. In Mongolia, the latest modeled employment–population ratio is 60% for those over 15, which is equal to the rate present in middle-income countries, whereas for high-income countries the rate is 56%. However, we increase the employment rate in relation to the assumed policy change in the pension age and also because we consider caregivers as employed. We also model the unemployment rate using the 2014 Household Socio-Economic Survey age-based estimates and as weights the respective age groups provided by the UN's

*World Population Prospects*. The labor force participation rate obtained is the sum of employment and unemployment rates.

Poverty reduction occurs as a result of the increased employment whenever employment occurs in the formal sector, maintaining constant the percentage observed in the last available estimate (the number of poor is reduced multiplying by the number supported by every working person, i.e., population divided by people employed, this is about 2.3 people in Mongolia). The estimate of the percentage working in the formal sector is obtained from people in vulnerable employment as estimated by the ILO and maintaining such percentage constant throughout the projection period (though this appears to be a relatively conservative assumption given that the rate of vulnerable employment has been steadily decreasing in recent years in Mongolia). We can, therefore, compute the evolving changes in the percentage of poor people and also the poverty gap assuming that the average income of the poor, as a percentage of the poverty line, remains constant.

Crucially, if we do not assume a direct relationship between GDP growth and employment, such way of modeling renders GDP growth irrelevant in terms of poverty reduction, because the poverty line grows at the same rate as GDP per capita. This is a strong, but conservative, assumption. The whole effect on poverty reduction instead comes from the distributive effect created by the changes in people entering employment, which is modeled differently based on aging, and policy interventions on pension age and caregivers' inclusion in social protection.

Population projections are taken from the UN *World Population Prospects'* medium variant, disaggregated for different population subgroups, notably children under 15 and the rest of the population. The key macroeconomic indicators are computed using the geometric mean of actual values between 2010 and 2015. These indicators include real GDP growth, the GDP deflator, the consumer price index, and real productivity growth (the growth rate of GDP in constant prices divided by the number of employed people). All these key indicators are maintained constant for the whole projection period, though productivity growth is calculated for the following years based on projected GDP and employment in the country.

With the above assumptions, we compute the increase in nominal GDP (obtained using the GDP deflator and the real GDP growth), per capita GDP, and wage inflation (affected by inflation and real productivity growth). The minimum wage is aligned to increase with the wage rate. The resulting poverty rate in 2030 is estimated to be less than 10%, with an aggregate poverty gap equivalent to 0.52% of GDP.



# Myanmar

*Mariana Infante Villarroel*<sup>25</sup>

Myanmar is continuing its historic transformation that started in 2011 with economic and social reforms and are expected to continue—even deepen—under a new administration that started its term in March 2016. They are needed.

In 2010, more than a quarter of its 52.1 million people lived below the national poverty line (ADB 2016a). The country has virtually no social protection system, which is crucial to achieve the Sustainable Development Goals (SDGs) and to help Myanmar release its economic potential—growth was 7.2% in 2015—for the benefit of all.

Poor infrastructure hampers access to remote border areas and prevents the deployment and retention of qualified teachers, doctors, and basic health staff (World Bank 2015b), translating into low human development outcomes that risk slowing progress. Unsurprisingly, Myanmar’s maternal mortality ratio is among the highest in the world (178 per 100,000 live births); nearly a quarter of children under 5 years are underweight (ADB 2016a) and 35% are stunted (World Bank 2015c); and access to health and education shows wide disparities between income quintiles.

Financing for social services has increased somewhat in recent years, but far more and better allocated government resources are needed and feasible. Due to its previous isolation, Myanmar largely missed the benefits that the agenda of the Millennium Development Goals brought to other countries. The SDGs can provide an important framework to focus attention and resources in social investments.

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## Myanmar's Social Protection System

### Overview

Social protection has been an important subject of policy developments as part of Myanmar's social transformation. The Rural Development Strategic Framework and the Social Protection Strategic Plan, drafted in 2014, set the stage for social assistance in particular, to help achieve poverty reduction targets. These strategies joined existing frameworks around social security for formal sector workers and civil servants. Social security is regulated by the Social Security Act (1954) and the new Social Security Law (SSL) of 2012 covering formal private sector workers, while the Civil Servant Pension Scheme (Civil Service Law 2013) is the main program for such state employees' old-age income security (ILO 2015).

Still, coverage by public social protection programs is extremely low (Table 3.1). Programs reach only 3.2% of the population, with social assistance covering only 0.1% (Infante Villarroel 2015b). The government has programs across all age groups through ministries, but its more prominent role is in the provision of social security schemes for the formal working-age population. Government-implemented social assistance programs are few, small, and underdeveloped, and thus unable to provide comprehensive basic coverage for vulnerable populations.

Public spending on social protection is also extremely low. Demand-side spending was a mere 0.6% of gross domestic product (GDP) and 1.7% of total government spending, and social assistance just 0.02% of GDP in 2014/15 (Infante Villarroel 2015b). It is striking to compare these negligible social assistance rates with that in pensions for civil servants (0.55% of GDP). There are, however, recent encouraging signs of increased social assistance spending, such as the expansion of the school stipends program, the introduction of social pensions, and higher sectoral social spending (health and education; see next sections). However, the country is still a long way from most developing countries, even those considered low spenders (Figure 3.1).

Development partners are important for social protection provision. The World Food Programme and the United Nations Office for Project Services Livelihoods and Food Security Trust Fund (LIFT) are the biggest financiers of social assistance, historically providing emergency support and humanitarian relief in times of crisis. The World Food Programme reached 2.2% of the population in 2013–2015 through school feeding, food for work, and emergency relief (among other programs), while LIFT supported 1.1% of the population in 2010–2014 (Infante Villarroel 2015b).

Table 3.1: Summary of Main Public Social Protection Schemes

Social Protection Floor	Scheme	Eligible Population	Cost (\$ and % of GDP)	Source of Funding	Coverage (% of Population / % of Eligible Population)
<b>Health</b>	Social Security Medical Care Scheme	Formal sector workers paying contributions	\$1.3 million (2011) <sup>a</sup> (0.003% of GDP)	Employers' and workers' contributions	765,000 (1.49% of popn. / 2.44% of the popn. age 15–59 in 2014/15) <sup>c</sup>
	MOH schemes	Patients of MOH's facilities. A focus on maternal and child health, and the chronically ill <sup>a</sup>	Over 1% of GDP (2014) <sup>d</sup>	MOH budget	...
<b>Children</b>	Support to compulsory primary education (“1,000 Kyat program”)	All primary school students	\$15.4 million (2013/14) <sup>a</sup> (0.024% of GDP)	General government budget	5.2 million children (100% of primary school children in 2013/14) <sup>a</sup>
	School stipends pilot program	Poor school children	\$9.9 million (2016/17) (0.015% of 2015 GDP)	World Bank/ DFAT support to MOE	149,000 children (1.5% of the popn. age 10–19 [grades 5–11])
<b>Working age</b>	Social Security Schemes (sickness, maternity, paternity, and family benefits; funeral grant, work injury)	Formal sector workers paying contributions	\$1.9 million (2012/13) <sup>a</sup> (0.003% of GDP)	Employers' and workers' contributions	765,000 (1.49% of popn. / 2.44% of the popn. age 15–59 in 2014/15) <sup>c</sup>
	Civil Servant Pension Scheme, Military Pension Scheme, and Political Personnel	Civil servants, military, and political personnel	\$28.28 million (2013/14) <sup>a</sup> (0.044% of GDP)	General government budget (a reform toward a contributory scheme is under discussion) <sup>a</sup>	160,795 (0.45% of popn. age 15–59 in 2013/14) <sup>a</sup>

continued on next page

Table 3.1 *continued*

Social Protection Floor	Scheme	Eligible Population	Cost (\$ and % of GDP)	Source of Funding	Coverage (% of Population / % of Eligible Population)
	Pension Scheme (invalidity and work injury, survivor, and compensation)				
Old age	Civil Servant Pension Scheme, Military Pension Scheme, and Political Personnel Pension Scheme	Civil servants, military, and political personnel	\$279.38 million (0.55 % of GDP in 2014/15) <sup>c</sup>	General government budget (a reform toward a contributory scheme is under discussion) <sup>b</sup>	843,000 <sup>c</sup> (1.64% of popn. / 18.84% of popn. age 60+ in 2014/15)
	Social Security Old-age Superannuation Pension Scheme (not yet active but included in the SSL of 2012)	Formal sector workers paying contributions			
	MOSWRR social pension	All elderly over 90 years old	\$0.39 million (2015/16) (0.0006% of GDP) <sup>c</sup>	General government budget	30,000 (41% of popn. age 90+)

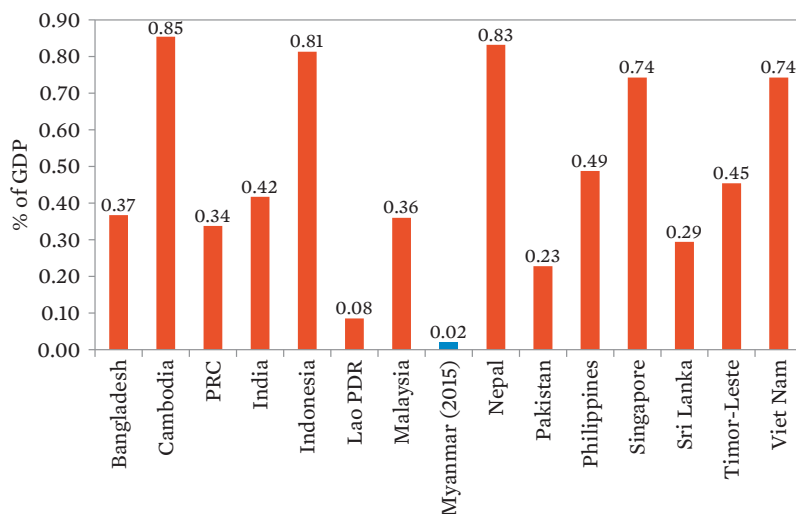
... = no data; DFAT = Department of Foreign Affairs and Trade; GDP = gross domestic product; MOE = Ministry of Education; MOH = Ministry of Health; MOSWRR = Ministry of Social Welfare, Relief and Resettlement; SSL = Social Security Law.

Notes: The MOE has a “national” stipends program covering only 11,000 children in 2013/2014. Monthly benefit levels in MK were 5,000 for primary, 6,000 for middle school, and 8,000 for high school, while selection criteria included orphans and school performance. The MOE, with support from the World Bank and Australia’s DFAT, is piloting an enhanced version of the stipends program that started in eight townships across four regions/states reaching 37,000 children in 2014/2015. The program has now expanded to 55 townships across all states and regions, and covers more than 149,000 students. Selection criteria emphasize socioeconomic conditions with the help of a poverty scorecard. Monthly benefit levels are MK5,000 for primary, MK8,000 for middle school, and MK10,000 for high school (World Bank 2015b).

Exchange rate: \$1.00 = MK1,294.43. GDP estimates can be found at <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=MM>.

Sources: <sup>a</sup> ILO (2015); <sup>b</sup> Dutta, O’Keefe, and Palacios (2015); <sup>c</sup> Infante Villarroel (2015b); <sup>d</sup> World Bank (2015b); <sup>e</sup> *Myanmar Times* (2016).

**Figure 3.1: Social Assistance Spending,  
Selected Asian Countries, 2013**  
(% of GDP)



GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Sources: ADB (2016b); Infante Villarreal (2015b).

## Health

The main health schemes in Myanmar are the Social Security Medical Care Scheme (SSMCS) and the Ministry of Health (MOH) programs for the general population. Myanmar's dual public service provision includes facilities from the Ministry of Labor, Immigration and Population to serve its affiliates as well as MOH facilities for all citizens.<sup>26</sup> Demand-side schemes have packages of services for the affiliates of the SSMCS but not the MOH services, most of which focus on maternal and child health (ILO 2015). Myanmar, unlike most other developing countries, has no medium or large cash transfers to promote access to medical services through the MOH. Some development partners are piloting some schemes (Infante Villarreal 2015c, *Myanmar Times* 2016). The MOH is piloting "hospital equity and trust" funds (ILO 2015).

<sup>26</sup> Military personnel and their dependents have access to free medical care in military hospitals (ILO 2015).

Access to affordable health care is limited to formal sector workers and the rich, for whom out-of-pocket (OOP) payments are not a burden, though it is the poor who most need services. The SSMCS covers only formal sector workers (not their dependents) working in companies with five or more employees (ILO 2015)—or less than 1.5% of the population. OOP payments, as a share of total health spending, reached 54% in 2015 (World Bank 2015b), a huge burden to vulnerable households, for which health shocks can be impoverishing. Women in the poorest quintile who access services, such as delivery by skilled birth attendants and postnatal care, fare less well than those in richer groups. Similarly, 33% of children from households in the poorest quintile were underweight in 2015, against 14% of those in the richest (World Bank 2015b).

The government has started to tackle health service provision by increasing and decentralizing public spending. Health spending climbed from 0.2% of GDP in 2009 to over 1% in 2014 (World Bank 2015b)<sup>27</sup> and, combined with education, increased its share of government spending from 8% in 2010's budget to about 20% in 2015 (World Bank 2016a). OOP payments, though still high, were cut from 82% of health-care costs in 2010. Programs of the MOH such as free medicine, delivery, and services for children under 5 years aim to reduce such burdens, along with means-tested pilot programs. The MOH has started providing grants to hospitals and health centers to improve service delivery.

A comprehensive package of services for the general population is not yet available, while the unequal distribution of health-care facilities among rural and urban areas and across regions means services are unavailable in some hard-to-reach areas (ILO 2015). Staffing is also an issue: some 30,000 doctors and 55,000 nurses and midwives serve 51.5 million people, but less than half of these doctors work in the public sector, making it difficult to adequately staff public health facilities in rural areas (World Bank 2015c). Medical training is poor, and many health facilities require upgrading, lack basic equipment, or both.

## Children

Several programs are aimed at school-age children but provide little support to children at school. Ministry of Education (MOE) programs for children include removal of primary and secondary fees, support to all primary school pupils, and cash stipends for poor and vulnerable children. The Social Security Law (SSL) offers a child benefit (10% of the average wage per child in primary education) but its potential coverage is likely very low (i.e., the poorest children of the less

<sup>27</sup> Revised estimates for 2014/15 put the figure at 1.2% of GDP.

than 1.5% of the population covered by social security schemes) (ILO 2015, Infante Villarroel 2015b).

Coverage and benefit levels of current programs are insufficient to provide children with basic income security. Although coverage is high on paper, the reality is different: the 1,000 Kyat program, for example, pays that amount once a year per pupil—about \$0.80. The stipends program is a more realistic alternative for children in need with significant monthly transfers through a means-tested approach.<sup>28</sup> However, it is still small, covering only 1.5% of the population 10–19 years old, and reaches only children in school. The Ministry of Social Welfare, Relief and Resettlement (MOSWRR) runs programs for vulnerable children but these offer even less coverage (Infante Villarroel 2015b).

As with health, the government has started to tackle issues in the education sector by increasing and decentralizing public spending, which for education increased from 0.7% of GDP in 2011 to about 2% in 2014. OOP payments, as a share of total education spending, dropped from 63% in 2010 to 30% in 2015 (World Bank 2015b). Decentralized spending has raised the amount schools receive as grants for service delivery, though rates of school dropouts and child labor are high, particularly among the poor. In 2015, only 29% of children from households in the poorest quintile were enrolled in secondary school, against 80% for those in the richest (World Bank 2015b). Net primary enrollment is only 69% in poorer areas against a national average of 85% (World Bank 2015c).

## Working Age

As with health, social protection coverage for people of working age is restricted to formal sector workers and civil servants. Social security schemes cover employees in public and private formal companies, or less than 1.5% of the population in 2014/15 (Infante Villarroel 2015c). Some benefits are in place for civil servants, military staff, and political personnel, but less than 0.5% of the population benefits from these schemes (ILO 2015). MOSWRR has programs for vulnerable populations, but again, they have very little coverage.

No government programs cover the informal sector to meaningfully contribute to income security in case of shock. The Workmen's Compensation Act<sup>29</sup> does not

<sup>28</sup> Anecdotal evidence suggests that the stipends program so far has encouraged parents to get more involved in their children's education; to improve attendance; and to cover education costs such as stationary, uniforms, and transport with the stipend (World Bank 2015b).

<sup>29</sup> It covers workers (or their heirs) in companies not covered by a social security scheme who receive financial compensation from the employer for an occupational disease or work injury resulting in disability or death (ILO 2015).

even cover agricultural workers, who account for more than 50% of the working population and are the bulk of the informal sector (ILO 2015, Dutta 2015a). More than 70% of the poor live in rural areas and earn their income from agricultural and casual work (World Bank 2015d). There is no investment in risk prevention inside and outside the workplace to decrease the likelihood of disability and disease. The SSMCS runs only some basic programs for international migrant workers, of little scope, even though internal migration is one of the main coping strategies of the poor. There are no services for internal migrants, such as voluntary social security schemes with portability of benefits.

Recent policy has begun to address the need for a public works program, which is badly needed and feasible (ILO 2015, Dutta 2015b, Infante Villarreal 2015d). Implementation has yet to begin. The Rural Development Strategic Framework and Social Protection Strategic Plan identify the need for such a program, executed by the Ministry of Agriculture, Livestock and Irrigation,<sup>30</sup> to smooth income shocks among the informal, mainly rural, population. However, government efforts on (what it mistakenly considers as) social protection have focused too much on revolving funds schemes, which by design exclude the poorest who may not be able to repay the loan (Infante Villarreal 2015e). The needs of the poor and vulnerable should be prioritized through sustainable schemes for people of working age.

## Old Age

Social protection coverage for people in old age is mainly for civil servants (ILO 2015), though there are plans to expand coverage to formal sector workers through the Social Security Old-age Superannuation Scheme, to be accessible to informal workers on a voluntary basis. The first beneficiaries of such a scheme are still decades away, and Myanmar faces a problem of vulnerability in old age right now.

A recently introduced MOSWRR social pension is a step in the direction of providing income security in old age for informal, vulnerable elderly, but it falls very short on benefit levels and coverage. It reaches about 30,000 people 90 years old and above (41% of this age group) providing the equivalent of only \$15 a year in 2015 (*Myanmar Times* 2016).<sup>31</sup> Furthermore, ad hoc budgeting poses questions

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<sup>30</sup> The previous government had separate ministries for rural development, livestock, and fisheries, which had the mandate for rural development and poverty reduction; and for agriculture and irrigation.

<sup>31</sup> According to MOSWRR, it plans to increase the benefit to \$8–\$9 a month.



on financial sustainability. This social pension also covers civil servants already receiving a state pension.

Nearly a third of older people are set to continue working for another decade after age 60, and will form a much larger group by 2050—22% of the population, up from the recent 8% (Dutta 2015b).

## Social Protection Gaps: Implications for the Sustainable Development Goal Agenda

Myanmar still needs to develop the foundations of a social protection system and gradually expand its coverage to meet the SDGs. At the policy level, greater articulation and financial sustainability of the different policies could help achieve SDG governance targets.<sup>32</sup> At the program level, the gradual expansion of social assistance for all groups is paramount to building a proper social protection floor (ILO 2015, Dutta 2015a). This needs to be done by expanding the coverage of existing schemes (such as the SSMCS and the school stipends) and by introducing new ones to fill gaps (such as government-led public works programs and cash transfers; see Table 3.2). At the delivery level, enhancing the coordination of social security schemes and the sustainability of social assistance delivery can help make an emerging system more efficient.

Given the near nonexistent social protection system in Myanmar, all social transfer targets are relevant to promote achievement of the SDGs. Demand-side interventions for universal health coverage and employment could be seen as part of the social protection system reflected in SDG Target 1.3 (Implement social protection, including floors). The rest of the chapter focuses on that target and its components.

Supply-side investments on health and education are needed to guarantee the effectiveness of social transfers. Health and education spending have been growing (from a low base) since the start of the decade (Figure 3.2), accompanying the political shift to “people-centered development.” Structural issues, however, may prevent increasing investments from translating into greater coverage and SDG achievement. Regional disparities mean there is a need for tailor-made solutions and accommodation of parallel service delivery systems under the administration of ethnic authorities. Still, the need for supply-side investments

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<sup>32</sup> See Chapter 1 for social protection-related SDGs and their targets.

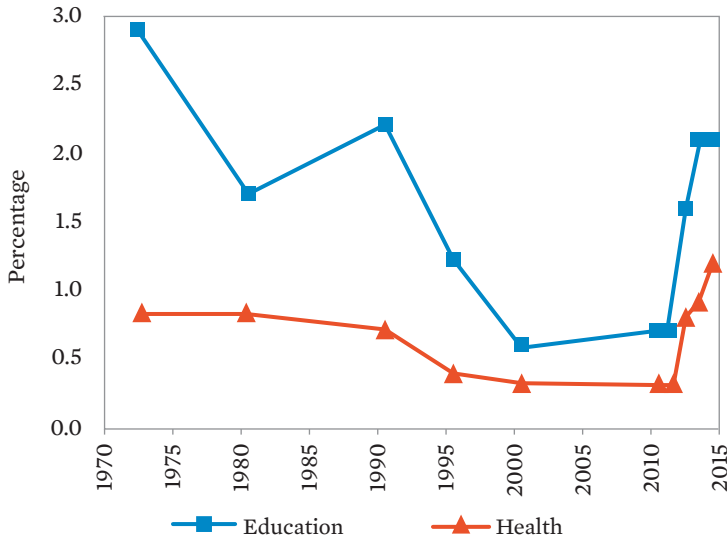
Table 3.2: Social Protection Provision, Gaps, and Options

SDG Governance Targets	Social Protection Gap	Potential Options to Close the Gap
<b>Appropriate social protection systems including floors (1.3)</b>	<ul style="list-style-type: none"> <li>– There is no social protection system; certain components in place with very low coverage</li> </ul>	<ul style="list-style-type: none"> <li>– Improve coordination at all levels (policy, program, and delivery), particularly on social security</li> <li>– Expand current programs, especially social assistance, and introduce new programs</li> </ul>
– Universal health coverage (demand side; 3.8)	<ul style="list-style-type: none"> <li>– No defined benefit package</li> <li>– Low coverage, particularly of informal workers</li> <li>– No supply-side coordination (scattered public sector, little oversight on private sector)</li> </ul>	<ul style="list-style-type: none"> <li>– Define benefit package and population covered</li> <li>– Extend existing schemes to uncovered populations (e.g., extend SSMCS to dependents)</li> </ul>
– Children	<ul style="list-style-type: none"> <li>– Few and inadequate benefits for children at school</li> <li>– Insufficient protection of children out of the school system</li> </ul>	<ul style="list-style-type: none"> <li>– Expand coverage and benefit levels of current programs (e.g., school stipends)</li> <li>– Introduce new programs for uncovered populations (e.g., conditional transfers to families with infants)</li> </ul>
– Working age (Full employment and decent work, 8.5)	<ul style="list-style-type: none"> <li>– Low coverage of existing programs</li> <li>– Virtually no coverage of informal workers</li> <li>– Insufficient protection of people unable to work</li> <li>– Little investment in risk prevention inside and outside the workplace</li> </ul>	<ul style="list-style-type: none"> <li>– Introduce a public works program that addresses seasonal unemployment</li> <li>– Introduce maternity and disability benefits</li> <li>– Invest in prevention programs</li> </ul>
– Old age	<ul style="list-style-type: none"> <li>– Insufficient coverage and inadequate benefits as part of the social pension scheme</li> <li>– No structured mechanism for long-term care</li> </ul>	<ul style="list-style-type: none"> <li>– Expand coverage and increase benefits of the social pension scheme</li> <li>– Establish a mechanism for long-term care</li> </ul>
<b>Universal health coverage—supply side (3.8)</b>	<ul style="list-style-type: none"> <li>– Low spending and quality of services</li> <li>– Insufficient and fragmented service provision</li> </ul>	<ul style="list-style-type: none"> <li>– Strengthen the health system: increase investment in hard and soft infrastructure</li> <li>– Improve coordination of service provision</li> <li>– Improve spending efficiency</li> </ul>
<b>Access to education—supply side (4.1, 4.2, 4.5)</b>	<ul style="list-style-type: none"> <li>– Low quality of services</li> <li>– Insufficient and fragmented service provision</li> </ul>	<ul style="list-style-type: none"> <li>– Strengthen the education sector: increase investment in hard and soft infrastructure</li> <li>– Improve coordination of service provision</li> <li>– Improve spending efficiency</li> </ul>

SDG = Sustainable Development Goal, SSMCS = Social Security Medical Care Scheme.

Sources: ILO (2015); Dutta (2015a); World Bank (2015b).

**Figure 3.2: Spending on Education and Health**  
(% of GDP)



GDP = gross domestic product.

Source: World Bank (2015b).

and the fiscal effects of increased social investments (below) support a *gradual* expansion of social protection provision in all aspects.

## Closing the Gap: Policy Options to Build a Social Protection Floor

### Cash Transfers

Development partners have helped the government identify policy options to close the social protection gaps. The International Labour Organization (ILO) led a One-UN Assessment-Based National Dialogue (ABND) exercise in 2014 and 2015<sup>33</sup> to assess gaps in public provision and to identify and cost policy options for achieving a social protection floor.

<sup>33</sup> Involving line ministries, the United Nations country team, social partners, civil society organizations, research institutions, and other stakeholders.

Table 3.3<sup>34</sup> shows low, medium, and high coverage packages that can gradually close the demand-side gaps identified in Table 3.2, drawing on the scenarios in the ILO's report on the ABND (ILO 2015). The scenarios cover all the components of the social protection floor, by changing the mix of programs in the coverage packages and by playing with the design parameters such as population covered and benefit levels. The packages could cost 2.1%–7.3% of GDP, or 6.6%–23.4% of government spending, in 2024. These estimates are minimum requirements since the expansion of the SSMCS may demand further resources, depending on the additional contributions from workers and government.

The backbone of a potential social protection floor consists of an expanded SSMCS, social health protection, cash transfers to mothers and infants, school stipends, a public works program, and social pensions. Social health protection should cover the population not covered by the SSMCS, and should exclude dependents of formal sector workers and civil servants, who should be covered by an expanded SSMCS. A cash transfer scheme to mothers and infants is being piloted by Save the Children in Rakhine state, while the MOH is piloting a maternal and child health voucher scheme (Infante Villarroel 2015c), which can serve as reference when designing a cash transfer scheme. The school stipends program has two versions, where higher benefit levels and selection criteria are being tested (Infante Villarroel 2015c; see Notes in Table 3.1). Public works programs have been implemented by several development partners (World Food Programme, ILO, United Nations Office for Project Services Livelihoods and Food Security Trust Fund [LIFT]-financed schemes), adapting the objectives and benefit levels to the geographic context but a government-led scheme is yet to emerge (Infante Villarroel 2015d). A social pension has been launched by MOSWRR, but with small coverage.

One of the main differences between the scenarios in Table 3.3 is whether programs are means-tested.<sup>35</sup> Coverage packages of the social protection scheme

<sup>34</sup> Benefits are expressed in US dollars for the readers' benefit. Exchange rate: \$1.00 = MK1,294.43. The original fiscal analysis was done in Myanmar kyat and can be found in ILO (2015) along with the assumptions used for the calculations. After the analysis was done, the Myanmar government released the 2014 census data by age group which could serve to update the population projections and expand the time horizon to 2030 to match Chapter 1's analysis. However, ILO (2015) already takes into account gross results from the census and the discrepancies between the population figures used in ILO (2015) and those of the census are small (less than 5%) for most population groups except working age, which was overestimated in ILO (2015) by 14% and children, who were underestimated by about 8%. These discrepancies should not bring major changes to broader cost and coverage trends. In any case, time horizons of both exercises—that in Chapter 1 and in the ABND—arrive at similar conclusions since (Chapter 1) “after year 10 the expenditure gradually and asymptotically approaches 100% of the maturity level expenditure in 2030” where year 10 in Chapter 1 coincides with the time horizon of the ABND exercise.

<sup>35</sup> Program costs in Table 3.3 already include administrative costs associated with targeting.

**Table 3.3: Policy Options to Close Demand-Side Social Protection Gaps in Myanmar**

Social Protection Floor	Options	Package			% of GDP by 2024	% of Gov't. Spending by 2024
		Low	Medium	High		
<b>Health</b>	SSMCS expansion to dependents and civil servants	Y	Y	Y	...	...
	SHP, \$23.20 a year for those not covered under SSMCS		Y		1.29	4.06
	SHP, \$23.00 a year for the poor and \$11.60 for the rest not covered under SSMCS	Y			0.88	2.78
	SHP, \$42.00 a year for those not covered under SSMCS			Y	2.25	7.08
	Transport costs, referral deliveries, and children under 5		Y	Y	0.0001	0.004
	Scaling up HIV/AIDS programs	Y	Y	Y	0.1	0.32
<b>Children</b>	CCT \$11.60 a month to all pregnant women (last 6 months of pregnancy) and children under 2 years		Y	Y	0.32	1
	Universal child allowance \$6.20 a month to children 2–15 years <sup>a</sup>		Y	Y	0.87	3.09
	Scaling up of school stipends to all poor children at school	Y	Y		0.15	0.46
	School feeding in all schools			Y	0.55	1.72
	UCT \$12.40 a month per child for families with children with disabilities			Y	0.06	0.18
<b>Working age</b>	Public works program, 60 days a year in rural areas, \$2.30 a day, popn. 16–64 years	Y	Y		0.71	2.22
	Public works program, 60 days a year in rural areas, \$2.30 a day, 5 days of technical and vocational education and training each year, popn. 16–64 years			Y	1.06	3.32
	UCT \$31.00 a month people living with disabilities, popn. 18–64 years			Y	0.41	1.31
	UCT \$23.20 a month people living with disabilities, popn. 18–65 years		Y		0.31	0.98
<b>Old age</b>	Universal social pension \$23.20 a month, popn. 70+ years		Y		0.82	2.57
	Universal social pension \$23.20 a month, popn. 65+ years			Y	1.47	4.62
	Social pension \$19.30 a month, 65+ years who are poor	Y			0.25	0.79
	Scaling up of home care program		Y	Y	0.04	0.14
	Additional \$23.20 for older persons with disabilities and dependent older persons			Y	0.21	0.65
<b>Total, % of GDP by 2024</b>		<b>2.09</b>	<b>4.61</b>	<b>7.34</b>		
<b>Total, % of gov't. spending by 2024</b>		<b>6.57</b>	<b>14.85</b>	<b>23.43</b>		

... = no data, CCT = conditional cash transfer, GDP = gross domestic product, SHP = social health protection, SSMCS = Social Security Medical Care Scheme, UCT = unconditional cash transfer, Y = Yes.

<sup>a</sup> This program has been adapted to exclude children 0–2 years already covered by the maternal and child conditional cash transfer program of \$11.60 a month in the medium and high scenarios.

Source: Adapted from ILO (2015).

scheme could vary and give more generous benefits to the poorest. Given the disproportionate level at which catastrophic health spending affects the poor, prioritizing financial protection of the poor seems sensible.<sup>36</sup> The current maternal and child health voucher scheme is means-tested, while the cash transfer scheme to mothers and infants is universal.

Though not part of the scenarios in Table 3.3 and taking advantage of updated and reliable poverty data (Box 3.1), geographic targeting could be an option for cash transfer programs in poor rural and remote areas (e.g., coastal states like Rakhine) while a means-tested mechanism could be an option where geographic targeting may see some of the poor “fall through the cracks.” For instance, the high population density in the Dry Zone and Delta regions means they are home to two-thirds of Myanmar’s poor and to the largest share of stunted children in the country, but Dry Zone regions are not among the poorest (Dutta 2015b).

Combining targeting methods may render optimal results and should be analyzed on a program basis. The stipends pilot program could reveal the

### Box 3.1: Better Poverty Data to Inform Program Design Options in Myanmar

The second Integrated Household and Living Conditions Assessment conducted by the United Nations Development Programme (UNDP) in 2009–2010 was the only source of poverty estimates and household living conditions for many years. It is now more than 6 years old and does not reflect the rapid socioeconomic changes happening in the country.

In 2014–2015, the World Bank carried out the Myanmar Poverty and Living Conditions Survey to fill immediate data gaps at the national level, which piloted an improved methodology and a nationally representative sampling frame provided by the 2014 census. Given its satisfactory results, the World Bank and UNDP are supporting the government in conducting a nationally representative large-scale integrated household survey in 2016/17.

Source: World Bank (2016b).

<sup>36</sup> Households that spend disproportionately on health show clear signs of experiencing catastrophic out-of-pocket payments when health shocks occur. “For the 18% of households that spend more than 40% of their nonfood expenditure on health, the average spending on health is 25% higher than their nonfood expenditure—which is indicative of significant borrowing or dis-saving to finance health care” (World Bank 2015c).

effects of improvements in the targeting criteria compared with the original government program, and serve as basis to develop a more coordinated targeting system for Myanmar (Dutta and Okamura 2015). An eventual public works program could use self-targeting and relatively low benefit levels to reach the poor. Though age restrictions limit its coverage, social pensions are already being implemented in a universal fashion, which seems appropriate and affordable, but it is recommended to exclude at least those already receiving a government pension (Ramkissoon 2015).

Payment systems are underdeveloped and are likely to remain so in the medium term, constraining the expansion of cash-based assistance which, though feasible in most geographic contexts, is used far less than food-based support, which is the most common modality of development partners, particularly in emergency response and nutrition programs (Stokkel 2015). Even when cash is used, as in the stipends program, it is distributed directly by program implementers. The absence of reliable and extensive payment systems makes the government pay its officers mostly in cash.

Any expansion of large-scale cash transfers may be further hampered by the lack of financial penetration and inclusion: only 23% of adults had an account at a formal institution in 2014—by contrast, 69% of adults in East Asia and the Pacific had formal accounts (Stokkel 2015). The rapid growth of financial services and network coverage in Myanmar may bring opportunities to develop payment options for social transfers and promote financial inclusion. Until then, strengthening direct cash distribution through better beneficiary identification procedures<sup>37</sup> and accountability mechanisms seems the best way to deliver reliable cash transfers.

Estimates for the different packages in Table 3.3 are along the lines identified in Chapter 1 for cash transfers. (Chapter 1 identified a resource requirement by 2030 of 2.1% of GDP for the lower estimate [targeted transfers] and 8.4% for the upper estimate [universal transfers and employment guarantee scheme].) This implies that the table's policy options reflect what could be done in practical terms for working toward the SDGs within Chapter 1's assumptions. It also implies that these packages, even the lower estimate one, could generate significant fiscal stress, though that could be mitigated by the enormous potential for poverty reduction, increased formal sector employment, and higher revenues and investments stimulated by precisely these measures (see Chapter 1).

<sup>37</sup> Less than 70% of the Myanmar population above the age of 10 has an identity card (Government of Myanmar 2015).

For instance, simulations suggest poverty in Myanmar could fall by several percentage points if some of the programs in Table 3.3 are introduced (2.5–4.3 percentage points in monetary poverty) with social health protection having the highest impact of an individual program.<sup>38</sup> However, the highest fall occurs when programs along all components of the social protection floor are introduced, with a fall of about 13 percentage points (ILO 2015).

## Supply-Side Investments

Current spending on health and education in Myanmar is higher than the baseline figures in Chapter 1, of 0.5% of GDP for health (2013) and 1.2% of GDP for education (1995). In 2014/15, spending on health was almost 1.2% of GDP, while spending on education was 2.0% of GDP. This points to narrower gaps than initially envisaged, which could translate into less fiscal stress if spending targets in Chapter 1 are kept. However, narrower gaps could also push the boundaries of spending targets by 2030 even further.

For instance, the ABND assessment identified a public spending target for health of 4% of GDP in 2024 (ILO 2015), which is more ambitious than the 3.2% of GDP envisaged for 2030 in Chapter 1. Four percent would mean spending more than Viet Nam did in 2014 (3.8% of GDP) but still below what Thailand did (5.6% of GDP—a key benchmark for Myanmar's social protection floor plans because Thailand has universal health coverage).<sup>39</sup> The education spending target in Chapter 1 (4.8% of GDP in 2030) is in line with Thailand's current spending (4.5% of GDP) (footnote 35) and surpass ASEAN'S current average (3.6% of GDP) (World Bank 2015c).

Investments in health need to focus on improving quality of service and equity of access through both additional *and* more efficient spending. Preventive and public health spending are efficient choices (World Bank 2015c). Targeting resources to underserved rural areas should be an investment priority given the current imbalance: urban health facilities accounted for about 70% of total public spending on health in 2013/14, but the majority of the population and the poorest people live in rural areas (World Bank 2015b). Pooling resources can improve equity of access by enabling greater cross-subsidy between groups (rich and poor, young and old, and healthy and sick), requiring the currently

<sup>38</sup> The programs analyzed (Table 3) are social health protection, cash transfer for mothers and children, school stipends for all children at school (universal version), public works programs, and social pensions for those older than 65. Simulations did not include means-tested programs, and so the potential poverty impact of programs targeted to the poor is unknown.

<sup>39</sup> World Bank. Health expenditure, total (% of GDP). <http://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?view=map>.



fragmented financing mechanisms (SSMCS, MOH, OOP payments, and donors) to be redesigned.

Investments in education also need to focus on improving quality of service and equity of access through additional but more efficient spending. Some can take decades to materialize while others are “low-hanging fruit.” Improving the quality of education means modernizing the curriculum, and retraining and equipping teachers with better textbooks and guides, which could easily take 5 years in a well-organized ministry of education, so would certainly take much longer in Myanmar (World Bank 2015c). Efficiency gains can be boosted by better targeted investment in rural and deprived areas, by more effective investment in current demand-side programs (e.g., reallocating resources from the 1,000 Kyat program to those with potentially more impact, such as the stipends program), and by improving the quality of purchasing.

In summary, options to close the gap include greater investment in cash transfers and in health and education. Social protection programs should aim to build the social protection floor by expanding access to health services through SSMCS and social health protection, strengthening income security of children through cash transfers to mothers and infants and school stipends, building resilience of the informal sector through a public works program, and providing income security in old age through social pensions.

## Fiscal Space Analysis: How to Finance the Social Protection Agenda of the Sustainable Development Goals

### Resource Requirements and Implications for the Government Budget

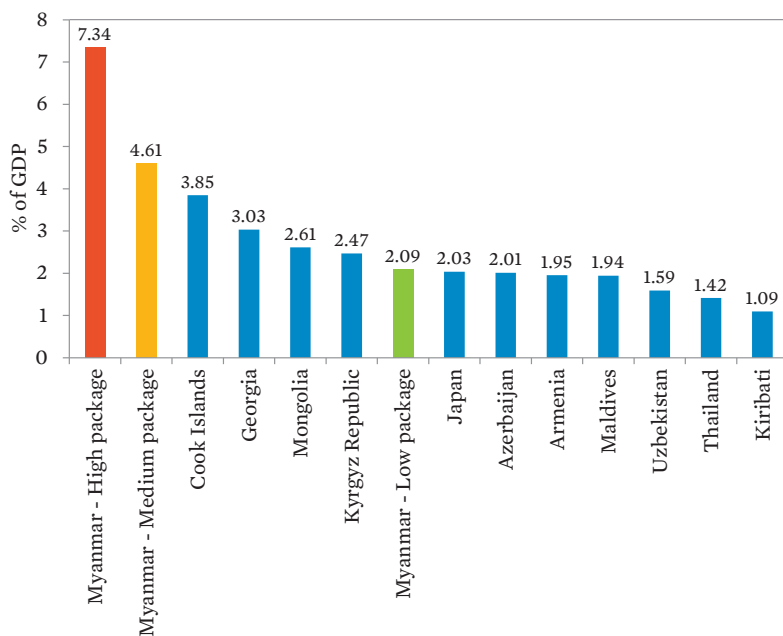
Resource requirements to finance the social protection agenda of the SDGs in Myanmar are heavy, possibly at 6.6%–23.4% of government spending (depending on the scenario in Table 3.3). Myanmar’s budget is projected by 2024 to run a deficit of about 5% of GDP on current trends; the additional social protection spending could add 2.1–7.3 percentage points to that deficit (ILO 2015). Chapter 1 identifies the need for Myanmar to allocate between 36.6% (lower estimate) and 64.6% (upper estimate) of government revenue in 2030 to close the social protection–SDG gap.

International comparisons show just how large this effort would be for Myanmar’s public spending. Bringing its current spending of 0.02% of GDP

on demand-side social protection to more than 7% by 2030 seems impossible. Figure 3.3 strongly suggests that the low coverage package is more realistic, given international comparators at different income levels.

It is therefore important to identify the potential funding sources for the low-coverage package, which should be the priority for 2030. Starting with a gradual expansion of social protection programs can also support the creation and strengthening of public delivery mechanisms for an effective government-led social protection system. Public resources should be the main funding mechanism, particularly for one that needs to prioritize social assistance and to gradually replace the current high donor and private share of spending on social services, as now discussed.

**Figure 3.3: Social Assistance Spending,  
Selected Asian Countries, 2030**  
(% of GDP)



GDP = gross domestic product.

Note: For Myanmar, budget projections are by 2024.

Source: Author based on ILO (2015) and ADB (2016b).

## Current Funding Sources

Donor and private funding of social service delivery is overrepresented in Myanmar. Government spending has financed mainly demand-side social security programs, while development partners have shouldered the few and fragmented social assistance programs. Health and education public spending has increased as a share of total spending, but households still bear nearly two-thirds of education spending—63% in 2010 (World Bank 2015c)—though that rate is likely to have fallen recently with increased government spending on free textbooks and free tuition.

A financial scenario with supply-side investments in health and education and a basic social protection package seems the most appropriate to achieve the social protection targets of the SDGs. But if the trend continues, recent increases in public social spending will likely change the financing outlook toward publicly financed social sectors in the long term. Given the relative importance of social protection in the upper estimates described in Chapter 1, any high-coverage social transfer package will absorb a significant share of government revenue in 2030 (two-thirds of the resource requirement in the “stationary state”).

Universal entitlements are also extremely hard to dismantle once in place, while low-coverage, targeted programs are easier to expand and broaden in scope. To prevent the crowding out of public resources from health and education in the short and medium term, cash transfers would be better to follow a gradual, expanding curve that allows for supply-side investments to realize and support increased demand.

## Absorbing Capacity: Gaps, Risks, and Opportunities in Today’s Institutional Landscape

### *Gaps and Risks*

Basic budgeting and planning procedures—a precondition for effective resource allocation and mobilization—are underdeveloped in Myanmar. They are still reactive and output-based, rather than strategic, forward looking, and results-oriented. Iterative budgeting processes are the norm, and budget decisions are based on the budget of the previous year rather than on objectives and sociodemographic data. Improvised program budgeting is the norm with, for example, MOSWRR’s budget. Aggregate fiscal discipline, strategic allocation of resources, and efficient service delivery are stymied by the current planning and budgeting processes (World Bank 2012). Still, the public financial management

and civil service reforms under way should improve the outlook in the medium term.

Policy coordination for coherent implementation and sustainable financing needs close attention when the country expands its social protection floor. Most social assistance programs are executed by development partners. Even if a gradual transition in government systems is planned and supported, the existing fragmentation and ad hoc budgeting will no doubt continue despite an overarching coordination and financing mechanism (Infante Villarroel 2015a). For instance, the Social Protection Strategic Plan provides a framework for social protection that places MOSWRR at the center of most coordination functions. However, MOSWRR has its own mandate as an implementing agency of social pensions and welfare services (and hopes to implement maternal and child cash transfers as well), and lacks the capacity and incentive to coordinate and mobilize resources beyond its institutional scope.

Expanding social security without full awareness of the budgetary implications could bring risks to sustainably financing social security and could crowd out public spending on social assistance (Dutta, O'Keefe, and Palacios 2015). The Social Security Law (SSL) of 2012 foresaw the creation of what are financially risky options for Myanmar's level of development, such as unemployment insurance and housing benefits, against a backdrop of weak regulatory and investment capacity. In addition, the financing strategy of the civil service pension scheme (now, a defined-benefit, noncontributory scheme) is yet to be defined but is evolving in parallel to the regulation of the pension scheme for private sector workers (see Table 3.3). Any financing solutions need to ensure that adequate and sustainable financing for social assistance is not compromised, which could be the case now that civil service pensions, operating costs of the social security scheme, social assistance, and supply-side investments in health and education all share the "social budget" pot. In some cases, these two objectives (expanding social security and making more resources available for social assistance) are not mutually exclusive. For instance, public works programs can act as de facto unemployment insurance mechanisms, particularly in predominantly rural environments such as Myanmar.

A wise approach to expanding the social protection floor in Myanmar needs to support the evolution of administrative systems through simple yet well-designed, scalable programs. The stipends, and the maternal and child health voucher scheme, are programs implemented through government systems and can provide the basis for national social assistance programs (Dutta 2015a). These programs can have, as objectives, the strengthening of delivery

systems in the short term, then gradually scale up and expand coverage over the medium term, and become a more sophisticated multisectoral backbone of social assistance provision in the long term (as with cash transfers in Indonesia and the Philippines). Tight coordination and planning between the social security, pensions, and universal health coverage reforms are important to avoid inefficiencies in the delivery system and in the use of public resources (Dutta 2015a).

Supply-side investments are equally destined to need a gradual approach. Greater spending on rural health infrastructure is certain to be held back by public investment management capacity, while increased spending in hiring education staff will be trammled by too few qualified teachers (World Bank 2016a). Moreover, overcoming these capacity constraints risks prompting macroeconomic instability if spending patterns are not adjusted (IMF 2015). (Chapter 1 and the ABND exercise take this into account with the gradual increase to reaching desired spending targets.) The capacity of the government to achieve the SDGs should therefore not be judged by the pace of spending allocation alone, but also by the quality of its spending and the degree of institutional strengthening.

### *Opportunities*

Myanmar can take advantage of being a “latecomer” to social protection, and can learn from the mistakes—and successes—of other low-income countries in the region, particularly in two related topics: the emerging emphasis on coordinated social protection provision, and the innovative ideas and technological solutions that have helped many countries reduce poverty and promote inclusive growth at relatively low cost (Infante Villarroyel 2015f). Countries such as Indonesia and the Philippines can help Myanmar identify the best approaches to social protection provision that will feature, for instance, systems approaches to benefit delivery, integrated beneficiary databases that reduce fragmentation and leakage, and area-based (along household-based) transfers that help address regional disparities and household vulnerabilities.

Lastly, development partners in Myanmar have a wealth of experience in running social assistance programs, which the government can use in its transition to fully owned public provision. The ABND exercise identified several instruments that development partners are already using, while the World Bank Social Protection Assessment provides details on where and how these can better serve objectives. Development partners, for example, should support the government in identifying designs and sustainable delivery functions that can facilitate

transitioning to government-led implementation in the medium term (Infante Villarreal 2015b). Technical assistance to translate international experience into lessons for Myanmar can also help, by informing the government's decision-making. Financing mechanisms from donors could support government-led programs, at least in the short and medium term, as we now see.

## Potential Financing Options

### Mobilizing New Resources

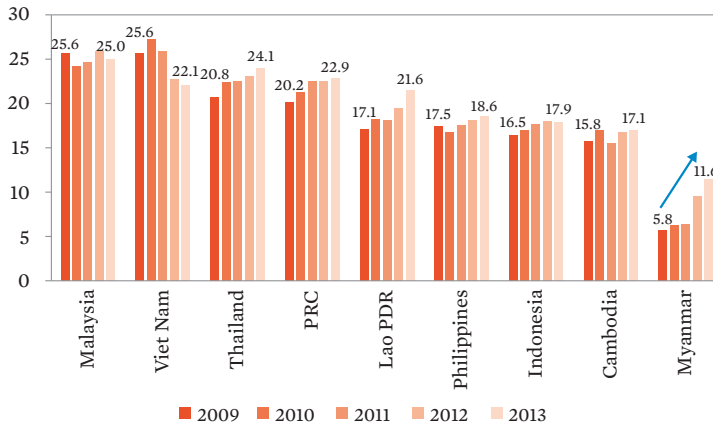
Myanmar's low revenue requires it to lift government receipts to create fiscal space for social investments. Revenue, excluding net receipts from state economic enterprises (SEEs), doubled as a share of GDP from 5.8% to 11.6% from 2011 to 2013, but remained below its potential against the regional average of some 21% of GDP (World Bank 2015c; and Figure 3.4). Even when controlled for by GDP per capita and compared with low-income near neighbors such as Cambodia, Myanmar's revenue collection remained low (Figure 3.5).<sup>40</sup> Including net receipts from SEEs, revenue was 20.9% of GDP in 2015 (ADB 2016a).

The government has to increase its revenue and potentially finance social protection spending. Its income tax receipts in 2013/14 were only 2.4% of GDP, against an average of 5.7% among nine low- and middle-income East Asian countries (World Bank 2015c). Property taxes are also low internationally (ILO 2015), as are indirect taxes, customs duties, and nontax revenues. Indirect taxes accounted for around 2.1% of GDP in 2013/14 compared with 6.4% in the countries in Figure 3.4 (World Bank 2015c). Customs duties are 0.3% of GDP versus 1.3% of GDP in the Asian country sample, but this share should automatically rise in the medium term as Myanmar integrates into the world economy.

Myanmar's economy and SEE receipts depend on volatile commodities that, given falling international commodity prices in the last couple of years, have lowered revenue estimates. Net profits from SEEs, which account for nearly 8% of GDP (World Bank 2016a), are unlikely to assure countercyclical resources needed by a social protection system. While the tax base has begun to diversify from its dependence on SEEs, with non-SEE revenue climbing from 2.1% of GDP in 2009/10 to 7.4% in 2013/14 (World Bank 2015c), further diversification would

<sup>40</sup> Some discrepancies exist between the different sources of revenue figures, but do not affect the overall picture.

**Figure 3.4: Government Revenue as Percentage of Gross Domestic Product 2009–2013, Selected East and Southeast Asian Countries**

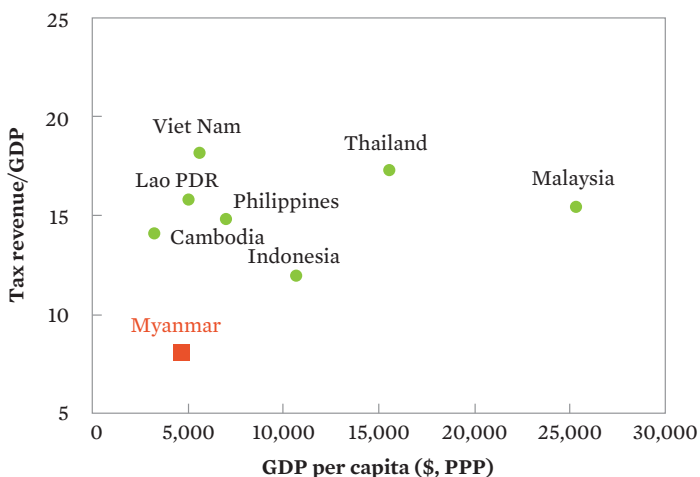


Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: Excludes net receipts from state economic enterprises.

Source: World Bank (2015c).

**Figure 3.5: Tax Revenues and Gross Domestic Product per Capita, Selected Southeast Asian Countries, 2014**



GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PPP = purchasing power parity.

Source: IMF (2015).

likely increase the stability of government revenue and the amount of sustainable financing.

In short, there seems to be scope for creating fiscal space by increasing government revenue but the source should be sustainable and progressive. New taxes—or increased rates for existing ones—have both been used in other countries to finance social protection expansion. For instance, taxes on tobacco and alcohol have been introduced in the Philippines, the PRC, and Thailand to finance social health protection, while in Latin America, Bolivia raised its taxes on natural resources extraction, which helped universalize its social pension scheme (ILO 2015, World Bank 2015b).

Natural resource revenues are a vital source of income for Myanmar but can leave the social protection budget vulnerable to external shocks unless it devises stabilizing measures, which means that the authorities must delink the social budget from, for example, SEE net receipts if natural resources are to be a source of SDG finance (IMF 2015). Indirect taxes can create regressive distortions and should be minimized, while income, property, and rent taxes should be pursued more directly, particularly non-distortive rent taxes on SEEs (World Bank 2015c, IMF 2015).

## Realizing Efficiency Gains through Decentralized Funding

Tapping into Myanmar's few and small decentralized funds could bring efficiency gains to these investments while opening up new funding mechanisms for social protection. The share of central government expenditures on intergovernmental transfers increased from 0.6% of GDP in 2011/12 to 2.3% in 2014/15, to account for 14.6% of the 2014/15 central government budget (Infante Villarroel 2015a). These transfers could be the cornerstone of local initiatives that underpin national reconciliation.

Three types of intergovernmental transfers could finance social protection: grants and loans to regional or state governments (though they tend to cover previous budget deficits rather than meet local needs); the Constituency Fund (although it is linked to very small projects); and the Poverty Reduction Fund (\$40 million in 2014/2015). This latter fund has the potential to ensure evidence-based resource allocation not only across regions and states but also within them among townships, as better poverty data become available (see Box 4.1). This fund's guidelines could be expanded to incorporate soft infrastructure for poverty reduction, such as social protection programs, beyond the current scope for infrastructure development.



## Boosting Beneficiary Contributions

Expanding the number of contributory social security programs could, in principle, add resources to the social security pot. The SSL calls for a steep rise in the payroll tax levied on formal sector workers and employers—if all its provisions are implemented—from 4% to 13%, with an additional 25% contribution for housing benefits (Dutta, O’Keefe, and Palacios 2015). The government is also considering turning the Civil Servant Pension Scheme into a contributory one.

Contributions are a limited source of funding that does not address the need for more social assistance provision, and that could put at risk the contributions of beneficiaries unless tighter regulation is brought in. There are serious concerns about the unconstrained and underregulated investment policy of the Social Security Board in charge of the SSL social security schemes: the SSL and regulations place few limits on the board’s investments and does not define an ideal portfolio (Dutta, O’Keefe, and Palacios 2015). As with the SSL, any eventual contributory civil service pension scheme should be preceded by robust governance arrangements to manage the accumulated funds and by reliable information systems to allow for the reconciliation of contribution flows with individual account records. As detailed civil service data are unavailable, current (or future) contributory schemes should focus on strengthening their systems before expanding their contribution base.

## Channeling Donor Support

Development partners have historically financed a much larger portion of social assistance than have government programs. Channeling their resources to finance a transition to government systems could help develop Myanmar’s social assistance component in the short and medium term. And because development partners have executed some of the components of the social protection floor, their technical knowledge and financial support would help leverage their resources in a coordinated way. Beyond technical assistance, development partners can also help provide seed investments in early stages of government programs by pooling resources instead of pursuing parallel agendas through their own implementing mechanisms. Programs such as MOE’s stipends and the National Community Driven Development Program (an area-based program) have already helped pool resources to supplement the government budget (Dutta 2015a), and MOSWRR is partnering with Save the Children and LIFT on the cash transfer pilot for maternal and child health. It will be important to link these temporary financing strategies to robust institutional development objectives

and sustainable public financing mechanisms to work toward government ownership, rather than perpetuating a business-as-usual model.

## Prudence First

The government's most prudent strategy is probably to aim at initially financing a low-cost social assistance package, mainly from government revenue. Alongside expanding social assistance coverage, harmonizing social insurance for the private and public sectors should strengthen the sustainability, coverage, and efficiency of social protection. Together, these elements should gradually close the social protection–SDG gaps, while pursuing institutional strengthening and tightening social cohesion. A financing mix could include

- better allocation of government resources across sectors;
- efficiency gains from more intergovernmental transfers (decentralized funds to states and regions) rather than more deconcentrated financing, and better spending on health, education, and social protection;
- increased government revenue from further indirect taxes (e.g., alcohol and tobacco) but especially from more progressive direct taxes such as income, property, and rent (particularly on SEEs); and
- better channeling of donor support through pooled resources for some programs and ensuring a technical support focus on building the institutional foundations for fully government-owned social assistance provision.

## Conclusions and Recommendations

The institutional constraints in Myanmar and the fiscal implications of the huge resources needed to finance the social protection agenda of the SDGs call for a progressive expansion of social protection supply- and demand-side investments. This stepwise expansion would give time for supporting systems to evolve in a way that benefits transparent and sustainable delivery of cash transfers. It would also help improve delivery capacity of government officials, particularly locally, who until now have had very different mandates.

This gradual expansion of supply-side investments in health and education and a basic social protection package to cover all components of the social protection floor (equivalent to 2.1% of GDP by 2024) are feasible options for Myanmar. The social protection package should include an expanded social security medical

care scheme, a social health protection scheme, cash transfers to mothers and infants, school stipends, a public works program, and social pensions.

An option for financing the social protection agenda of the SDGs in Myanmar would include reallocated government resources as well as additional revenue from various sources. The financing mix should prioritize better allocation of government resources, a top-up for decentralized funds to states and regions, increased government revenue from progressive direct taxes, and a better channeling of donor support.

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# Timor-Leste

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Timor-Leste is one of the youngest countries in the world, and since independence in 2002, this small country has been regarded as an example for its transition to democracy. Nonetheless, its short history as a sovereign state has seen many struggles to maintain peace, and even more, to lift its 1.18 million people from extreme poverty and guarantee a decent life for all.

To this end, the country has created a broad system of social assistance, offers free and universal public health services and education, and has made huge efforts to expand access to essential services in these short years. Timor-Leste has an ambitious set of policies and programs for a country at its development stage, and much of the principles that underline the Sustainable Development Goals (SDGs) can be seen in its policies, such as universality, equality, and inclusiveness.

Large cash-transfer schemes targeted at certain groups of society—children, veterans, and the elderly—stand out among other programs for their coverage and costs. This is against a backdrop where social protection (exclusively financed by the General State Budget) represents the largest share of government expenditures (after infrastructure investments) amounting to 25.3%<sup>41</sup> of non-oil gross domestic product (GDP) in 2015.<sup>42</sup>

Access to social protection services in remote areas is still a serious challenge, however. Lack of roads, transport, and means of reliable communication places huge barriers that prevent the government from offering access to education, health, and other services, and prevents individuals from reaching services that are available.

Human and economic development remains low, placing the country in a challenging starting position, as seen in poor indicators for poverty, malnutrition,

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<sup>41</sup> Including government expenditures by the Ministry of Education, Ministry of Health, and Ministry of Social Solidarity.

<sup>42</sup> Given the weak linkage of the oil sector to the rest of the economy and the fact that all revenues flow directly to the Petroleum Fund, economic analysis is usually on the non-oil economy.

maternal and infant health, educational attainment, and number of decent jobs. The country needs to reshape its social protection rationale to one that focuses on more practical poverty reduction and human development to achieve the SDGs, and its own targets set in the Timor-Leste Strategic Development Plan 2011–2030.

Timor-Leste is one of the most oil-dependent countries in the world. Its petroleum and gas revenues have delivered impressive economic growth, and allowed the Petroleum Fund to amass huge fiscal reserves. The Fund has covered more than 80% of total government expenditures since 2005 (Ministry of Finance 2015). Total oil reserves, however, are modest and the current fields are projected to be depleted by 2026, and no other reserves are set to be explored after this (Annex 4.1). In this context of high development needs, the wealth accumulated in the Petroleum Fund offers an opportunity for the attainment of the SDGs' social protection agenda and for sustainable and inclusive growth. However, as discussed in Chapter 1, the financing gap for such achievements might prove too large, even with the Petroleum Fund.

Beyond the gaps and challenges, this chapter explores some options to close them, looks at the costs, and concludes with a fiscal space analysis and possible strategies and recommendations to advance the social protection agenda.

## The Social Protection System and Its Gaps

The constitution explicitly recognizes health, education, and social assistance and social security as the rights of every citizen. In the years after Timor-Leste's independence, severe budget constraints led efforts to be focused mostly on ad hoc safety net programs for the most vulnerable groups. The political crisis of 2006 changed the government's initial approach, and broad social assistance programs were created in 2007–2008, with the explicit goals of improving social peace and cohesion.<sup>43</sup> Most programs were set up independently, without an encompassing framework to guide policy. Since 2011, the state has been guided by the Timor-Leste Strategic Development Plan 2011–2030, which highlights a commitment to protect the most vulnerable citizens, and to invest in health, education, and essential services.

<sup>43</sup> The crisis stemmed from the population's high expectations and frustration with the slow pace of development after independence, among other issues.



Timor-Leste has a broad system of social assistance, and public health services and education are free and universal for all citizens. Efforts to expand access to other essential goods and services to all have been the focus of government investments in the last decade. Yet many obstacles remain, for social transfer programs and service delivery alike.

Timor-Leste has three main social transfer programs: Bolsa da Mãe (Mother's Allowance), a conditional cash transfer, targeted to children of vulnerable households; Allowance for the Elderly and Persons with Disabilities (SAII), which is a universal social pension for the elderly and persons with disabilities; and veterans' pensions, which reward and support those who fought for the country's independence, and martyrs' families.

Social assistance programs mainly depend on cash transfer mechanisms to deliver benefits. There are serious issues with the targeting of beneficiaries, however, due primarily to lack of resources to comply with all administrative processes properly and due verification of eligibility, or due to fuzzy eligibility criteria, which can lead to many inclusion and exclusion errors. Payment delivery also faces many obstacles, and the two largest cash transfer programs (in number of beneficiaries) Bolsa da Mãe and SAII pay benefits only once and twice a year, respectively, thus harming principles for the effectiveness of social transfers, predictability, and regularity of payments.

Despite generally following a universal approach, the reach of service delivery is still limited. Most service infrastructure, whether health, education, sanitation, or electricity, is concentrated around administrative centers, and given poor road conditions and lack of means of transport, access is in effect highly constrained to many communities farther away.

Coverage of programs varies widely, with small social assistance programs reaching a few dozen people, and some programs reaching almost 70% of the population, like the Integrated Community Health Services (SISCA) and SAII (more than 90% of its target group). Table 4.1 summarizes the main social protection schemes and the essential services considered in this analysis.

Spending on social assistance and linked programs has taken a large share of the government's budget in the last decade. It rose steeply after the 2006 crisis, when multiple programs were created (Figure 4.1), increasing from 0.18% of non-oil GDP in 2005 to 13.6% on this metric in 2015. Investments in health varied less over the period, mainly staying between 3.5% and 4.5%, while education more than doubled, from 3.3% to 7.2%. However, the largest increase in budget

Table 4.1: Summary of Main Public Social Protection Schemes, 2015

	Program	Target	Coverage	Costs
<b>Social Transfers</b>				
Children	Bolsa da Mãe	Children 0–17 years, in vulnerable families	154,857 children (24.9% of target group)	\$8.5 million (0.6% of non-oil GDP)
	School Feeding	Children 3–15 years, at school	334,911 children (91.1% of target group)	\$6.4 million (0.44% of non-oil GDP)
Working Age	Social Security Schemes	Public servants, including the military	688 people	\$1.3 million (0.09% of non-oil GDP)
	Rural Employment	Workers from rural communities	6,572 people (33.0% of unemployed) working an average of 13 days	\$5 million (0.34% of non-oil GDP)
Elderly	Allowance for the Elderly and Persons with Disabilities (SAII)	Those above 60 years Those above 18 years with disabilities	86,974 people (90% of target group) 7,313 people (19.2% of target group)	\$30.6 million (2.1% of non-oil GDP)
	Veterans' Pensions	Veterans from the independence struggle, and families of martyrs	31,445 people (2.6% of total population)	\$119.7 million (8.5% of non-oil GDP)
<b>Direct Service Delivery</b>				
Health Care	Public health system	All citizens	...	\$62.5 million (4.4% of non-oil GDP)
	SISCA	All <i>sucos</i> and villages	823,368 people (69.6% of total population)	...
	Family health	All households	509,873 people (43.1% of total population)	...
Education	Preprimary school	Children 3–5 years	18,983 children (18.0% of target group)	
	Primary school	Children 6–14 years	316,074 children (117.3% of target group)	\$102.2 million (7.2% of non-oil GDP)
	Secondary school	Children 15–17 years	48,708 children (63.0% of target group)	

continued on next page

Table 4.1 *continued*

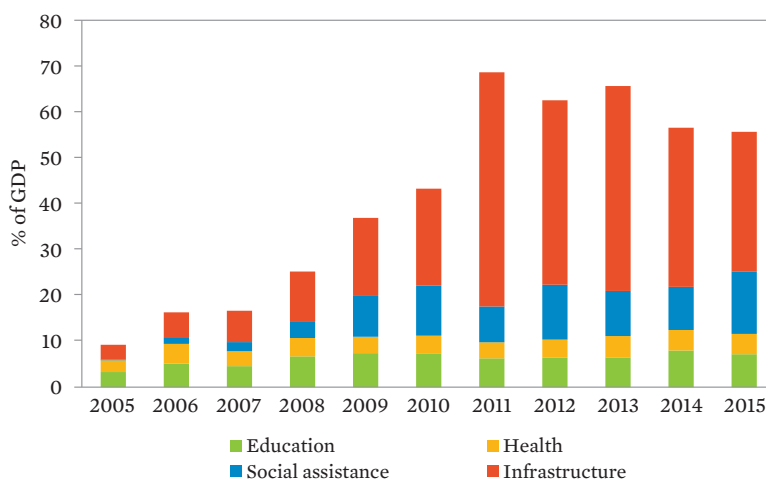
	Program	Target	Coverage	Costs
Other Services	Electricity	All citizens	851,760 (72% of total population)	
	Clean water	All citizens	887,250 people (75% of total population)	\$61.3 million (4.3% of non-oil GDP)
	Sanitation	All citizens	709,800 (60% of total population)	

... = no data, Bolsa da Mãe = Mother's Allowance conditional cash transfer, GDP = gross domestic product, SISCA = Integrated Community Health Services.

Note: Coverage was calculated based on the 2015 Census, and data on costs refer to 2015, or more recent year where available.

Sources: Author's consultations in 2016 with Secretary of State for Training and Employment Policies—Directorate of Employment; Ministry of Education—National Directorate of School Feeding and Transportation; Ministry of Social Solidarity—National Directorate of Veteran Support; and Ministry of Social Solidarity—National Directorate of Contributory Social Security; and Ministry of Finance (2016a).

**Figure 4.1: Public Expenditure on Social Assistance, Education, Health, and Infrastructure, as a Share of Non-Oil Gross Domestic Product, 2005–2015**  
(% of GDP)



GDP = gross domestic product.

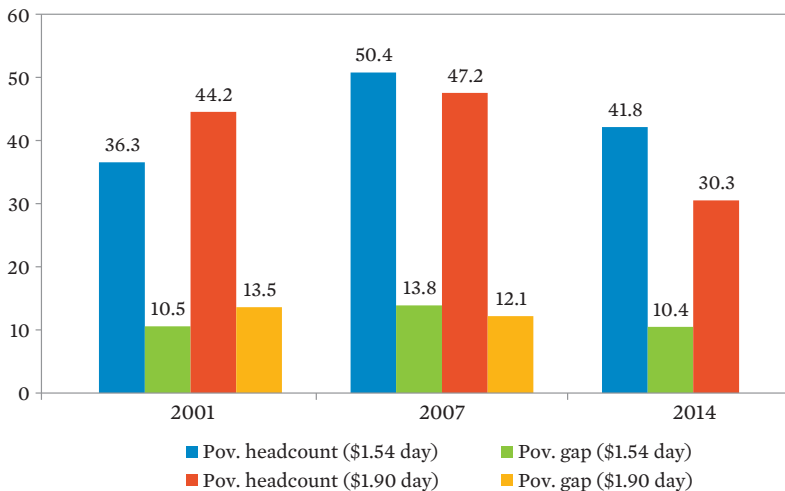
Source: Ministry of Finance (2016a).

in the past decade was unquestionably on infrastructure, much of it to expand electricity generation and distribution. To what extent, therefore, do these policies meet the targets?

## Social Transfers

Timor-Leste's social transfers, which should help achieve Target 1.3 (Implement social protection, including floors), have yet to reduce poverty sharply: while non-oil GDP per capita grew by about 53% from 2007 to 2014 (Ministry of Finance 2015), poverty fell by only some 17% in the same period, and it remains higher today than in 2001 (Figure 4.2).<sup>44</sup> Against SDG Target 1.1 (Eradicate extreme poverty), with 30.3% of the population living in extreme poverty, and Target 1.2 (Reduce poverty by half), a poverty headcount of 41.8% (using the

**Figure 4.2: Poverty Headcount and Gap, by National and International Poverty Lines**



Note: No data for the 2014 poverty gap for the international poverty line.

Sources: Ministry of Finance (2003, 2008, and 2016b).

<sup>44</sup> Drawing on the nationally defined poverty line of \$1.54 per capita per day, which was set based on the minimum resources to guarantee consumption of sufficient food, adequate housing, and a bundle of nonfood goods (Ministry of Finance 2016b).

national poverty line) shows the challenges. In rural areas, progress has been even slower, and the gap with urban areas is widening.<sup>45</sup>

Of the three main social transfer programs, the benefit levels of SAI and Bolsa da Mãe are modest, \$30 and \$5 monthly, while the veterans' pensions range from \$276 to \$575 monthly or one-time lump-sum payments of up to \$6,900, depending on the length of service. Coverage rates vary, with SAI reaching more than 90% of the elderly and about 19% of persons with disabilities; Bolsa da Mãe, about one of four children, and veterans' pensions around 2.6% of the population. Despite fewer beneficiaries, veterans' pensions amounted to \$119.7 million in 2015—about 8.5% of non-oil GDP, or 61% of the social assistance budget (see Table 4.1). Children also benefit from the School Feeding program, directed to preprimary and primary school students, which offers one meal a day (\$0.25 per child per school day).

Comprehensive social protection for those of working age has yet to be implemented. The first social insurance system was created in November 2016 and was expected to start operation in mid-2017. It will replace the current, temporary noncontributory scheme for public employees, introduced in 2012, which offers old-age, disability, and survivors' pensions, with high replacement rates, and unify it with the private sector under a single scheme.

New contributory social security schemes include old-age, disability, and survivors' pensions, and maternity/paternity and work injury benefits, and is expected to cover 40,000–70,000 workers in its first 5 years, amounting to about 18%–32% of the labor force. Workers without a formal job can access Rural Employment program, a small cash-for-work scheme which aims to create local jobs and boost infrastructure at community level, and is the only program targeted at the working-age population in informal jobs.<sup>46</sup>

In the long term, the new contributory system will reduce expenses of SAI and prevent further entitlement to the transitory social security scheme. However, in the short term, the shift of beneficiaries from noncontributory to contributory will be slow.

<sup>45</sup> From 2007 to 2014, the poverty headcount at \$1.54 per capita per day fell in urban areas from 45.2% to 28.3% and in rural areas from 51.5% to 47.1%.

<sup>46</sup> The program hires local workers, paying \$3 per day of work; on average, laborers work for 13 days. The program can procure local companies for more complex projects, although in these contracts companies hire workers directly.

Most social transfer programs face common challenges. Operational issues and high costs for benefit delivery result in payments made only once or twice a year. Problems also exist with registering, document verification, and screening of beneficiaries—all issues that intensify inclusion and exclusion errors. To overcome such problems, the Family Health program takes a team of doctors and nurses on house visits, making simple examinations, gathering information, and delivering medicine and health-care information for families.

## Health

Despite good progress in some health issues, such as increasing life expectancy and decreasing maternal and child mortality,<sup>47</sup> the country faces many issues if it is to achieve SDG Target 3.8 (Achieve universal health coverage). Malnutrition among children and maternal mortality ratio are still among the highest in the region, and immunization rates need a huge boost. The prevalence of noncommunicable diseases is increasing, accounting for about 44% of all deaths in 2014 (World Bank 2016), and infectious diseases remain a substantial threat.

OOP payments are a small fraction of total health expenditure, with the government responsible for 91.7% of total expenditure in 2013. On the other hand, private health-care supply is low, mainly in the capital city of Dili or supplied by nongovernment organizations, which limits people from actually making any private health expenditure.

From 2005 to 2015, government health expenditure varied between 3.2% and 4.6% of non-oil GDP, remaining most of the time above the benchmark suggested in Chapter 1. However, many health programs are financed by official development assistance (ODA), and these resources are decreasing. Health budget increases in the last decade were driven by the expansion of the health workforce, but its budget is decreasing as a share of government expenditures, as infrastructure investment dwarfs other items (World Bank 2016; and see Figure 4.1).

<sup>47</sup> Life expectancy increased from 60.2 years in 2001 to 68.2 in 2014 (Ministry of Health 2011). From 2001 to 2015, under-5 mortality fell from 125 deaths per 1,000 live births to 64, and infant mortality from 88 deaths per 1,000 live births to 44. Maternal mortality ratios were stagnant from 2001 to 2010, but have since improved sharply from 557 deaths per 100,000 births to 270 in 2015 (Ministry of Finance 2014, UNDP 2015). However, in 2015, antenatal and postnatal care reached only about half of women, only 63% of deliveries were accompanied by a health professional, and only 22% were at a health facility (Ministry of Health 2015a, 2015b). With these indicators, Targets 3.1, 3.2, 3.7, and 5.6 (on maternal and neonatal mortality, reproductive health care and rights) will be difficult to reach.

With this in mind, and assuming that government health expenditure levels will remain around the average of the past 10 years (4.15% of non-oil GDP) and compensate for the reduced ODA, the challenges to guarantee the access to health social protection will concentrate on improving the quality of services, improving spending efficiency, and reaching those in the most isolated places.

## Education

As in public health, public education, which is free and universal, faces the same challenges of reaching all citizens. The years following independence saw a general decline in enrollment rates, but, since 2007, education indicators have picked up nicely. Primary school net enrollment rates have increased to around 90%, and completion rates are improving. Repetition rates, however, remain high, at roughly 15% of enrolled students. And the ratio of boys and girls in primary school is almost the same.

Preprimary and secondary school indicators lag behind, while preschool is attended by only about 14.7% of children. Secondary enrollment is also low compared with primary school, with 26.6% net enrollment and 60.5% gross enrollment (Ministry of Education 2014). These varying enrollment rates are, in part, a reflection of the infrastructure, for which primary education has more than 10 times the stock of schools than preprimary and secondary schools combined.<sup>48</sup>

There are also challenges related to institutional capacities, such as financial management and curriculum development, and provision of quality education. The number and quality of education professionals remain low, as training teachers is slow and costly. And once again, more distant regions face worse conditions than urban areas.

Investment in education per capita multiplied almost 10 times between independence and 2012, while as a share of non-oil GDP, the budget of the Ministry of Education went up from 2% in 2001 (World Bank 2013) to 7.2% in 2015. Yet as a share of government spending, it has declined, and in 2015 was barely half the rate set by the National Education Strategic Plan (7.1% versus roughly 13%).

<sup>48</sup> In 2011, the country had 40 preprimary schools and 64 secondary schools, against 1,280 primary schools. The required total stock by 2030 is put at 862 preprimary, 1,949 primary schools, and 211 secondary—i.e., 1,638 schools would have to be built. For more details, see Ministry of Education (2011).

## Other Essential Goods and Services

An estimated 70% of public infrastructure was destroyed in the conflict following the referendum on independence. Rebuilding is the national priority, as reflected in the Timor-Leste Strategic Development Plan 2011–2030, which aims to provide reliable electricity, clean water, and improved sanitation to all by 2030, matching SDG Targets 6.1, 6.2, and 7.1. Progress in raising access to electricity and water and in restoring the national road network has been very good, but less so in sanitation, and farming infrastructure (ADB 2016, World Bank 2015).

Access to clean water has improved significantly in urban areas, reaching more than 90% of the population; however, rural areas lag far behind—only about 75% of the country has access to clean water. Improved sanitation is moving more slowly, and has changed little in the past 15 years. In 2014, around 60% of the population had access to improved sanitation. Target 6.1 (Achieve universal access to safe drinking water) seems closer than Target 6.2 (Achieve access to sanitation for all). However, since 2010, progress in both indicators seems to have stagnated. When disaggregated by rural and urban areas, the former have gaps double the size of the latter. And even with the massive investments in electricity infrastructure since 2008, only 72% of households have access. The gap is concentrated in rural areas—37% of households have no access to electricity (Ministry of Finance 2016b), where the challenge to achieve Target 7.1 (Ensure universal access to modern energy) will be tough.

The budget for infrastructure was steep until about 2013 (see Figure 4.1). The maintenance budget did not keep up, which threatens to undo much of the investment made in the last decade as roads, the electricity grid, and other infrastructure degrade over time (World Bank 2015, p. 39).

## Challenges Ahead

The results of the spending on social protection, education, health, and other essential goods and services raise questions on how well the money is spent. The patchy evidence on the social transfers' impact suggests that, the old-age social pension aside, current programs have insignificant impact on reducing poverty. This may well stem from the huge concentration of resources in the veterans' pensions; the use of targeting mechanisms that often exclude the poor, and shortfalls in Bolsa da Mãe to reach all the target population and to deliver adequate benefits. Service delivery suffers, still, from shortage of infrastructure and maintenance. Yet government capacity to deliver and manage services, institutional development, and the business environment all seem to have



improved, but much has yet to be done. Table 4.2 summarizes the main gaps of social protection provision in Timor-Leste, and provides some insight on potential ways forward. Some of these are costed in the next section, given that the nature of the applied methodology does not allow for more in-depth costing exercises.

**Table 4.2: Social Protection Gaps and Strategies**

SDG Governance Targets	Social Protection Gap	Potential Strategies to Close the Gap
<i>Appropriate social protection systems including floors (1.3)</i>	<ul style="list-style-type: none"> <li>- Fragmented system, without an overarching coherence</li> <li>- Budget unbalanced between programs, and concentrated on veterans' pensions</li> </ul>	<ul style="list-style-type: none"> <li>- Improve coordination at all levels (policy and operations), particularly between line ministries</li> <li>- Improve information sharing between programs and ministries</li> <li>- Improve programs that provide broadly based benefits, shift resources from less effective ones, and introduce new programs</li> </ul>
- Children	<ul style="list-style-type: none"> <li>- Programs offering adequate benefits</li> <li>- Benefits focused on children of school age</li> <li>- Programs not properly addressing malnutrition</li> </ul>	<ul style="list-style-type: none"> <li>- Improve coverage and benefit levels of current programs (e.g., Bolsa da Mãe, School Feeding)</li> <li>- Introduce new programs designed to improve nutrition (e.g., transfers and in-kind benefits to children, with a focus on those under 5)</li> </ul>
- Working age (Full employment and decent work) (8.5)	<ul style="list-style-type: none"> <li>- Only small coverage of informal workers</li> <li>- Contributory social security in very early implementation stage</li> <li>- Little support for the unemployed</li> <li>- Little to no protection for farmers, especially subsistence farmers</li> </ul>	<ul style="list-style-type: none"> <li>- Implement the new social security schemes as soon as possible</li> <li>- Expand and diversify the small cash-for-work scheme</li> </ul>

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Table 4.2 *continued*

SDG Governance Targets	Social Protection Gap	Potential Strategies to Close the Gap
– Old age	<ul style="list-style-type: none"> <li>– SAII benefits are paid only twice a year</li> <li>– Benefits are losing purchasing power, given long periods without inflation adjustments</li> </ul>	<ul style="list-style-type: none"> <li>– Improve delivery mechanisms to allow monthly payments</li> <li>– Create indexation mechanisms for social transfer amounts</li> </ul>
<b>Universal health coverage (3.8)</b>	<ul style="list-style-type: none"> <li>– Insufficient health infrastructure and human resources</li> <li>– Low quality and unreliable provision of services</li> <li>– Limited capacity to reach citizens far from health units/centers</li> </ul>	<ul style="list-style-type: none"> <li>– Maintain and increase investment in infrastructure</li> <li>– Improve the balance of health-care professionals (more nurses and midwives relative to doctors)</li> <li>– Expand outreach programs (e.g., SISCA)</li> <li>– Improve provision and logistical capacity to avoid interruption of services</li> <li>– Improve spending efficiency</li> </ul>
<b>Access to education (4.1, 4.2, 4.5)</b>	<ul style="list-style-type: none"> <li>– Low quality of services</li> <li>– Insufficient education infrastructure and human resources</li> </ul>	<ul style="list-style-type: none"> <li>– Increase investment in infrastructure</li> <li>– Improve teacher training programs</li> <li>– Update school curriculum</li> <li>– Improve spending efficiency</li> </ul>
<b>Access to other essential goods and services (6.1, 6.2, 7.1)</b>	<ul style="list-style-type: none"> <li>– Insufficient water, sanitation, and electricity infrastructure</li> <li>– Inadequate investment in maintenance</li> <li>– Poor quality-assurance mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>– Increase investment in extending water, sanitation, and electricity infrastructure</li> <li>– Couple investments in infrastructure with future provision of budget for proper maintenance</li> <li>– Improve spending efficiency</li> </ul>

Bolsa da Mãe = Mother's Allowance conditional cash transfer, SAII = Allowance for the Elderly and Persons with Disabilities, SDG = Sustainable Development Goal, SISCA = Integrated Community Health Services.

Source: Adapted from Bongestabs (forthcoming).

## How to Fill the Gaps

Some challenges stand out—mainly, how to eradicate poverty, end child malnutrition, and guarantee access to essential services and decent jobs. As shown in Chapter 1, Timor-Leste will face grave difficulties to finance the SDG social protection agenda. This would be true even if the oil revenues continue

at current levels. But as these resources become more scarce, choosing the right policies is increasingly crucial. This section focuses on policy options, with the costs estimated in the next section. Most attention is given to social transfers, as different design options can be costed using Chapter 1's methodology on what is referred to as the "adapted social budgeting model."

## Social Transfers

Social transfers need to be made more effective, so as to facilitate poor families to invest in their productive activities, and to guarantee that children will have conditions to develop fully. However, it is difficult to argue that a country that spends 12% of non-oil GDP on social transfers needs to commit even more resources for social protection, and even harder to argue that it will be feasible for Timor-Leste to increase its current expenditure. And so the government needs to reshape its social protection rationale to one that focuses on *efficient* poverty reduction and human development programs. A mix of adjusting the current programs and adapting the solutions proposed as the "upper estimate" (see Chapter 1) is a more feasible approach.

### For Children

By 2030, about 40% of the population will be below age 15, and partly because deprivation in children's early years can have long-lasting consequences, providing adequate conditions for children should be the main focus of Timor-Leste's social transfers.

The country's poverty and malnutrition rates make a strong case for interventions for children, starting during pregnancy, such as a universal Early Childhood Development (ECD) grant program for children below primary school age. (The limited supply of preprimary schooling is the reason to keep the benefit until primary school age.) It would target pregnant women and children from birth to 5 years old. It would pay 50% of the poverty line before birth to support the mother's nutritional status, and continue until the child reaches age of 5.<sup>49</sup> Payments could be made during prenatal and postnatal examinations, and coordinated with other maternal and child care services to stimulate uptake. The universal ECD grant would replace the Bolsa da Mãe for children 0–5 years old.

<sup>49</sup> For the calculations of period of payment before birth, 6 months of payments are assumed. And for the breastfeeding period, the benefit considers about 75% to support food and nonfood expenses for the baby, and 25% for the mother's nutrition.

For school-age children, Timor-Leste already offers two social transfer programs Bolsa da Mãe and the School Feeding program.<sup>50</sup> As the programs are complementary, it is recommended that both programs increase their benefits significantly. Together, they would meet 50% of poverty line needs for vulnerable children aged 6–14 years, with higher attention to nutrition, and provide meals to all children at school.

### *For Those of Working Age*

The existing public works program—Rural Employment—is modest, covering only about 33% of the unemployed with only a few days of work. To contribute to SDG Goal 1 and Target 8.5 (Achieve full employment and decent work), the program needs to be expanded and benefit levels increased—the current benefit is equivalent to a mere 7% of the poverty line, or 2.8% of the minimum wage. Furthermore, the program works on small and simple projects without a specific focus. It should instead focus on rural infrastructure and services, especially to support subsistence farmers in, for example, building irrigation channels and providing access to markets, so as to help improve yields and output.

### *For Old Age and Disability*

Protection in old age is comprehensive, and despite shortfalls in coverage for people with disabilities, uptake is higher than the proposed rate in the methodology used in this study. The social pension, SAI, has characteristics similar to those of the pension suggested in the standard methodology. It targets all individuals over 60, and pays benefits equivalent to some 65% of the poverty line—a rate, however, not updated since 2012. Therefore, the only change proposed here is to update the rate to 70% of the poverty line. Likewise, the disability pension should be adjusted to the same rate, and made universal from age 6—a higher benefit than Bolsa da Mãe to compensate for the additional costs related to disability.

In the medium and long term, a share of the beneficiaries of SAI will be covered by the new contributory social security system.<sup>51</sup> It is expected that SAI becomes pension-tested to avoid overlap of the two benefits and reduce the overall

<sup>50</sup> The School Feeding program has almost universal coverage for children at primary school age, but does not cover secondary school. Current benefit levels are a little over 15% of the national poverty line. Bolsa da Mãe covers only about 25% of children aged 0–17 years, with a benefit equivalent to only 10.7% of the poverty line.

<sup>51</sup> As per SAI's Law 19/2008, the program's benefits are not cumulative with similar benefits from other programs, in this case, the old-age pension or disability benefits from the contributory social security schemes.

budget of the social pensions. However, it is also intended that the social pension budget will cover contributory old-age and disability pensions that do not reach a minimum value due to low level of contributions or incomplete contributory careers, as Law 12/2016 allows.

## Direct Service Delivery

The following recommendations for resource requirements are estimated in the same manner as in Chapter 1.

### Health

Health care has problems on the supply and demand sides. Investments to expand the network of health centers and human resources are expected to fill much of the supply gap in the next decade, *if* government expenditure continues at similar rates of the past 5 years (4.15% of non-oil GDP). However, for long-term fiscal sustainability, the output of such infrastructure needs to pick up. One option is to improve the balance of health-care professionals, from training doctors to training nurses and midwives (World Bank 2016). On the demand side, expanding the reach of programs, such as SISCA and Family Health program, would extend the effective coverage of basic health services. Emergency services need more attention though.<sup>52</sup>

### Education

The government plans to make access to preprimary and secondary schools near universal, as it is for primary schools—a substantial challenge, given that from 2011 to 2030, the number of schools would have to increase by almost 85%, with a proportional increase in the number of teachers.

To improve educational attainment, measures to improve quality should be taken at all levels, from upgrading teaching performance to enhancing institutional and human resource capacities. A focus on the basic levels of education can improve the rates of return from investments in the later stages, and can facilitate increases in labor productivity and attract private investment, while taking advantage of the “demographic bonus” of the fast-growing and young population.

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<sup>52</sup> Some municipalities have only limited capacity to receive emergency care requests, as there are no working telephone lines in the health centers, and in those that have, there are only a few ambulances (most of which are out of order due to maintenance issues) to bring the emergency services to critical patients. See Ministry of Health (2015a) for more details.

The government will have to sharply improve implementation of the current plan if it wants to achieve these figures because the National Education Strategic Plan 2011–2030 (Ministry of Education 2011) allowed for investment in education of some 13% of the National Budget from 2015. However, the actual outturn, at 7.1%, was scarcely more than half of that.

### *Other Essential Goods and Services*

The gains in essential infrastructure need to be matched by the same in the human capital that uses these assets. Taking clean water and sanitation to unserved population will be expensive as most areas still not covered are isolated and therefore are difficult to reach. As for access to electricity, the huge investment in energy generation has ended, and so further investment will likely be in distribution. Moreover, budget planning for investing in different types of infrastructure needs to have forecast and allocated funds for maintenance, or the country risks entering an eternal cycle of rebuilding.

## Estimates of Resource Requirements

This section draws on the methodology in Chapter 1, with minor adaptations to best fit the reality of Timor-Leste (Annex 4.2). Resource requirements were calculated for the status quo scenario of projected government revenues in 2030.

### The Modeled Scenarios

Of the four gaps to be closed—in social transfers, health care, education, and other essential goods and services—all but social transfer gaps are constant in the lower and upper cost estimates, and so these gaps will be the same in all scenarios now presented. Three models were developed for the social transfer gap: the lower estimate (Chapter 1), the upper estimate (Chapter 1), and an “adapted model” for Timor-Leste (“How to fill the gaps” above).

#### *Scenario 1: Lower Estimate*

This scenario assumes a national social assistance scheme, with perfect targeting providing benefits to all individuals of the same value as the average poverty gap to “place” the person on the poverty line and fill the present post-transfer gap. Given that the poverty gap used was calculated with the existing social transfers in place and that no data on the poverty gap pretransfers are available, the model needs to account for the costs of the current transfers, as part of the poverty gap was already covered by existing programs.

Thus, the lower case scenario includes costs of the SAI, Bolsa da Mãe, School Feeding, and Rural Employment programs, as if they are continued until the stationary state in 2030. (The current programs, when projected to 2030, result in a cost of 4.6% of GDP in the stationary state.) The existing benefits are projected from current levels, changing in line with the poverty line or minimum wage, and with current take-up rates. Therefore, the lower cost estimates include maintaining the current system as it is, and adds a perfectly targeted social transfer to close the gap. The Veterans' Pensions program, despite its steep share of government expenditure, was not included in this calculation mainly due to the nature of the program.<sup>53</sup>

### *Scenario 2: Upper Estimate*

This scenario models the upper cost estimate (Chapter 1). It is made with the aim of comparing the costs of the different policy choices made, and includes a child grant, social pensions for the elderly and disabled, Maternity Leave Benefit, and a cash-for-work scheme for the unemployed. This assumes that the current social transfers no longer exist, thus contrary to Scenario 1, their costs need to be subtracted from the total, as the budget allocated to them will be freed.

### *Scenario 3: Adapted Model*

As introduced in “How to fill the gaps,” the model introduces a universal ECD grant (starting with pregnancy). It adjusts the benefits of Bolsa da Mãe, School Feeding, Rural Employment, and SAI (Table 4.3). It is assumed that the existing programs only exist in their adjusted form, and, as in Scenario 2, their costs are subtracted from the total.

## Projected Resource Gaps in 2030

The projected required additional resources to close the SDG-related social protection gaps are as follows: by the lower estimate, 5.1% of GDP; by the upper estimate, 14.6%; and under the adapted model, 13.1%.

The amount of resources modeled to cover health, education, and other essential goods and services gaps are constant throughout the three scenarios—together,

<sup>53</sup> The benefits are targeted to a specific group that fought for independence, thus do not use demographics or income characteristics to access eligibility. To project the program's costs in the future, a more sophisticated projection tool would be necessary, as would access to more detailed information on the beneficiaries, their families, and households. Unfortunately, this falls outside the scope of this study, and no published projection of costs for the program was found.

**Table 4.3: Summary of Adapted Model Social Transfer Options**

Benefit	Target Group	Benefit Value	Cost (in 2030, % of GDP)
ECD Grant (new)	– Pregnant women – Children 0–5 years	– 50% of poverty line	4.3
Bolsa da Mãe (adjusted)	– Poor children 6–14 years	– 35% of poverty line	1.7
School Feeding (adjusted)	– Children from primary and secondary school (6–17 years)	– 15% of poverty line	1.8
Rural Employment (adjusted)	– Unemployed and subsistence farmers	– Up to 100 days of work, at the national minimum wage	2.8
SAAI (adjusted)	– People over 60 – People with disabilities	– 70% of poverty line	2.2

Bolsa da Mãe = Mother's Allowance conditional cash transfer, ECD = early childhood development, GDP = gross domestic product, SAAI = Integrated Community Health Services.

Source: Author's construction.

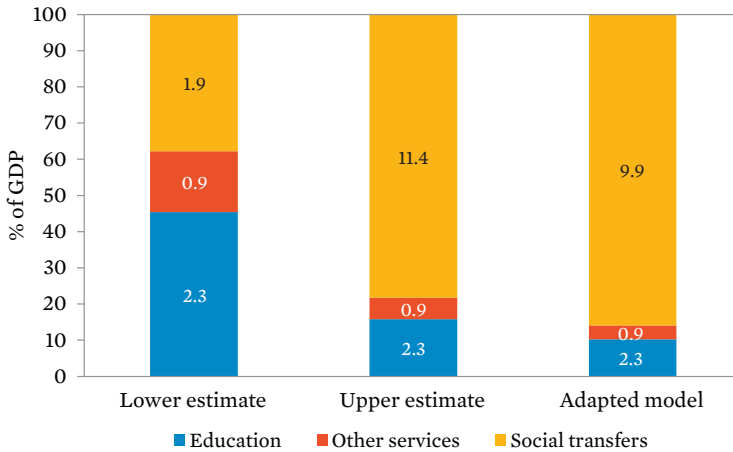
the three gaps amount to 3.2% of GDP. The rest of the gaps in the previous paragraph consists of social transfers, which can go from less than 40% of the estimated social protection gap to almost 80% as the costs of the universal social transfers come into the picture (Figure 4.3).

The education gap is considerable, but lower than the resources estimated in the National Education Strategic Plan 2011–2030. In 2015, the education budget was about 6.3% of non-oil GDP lower than that estimated by the plan. The other essential goods and services gap totals 0.9% of GDP, and following current investment plans, it is likely that investments surpass this amount. The only area with no gap is health, as public expenditure is higher than the benchmark used, which assumes that the downward trend of health expenditure will stop, and expenditure will remain equivalent to the average of 2010–2015 (in 2014, 4.5% of non-oil GDP).

On the social transfers' estimated costs, the benefits for children are the main drivers for the high price tag for both the upper estimate and the adapted model. The reasons are twofold: first is the sheer number of children, as by 2030, about 40% of the population will be under 18, and so providing benefits for all of them will be expensive; second is related to the benefit amounts, which are much higher than the current baseline.



**Figure 4.3: Composition of Social Protection Additional Required Resources by Type, Three Estimates, 2030**  
(% of GDP)



GDP = gross domestic product.

Source: Author's calculation.

However, following the path proposed by the lower estimate scenario does not seem feasible either, as it implies perfect targeting of all the poor, and transfer of the exact amount of each person's poverty gap.

The high additional resources required to close the social protection SDG gap, even for the lower estimate scenario, suggest that the government will need to stay closer to the current set of policies rather than shift to the generous and universal approach of the higher-cost scenarios. Declining oil revenues will no doubt impose further restrictions on public expenditure, and any expansion of fiscal space may well prove harder than current fiscal reserves and resource inflows suggest.

## Fiscal Space Analysis

Irrespective of its fiscal position, increasing fiscal space in the magnitudes just estimated would be a massive challenge for any country. But Timor-Leste has the second-lowest tax-GDP ratio among the 16 studied countries, and it is worsening.

Even in the lower estimate, additional resources required in the stationary state are equivalent to 5.1% of non-oil GDP. For the upper estimate and adapted model estimates, resource requirements are seen as more than double that, at 14.6% and 13.1% of non-oil GDP, respectively. Will Timor-Leste's fiscal position let it meet the social protection agenda of the SDGs? If so, how?

## Fiscal Position

Public expenditure has climbed steeply since 2007, from \$241 million to \$1,952 million in 2016, reflecting major infrastructure projects and new social transfers. The Petroleum Fund remains the dominant source of government budget, financing about 90% of it in 2016. Yet the sharp drop in oil prices led to a 40% decrease in petroleum revenues in 2015 from 2014. The overall budget surplus fell from 25.9% of oil GDP in 2014 to 4.2% in 2015. The non-oil balance has been negative for more than a decade, reaching a massive fiscal deficit of 88.8% of non-oil GDP in 2015. As oil prices and production decline, predictions are that this will also be the case for oil GDP in future years (IMF 2016).

In the short and medium term, the financial assets of the Petroleum Fund can compensate for diminishing revenues, and offer security and fiscal stability. The rationale for the excess withdrawals is to build essential infrastructure to boost economic growth and domestic revenues in the long term. However, the balance between the infrastructure supply and demand, to generate the desired returns, seems to have been overlooked. Even excluding infrastructure, the recurrent budget is growing faster than the economy, and at larger magnitudes than non-oil revenues. This is a threat to fiscal sustainability in the medium and long term because unless other revenue sources are mobilized as oil revenues stop, the Petroleum Fund could be rapidly depleted (ADB 2016, World Bank 2015).

According to the IMF, the best options for the government to balance its fiscal position include avoiding front-loading public investment projects (thus reducing excess withdrawals from the Petroleum Fund),<sup>54</sup> increasing non-oil revenues, and reviewing recurrent expenses (IMF 2016). Social protection financing will surely be affected by these changes.

<sup>54</sup> To sustain long-term fiscal balance, the World Bank estimated that the overall government spending should average less than \$1.30 billion a year in the short term, \$1.34 billion a year in the medium term, and \$1.48 billion a year in the long term (World Bank 2015). From 2013 to 2016, however, expenditure averaged \$1.56 billion per year.

## Financing the Social Protection Agenda

Despite the challenging scenario, there are ways to boost the fiscal envelope for social protection to cover some, if not all, the gaps identified. The International Labour Organization (ILO), based on the experience of 187 countries on financing social protection, proposed various strategies (Ortiz, Cummins, and Karunanethy 2015), which include those recommended by the IMF, and those discussed in Chapter 1. These options are now discussed.

### *Reallocating Public Expenditures*

Budget allocation shows an erratic pattern over the years, with different ministries suffering sudden cuts or boosts. The increases in expenditure occurred faster than improvements in institutional capacity, and there is much room for efficiency and productivity gains.

One example is the veterans' pensions, the second-largest item in the national budget, behind only the infrastructure investments. In 2015, the program covered only about 2% of the country's population, but due to high benefit values, it cost the equivalent of 8.5% of non-oil GDP.<sup>55</sup> Cutting current benefits or coverage of this program can seem as a fast and easy way to free valuable funds for other social protection programs; however, the political sensibility of the issue goes far beyond the technical analysis of the cost of the scheme. Yet as few new beneficiaries enter the program, and as they and their heirs pass away, budget requirements diminish. Thus, guaranteeing that eligibility to survivor benefits linked to the veterans' pensions is strictly monitored can free significant funds for poverty reduction initiatives.

Likewise, if investments in infrastructure (which, in 2016, represented 60% of non-oil GDP) slowed, significant resources would be freed. Just 10% of the current levels of expenditure in infrastructure could pay for *all* the lower estimate gap, and *almost half* of the more costly scenarios.

### *Increasing Tax Revenues*

Possibly the main option for Timor-Leste to finance social protection and balance its budget is to increase its tax-GDP ratio. Current tax revenues, as a share of GDP, are among the lowest in the region, averaging 11.8% of non-oil GDP from

<sup>55</sup> Sourced from Ministry of Social Solidarity—Direção Nacional de Apoio aos Combatentes e Mártires da Libertação Nacional.

2005 to 2014. Domestic revenues have been growing steadily since 2005, but at a much slower pace than government expenditures—from 2005 to 2015, non-oil revenues grew by 272%, while expenditures increased by 1,392% (Ministry of Finance 2016a, 2016c).

The array of taxes and fees in the country is modest, composed mainly of personal income tax (PIT), corporate income tax (CIT), import duties, final withholding taxes on government-financed contracts, and excise taxes. Tax collection faces numerous issues of compliance and coverage. Enacting a comprehensive tax reform is one of the priorities of the government, and discussions are ongoing in Parliament. A Fiscal Reform Commission has prepared a reform package, which includes tax rates adjustments and the introduction of a value-added tax (VAT). Other options could be a tax on property, increased excise taxes (e.g., tobacco, alcohol), and higher taxes on imported goods produced locally. PIT and CIT should also be made more progressive. Expanding the contributory base of the PIT and CIT, and improving tax collection efficiency, should also be considered.

### *Ensuring More Effective Use of Official Development Assistance*

Official development assistance (ODA) amounts are declining in Timor-Leste, as donors change priorities and respond to the development they are witnessing. From 2010 to 2015, a total of \$1.52 billion in ODA was disbursed to Timor-Leste, concentrated mainly in the areas of government's institutional development, transport (roads), education, agriculture, water and sanitation, and health (Ministry of Finance 2016a).

In particular, health is a sector from which much of the government's investment was financed by foreign aid. Declining ODA to health could set back advances and constrain further the health budget. However, reliance on long-term stable ODA resources is a risky strategy, as the level of future ODA receipts is generally unpredictable. ODA resources should primarily be used for investments, such as purchase of equipment or creation of infrastructure or systems, and not to cover recurrent expenses.

### *Improving Efficiency and Effectiveness*

Lastly, there is the possibility of doing more with the money that is already committed to social protection. Improving coordination between programs is the first step to improve effectiveness of the social protection system. Issues of data collection, benefit delivery, shortage of equipment and human resources in the

field, screening and follow-up of beneficiaries, and monitoring and evaluation are common among almost all social protection programs.

Closer cooperation between programs could support different agencies to share resources, trade information, and generally help each other in performing their jobs more efficiently, saving financial and human resources, and time. Additionally, allocating budget for proper maintenance of social protection infrastructure (from buildings, to cars, to equipment), would allow these assets to be used for longer periods. All this would entail cooperation and coordination at all levels, which would only be possible through the creation of an effective interministerial governance body.

## Conclusions

Despite its rather comprehensive social protection system, there is much to be improved in Timor-Leste to achieve the SDG social protection agenda. The resources required to do so, following the methodology proposed in Chapter 1, stand at a level that is almost surreal—a more modest path will have to be taken. But no option just outlined will suffice alone, and most likely, not even a combination of options to increase fiscal space will allow increases in the magnitudes required by the upper estimate and adapted model scenarios.

Increasing tax revenues is an important step in the transition of an oil economy to a diversified economy. As the oil revenues decline and the Petroleum Fund is consumed, increased domestic revenues is the only sustainable option for Timor-Leste to balance its fiscal position. Improving tax collection mechanisms, introducing progressive reforms on PIT and CIT, and creating property and additional excise taxes, could be the starting points for developing a more comprehensive tax system, while creating revenues to finance social protection. Reverting the decline in ODA and increased borrowing are other options, but at smaller magnitudes.

In the Timor-Leste scenario, where the current levels of expenditure on social protection are relatively high and the forecast for fiscal balance is grim, the combination of reallocation of public expenditures, gains in spending efficiency, and use of fiscal reserves appear as the options with higher potential to support the advance of the SDG social protection agenda.

Perhaps the most reasonable path would be twofold. First, aim at slightly higher expenditure than current levels throughout 2030 using the fiscal space

strategies discussed, while increasing efficiency of existing programs. And second, gradually migrate budget from programs that do not contribute much to the SDG agenda, such as the veterans' pensions and excessive infrastructure spending, into programs that tackle some of the key problems in Timor-Leste—such as access to services, malnutrition, and rural poverty. This would certainly look more like the lower estimate scenario than the other models, but would direct efforts to areas that have long-lasting effects, and better use resources that are already committed.

Ultimately, the fiscal space for the SDG agenda hinges on the government's capacity to steer the country toward a vibrant and inclusive non-oil economy, without compromising the country's long-term fiscal balance.

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## Annex 4.1: What to Do Before and After the Oil Runs Out

Timor-Leste's petroleum and gas revenues have delivered impressive economic growth, and allowed the Petroleum Fund to amass huge fiscal reserves (Ministry of Finance 2015). Total oil reserves, however, are modest and the current fields are projected to deplete by 2026, and no other reserves are set to be explored after this.

There is little linkage between the oil sector and the rest of the economy, the main exceptions being taxes and royalties paid to the government. All revenues from the oil sector are transferred directly to the Petroleum Fund, which manages the hydrocarbons wealth and serves as a stabilizer for the country's finances against shocks to the economy. From 2005 to 2015 the fund grew quickly, from \$370 million to \$16.2 billion (about \$13,500 per capita), or 11.5 times government expenditure in 2014 (see Figure 4.1, on p. 98) (ADB 2016, Ministry of Finance 2016c).

The government can withdraw annually what is designated the "Estimated Sustainable Income,"<sup>56</sup> an amount that should keep the fund's wealth constant indefinitely, in real terms, and provide future generations with the yields of today's petroleum. However, after the 2006 political crisis, the government has been systematically withdrawing more from the Petroleum Fund than the Estimated Sustainable Income to create the infrastructure<sup>57</sup> and human capital it views necessary for sustainable and diversified economic growth (IMF 2016, Ministry of Finance 2011).

The economy is still at the start of a projected transition from high oil dependency to becoming a diversified, non-oil-based one. In the past 10 years, the non-oil economy doubled in real terms and is estimated to have grown by 5.5% in 2014 and by 4.3% in 2015, due to slowing government spending, reflecting the fact that the economy still relies almost entirely on government expenditure, which averaged more than 95% of non-oil GDP from 2010 to 2014. Growth in critical sectors of economy, such as agriculture or manufacturing, is much slower (ADB 2016; Ministry of Finance 2015, 2016a; World Bank 2016).

<sup>56</sup> Set at 3% of total petroleum wealth, which comprises the balance of the Petroleum Fund and the net present value of expected future petroleum revenue.

<sup>57</sup> Since 2010, investments in infrastructure projects have grown by 448%, a level that might overshoot the real needs of the country to achieve upper middle-income status (World Bank 2015).

The areas for economic development prioritized by the government are tourism, petrochemicals, and agriculture. Agriculture shows potential as a means of improving livelihoods countrywide, while boosting the export basket and guiding long-term development. Yet despite public investment, the lack of high-quality infrastructure, access to markets, and poor agricultural techniques and inputs are still obstacles to agricultural growth (ADB 2016, World Bank 2016).

## Annex 4.2: Two Adaptations for Timor-Leste

The first and more important methodological adaptation was the choice of the measure of gross domestic product (GDP). The economy depends heavily on petroleum revenues and the reserves built from them. Petroleum production and revenues are predicted to decline until they cease in the middle of the next decade. To follow the proposed projection method using only petroleum GDP would mean that the country would have hardly any oil revenues left before 2030.

Moreover, with the end of oil revenues, there will be no distinction between oil and non-oil GDP, including in the stationary state, 2030. For these reasons, and because the oil economy has weak linkage to other sectors, non-oil GDP was used as the reference measure for the economy and projections, including GDP projections, which were calculated as the geometric mean of non-oil GDP growth rates from 2010 to 2014 and kept constant until 2030.

The second adaptation concerned the calculation of the other essential goods and services gap. Investments in infrastructure are the dominant element in the government budget. When estimating the resource requirements to close this gap, the Joint Access Index (Appendix 2) considers only access to electricity and access to improved water sources.

If the total investment in infrastructure was considered, the results would show an additional cost to close the gap of 9.2% of GDP in the stationary state—which, in other words, was implicitly assuming that to offer access to electricity and improved water to all residents, Timor-Leste would have to keep investing 40%–50% of GDP for more than a decade. To avoid such a discrepancy, the adapted modeled scenarios take as their reference the sum of the fraction of investments made exclusively in electricity and in water and sanitation—9.3% of the total infrastructure investment for 2013–2018 (World Bank 2015).

These adaptations may make this chapter's results not strictly comparable with those in Chapter 1. (For instance, if the oil GDP had been used to project

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the health gap, instead of zero, it would have given a gap of 1.7% of GDP in the stationary state—though GDP in the stationary state would have been minuscule if the trend from 2010 to 2014 had been projected through 2030, as the decline in oil GDP would have nullified and reversed the growth trend from non-oil GDP.) Still, these results show a more nuanced picture than if no adaptation had been made.

# 5

## Social Assistance

*Franziska Gassmann*<sup>58</sup>

If the first Sustainable Development Goal (SDG) to “End poverty in all its forms everywhere” is to be taken seriously, most low- and middle-income countries face a huge challenge. An estimated 1 billion people have indeed escaped extreme poverty since the early 1990s, and the global poverty rate fell from 35% in 1990 to 10.7% in 2013, but the absolute number of people living below the international poverty line of \$1.90 at purchasing power parity has hardly changed. Countries in Asia contributed greatly to the overall decline in poverty rates: from 2012 to 2013, over 100 million people in Asia left extreme poverty behind, notably in India, Indonesia, and the People’s Republic of China (PRC) (World Bank 2016). Yet the living standards of those still below that line have hardly improved (Ravallion 2016). The achievement of the first SDG requires additional efforts at global and national levels, particularly on policies that address chronic poverty traps and that improve the outcomes of poor and vulnerable populations.

SDG Target 1.3 (Implement social protection, including floors) explicitly recognizes the potential of social protection systems for eradicating poverty. Noncontributory social protection schemes—also known as social assistance schemes<sup>59</sup>—as part of comprehensive social protection systems are important for guaranteeing a minimum consumption level for poor and vulnerable households, allowing them productive livelihoods, and promoting access and use of other public services such as education and health care.

Evidence of the positive impacts of social assistance, particularly of cash transfers, on the lives of the poor and vulnerable has accumulated over the past decade.<sup>60</sup> In developing countries with at-scale social protection systems, poverty and inequality have decreased considerably. International evidence is highly conclusive about the positive effect of cash transfers on school attendance, food

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<sup>58</sup> The author would like to thank Eszter Timar for the excellent research assistance. This chapter benefited from comments from Michael Cichon, Willem Adema, Karin Schelzig, Nuno Cunha, and Sri Wening Handayani.

<sup>59</sup> Or in the terminology of the World Bank “social safety nets” (World Bank 2015). We will use the terms “social assistance” and “noncontributory social protection” interchangeably.

<sup>60</sup> See, for example, Handa and Davis (2006); Barrientos and Scott (2008); ILO (2010); IEG (2011); UNICEF (2012); Tirivayi, Knowles, and Davis (2013); World Bank (2015); and Bastagli et al. (2016).

consumption, and the health status of the population. Changes in disposable income stemming from social transfers positively affect labor supply and reduce rates of child labor. Additional effects are related to investments in child well-being and productive activities that raise human and physical capital and that foster labor productivity. Moreover, cash transfers are likely to be spent locally, generating local and regional economic multiplier effects.<sup>61</sup>

In the context of chronic poverty traps—often the result of unfavorable household demographics, little education, and lack of productive assets (Woolard and Klasen 2005; Scott et al. 2014; Mideros and Gassmann, forthcoming)—social assistance programs not only lift consumption floors, but also foster economic and social mobility for those at the bottom of the welfare distribution (Gertler, Martinez, and Rubio-Codina 2012). By extending coverage and improving the adequacy of noncontributory social protection measures, the poorest can eventually reach a sustainable growth path.

Social assistance programs, especially cash transfer programs, have become increasingly popular in low- and middle-income countries. According to the World Bank (2015), all of the 157 surveyed developing countries had at least one social assistance program. School feeding programs and unconditional cash transfers, such as social pensions and family allowances, are the most frequently used instruments. This is also the case in Asia, where among 29 countries, 18 have an unconditional cash transfer program and 19 have a school feeding program.<sup>62</sup> In the region, public works programs are available in 14 countries; conditional cash transfer programs and unconditional in-kind transfers in 11 countries; and fee waivers related to education, health, or housing services in 10 countries (World Bank 2015, p. 11).

Coverage of the poor remains limited, however, particularly in South Asia, where only 21% of the poorest 20% benefit from social assistance programs. Overall, 39% of the population in East Asia and the Pacific and 17% in South Asia are covered by noncontributory social protection schemes (World Bank 2015, p. 46). These numbers point to sizable coverage gaps in the region, indicating that substantial additional investments are required before social protection floors become a reality (ILO 2012).

<sup>61</sup> Mideros, Gassmann, and Mohnen. 2016. Estimation of Rates of Return on Social Protection: Ex Ante Microsimulation of Social Transfers in Cambodia. *Journal of Development Effectiveness*. 8(1), pp. 67–86.

<sup>62</sup> These numbers do not include countries in Central Asia, which fall under “Europe and Central Asia” according to the World Bank regional classification.

With limited fiscal resources, governments must decide whether to extend coverage (the horizontal dimension) or strengthen adequacy (the vertical dimension) of social assistance programs. While universal or categorical allocation of social assistance is the preferred solution in the long term, countries can build on current schemes in the short run and gradually extend eligibility and transfer levels over time.

Policy options include smart targeting (excluding wealthy households), sequentially including additional groups, raising eligibility thresholds of poverty targeting to reduce exclusion errors, consolidating current social assistance programs and subsidies, improving administrative procedures and use of social registries, and aligning social insurance and social assistance programs. Yet governments also need to invest in supply-side measures in providing services. Only then can demand strengthened by social assistance translate into better opportunities for the poor and vulnerable.

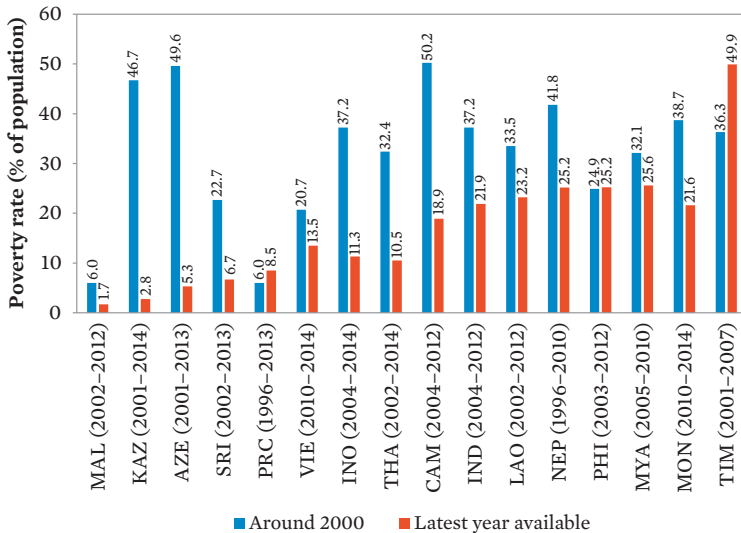
## How Big Is the Social Assistance Gap?

In this chapter, social assistance is defined as noncontributory social protection provided on a regular basis and financed from general government revenues. The focus is primarily on cash-based programs, which may be targeted universally at specific groups of the population or means-tested. Eligibility criteria can range from simple categorical requirements, such as being of a certain age, to criteria related to household means, and any combination. Program eligibility may be further tied to conditions, as with conditional cash transfers, school feeding, or public works programs.

### Poverty and Deprivation

The region had been successful in reducing poverty from 2002 to 2013. About 707 million people moved out of extreme poverty, as measured by international standards. Yet recent data show that roughly 9% (330 million) of the population of Asia and the Pacific still lives in extreme poverty (ADB 2016). Nationally, 14 of our 16 Asian focus countries saw rapidly decreasing poverty rates, though rates remained virtually unchanged in the Philippines, or even climbed sharply, as in Timor-Leste (Figure 5.1). Among the 16 countries, seven have more than one-fifth of their population living below their national poverty line. Moreover, distribution around the line is generally dense, which means that a shock can push large groups of the population into poverty. The dynamic nature of poverty also means that most poverty statistics are always playing a game of catch-

**Figure 5.1: Poverty Trends Based on National Poverty Lines**



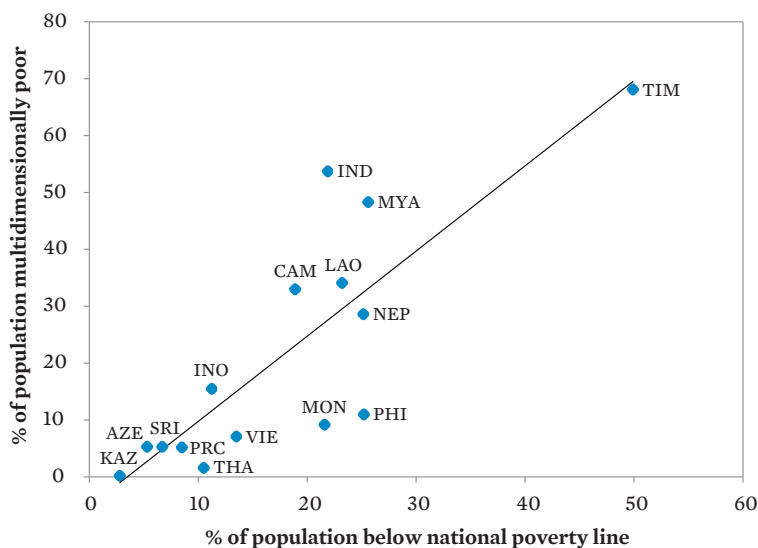
AZE = Azerbaijan, CAM = Cambodia, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MAL = Malaysia, MON = Mongolia, MYA = Myanmar, NEP = Nepal, PHI = Philippines, PRC = People's Republic of China, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Source: World Bank. World Development Indicators.

up, given the time lag between data collection and publication, which is a real issue with internationally comparable datasets such as the World Bank's World Development Indicators and others.

On multidimensional poverty, which captures deprivations in health, education, and living standards based on 10 nonmonetary indicators, poverty rates range from less than 1% in Kazakhstan to 68% in Timor-Leste (Alkire et al. 2016). Although there is a strong positive correlation between rates of monetary and multidimensional poverty, Figure 5.2 shows that each indicator captures distinctly different notions of poverty. Countries with similar monetary poverty levels can differ considerably on nonmonetary deprivation. In both India and Mongolia, for example, a similar share of the population lives below the national (monetary) poverty line, but on multidimensional (nonmonetary) poverty, less than 10% of Mongolia's population is multidimensionally poor, against 54% in India.

**Figure 5.2: Monetary versus Multidimensional Poverty, Latest Years**



AZE = Azerbaijan, CAM = Cambodia, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MON = Mongolia, MYA = Myanmar, NEP = Nepal, PHI = Philippines, PRC = People's Republic of China, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Note: No data for Malaysia.

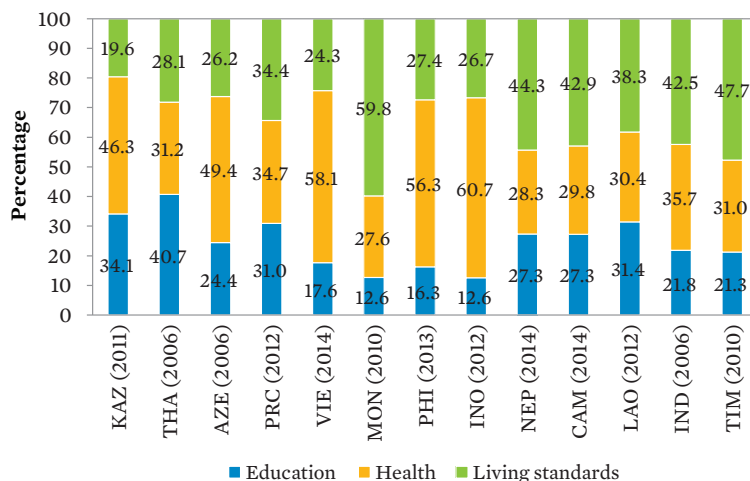
Sources: Monetary poverty: World Bank. World Development Indicators; Multidimensional poverty: Alkire et al. (2016), except Myanmar and Sri Lanka: Oxford Poverty and Human Development Initiative Country Briefings.

This difference provides further evidence for the large heterogeneity of the countries in the region, resulting in different needs and challenges. Deprivations in education and health, for example, account for more than half of multidimensional poverty in most countries in the region (Figure 5.3).

Although the majority of the poor still live in rural areas, the number of poor in urban areas has increased in several Asian countries (ADB 2014). Urban poverty differs from rural poverty and is often more complex. Vulnerabilities relate to lack of appropriate housing, land, physical infrastructure, and access to services. Informality in urban areas is particularly high and income from work often volatile, which scarcely protects workers against poverty (ADB 2014).



**Figure 5.3: Contribution of Dimensions to Multidimensional Poverty, Latest Years**



AZE = Azerbaijan, CAM = Cambodia, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MON = Mongolia, NEP = Nepal, PHI = Philippines, PRC = People's Republic of China, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Note: No data for Malaysia, Myanmar, and Sri Lanka.

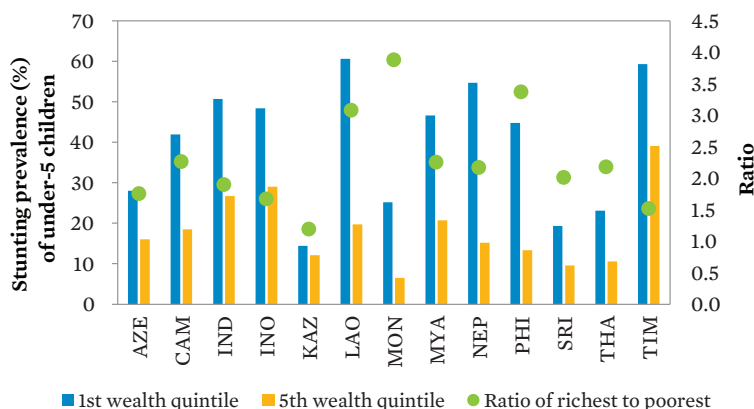
Source: Alkire et al. (2016).

Child malnutrition remains a concern for quite a few of the 16 focus countries. In Timor-Leste and the Lao People's Democratic Republic (Lao PDR), over 49% of children under the age of 5 are stunted (UNICEF, World Bank, and WHO 2016). The prevalence of stunting among young children is much higher in poor households (Figure 5.4).

Despite the steady increase in average consumption and the subsequent decline in poverty rates, the situation of the remaining poor has scarcely improved. Fewer people have incomes below the poverty line, but the average distance of the poor to the poverty line has hardly narrowed (Ravallion 2016). This is confirmed by the average intensity of multidimensional deprivation, which ranges from 32% to 53% even in countries with very low multidimensional headcount rates (Alkire et al. 2016).<sup>63</sup>

<sup>63</sup> The average intensity of deprivation measures the average percentage of deprivations (over 10 weighted indicators) of those that are multidimensionally poor. It is the equivalent of the poverty gap rate, but only considers the poor and not the total population.

Figure 5.4: Stunting Disparities for Children Under-5, Latest Years



AZE = Azerbaijan, CAM = Cambodia, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MON = Mongolia, MYA = Myanmar, NEP = Nepal, PHI = Philippines, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste.

Notes: Data ranging from 2010 to 2014. No data for the People's Republic of China, Malaysia, and Viet Nam.

Source: Alkire et al. (2016).

## Flagship and Other Cash-Based Social Assistance Programs

Many countries have invested in social protection over the past decades, and social assistance programs have expanded rapidly.<sup>64</sup> Some of these programs belong to the world's largest programs by beneficiary numbers, such as the PRC's unconditional cash transfer program Di-Bao, targeted to the poor and reaching 75 million beneficiaries; Indonesia's BLSM<sup>65</sup> program providing unconditional cash transfers to 61 million; or the MGNREGA<sup>66</sup> public works program in India, which provides support to 58 million (World Bank 2015).

The Philippines' Pantawid<sup>67</sup> program, a conditional cash transfer program targeted at poor families with children, reaches 21% of the population, and Malaysia's BR1M,<sup>68</sup> an unconditional cash transfer for poor households, goes to 51% of the population (World Bank 2015).

<sup>64</sup> For an overview, see Annex 5.1.

<sup>65</sup> Bantuan Langsung Sementara Masyarakat.

<sup>66</sup> Mahatma Gandhi National Rural Employment Guarantee Act.

<sup>67</sup> Pantawid Pamilyang Pilipino.

<sup>68</sup> Bantuan Rakyat 1 Malaysia.

At the other end of the spectrum are countries with no sizable cash-based social assistance programs, such as Cambodia, the Lao PDR, and Myanmar. Being low-income, however, does not explain the absence of such programs. Low-income Nepal, for example, introduced its universal social pension in 1995 (though initially only for those 75 years and older). In 2014, the program had close to 1 million beneficiaries (World Bank 2015).

Providing income support to the elderly in the form of social pensions has become popular over the last 2 decades. Noncontributory income support programs for the elderly take different forms, ranging from social assistance programs targeted at poor households in general, to selective and universal social pensions (Barrientos 2012).

Beyond Nepal, countries with either universal or means-tested social pension schemes include India, Indonesia, Malaysia, the Philippines, the PRC, Thailand, Timor-Leste, and Viet Nam. The PRC is a particularly interesting case as its New Rural Social Pension program ties benefit receipt to the condition that the recipient's children contribute to the formal social insurance scheme. About 60% of people over 60 were a few years ago receiving payments from that program (ISSA 2013).

Income support for children is frequently provided in kind or in the form of education stipends. In-kind support, such as school feeding programs or fee waivers for education- or health-related services, is relatively common, with 11 of the 16 focus countries offering school feeding programs (World Bank 2015). Several countries provide cash-based scholarships for school-age children, sometimes merit-based and not necessarily targeted at vulnerable children. But these programs generally exclude young children and those not attending school.

Unconditional child grant programs are still rare. While Thailand is piloting a child grant for very young children, Mongolia is the only country with a universal child grant—the Child Money Program<sup>69</sup>—in which benefits are provided to every child up to the age of 18 (Onishi and Chuluun 2015). Kazakhstan provides a state allowance to children under 18 living in poor families. Over 600,000 children benefited from this program in 2012 (UNICEF 2015). Both Mongolia and Kazakhstan also have categorical social assistance transfers for families with

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<sup>69</sup> The Child Money Program in Mongolia is currently distributed only to the poorest 60% of the children, but with the promise to pay retroactively to the remaining 40% once government finances allow. Although the Government of Mongolia has so far resisted pressures to introduce poverty targeting to the Child Money Program, the fragile economic situation necessitated postponing payments to the most affluent children.

many children. Nepal established a child grant to address the specific poverty and vulnerability of the Dalit, which takes a categorical approach to targeting in the poorest Karnali zone, and uses hybrid targeting (categorical and means-tested) in the rest of the country (Hagen-Zanker, Mallett, and Ghimire 2015).

Following the example of Latin America, several Asian countries have introduced conditional cash transfer programs for poor families with children. The Program Keluarga Harapan in Indonesia covered 6 million families in 2016, reaching 5% of the population and 11% of the poor. The program has recently been extended and includes families with elderly (aged 70 and above) and disabled household members (Gaol 2016). The Pantawid program in the Philippines reached 4.4 million households in 2015, among them over 10 million children (Mangahas 2016). The Bolsa da Mãe program in Timor-Leste provided cash transfers to 55,000 households in 2016 (Spantigati 2016).

Many general cash-based social assistance programs that target poor and vulnerable households may also benefit children and the elderly living in recipient households. Azerbaijan and Kazakhstan have targeted social assistance programs aimed at supporting extremely poor households. Azerbaijan's means-tested program provided support to 114,000 families in 2015, reaching close to half a million people (about 5% of the population), of whom almost 50% were below 18 (Ministry of Labour and Social Protection 2016). Kazakhstan's program is small, in 2016 providing means-tested support to 19,700 households, 54% of them in rural areas (Ministry of Healthcare 2016). The Government of Kazakhstan announced that this targeted social assistance program will become conditional for families with able-bodied household members, who will have to sign a "social contract" (Government of Kazakhstan 2016).

Income support for the working-age poor and vulnerable consists either of means-tested cash transfers (for example, Azerbaijan or Kazakhstan), categorical transfers to vulnerable groups such as the disabled (for instance, Azerbaijan, Kazakhstan, Mongolia, Sri Lanka, and Viet Nam), or public works programs (such as the program under the MGNREGA Act in India). While MGNREGA is by far the largest, similar programs are available in some of the other focus countries, though they are either very small (Cambodia and Mongolia), only temporarily available (Kazakhstan), or are still in the pilot phase (Nepal).

## Effectiveness of Existing Social Assistance Programs

Coverage, distribution, and adequacy are core outcome indicators for assessing programs' effectiveness. Coverage rates provide an indication of the horizontal

dimension, while benefit distribution and adequacy reflect achievements along the vertical dimension. Comparable information on the performance of social assistance schemes is scarce, however. The ASPIRE database hosted by the World Bank is the only database allowing for a cross-country comparison of performance indicators.<sup>70</sup> Its standardized indicators are derived from national household surveys and are updated regularly, but its limitations have to be kept in mind in cross-country use.

As the selection of programs covered by the data depends on the World Bank's definition of social assistance<sup>71</sup> and on the availability of program information in national surveys, results may differ from country-specific analyses and national reports. Moreover, data are not available for all countries or all indicators. And some of the data are quite old,<sup>72</sup> because household survey data are not collected regularly in all countries and often become available for analysis only with delay.

Coverage with social assistance—broadly defined—varies greatly (Figure 5.5).<sup>73</sup> While close to 100% of the population in Mongolia benefited from any form of social assistance in 2012,<sup>74</sup> only 17% of the population in India was covered in 2011. In other words, only 17% of the Indian population was living in a household where at least one household member benefited from any social assistance program, in cash or in kind.

Among the poorest 20% of the population per country, coverage rates exceeded 85% in Azerbaijan, Indonesia, Malaysia, Mongolia, and Thailand. Some 40%–50% of the poorest quintile are social assistance beneficiaries in Kazakhstan, Nepal, and Sri Lanka. The situation changes considerably for cash transfers. While coverage rates among the poorest remain high in Azerbaijan, Malaysia, and Mongolia, they fall sharply in other countries: in Kazakhstan, Nepal, and Thailand, less than 5% of the population in the poorest quintile receives any form of cash transfer. As the figure indicates, this is not simply a matter of targeting, but an indication of program size in general. In Indonesia, Sri Lanka, and Viet Nam,

<sup>70</sup> <http://datatopics.worldbank.org/aspire/>. Unlike other databases, ASPIRE data are based on national household survey data. The Social Protection Index database of ADB relies on administrative data provided by national governments.

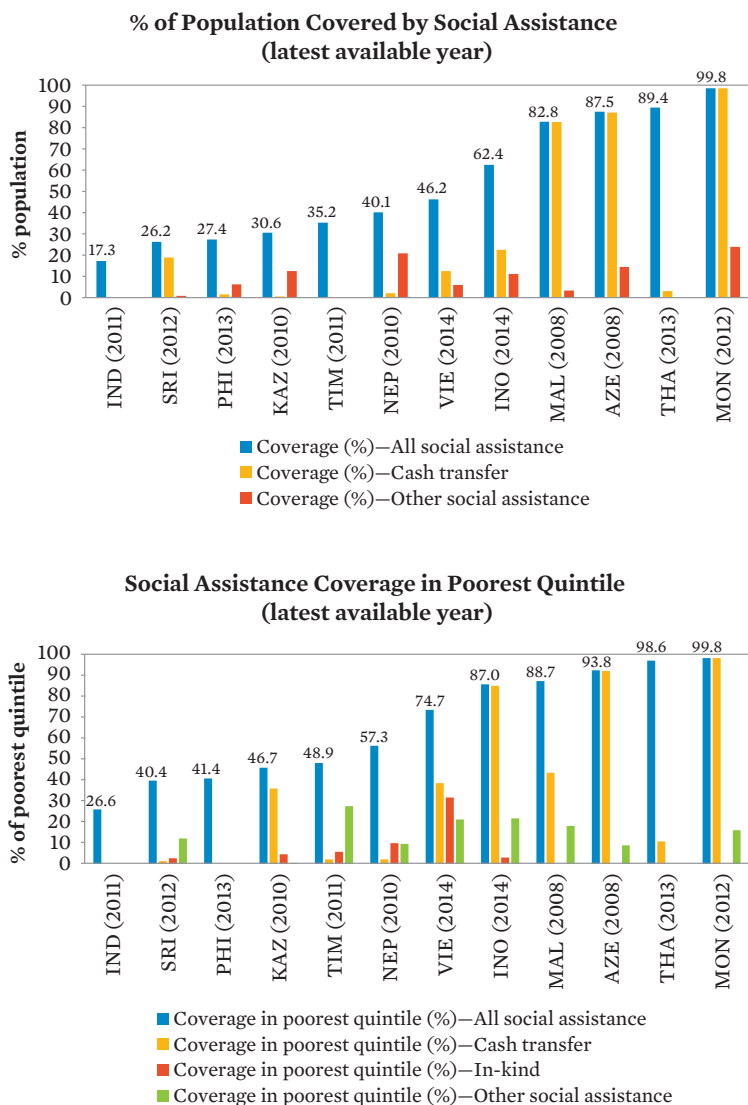
<sup>71</sup> Includes, in principle, any kind of social assistance programs (cash transfers, in-kind transfers, school feeding, public works, fee waivers, and others) for which data are available in national surveys (World Bank 2015).

<sup>72</sup> We only include focus countries with data not older than 2006.

<sup>73</sup> Note that coverage rates refer to the total population (or a subgroup thereof).

<sup>74</sup> The 100% coverage refers to 2012 when every citizen was receiving a transfer from the Human Development Fund, which was essentially a basic income. The policy changed in mid-2012, after which only children remained eligible.

**Figure 5.5: Coverage of the Population (top) and of the Poor (bottom) with Social Assistance**



AZE = Azerbaijan, IND = India, INO = Indonesia, KAZ = Kazakhstan, MAL = Malaysia, MON = Mongolia, NEP = Nepal, PHI = Philippines, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

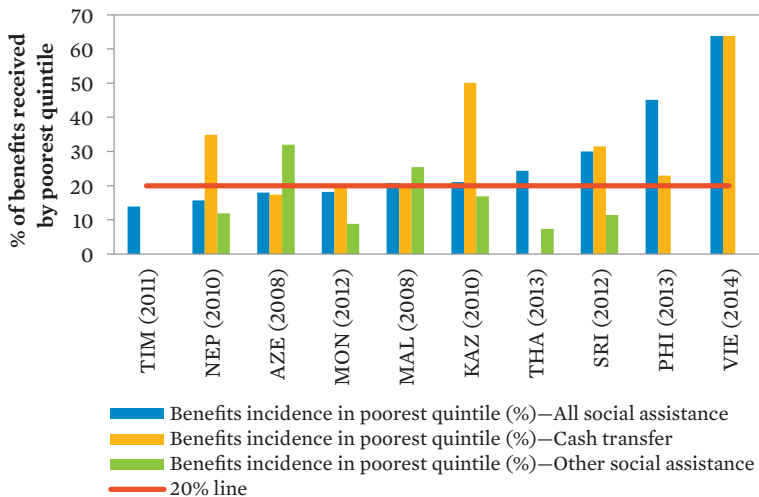
Source: Author's calculations based on data from ASPIRE.

coverage rates of cash transfers are also below 50%, all in all implying that many countries exclude large shares of the poor from their social assistance programs.

Nor is the distribution of benefits always pro-poor. In Azerbaijan, Mongolia, and Nepal—three of the seven countries for which we have information on the distribution of cash transfers—less than 20% of total transfers are distributed to the poorest quintile (Figure 5.6). In Azerbaijan, more than 80% of the poorest are cash transfer beneficiaries, yet they receive less than 20% of the money allocated. A similar situation is seen in Malaysia and Mongolia. The opposite pattern is seen in Kazakhstan, Nepal, and Viet Nam: despite low coverage rates of cash transfers among the poorest quintile, there is a progressive allocation of transfers.

These findings exemplify the inherent trade-off between inclusion and exclusion errors. Narrowly targeted social assistance systems, particularly those relying on individual needs assessments, often result in high exclusion errors, while countries with (partly) universal systems perform well on coverage, as the nonpoor are benefiting from the support as well.

**Figure 5.6: Distribution of Cash Transfers to the Poor**



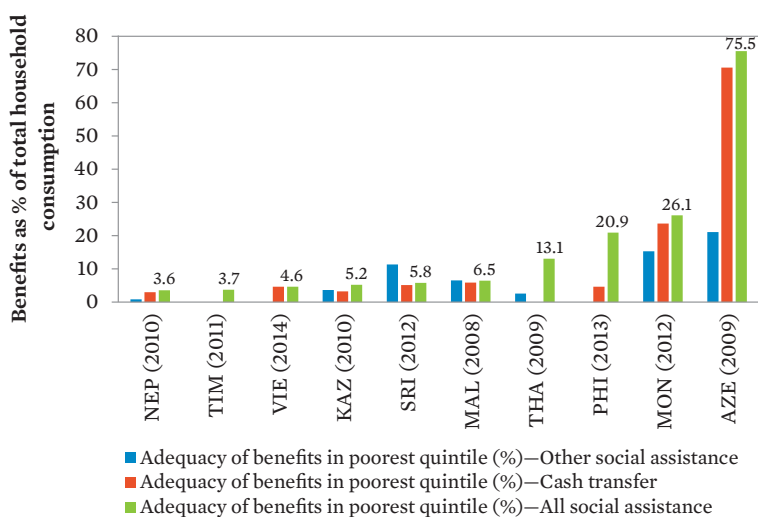
AZE = Azerbaijan, KAZ = Kazakhstan, MAL = Malaysia, MON = Mongolia, NEP = Nepal, PHI = Philippines, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Source: Author's calculations based on data from ASPIRE.

The effectiveness of social assistance programs can be assessed by considering the transfer value in terms of total household consumption and the expected impact on poverty rates. On average, cash transfers account for 10% of poor households' consumption in low-income countries and 21% in lower middle-income countries (World Bank 2015). Unconditional cash transfer programs, such as social pensions or family allowances, are more generous than other types of cash transfer programs. Still, the average transfer size is far from enough to bring the extreme poor up to the international poverty line.

Overall, transfers cover about one-fifth of the amount needed to eradicate extreme poverty (World Bank 2015). Among the selected countries in Asia with comparable data, Azerbaijan stands out, as cash transfers account for 70% of household consumption among the poor (Figure 5.7). Mongolia is the only other country in our sample where the value of cash transfers exceeds 20% of poor households' consumption. In all other countries, the adequacy of the transfer value lags far behind, representing as little as 5% of average household

**Figure 5.7: Share of Benefits in Total Household Consumption of the Poor**



AZE = Azerbaijan, KAZ = Kazakhstan, MAL = Malaysia, MON = Mongolia, NEP = Nepal, PHI = Philippines, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

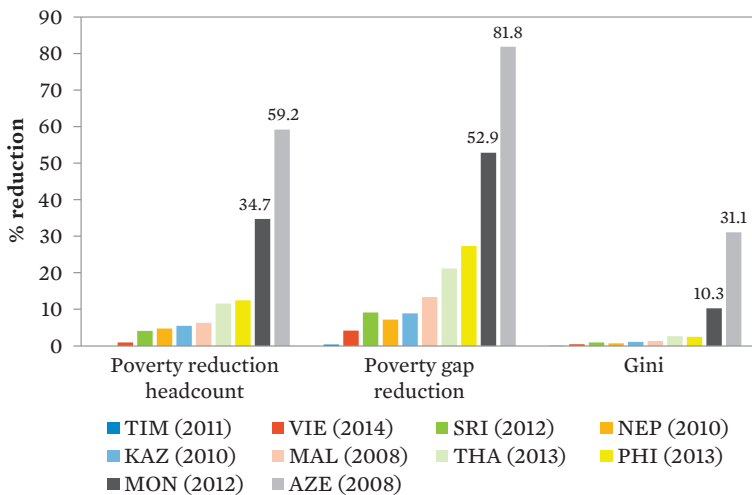
Source: Author's calculations based on data from ASPIRE.



consumption of the poorest quintile. Unsurprisingly, the poverty reduction effect of many social assistance programs is minimal.

Due to their relatively generous schemes or multiple programs, Azerbaijan and Mongolia also stand out on the poverty reduction effect of their social assistance schemes. If the international poverty line is used as a standard, poverty is eradicated by cash transfers in Azerbaijan, reduced by more than 80% in Mongolia, and by more than 60% in Malaysia. However, the level of extreme poverty is arguably low in these countries and little needs to be eradicated. Yet even if we define the bottom 20% of the population as poor,<sup>75</sup> Azerbaijan and Mongolia still stand out with a reduction of the poverty gap of 82% and 53%, respectively (Figure 5.8). Malaysia lags somewhat behind, probably because of the low benefit level relative to household consumption.

**Figure 5.8: Poverty Reduction Effect**



AZE = Azerbaijan, KAZ = Kazakhstan, MAL = Malaysia, MON = Mongolia, NEP = Nepal, PHI = Philippines, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Source: Author's calculations based on data from ASPIRE.

<sup>75</sup> This means anchoring the poverty rate of 20% in each country for comparative purposes. It also implies that the reduction of the poverty gap can be understood as the reduction of the gap of the poorest 20% due to the standardization of the poverty rate.

The data in this section have provided only a snapshot, and conclusions depend on the year or years with data. Azerbaijan and Mongolia exemplify this issue. Both are resource rich and depend heavily on revenues from the export of oil (Azerbaijan) and other natural resources (Mongolia). During good times, the countries expanded their support for the poor and vulnerable, but the decline in global commodity prices required them to cut back on social assistance spending, reducing the number of beneficiaries in both countries.

## Closing the Social Assistance Gap

The right to social assistance, as part of social protection, has been progressively recognized and realized around the world during the last century. Social protection and a decent standard of living are human rights, entrenched in international agreements such as the United Nations' Universal Declaration of Human Rights (1948); the International Covenant on Economic, Social and Cultural Rights (1966); the Convention on the Rights of the Child (1989); or the ILO's Social Protection Floor Recommendation (ILO 2012). These agreements have been signed, ratified, or adopted by most countries of the world.

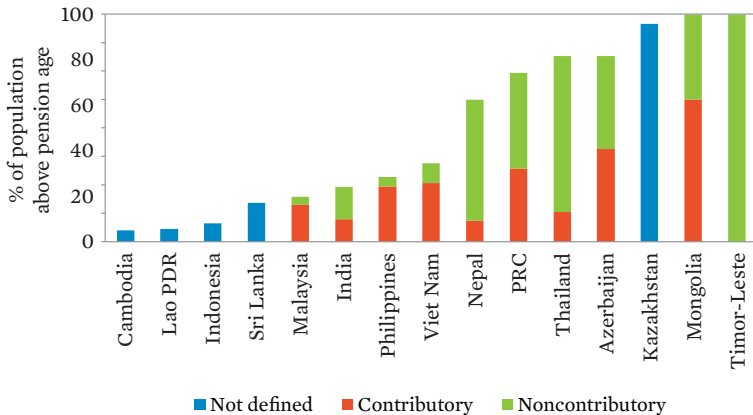
Such human rights-based approaches to social protection define the role of states and their citizens as duty-bearers and rights-holders (Piron 2004). And if social protection is a human right, therefore, it is a legal entitlement rather than a matter of charity, and is the responsibility of the state to provide it. At the 23rd ASEAN Summit in 2013, member states of the Association of Southeast Asian Nations (ASEAN)—including focus countries Cambodia, Indonesia, the Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam—adopted the ASEAN Declaration on Strengthening Social Protection (ASEAN Member States 2013).

With social assistance policies underperforming in most countries, simply allocating more money—though urgently needed—will not solve the problem. Hence, the question is how to move forward to close the social protection gap through 2030. A realistic approach starts by analyzing the portfolio of social assistance now provided and identifying those programs which are performing reasonably well and have the potential to be expanded, reformed, or both.

## Basic Income Security for the Elderly

The policy context for the elderly population is probably the most promising among the three groups: the elderly, children, and working-age adults. In most

Figure 5.9: Pension Coverage



LAO = Lao People's Democratic Republic, PRC = People's Republic of China.

Notes: Data ranging from 2010 to 2012. "Not defined" means that no information is available on the distinction between contributory and noncontributory coverage.

Source: ILO (2014).

societies, the elderly are more likely considered to be deserving of government support, which makes policy choices in their favor more sustainable (Schüring and Gassmann 2016). Universal coverage of the population above pension age has already been achieved in Mongolia and Timor-Leste (Figure 5.9). Kazakhstan has close to 100% coverage, while the pension schemes in Azerbaijan, the PRC, and Thailand cover more than 70% of the population above the national pension age. In Nepal, the pension coverage rate also exceeds 60%. In all other focus countries, the majority of the elderly are not yet covered (ILO 2014).

Most countries rely on a mix of contributory and noncontributory pensions. Following the subsidiarity principle, the higher the coverage with social insurance pensions in a country, the lower the need for social pensions. Countries where the majority of the population works in the informal economy tend to have low contribution rates and thus low coverage rates. Moreover, statutory pensions can be small for those with an incomplete contribution history or low previous earnings. Social pensions can replace or complement the pension gap. They are also a means of redistributing from the young to the old and from the wealthier to the poor. The question is whether social pensions should be provided

universally (upper scenario) or targeted to the poor (lower scenario).<sup>76</sup> Universal social pensions have the advantage that they are relatively easy to manage and implement.

The design of social pension schemes offers a lot of flexibility. They can be tailored to the needs and resources of a country and adjusted over time. Most countries with social pensions use the universal approach, but some have narrowed eligibility by setting higher age limits or providing transfers only to those without any other pension entitlements, like Mongolia (Neuland 2016). Nepal went the other way, initially defining the eligibility age at 75, but later lowering it to 70.<sup>77</sup> The Philippines has also gradually lowered the pension age.

Timor-Leste provides a monthly pension to everybody aged 60 and older (or 18 and older in case of severe disability). Timor-Leste is particularly interesting because there is no contributory pension program—universal coverage is achieved solely by the noncontributory social pension. Other countries, such as Indonesia, Malaysia, and Viet Nam, offer means-tested social pensions to their elderly citizens.

Social pensions have the advantage of being politically more acceptable. They can also be effective in contexts with large international migration, which results in contribution gaps of current migrants and undermines intergenerational family support (Barrientos 2012).

Concerns relate to sustainability given demographic trends (Figure 5.10). The financial requirements of social pensions provided to everybody aged 60 and above, as underlying the upper scenario, are particularly high in the PRC, Sri Lanka, and Thailand, where the share of people aged 60 and above in the population will likely exceed 20% by 2030 (UN DESA Population Division 2015). Cambodia, the Lao PDR, Mongolia, Nepal, the Philippines, and Timor-Leste, on the other hand, have a comparatively young population. The share of the elderly increases most rapidly in Viet Nam, Thailand, Mongolia, and Azerbaijan with growth rates of 70% and more through 2030.

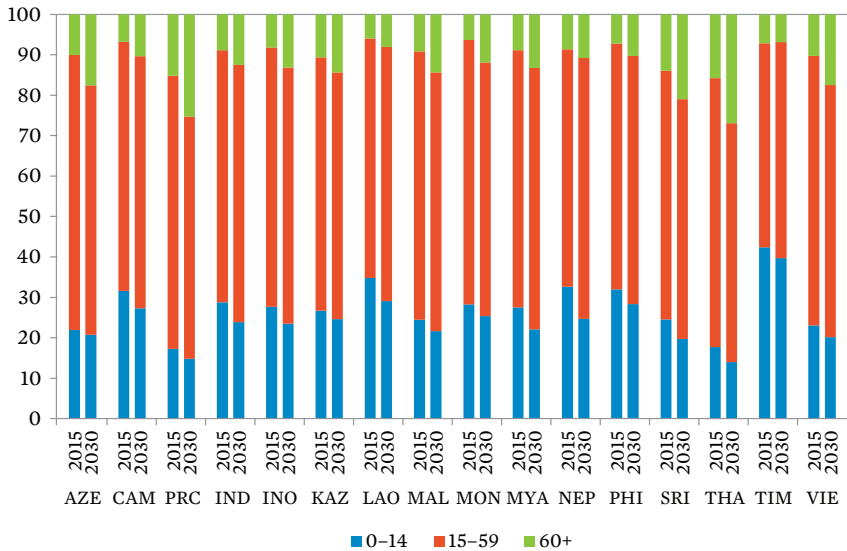
## Basic Income Security for Children

While the demographic dividend may work in favor of introducing and extending universal pensions in countries with a young population, it may work against

<sup>76</sup> See Chapter 1 for explanation on lower and upper scenarios.

<sup>77</sup> For Dalits and all residents of the Karnali region, the age limit is set at 60.

Figure 5.10: Expected Demographic Trends (%)



AZE = Azerbaijan, CAM = Cambodia, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MAL = Malaysia, MON = Mongolia, MYA = Myanmar, NEP = Nepal, PHI = Philippines, PRC = People's Republic of China, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Source: UN DESA Population Division (2015).

the universal protection of children as the potential number of beneficiaries is much higher. Because of the fiscal implications, governments in countries with a child and youth bulge may find universal cash transfers for children unattractive and unaffordable. Yet this is a rather shortsighted view given the importance of human capital for the economic development of a country and the future returns of investing in the development of children (Dietrich et al. 2016; Mideros, Gassmann, and Mohnen 2016).

Social assistance programs for children show great variation across countries. Among the 16 focus countries, only Mongolia has a universal child allowance for children up to 18.<sup>78</sup> At the other end of the spectrum are countries with purely poverty-targeted cash transfers, often in combination with conditionality. In between are countries that have a mix of different cash-based social assistance

<sup>78</sup> Although currently put on hold for the most affluent 40% of children.

programs for children, some categorical and some poverty targeted. Eligibility for a categorical transfer can refer to the age of the child, disability status, the presence of parents, household composition, or location, while the transfers for poor children depend on the living standard of the child's family.

Arguments against the introduction of universal child grants are mainly related to budget constraints and sometimes to the fear of increasing fertility rates. While there is no evidence for the latter argument (see, for example, Palermo et al. 2015), the financial argument is not that easily rejected. Particularly low-income countries are more likely to have a young population and generate at the same time less government revenue. A sequenced introduction of universal child grants, though, would still be feasible.

One option is to start with the very young children, as they are often the most vulnerable, and deprivations at a young age have detrimental consequences for later in life.<sup>79</sup> Over time, the eligible age can be increased. Thailand, for example, has chosen this strategy. In the pilot year, the government provided a monthly cash payment to 128,000 children born between October 2015 and September 2016 to poor and vulnerable families (Samson 2016). In 2016, the project was extended for 3 years, increasing the level of benefits and the number of beneficiaries (Chanmorchan et al. 2016).

Another option is to combine universal and targeted child grants. During the first years of life, for example, all children are eligible, while from a certain age transfers are targeted to poor children. Kazakhstan has taken this approach: it offers a universal birth grant, a universal benefit for children under 1 year, and a narrowly targeted<sup>80</sup> state allowance for children until 18 (ODI 2015). Targeting the state allowance to poor children may save costs in the short run, but, in the longer run, it may limit the country's economic growth potential and jeopardize the achievement of other Sustainable Development Goals (SDGs), such as universal education, if children are prevented from attending school due to lack of financial resources.

## Basic Income Security for Working-Age Adults

Protecting working-age adults from poverty by providing them with basic income security is perhaps the hardest and most controversial policy discussion, unless it concerns a (severely) disabled or (chronically) ill person. Most countries

<sup>79</sup> For a recent overview, see Samson (2016).

<sup>80</sup> The eligibility threshold of the means test is an average per capita income of 60% of the subsistence minimum (ODI 2015).

have categorical social assistance programs, similar to social pensions, for adults incapable to work. Governments are reluctant to offer cash transfers to poor work-able adults. The common perception is that social assistance creates work disincentives and makes recipients welfare dependent, even though most empirical research from low- and middle-income countries refutes the argument (ILO 2010; Gassmann, François, and Trindade 2016; Gassmann and Trindade 2016). This may explain the popularity of public works programs, such as the MGNREGA program in India. The prevalence of public works program in the other 15 countries is, however, limited. Existing programs are either small in scope or are in essence community-based social programs.

Employment-guarantee programs, such as the one in India, have potential but also limitations, and might not always be the best option. Public works programs can help in middle-income countries that have been subject to a macroeconomic shock; in low-income countries, which mainly depend on agriculture and are exposed to regular weather shocks or seasonal variation; in post-conflict countries or otherwise fragile contexts; and in countries that have suffered from a natural disaster (Subbarao et al. 2013). Depending on the nature of the shock and the country context, public works programs may be temporary—or they may be there to stay.

Depending on the type of employment (“work”) offered, which often involves heavy labor, not all groups can effectively participate. The prospects of moving from public works to regular work are also rarely bright. Yet public works programs have proven to be effective in crises, for example in the aftermath of conflict or natural emergencies. Public works programs are also effective when combined with other types of social assistance programs. Take the Ethiopian Productive Safety Net Program, which shows that public works programs can be supplemented with cash transfers and livelihood support, depending on the characteristics and needs of the beneficiary household.

## Closing the Gap

If SDG Target 1.3 is to be achieved by 2030 and the social protection gap is to be closed, most of the 16 Asian countries have to step up their efforts and invest in effective and efficient social assistance schemes. The two main policy issues are to extend coverage and increase the level of transfers for adequate protection.

Azerbaijan, Malaysia, and Mongolia aside, cash transfers reach only a fraction of the poor. To reduce exclusion errors, countries need to gradually extend the eligibility criteria of existing programs. The nature of the extension depends on

the country and its current targeting system. Nepal, for example, could further lower the age after which the elderly are eligible for a social pension. Countries with means-tested cash transfers, such as Mongolia's food stamp program, the Philippines' Pantawid, or Indonesia's Program Keluarga Harapan, could consider raising the eligibility threshold to reach a larger share of the poorest households.

In most countries, the horizontal dimension of social protection needs to be broadened, as some groups are systematically excluded. Viet Nam, for example, which has a mix of categorical and means-based criteria, should consider including children under the age of 3, who are not covered by any social assistance scheme. Among the focus countries, coverage with social assistance programs of the urban poor is far lower than of the rural poor (Gentelini 2015), except for Azerbaijan and Mongolia, where urban coverage is higher or equal, respectively (World Bank 2015).

Some programs indeed focus only on the poor in rural areas, such as India's MGNREGA. The PRC has found a way to address the disparities between urban and rural areas, by operating two different subprograms of Di-Bao unconditional cash transfer program: one for urban and one for rural areas (ADB 2014). Another example is Viet Nam, where the eligibility threshold for the Regular Social Assistance is set at different levels for urban and rural households; and a multidimensional poverty component takes into account deprivations in housing, infrastructure, and services (Dutta 2016).

Cambodia, the Lao PDR, and Myanmar have no sizable cash-based social assistance schemes yet. All three have small pilot-based programs, often financed with support from international donors. Cambodia and Myanmar have developed social protection strategies, which will guide implementation of national social assistance schemes. Myanmar's plans for protecting children are similar to Thailand's: start with the youngest children and extend assistance to other age groups gradually.

The second option—or rather necessity in many countries—is to increase benefit levels to improve the effectiveness of social assistance. As the analysis has shown, the poverty reduction impact of many cash transfer programs is weak: the contribution of cash transfers to total household consumption is significantly below 10% in most countries. However, increasing benefit levels requires additional resources. Governments will face the dilemma of whether to extend the horizontal dimension of basic income security or use the resources to strengthen the vertical dimension.



## The Way Forward

Recent estimates indicate that the eradication of extreme poverty—lifting everybody to the international poverty line of \$1.90 per day in 2011 purchasing power parity (PPP)—would require less than 1% of GDP in most of our 16 countries (Table 5.1). Closing the poverty gap up to \$3.10 per day in 2011 PPP requires considerably more funds and exceeds the threshold of 3% of GDP in five countries (Cambodia, India, the Lao PDR, Nepal, and Timor-Leste) (Bierbaum et al. 2016). The lower and upper scenarios in Chapter 1 indicate the financial

**Table 5.1: Estimated Costs of Closing the Income and Sustainable Development Goal-Related Gaps**  
(% of GDP)

Country	Income Gap <sup>a</sup>		SDG-Related Gap in 2030 <sup>b</sup>	
	At \$1.90	At \$3.10	Lower	Upper
Azerbaijan	0.0	0.0	0.7	6.8
Cambodia	0.2	3.6	0.6	7.6
PRC	0.1	0.6	0.0	1.5
India	0.5	3.9	1.5	6.1
Indonesia	0.1	1.4	0.1	3.4
Kazakhstan	0.0	0.0	0.2	3.1
Lao PDR	1.2	6.0	0.8	4.6
Malaysia	0.0	0.0	0.1	6.0
Mongolia	0.0	0.1	0.2	5.4
Myanmar	...	...	2.1	8.4
Nepal	0.6	5.7	1.5	11.2
Philippines	0.3	2.2	0.2	3.9
Sri Lanka	0.0	0.5	0.0	2.2
Thailand	0.0	0.0	0.4	4.9
Timor-Leste	2.0	12.7	5.2	12.7
Viet Nam	0.1	0.8	0.6	6.6

... = no data, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China, SDG = Sustainable Development Goal.

<sup>a</sup> Based on international poverty lines in 2011 purchasing power parity.

<sup>b</sup> Only the social protection gap; indicates necessary expenditures in 2030 (see Chapter 1 for details).

Sources: Income gap: Bierbaum et al. (2016); SDG-related gap: Chapter 1 of this book.

resources needed to close the social assistance gap: lower closing the national poverty gap, upper assuming universal coverage of children and the elderly, and a minimum employment guarantee for unemployed working-age adults. Chapter 1 indicates that the costs for the lower scenario are low to moderate in most countries. The upper scenario, however, exceeds the financial means of countries such as Cambodia, the Lao PDR, Nepal, and Timor-Leste even over the longer term, but can guide the discussion of policy options.

The additional financial resources required to achieve the lower scenario seem moderate for most of our 16 focus countries (Table 5.1), but these estimates present, at best, a lower bound. The actual requirements might be far more, given the difficulty of identifying and targeting the extremely poor. The underlying assumption of perfect targeting is unlikely to be achieved, and neglects the allocation problem. Even the most effective poverty-targeted<sup>81</sup> social assistance programs have substantial exclusion errors. Therefore, an assessment of the required minimum resources needs to account for inclusion and exclusion errors, given the trade-off between the two types of errors, and would lead to a higher lower bound. If the lower scenario is to be achieved at all costs, countries would have to completely overhaul their approach, which could be detrimental in the long run and most probably prevent future change to the upper scenario, which reflects the idea of national social protection floors.

Theoretically, the lower scenario could be achieved by bundling all existing cash-based programs, including social pensions and other categorical programs, into one single poverty-targeted program. It would entail a move from individual transfers to family or household-based programs—“family packages.”<sup>82</sup> Each family will be assessed as one unit. The family gap in relation to the poverty line then determines the level of the family transfer.

It is immediately evident that this option faces several obstacles. First, it requires a welfare indicator to be identified, one that accurately reflects a household's living standard. Given that the majority of the poor in our sample countries depend on subsistence agriculture or work in the informal sector, a standard or even verified means test assessing incomes and assets is infeasible.

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<sup>81</sup> Poverty-targeted is used here as a general term and refers to targeting methods that apply to individual or household assessments of living standards to establish benefit eligibility, such as means tests, proxy means tests, or community-based assessments.

<sup>82</sup> One could argue that this violates human rights as such an approach would also affect individual rights of those receiving social pensions and disability allowances.

The next option is the use of proxy means tests, which several countries already use. However, as the word “proxy” says, these tests are only as accurate as the underlying data and methodology used to calibrate the test. Inclusion and exclusion errors are inevitable. Presupposing that exclusion errors are the main concern, raising the eligibility threshold above the poverty line may partly solve the issue and guarantee that a larger share of the poor are entitled to a transfer. A less invasive approach would be to keep existing categorical transfers as they are implemented now, but they would be part of the family assessment. Still, the targeting problem remains the same.

In the true spirit of national social protection floors and given the challenges of achieving the lower scenario, moving stepwise toward the second option (upper scenario) seems more promising. It allows countries to build on the systems already in place and gradually extend coverage and increase transfer levels. Several countries with relatively long-standing social protection systems can gain much by reforming them. *Consolidation* is a key word here. Mongolia, for example, has, besides the child grant program, more than 70 social assistance programs of which all but one (the food stamp program) are allocated on a categorical basis. The distribution of benefits for several of these programs is highly regressive (Onishi and Chuluun 2015).

Viet Nam is similar. Its social protection schemes are rather patchy. Many different laws and decrees govern the various programs and the responsibilities are spread over several ministries, such that some groups are quite well protected, while others are entirely excluded. Also common to socialist countries, programs do not necessarily target the poor and vulnerable, but are allocated based on “deservingness” or merit. Governments stand to gain a lot from thinking about *comprehensive* social protection systems, i.e., the protection offered by social insurance, social assistance, employment, and health policies.

Moving toward such systems requires appropriate country-based strategies. Many countries have formulated social protection strategies, either as stand-alone documents or as part of national poverty reduction strategies (World Bank 2015). But having a strategy is no guarantee of implementation as strategies are often guided by wishful thinking or—to put it more positively—embody a vision that will take many years to realize.

Particularly in countries with many different social assistance programs, institutions, agencies, and other entities at different administrative levels, the absence of strong coordination mechanisms or a lead agency leads to scattered, overlapping, and eventually costly but ineffective systems. Strengthening the

institutions involved in designing and running social assistance schemes and coordinating them can help implement policies better, including comprehensive management information systems. Social registries, as for example in Indonesia and the Philippines, contain information on potentially eligible individuals and households, and can be used to assign, administer, and monitor such schemes (World Bank 2015). Beneficiary registries, in contrast, are narrower in scope, as they focus on benefit recipients. Still, these systems are essential for monitoring and for potentially identifying benefit overlaps if the registry contains information on all programs.

Yet the question remains how to move forward, at this juncture where to start. In the spirit of social protection floors, extending the horizontal dimension would come first, after which the degree of protection can be improved. This argues for improving coverage before adequacy. But even then, which groups should be prioritized if the budget does not extend to serving all?

A policy analyst's perspective would first assess the degree of poverty and vulnerability of the different groups in the population and prioritize those most at risk. The policy maker, on the other hand, may consider the political economy and societal preferences that could lead to a different ordering. Both perspectives are relevant in the policy-making process and should guide the development of national social protection strategies on how to fill the social assistance gap. It requires regular analysis of the situation, which feeds into a broad-based social dialogue on each country's way forward.

A final word on data. Comparable data are hard to find, notably poverty rates for subgroups, and information on current social assistance spending and on the performance of social assistance programs. Hence, to appreciate to what extent the social protection gap is closing over time, more specific, accurate, and comparable data are needed.

## Conclusions

Social assistance programs play an important role in comprehensive social protection systems if the horizontal dimension of the social protection floor is to be achieved. Cash-based programs especially are effective for ensuring basic income security for children, adults, and the elderly in need. Yet as the analysis has shown, most countries in the region are lagging behind on both coverage *and* adequacy.

Coverage gaps are grounded in several factors: lack of government-based national social assistance programs are still absent, as for example in Cambodia and Myanmar; needs exceeding the allocated financial resources in countries with relatively high poverty rates; or programs do not reach those in need. The last point may be due to inappropriate or narrow targeting methods leading to exclusion of the poor, or the absence of programs for certain groups.

Shortcomings in adequacy stem predominantly from insufficient budget allocations resulting in cash transfers that account for only a small share in overall household consumption. Moreover, social assistance cash transfers are rarely adjusted for increases in living costs, because laws do not include explicit regulations for that.<sup>83</sup>

Given administrative capacity requirements for and the problems of correctly identifying the poor through individual needs assessments, universal or categorical allocations of cash transfers are the preferred policy solution to close the social assistance gaps. Yet this first-best solution may not be financially or politically feasible. And so, based on the above analysis, the following recommendations emerge:

- Use smart targeting, excluding wealthy households;
- Sequence inclusion of additional groups over time;
- Raise eligibility thresholds of poverty-targeting to reduce exclusion errors;
- Consolidate existing social assistance programs and subsidies;
- Use social registries to strengthen the administration, monitoring, and evaluation of social assistance programs;
- Strengthen social insurance schemes and align eligibility rules and benefit levels with social assistance programs; and
- Improve the collection of accurate and comparable data on poverty and social assistance within and across countries to inform the policy dialogue with evidence.

Social assistance programs by themselves cannot close the protection gap or achieve the first SDG, but they can be very effective in supporting a country's development and the achievement of inclusive growth. Social assistance enables households to invest in human and physical capital, reducing inequality and the intergenerational transmission of poverty.

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<sup>83</sup> National legislation governing social assistance policies is entirely lacking in some countries.

Yet for social assistance policies to be effective, governments should invest in the provision of services such as health, education, and infrastructure. Only then can demand strengthened by social assistance translate into better opportunities for the poor and vulnerable.

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Annex 5.1 Table: Overview of Social Assistance Programs in 16 Countries

Country	General Social Assistance			Social Assistance for Children			Social Assistance for the Active Aged			Social Assistance for the Elderly		
	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description
Azerbaijan	Targeted Social Assistance	548,663 (2012) <sup>a</sup>	Targeted, unconditional cash transfer	-	-	-	-	-	Old Age Social Allowance	1,290,000 (2016) <sup>b</sup>	Social Pension, pension-tested	
Cambodia	-	-	-	CESSP Scholarship Program	...	Targeted, conditional cash transfer	-	-	-	-	-	
PRC	Dj-Bao	74,500,000 (2013) <sup>a</sup>	Targeted, unconditional cash transfer	Educational subsidies	...	Targeted, conditional cash transfer	-	-	Social Pension	...	Social Pension, universal	
India	-	-	-	Janani Suraksha Yojana	7,301,654 (2014) <sup>a</sup>	Targeted, conditional cash transfer	Mahatma Gandhi National Rural Employment Guarantee Scheme	57,801,470 (2014) <sup>a</sup>	Employment guarantee	Indira Gandhi National Old Age Pension Scheme	20,885,795 (2014) <sup>a</sup>	Social Pension, universal
Indonesia	Program Keluarga Harapan	6,000,000 families (2016) <sup>b</sup>	Targeted, conditional cash transfer	Scholarship for Poor Students	3,080,000 (2013) <sup>a</sup>	Targeted, conditional cash transfer	-	-	Asistensi Sosial Usia Lanjut	10,000 (2013) <sup>m</sup>	Social Pension, means-tested	
Kazakhstan	Targeted Social Assistance	104,100 (2012) <sup>a</sup>	Targeted, unconditional cash transfer	State allowance	600,000 (2012) <sup>s</sup>	Targeted, cash transfer	"Road Map" Program	247,000 (2009) <sup>a</sup>	Public works State Pension	1,930,800 (2010) <sup>m</sup>	Social Pension, pension-tested	

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Annex 5.1 Table continued

Country	General Social Assistance			Social Assistance for Children			Social Assistance for the Active Aged			Social Assistance for the Elderly		
	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description
Lao PDR	-	-	-	-	-	-	Poverty Reduction Fund	118,000 (2009) <sup>a</sup>	Public works	-	-	-
Malaysia	Bantuan Rakyat 1 Malaysia	15,300,000 (2014) <sup>a</sup>	Targeted, unconditional cash transfer	School Assistance for Needy Children	...	...	-	-	-	Assistance to the Elderly	102,500 (2011) <sup>o</sup>	Social Pension, means-tested
Mongolia	Social Welfare Allowance	42,260 (2015) <sup>c</sup>	Targeted, unconditional cash transfer	Child Money Program	1,029,400 (2015) <sup>e</sup>	Universal child benefit	-	-	-	Social Welfare Pension	333,300 (2013) <sup>p</sup>	Social Pension, means-tested
Myanmar	-	-	-	-	-	-	-	-	-	-	-	-
Nepal	-	-	-	Child Grant for Dalit Children	...	Targeted, unconditional cash transfer	Karnali Employment Program	323,600 (2014) <sup>q</sup>	Public works	Old-Age Pension Scheme	1,046,273 (2015/16) <sup>u</sup>	Social Pension, means-tested
Philippines	-	-	-	Pantawid Pamilyang Pilipino Program	4,400,000 households (2015) <sup>b</sup>	Targeted, conditional cash transfer	-	-	-	Tulong Para Kay Lolo at Lola	1,000,000 (2013) <sup>u</sup>	Social Pension, means-tested
Sri Lanka	Samurdhi Relief Program	1,572,104 (2011) <sup>b</sup>	Targeted, unconditional cash transfer	Grade C scholarship and bursaries program for school children	85,000 (2012) <sup>q</sup>	Targeted, conditional cash transfer	-	-	-	-	-	-

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Annex 5.1 Table continued

Country	General Social Assistance			Social Assistance for Children			Social Assistance for the Active Aged			Social Assistance for the Elderly		
	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description	Program Name	No. of Beneficiaries	Description
Thailand	Social Welfare Program	775,213 (2011) <sup>e</sup>	Targeted, unconditional cash transfer	Child Support Grant	128,000 (2016) <sup>j</sup>	Targeted, conditional cash transfer	Income generation activities	...	...	Old-Age Allowance	5,147,100 (2011) <sup>e</sup>	Social Pension, means-tested
Timor-Leste	-	-	-	Bolsa da Mãe	54,488 households (2016) <sup>j</sup>	Targeted, conditional cash transfer	Programa de emprego intensivo	56,000 (2011) <sup>k</sup>	Public works	Transfers for the elderly	86,974 (2015) <sup>f</sup>	Social Pension, universal
Viet Nam	Regular Social Assistance under Decree 136/2013	1,000,000 (2012) <sup>f</sup>	Targeted, unconditional transfer	Decree 49 and Decree 74/2013	2,000,000 (2012) <sup>f</sup>	Targeted, unconditional transfer	Public Works Program for Unemployed or Underemployed Laborers	...	...	Over 80 Allowance and Allowance for Older People	1,557,647 (2012) <sup>f</sup>	Social Pension, means-tested and pension-tested

- = not applicable (no such social assistance program in the country), ... = no data, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Notes: Nepal's Child Grant for Dalit Children is universal for Dalit children in the Karmali zone, and is categorically (targeted at Dalits) and means-tested in the rest of the country.

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**Annex 5.1 Table** continued

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# 6

## Health Care

*Axel Weber, Michael Cichon, Eduardo P. Banzon,  
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This chapter analyzes the gap in universal health coverage (UHC) in Asia and explores the potential options for closing it. Focusing on the 16 countries discussed in this book, it explores health financing and service coverage indicators, both as part of the discussion to cover where countries are, and how they could work to achieve UHC.

UHC means that all people receive quality essential health-care services they need, without being exposed to financial hardship. Asian countries have varying government<sup>84</sup> shares in total health expenditure (THE), an indicator that could reflect financial risk protection. Out-of-pocket (OOP) spending for health is regressive and is never considered an option for countries to cover health care-related costs. It is recommended that countries reduce OOP spending to less than 20% of THE, because when health spending reaches a certain level, people may be pushed into (or further into) poverty. The potential solution therefore, for covering costs, is to increase the government share in THE, either through increased government health spending or pooling of funds in a social health insurance system (or a combination of both).

For social health insurance, there is a need to evaluate how expanding fiscal space for health could generate higher health insurance coverage and lower private spending. Service coverage also needs to improve significantly and to be made available equitably, so as to narrow health-care inequalities. Beyond financing, UHC should be seen not just as a target but as a prerequisite to more equitable health and health care, both within countries and between them.

Estimating the gaps in financing for health care, this chapter reveals how much is needed to help countries achieve UHC, and shows the need to continue investing in health.

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<sup>84</sup> General government expenditure on health and social security services.

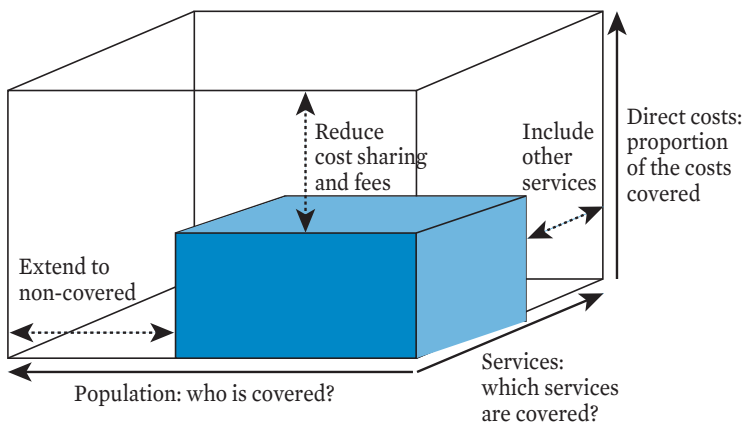


## Universal Health Coverage

Long before the notion of UHC was included as an explicit target in the Sustainable Development Goals (SDGs), it was a concept in the global discourse on development policies. The World Health Organization (WHO), for example, defines UHC as follows: “[It] means that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.”<sup>85</sup>

The World Bank uses a similar definition: “[It] is about people having access to the health care they need without suffering financial hardship. UHC aims to achieve better health and development outcomes, help prevent people from falling into poverty due to illness, and give people the opportunity to lead healthier, more productive lives.”<sup>86</sup> It looks at three dimensions of coverage for population, health health services, and costs, as illustrated in the UHC cube (Figure 6.1).

**Figure 6.1: The Universal Health Coverage Cube**



**Three dimensions to consider when moving toward universal coverage**

Source: World Bank. <http://www.worldbank.org/en/topic/universalhealthcoverage> (accessed 16 November 2016).

<sup>85</sup> World Health Organization. [http://www.who.int/health\\_financing/universal\\_coverage\\_definition/en/](http://www.who.int/health_financing/universal_coverage_definition/en/) (accessed 16 November 2016).

<sup>86</sup> World Bank. <http://www.worldbank.org/en/topic/universalhealthcoverage> (accessed 16 November 2016).

No doubt, UHC has the potential to greatly improve health equity and even health outcomes, but as always, the effectiveness of systems depends critically on how they are implemented. A wide-ranging World Bank study on the impact of UHC in developing countries concludes:

The review indicates that UHC interventions in low- and middle-income countries improve access to health care. It also shows, though less convincingly, that UHC often has a positive effect on financial protection, and that, in some cases it seems to have a positive impact on health status. The review also shows that the effect of UHC schemes on access, financial protection, and health status varies across contexts, UHC scheme design, and UHC scheme implementation processes (Giedion, Alfonso, and Diaz 2013).

Health-care markets are perhaps the most complex markets in any economy. Interactions between contributors and financing systems, between financing systems and providers, and between patients and providers are characterized and determined by asymmetric information about the need for, and structure and volume of, adequate and available care. This means that the quality of care can rarely be judged accurately by recipients, while the price of care is determined by the payment mechanisms that regulate the flow of money between providers and financiers, provider payment systems, and supply of health facilities and providers, among others. These aspects have been discussed in depth, for example, in Cichon et al. (1999), Kwon (1997), and Normand and Weber (2010). Here we are aiming to show, in practical terms, financing problems without perfect knowledge of these detailed determinants, which is unsatisfactory but unavoidable, and a reality for social health protection planners and managers.

Our imperfect understanding of these relationships is mirrored by deficiencies in health statistics: “the degree of effective access to essential health services... is the most difficult to estimate. There is no generally accepted indicator that would measure population coverage and the quality of care” (Cichon and Cichon 2016). The obvious reason lies in the complexities of health services and the virtual impossibility of defining adequate utilization levels or even specifying essential sets of health-care goods and services for a given population in a particular region.

## Measuring Universal Health Coverage

Let us now explore the current state of the 16 countries in achieving SDG Target 3.8—UHC. When people get sick, use of health-care services comes with a cost and,

when payment is sourced from an individual's or family's own income, it can be catastrophic.<sup>87</sup> Depending on the individual or family income status, catastrophic health spending may lead to impoverishment—tipping people into poverty, or deepening their poverty. To protect individuals and families from financial risks from using health-care services, prepayments for health should expand. Some countries in Asia do this by increasing general government expenditure on health care either through direct provision of health services or expansion of their national health insurance (NHI) system (or a combination of both).

Achieving UHC is political and technical. The decision to increase national health spending depends largely on national priorities and direction. The recognition of the need to make sure that health services are provided to all, regardless of income status, often comes with strong demand for equity in access to health services and for financial risk protection, and may reflect historical events that call for UHC. In the Republic of Korea, for example, UHC was founded soon after the Korean War with the government's recognition of its important role in making health care accessible to all. In Thailand, the country's technical strength and a “big bang” approach to policy reform paved the way for the country's UHC scheme that covered nearly everyone (Kuhonta 2017). Depending on how strong the messages demanding UHC are, many states have already started working to achieve UHC after recognizing their role in improving health and access of people to health care.

Development partners, including the Asian Development Bank, provides support to countries needing technical and financial support in implementing small to big bang health care-related reforms. Also monitoring the status of UHC in many countries, WHO recommends using both service and financial risk protection coverage indicators (WHO 2015).

## Financial Risk Protection

Private spending for health care is regressive; hence, the need to financially protect families, especially the poor. Social protection systems in Asia and the Pacific provide for this either through social assistance (free medical care in government-provided health-care services) or from significant health insurance coverage (or a combination of both). To reduce the risk of potentially catastrophic OOP spending or impoverishment related to health-care use, OOP spending must be reduced to at least 20% of THE (WHO 2015, Xu et al. 2010).

<sup>87</sup> Health spending is taken to be catastrophic when a household must reduce its basic expenditure over a period of time to cope with health-care costs (Wyszewianski 1986).

OOP spending is a threat to the use of health-care services because it becomes an important access barrier (ADB 2012, Kwon et al. 2012). When funds for health care are pooled, either through government direct provision or NHI, OOP payment may be reduced. In most countries, the decision on this depends on efficiency considerations. NHI systems in Asia and the Pacific are most often preferred because of their advantage on the strategic purchasing side, effective pooling, financial sustainability, and reduced or regulated inefficiencies in public sector direct provision of services (Banzon and Mailfert 2017).

Table 6.1 shows a wide range of per capita spending of the 16 developing member countries with the Lao People's Democratic Republic (Lao PDR) having the

**Table 6.1: Selected Health Financing Indicators in 16 Focus Countries, Latest Available Year**

Country	GDP per Capita (\$ PPP)	Per Capita Spending on Health (\$ PPP)	Total Health Expenditure as % of GDP	Social Security as % of General Government Expenditure	OOP as % of Total Health Expenditure
	2014	2014	2014	2014	2014
Azerbaijan	17,607.60	1,047.30	6.04	–	72.08
Cambodia	3,291.10	183.23	5.68	–	74.19
PRC	13,439.90	730.52	5.55	67.58	31.99
India	5,677.70	267.41	4.69	5.70	62.42
Indonesia	10,537.20	299.41	2.85	18.75	46.87
Kazakhstan	24,845.50	1,068.06	4.36	–	45.14
Lao PDR	5,407.40	98.47	1.87	3.13	38.98
Mongolia	11,954.60	1,040.23	4.17	1.07	35.30
Malaysia	25,487.90	565.07	4.73	30.50	41.63
Myanmar	11,954.60	103.47	2.28	1.19	50.69
Nepal	2,387.20	137.40	5.80	17.06	47.65
Philippines	6,937.60	328.87	4.71	40.86	53.69
Sri Lanka	11,219.10	369.17	3.50	–	42.09
Thailand	15,646.60	599.84	4.12	9.85	11.92
Timor-Leste	2,223.00	101.54	1.48	–	9.57
Viet Nam	5,657.00	390.50	7.07	44.53	36.76

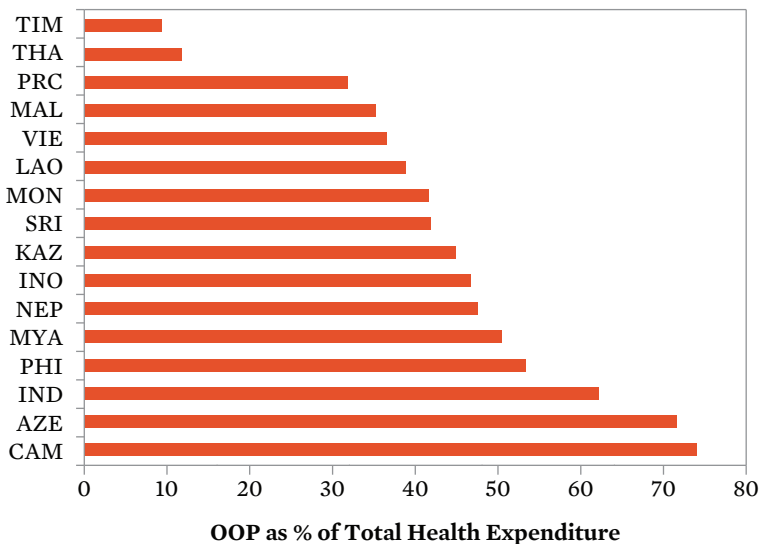
– = not applicable, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, OOP = out-of-pocket, PPP = purchasing power parity, PRC = People's Republic of China.

Sources: WHO Global Health Observatory Data Repository and World Bank Data Repository (accessed 16 October 2017).

lowest at 98.5 per capita (\$ PPP) and Malaysia and Kazakhstan the highest at more than \$1,000. A similar wide variation is seen in the share of THE in gross domestic product (GDP), with Timor-Leste spending 1.5% and Viet Nam, 7.1%. Most of the countries use direct government spending for health through direct provision of health services (tax-based) with only Indonesia, Mongolia, Nepal, the People's Republic of China (PRC), the Philippines, Thailand, and Viet Nam substantially using social security mechanisms. For countries with social health insurance, premium contributions by individuals, as employees with employer contributions or other membership types, account for a significant part of the share of government expenditure.

Among the 16 focus countries, only in Timor-Leste and Thailand is OOP spending less than 20% of THE (Figure 6.2). Thailand is a global model for successful implementation of UHC, but Timor-Leste is a different case given that THE

**Figure 6.2: Out-of-Pocket Spending as a Share of Total Health Expenditure, 2014**  
(%)



AZE = Azerbaijan, CAM = Cambodia, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MAL = Malaysia, MON = Mongolia, MYA = Myanmar, NEP = Nepal, OOP = out-of-pocket, PHI = Philippines, PRC = People's Republic of China, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.  
Source: WHO Global Health Observatory Data Repository. <http://www.who.int/gho/en/>.

is only 1.5% of GDP, with health service coverage acknowledged to be limited (Chapter 4). For most of the countries, an average of 30% of OOP still needs to be shifted from other sources to protect households from financial risk.

Countries with an NHI system could leverage strategic purchasing of health services to drive efficiencies in the health sector (Banzon and Mailfert 2017, Honda 2014, Tangcharoensathien et al. 2015). However, this can only happen if NHI purchasing power is strong enough to influence health system behavior. For countries with high OOPs and NHI, one option is to increase prepayment and pooling of funds either through increased premiums or government subsidies for the poor. Innovations in the design of the NHI system allows for government subsidies to be absorbed, moving from the traditional membership based on individual capacity to pay for health insurance premiums (i.e., driven by the formal sector). This behavior provided social assistance using a health insurance cap (Handayani and Paredes 2017).

Banzon and Mailfert (2017) explored how inefficiencies in the public sector may be hurdled. Costs of health-care services will continue to rise and, unless the public sector keeps up, sustaining public sector financing for health care could be challenging. Government systems may also have limitations in adaptively hiring health professionals when demand exceeds service capacity in public health facilities—often resulting in understaffed facilities. Effective pooling of funds and overcoming inefficiencies in the public sector could be the key to facilitating UHC.

## Health Service Coverage

Beyond financial risk protection, countries should pay attention to the breadth of service coverage. Several service coverage indicators have already been proposed to measure UHC. WHO (2015) initially identified eight tracer indicators to monitor progress toward UHC. These indicators are specific to reproductive and newborn health (antenatal care, skilled birth attendance, family planning), child immunization (three doses of diphtheria, tetanus, and pertussis vaccines), infectious diseases (antiretroviral therapy, tuberculosis treatment), and other non-health sector determinants of health (improved water sources and improved sanitary facilities). These indicators (Table 6.2) were selected primarily because of data availability.

However, as recognized by WHO, the indicators missed other important health-care services such as those specific to noncommunicable diseases. Recognizing the burden of such diseases and the need to respond to it, potential tracer

indicators being considered include hypertension treatment coverage, type-2 diabetes treatment coverage, and other specific indicators for mental health.

Inequalities in access within and between countries should also be reduced, to achieve progress in health service coverage. Many communities in remote regions suffer from a lack of access to health facilities or health professionals. Others, due to limited access of the poor to health services, experience wide income-related inequalities. Cross-country disparities should also be reduced, as more countries engage in strategies to achieve UHC. Measured jointly with financial risk protection, service coverage explores what services are available and who gets it, which is important because good results on financial risk protection indicator do not always mean that a broad range of health services is available.

Table 6.2 shows the eight service coverage indicators for the 16 countries. Thailand—the country with the lowest OOP spending in THE—shows good results. Conversely, Timor-Leste (with OOP spending below 20% of THE, hence reduced risk of catastrophic spending) shows relatively poor results.

## Universal Health Care in Asia and the Pacific

The front-runners in Asia and the Pacific for UHC implementation, including developed countries, are Japan, the Republic of Korea, and Thailand. On THE as a share of GDP, the Republic of Korea (74%) and Japan (10.2%) spend the most, at more than 5%. OOP spending is optimal in Japan (13.9%), at less than 20%, while the Republic of Korea (36.1%) has notably high OOP health spending despite wide THE share of GDP.<sup>88</sup>

In Thailand, aggressive health policy reforms provided for extensive population coverage, allowing better access to health services among the poor. The country's technical strength and political window for reforms contributed to the success of UHC (Kuhonta 2017). Thailand, unlike Japan, achieved optimal OOP with THE at less than 5% of GDP.

Among the 16 focus countries, Indonesia, the Lao PDR, Mongolia, the Philippines, the PRC, and Viet Nam have all taken the path of NHI to achieve UHC, but their health-care services are still paid for by a mix of private and public funds. Pooling of funds should expand in these countries to shift significant levels of OOP spending to NHI. Strategic purchasing is also not a given in health insurance. NHI organizations should be able to design payment schemes and

<sup>88</sup> WHO Global Health Expenditure database, 2014.

Table 6.2: World Health Organization–Recommended Service Coverage Indicators, Latest Available Year

Country	Skilled Birth Attendance	Antenatal Care Services—At Least Four Visits (%)	Married or In-Union Women of Reproductive Age Who Have Their Need for Family Planning Satisfied with Modern Methods (%)	Latest Available Year	DTP3 Coverage (%)	Estimated ART Coverage Among People with HIV (%)	Tuberculosis Treatment Coverage (%)	Population Using Improved Drinking-Water Sources (%); Urban and Rural Total	Population Using Improved Sanitation Facilities (%); Urban and Rural Total
	Year	Latest Available Year	Latest Available Year	2016	2016	2016	2015	2015	2015
Azerbaijan	99.9	66.1	21.5	97	30 (22–40)	81 (67–98)	87.0	89.3	
Cambodia	89.0	75.6	56.4	90	80 (70–92)	59 (42–92)	75.5	42.4	
PRC	99.9	–	96.6	99	–	87 (75–100)	95.5	76.5	
India	81.1	49.7	63.9	88	49 (40–61)	59 (36–110)	94.1	39.6	
Indonesia	87.4	83.5	78.8	79	13 (11–15)	32 (23–50)	87.4	60.8	
Kazakhstan	100.0	87.0	79.6	82	31 (27–37)	89 (81–99)	92.9	97.5	
Lao PDR	40.1	36.9	61.3	82	41 (36–47)	37 (26–57)	75.7	70.9	
Malaysia	99.0	–	–	98	37 (34–41)	87 (75–100)	98.2	96.0	
Mongolia	98.9	89.6	68.3	99	33 (31–39)	37 (23–72)	64.4	59.7	
Myanmar	60.2	73.4	58.5	90	55 (48–63)	70 (54–96)	80.6	79.6	
Nepal	55.6	59.5	56.0	87	40 (35–47)	75 (66–85)	91.6	45.8	
Philippines	72.8	84.3	51.5	86	32 (29–35)	85 (74–99)	91.8	73.9	
Sri Lanka	98.6	92.5	69.4	99	27 (18–39)	69 (52–96)	95.6	95.1	
Thailand	99.6	93.4	89.2	99	69 (60–79)	53 (35–89)	97.8	93.0	
Timor-Leste	29.3	55.1	38.3	85	–	57 (40–87)	71.9	40.6	
Viet Nam	93.8	73.6	69.7	96	47 (41–53)	75 (65–98)	97.6	78.0	

– = not applicable; ART = antiretroviral therapy; DTP3 = diphtheria, tetanus, and pertussis; Lao PDR = Lao People's Democratic Republic; PRC = People's Republic of China.

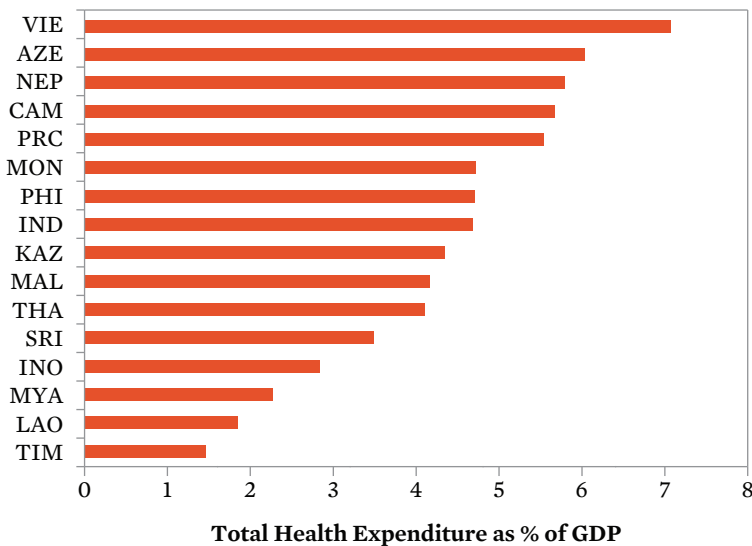
Source: WHO Global Health Observatory Data Repository (accessed 16 October 2017).



relationships with, for example, a clear split between purchaser and provider, for more strategic purchasing arrangements.

Around 70% of focus countries have THE below 5% of GDP (Figure 6.3). For countries to spend at least 5% of their GDP on health, the majority of countries in Asia and the Pacific should expand their fiscal space for health, driven by a less regressive financing option—public finance or NHI. In the Philippines, for example, some fiscal space was added by the Sin Tax Reform law,<sup>89</sup> a form of hypothecated tax for health (Kaiser, Bredenkamp, and Iglesias 2016).

**Figure 6.3: Total Health Expenditure as a Share of Gross Domestic Product, 2014**  
(%)



AZE = Azerbaijan, CAM = Cambodia, GDP = gross domestic product, IND = India, INO = Indonesia, KAZ = Kazakhstan, LAO = Lao People's Democratic Republic, MAL = Malaysia, MON = Mongolia, MYA = Myanmar, NEP = Nepal, PHI = Philippines, PRC = People's Republic of China, SRI = Sri Lanka, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Source: WHO Global Health Observatory Data Repository. <http://www.who.int/gho/en/>.

<sup>89</sup> Entitled "An Act Restructuring the Excise Tax on Alcohol and Tobacco Produces by Amending Sections 141, 142, 143, 144, 145, 8, 131 and 288 of Republic Act No. 8424. Otherwise known as the National Internal Revenue Code of 1997, as amended by Republic Act no. 9334, and for other purposes."

For countries with THE of more than 5% of GDP, reducing inefficiencies in public finance should be the focus, to maximize the support of government spending and to reduce OOP spending. In Cambodia, Nepal, and Timor-Leste, significant external funds for health should be replaced by domestic spending for financial sustainability. Otherwise, if private funds are used to substitute for external funds, this could increase risks of financial catastrophe and inequities in coverage and access.

The above statement makes it clear that nearly all countries in Asia and the Pacific have more work to do, both in improving financial risk protection and in expanding health service coverage.

## The Fiscal Size of the Health Protection Gap

National health expenditure is still a critical yardstick for estimating the resource requirements to close national health protection gaps, which have to be interpreted relative to the level of national health expenditure already reached and that needed for full protection. The cost of care depends on multiple factors that make it hard to standardize sufficient or ideal expenditure. Health expenditure is determined by such factors as age structure (and closely related, the morbidity structure) of a population; extent, structure, and quality of the provider network; provider fee levels and their relation to per capita income; purchasing power of patients; and the pooling level.

With increasing age and morbidity, the demand for health care—hence cost—self-evidently increases. The number and quality of providers influence the supply and—due to the provider domination of market interactions between providers and patients—cost of care. The effectiveness of purchasing influences the prices of health care. The higher the prices, the larger the health budget. Some prices correlate with the income level in a country, like the income of health professionals, construction prices, and locally produced health goods. The purchasing power of patients also determines the possible spending in the health sector. Pooling may enlarge purchasing power and total expenditure.

Increasing the share of THE in GDP is not the only approach to moving toward UHC. Looking at the current levels of spending of the 16 countries, investments in health still need to rise because none of the 16 countries approach the global average in 2014 for THE in GDP—9.9% (WHO 2017). Only five of the 16 (Azerbaijan, Cambodia, Nepal, the PRC, and Viet Nam) spend more than 5% of GDP on health. However, two of the five—Cambodia and Azerbaijan—have the highest share of OOP spending of all 16, at more than 70%, while the PRC

and Viet Nam have OOP spending of less than 40%. This reinforces the point that financially addressing the health protection gap is not simply a matter of increasing the share of THE in GDP but requires financing, organizational, service delivery, and other health system measures to ensure the efficient use of money to eventually reduce OOP spending.

Thailand, for instance, spent just 4.1% of GDP on health in 2014 but is acknowledged as having achieved UHC. Its health system reforms include flowing most of its government health budget through a purchasing agency, the National Health Security Office. This office then strategically purchases health services from government and some private health-care providers, helping to reduce OOP spending to around 12% (in 2014).

The calculation of the fiscal size of the health protection gap needs to consider country context, given that there is no direct correlation between the share of THE in GDP and achieving UHC.

An initial determination of financing needs among the 16 countries is not expected to provide definitive estimates of the funding gap as it will be unable to fully consider different UHC paths among them. Although it will not consider the effect of economy size, which affects the amount of funding available for health, nor economies of scale and scope stemming from an increased size of the health system, these estimates are useful as a preliminary starting point. The estimates are not to be considered prescriptive or recommendatory, particularly as to the percentage gap of the share of THE in GDP or the total amount needed.

The assumptions did not take the global average of 9.9% of THE in GDP and an OOP spending of less than 20% as the setting for comfortably accepting that countries have mobilized enough to reach UHC. This is because 9.9% is too high, as the highest share of THE in GDP among the 16 countries is Viet Nam's 7%. Although Viet Nam is not accepted internationally as having reached UHC, the Republic of Korea, at 7%, is. This combination among the 16 (highest current share and a country example of achieving UHC at that share) is the basis for taking 7% as the minimum needed to finance UHC.

However, an assumption of 7% of GDP to reach UHC is not fully appropriate, as seen in Cambodia and Azerbaijan. There is a need to ensure that this spending is pooled and there are parallel efforts to reduce OOP spending as THE increases. An ideal target for OOP spending would be the 12% of Thailand, i.e., less than the 20% recommended by Xu et al. (2010). However, a higher level of OOP spending of 40% will be used, a rate that the Republic of Korea, Malaysia, and Sri Lanka have kept, while being acknowledged as having UHC or something close to it.

Using 7% of GDP with 40% OOP spending as minimum threshold spending for UHC translates into prepaid or pooled health spending of 4% THE in GDP, which approximates the pooled health spending of Thailand.

The 7% and 40% assumptions are used in the estimates in Table 6.3. The first column shows the target per capita spending in purchasing power parity (PPP). The differences in the absolute numbers are large due to different levels of economic performance of the countries. The per capita spending is financed by pooled and OOP resources. It is assumed that the total pooling increases to 60% of health spending in all countries.

We calculated the current pooling per capita as the residual of OOP spending. Pooling includes social health insurance expenditure as well as that of tax-financed systems. The target pooling (cost coverage) here is normatively set at 60% of target expenditure. The resource gap per capita is then calculated as the difference between actual and target pooling.

Multiplying this by population, we arrive at the total amount of the health protection gap. These estimates are higher than those in Chapter 1, in part because the normative level of health expenditure is set about 1% higher than in the earlier estimates, and because the level of current pooling is estimated differently. This normative assumption explains most of the difference between these results and those in Chapter 1. It can be assumed that those in Chapter 1 provide lower bounds for the resource gaps. These provide higher estimates: they do not assume that all countries are perfectly efficient in delivering health outcomes, but do assume that countries can ensure adequate access and quality of care if they reach the assumed benchmark, and can ensure efficiency when delivering health-care goods and services.

The estimates of resource requirements offer an orientation on the costs of closing protection gaps. Ultimately, the cost of UHC depends on how well programs are designed and implemented. Based on the analysis, we consider that closing the gaps—regardless of whether the gaps are conservatively calculated (as here) or more optimistically (as in Chapter 1)—does not appear insurmountable in most countries.

The total costs for the 16 countries are estimated at around \$600 billion (PPP), or 1.7% of their GDP, ranging from zero in Thailand and Viet Nam to about 3% in the Lao PDR and Myanmar. The weighted average of the cost estimated in Chapter 1 amounts to roughly half of that percentage.

**Table 6.3: Estimation of the Resource Requirements to Close the Health Protection Gaps in Selected Asian Countries, 2015**

Country	Target per Capita Expenditure in \$ PPP	Population (million)	Estimate Current Pooling per Capita in \$	Gap per Capita in \$ PPP	Gap Total (\$ billion PPP)	Gap in Pooled Financing in \$ PPP	Gap in Pooled Financing as % of GDP
Azerbaijan	1,232.5	9.4	293.2	739.5	446.3	4.2	2.4
Cambodia	229.5	15.6	47.3	137.7	90.4	1.4	2.6
PRC	950.0	1,376.0	496.7	570.0	73.3	100.8	0.5
India	401.1	1,310.0	101.6	240.7	139.0	182.1	2.3
Indonesia	727.0	257.5	158.7	436.2	277.5	71.5	2.5
Kazakhstan	1,739.2	17.6	587.5	1,043.5	456.1	8.0	1.8
Lao PDR	374.2	6.8	60.1	224.5	164.4	1.1	2.9
Malaysia	855.5	3.0	327.8	513.3	185.5	0.5	1.5
Mongolia	1,771.8	30.3	676.1	1,063.1	387.0	11.7	1.4
Myanmar	345.1	53.8	50.7	207.1	156.4	8.4	3.0
Nepal	161.9	28.5	71.4	97.1	25.7	0.7	1.0
Philippines	485.7	100.7	151.3	291.4	140.1	14.1	1.9
Sri Lanka	773.3	20.7	214.2	464.0	249.8	5.2	2.1
Thailand	1,074.3	68.0	836.1	644.6	–	–	–
Timor-Leste	159.8	1.2	91.4	95.9	4.5	0.0	0.2
Viet Nam	396.0	91.7	246.0	237.6	–	–	–
<b>All</b>	<b>727.3</b>	<b>3,390.8</b>	<b>259.1</b>	<b>436.4</b>	<b>177.3</b>	<b>601.1</b>	<b>1.7</b>

– = not applicable, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PPP = purchasing power parity, PRC = People's Republic of China.

Sources: ADB Social Protection Index Data, World Bank, and WHO databases; Calculations by A. Weber.

## Moving Beyond the Estimates

The message of the estimates is clear: countries need to boost financing, with stronger regulations to reduce OOP spending and inequalities in access to health-care services, because reducing OOP spending is often not a direct result of increasing THE. In Viet Nam, for example, THE is 7% of GDP, but OOP remains high. Countries should ensure that inputs from public funds to purchase health services shift the burden of paying for health-care services—a move directed from individuals (private sources) to a pooled fund.

In the face of UHC, health-care costs will continue to rise, largely driven by the expansion of the breadth of health services available, advances in medical technology and, to some extent, provider behavior. Governments' failure to respond could worsen inequalities in access to health services and could cause OOP spending to rise.

Strategic purchasing may be used as a good model. When governments try to expand fiscal space, how the money will be spent is the first dilemma to solve. In an NHI system, the bigger the pool, the more powerful the institution becomes for purchasing health-care service. Countries with NHI systems should be able to leverage their purchasing role to influence provider behavior and the quality and quantity of health-care services provided.

## Possible Policy Scenarios in Asia and the Pacific

Given the technical and political push needed to achieve UHC, it is possible that policy reforms will vary widely in scale and urgency. Learning from Thailand's experience, countries should design the system to achieve good financial risk protection and service coverage—coupled with good political support, this seems the key component to move to UHC.

Shifting health-care spending to pooled or prepaid funds requires a system-wide approach, including strong regulations and major policy reforms in taxes and the NHI mandate. Depending on how a country plans to expand fiscal space, the policy inputs could range from a minimal approach to a big bang (as in Thailand). Whether a country has an NHI system or direct public provision of health services, it must control inefficiencies in paying for health care.

For meeting the SDGs, governments need to scale up implementation of UHC, possibly through joint technical development of potential solutions. They also need to enhance technical capacities through investing in research and development, health technology, and health systems reform.

## Conclusions

Sixteen Asian focus countries have an estimated average gap of 1.7% of GDP that must be filled to achieve affordable and equitable access, varying from zero in Thailand and Viet Nam to almost 3% of GDP in the Lao PDR and Myanmar (the gap is calculated based on costs). The possibilities that countries have to cover the gaps are shifting the public budget, improving efficiency of tax collection, levying additional taxes or introducing earmarked taxation for health care, introducing contribution financing, pooling presently paid OOP payments and the affiliated reduction of precautionary savings for health, and (to a limited extent) securing overseas development assistance.

Most of the 16 countries need to make significant efforts to reduce OOP spending. They should expand funds pooled for health care carefully to control costs and monitor the performance of health facilities. They need to resolve inefficiencies in the health-care system, especially in publicly provided health-care services. NHI systems will help to resolve inefficiencies in the public sector through efficient pooling and purchasing of health-care services. Beyond financial risk protection, supply-side interventions to improve the range of services should be launched. Infrastructure and development of health human resources should be funded in the countries with weaknesses in access.

In one sentence: problems in financial risk protection and service coverage coexist, requiring a more comprehensive approach to reducing inequities in health and to achieving UHC.

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# 7

## Social Insurance

*Krzysztof Hagemeyer*

Extending coverage through contributory social insurance or other contributory programs is tempting for governments as a potential avenue for mobilizing new resources and creating new fiscal space. Such extension has clear limits, however: it applies only to those in the labor market who have employment status with high degree of formality and whose incomes are significantly above subsistence level and received regularly. It also requires administrative structures with capacity to regularly register incomes of those covered, and to collect contributions.

This chapter analyzes the potential of social insurance (also called contributory social protection) in the 16 Asian countries reviewed in this publication to fill the protection and coverage gaps in income security. It focuses on pensions, but also reviews other benefits temporarily replacing lost labor income due to events such as sickness, maternity, and unemployment. As current labor market structures largely determine the chances of extending coverage through these means, this chapter also examines their characteristics and analyzes coverage by the different forms of social insurance and assesses the potential for extension.

The analysis finds that, although efforts to extend coverage by social insurance may have major effects in some countries both in reducing poverty and in mobilizing additional resources, most of the current gaps will have to be plugged by noncontributory interventions. The reason stems from prevailing informal labor market structures and the 3- or 4-decade lag between initiating contributory old-age pension programs and when the first pensioners can retire with decent pension benefits. Filling the protection gap in income security in old age by 2030 will require expansion of noncontributory pensions everywhere.

## Making Social Insurance Universal

### Purpose and Scope of Social Insurance

The purpose of social insurance is to provide income security and replace income from work lost due to life contingencies and social risks: temporary sickness (employment related or not); longer-term disability (employment related or not); incapacity to work and longevity risk in old age; loss of the breadwinner (employment related or not); and unemployment, maternity, and family obligations.<sup>90</sup>

In contributory social security schemes, a certain minimum required period of payment is always one of the entitlement criteria for receiving benefits. Mandatory social insurance schemes are a specific type of contributory scheme that usually have a link between the contribution paid by a member and the levels of benefits received. But these schemes do not attempt to link the contribution paid to individual risks (which private insurance does) and allow redistribution. Contributions are charged according to ability to pay.

Contributory provisions may cover the same contingencies as social insurance and may provide similar benefits, but do not follow the same principles: schemes based on provident funds or individual savings accounts may provide important coverage for life contingencies and social risks but, in terms of adequacy, are usually inferior to social insurance coverage. Some countries however, including those in Asia, have recently attempted to enhance these schemes' adequacy of benefits.

For example, Singapore's provident fund introduced partial but mandatory annuitizing of benefits (Asher and Bali 2013). Malaysia is debating reforming its Employees Provident Fund—the country's central pension pillar—either by moving from a retirement savings investment fund to a fully fledged pension fund that offers some minimum annuities, or by creating a Notional Defined Contribution scheme, financed pay as you go with the fund's resources as its major reserve fund (Holzmann 2014).

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<sup>90</sup> According to social security standards of the International Labour Organization (ILO), social insurance benefits for all these contingencies should be paid through the duration of the contingency as periodical (e.g., monthly) benefits. Benefit payment is usually assumed to be temporary (for sickness, maternity, family, or unemployment benefits) and only for disability, loss of the breadwinner, and old age. Benefits (disability, survivors', and disability pensions) paid over longer periods and, at least for old-age pensions, should be life annuities (rather than lump-sum payments).

In many countries, coverage (as for employment injury, sickness, or maternity) is solely the employers' liability as mandated by labor codes. This form of coverage also has many deficiencies both in terms of the financial burden and risk for employers (usually much higher than when coverage is through social insurance) and of the situation of the individual covered.<sup>91</sup> Social insurance was never intended to be only for the better off: it was designed specifically to cover employees in the formal labor market, and social insurance schemes are often important for basic social protection.

### Advantages and Disadvantages of Universalizing Social Insurance Coverage

Social insurance was historically designed to cover those with employee status and potentially completely dependent on it as an income source, and so has usually been financed by contributions from employees and employers.<sup>92</sup> These days, formal sector employees are often seen as privileged relative to those in the informal economy, which is dominated by the self-employed. But this "privileged" position—rather, less vulnerability—is because formal sector employees are much more often either covered by social insurance or by similar provisions for income security, at least in certain contingencies. And employees who must rely only on income from informal employment (that is, they are not covered by social security) may sometimes be even more vulnerable than other groups in the informal economy. Hence, Target 8.5 (Achieve full employment and decent work) of the Sustainable Development Goals (SDGs) should mean that *at least* all those who are employees should be covered by key social insurance provisions.<sup>93</sup>

For the above reasons, policies often prioritize covering with social insurance all those with employee status. Also, covering people through contributory schemes requires certain regularity of income, a condition more often met by employees. (Although many informal employees are paid irregularly, that usually violates provisions of national labor codes, and thus formalizing them is at least theoretically easier than formalizing the self-employed.)

<sup>91</sup> The ILO's Social Protection Floors Recommendation No. 202 of 2012 recognizes contributory schemes—social insurance in particular—as one way to build and then expand social protection. According to this recommendation, such national floors should prioritize social insurance to cover all those with contributory capacity. The ILO lays heavy stress on the need for efforts to formalize the informal economy and indicates that policies aimed at extending coverage should be closely coordinated with measures aimed at formalization.

<sup>92</sup> International social security standards require that protected persons should not cover more than half the costs of overall social security expenditure in the country.

<sup>93</sup> That is employment injury or death, sickness, maternity, and unemployment; followed by old-age pensions, general disability and survivors' pensions; and family benefits.

In addition, solid coverage by social insurance (or any other contributory schemes) requires administrative structures allowing the registration of contributors—their incomes and contributions. While it is possible to develop such structures that register the self-employed, it is much harder to record actual income of the self-employed, which is why social insurance schemes covering the self-employed either base contributions on declared income (and a required minimum income) or use flat-rate contributions and provide flat-rate benefits. Also, not every country has the administrative structures necessary to enhance coverage, if it is easy to put in place a contributory scheme.<sup>94</sup>

Quite a few Asian countries are extending coverage beyond those with employee status (MacKellar 2009, Durán-Valverde et al. 2013). In the Philippines, for certain categories of the self-employed, social insurance coverage is, in theory, mandatory for groups such as independent professionals, business owners, farmers, fishers, arts professionals, professional athletes, street vendors, and some others. Coverage is gradually increasing (it is now about 20% of all self-employed), reflecting a mix of efforts within the scheme's design (differentiation of income categories), administration (intensive use of information and communication technologies, and cooperation with banks), and incentives to contribute (access to personal loans and other benefits). Azerbaijan, Kazakhstan, Mongolia, and the Philippines are the only ones in the region to support such mandatory coverage.

Other countries rely on voluntary coverage. Examples include ambitious (only partly successful) attempts to expand rural pensions in the People's Republic of China (PRC); a scheme for farmers, fishers, and the self-employed in Sri Lanka; and plans in Indonesia to subsidize contributions from informal workers; and design a pension program for herders and the self-employed in Mongolia (ILO 2016).

A wider issue for pensions is that social insurance may be an important part of the national pension system but will never provide enough coverage to all unless combined with other schemes. Only those in formal employment (employees and certain groups of self-employed with regular incomes) can be *effectively* covered, and then only if their employment and contribution records

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<sup>94</sup> For example, although many Latin American countries established social insurance at the same time as much of Europe between World Wars I and II, most European countries have since achieved nearly universal social insurance coverage, while Latin America's social insurance coverage gap has stayed unchanged for decades.

hit certain thresholds.<sup>95</sup> To meet all the main objectives of the pension system and—given the SDGs' social protection agenda—particularly poverty prevention, the contributory (social insurance) tier of the national pension system has to be supplemented with a noncontributory one, providing either a universal pension or at least an income- or pension-tested basic pension.<sup>96</sup> And as contributory pensions only begin to have an impact after several decades of coverage starting, most countries wanting to fill the coverage gap in minimum income security to all elderly in Asia by 2030 will have to do so largely via noncontributory (social assistance) provisions. Contributory provisions within this time frame can take care only of those who are already effectively covered and contributing.

A great advantage of filling the existing coverage gaps with contributory schemes—possibly with social insurance—is that well-designed and well-governed contributory schemes provide their own financing. Thus, rightly, many see extending social insurance coverage (and increasing its effectiveness—contribution compliance, etc.) as a promising way to expand the fiscal space for social protection (Box 7.1).

To summarize, expanding social insurance must be part of countries' strategies to achieve the social protection-related SDGs. All employers should be mandatorily covered and contribute to employment injury schemes covering all their employees. Similarly, all employees should be covered by short-term benefits for sickness, maternity, and temporary unemployment (the long-term unemployed and new entrants to the labor market need different social protection policies).

## Asian Coverage and Gaps

Table 7.1 shows the scope of statutory coverage in most of the 16 countries analyzed in this publication. Five of the 16 (Azerbaijan, Kazakhstan, Mongolia, the PRC, and Thailand) with their social insurance provide comprehensive legal

<sup>95</sup> *Effective coverage*—the proportion of all employed people contributing (or having employers contributing on their behalf) to any social insurance scheme that provides coverage for a given contingency—is a more accurate measure than legal coverage. These people should in the future therefore be entitled to benefits, such as a retirement pension or unemployment benefits, if they continue contributing long enough. Effective coverage is usually far lower than *legal* (or *statutory*) coverage, which presents the portion of the economically active who, under existing legal provisions, should be covered by one of the schemes providing protection for a given contingency (pensions, disability, unemployment, etc.). They may not, however, be contributing and thus not be effectively covered. Often easy to estimate, the legal coverage indicator usually overestimates numbers of the effectively protected.

<sup>96</sup> For a discussion of a pension system's objectives, see Barr and Diamond (2008).

### Box 7.1: Fiscal Space and Social Protection

An International Labour Organization study by Ortiz, Cummins, and Karunanethy (2015), analyzing existing options to expand fiscal space for social protection, makes extension of effective coverage by social insurance one of the most important. At the same time, however, it concludes (p. 22) that much of the scope for increasing coverage depends on the efforts of social security administrations and labor inspectorates to enforce the legal provisions and ensure compliance of employers and workers to register, on the one hand, and to fully pay their contributions, on the other.

Of course, one must consider the country's situation, including the tax burden (there may be a trade-off between how much one can collect from employees through personal income tax and social security contributions, and the potential impact of labor cost increases due to raised employers' contributions).

Source: Author.

coverage for all eight major social security policy areas. India and Viet Nam provide semi-comprehensive coverage with seven policy areas covered by at least some schemes. The Lao People's Democratic Republic (Lao PDR), the Philippines, and Sri Lanka have limited scope, covering five or six policy areas. Indonesia, Malaysia, Myanmar, and Nepal have very limited scope, covering only three or four policy areas. Cambodia and Timor-Leste have too little information, but their scope is certainly very limited.

### Old-Age Pensions

According to results of the research conducted through the second wave of the East Asian Retirement Survey (Chomik 2016, Jackson and Peter 2015, World Bank 2016), while Asian countries have previously prioritized economic growth over social protection, there is evidence of increasing expectations among populations that their government will increasingly step in to finance retirement. People in different countries were asked: "Who, ideally, should be mostly responsible for providing income to the retired?" In the Philippines, the PRC, Thailand, and Viet Nam, more than 60% said the most responsible is government, while the rest of the respondents indicated that the family or retirees themselves should be responsible.

Table 7.1: Scope of Statutory Coverage by Statutory Schemes in Sample Countries

Country	Number of Policy Areas Covered by at Least One Program	Policy Areas Covered	Existence of a Statutory Program										
			Scope of Coverage	Sickness (Cash)	Maternity (Cash)	Old Age	Employment Injury	Invalidity	Survivors	Family Allowances	Unemployment		
Azerbaijan	8	Comprehensive	●	●	●	●	●	●	●	●	●	●	●
Cambodia	...	Very limited	▲	...	...	...	...	...	...	...	...	...	▲
PRC	8	Comprehensive	●	●	●	●	●	●	●	●	●	●	●
India	7	Semi-comprehensive	●	●	●	●	●	●	●	●	●	●	●
Indonesia	4	Very limited	▲	●	●	●	●	●	●	●	●	●	▲
Kazakhstan	8	Comprehensive	●	●	●	●	●	●	●	●	●	●	●
Lao PDR	6	Limited	●	●	●	●	●	●	●	●	●	●	None
Malaysia	4	Very limited	△	●	▲	●	●	●	●	●	●	●	▲
Mongolia	8	Comprehensive	●	●	●	●	●	●	●	●	●	●	●
Myanmar	3	Very limited	●	●	●	▲	●	●	▲	●	▲	Not yet	Not yet
Nepal	4	Very limited	▲	▲	▲	●	●	●	●	●	●	●	▲
Philippines	6	Limited	●	●	●	●	●	●	●	●	●	●	▲
Sri Lanka	5	Limited	△	▲	▲	●	●	●	●	●	●	●	▲
Thailand	8	Comprehensive	●	●	●	●	●	●	●	●	●	●	●
Timor-Leste	...	Very limited	...	▲	▲	●	●	●	...	...	...	None	None
Viet Nam	7	Semi-comprehensive	●	●	●	●	●	●	●	●	●	●	●

Symbols

- At least one program anchored on national legislation
- ▲ Limited provision (e.g., labor code only).
- △ Only in-kind benefit (e.g., medical benefit).

... = no data, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.  
 Source: Data extracted from ILO (2014a), Table B.2, Annex IV (Statistical Tables).



Everywhere except Viet Nam, the majority of respondents believed that employee contributions to contributory pension schemes should be increased, and everywhere a large majority agreed that “government should require workers to save more for their retirement.” The majority of respondents in most countries also agreed that government should increase taxes to provide a basic social pension to the elderly in need.

In most of the 16 Asian sample countries, coverage is rather low. For 15 of them (Myanmar is not included), Table 7.2 shows proportion of older people receiving any type of pension as well as proportions of those covered by contributory and noncontributory provisions.

Effective coverage rates, showing people contributing compared with all the employed, are in Table 7.6. Only in Azerbaijan, Kazakhstan, Malaysia, Mongolia, the PRC, and Viet Nam does it seem that more than half of employees are contributing to one of the contributory pension schemes. In the Philippines,

**Table 7.2: Old-Age Pension Beneficiaries as Percentage of Population over Statutory Pensionable Age**

Country	Total	Contributory	Noncontributory	Year	Statutory Pensionable Age (Basis for Reference Population)
Azerbaijan	81.7	40.8	40.9	2012	62.5 Men   57.5 Women
Cambodia	5.0	...	...	2010	55
PRC	74.4	32.2	42.1	2011	60 Men   55 Women
India	24.1	9.9	14.2	2011	58
Indonesia	8.1	...	...	2010	55
Kazakhstan	95.9	...	...	2011	63 Men   58 Women
Lao PDR	5.6	...	...	2010	60
Malaysia	19.8	16.2	3.6	2010	55
Mongolia	100.0	62.6	37.4	2011	60
Nepal	62.5	9.2	53.3	2010	58
Philippines	28.5	24.3	4.2	2011	60
Sri Lanka	17.1	...	...	2010	55 Men   50 Women
Thailand	81.7	13.1	68.6	2010	60
Timor-Leste	100.0	0.0	100.0	2011	60
Viet Nam	34.5	25.8	8.7	2010	60 Men   55 Women

... = no data, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.  
Source: ILO (2014a), Annex Table B.9, Annex IV (Statistical Tables).

Sri Lanka, and Thailand, about half of employees contribute. In the other countries, effective coverage from contributory schemes is very low, even among employees.

None of the 16 countries can reach high legal coverage with only contributory schemes. Table 7.3 shows key features of main pension programs in 14 of the 16 countries, as well as estimates of legal coverage by contributory (mandatory and voluntary) and noncontributory pension schemes. In the PRC, the estimate shows 100% coverage as, theoretically, all those not covered as employees can join voluntary schemes for rural and urban nonsalaried workers, but, in practice, the proportion of people effectively contributing to these schemes is much lower. Azerbaijan, Kazakhstan, Mongolia, and Thailand potentially cover the whole population, combining contributory and noncontributory provisions. (Although Nepal has a noncontributory pension, coverage is estimated to be low as the age of entitlement to that pension is much higher than to the contributory one.) In countries which do not use noncontributory provisions to supplement contributory ones, even legal potential coverage is quite low (generally less than 50% of the working-age population).

## Employment Injury

Table 7.4 shows key feature of main employment injury programs in 13 of the 16 Asian countries with data. In about half the countries, coverage for employment-related injury comes in the form of social insurance, in the other half as employer's liability insurance (sometimes, employers are obliged to secure private insurance). Still, these schemes are funded mainly by employers, either through contributions, through buying insurance for workers, or—for simple employers' liability—by directly paying benefits. Coverage in all countries is limited to employees, and usually those in the larger firms.

## Unemployment Benefits

Among the 16-country sample, only six (Azerbaijan, Kazakhstan, Mongolia, the PRC, Thailand, and Viet Nam) have well-working contributory unemployment benefit programs. In Thailand, nearly 30% of the unemployed receive benefits, but in other countries, coverage is 10% or less of all the unemployed. India has a public employment guarantee program for the unemployed rural poor, but it reaches a maximum of 3% of the unemployed across the country, although in some states coverage is significantly higher—see, for example, Kamath (2010) and Das (2013). Some other countries in the region (including Indonesia, Malaysia, the Philippines, and Sri Lanka) are debating the possibility of

Table 7.3: Old-Age Pensions—Key Features of Main Extension Programs and Estimates of Legal Coverage

Country	Type of Program	Statutory Pensionable Age		Contribution Rates: Old-Age, Disability, Survivors			Estimate of Legal Coverage for Old Age as Percentage of Working-Age Population			
		Men	Women	Insured Person	Employer	Financing from Government	Total	Mand. Contrib.	Volun. Contrib.	Non-Contrib.
Azerbaijan	Social insurance and notional defined contribution (NDC)	63	58.5	3%	22%	Provides subsidies for social insurance	100.0	65.8	0.0	34.2
	Pensions-tested noncontributory pension	67	62 (57)	-	-	Total cost				
PRC	Budget-funded pension scheme for civil servants and employees of public cultural, educational, and scientific institutions	60	55	-	-	Total cost	6.8	0.0	0.0	6.8
	The basic pension scheme for urban workers	60	55 (cadres) / 50 (workers)	8%	20%	Subsidies as needed	29.8	22.3	7.5	0.0
	<i>The voluntary rural and urban pensions for non-salaried workers</i>						63.4	0.0	63.4	
	<i>The voluntary rural pension scheme</i>									
	- noncontributory government budget financed basic pension	60	60	-	-	Total cost for noncontributory pension (at least CNY55 a month per insured person)				

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Table 7.3 continued

Country	Type of Program	Statutory Pensionable Age		Contribution Rates: Old-Age, Disability, Survivors			Estimate of Legal Coverage for Old Age as Percentage of Working-Age Population			
		Men	Women	Insured Person	Employer	Financing from Government	Total	Mand. Contrib.	Volun. Contrib.	Non-Contrib.
PRC	- Individual account pension	60	60	CNY100- CNY500	-	Local governments contribute at least CNY30 a year per insured person to the individual account				
	The voluntary urban pension scheme for nonsalaried workers									
	- noncontributory government budget financed basic pension	60	60	-	-	Total cost for noncontributory pension (at least CNY55 a month per insured person)				
	- Individual account pension	60	60	CNY100- CNY1,000	-	Government contributes at least CNY30 a year per insured person to the individual account				
<b>PRC Total</b>							100.0	22.3	70.9	6.8
India	Provident Fund complemented with social insurance (Pension Scheme)	55	55	12%	12%	1.17% of the insured's basic wages	12.5	1.9	10.6	
	Gratuity schemes for industrial workers (lump-sum benefit)			No contribution	4%	No contribution				
	Means-tested noncontributory pension	60	60	-	-	Total cost				

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Table 7.3 continued

Country	Type of Program	Statutory Pensionable Age		Contribution Rates: Old-Age, Disability, Survivors			Estimate of Legal Coverage for Old Age as Percentage of Working-Age Population			
		Men	Women	Insured Person	Employer	Financing from Government	Total	Mand. Contrib.	Volun. Contrib.	Non-Contrib.
<b>Indonesia</b>	Provident fund with a small social insurance component	55	55	2%	4%	No contribution	42.9	10.5	32.4	0.0
<b>Kazakhstan</b>	Social insurance: NDC based on individual accounts	63	58	10%	11%	Cost of state basic pension. Old-age solidarity pension: Subsidies as needed	100.0	73.3	0.0	26.7
	Pensions-tested noncontributory pension	63	58	-	-	Total cost				
<b>Lao PDR</b>	Social insurance	60	60	4.5%	5%	Administrative costs for the Social Security Organization	9.5	9.5	0.0	0.0
<b>Malaysia</b>	Social insurance	55	55	0.5%	0.5%	No contribution	45.0	45.0	0.0	0.0
	Provident Fund	55	55	11%	13%	For self-employed persons only, 5% of contributions up to RM60 a year				
<b>Mongolia</b>	Social insurance: NDC (for those born after 1960)	60	55	5.5%	13.5%	-	100.0	23.2	18.6	58.2
	Means-tested noncontributory pension	60	55	-	-	Total cost				

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Table 7.3 continued

Country	Type of Program	Statutory Pensionable Age		Contribution Rates: Old-Age, Disability, Survivors		Estimate of Legal Coverage for Old Age as Percentage of Working-Age Population				
		Men	Women	Insured Person	Employer	Financing from Government	Total	Mand. Contrib.	Volun. Contrib.	Non-Contrib.
Nepal	Provident Fund	58	58	10%	10%		29.1	2.0	0.0	27.1
	Pensions-tested noncontributory pension	70 (60 in some areas)	70 (60 in some areas)	-	-	Total cost				
Philippines	Social insurance	60	60	3.33%	7.07%	Any deficit				
	Means-tested noncontributory pension	77	77	-	-	Total cost	53.2	53.2	0.0	...
Sri Lanka	Provident Fund	55	50	8%	12%	No contribution	31.5	31.5	0.0	0.0
Thailand	New social insurance system	55	55	3%	3%	1%				
	Pensions-tested noncontributory pension	60	60	-	-	Total cost	100.0	35.9	25.9	38.2
Timor-Leste	Pensions-tested noncontributory pension	60	60	-	-	Total cost	100.0	0.0	0.0	100.0
Viet Nam	Social insurance	60	55	7%	13% (14% from 2014)	Subsidies as needed	65.6	26.4	39.2	...
	Means-tested noncontributory pension/ Pension tested above 80	60	60	-	-	Total cost				

... = no data, -- = not applicable, Lao PDR = Lao People's Democratic Republic, Mand. = mandatory, PRC = People's Republic of China, vol. = voluntary. Source: Data extracted from ILO (2014a), Table B.6, Annex IV (Statistical Tables).

Table 7.4: Employment Injury—Key Features of Main Programs and Estimates of Legal Coverage

Country	Type of Program	Contribution Rates (%)			Financing from Gov't.	Estimate of Legal Employment Injury Coverage as % of Labor Force	
		Employee	Employer	Self-Employed		Mandatory Coverage	Voluntary Coverage
Azerbaijan	Employers liability to provide mandatory insurance	No contribution	Whole cost	Whole cost. Voluntary	Whole cost of funeral grant	39.7	0.0
PRC	Social insurance Employer liability	No contribution	1% of total payroll (on average) for social insurance; whole costs for employer liability	Contribute as employer for employees	Subsidies as needed	24.2	0.0
India	Social insurance	Global contribution, under sickness	Global contribution, under sickness	Not covered	Global contribution, under sickness	7.9	0.0
Indonesia	Social insurance	No contribution	Whole cost	1% of monthly declared earnings. Voluntary basis	No contribution	28.7	44.3
Kazakhstan	Employer liability involving compulsory insurance; social assistance	No contribution	Total cost of insurance premiums (from 0.04% to 9.9% of payroll) or directly provides benefits to the insured	Cost of certain benefits	Cost of permanent disability and survivor benefits	56.1	0.0
Lao PDR	Social insurance (employer liability for non-covered employees)	No contribution	Global contribution, under old age (5% of monthly payroll)	Not covered	Administrative costs for the social security administration	6.7	0.0

continued on next page

Table 7.4 continued

Country	Type of Program	Contribution Rates (%)			Financing from Gov't.	Estimate of Legal Employment Injury Coverage as % of Labor Force	
		Employee	Employer	Self-Employed		Mandatory Coverage	Voluntary Coverage
Malaysia	Social insurance	No contribution	1.25% of monthly payroll, according to 34 wage classes	Not covered	No contribution	36.2	0.0
Myanmar	Social insurance	No contribution; under sickness for the funeral grant	1% of monthly payroll; under sickness for the funeral grant	Not covered	No contribution	...	...
Nepal	Employer liability involving compulsory insurance	No contribution	Whole cost	Not covered	No contribution	3.8	0.0
Philippines	Social insurance	No contribution	0.2% for monthly earnings of at least ₱15,000	Not covered	Any deficit	45.8	0.0
Sri Lanka	Employer liability	No contribution	Whole cost or (1% to 7.5% of gross payroll according to assessed risk)	Not covered	Whole cost of medical benefits	42.3	0.0
Thailand	Employer liability involving compulsory insurance	No contribution	0.2% to 1% of annual payroll according to assessed risk	Not covered	No contribution	26.2	0.0
Viet Nam	Social insurance	No contribution	1% of monthly payroll	Not covered	No contribution	30.4	0.0

... = no data, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Data extracted from ILO (2014a), Table B.4, Annex IV (Statistical Tables).



introducing unemployment benefits by converting existing severance pay obligations of employers. Debates are difficult as trade unions, though opting for unemployment benefits, want to keep at least partially existing severance payments, while employers seem willing to agree to pay contributions to new social insurance programs only if their severance pay obligations are phased out.

## Coverage Gaps in Social Insurance

The share of employees in total employment in the 16 Asian countries varies widely (Table 7.5). In some countries, over 50% of all the employed are wage and salary earners (Kazakhstan, Malaysia, Mongolia, the Philippines, the PRC, and Sri Lanka), while in the rest, they are in the minority, with the lowest shares well below one-third in India, the Lao PDR, and Myanmar.

**Table 7.5: Share of Wage and Salary Earners in Total Employment, 2015**

Country	Wage and Salary Earners as Share of Total Employment (%)
Azerbaijan	34.7
Cambodia	37.3
PRC	53.3
India	21.2
Indonesia	36.1
Kazakhstan	69.2
Lao PDR	15.5
Malaysia	75.5
Mongolia	53.9
Myanmar	11.9
Nepal	26.6
Philippines	54.8
Sri Lanka	57.9
Thailand	46.0
Timor-Leste	32.8
Viet Nam	36.2

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's estimates based on ILO Global Employment Trends 2014: supporting data sets (ILO 2014b).

## Estimating the Contribution of Social Insurance to Achieving the Social Protection Agenda of the Sustainable Development Goals

Contributory schemes effectively covering larger proportions of self-employed until now have proven possible only in highly formalized economies with sound mechanisms for registering (people and incomes) and enforcing collection of taxes and contributions. In countries with large proportions of mostly rural self-employed, highly informal economies, and weak administrative capacity, there are clear limits for extension of coverage by contributory pension schemes.

Table 7.6 shows estimates of social insurance coverage rates—and its inverse, coverage gaps—in the 16 countries, assuming that all those with employee status

**Table 7.6: Estimates of Social Insurance Coverage Gaps, 2015 or Latest Available**

Country	Maximum Potential Coverage by Contributory Schemes (thousands)			Estimated Number of Actual Contributors (thousands)	Coverage Gap (% not contributing)	
	All Employed	All Paid Employed	Employees		Maximum (% of paid employed)	Minimum (% of employees)
Azerbaijan	4,714	4,351	1,508	1,773	59	4
Cambodia	8,606	7,941	2,964	43	99	99
PRC	769,919	676,346	360,382	270,995	60	25
India	484,550	419,227	88,748	51,887	88	42
Indonesia	118,260	101,055	36,499	13,838	86	62
Kazakhstan	8,679	8,645	5,979	5,750	33	4
Lao PDR	3,407	2,184	339	48	98	86
Malaysia	13,057	12,484	9,431	7,761	38	18
Mongolia	1,234	952	513	611	36	4
Myanmar	29,678	16,698	1,979	0	100	100
Nepal	15,051	14,031	3,735	468	97	87
Philippines	41,254	37,004	20,291	11,711	68	42
Sri Lanka	8,156	7,541	4,363	2,057	73	53
Thailand	39,873	32,063	14,760	9,049	72	39
Timor-Leste	189	145	47	18	87	61
Viet Nam	54,622	46,133	16,713	11,555	75	31

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's estimates based on ILO and World Bank databases.

could be potentially covered. (We do not consider here the second, maximum option, which would aim to cover all those with paid employment, that is, including all the self-employed. We see this option as unrealistic, at least by 2030.)

In only three countries is the percentage of contributors among all those in paid employment higher than 50% (and respectively the coverage gap is lower than 50%): Kazakhstan, Malaysia, and Mongolia (penultimate column). These three countries, as seen, have high shares of employees in total employment. But some other countries with similar shares still have coverage gap ratios to total paid employment higher than 50%—the Philippines, the PRC, and Sri Lanka.

If, however, we look at coverage gaps among employees only (right-most column), the picture changes slightly. The lowest coverage gaps are in Azerbaijan, Kazakhstan, and Mongolia where nearly all employees seem to be contributing. Shares of employees not yet covered are in the PRC and Malaysia, 20%–25%; in Viet Nam, about 30%; in India, the Philippines, and Thailand, about 40%; in Sri Lanka, slightly over 50%; in Indonesia and Timor-Leste, about 60%; and in the Lao PDR and Nepal, close to 90%. Contributory schemes offer no coverage at all in Myanmar and Cambodia (but, in these countries, at least certain groups of government employees are covered by noncontributory schemes for pensions and some other benefits).

Current levels of coverage rates and gaps reveal countries' varying potential for closing some of the social protection gap through 2030 with contributory schemes.

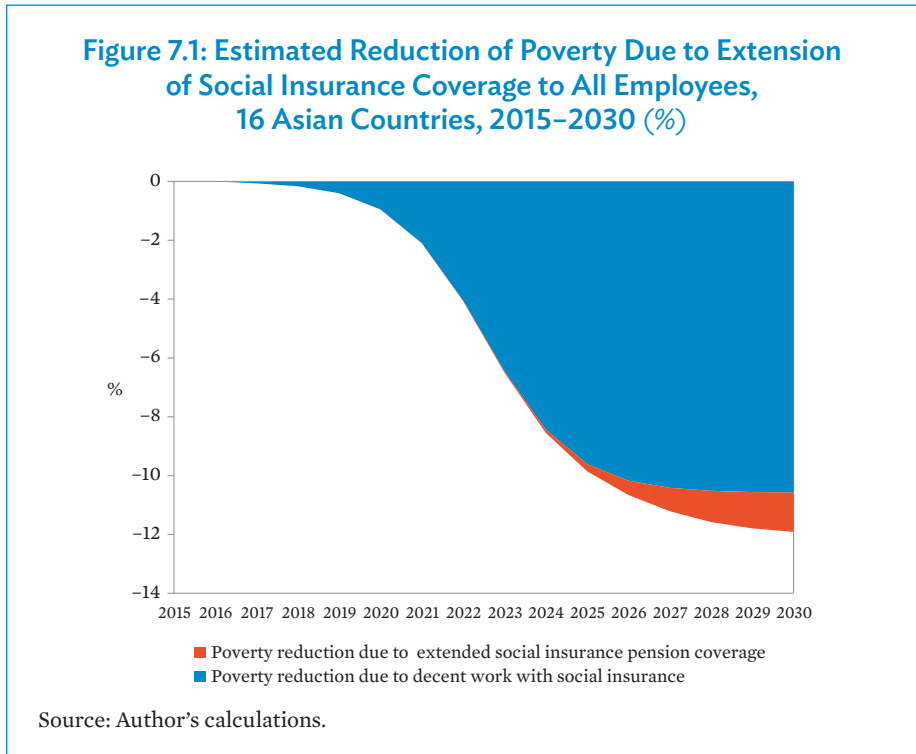
In further analysis, we assume that, as part of achieving decent work, countries will make efforts to cover with social insurance all those with employee status in the labor market. Most countries with low employee coverage rates will find this challenging, sometimes due to institutional and administrative problems, and so our assumption may lead to overestimating possible coverage and poverty reduction effects. We also assume that the above aim will be achieved gradually, using the maturation function (Chapter 1). We do not assume, however, that by 2030 there will be any substantial increase of coverage by contributory schemes for the self-employed.

The above is taken to have the following effects:

- All employees covered by social insurance and their dependents will enjoy decent remuneration and social insurance benefits for different contingencies. Implicit assumption here is that this expansion of coverage will mean not only increasing the extent of personal coverage of employees but also the scope and quality of such coverage—that all the major contingencies and policy areas will be covered (which, in many countries in question, is far from being the case now) and that benefits will be sufficient to prevent poverty. Again, this assumption may be overoptimistic and thus results may overestimate possible poverty reduction effects.
- Poverty incidence in this group of the population (employees and their dependents) will be gradually reduced to zero, and the number of poor, the poverty gap, and the protection gap will be proportionally reduced relative to the status quo scenario (see Chapter 1) of projected government revenues in 2030.
- More people will start receiving pensions, assuming the same maturation function as above but with the effects delayed by a further 5 years, proportionally to the increased coverage of the working-age population. Most of these pensions will likely be disability pensions, as 2030 is too short to allow enough time for contributions to give entitlements to meaningful old-age pensions, and so the number of those in poverty will additionally fall by the number of these new pensioners.
- Poverty incidence among those who become newly entitled to pension benefits will be reduced to zero relative to the current level. The poverty gap and protection gap will be proportionally reduced relative to the decrease in the number of poor compared with the status quo scenario.

We also assume that, from the fiscal point of view, such extension of coverage and reduction of poverty will be fully financed by revenue from contributions paid by the newly insured and their employers. Of course, such increase in coverage is not neutral in fiscal and economic terms. Higher fiscal obligation of the newly covered may result in their behavior in terms of willingness to pay other taxes as well as in terms of their behavior at the labor market. Increased labor costs may have an impact on the hiring behavior of employers. On the other hand, better coverage and more decent work in the longer run leads to higher productivity of those employed, making it hard to predict the balance of these economic consequences.

Figure 7.1 shows aggregate expected reduction of poverty for all 16 countries. Table 7.7 presents detailed results.



## Conclusions

Extending coverage by social insurance potentially not only provides an opportunity to reduce the current social protection gap, but also serves as mechanism to mobilize resources to finance it. Our analysis shows, however, that there are limits to such extension by contributory schemes due to the labor market structures of many Asian countries, notably degree of formality of employment.

Given that populations in many of the 16 Asian countries seem to expect more government involvement in providing income security in old age, and that groups of populations seem ready to participate with additional contributions, savings, or both, efforts to extend coverage should be undertaken as part of national strategies to reach the social protection-related SDGs.

**Table 7.7: Assumed Increase in Social Insurance Coverage and Estimated Poverty Reduction Effects of Expanding Share of Employment Covered by Social Insurance and by Extending Coverage by Contributory Pensions through 2030**

Country	Coverage (% of All Employed Covered)		Reduction of Poverty Incidence (Percentage Points) by 2030	
	2015	2030	Covering All Employees with Full Range of Short-Term Social Insurance Benefits	Covering All Employees with Social Insurance Pensions
Azerbaijan	33	35	- 1.4	- 0.2
Cambodia	0	22	- 21.9	- 2.3
PRC	40	53	- 13.3	- 3.2
India	12	21	- 8.9	- 1.1
Indonesia	14	36	- 22.4	- 2.8
Kazakhstan	66	69	- 2.8	- 0.4
Lao PDR	2	15	- 13.3	- 1.0
Malaysia	62	75	- 13.6	- 1.9
Mongolia	52	54	- 2.2	- 0.2
Myanmar	0	12	- 11.9	- 1.5
Nepal	3	27	- 23.1	- 2.4
Philippines	32	55	- 23.0	- 2.3
Sri Lanka	27	57	- 29.7	- 6.2
Thailand	28	42	- 14.1	- 3.8
Timor-Leste	13	30	- 17.6	- 1.2
Viet Nam	25	36	- 11.2	- 1.9
<b>Total</b>	-	-	<b>- 10.6</b>	<b>- 1.3</b>

- = not applicable, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's calculations.

The situation, of course, differs by country. Some have already achieved relatively high coverage by social insurance, and for them, closing coverage gaps requires completing it with noncontributory schemes for those not covered and needing protection. Other countries still need to sharply improve coverage of people with employee status but must also expand social assistance schemes, including social pensions, to close the protection gaps of those in the informal economy. Expansion of social insurance is therefore important, but not a full solution.

Benefit eligibility in contributory pension schemes always requires a certain minimum period of contribution payments and, with old-age pensions, such periods extend to decades. That is why one should not expect any dramatic increase in the number of elderly receiving contributory old-age pensions through 2030 and why closing the protection and coverage gap requires rapid expansion of noncontributory interventions.

Thus, through 2030, the effects of extending contributory pensions on reducing poverty and expanding protection will likely be very small, but one must remember that much larger effects will come within a longer period after 2030, when—after 40 or more years of contributing—the people newly covered before 2030 will retire.

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# Sustainable Development Goals, Governance, and Outcome Targets Constituting the Social Protection Agenda of the Sustainable Development Goals

## Goal 1. End poverty in all its forms everywhere

- 1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day—*Outcome target*
- 1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions—*Outcome target*
- 1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable—*Governance target*
- 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance—*Governance target*
- 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters—*Outcome target*

## Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

- 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round—*Outcome target*
- 2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children

under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons—*Outcome target*

### Goal 3. Ensure healthy lives and promote well-being for all at all ages

- 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births—*Outcome target*
- 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births—*Outcome target*
- 3.4 By 2030, reduce by one-third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being—*Outcome target*
- 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs—*Outcome target*
- 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all—*Governance target*

### Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

- 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.—*Governance target*
- 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and preprimary education so that they are ready for primary education—*Governance target*
- 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable,

including persons with disabilities, indigenous peoples and children in vulnerable situations—*Governance target*

### Goal 5. Achieve gender equality and empower all women and girls

- 5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate—*Governance target*
- 5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences—*Governance target*

### Goal 6. Ensure availability and sustainable management of water and sanitation for all

- 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all—*Governance target*
- 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations—*Governance target*

### Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

- 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services—*Governance target*

### Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

- 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value—*Governance target*

## Goal 10. Reduce inequality within and among countries

- 10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average—*Outcome target*
- 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status—*Outcome target*
- 10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality—*Governance target*

## Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

- 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums—*Governance target*
- 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations—*Outcome target*

## Goal 13. Take urgent action to combat climate change and its impacts

- 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries—*Outcome target*

## APPENDIX 2

# A Robust, Two-Step Modeling Methodology

## Steps, Databases, and Assumptions

The methodology to estimate resource requirements proceeds in the following two steps, discussed in detail in the rest of Appendix 2 after a few paragraphs on the databases used and the general assumptions made.<sup>1</sup> The substantive part of Appendix 2 closes with a display and interpretation of results. Where necessary, the methodology is illustrated by the country example of Cambodia.

### Steps

#### *Step One*

The resource gaps for 2030 as the end point of the projection period, 2015–2030, are established. *These resource gaps, also called resource requirements, are identical to the necessary expenditure (including reallocated spending) to close the respective protection gaps.*

#### *Step Two*

The projected increase of the required resources between 2015 and 2030 is modeled. The model used is a simple deterministic scenario model that follows the general methodology used in the social budgeting approach of the International Labour Organization (ILO).<sup>2</sup>

### Databases

The majority of country data derived from four data sources: United Nations (UN) population prospects; World Development Indicators of the World Bank; *Key Indicators for Asia and the Pacific 2015* of the Asian Development Bank (ADB); and the ILO's central statistics database, ILOSTAT. National data, such as national poverty lines in national currency and national minimum wages, are used where needed.

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<sup>1</sup> This draws on the methodological annex of Cichon and Cheechang (2015).

<sup>2</sup> See Scholz, Cichon, and Hagemeyer (2000).

## *General Assumptions*

The estimates of the national resources needed to close the social expenditure gaps related to the Sustainable Development Goals (SDGs) are anchored on demographic, economic, and government budget scenarios built for the projection period, 2015–2030.

## *Demographic Scenarios*

The size and structure of the population of the 16 countries in the sample are assumed to develop in line with the medium variant of the UN population projections.

## *Economic and Labor Market Scenarios*

Real gross domestic product (GDP) growth for 2015 is calculated as the geometric mean of the post-crisis growth rates from 2010 to 2014 and then kept constant throughout the projection period. The same principle applies to the GDP deflator, price inflation, and productivity (GDP per employed person) during the projection period. Assuming GDP growth rates and productivity rates render unemployment rates a dependent variable. In some cases, growth and productivity rates have to be corrected downward to prevent the model from returning negative unemployment.

Labor force participation rates (aggregated for the entire labor force) are derived from ILO data for the latest available year before 2015. The rates are kept constant during the projection period. Likewise, the proportion of informal employment to total employment (using ILO data on “vulnerable employment”) are kept constant throughout the projection period. Wage inflation is calculated as productivity plus inflation. Minimum wages are adjusted in line with general wage inflation. The national poverty lines are established for 2015 and then adjusted in line with the rate of change of GDP per capita to avoid the “disappearance” of poverty due to the failure to adjust national poverty lines to the general progression of living standards.

## *Fiscal Scenarios*

General government revenue and expenditure (measured as shares of GDP) are calculated on the basis of the ADB time series data between 1990 and 2014. The starting value for 2015 is forecast by a linear regression. The values are then kept constant (in percentage of GDP) throughout the projection period. Alternative

scenarios for the growth of revenues and expenditure are possible (and are undertaken in one sensitivity test), but the scenario chosen here seemed the most conservative.

### *Step One: Establishing the Resources Gaps for 2030*

The impact matrix (Box 2.1 in the main text) demonstrated that all the 27 social targets can be assumed as being met, if all 14 governance targets are met. The 14 governance targets can be separated into social transfer targets and infrastructure targets. The social transfer targets are Targets 1.3, 3.8, and 8.5. The infrastructure targets reflect government obligations to make education, housing, water, sanitation, energy, and sanitation services available to all residents. The resource gaps in the stationary state—the amount of resources needed to theoretically fill the present gaps in social protection and the infrastructure—are estimated as described in the following sections. A stationary state is a state where the respective social protection benefits or the new infrastructure has been rolled out to all people who should theoretically benefit from it. In addition, per capita expenditure has reached its highest real level.

The gaps that the 14 social governance targets define are here clustered into four categories: social transfer, health care, education, and in the provision of other essential goods and services (the next three subsections). The lower and upper estimates for the social transfer gaps are calculated. This demonstrates the cost difference between a restrictive or residual social assistance approach to achieve a social protection floor, and an alternative floor created by mainly universal benefits and cash-for-work programs. No alternative cost estimates are undertaken for health care or social infrastructure benefits.

### *Closing the Social Transfer Gap*

Social protection targets can be achieved by social protection *cash transfers* that ensure income security. These cash transfers are costed in two ways—the lower and upper cost estimates.

#### *Lower Cost Estimate*

*The lower cost estimate assumes that a national social assistance scheme—by way of perfect targeting—fills individual poverty gaps up to the national poverty line. This approach simply portends that the existence of poor people and the respective aggregate poverty gap (i.e., the sum of all individual poverty gaps of all the poor) reflect the failure of the national social protection (also called social transfer)*



schemes. If people remain poor after these schemes have been launched, these schemes either do not reach all the poor and/or do not provide enough transfer incomes to lift them out of poverty.<sup>3</sup> There appears to be an inherent conflict between the first three targets of Goal 1 (see Appendix 1).

Target 1.2 could be narrowly interpreted as reducing the number of people living on income under monetary national poverty lines by half. It appears that achieving appropriate social protection systems for all (Target 1.3) and leaving half the population with income under the national poverty line (Target 1.2) are incompatible. However, Target 1.2 apparently refers to the concept of multidimensional poverty. The most frequently used definition of the Oxford Poverty and Human Development Initiative of multidimensional poverty contains 10 indicators clustered in three dimensions: health, education, and standard of living. The indicators refer to child mortality; nutrition; years of schooling; school attendance; and the possession or access to cooking fuel, toilets, water, electricity, a solid floor, and a minimum set of assets. People are considered poor if they are deprived in at least one-third of the weighted indicators. National definitions of the dimensions and indicators of multidimensional poverty and their weights inevitably vary. National monetary poverty lines are generally calculated on the basis of the monetary value of a minimum physiologically necessary calorie intake and an additional amount of resources needed to access essential goods and services. Bringing the monetary poverty target down to halving poverty under the national line would certainly violate at least Target 2.1 (hunger), Target 2.2 (malnutrition), and Target 1.4 (access to basic services).

In addition, halving the number of people living on incomes under the monetary national poverty lines could also be misleadingly “cheap” if the distribution of incomes under the national poverty line is tilted toward that line. The apparent contradiction could also be resolved if one were to assume that Target 1.2 is aimed at developed countries with poverty lines that generally exceed the absolute international poverty lines of the national poverty lines in developing countries by a factor of 10 and higher. For the purposes of this analysis, it is assumed that *adequate social protection systems* in low-income to lower middle-income countries—like our sample of 16 countries—should aim at lifting all poor people to the national monetary poverty line. Table A2.1 displays the national poverty lines used in the model and their equivalent multiples of the revised international poverty line of \$1.90 per day. On average, the 16 national poverty lines exceed the \$1.90 international line by about 150%. This also indicates the

<sup>3</sup> That approach was first developed by Cichon and Cichon (2016) and further refined by Bierbaum et al. (2016).

limited social policy relevance of the international line that was established on the basis of average national lines of 15 low-income countries (of which Nepal was the only one in Asia).

**Table A2.1: Amounts of National per Capita Poverty Lines in Selected Asian Countries, 2015 or Latest**

Country	National Monthly Line in National Currency Estimated in Model for 2015	PPP Conversion Rates	Monthly National Poverty Lines in \$ PPP	National Poverty Lines in % of International Monthly Line Based on \$1.90 per day (in PPP)
Azerbaijan	105	0.3168	331.4	573.5
Cambodia	116,000.0	1,353.09	85.7	148.3
PRC	191.7	3.46	55.4	95.9
India	1,113.3	15.10	73.7	127.6
Indonesia	330,776.0	4,060.45	81.5	141.0
Kazakhstan	22,859.3	93.04	245.7	425.1
Lao PDR	243,907.0	2,601.83	93.7	162.2
Malaysia <sup>a</sup>	416.0	1.42	293.3	507.5
Mongolia	146,650.0	642.31	228.3	395.1
Myanmar <sup>b</sup>	37,881.0	234.97	161.2	279.0
Nepal	2,601.9	30.31	85.8	148.5
Philippines	1,755.6	17.93	97.9	169.4
Sri Lanka	3,624.0	45.44	79.8	138.0
Thailand	2,873.3	12.22	235.2	407.0
Timor-Leste <sup>c</sup>	46.8	0.66	70.9	122.8
Viet Nam	1,003,446.1	7,591.67	132.2	228.7
<b>Simple sample average</b>			<b>134.7</b>	<b>254.35</b>

Lao PDR = Lao People's Democratic Republic, PPP = purchasing power parity, PRC = People's Republic of China.

<sup>a</sup> Individual line estimated as household line divided by 2.

<sup>b</sup> PPP exchange rate value available for 2011 only.

<sup>c</sup> Conversion rate as used by government.

Sources: World Bank. World Development Indicators; and data from statistical offices.

This methodology also implicitly assumes that Target 8.5 (Achieve full employment and decent work) has to be attained by a combination of increased demand for labor by the private sector, legislation that has no direct fiscal impact (such as laws on safe working conditions), and public works programs. Only public works programs have a direct fiscal impact. It is assumed that the public works programs provide enough days of work per poor person, and an income, to guarantee an income equivalent to the national poverty line. That way, the achievement of Target 8.5 becomes a part of the general closing of the national poverty gap.

One theoretical problem remains. The reduction of aggregate national poverty gaps over time is generally attributed to the trickle-down effects of economic growth and to government transfers to the poor. In a social budget modeling procedure, government action is modeled by straightforward cost estimates of benefit schemes. The conduit of economic trickle-down effects to the national poverty gaps have to be modeled in a pragmatic way. It is thus assumed here that the annual number of additional employed persons “produced” by economic growth are the main driver for the reduction of the national poverty gap due to the trickle-down effect.

First, the average dependency ratio of an employed person is calculated (i.e., total population divided by the number of employed persons), then that ratio is applied to the additional number of employed persons and multiplied by the shares of employment in the formal sector. The resulting number of people is assumed to be equivalent to the number of people “pulled out” of poverty by economic growth. It is, therefore, implicitly assumed that only people entering formal employment will be successfully lifted out of poverty. This may be a slight overestimation of the effect, as even some of the newly employed people in the formal sector may stay in poverty as working poor. However, because the average poverty gap is generally small, that effect is probably also very small.

### *Upper Cost Estimate*

*The upper cost estimate is based on a universal flat-rate benefit approach. It assumes that children under age 16 receive a child grant of 50% of the amount of the poverty line, all people over age 60 receive a universal pension of 70% of the national poverty line, all people in invalidity and on maternity leave receive a universal benefit of 70% of the national poverty line, and all unemployed persons get 100 days of public works remunerated at the level of the national minimum wage.*

### *Closing the Health-Care Gap*

The “adequate” level of health expenditure in a country is notoriously difficult to assess because, on the demand side, health-care needs in countries vary by the national epidemiological risk structure, the demographic structure of a population, and its propensity to consume the different types of health services. On the supply side, expenditure levels vary by the actual pattern and structure of health delivery and the unit cost of producing health services. The only way to assess in a cross-country study whether a country has a concrete health expenditure gap when aiming to comply with the benchmarks set by the SDGs is to compare the health expenditure of the countries in the sample with the average health expenditure for all developing countries that fulfill the concrete numerical targets set by the SDGs.

According to the World Development Indicators, the global average for national public health expenditure was 5.9% of GDP. That average contains a number of industrialized countries with unrealistically high health expenditure for developing countries. A more realistic benchmark for comparison for the 16 developing member countries in our sample would be the global average health expenditure (as a percentage of GDP) of all developing countries that have achieved the following targets:

- maternal mortality of under 70 per 100,000 live births (Target 3.1),
- infant mortality of under 12 per 1,000 live births (a proxy for Target 3.2), and
- under-5 mortality of less than 25 per 1,000 live births (Target 3.2).

Twenty-two developing countries meet the above criteria, with a combined population of 1.8 billion, or 25% of the global population. The sample is dominated by the People’s Republic of China (PRC), which has a public health expenditure of 3.1% of GDP and which meets the test criteria. India, with health expenditure of only 1.3% of GDP, fails the test.

The unweighted average public health expenditure for these 22 countries is 3.4% of GDP; the population weighted average is 3.2% of GDP. Here, the weighted average of 3.2% of GDP is used as the benchmark for health expenditure that countries should reach, provided that they have not achieved the above three performance criteria at a lower level of expenditure.

Table A2.2 shows that only four countries in our sample make the target (Malaysia, the PRC, Sri Lanka, and Thailand). Malaysia and Sri Lanka meet the

**Table A2.2: Estimated Resource Requirements to Meet the Health-Care Targets of the Sustainable Development Goals, Stationary State Estimates for 2030**

Country	Under-5 Mortality 2015 (Latest World Bank Estimates)	Infant Mortality 2015 (Latest World Bank Estimates)	Maternal Mortality 2015 (Latest World Bank Estimates)	Target Maternal Mortality		Target Infant Mortality		Target Under-5 Mortality		All Targets Met? Yes=1, No=0	Public Health Expenditure in 2014 in % of GDP (or Latest World Bank Estimates)	Estimated Additional Resource Requirement in 2030 (Stationary State), in % of GDP
				Yes=1, No=0	Yes=1, No=0	Yes=1, No=0	Yes=1, No=0	Yes=1, No=0				
Azerbaijan	31.7	27.9	25.0	1	0	0	0	0	0	0	1.2	2.0
Cambodia	28.7	24.6	161.0	0	0	0	0	0	0	0	1.3	1.9
PRC	10.7	9.2	27.0	1	1	1	1	1	1	1	3.1	0.0
India	47.7	37.9	174.0	0	0	0	0	0	0	0	1.4	1.8
Indonesia	27.2	22.8	126.0	0	0	0	0	0	0	0	1.1	2.1
Kazakhstan	14.1	12.6	12.0	1	0	1	0	1	0	0	2.4	0.8
Lao PDR	66.7	50.7	197.0	0	0	0	0	0	0	0	0.9	2.3
Malaysia	7	6	40.0	1	1	1	1	1	1	1	2.3	0.0
Mongolia	22.4	19	50.8	1	0	1	0	1	0	0	2.6	0.6
Myanmar	50	39.5	178.0	0	0	0	0	0	0	0	1.0	2.2
Nepal	35.8	29.4	258.0	0	0	0	0	0	0	0	2.3	0.9
Philippines	28	22.2	114.0	0	0	0	0	0	0	0	1.6	1.6
Sri Lanka	9.8	8.4	30.0	1	1	1	1	1	1	1	2.0	0.0
Thailand	12.3	10.5	20.0	1	1	1	1	1	1	1	5.6	0.0
Timor-Leste	52.6	44.7	557.0	0	0	0	0	0	0	0	1.3	1.9
Viet Nam	21.7	17.3	54.0	1	0	1	0	1	0	0	3.8	0.0
<b>Unweighted average</b>											<b>2.2</b>	<b>1.1</b>

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.  
Source: World Bank. World Development Indicators 2015 and 2016.

targets with substantially lower public health expenditure than the benchmark. In both countries, this is probably because an additional roughly 1.5% of GDP is allocated to health care in the form of out-of-pocket (OOP) payments. Viet Nam spends more than the benchmark, but does not reach the performance criteria. It misses the target for the infant mortality rate. However, it is assumed that it can meet the target if it reallocates existing resources, and would require no additional resources.

The crucial information in Table A2.2 is the estimated additional resource requirement in the stationary state based on the latest available data for the sample countries. That means that the stationary relative cost of health care—expressed as a percentage of GDP—calculated for 2015 (or nearest year) is also assumed to be the stationary-state relative cost in 2030. The unweighted average additional resource requirement is 1.1% of GDP. This average includes the five countries that do not have an additional resource requirement.

### *Closing the Education Gap and the Gap in Other Essential Goods and Services*

Infrastructure targets are met if all people have de facto access to the respective essential goods and services. This implies that there are no financial and physical barriers to access. Physical barriers to access are overcome if the government builds distribution networks and supply channels that ensure that all people can access all essential goods and services. The setup and maintenance of these channels can be undertaken by public agencies or commissioned to private entities. De facto access is assured if all people have the means to obtain these goods and services. These means can consist of enough own or earned income, financial support in the form of income transfers, or an entitlement to and the direct provision of goods and services by the government.

Effective access is generally ensured by a combination of own cash payments (which could be called OOP payments), public transfers in cash, and public provision in kind. Universal social protection for those in need is thus only assured when the combination of direct provision and cash transfers is designed in such a way that effective access to all goods and services is guaranteed.

The amounts of national poverty lines (and hence respective cash transfers to reach that level of income) are calculated on the basis of cost estimates for food and nonfood items. As said, the monetary value of the food component of the poverty lines is normally calculated as a standard amount of calories that a person should consume per day, times the average per-calorie price of all essential food items. Nonfood items contain all essential nonfood items that a person requires

to meet her or his basic needs. The nonfood component is often calculated using the so-called Engel coefficient, which describes by which factor the monetary value of the food component (or the food poverty line) has to be multiplied to provide an estimate of the total poverty line. The nonfood component usually includes all the OOP payment that a person has to make to access essential nonfood goods and essential services (largely health care, education, safe water, hygiene and sanitation, energy, and housing).

It is assumed here that the OOP part of the financing of essential goods and services, including expenditure for education (such as school fees, educational material, and school uniforms to be paid by parents) are to be covered by the cash transfers of the social protection system.

The remaining challenge is thus to provide a cost estimate for the non-OOP part of the resources needed to make essential goods and services available to all people. As health care has been taken care of by the above process, we focus here on the two clusters of education and other essential goods and services (safe water, hygiene and sanitation, energy, and housing). We assume that, so far, the distribution channels of these goods and services are only catering for part of the population adequately. If, however, the social protection system is now either promising free access to all essential goods and services or providing people with the cash income to purchase adequate amounts of them, the delivery capacity of the services has to be increased.

Before the introduction of necessary new social transfer schemes, each country had adopted a certain pattern of financing essential goods and services through a combination of OOP payments and free or subsidized direct provision. We assume that that pattern will not change after the introduction of the social protection schemes. So if now—after the introduction of new social transfers—all people have the financial means to access to essential goods and services, the government has to increase its present expenditure for investment, maintenance, and goods and service delivery of the delivery channels by a proportion equivalent to the additional people now having effective access to these goods and services. So, basic public expenditure for water and sanitation, energy, housing, transportation, and communication have to be increased by the same proportion, as the number of people with effective access to the goods and service increases.

A classic example of the mixed financing and provision of essential services is education. Households might—for example—receive a cash transfer to pay for school fees, while they finance the cost of the school uniforms OOP, and the local, regional, or central government may still finance a major share of the capital and recurrent expenditure of schools and universities.

As the exact matching of the quantitative use indicators and respective fiscal expenditure is not generally available, we have to use proxies for the initial expenditure in the different categories of goods and services and “drivers” for the estimated increase of government infrastructure expenditure. This generally will lead to a risk-averse overestimation of the necessary resources needed to meet the targets of the SDGs.

### *The Education Gap*

The SDG governance targets require governments to ensure that by 2030:

(4.1) ... all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes and

(4.2) ... all girls and boys have access to quality early childhood development, care and preprimary education so that they are ready for primary education.

By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

Neither International Monetary Fund (IMF) nor ADB regional expenditure data distinguish between different categories of education. We thus use the statistical data for total government expenditure for education as a proxy for the sum of expenditure for the sum of preprimary, primary, and secondary education. For Cambodia, this amounts to 2.0% of GDP.

It is assumed that the financial gap in education (or better, the resource requirement to close that gap) is determined by the extension of the delivery capacity necessary to build an education system. That extension aims at a situation where all people wanting to complete secondary education can do so. That state of affairs is here modeled by enrollment rates and pupil–teacher ratios in high-income countries. The gross enrollment rates in preprimary, primary, and secondary education are considered proxies for the population coverage of the education system. The teacher–pupil ratios are considered proxies for the quality of the education systems.

With these two types of proxy indicators, an education performance index was established. The index calculates the population-weighted sum of the product of the enrollment rates and the pupil–teacher ratios for the preprimary, primary, and secondary educational subsystems. The weights used are the shares of the number 0–4, 5–9, and 10–19-year-olds in the total groups of the



0–19-year-olds. It is assumed that, by 2030, the countries in our sample will have reached the performance level of high-income countries in 2015. This index is used as a “driver” to bring up present expenditure levels to levels that allow the performance of high-income countries to be reached.

In a first calculation step, the present expenditure in the sample countries is increased linearly in line with the necessary increase of the performance index. The resulting necessary increases are capped in two ways. First, the necessary increase in education expenditure is capped by country-specific maximum. That maximum is the present average level of expenditure in high-income countries (4.9% of GDP) adjusted by the share of the age group 0–19 in the total population, compared with the respective share in high-income countries.

Second, the country-specific maxima are capped by the present level of the average education level of expenditure in Sweden and Finland, the two countries with the highest education expenditure (measured as a percentage of GDP) in the Organisation for Economic Co-operation and Development (OECD). (It is hardly imaginable that the countries in our sample will exceed that level within the next 14 years.) It can be assumed that—if their population structure, in principle, merits a higher level of expenditure—countries will contain expenses by increasing the pupil–teacher ratio.

Table A2.3 provides key information for the education system in our sample countries. Table A2.4 calculates the values of the performance index and the resulting resource gaps (respectively the resource requirements) in the sample countries. The gross enrollment rates used exceed 100% in many primary education systems, which simply reflects the fact that, in these countries, many “overage” pupils are kept too long in the primary system without progression to the secondary system. For comparison, the tables also contain the respective enrollment and pupil–teacher ratios in upper middle-income countries.

The performance index in Cambodia in 2015 reaches only 33% of the value of that in high-income countries. In a first step, the national expenditure level is increased by the factor  $100/33$  to  $2.0\% \cdot 100/33 = 6.1\%$ . This simulates increased performance at 100% of that in high-income countries. The resulting preliminary resource requirement would thus be  $6.1\% - 2.0\% = 4.1\%$ .

In a second step, this is checked against the double benchmarks defined above. First, the population-adjusted benchmark expenditure for the country is calculated by multiplying the OECD average expenditure of 4.9% by the ratio of the population shares of the under 19-year-olds in Cambodia and high-income

Table A2.3: Basic Data on Education, Latest Year, 2010–2015

Country	Enrollment Rate Both Sexes in % of Relevant Pop. Gr.		Gross Enrollment Rate Both Sexes in % of Relevant Pop. Gr.		Teacher-Pupil Ratio		Population 0–4 in 1000		Population 5–9 in 1000		Population 10–19 in % of Total		Educational Performance Index in % of HI
	Preprimary <sup>a</sup>	Primary <sup>a</sup>	Preprimary <sup>a</sup>	Secondary <sup>a</sup>	Primary <sup>a</sup>	Secondary <sup>a</sup>	Primary <sup>a</sup>	Secondary <sup>a</sup>	Pred.2030	Pred.2030	Pred.2030	Pred.2030	
Azerbaijan	23.1	106.6	102.8	102.8	0.0897	0.0792	0.0792	0.0792	6.0	6.7	6.7	16.5	104
Cambodia <sup>b</sup>	17.6	116.4	81	81	0.0318	0.0224	0.0346	0.0346	8.8	9.1	9.1	18.5	33
PRC	81.6	103.9	94.3	94.3	0.0475	0.0616	0.0701	0.0701	4.4	4.8	4.8	11.4	89
India	9.6	110.6	68.9	68.9	0.1403	0.0310	0.0325	0.0325	7.9	8.0	8.0	16.0	34
Indonesia	58.1	105.7	82.5	82.5	0.0800	0.0621	0.0645	0.0645	7.7	7.8	7.8	16.3	81
Kazakhstan	60.4	110.6	109.1	109.1	0.1071	0.0617	0.1332	0.1332	7.6	8.1	8.1	18.5	163
Lao PDR	30.4	116.3	57.2	57.2	0.0521	0.0398	0.0546	0.0546	9.4	9.8	9.8	19.5	47
Malaysia	98.9	106.9	79	79	0.0559	0.0877	0.0855	0.0855	7.1	7.3	7.3	14.2	106
Mongolia	85.9	101.7	90.7	90.7	0.0368	0.0368	0.0730	0.0730	7.9	8.4	8.4	18.5	77
Myanmar	23.5	99.7	51.3	51.3	0.0357	0.0362	0.0314	0.0314	7.4	7.4	7.4	14.8	29
Nepal	85.4	135.4	67.2	67.2	0.0454	0.0435	0.0350	0.0350	7.9	8.3	8.3	16.7	54
Philippines	54.4	116.8	88.4	88.4	0.0288	0.0318	0.0370	0.0370	9.6	9.4	9.4	18.2	44
Sri Lanka	95	101.3	99.7	99.7	0.0412	0.0424	0.0578	0.0578	6.3	6.5	6.5	14.1	74
Thailand	72.8	103.7	86.2	86.2	0.0495	0.0649	0.0503	0.0503	4.4	4.6	4.6	10.3	71
Timor-Leste	17	136.8	73.1	73.1	0.0339	0.0319	0.0412	0.0412	13.5	13.3	13.3	25.2	41
Viet Nam <sup>c</sup>	81.4	109.4	57.8	57.8	0.0568	0.0521	0.0346	0.0346	6.3	6.7	6.7	14.4	52

continued on next page

Table A2.3 *continued*

Country	Gross Enrollment Rate Both Sexes in % of Relevant Pop. Gr.		Gross Enrollment Rate Both Sexes in % of Relevant Pop. Gr.		Teacher-Pupil Ratio		Teacher-Pupil Ratio		Population 0-4 in 1000		Population 5-9 in 1000		Population 10-19 in % of Total		Educational Performance Index in % of HI	
	Preprimary <sup>a</sup>	Primary <sup>a</sup>	Preprimary <sup>a</sup>	Secondary <sup>a</sup>	Primary <sup>a</sup>	Secondary <sup>a</sup>	Primary <sup>a</sup>	Secondary <sup>a</sup>	Pred.2030	Pred.2030	Pred.2030	Pred.2030	Pred.2030	Pred.2030	% of HI	% of HI
Upper-middle-income countries	72	115.5	92.1	0.0477	0.0530	0.0631	5.6	5.9	13.0	80						
High-income countries <sup>d</sup>	79	102.5	103.9	0.0662	0.0629	0.0725	5.3	5.5	11.4	100						

Gr: = group, HI = high-income countries, Lao PDR = Lao People's Democratic Republic, Pop. = population, PRC = People's Republic of China.

Notes:

<sup>a</sup> Latest available values during decade 2006–2015.

<sup>b</sup> Gross enrollment rate for Cambodia for 2015 estimated on the basis of data from 2003 to 2008.

<sup>c</sup> Data for 1998 in World Development Indicators database available only.

<sup>d</sup> Education data are those of all Organisation for Economic Co-operation and Development member countries.

Sources: World Bank. World Development Indicators 2016; UN World Population Prospects.

**Table A2.4: Estimated Resource Requirements to Meet the Education Targets of the Sustainable Development Goals, Stationary State Estimates for 2030**

Country	Total Government Expenditure on Education in % of GDP latest year 2010–2015	Educational Performance Index in % of High-Income Countries	National Population Adjusted Maximum Benchmark Expenditure in % of GDP	Estimated Resource Gap in Stationary State (2030) in % of GDP
Azerbaijan	2.5	103.8	6.5	0.0
Cambodia	2.0	33.0	7.5	4.1
PRC	1.9	89.0	4.6	0.2
India	3.8	34.5	7.0	3.2
Indonesia	3.3	81.4	7.0	0.8
Kazakhstan	3.1	162.5	7.5	0.0
Lao PDR	4.2	46.6	7.5	3.3
Malaysia	6.1	106.1	6.3	0.0
Mongolia	4.6	76.6	7.5	1.4
Myanmar <sup>d</sup>	1.2	28.6	6.5	3.0
Nepal	4.7	53.8	7.3	2.6
Philippines	3.4	43.9	7.5	4.1
Sri Lanka	1.6	74.1	6.0	0.6
Thailand	4.1	70.7	4.3	0.2
Timor-Leste	7.7	40.6	7.5	0.0
Viet Nam	6.3	52.3	6.1	0.0
Simple sample average	3.9	66.3	6.7	1.6
Upper-middle-income countries	4.2	79.6	5.4	1.1
High-income countries	4.9	100.0	0.0	0.0

0.0 = magnitude is less than half of unit employed, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

<sup>a</sup> Data for 1995 only.

Sources: World Bank. World Development Indicators; and author's calculations.

countries, i.e.,  $4.9\% \times 36.4 / 22.1 = 8.1\%$ . This is higher than the overall Swedish–Finnish benchmark of 7.5%. Hence, the latter value is used as a maximum national benchmark. The “maximum” resource requirement is then estimated as  $7.5\% - 2.0\% = 5.5\%$ . Because that is higher than the value calculated in the first step (4.1%), the value of 4.1% is used as an estimated shortfall in educational expenditure.

### *The Gap in Other Essential Goods and Services*

The resource requirements for meeting Target 6.1 (“By 2030, achieve universal and equitable access to safe and affordable drinking water for all”), Target 6.2 (“By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations”), Target 7.1 (“By 2030, ensure universal access to affordable, reliable and modern energy services”), and Target 11.1 (“By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums”) are here aggregated into one category “other essential goods and services.”

From ADB’s *Key Indicators for Asia and the Pacific 2015*, the combined expenditure for housing, gas, water, electricity, and community amenities is established for 11 countries in the sample. For five countries (Indonesia, Kazakhstan, the Lao PDR, Myanmar, and Viet Nam) no internationally comparable data were available. Using the World Development Indicators “access to improved water sources” and “access to electricity,” a Joint Access Index (the arithmetic mean of the two indicators) was established. This driver was used to bring access up to 100% of the population by 2030, as all above targets demand universal access to all subcategories of essential services.

Table A2.5 provides the results, primarily that the overall resource requirements for this aggregated category are rather small. The simple average for all 11 countries with data is only around 0.1% of GDP. Based on the overall low resource requirement in this category and the values for the joint access indicator for the five countries without data, it can be assumed that the resource requirement for these countries is small, and neglecting it in the calculation of the total resource requirement is not likely to lead to a major error.

### *Summary of Costing Methodology for the Stationary State*

The methods to estimate the SDG-related expenditure gaps in the different expenditure categories is summarized in Table A2.6. Table A2.7 summarizes the result of the stationary state calculations for Cambodia.

### *Step Two: Projecting Expenditure over 2015–2030*

The long-term financial development of individual social security branches (pensions, health care, unemployment benefits, etc.) or schemes can only be accurately modeled by actuarial cohort-based, long-term expenditure and income projections. Such models require a complex and detailed database,

**Table A2.5: Estimated Resource Requirements to Meet the Education Targets of the Sustainable Development Goals, Stationary State Estimates for 2030**

Country	Total Government <sup>a</sup> Expenditure on Other Essential Services (Housing, Gas, Water, Electricity, Community Amenities) in % of GDP Latest Year 2010–2015	Access to Improved Water Source in % of Population	Access to Electricity in % of Population	Joint Access Index	Estimated Resource Gap in Stationary State (2030) in % of GDP
Azerbaijan	0.7	87.0	100.0	93.5	0.0
Cambodia <sup>b</sup>	0.6	75.5	31.1	53.3	0.5
PRC	1.2	95.5	100.0	97.8	0.0
India	0.2	94.1	78.7	86.4	0.0
Indonesia	–	87.7	87.6	87.7	–
Kazakhstan	–	92.9	100.0	96.5	–
Lao PDR	–	75.7	70.0	72.9	–
Malaysia	0.5	98.2	96.4	97.3	0.0
Mongolia	1.2	64.4	96.4	80.4	0.3
Myanmar	–	80.6	47.0	63.8	–
Nepal	1.6	91.2	76.3	83.8	0.3
Philippines	0.5	91.8	87.5	89.7	0.1
Sri Lanka	1.2	95.6	88.7	92.2	0.1
Thailand	0.5	97.8	100.0	98.9	0.0
Timor-Leste	0.1	71.9	41.6	56.8	0.1
Viet Nam	–	97.6	99.0	98.3	–
Simple sample average	0.8	87.4	80.0	83.7	0.1

– = not applicable, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Notes:

<sup>a</sup> Categories as defined in ADB, Key Indicators; data used here may be partial.

<sup>b</sup> Approximately the Key Indicators category “other economic services.”

Sources: World Bank. World Development Indicators 2016; ADB. 2015. *Key Indicators for Asia and the Pacific 2015*; and author's calculations.

containing economic and demographic information on the covered population by age and sex. Information required includes incomes by age and sex; transition probabilities for describing death, birth, entry into the labor market; continuation or termination of benefit receipt; and continuation and termination of employment, etc. In most developing country contexts, many of the detailed data have to be replaced by assumptions or established by special surveys, given the lack of readily available statistical data.

**Table A2.6: Estimating the Sustainable Development Goal-Related Social Protection Expenditure/Resource Gaps—Principal Methodological Approach**

Expenditure Category	Related Governance Targets	General Estimation Approach	Method
Social protection cash transfers	Target 1.3, Target 8.5	Lower estimate: Closing the aggregate poverty gap. Upper estimate: Providing flat-rate benefit for defined categories of population	Calculating the size of the aggregated national poverty gap Calculating the cost of individual benefits
Universal health care	Target 3.8	Closing the expenditure gap	Calculating the average expenditure of all developing countries that meet the criteria of outcome Targets 3.1 and 3.2 (i.e., 3.2% of gross domestic product) minus actual expenditure if greater than zero, otherwise zero
Education	Targets 4.1 and 4.2	Closing the expenditure gap	Bringing up the national educational achievement indicator to the level of high-income countries and adjusting expenditure accordingly. Using a double cap for resource requirement levels: national population-adjusted maximum and global cap of expenditure (that of Sweden and Finland)
Other economic services: (housing, gas, water, electricity, community amenities)	Targets 6.1, 6.2, 7.1, and 11.1	Closing the expenditure gap	Bringing access index up to 100% of population and increasing expenditure accordingly

Source: Author's calculations.

Establishing a comprehensive social budgeting model for the financial state and likely future development of an entire social protection system is a similarly complex and time-consuming exercise, which relies on an even wider database that is likewise seldom available. Modeling efforts of that dimension are normally

**Table A2.7: Example Estimates for Cambodia of the Resource Requirement for Adherence to the Social Protection Agenda of the Sustainable Development Goal, 2030, Stationary State Estimate**

Expenditure Category	Resource Requirement in Stationary State as of 2030 (% of GDP)	Resource Requirement in Stationary State as of 2030 (% of GDP)
	<i>Lower Estimate</i>	<i>Upper Estimate</i>
Social transfer gap	0.6	7.6
Health-care gap	1.9	1.9
Education gap	4.1	4.1
Essential goods and services gap	0.5	0.5
Estimated total expenditure on closing gaps:		
% of GDP	7.1	14.1
% of current government revenue (estimated 2030)	47.3	93.9

GDP = gross domestic product.

Source: Author's model calculations.

only justified when a concrete introduction or reforms of benefit schemes are planned, or when regular actuarial monitoring of existing schemes is legally required. For the initial exploration of the financial dimension of certain social protection schemes, abbreviated models are an acceptable option that saves time and effort, as now described.

### *Methodology for the Lower Cost Estimate*

This modeling approach starts from the “end,” i.e., after the expenditure gaps for the stationary state in 2030 are established in step one (previous section). An assumed gradual implementation rate is then applied to these stationary state values, to take the assumed actual state of the benefit rollout at each projection year into account. The following section explains how that rate is calculated.

The gradual implementation rates are calculated here by simulating the annual expenditure progression between the starting year of 2015 and 2030, with the help of a standard maturation function, which shows how the expenditure in the different SDG-related social protection expenditure categories approaches the *mature state*, i.e., when all people receive the full intended benefits. The function



thus maps the speed by which the government rolls out the different new benefit scheme to the entire population.

The function used here is largely arbitrary and simply reflects implicit assumptions on effectiveness and decisiveness of government action. The resource gap projections for the individual years are thus merely indicative, which should demonstrate that governments will have to face gradually and structurally increasing resource requirements during the introductory phase of the new social protection and service delivery systems.

One way to model the maturation process would simply be to undertake a linear interpolation between zero expenditure in 2015 and full mature expenditure in 2030. However, experience shows that expenditure of social transfer schemes generally follows a typical pattern in which expenditure at first increases slowly, then enters into a rapid take-off phase, and finally slowly approaches maturity. Although the pattern of maturation of short- and long-term social protection benefits is underresearched, there are indications that the typical maturation function used here is a fair mapping of a typical maturation process (see, for example, Carrol and Palme 2006, p. 26).

Hence, these maturation functions and their curves replace the complex cohort-based modeling of an actuarial model or the successive annual benefit expenditure calculations of social budgeting models.<sup>4</sup> That leaves us to select a function for the maturation process.

Maturation functions are fully determined by three parameters: the final values of the variable in question, the parameter  $b$  (which determines the initial value), and the parameter  $p$ , which steers the velocity of the maturation. The maturation function used here is

$$PE_t = 100 / (1 + b * p^t)$$

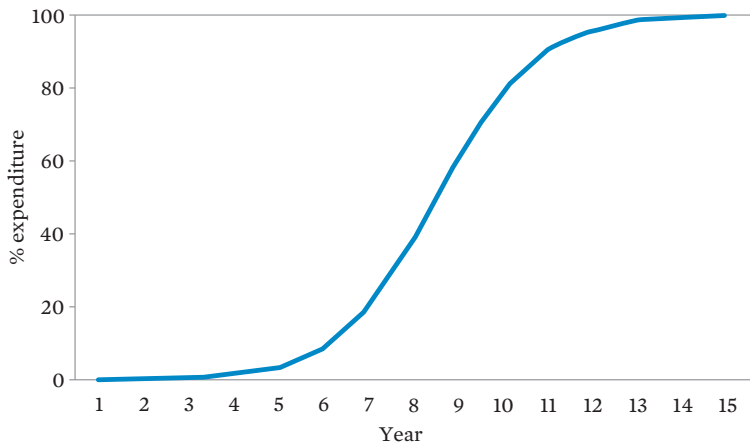
where PE denotes the proportion of the estimated final expenditure in the stationary state reached in the final year of the projection period.

The parameter values used are  $B = 1000$  and  $P = 0.4$ .

<sup>4</sup> The nature and possible use of the maturation or logistical curves are described in detail in Cichon et al. (2004), p. 71.

These parameter values define a specific function that implicitly assumes, as maturation pattern, that 20% of the stationary state expenditure is reached in year 7, 40% in year 8, 60% in year 9, and 80% in year 10, i.e., after two-thirds of the projection period. After year 10, the expenditure gradually and very slowly approaches 100% of the maturity-level expenditure. This approach is used for all the expenditure categories in the lower cost variant. The progression pattern is shown by Figure A2.1.

**Figure A2.1: Assumed Maturation Curve for Sustainable Development Goal-Related Social Protection Expenditure**



Source: Author.

As said, the progression over time here is used only for demonstration. It is based on the assumption that the national governance system will take at least 5 years to prepare a new benefit scheme and build it, or to extend an existing social service system from the planning process, from legislation to implementation. It is then assumed that the administrative system will take another 5 years to roll out to the majority of potential beneficiaries (here assumed to be 80%) and then another 5 years till coverage of the assumed last 20% of administratively difficult cases is completed.

The demonstration of potential resource requirement developments over the period of the SDGs mainly serves to aid longer-term financial planning. The

pattern of the phasing-in or introduction of financing mechanisms to cover additional resources, or the shifting of resources from other uses, has to match the maturation of expenditure in such a way that the present value of expected expenditure and revenues balances over a defined planning horizon.

### *Methodology for the Upper Cost Estimate*

Identical upper and lower resource estimates are used for all individual expenditure categories except the social protection cash transfers. The upper estimates in the expenditure category of social protection cash transfers use a classical social budgeting approach. Generally, the cost of the social protection benefits is calculated as

$$EC_{i,t} = B_{i,t} * A_{i,t}$$

where

$EC_{i,t}$  denotes the expenditure in category  $i$  of expenditure in year  $t$ ,

$B_{i,t}$  denotes the number of transfer recipients in expenditure category  $i$  and year  $t$ , and

$A_{i,t}$  denotes the amount of transfers (i.e., the monetary value of transfers in cash and in kind) in expenditure category  $i$  and year  $t$ .

The expenditure projection proceeds in two steps. In the first, the expenditures in the different benefit categories are calculated assuming a 100% benefit take-up and maximum benefit levels. This simply means that all children under age 16 receive a child grant of 50% of the amount of the national poverty line, all people over age 60 receive a universal pension of 70% of the national poverty line, all people in invalidity receive a universal pension of 70% of the national poverty line, and all unemployed persons get 100 days of public works remunerated at the level of the national minimum wage. It is assumed that all benefit levels are adjusted in line with wage inflation, so as to avoid a deterioration of the standard of living of benefit recipients relative to that of salaried workers.

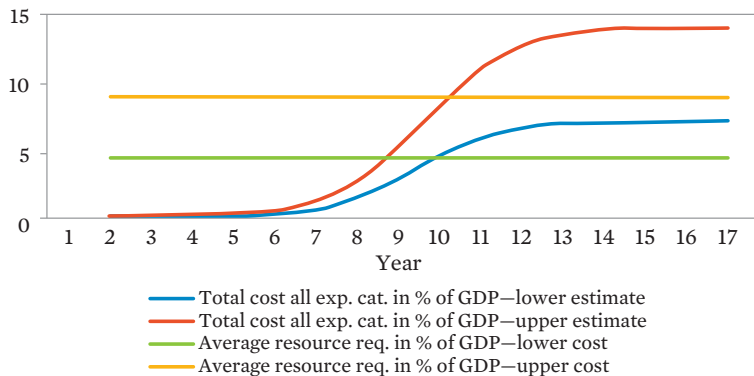
In the second step, the values of the above maturation function are applied to the annual full cost estimates to model the gradual take-up of benefits. This implicitly assumes—as with the lower estimate—that it will take about 10 years till the new transfer scheme reaches about 80% of the potential beneficiaries, and that full population coverage will only be reached at the end of the projection period.

### Display and Interpretation of Results

The expenditures by category and the total expenditure are then displayed as a percentage of GDP, which ensures comparability of estimates among countries.

Figure A2.2 demonstrates the projected development of the lower and upper resource requirements for Cambodia. In the lower estimate, the requirement increases to 7.1% of GDP and in the higher, to 14.1% of GDP. Not all the projected resource requirements necessarily have to translate into additional total government expenditure. Some of the resources may be mobilized by reallocation of existing expenditure.

**Figure A2.2: Projected Resource Requirements for the Social Protection Agenda of the Sustainable Development Goals, Cambodia, 2015–2030**  
(% of GDP)



GDP = gross domestic product.

Source: Author.

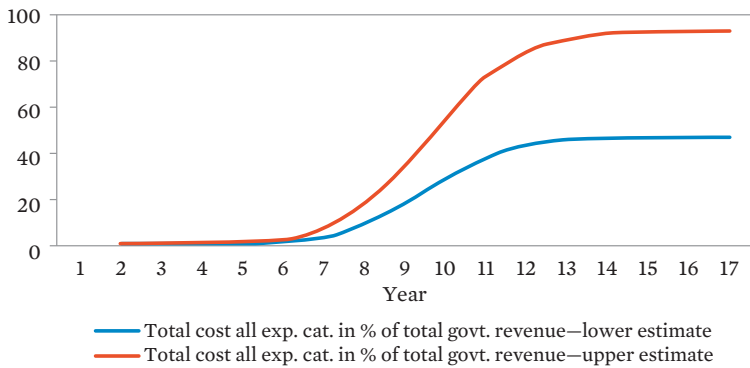
The total resource requirement expenditure will also be expressed as a percentage of government revenues in the 16 countries in the sample. The indicator permits an assessment of the size of the fiscal challenge that the government will be facing.

In Cambodia, that challenge is substantial. In the lower estimate, the government would have to increase or reallocate its fiscal revenues in the stationary state by

about 47%, should it set out to comply with the requirements of the social SDGs. If it followed the upper cost strategy, the resource requirement would amount to about 94% of government revenues—essentially prohibitive (Figure A2.3). That means that Cambodia would no doubt have to adopt a low-cost strategy, which would prioritize the different gap closures over a much longer period or reduce the desired quality of access in education and health care over a much longer period.

**Figure A2.3: Projected Resource Requirements for the Social Protection Agenda of the Sustainable Development Goals, Cambodia, 2015–2030**

(% of estimated government expenditure)



Source: Author.

However, this has to be seen in a historical context. Comparing the national relative expenditure of the individual countries to the average revenue levels in the region provides an additional indication as to whether the countries currently have a relatively high or low revenue–GDP ratio. If a country so far has only achieved a low ratio, the fiscal space might be easier to extend by the required proportions than in countries that have already reached a high ratio (by regional standards). Cambodian government revenues, as a share of GDP, already increased by 56% between 2000 and 2014. Its present revenue is about 6 percentage points of GDP lower than the regional average of 21.5%.

To measure the size of the fiscal policy challenge facing a country during the period of the SDGs, two indicators of fiscal stress<sup>5</sup> during 2015–2030 are now defined, in addition to the predicted fiscal deficit, i.e., the absolute fiscal stress is defined as

$$AFS_j = GR_j - GE_j + I * \Delta RGR_j - RG_j$$

where

$GR_j$  is government revenue in the last historical observation year in country  $j$  in % of GDP,

$GE_j$  is government expenditure in the last historical observation year in country  $j$  in % of GDP,

$\Delta RGR_j$  is the difference between the regional average government revenue in developing member countries and the  $GR$  in country  $j$  in % of GDP,

$I$  is a dummy variable which is 1 if  $GR$  in country  $j$  is smaller than the regional average and zero if it is bigger in % of GDP, and

$RG_j$  is the stationary state resource gap calculated for the last observation year in % of GDP.

The relative fiscal stress is defined as

$$RFS_j = AFS_j / (GR_j + I * \Delta RGR_j)$$

In addition, a long-term indicator for the resource requirement and the fiscal stress can also be displayed. Based on the principal conceptual approach when calculating the general average premium for social insurance schemes,<sup>6</sup> this indicator is calculated as a ratio of the sum of all present values of the absolute resource gaps (measured in local currency units) throughout the projection period and the sum of the present values of all annual GDPs (also measured in local currency units) during the projection period. One can consider this indicator as the average resource requirement (respectively the average resource gap) throughout the projection period

<sup>5</sup> Similar definitions were used by Chongcharoentanawat et al. 2016.

<sup>6</sup> See Cichon et al. (2004), p. 280.

$$ARG = \left( \frac{\sum_{i=0}^n RG_i / (1 + dr)^i}{\sum_{i=0}^n GDP_i / (1 + dr)^i} \right) * 100$$

where *ARG* is here called the average resource gap, *dr* is the assumed discount rate. The latter is here assumed to be the sum of a constant real interest rate of 1% plus the GDP deflator.

The average resource gap can be interpreted in the following way. If the government increased its revenue from the first year of the projection period to the end of that period by the *ARG*, it would be able to finance the closing of the resource gap.

Given the regional average revenue–GDP ratio of 21.5% of GDP, an assumed Cambodian tax–GDP ratio of 15.0% of GDP, and a projected expenditure rate of 20.9 % of GDP, we see that

- the projected absolute fiscal stress in the stationary state (2030) amounts to –6.5% of GDP in the lower cost estimate and –13.5% of GDP in the upper cost estimate; and
- the projected relative fiscal stress in the stationary state (2030) amounts to 30% of the average revenue level in the region in the lower estimate and to 63% in the upper cost estimates.

The average resource requirement during the period of the SDGs for our example Cambodia, as a share of GDP, is 4.44% (lower estimate) and 8.57% (upper estimate).

Figure A2.2 includes the latter two indicators.

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APPENDIX 3

# Statistical Tables

Table A3.1: Azerbaijan

<b>Main Projection Results</b>		<b>LCU</b>	<b>Manat</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>MACROECONOMIC INDICATORS</b>				
Price inflation rate (%)	3	3	3	3
Wage inflation rate (%)	5.4	5.0	5.0	5.0
GDP deflator (%)	3.0	3.0	3.0	3.0
Real GDP growth (%)	2.0	2.0	2.0	2.0
Productivity growth (%)	2.3	1.9	1.9	1.9
Increase in nominal GDP per capita (%)	0.0	4.2	4.6	4.8
Nominal GDP in LCU (billion LCU)	54.4	69.6	89.0	114.0
GDP per capita and annum in LCU	5,572.9	6,795.0	8,442.3	10,626.2
Minimum wage, monthly in LCU	125.0	160.1	204.0	259.8
<b>GOVERNMENT BUDGET</b>				
Expenditure (in % of GDP)	31.9	31.90	31.90	31.90
Revenue (in % of GDP)	29.6	29.60	29.60	29.60
Deficit (in % of GDP)	-2.3	-2.30	-2.30	-2.30
<b>POPULATION</b>				
Total Population (in '000s)	9,753	10,238.00	10,547.00	10,725.00
Target population 60+ (in '000s)	980	1,248.00	1,665.00	1,884.00
Target population 0-14 (in '000s)	2,138	2,406.00	2,506.00	2,226.00
Target population 15-59 (in '000s)	6,635	6,584.00	6,376.00	6,615.00
<b>LABOR FORCE AND EMPLOYMENT</b>				
Labor force part. rate, 15+ (%)	67.4	67.4	67.4	67.4
Labor force (in '000s)	5,132.5	5,278.8	5,419.6	5,728.3
Employment (in '000s)	4,713.7	4,709.1	4,732.2	4,755.5
share in formal employment (%)	0.4	0.4	0.4	0.4
Unemployed (in '000s)	418.8	569.7	687.4	972.8
Unemployment rate (%)	8.2	10.8	12.7	17.0
Increase/decrease in employment (in '000s)	0.0	4.6	4.6	4.7
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	4.3	4.5	4.6
<b>POVERTY</b>				
Number of poor (in '000s)	546.2	577.6	572.6	559.4
Poverty rate at national poverty line, 2014 (%)	5.6	5.6	5.4	5.2
National poverty line (LCU monthly)	105.0	128.0	159.1	200.2
Poverty gap ratio, 2014 (%)	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	0.4	0.5	0.6	0.7
Income per poor person ( LCU monthly)	46.9	57.2	71.0	89.4
Gap per poor person (LCU monthly)	58.1	70.9	88.1	110.8
Aggregate poverty gap in % of GDP	0.7	0.7	0.7	0.7
<b>Additional resources for education</b>				
gradual implementation (% of GDP)	0.00	0.00	0.00	0.00
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>				
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>				
gradual implementation (in % of GDP)	0.00	0.18	1.81	2.00
<b>Additional resources for SP cash benefits</b>				
	<i>LOWER ESTIMATE</i>			
Gradual implementation (in % of GDP)	0.00	0.06	0.62	0.65

continued on next page

Table A3.1 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	73.50	89.62	111.34	140.15
gradual implementation (billion LCU)	0.00	0.12	2.01	3.17
MINUS existing expenditure (% of GDP)	0.00	0.00	0.20	0.20
In % of GDP	0.00	0.17	2.06	2.58
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	52.50	64.01	79.53	100.11
potential beneficiaries (in '000s)	2,138.00	2,406.00	2,506.00	2,226.00
gradual implementation (billion LCU)	0.00	0.16	2.16	2.67
in % of GDP	0.00	0.24	2.43	2.34
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	52.08	66.73	84.99	108.25
Number of beneficiaries (in '000s)	418.83	569.69	687.40	972.83
gradual implementation (billion LCU)	0.00	0.04	0.63	1.26
in % of GDP	0.00	0.06	0.71	1.11
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	73.50	89.62	111.34	140.15
Number of beneficiaries (in '000s)	47.14	47.09	47.32	47.55
gradual implementation (billion LCU)	0.00	0.00	0.06	0.08
in % of GDP	0.00	0.01	0.06	0.07
<i>MATERNITY</i>				
Average monthly benefit (LCU)	73.50	89.62	111.34	140.15
Number of beneficiaries ('000s)	142.53	160.40	167.07	148.40
gradual implementation (billion LCU)	0.00	0.00	0.05	0.06
in % of GDP	0.00	0.01	0.06	0.05
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.05	0.53	0.62
<b>Total social security cost in % of GDP</b>	<b>0.01</b>	<b>0.53</b>	<b>5.86</b>	<b>6.77</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.24	2.43	2.65
Total cost all exp.cat. in % of GDP—upper estimate	0.01	0.70	7.67	8.77
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.01	0.81	8.19	8.95
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.02	2.38	25.91	29.62
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	1.38			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	4.38			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.2: Cambodia

<b>Main Projection Results</b>		<b>LCU</b>		<b>Riel</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	3.67	3.67	3.67	3.67	3.67
Wage inflation rate (%)	7.0	9.4	9.4	9.4	9.4
GDP deflator (%)	2.0	2.0	2.0	2.0	2.0
Real GDP growth (%)	7.2	7.2	7.2	7.2	7.2
Productivity growth (%)	3.2	5.5	5.5	5.5	5.5
Increase in nominal GDP per capita (%)	0.0	7.9	8.1	8.1	8.2
Nominal GDP in LCU (billion LCU)	74,116.9	116,184.6	182,129.3	285,503.3	
GDP per capita and annum in LCU	4,757,794.1	6,912,047.8	10,149,873.1	15,032,819.3	
Minimum wage, monthly in LCU	512,000.0	778,716.4	1,218,728.9	1,907,369.7	
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	20.9	20.90	20.90	20.90	20.90
Revenue (in % of GDP)	15	15.00	15.00	15.00	15.00
Deficit (in % of GDP)	-5.9	-5.90	-5.90	-5.90	-5.90
<b>POPULATION</b>					
Total Population (in '000s)	15,578	16,809.00	17,944.00	18,992.00	
Target population 60+ (in '000s)	1,052	1,271.00	1,615.00	1,972.00	
Target population 0-14 (in '000s)	4,924	5,212.00	5,277.00	5,188.00	
Target population 15-59 (in '000s)	9,602	10,326.00	11,052.00	11,832.00	
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	83.0	83.0	83.0	83.0	83.0
Labor force (in '000s)	8,842.8	9,625.5	10,513.6	11,457.3	
Employment (in '000s)	8,606.0	9,601.4	10,410.1	11,286.8	
share in formal employment (%)	0.2	0.2	0.2	0.2	0.2
Unemployed (in '000s)	236.8	24.1	103.6	170.5	
Unemployment rate (%)	2.7	0.3	1.0	1.5	
Increase/decrease in employment (in '000s)	0.0	154.0	167.0	181.1	
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	60.2	64.4	68.3	
<b>POVERTY</b>					
Number of poor (in '000s)	2,757.3	2,566.4	2,417.8	2,217.6	
Poverty rate at national poverty line, 2014 (%)	17.7	15.3	13.5	11.7	
National poverty line (LCU monthly)	116,000.0	168,523.0	247,464.5	366,515.9	
Poverty gap ratio, 2014 (%)	0.0	0.0	0.0	0.0	
National aggregate poverty gap in bill. RS	672.2	909.0	1,257.5	1,708.2	
Income per poor person (LCU monthly)	95,683.6	139,007.6	204,123.3	302,323.8	
Gap per poor person (LCU monthly)	20,316.4	29,515.3	43,341.2	64,192.0	
Aggregate poverty gap in % of GDP	0.9	0.8	0.7	0.6	
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.40	3.92	4.10	
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.04	0.45	0.50	
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.17	1.72	1.90	
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER</i>	<i>LOWER</i>	<i>LOWER</i>	<i>LOWER</i>	
	<i>ESTIMATE</i>	<i>ESTIMATE</i>	<i>ESTIMATE</i>	<i>ESTIMATE</i>	
Gradual implementation (in % of GDP)	0.00	0.07	0.62	0.60	

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Table A3.2 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER</i> <i>ESTIMATE</i>	<i>HIGHER</i> <i>ESTIMATE</i>	<i>HIGHER</i> <i>ESTIMATE</i>	<i>HIGHER</i> <i>ESTIMATE</i>
<b>PENSIONS</b>				
average pension (LCU monthly)	81,200.00	117,966.07	173,225.17	256,561.11
gradual implementation (billion LCU)	1.02	160.07	3,038.49	6,064.75
MINUS existing expenditure (% of GDP)	0.00	0.00	0.00	0.00
In % of GDP	0.00	0.14	1.67	2.12
<b>CHILD BENEFITS</b>				
average benefit (LCU monthly)	58,000.00	84,261.48	123,732.26	183,257.93
potential beneficiaries (in '000s)	4,924.00	5,212.00	5,277.00	5,188.00
gradual implementation (billion LCU)	3.42	468.87	7,091.61	11,396.67
in % of GDP	0.00	0.40	3.89	3.99
<b>ACTIVE AGE</b>				
<b>CASH FOR WORK</b>				
Average monthly benefit (LCU)	213,333.33	324,465.15	507,803.69	79,4737.38
Number of beneficiaries (in '000s)	236.82	24.07	103.55	170.54
gradual implementation (billion LCU)	0.61	8.34	571.11	1,624.70
in % of GDP	0.00	0.01	0.31	0.57
<b>INVALIDITY (invalidity rate 1%)</b>				
Average monthly benefit (LCU)	81,200.00	117,966.07	173,225.17	256,561.11
Number of beneficiaries (in '000s)	86.06	96.01	104.10	112.87
gradual implementation (billion LCU)	0.08	12.09	195.86	347.12
in % of GDP	0.00	0.01	0.11	0.12
<b>MATERNITY</b>				
Average monthly benefit (LCU)	81,200.00	117,966.07	173,225.17	256,561.11
Number of beneficiaries ('000s)	328.27	347.47	351.80	345.87
gradual implementation (billion LCU)	0.08	10.94	165.47	265.92
in % of GDP	0.00	0.01	0.09	0.09
<b>ADMINISTRATION</b>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.06	0.61	0.69
<b>Total social security cost in % of GDP</b>	<b>0.01</b>	<b>0.63</b>	<b>6.68</b>	<b>7.59</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.01	0.68	6.72	7.09
Total cost all exp.cat. in % of GDP—upper estimate	0.01	1.24	12.77	14.08
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.05	4.54	44.79	47.27
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.10	8.25	85.16	93.89
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	4.57			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	8.82			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.3: People's Republic of China

<b>Main Projection Results</b>		<b>LCU</b>		<b>Renminbi</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	3	3	3	3	3
Wage inflation rate (%)	9.8	9.8	9.8	9.8	9.8
GDP deflator (%)	3.0	3.0	3.0	3.0	3.0
Real GDP growth (%)	8.0	7.0	7.0	7.0	7.0
Productivity growth (%)	6.6	6.6	6.6	6.6	6.6
Increase in nominal GDP per capita (%)	0.0	9.9	10.1	10.3	10.3
Nominal GDP in LCU (billion LCU)	67,670.0	110,541.6	179,734.3	292,237.5	292,237.5
GDP per capita and annum in LCU	49,177.1	78,798.1	127,032.1	206,448.9	206,448.9
Minimum wage, monthly in LCU	1,373.0	2,191.0	3,496.3	5,579.4	5,579.4
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	23.5	23.50	23.50	23.50	23.50
Revenue (in % of GDP)	22.4	22.40	22.40	22.40	22.40
Deficit (in % of GDP)	-1.1	-1.10	-1.10	-1.10	-1.10
<b>POPULATION</b>					
Total Population (in '000s)	1,376,048	1,402,847.00	1,414,873.00	1,415,544.00	1,415,544.00
Target population 60+ (in '000s)	209,239	245,203.00	293,907.00	358,144.00	358,144.00
Target population 0-14 (in '000s)	237,115	240,140.00	230,055.00	209,746.00	209,746.00
Target population 15-59 (in '000s)	929,694	917,504.00	890,911.00	847,654.00	847,654.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	71.4	71.4	71.4	71.4	71.4
Labor force (in '000s)	813,198.2	830,172.8	845,960.1	860,939.8	860,939.8
Employment (in '000s)	769,918.7	788,138.3	803,036.5	818,216.4	818,216.4
share in formal employment (%)	0.6	0.6	0.6	0.6	0.6
Unemployed (in '000s)	43,279.5	42,034.5	42,923.5	42,723.4	42,723.4
Unemployment rate (%)	5.3	5.1	5.1	5.0	5.0
Increase/decrease in employment (in '000s)	0.0	2,946.3	3,002.0	3,058.8	3,058.8
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	3,036.5	3,068.9	3,074.6	3,074.6
<b>POVERTY</b>					
Number of poor (in '000s)	25,044.1	6,571.9	0.0	-3,074.6	-3,074.6
Poverty rate at national poverty line, 2014 (%)	1.8	0.5	0.0	-0.2	-0.2
National poverty line (LCU monthly)	191.7	307.1	495.1	804.6	804.6
Poverty gap ratio, 2014 (%)	0.2	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	7.0	2.9	0.0	-3.6	-3.6
Income per poor person ( LCU monthly)	168.5	270.0	435.3	707.4	707.4
Gap per poor person (LCU monthly)	23.2	37.1	59.8	97.3	97.3
Aggregate poverty gap in % of GDP	0.0	0.0	0.0	0.0	0.0
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.02	0.19	0.20	0.20
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	-	-	-	-	-

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Table A3.3 *continued*

<b>Additional resources for SP cash benefits</b>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>
Gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00
<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>
<i>PENSIONS</i>				
average pension (LCU monthly)	134.17	214.98	346.57	563.24
gradual implementation (billion LCU)	0.34	56.28	1106.32	2418.06
MINUS existing expenditure (% of GDP)	0.00	0.00	0.20	0.20
In % of GDP	0.00	0.05	0.42	0.63
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	95.83	153.56	247.55	402.32
potential beneficiaries (in '000s)	237,115.00	240,140.00	230,055.00	209,746.00
gradual implementation (billion LCU)	0.27	39.37	618.55	1011.52
in % of GDP	0.00	0.04	0.34	0.35
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	572.08	912.92	1456.81	2324.75
Number of beneficiaries (in '000s)	43,279.45	42,034.51	42,923.55	42,723.42
gradual implementation (billion LCU)	0.30	40.97	679.16	1190.58
in % of GDP	0.00	0.04	0.38	0.41
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	134.17	214.98	346.57	563.24
Number of beneficiaries (in '000s)	7,699.19	7,881.38	8,030.37	8,182.16
gradual implementation (billion LCU)	0.01	1.81	30.23	55.24
in % of GDP	0.00	0.00	0.02	0.02
<i>MATERNITY</i>				
Average monthly benefit (LCU)	134.17	214.98	346.57	563.24
Number of beneficiaries ('000s)	15,807.67	16,009.33	153,370.00	13,983.07
gradual implementation (billion LCU)	0.01	0.92	14.43	23.60
in % of GDP	0.00	0.00	0.01	0.01
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.01	0.12	0.14
<b>Total social security cost in % of GDP</b>	0.00	0.14	1.28	1.55
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.02	0.19	0.20
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.16	1.47	1.75
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.00	0.09	0.85	0.89
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.01	0.71	6.56	7.81
Average resource requirement in % of GDP during 2015–30 lower estimate.	0.13			
Average resource requirement in % of GDP during 2015–30 upper estimate.	1.00			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.4: India

<b>Main Projection Results</b>		<b>LCU</b>		<b>Rupee</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	8	8	8	8	8
Wage inflation rate (%)	14.3	12.3	12.3	12.3	12.3
GDP deflator (%)	5.0	5.0	5.0	5.0	5.0
Real GDP growth (%)	4.0	4.0	4.0	4.0	4.0
Productivity growth (%)	5.8	4.0	4.0	4.0	4.0
Increase in nominal GDP per capita (%)	0.0	8.0	8.1	8.1	8.3
Nominal GDP in LCU (billion LCU)	135,672.0	210,670.4	327,127.2	507,960.3	507,960.3
GDP per capita and annum in LCU	103,483.5	151,686.1	223,810.8	332,509.2	332,509.2
Minimum wage, monthly in LCU	3200.0	5830.9	10423.7	18634.1	18634.1
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	13.8	13.80	13.80	13.80	13.80
Revenue (in % of GDP)	9.2	9.20	9.20	9.20	9.20
Deficit (in % of GDP)	-4.6	-4.60	-4.60	-4.60	-4.60
<b>POPULATION</b>					
Total Population (in '000s)	1,311,049	1,388,857.00	1,461,624.00	1,527,658.00	1,527,658.00
Target population 60+ (in '000s)	116,553	139,375.00	164,222.00	190,730.00	190,730.00
Target population 0-14 (in '000s)	377,426	372,831.00	367,793.00	365,027.00	365,027.00
Target population 15-59 (in '000s)	817,070	876,651.00	929,609.00	971,901.00	971,901.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	54.2	54.2	54.2	54.2	54.2
Labor force (in '000s)	506,023.7	550,686.1	592,856.4	630,146.0	630,146.0
Employment (in '000s)	484,550.3	475,375.5	475,375.5	475,375.5	475,375.5
share in formal employment (%)	0.2	0.2	0.2	0.2	0.2
Unemployed (in '000s)	21,473.3	75,310.6	117,480.9	154,770.5	154,770.5
Unemployment rate (%)	4.2	13.7	19.8	24.6	24.6
Increase/decrease in employment (in '000s)	0.0	0.0	0.0	0.0	0.0
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	0.0	0.0	0.0	0.0
<b>POVERTY</b>					
Number of poor (in '000s)	537,005.7	573,883.2	603,950.9	631,236.5	631,236.5
Poverty rate at national poverty line, 2014 (%)	41.0	41.3	41.3	41.3	41.3
National poverty line (LCU monthly)	1,113.3	1,631.8	2,407.7	3,577.1	3,577.1
Poverty gap ratio, 2014 (%)	11.0	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	1,919.6	3,006.9	4,669.1	7,250.2	7,250.2
Income per poor person ( LCU monthly)	815.4	1,195.2	1,763.5	2,619.9	2,619.9
Gap per poor person (LCU monthly)	297.9	436.6	644.2	957.1	957.1
Aggregate poverty gap in % of GDP	1.4	1.4	1.4	1.4	1.4
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.02	0.19	0.20	0.20
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,comunity amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.02	0.18	0.20	0.20
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.16	1.63	1.80	1.80

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Table A3.4 *continued*

<b>Additional resources for SP cash benefits</b>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>
Gradual implementation (in % of GDP)	0.00	0.13	1.29	1.43
<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>
<i>PENSIONS</i>				
average pension (LCU monthly)	779.28	1,142.26	1,685.39	2,503.94
gradual implementation (billion LCU)	1.09	169.97	3,006.12	5,724.76
MINUS existing expenditure (% of GDP)	0.05	0.05	0.05	0.05
In % of GDP	0.00	0.03	0.87	1.08
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	556.63	815.90	1,203.85	1,788.53
potential beneficiaries (in '000s)	377,426.00	372,831.00	367,793.00	365,027.00
gradual implementation (billion LCU)	2.52	324.76	4,808.96	7,825.92
in % of GDP	0.00	0.15	1.47	1.54
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	1,333.33	2,429.55	4,343.22	7,764.21
Number of beneficiaries (in '000s)	21,473.33	75,310.56	117,480.87	154,770.47
gradual implementation (billion LCU)	0.34	195.34	5,541.84	14,404.58
in % of GDP	0.00	0.09	1.69	2.84
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	779.28	1,142.26	1,685.39	2,503.94
Number of beneficiaries (in '000s)	4,845.50	4,753.76	4,753.76	4,753.76
gradual implementation (billion LCU)	0.05	5.80	87.02	142.68
in % of GDP	0.00	0.00	0.03	0.03
<i>MATERNITY</i>				
Average monthly benefit (LCU)	779.28	1,142.26	1,685.39	2,503.94
Number of beneficiaries ('000s)	25,161.73	24,855.40	24,519.53	24,335.13
gradual implementation (billion LCU)	0.06	7.58	112.21	182.60
in % of GDP	0.00	0.00	0.03	0.04
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.03	0.41	0.55
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.31</b>	<b>4.50</b>	<b>6.07</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.32	3.29	3.62
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.51	6.50	8.27
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.04	3.53	35.80	39.38
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.05	5.54	70.70	89.86
Average resource requirement in % of GDP during 2015–30 lower estimate.	2.01			
Average resource requirement in % of GDP during 2015–30 upper estimate.	4.14			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.5: Indonesia

<b>Main Projection Results</b>		<b>LCU</b>		<b>Rupiah</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	5.63	5.63	5.63	5.63	5.63
Wage inflation rate (%)	10.8	10.8	10.8	10.8	10.8
GDP deflator (%)	5.4	5.4	5.4	5.4	5.4
Real GDP growth (%)	5.7	5.7	5.7	5.7	5.7
Productivity growth (%)	4.9	4.9	4.9	4.9	4.9
Increase in nominal GDP per capita (%)	0.0	10.3	10.4	10.6	10.6
Nominal GDP in LCU (billion LCU)	11,740,929.0	20,112,012.3	34,451,536.0	59,014,896.9	59,014,896.9
GDP per capita and annum in LCU	45,584,688.0	73,980,387.6	121,092,901.6	199,724,845.0	199,724,845.0
Minimum wage, monthly in LCU	1,655,550.5	2,765,389.3	4,619,235.6	7,715,853.2	7,715,853.2
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	16.6	16.60	16.60	16.60	16.60
Revenue (in % of GDP)	14.6	14.60	14.60	14.60	14.60
Deficit (in % of GDP)	-2	-2.00	-2.00	-2.00	-2.00
<b>POPULATION</b>					
Total Population (in '000s)	257,563	271,856.00	284,505.00	295,481.00	295,481.00
Target population 60+ (in '000s)	21,195	26,175.00	32,161.00	38,956.00	38,956.00
Target population 0-14 (in '000s)	71,326	71,485.00	71,627.00	69,432.00	69,432.00
Target population 15-59 (in '000s)	165,042	174,196.00	180,717.00	187,093.00	187,093.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	0.7	0.7	0.7	0.7	0.7
Labor force (in '000s)	124,406.3	133,847.8	142,202.5	151,000.7	151,000.7
Employment (in '000s)	118,260.5	122,897.4	127,716.1	132,723.7	132,723.7
share in formal employment (%)	0.5	0.5	0.5	0.5	0.5
Unemployed (in '000s)	6,145.8	10,950.5	14,486.4	18,277.0	18,277.0
Unemployment rate (%)	4.9	8.2	10.2	12.1	12.1
Increase/decrease in employment (in '000s)	0.0	941.7	978.6	1,017.0	1,017.0
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	1,039.1	1,089.2	1,132.8	1,132.8
<b>POVERTY</b>					
Number of poor (in '000s)	29,104.6	25,528.2	21,273.6	16,433.3	16,433.3
Poverty rate at national poverty line, 2014 (%)	11.3	9.4	7.5	5.6	5.6
National poverty line (LCU monthly)	330,776.0	536,823.6	878,686.0	1,449,262.6	1,449,262.6
Poverty gap ratio, 2014 (%)	0.0	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	18402.3	26195.5	35731.3	45,524.8	45,524.8
Income per poor person ( LCU monthly)	278086.0	451311.9	738718.3	1,218,406.6	1,218,406.6
Gap per poor person (LCU monthly)	52,690.0	85,511.7	139,967.7	230,856.0	230,856.0
Aggregate poverty gap in % of GDP	0.2	0.1	0.1	0.1	0.1
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.15	1.42	1.50	1.50
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.19	1.90	2.10	2.10
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>	<i>LOWER ESTIMATE</i>
Gradual implementation (in % of GDP)	0.00	0.01	0.09	0.08	0.08

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Table A3.5 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>	<i>HIGHER ESTIMATE</i>
<b>PENSIONS</b>				
average pension (LCU monthly)	231,543.20	375,776.53	615,080.18	1,014,483.85
gradual implementation (billion LCU)	58.83	10,501.01	214,850.42	473,734.13
MINUS existing expenditure (% of GDP)	0.00	0.00	0.00	0.00
In % of GDP	0.00	0.05	0.62	0.80
<b>CHILD BENEFITS</b>				
average benefit (LCU monthly)	165,388.00	268,411.80	439,342.98	724,631.32
potential beneficiaries (in '000s)	71,326.00	71,485.00	71,627.00	69,432.00
gradual implementation (billion LCU)	141.42	20,484.79	341,786.89	603,103.64
in % of GDP	0.00	0.10	0.99	1.02
<b>ACTIVE AGE</b>				
<b>CASH FOR WORK</b>				
Average monthly benefit (LCU)	689,812.71	1,152,245.53	1,924,681.50	3,214,938.81
Number of beneficiaries (in '000s)	6,145.82	10,950.45	14,486.44	18,277.04
gradual implementation (billion LCU)	50.82	13,470.76	302,827.54	704,358.39
in % of GDP	0.00	0.07	0.88	1.19
<b>INVALIDITY (invalidity rate 1%)</b>				
Average monthly benefit (LCU)	231,543.20	375,776.53	615,080.18	1,014,483.85
Number of beneficiaries (in '000s)	1,182.60	1,228.97	1,277.16	1,327.24
gradual implementation (billion LCU)	3.28	493.05	8,532.03	16,140.19
in % of GDP	0.00	0.00	0.02	0.03
<b>MATERNITY</b>				
Average monthly benefit (LCU)	231,543.20	375,776.53	615,080.18	1,014,483.85
Number of beneficiaries ('000s)	4,755.07	4,765.67	4,775.13	4,628.80
gradual implementation (billion LCU)	3.30	477.98	7,975.03	14,072.42
in % of GDP	0.00	0.00	0.02	0.02
<b>ADMINISTRATION</b>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.02	0.25	0.31
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.25</b>	<b>2.80</b>	<b>3.38</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.34	3.41	3.67
Total cost all exp.cat. in % of GDP—upper estimate	0.01	0.58	6.11	6.97
Total cost all exp.cat. in % of total govt. revenue—lower estimate	0.02	2.36	23.36	25.16
Total cost all exp.cat. in % of total govt. revenue—upper estimate	0.04	3.98	41.87	47.76
Average resource requirement in % of GDP during 2015–30 lower estimate.	2.18			
Average resource requirement in % of GDP during 2015–30 upper estimate.	3.98			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.6: Kazakhstan

<b>Main Projection Results</b>		<b>LCU</b>		<b>Tenge</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	5	5	5	5	5
Wage inflation rate (%)	5.8	5.8	5.8	5.8	5.8
GDP deflator (%)	8.0	8.0	8.0	8.0	8.0
Real GDP growth (%)	2.0	2.0	2.0	2.0	2.0
Productivity growth (%)	0.8	0.8	0.8	0.8	0.8
Increase in nominal GDP per capita (%)	0.0	9.1	9.3	9.5	9.5
Nominal GDP in LCU (billion LCU)	40,878.0	66,314.6	107,579.3	174,521.3	174,521.3
GDP per capita and annum in LCU	2,319,450.7	3,562,429.1	5,539,331.1	8,694,766.0	8,694,766.0
Minimum wage, monthly in LCU	22,859.0	30,360.3	40,323.3	53,555.6	53,555.6
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	19.7	19.70	19.70	19.70	19.70
Revenue (in % of GDP)	14	14.00	14.00	14.00	14.00
Deficit (in % of GDP)	-5.7	-5.70	-5.70	-5.70	-5.70
<b>POPULATION</b>					
Total Population (in '000s)	17,624	18,615.00	19,421.00	20,072.00	20,072.00
Target population 60+ (in '000s)	1,881	2,192.00	2,636.00	2,888.00	2,888.00
Target population 0-14 (in '000s)	4,709	5,341.00	5,351.00	4,939.00	4,939.00
Target population 15-59 (in '000s)	11,034	11,082.00	11,434.00	12,245.00	12,245.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	72.8	72.8	72.8	72.8	72.8
Labor force (in '000s)	9,402.1	9,663.5	10,243.0	11,016.8	11,016.8
Employment (in '000s)	8,678.9	9,207.9	9,769.2	10,364.7	10,364.7
share in formal employment (%)	0.7	0.7	0.7	0.7	0.7
Unemployed (in '000s)	723.2	455.5	473.7	652.1	652.1
Unemployment rate (%)	7.7	4.7	4.6	5.9	5.9
Increase/decrease in employment (in '000s)	0.0	108.3	114.9	121.9	121.9
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	156.7	163.8	169.6	169.6
<b>POVERTY</b>					
Number of poor (in '000s)	3,859.7	3,294.2	2,618.4	1,858.7	1,858.7
Poverty rate at national poverty line, 2014 (%)	21.9	17.7	13.5	9.3	9.3
National poverty line (LCU monthly)	22,859.0	35,109.0	54,592.0	85,690.0	85,690.0
Poverty gap ratio, 2014 (%)	0.0	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	149.9	196.5	242.8	270.5	270.5
Income per poor person (LCU monthly)	19,623.3	30,139.2	46,864.4	73,560.3	73,560.3
Gap per poor person (LCU monthly)	3,235.7	4,969.8	7,727.6	12,129.6	12,129.6
Aggregate poverty gap in % of GDP	0.4	0.3	0.2	0.2	0.2
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for other ec. Services (incl. housing, gas, water, electricity, community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.07	0.72	0.80	0.80
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER ESTIMATE</i>				
Gradual implementation (in % of GDP)	0.00	0.03	0.20	0.15	0.15

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Table A3.6 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	16,001.30	24,576.29	38,214.43	59,982.98
gradual implementation (billion LCU)	0.36	57.51	1,094.08	2,076.54
MINUS existing expenditure (% of GDP)	0.00	0.00	0.00	0.00
In % of GDP	0.00	0.09	1.02	1.19
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	11,429.50	17,554.49	27,296.02	42,844.98
potential beneficiaries (in '000s)	4,709.00	5,341.00	5,351.00	4,939.00
gradual implementation (billion LCU)	0.65	100.10	1,586.39	2,536.61
in % of GDP	0.00	0.15	1.47	1.45
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	9,524.58	12,650.13	16,801.35	22,314.82
Number of beneficiaries (in '000s)	723.24	455.54	473.74	652.09
gradual implementation (billion LCU)	0.08	6.15	86.45	174.43
in % of GDP	0.00	0.01	0.08	0.10
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	16,001.30	24,576.29	38,214.43	59,982.98
Number of beneficiaries (in '000s)	86.79	92.08	97.69	103.65
gradual implementation (billion LCU)	0.02	2.42	40.55	74.52
in % of GDP	0.00	0.00	0.04	0.04
<i>MATERNITY</i>				
Average monthly benefit (LCU)	16,001.30	24,576.29	38,214.43	59,982.98
Number of beneficiaries ('000s)	313.93	356.07	356.73	329.27
gradual implementation (billion LCU)	0.02	2.34	37.02	59.19
in % of GDP	0.00	0.00	0.03	0.03
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.03	0.26	0.28
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.28</b>	<b>2.91</b>	<b>3.10</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.10	0.93	0.95
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.35	3.63	3.90
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.01	0.70	6.63	6.81
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.03	2.51	25.95	27.86
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	0.52			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	2.06			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.7: Lao People's Democratic Republic

<b>Main Projection Results</b>		<b>LCU</b>		<b>Kip</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	5.4	5.4	5.4	5.4	5.4
Wage inflation rate (%)	10.9	10.9	10.9	10.9	10.9
GDP deflator (%)	4.0	4.0	4.0	4.0	4.0
Real GDP growth (%)	8.0	8.0	8.0	8.0	8.0
Productivity growth (%)	5.2	5.2	5.2	5.2	5.2
Increase in nominal GDP per capita (%)	0.0	10.6	10.8	11.0	11.0
Nominal GDP in LCU (billion LCU)	105,926.0	189,447.6	338,825.1	605,985.4	605,985.4
GDP per capita and annum in LCU	15,572,771.9	25,618,334.9	42,533,909.4	71,376,367.3	71,376,367.3
Minimum wage, monthly in LCU	900,000.0	1,508,426.9	2,528,168.5	4,237,285.9	4,237,285.9
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	25.2	25.20	25.20	25.20	25.20
Revenue (in % of GDP)	17.5	17.50	17.50	17.50	17.50
Deficit (in % of GDP)	-7.7	-7.70	-7.70	-7.70	-7.70
<b>POPULATION</b>					
Total Population (in '000s)	6,802	7,395.00	7,966.00	8,490.00	8,490.00
Target population 60+ (in '000s)	406	481.00	576.00	685.00	685.00
Target population 0-14 (in '000s)	2,366	2,473.00	2,506.00	2,471.00	2,471.00
Target population 15-59 (in '000s)	4,030	4,441.00	4,884.00	5,334.00	5,334.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	0.8	0.8	0.8	0.8	0.8
Labor force (in '000s)	3,460.9	3,839.2	4,258.8	4,694.8	4,694.8
Employment (in '000s)	3,406.8	3,780.1	4,193.3	4,622.6	4,622.6
share in formal employment (%)	0.2	0.2	0.2	0.2	0.2
Unemployed (in '000s)	54.1	59.1	65.5	72.2	72.2
Unemployment rate (%)	1.6	1.5	1.5	1.5	1.5
Increase/decrease in employment (in '000s)	0.0	76.0	83.7	85.2	85.2
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	24.1	25.8	25.4	25.4
<b>POVERTY</b>					
Number of poor (in '000s)	1,578.1	1,592.6	1,583.2	1,554.5	1,554.5
Poverty rate at national poverty line, 2014 (%)	23.2	21.5	19.9	18.3	18.3
National poverty line (LCU monthly)	243,907.0	401,244.6	666,183.2	1,117,925.3	1,117,925.3
Poverty gap ratio, 2014 (%)	0.1	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	1,095.0	1,818.0	3,000.4	4,943.7	4,943.7
Income per poor person ( LCU monthly)	186,084.2	306,122.0	508,251.8	852,899.9	852,899.9
Gap per poor person (LCU monthly)	57,822.8	95,122.7	157,931.4	265,025.4	265,025.4
Aggregate poverty gap in % of GDP	1.0	1.0	0.9	0.8	0.8
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.33	3.24	3.36	3.36
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.20	2.08	2.30	2.30
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER ESTIMATE</i>				
Gradual implementation (in % of GDP)	0.00	0.09	0.80	0.81	0.81

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Table A3.7 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	170,734.90	280,871.25	466,328.21	782,547.71
gradual implementation (billion LCU)	0.83	144.23	2,917.35	6,425.64
MINUS existing expenditure (% of GDP)	0.00	0.00	0.00	0.00
In % of GDP	0.00	0.08	0.86	1.06
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	121,953.50	200,622.32	333,091.58	558,962.65
potential beneficiaries (in '000s)	2,366.00	2,473.00	2,506.00	2,471.00
gradual implementation (billion LCU)	3.46	529.69	9,066.08	16,556.58
in % of GDP	0.00	0.28	2.68	2.73
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	375,000.00	628,511.20	1,053,403.54	1,765,535.80
Number of beneficiaries (in '000s)	54.09	59.06	65.52	72.23
gradual implementation (billion LCU)	0.24	39.63	749.62	1528.61
in % of GDP	0.00	0.02	0.22	0.25
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	170,734.90	280,871.25	466,328.21	782,547.71
Number of beneficiaries (in '000s)	34.07	37.80	41.93	46.23
gradual implementation (billion LCU)	0.07	11.34	212.38	433.62
in % of GDP	0.00	0.01	0.06	0.07
<i>MATERNITY</i>				
Average monthly benefit (LCU)	170,734.90	280,871.25	466,328.21	782,547.71
Number of beneficiaries ('000s)	157.73	164.87	167.07	164.73
gradual implementation (billion LCU)	0.08	12.36	211.54	386.32
in % of GDP	0.00	0.01	0.06	0.06
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.04	0.39	0.42
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.43</b>	<b>4.27</b>	<b>4.60</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.01	0.62	6.13	6.47
Total cost all exp.cat. in % of GDP—upper estimate	0.01	0.97	9.60	10.25
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.04	3.56	35.01	36.97
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.06	5.52	54.84	58.59
Average resource requirement in % of GDP during 2015–30 lower estimate.	4.14			
Average resource requirement in % of GDP during 2015–30 upper estimate.	6.51			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.8: Malaysia

<b>Main Projection Results</b>		<b>LCU</b>	<b>Ringgit</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>MACROECONOMIC INDICATORS</b>				
Price inflation rate (%)	2.43	2.43	2.43	2.43
Wage inflation rate (%)	4.0	7.0	7.0	7.0
GDP deflator (%)	2.2	2.2	2.2	2.2
Real GDP growth (%)	5.4	5.4	5.4	5.4
Productivity growth (%)	1.5	4.5	4.5	4.5
Increase in nominal GDP per capita (%)	0.0	6.3	6.5	6.7
Nominal GDP in LCU (billion LCU)	1,191.4	1,723.8	2,494.2	3,608.7
GDP per capita and annum in LCU	39,280.9	53,250.8	72,643.7	99,947.1
Minimum wage, monthly in LCU	900.0	1,205.0	1,693.2	2,379.2
<b>GOVERNMENT BUDGET</b>				
Expenditure (in % of GDP)	24.2	24.20	24.20	24.20
Revenue (in % of GDP)	19.6	19.60	19.60	19.60
Deficit (in % of GDP)	-4.6	-4.60	-4.60	-4.60
<b>POPULATION</b>				
Total Population (in '000s)	30,331	32,372.00	34,334.00	36,106.00
Target population 60+ (in '000s)	2,784	3,525.00	4,354.00	5,196.00
Target population 0-14 (in '000s)	7,433	7,412.00	7,717.00	7,812.00
Target population 15-59 (in '000s)	20,114	21,435.00	22,263.00	23,098.00
<b>LABOR FORCE AND EMPLOYMENT</b>				
Labor force part. rate, 15+ (%)	0.7	0.7	0.7	0.7
Labor force (in '000s)	135,770	14,468.6	15,027.5	15,591.2
Employment (in '000s)	130,570	14,269.0	14,858.9	15,473.1
share in formal employment (%)	0.8	0.8	0.8	0.8
Unemployed (in '000s)	520.0	1,99.6	168.7	118.1
Unemployment rate (%)	3.8	1.4	1.1	0.8
Increase/decrease in employment (in '000s)	0.0	115.1	119.9	124.8
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	205.2	217.9	229.6
<b>POVERTY</b>				
Number of poor (in '000s)	182.0	194.2	206.0	216.6
Poverty rate at national poverty line, 2014 (%)	0.6	0.6	0.6	0.6
National poverty line (LCU monthly)	833.9	1,130.4	1,542.1	2,121.7
Poverty gap ratio, 2014 (%)	0.3	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	0.9	1.3	1.9	2.8
Income per poor person ( LCU monthly)	416.9	565.2	771.0	1,060.8
Gap per poor person (LCU monthly)	416.9	565.2	771.0	1,060.8
Aggregate poverty gap in % of GDP	0.1	0.1	0.1	0.1
<b>Additional resources for education</b>				
gradual implementation (% of GDP)	0.00	0.00	0.00	0.00
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>				
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.03
<b>Additional resources for health benefits</b>				
gradual implementation (in % of GDP)	-	-	-	-
<b>Additional resources for SP cash benefits</b>				
	<i>LOWER ESTIMATE</i>			
Gradual implementation (in % of GDP)	0.00	0.01	0.07	0.08

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Table A3.8 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	583.70	791.28	1,079.45	1,485.17
gradual implementation (billion LCU)	0.02	2.98	51.05	92.50
MINUS existing expenditure (% of GDP)	0.06	0.06	0.06	0.06
In % of GDP	0.00	0.11	1.99	2.50
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	416.93	565.20	771.04	1,060.83
potential beneficiaries (in '000s)	7,433.00	7,412.00	7,717.00	7,812.00
gradual implementation (billion LCU)	0.04	4.47	64.62	99.34
in % of GDP	0.00	0.26	2.59	2.75
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	375.00	502.10	705.51	991.34
Number of beneficiaries (in '000s)	520.00	199.60	168.67	118.07
gradual implementation (billion LCU)	0.00	0.11	1.29	1.40
in % of GDP	0.00	0.01	0.05	0.04
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	583.70	791.28	1,079.45	1,485.17
Number of beneficiaries (in '000s)	130.57	142.69	148.59	154.73
gradual implementation (billion LCU)	0.00	0.12	1.74	2.75
in % of GDP	0.00	0.01	0.07	0.08
<i>MATERNITY</i>				
Average monthly benefit (LCU)	583.70	791.28	1,079.45	1,485.17
Number of beneficiaries ('000s)	495.53	494.13	514.47	520.80
gradual implementation (billion LCU)	0.00	0.10	1.51	2.32
in % of GDP	0.00	0.01	0.06	0.06
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.04	0.48	0.54
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.43</b>	<b>5.24</b>	<b>5.98</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.01	0.07	0.10
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.43	5.24	6.01
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.00	0.03	0.35	0.52
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.02	2.20	26.71	30.64
Average resource requirement in % of GDP during 2015–30 lower estimate.	0.05			
Average resource requirement in % of GDP during 2015–30 upper estimate.	3.36			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.9: Mongolia

<b>Main Projection Results</b>		<b>LCU</b>		<b>Tögrög</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	10	10	10	10	
Wage inflation rate (%)	11.7	13.9	14.4	14.4	
GDP deflator (%)	8.0	8.0	8.0	8.0	
Real GDP growth (%)	10.0	6.0	6.0	6.0	
Productivity growth (%)	1.5	3.5	4.0	4.0	
Increase in nominal GDP per capita (%)	0.0	12.9	13.4	13.5	
Nominal GDP in LCU (billion LCU)	23,166.7	48,175.8	94,727.7	186,262.3	
GDP per capita and annum in LCU	7,829,232.8	15,154,380.4	28,159,233.6	52,900,392.7	
Minimum wage, monthly in LCU	192,000.0	355,879.8	687,312.9	1,346,742.6	
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	28.2	28.20	28.20	28.20	
Revenue (in % of GDP)	27.6	27.60	27.60	27.60	
Deficit (in % of GDP)	-0.6	-0.60	-0.60	-0.60	
<b>POPULATION</b>					
Total Population (in '000s)	2,959	3,179.00	3,364.00	3,521.00	
Target population 60+ (in '000s)	189	247.00	334.00	422.00	
Target population 0-14 (in '000s)	835	935.00	952.00	894.00	
Target population 15-59 (in '000s)	1,935	1,997.00	2,078.00	2,205.00	
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	63.7	66.3	69.0	71.8	
Labor force (in '000s)	1,353.0	1,487.5	1,663.9	1,885.9	
Employment (in '000s)	1,234.0	1,477.7	1,649.1	1,813.9	
share in formal employment (%)	0.5	0.5	0.5	0.5	
Unemployed (in '000s)	118.9	9.8	14.8	72.0	
Unemployment rate (%)	8.8	0.7	0.9	3.8	
Increase/decrease in employment (in '000s)	0.0	34.9	31.1	34.2	
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	36.8	31.1	32.6	
<b>POVERTY</b>					
Number of poor (in '000s)	639.1	406.4	250.7	99.4	
Poverty rate at national poverty line, 2014 (%)	21.6	12.8	7.5	2.8	
National poverty line (LCU monthly)	146,650.0	283,857.9	527,452.9	990,881.6	
Poverty gap ratio, 2014 (%)	0.1	0.0	0.0	0.0	
National aggregate poverty gap in bill. RS	270.8	333.3	382.1	284.5	
Income per poor person ( LCU monthly)	111,345.4	215,521.8	400,473.5	752,336.0	
Gap per poor person (LCU monthly)	35,304.6	38,336.2	126,979.4	238,545.6	
Aggregate poverty gap in % of GDP	1.2	0.7	0.4	0.2	
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.13	1.32	1.40	
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.03	0.27	0.30	
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.05	0.54	0.60	
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER ESTIMATE</i>				
Gradual implementation (in % of GDP)	0.00	0.06	0.37	0.15	

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Table A3.9 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<b>PENSIONS</b>				
average pension (LCU monthly)	102,655.00	198,700.56	369,217.03	693,617.10
gradual implementation (billion LCU)	0.23	52.40	1,339.38	3,508.71
MINUS existing expenditure (% of GDP)	0.20	0.20	0.20	0.20
In % of GDP	0.00	0.00	1.21	1.68
<b>CHILD BENEFITS</b>				
average benefit (LCU monthly)	73,325.00	141,928.97	263,726.46	495,440.79
potential beneficiaries (in '000s)	835.00	935.00	952.00	894.00
gradual implementation (billion LCU)	0.73	141.68	2,726.88	5,309.39
in % of GDP	0.00	0.29	2.88	2.85
<b>ACTIVE AGE</b>				
<b>CASH FOR WORK</b>				
Average monthly benefit (LCU)	80,000.00	148,283.25	286,380.37	561,142.77
Number of beneficiaries (in '000s)	118.94	9.79	14.81	72.00
gradual implementation (billion LCU)	0.11	1.55	46.06	484.29
in % of GDP	0.00	0.00	0.05	0.26
<b>INVALIDITY (invalidity rate 1%)</b>				
Average monthly benefit (LCU)	102,655.00	198,700.56	369,217.03	693,617.10
Number of beneficiaries (in '000s)	12.34	14.78	16.49	18.14
gradual implementation (billion LCU)	0.02	3.13	66.13	150.81
in % of GDP	0.00	0.01	0.07	0.08
<b>MATERNITY</b>				
Average monthly benefit (LCU)	102,655.00	198,700.56	369,217.03	693,617.10
Number of beneficiaries ('000s)	55.67	62.33	63.47	59.60
gradual implementation (billion LCU)	0.02	3.31	63.63	123.89
in % of GDP	0.00	0.01	0.07	0.07
<b>ADMINISTRATION</b>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.03	0.43	0.49
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.34</b>	<b>4.71</b>	<b>5.44</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.27	2.50	2.45
Total cost all exp.cat. in % of GDP—upper estimate	0.01	0.55	6.84	7.73
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.01	0.98	9.07	8.87
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.02	2.00	24.80	28.01
Average resource requirement in % of GDP during 2015–30 lower estimate.	1.57			
Average resource requirement in % of GDP during 2015–30 upper estimate.	4.47			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.10: Myanmar

<b>Main Projection Results</b>		<b>LCU</b>		<b>Kyat</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	3.86	3.86	3.86	3.86	3.86
Wage inflation rate (%)	9.5	11.1	11.6	11.6	11.6
GDP deflator (%)	2.3	2.3	2.3	2.3	2.3
Real GDP growth (%)	8.4	8.4	8.4	8.4	8.4
Productivity growth (%)	5.4	7.0	7.5	7.5	7.5
Increase in nominal GDP per capita (%)	0.0	9.9	10.0	10.2	10.2
Nominal GDP in LCU (billion LCU)	70,167.2	117,218.4	195,820.3	327,129.5	327,129.5
GDP per capita and annum in LCU	1,301,826.7	2,084,216.3	3,354,581.3	5,430,436.7	5,430,436.7
Minimum wage, monthly in LCU	79,200.0	129,167.3	219,956.9	381,611.6	381,611.6
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	27.5	27.50	27.50	27.50	27.50
Revenue (in % of GDP)	22.8	22.80	22.80	22.80	22.80
Deficit (in % of GDP)	-4.7	-4.70	-4.70	-4.70	-4.70
<b>POPULATION</b>					
Total Population (in '000s)	53,899	56,241.00	58,374.00	60,240.00	60,240.00
Target population 60+ (in '000s)	4,787	5,771.00	6,828.00	7,981.00	7,981.00
Target population 0-14 (in '000s)	14,849	13,960.00	13,401.00	13,302.00	13,302.00
Target population 15-59 (in '000s)	34,263	36,510.00	38,145.00	38,957.00	38,957.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	0.8	0.8	0.8	0.8	0.8
Labor force (in '000s)	30,690.8	33,230.2	35,345.9	36,890.3	36,890.3
Employment (in '000s)	29,678.0	32,869.6	34,865.5	36,299.4	36,299.4
share in formal employment (%)	0.1	0.1	0.1	0.1	0.1
Unemployed (in '000s)	1,012.8	360.6	480.4	590.9	590.9
Unemployment rate (%)	3.3	1.1	1.4	1.6	1.6
Increase/decrease in employment (in '000s)	0.0	415.5	279.9	291.4	291.4
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	87.8	57.7	59.6	59.6
<b>POVERTY</b>					
Number of poor (in '000s)	14,013.7	13,914.4	14,019.5	14,169.7	14,169.7
Poverty rate at national poverty line, 2014 (%)	26.0	24.7	24.0	23.5	23.5
National poverty line (LCU monthly)	37,881.1	60,647.4	97,613.0	158,017.1	158,017.1
Poverty gap ratio, 2014 (%)	0.0	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	1,592.6	2,531.6	4,105.5	6,717.2	6,717.2
Income per poor person ( LCU monthly)	28,410.8	45,485.6	73,209.8	118,512.8	118,512.8
Gap per poor person (LCU monthly)	9,470.3	15,161.9	24,403.3	39,504.3	39,504.3
Aggregate poverty gap in % of GDP	2.3	2.2	2.1	2.1	2.1
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.31	2.89	3.00	3.00
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,comunity amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.20	1.99	2.20	2.20
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER ESTIMATE</i>				
Gradual implementation (in % of GDP)	0.00	0.19	1.90	2.05	2.05

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Table A3.10 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<b>PENSIONS</b>				
average pension (LCU monthly)	26,516.77	42,453.18	68,329.11	110,611.99
gradual implementation (billion LCU)	1.52	261.56	5,067.27	10,582.17
MINUS existing expenditure (% of GDP)	0.00	0.00	0.00	0.00
In % of GDP	0.00	0.22	2.59	3.23
<b>CHILD BENEFITS</b>				
average benefit (LCU monthly)	18,940.55	30,323.70	48,806.51	79,008.56
potential beneficiaries (in '000s)	14,849.00	13,960.00	13,401.00	13,302.00
gradual implementation (billion LCU)	3.37	451.94	7,103.79	12,598.14
in % of GDP	0.00	0.39	3.63	3.85
<b>ACTIVE AGE</b>				
<b>CASH FOR WORK</b>				
Average monthly benefit (LCU)	33,000.00	53,819.70	91,648.72	159,004.84
Number of beneficiaries (in '000s)	1,012.80	360.57	480.38	590.89
gradual implementation (billion LCU)	0.40	20.72	478.18	1,126.24
in % of GDP	0.00	0.02	0.24	0.34
<b>INVALIDITY (invalidity rate 1%)</b>				
Average monthly benefit (LCU)	26,516.77	42,453.18	68,329.11	110,611.99
Number of beneficiaries (in '000s)	296.78	328.70	348.66	362.99
gradual implementation (billion LCU)	0.09	14.90	258.75	481.30
in % of GDP	0.00	0.01	0.13	0.15
<b>MATERNITY</b>				
Average monthly benefit (LCU)	26,516.77	42,453.18	68,329.11	110,611.99
Number of beneficiaries ('000s)	989.93	930.67	893.40	886.80
gradual implementation (billion LCU)	0.08	10.55	165.76	293.96
in % of GDP	0.00	0.01	0.08	0.09
<b>ADMINISTRATION</b>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.06	0.67	0.77
<b>Total social security cost in % of GDP</b>	<b>0.01</b>	<b>0.71</b>	<b>7.34</b>	<b>8.43</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.01	0.70	6.78	7.25
Total cost all exp.cat. in % of GDP—upper estimate	0.01	1.22	12.23	13.63
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.04	3.06	29.74	31.78
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.06	5.34	53.63	59.78
Average resource requirement in % of GDP during 2015–30 lower estimate.	4.65			
Average resource requirement in % of GDP during 2015–30 upper estimate.	8.51			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.11: Nepal

Main Projection Results	LCU		Rupee	
	2015	2020	2025	2030
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>MACROECONOMIC INDICATORS</b>				
Price inflation rate (%)	9.02	9.02	9.02	9.02
Wage inflation rate (%)	12.8	11.7	11.7	11.7
GDP deflator (%)	8.2	8.2	8.2	8.2
Real GDP growth (%)	4.4	4.4	4.4	4.4
Productivity growth (%)	3.5	2.5	2.5	2.5
Increase in nominal GDP per capita (%)	0.0	11.7	11.9	12.1
Nominal GDP in LCU (billion LCU)	2,192.6	4,027.0	7,396.0	13,583.5
GDP per capita and annum in LCU	76,905.0	133,410.7	232,900.7	410,327.7
Minimum wage, monthly in LCU	10,185.5	17,833.9	31,074.0	54,143.6
<b>GOVERNMENT BUDGET</b>				
Expenditure (in % of GDP)	18.8	18.80	18.80	18.80
Revenue (in % of GDP)	17.2	17.20	17.20	17.20
Deficit (in % of GDP)	-1.6	-1.60	-1.60	-1.60
<b>POPULATION</b>				
Total Population (in '000s)	28,511	30,185.00	31,756.00	33,104.00
Target population 60+ (in '000s)	2,455	2,738.00	3,117.00	3,572.00
Target population 0-14 (in '000s)	9,313	8,742.00	8,363.00	8,169.00
Target population 15-59 (in '000s)	16,743	18,705.00	20,276.00	21,363.00
<b>LABOR FORCE AND EMPLOYMENT</b>				
Labor force part. rate, 15+ (%)	0.8	0.8	0.8	0.8
Labor force (in '000s)	15,972.7	17,840.6	19,463.0	20,745.9
Employment (in '000s)	15,051.2	16,395.2	17,946.4	19,644.3
share in formal employment (%)	0.3	0.3	0.3	0.3
Unemployed (in '000s)	921.5	1,445.3	1,516.6	1,101.6
Unemployment rate (%)	5.8	8.1	7.8	5.3
Increase/decrease in employment (in '000s)	0.0	293.8	321.5	352.0
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	154.7	163.0	170.2
<b>POVERTY</b>				
Number of poor (in '000s)	7,184.8	6,875.4	6,418.8	5,840.8
Poverty rate at national poverty line, 2014 (%)	25.2	25.2	25.2	25.2
National poverty line (LCU monthly)	2,601.9	4,513.6	7,879.5	13,882.2
Poverty gap ratio, 2014 (%)	0.1	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	48.1	79.8	130.1	208.5
Income per poor person (LCU monthly)	2,044.3	3,546.4	6,191.1	10,907.5
Gap per poor person (LCU monthly)	557.5	967.2	1,688.5	2,974.8
Aggregate poverty gap in % of GDP	2.2	2.0	1.8	1.5
<b>Additional resources for education</b>				
gradual implementation (% of GDP)	0.00	0.28	2.57	2.59
<b>Additional resources for other ec. Services (incl. housing, gas, water, electricity, community amenities)</b>				
gradual implementation (in % of GDP)	0.00	0.03	0.27	0.03
<b>Additional resources for health benefits</b>				
gradual implementation (in % of GDP)	0.00	0.08	0.81	0.90
<b>Additional resources for SP cash benefits</b>				
	<i>LOWER ESTIMATE</i>			
Gradual implementation (in % of GDP)	0.00	0.18	1.59	1.53

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Table A3.11 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<b>PENSIONS</b>				
average pension (LCU monthly)	1,821.30	3,159.50	5,515.66	9,717.57
gradual implementation (billion LCU)	0.05	9.24	186.73	416.09
MINUS existing expenditure (% of GDP)	0.35	0.35	0.35	0.35
In % of GDP	0.00	0.00	2.17	2.71
<b>CHILD BENEFITS</b>				
average benefit (LCU monthly)	1300.93	2,256.78	3,939.76	6,941.12
potential beneficiaries (in '000s)	9313.00	8,742.00	8,363.00	8,169.00
gradual implementation (billion LCU)	0.15	21.06	357.85	679.69
in % of GDP	0.01	0.52	4.84	5.00
<b>ACTIVE AGE</b>				
<b>CASH FOR WORK</b>				
Average monthly benefit (LCU)	4,243.97	7,430.80	12,947.49	22,559.83
Number of beneficiaries (in '000s)	921.50	1,445.34	1,516.60	1,101.65
gradual implementation (billion LCU)	0.05	11.47	213.27	297.92
in % of GDP	0.00	0.28	2.88	2.19
<b>INVALIDITY (invalidity rate 1%)</b>				
Average monthly benefit (LCU)	1,821.30	3,159.50	5,515.66	9,717.57
Number of beneficiaries (in '000s)	150.51	163.95	179.46	196.44
gradual implementation (billion LCU)	0.00	0.55	10.75	22.88
in % of GDP	0.00	0.01	0.15	0.17
<b>MATERNITY</b>				
Average monthly benefit (LCU)	1,821.30	3,159.50	5,515.66	9,717.57
Number of beneficiaries ('000s)	620.87	582.80	557.53	544.60
gradual implementation (billion LCU)	0.00	0.49	8.35	15.86
in % of GDP	0.00	0.01	0.11	0.12
<b>ADMINISTRATION</b>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.08	1.02	1.02
<b>Total social security cost in % of GDP</b>	<b>0.01</b>	<b>0.92</b>	<b>11.17</b>	<b>11.21</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.01	0.56	5.25	5.05
Total cost all exp.cat. in % of GDP—upper estimate	0.01	1.30	14.83	14.74
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.04	3.28	30.52	29.38
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.09	7.58	86.22	85.67
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	3.03			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	8.54			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.12: Philippines

<b>Main Projection Results</b>		<b>LCU</b>		<b>Peso</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	3.68	3.68	3.68	3.68	3.68
Wage inflation rate (%)	8.3	7.3	7.3	7.3	7.3
GDP deflator (%)	2.8	2.8	2.8	2.8	2.8
Real GDP growth (%)	5.7	5.7	5.7	5.7	5.7
Productivity growth (%)	4.5	3.5	3.5	3.5	3.5
Increase in nominal GDP per capita (%)	0.0	7.1	7.2	7.2	7.4
Nominal GDP in LCU (billion LCU)	13,737.5	20,808.9	31,520.2	47,745.2	47,745.2
GDP per capita and annum in LCU	136,420.1	191,900.0	271,367.9	386,362.8	386,362.8
Minimum wage, monthly in LCU	10,582.0	15,129.9	21,528.5	30,633.1	30,633.1
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	15.6	15.60	15.60	15.60	15.60
Revenue (in % of GDP)	13.9	13.90	13.90	13.90	13.90
Deficit (in % of GDP)	-1.7	-1.70	-1.70	-1.70	-1.70
<b>POPULATION</b>					
Total Population (in '000s)	100,700	108,436.00	116,153.00	123,576.00	123,576.00
Target population 60+ (in '000s)	7,321	8,897.00	10,690.00	12,682.00	12,682.00
Target population 0-14 (in '000s)	32,172	33,363.00	34,387.00	34,997.00	34,997.00
Target population 15-59 (in '000s)	61,207	66,176.00	71,076.00	75,897.00	75,897.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	0.7	0.7	0.7	0.7	0.7
Labor force (in '000s)	44,680.3	48,947.6	53,311.4	57,753.5	57,753.5
Employment (in '000s)	41,253.9	45,608.4	50,666.2	56,284.8	56,284.8
share in formal employment (%)	0.6	0.6	0.6	0.6	0.6
Unemployed (in '000s)	3,426.4	3,339.2	2,645.3	1,468.7	1,468.7
Unemployment rate (%)	7.7	6.8	5.0	2.5	2.5
Increase/decrease in employment (in '000s)	0.0	949.3	1,054.5	1,171.5	1,171.5
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	1399.5	1,500.9	1,599.0	1,599.0
<b>POVERTY</b>					
Number of poor (in '000s)	25,980.6	21,304.6	15,320.3	8,308.6	8,308.6
Poverty rate at national poverty line, 2014 (%)	25.8	19.6	13.2	6.7	6.7
National poverty line (LCU monthly)	1,755.6	2,469.6	3,492.3	4,972.1	4,972.1
Poverty gap ratio, 2014 (%)	0.1	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	114.6	132.1	134.4	103.8	103.8
Income per poor person ( LCU monthly)	1,388.1	1,952.7	2,761.3	3,931.5	3,931.5
Gap per poor person (LCU monthly)	367.5	516.9	730.9	1,040.7	1,040.7
Aggregate poverty gap in % of GDP	0.8	0.6	0.4	0.2	0.2
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.39	3.85	4.09	4.09
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.01	0.09	0.03	0.03
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.14	1.45	1.60	1.60
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER ESTIMATE</i>				
Gradual implementation (in % of GDP)	0.00	0.06	0.39	0.22	0.22

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Table A3.12 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<b>PENSIONS</b>				
average pension (LCU monthly)	1,228.92	1,728.70	2,444.58	3,480.49
gradual implementation (billion LCU)	0.11	16.42	283.83	529.11
MINUS existing expenditure (% of GDP)	0.34	0.34	0.34	0.34
In % of GDP	0.00	0.00	0.56	0.77
<b>CHILD BENEFITS</b>				
average benefit (LCU monthly)	877.80	1,234.79	1,746.13	2,486.06
potential beneficiaries (in '000s)	32,172.00	33,363.00	34,387.00	34,997.00
gradual implementation (billion LCU)	0.34	43.98	652.15	1,042.94
in % of GDP	0.00	0.21	2.07	2.18
<b>ACTIVE AGE</b>				
<b>CASH FOR WORK</b>				
Average monthly benefit (LCU)	4,409.17	6,304.15	8,970.22	12,763.79
Number of beneficiaries (in '000s)	3,426.40	3,339.21	2,645.28	1,468.71
gradual implementation (billion LCU)	0.18	22.47	257.72	224.71
in % of GDP	0.00	0.11	0.82	0.47
<b>INVALIDITY (invalidity rate 1%)</b>				
Average monthly benefit (LCU)	1,228.92	1,728.70	2,444.58	3,480.49
Number of beneficiaries (in '000s)	412.54	456.08	506.66	562.85
gradual implementation (billion LCU)	0.01	0.84	13.45	23.48
in % of GDP	0.00	0.00	0.04	0.05
<b>MATERNITY</b>				
Average monthly benefit (LCU)	1,228.92	1,728.70	2,444.58	3,480.49
Number of beneficiaries ('000s)	2,144.80	2,224.20	2,292.47	2,333.13
gradual implementation (billion LCU)	0.01	1.03	15.22	24.34
in % of GDP	0.00	0.00	0.05	0.05
<b>ADMINISTRATION</b>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.03	0.35	0.35
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.36</b>	<b>3.89</b>	<b>3.88</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.01	0.60	5.77	5.94
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.91	9.28	9.59
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.05	4.32	41.53	42.70
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.00	6.51	66.75	69.02
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	3.48			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	5.58			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.13: Sri Lanka

<b>Main Projection Results</b>		<b>LCU</b>	<b>Rupee</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>MACROECONOMIC INDICATORS</b>				
Price inflation rate (%)	5.82	5.82	5.82	5.82
Wage inflation rate (%)	11.1	11.1	11.1	11.1
GDP deflator (%)	5.9	5.9	5.9	5.9
Real GDP growth (%)	5.8	5.8	5.8	5.8
Productivity growth (%)	5.0	5.0	5.0	5.0
Increase in nominal GDP per capita (%)	0.0	11.7	11.9	12.0
Nominal GDP in LCU (billion LCU)	11,535.3	20,406.0	36,098.3	63,858.0
GDP per capita and annum in LCU	556,857.1	964,502.9	16,853,339.5	2,965,451.7
Minimum wage, monthly in LCU	8,331.7	14,096.4	23,849.5	40,350.6
<b>GOVERNMENT BUDGET</b>				
Expenditure (in % of GDP)	19.3	19.30	19.30	19.30
Revenue (in % of GDP)	12.7	12.70	12.70	12.70
Deficit (in % of GDP)	-6.6	-6.60	-6.60	-6.60
<b>POPULATION</b>				
Total Population (in '000s)	20,715	21,157.00	21,419.00	21,534.00
Target population 60+ (in '000s)	2,886	3,462.00	4,019.00	4,524.00
Target population 0-14 (in '000s)	5,091	4,487.00	4,519.00	4,424.00
Target population 15-59 (in '000s)	12,738	12,824.00	12,881.00	12,767.00
<b>LABOR FORCE AND EMPLOYMENT</b>				
Labor force part. rate, 15+ (%)	0.5	0.5	0.5	0.5
Labor force (in '000s)	8,562.0	8,924.7	9,261.2	9,475.5
Employment (in '000s)	8,155.7	8,495.3	8,849.0	9,717.5
share in formal employment (%)	0.6	0.6	0.6	0.6
Unemployed (in '000s)	406.2	429.4	412.2	258.0
Unemployment rate (%)	4.7	4.8	4.5	2.7
Increase/decrease in employment (in '000s)	0.0	69.0	71.9	74.9
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	98.3	99.6	100.3
<b>POVERTY</b>				
Number of poor (in '000s)	1,387.9	926.5	440.0	-59.0
Poverty rate at national poverty line, 2014 (%)	6.7	4.4	2.1	-0.3
National poverty line (LCU monthly)	3,624.0	6,276.9	10,968.1	19,299.0
Poverty gap ratio, 2014 (%)	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	10.8	12.5	10.4	-2.4
Income per poor person ( LCU monthly)	2,974.9	5,152.7	9,003.7	15,842.5
Gap per poor person (LCU monthly)	649.1	1,124.2	1,964.4	3,456.5
Aggregate poverty gap in % of GDP	0.1	0.1	0.0	0.0
<b>Additional resources for education</b>				
gradual implementation (% of GDP)	0.00	0.00	0.58	0.60
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>				
gradual implementation (in % of GDP)	0.00	0.01	0.09	0.03
<b>Additional resources for health benefits</b>				
gradual implementation (in % of GDP)	-	-	-	-
<b>Additional resources for SP cash benefits</b>				
	<i>LOWER ESTIMATE</i>			
Gradual implementation (in % of GDP)	0.00	0.01	0.03	0.00

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Table A3.13 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	2,536.80	4,393.86	7,677.68	13,509.31
gradual implementation (billion LCU)	0.09	16.24	335.14	732.61
MINUS existing expenditure (% of GDP)	0.00	0.00	0.00	0.00
In % of GDP	0.00	0.08	0.93	1.15
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	1,812.00	3,138.47	5,484.06	9,649.51
potential beneficiaries (in '000s)	5,091.00	4,871.00	4,519.00	4,243.00
gradual implementation (billion LCU)	0.11	16.32	269.17	490.79
in % of GDP	0.00	0.08	0.75	0.77
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	3,471.56	5,873.49	9,937.28	16,812.77
Number of beneficiaries (in '000s)	406.22	429.42	412.18	258.00
gradual implementation (billion LCU)	0.02	2.69	44.49	52.00
in % of GDP	0.00	0.01	0.12	0.08
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	2,536.80	4,393.86	7,677.68	13,509.31
Number of beneficiaries (in '000s)	81.56	84.95	88.49	92.17
gradual implementation (billion LCU)	0.00	0.40	7.38	14.93
in % of GDP	0.00	0.00	0.02	0.00
<i>MATERNITY</i>				
Average monthly benefit (LCU)	2,536.80	4,393.86	7,677.68	13,509.31
Number of beneficiaries ('000s)	339.40	324.73	301.27	282.87
gradual implementation (billion LCU)	0.00	0.38	6.28	11.45
in % of GDP	0.00	0.00	0.02	0.02
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.02	0.18	0.20
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.19</b>	<b>2.02</b>	<b>2.24</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.08	0.70	0.62
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.26	2.69	2.87
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.01	0.59	5.51	4.89
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.02	2.08	21.20	22.58
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	0.42			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	1.71			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.14: Thailand

<b>Main Projection Results</b>		<b>LCU</b>	<b>Baht</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>MACROECONOMIC INDICATORS</b>				
Price inflation rate (%)	2.63	2.63	2.63	2.63
Wage inflation rate (%)	5.5	5.5	5.5	5.5
GDP deflator (%)	2.1	2.1	2.1	2.1
Real GDP growth (%)	2.0	3.0	3.0	3.01
Productivity growth (%)	2.8	2.8	2.8	2.8
Increase in nominal GDP per capita (%)	0.0	5.1	5.2	5.3
Nominal GDP in LCU (billion LCU)	13,687.8	17,520.1	22,534.7	28,984.5
GDP per capita and annum in LCU	201,413.3	255,469.5	328,316.8	424,675.5
Minimum wage, monthly in LCU	6,600.0	8,610.7	11,233.8	14,656.2
<b>GOVERNMENT BUDGET</b>				
Expenditure (in % of GDP)	20.5	20.50	20.50	20.50
Revenue (in % of GDP)	17.5	17.50	17.50	17.50
Deficit (in % of GDP)	-3	-3.00	-3.00	-3.00
<b>POPULATION</b>				
Total Population (in '000s)	67,959	68,580.00	68,637.00	68,251.00
Target population 60+ (in '000s)	10,731	13,236.00	15,825.00	18,354.00
Target population 0-14 (in '000s)	12,036	11,219.00	10,351.00	9,533.00
Target population 15-59 (in '000s)	45,192	44,125.00	42,461.00	40,364.00
<b>LABOR FORCE AND EMPLOYMENT</b>				
Labor force part. rate, 15+ (%)	0.7	0.7	0.7	0.7
Labor force (in '000s)	40,264.6	41,299.9	41,965.9	42,277.0
Employment (in '000s)	39,873.1	40,145.1	40,616.1	41,092.6
share in formal employment (%)	0.4	0.4	0.4	0.4
Unemployed (in '000s)	391.5	1,154.8	1,349.8	1,184.4
Unemployment rate (%)	1.0	2.8	3.2	2.8
Increase/decrease in employment (in '000s)	0.0	93.5	94.6	95.7
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	67.5	67.7	67.4
<b>POVERTY</b>				
Number of poor (in '000s)	7,135.7	7,004.0	6,671.6	6,297.4
Poverty rate at national poverty line, 2014 (%)	10.5	10.2	9.7	9.2
National poverty line (LCU monthly)	2,873.3	3,644.4	4,683.6	6,058.2
Poverty gap ratio, 2014 (%)	2.6	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	61.5	76.6	93.7	114.5
Income per poor person ( LCU monthly)	2,154.9	2,733.3	3,512.7	4,543.6
Gap per poor person (LCU monthly)	718.3	911.1	1,170.9	1,514.5
Aggregate poverty gap in % of GDP	0.4	0.4	0.4	0.4
<b>Additional resources for education</b>				
gradual implementation (% of GDP)	0.00	0.02	0.19	0.20
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>				
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>				
gradual implementation (in % of GDP)	-	-	-	-
<b>Additional resources for SP cash benefits</b>				
	<i>LOWER ESTIMATE</i>			
Gradual implementation (in % of GDP)	0.00	0.04	0.38	0.39

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Table A3.14 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	2,011.28	2,551.07	3,278.51	4,240.73
gradual implementation (billion LCU)	0.26	36.05	563.50	933.01
MINUS existing expenditure (% of GDP)	0.33	0.33	0.33	0.33
In % of GDP	0.00	0.00	2.17	2.89
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	1,436.63	1,822.19	2,341.79	3,029.09
potential beneficiaries (in '000s)	12,036.00	11,219.00	10,351.00	9,533.00
gradual implementation (billion LCU)	0.21	21.83	263.27	346.14
in % of GDP	0.00	0.12	1.17	1.19
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	2,750.00	3,587.77	4,680.77	6,106.73
Number of beneficiaries (in '000s)	391.46	1,154.84	1,349.85	1,184.36
gradual implementation (billion LCU)	0.01	4.42	68.62	86.70
in % of GDP	0.00	0.03	0.30	0.30
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	2,011.28	2,551.07	3,278.51	4,240.73
Number of beneficiaries (in '000s)	398.73	401.45	406.16	410.93
gradual implementation (billion LCU)	0.01	1.09	14.46	20.89
in % of GDP	0.00	0.01	0.06	0.07
<i>MATERNITY</i>				
Average monthly benefit (LCU)	2,011.28	2,551.07	3,278.51	4,240.73
Number of beneficiaries ('000s)	802.40	747.93	690.07	635.53
gradual implementation (billion LCU)	0.00	0.51	6.14	8.08
in % of GDP	0.00	0.00	0.03	0.03
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.02	0.37	0.45
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.17</b>	<b>4.11</b>	<b>4.93</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.06	0.57	0.60
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.20	4.30	5.13
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.00	0.34	3.27	3.40
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.01	1.12	24.59	29.32
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	0.33			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	2.54			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.15: Timor-Leste

Main Projection Results		LCU	US Dollar	
YEAR	2015	2020	2025	2030
<b>MACROECONOMIC INDICATORS</b>				
Price inflation rate (%)	7	7	7	7
Wage inflation rate (%)	11.1	11.1	11.1	11.1
GDP deflator (%)	3.0	3.0	3.0	3.0
Real GDP growth (%)	6.0	6.0	6.0	6.0
Productivity growth (%)	3.8	3.8	3.8	3.8
Increase in nominal GDP per capita (%)	0.0	6.9	7.0	7.5
Nominal GDP in LCU (billion LCU)	1.4	2.2	3.4	5.3
GDP per capita and annum in LCU	1,192.9	1,666.2	2,352.3	3,350.3
Minimum wage, monthly in LCU	115.0	194.4	328.5	555.2
<b>GOVERNMENT BUDGET</b>				
Expenditure (in % of GDP)	44.3	44.30	44.30	44.30
Revenue (in % of GDP)	10.4	10.40	10.40	10.40
Deficit (in % of GDP)	-33.9	-33.90	-33.90	-33.90
<b>POPULATION</b>				
Total Population (in '000s)	1,184	1,315.00	1,445.00	1,574.00
Target population 60+ (in '000s)	85	90.00	96.00	107.00
Target population 0-14 (in '000s)	503	557.00	616.00	626.00
Target population 15-59 (in '000s)	596	668.00	733.00	841.00
<b>LABOR FORCE AND EMPLOYMENT</b>				
Labor force part. rate, 15+ (%)	31.2	31.2	31.2	31.2
Labor force (in '000s)	212.5	236.5	258.6	295.8
Employment (in '000s)	189.0	209.9	233.1	258.8
share in formal employment (%)	0.3	0.3	0.3	0.3
Unemployed (in '000s)	23.5	26.6	25.6	36.9
Unemployment rate (%)	11.1	11.3	9.9	12.5
Increase/decrease in employment (in '000s)	0.0	4.4	4.8	5.4
Reduction/increase in number of poor due to inc. in employment (in '000s)	0.0	8.3	9.1	10.0
<b>POVERTY</b>				
Number of poor (in '000s)	590.8	614.7	629.8	636.2
Poverty rate at national poverty line, 2014 (%)	49.9	46.7	43.6	40.4
National poverty line (LCU monthly)	46.8	65.4	92.3	131.4
Poverty gap ratio, 2014 (%)	0.1	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	0.1	0.1	0.2	0.3
Income per poor person ( LCU monthly)	34.0	47.6	67.1	95.6
Gap per poor person (LCU monthly)	12.8	17.8	25.2	35.8
Aggregate poverty gap in % of GDP	6.4	6.0	5.6	5.2
<b>Additional resources for education</b>				
gradual implementation (% of GDP)	0.00	0.00	0.00	0.00
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>				
gradual implementation (in % of GDP)	0.00	0.01	0.09	0.10
<b>Additional resources for health benefits</b>				
gradual implementation (in % of GDP)	0.00	0.17	1.72	1.90
<b>Additional resources for SP cash benefits</b>				
	<i>LOWER ESTIMATE</i>			
Gradual implementation (in % of GDP)	0.01	0.53	5.06	5.18

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Table A3.15 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	32.76	45.76	64.60	92.01
gradual implementation (billion LCU)	0.00	0.00	0.07	0.12
MINUS existing expenditure (% of GDP)	3.26	3.26	3.26	3.26
In % of GDP	0.00	0.00	0.00	0.00
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	23.40	32.69	46.15	65.72
potential beneficiaries (in '000s)	503.00	557.00	616.00	626.00
gradual implementation (billion LCU)	0.00	0.02	0.31	0.49
in % of GDP	0.01	0.89	9.08	9.35
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	47.92	80.98	136.87	231.31
Number of beneficiaries (in '000s)	23.49	26.62	25.57	36.93
gradual implementation (billion LCU)	0.00	0.00	0.04	0.10
in % of GDP	0.00	0.11	1.12	1.94
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	32.76	45.76	64.60	92.01
Number of beneficiaries (in '000s)	1.89	2.10	2.33	2.59
gradual implementation (billion LCU)	0.00	0.00	0.00	0.00
in % of GDP	0.00	0.00	0.05	0.05
<i>MATERNITY</i>				
Average monthly benefit (LCU)	32.76	45.76	64.60	92.01
Number of beneficiaries ('000s)	33.53	37.13	41.07	41.93
gradual implementation (billion LCU)	0.00	0.00	0.01	0.01
in % of GDP	0.00	0.02	0.21	0.22
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.10	1.05	1.16
<b>Total social security cost in % of GDP</b>	0.01	1.12	11.51	12.72
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.01	0.71	6.87	7.18
Total cost all exp.cat. in % of GDP—upper estimate	0.01	1.30	13.32	14.72
Total cost all exp.cat. in % of total govt.revenue— lower estimate	0.08	6.84	66.08	69.02
Total cost all exp.cat. in % of total govt.revenue— upper estimate	0.14	12.47	128.05	141.55
Average resource requirement in % of GDP during 2015–30 lower estimate.	4.39			
Average resource requirement in % of GDP during 2015–30 upper estimate.	8.65			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

Table A3.16: Viet Nam

<b>Main Projection Results</b>		<b>LCU</b>		<b>Dong</b>	
<b>YEAR</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	
<b>MACROECONOMIC INDICATORS</b>					
Price inflation rate (%)	8.22	8.22	8.22	8.22	8.22
Wage inflation rate (%)	12.3	13.4	13.4	13.4	13.4
GDP deflator (%)	9.9	9.9	9.9	9.9	9.9
Real GDP growth (%)	5.7	5.7	5.7	5.7	5.7
Productivity growth (%)	3.7	4.8	4.8	4.8	4.8
Increase in nominal GDP per capita (%)	0.0	15.1	15.4	15.5	15.5
Nominal GDP in LCU (billion LCU)	4,574,820.3	9,681,504.8	20,488,572.0	43,359,125.6	43,359,125.6
GDP per capita and annum in LCU	48,955,785.8	98,630,841.4	200,683,409.1	412,072,814.1	412,072,814.1
Minimum wage, monthly in LCU	3,100,000.0	5,697,938.8	10,692,071.2	20,063,463.3	20,063,463.3
<b>GOVERNMENT BUDGET</b>					
Expenditure (in % of GDP)	27.6	27.60	27.60	27.60	27.60
Revenue (in % of GDP)	25.1	25.10	25.10	25.10	25.10
Deficit (in % of GDP)	-2.5	-2.50	-2.50	-2.50	-2.50
<b>POPULATION</b>					
Total Population (in '000s)	93,448	98,159.00	102,094.00	105,222.00	105,222.00
Target population 60+ (in '000s)	9,614	12,287.00	15,323.00	18,425.00	18,425.00
Target population 0-14 (in '000s)	21,577	22,488.00	22,335.00	21,225.00	21,225.00
Target population 15-59 (in '000s)	62,257	63,384.00	64,436.00	65,572.00	65,572.00
<b>LABOR FORCE AND EMPLOYMENT</b>					
Labor force part. rate, 15+ (%)	12,615.5	10,924.1	9,726.1	8,334.9	8,334.9
Labor force (in '000s)	13.5	11.1	9.5	7.9	7.9
Employment (in '000s)	1,003,446.1	2,021,635.0	4,113,405.0	8,446,250.7	8,446,250.7
share in formal employment (%)	0.0	0.0	0.0	0.0	0.0
Unemployed (in '000s)	50,635.8	88,338.3	160,028.8	281,593.1	281,593.1
Unemployment rate (%)	668,964.0	1,347,756.6	2,742,270.0	5,630,833.8	5,630,833.8
Increase/decrease in employment (in '000s)	334,482.0	673,878.3	1,371,135.0	2,815,416.9	2,815,416.9
Reduction/increase in number of poor due to inc. in employment (in '000s)	1.1	0.9	0.8	0.6	0.6
<b>POVERTY</b>					
Number of poor (in '000s)	12,615.5	10,924.1	9,726.1	8,334.9	8,334.9
Poverty rate at national poverty line, 2014 (%)	13.5	11.1	9.5	7.9	7.9
National poverty line (LCU monthly)	1,003,446.1	2,021,635.0	4,113,405.0	8,446,250.7	8,446,250.7
Poverty gap ratio, 2014 (%)	0.0	0.0	0.0	0.0	0.0
National aggregate poverty gap in bill. RS	50,635.8	88,338.3	160,028.8	281,593.1	281,593.1
Income per poor person ( LCU monthly)	668,964.0	1,347,756.6	2,742,270.0	5,630,833.8	5,630,833.8
Gap per poor person (LCU monthly)	334,482.0	673,878.3	1,371,135.0	2,815,416.9	2,815,416.9
Aggregate poverty gap in % of GDP	1.1	0.9	0.8	0.6	0.6
<b>Additional resources for education</b>					
gradual implementation (% of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for other ec. Services (incl.housing, gas, water, electricity,community amenities)</b>					
gradual implementation (in % of GDP)	0.00	0.00	0.00	0.00	0.00
<b>Additional resources for health benefits</b>					
gradual implementation (in % of GDP)	0.00	0.06	0.63	0.70	0.70
<b>Additional resources for SP cash benefits</b>					
	<i>LOWER ESTIMATE</i>				
Gradual implementation (in % of GDP)	0.00	0.08	0.71	0.65	0.65

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Table A3.16 *continued*

<b>Additional resources for SP cash benefits</b>	<i>HIGHER ESTIMATE</i>			
<i>PENSIONS</i>				
average pension (LCU monthly)	702,412.24	1,415,144.48	2,879,383.52	5,912,375.49
gradual implementation (billion LCU)	80.95	18,563.57	479,201.59	1,305,824.10
MINUS existing expenditure (% of GDP)	0.04	0.04	0.04	0.04
In % of GDP	0.00	0.15	2.30	2.97
<i>CHILD BENEFITS</i>				
average benefit (LCU monthly)	501,723.03	1,010,817.49	2,056,702.51	4,223,125.49
potential beneficiaries (in '000s)	21,577.00	22,488.00	22,335.00	21,225.00
gradual implementation (billion LCU)	129.78	24,268.25	498,921.68	1,074,476.32
in % of GDP	0.00	0.25	2.44	2.48
<i>ACTIVE AGE</i>				
<i>CASH FOR WORK</i>				
Average monthly benefit (LCU)	1,291,666.67	2,374,141.17	4,455,029.66	8,359,776.40
Number of beneficiaries (in '000s)	1,293.68	644.40	1,252.56	1,863.79
gradual implementation (billion LCU)	20.03	1,633.33	60,607.24	186,770.01
in % of GDP	0.00	0.02	0.30	0.43
<i>INVALIDITY (invalidity rate 1%)</i>				
Average monthly benefit (LCU)	702,412.24	1,415,144.48	2,879,383.52	5,912,375.49
Number of beneficiaries (in '000s)	546.22	582.28	608.00	634.86
gradual implementation (billion LCU)	4.60	879.72	19,014.18	44,993.97
in % of GDP	0.00	0.01	0.09	0.10
<i>MATERNITY</i>				
Average monthly benefit (LCU)	702,412.24	1,415,144.48	2,879,383.52	5,912,375.49
Number of beneficiaries ('000s)	1,438.47	1,499.20	1,489.00	634.86
gradual implementation (billion LCU)	3.03	566.26	11,641.51	44,993.97
in % of GDP	0.00	0.01	0.06	0.10
<i>ADMINISTRATION</i>				
Administration cost rate	0.10	0.10	0.10	0.10
Admin cost in % of GDP	0.00	0.04	0.52	0.60
<b>Total social security cost in % of GDP</b>	<b>0.00</b>	<b>0.48</b>	<b>5.70</b>	<b>6.65</b>
<b>TOTAL ESTIMATED RESOURCE REQUIREMENT</b>				
YEAR	2015	2020	2025	2030
Total cost all exp.cat. in % of GDP—lower estimate	0.00	0.14	1.34	1.37
Total cost all exp.cat. in % of GDP—upper estimate	0.00	0.54	6.33	7.37
Total cost all exp.cat. in % of total govt.revenue—lower estimate	0.01	0.57	5.34	5.48
Total cost all exp.cat. in % of total govt.revenue—upper estimate	0.02	2.15	25.22	29.37
Average resource requirement				
in % of GDP during 2015–30 lower estimate.	0.82			
Average resource requirement				
in % of GDP during 2015–30 upper estimate.	4.04			

GDP = gross domestic product, LCU = local currency unit, SP = social protection.

**Table A3.17: Composition of Expenditure to Close the Social Protection Financial Gap, Stationary State, 2030**  
(% of GDP)

### Lower Estimate

Country	Education	Other Services	Health Care	Social Protection Cash Benefits	Total
Azerbaijan	0.0	0.0	2.0	0.7	2.6
Cambodia	4.1	0.5	1.9	0.6	7.1
PRC	0.2	0.0	0.0	0.0	0.2
India	0.2	0.2	1.8	1.4	3.6
Indonesia	1.5	0.0	2.1	0.1	3.7
Kazakhstan	0.0	0.0	0.8	0.2	1.0
Lao PDR	3.4	0.0	2.3	0.8	6.5
Malaysia	0.0	0.0	0.0	0.1	0.1
Mongolia	1.4	0.3	0.6	0.2	2.5
Myanmar	3.0	0.0	2.2	2.1	7.2
Nepal	2.6	0.0	0.9	1.5	5.1
Philippines	4.1	0.0	1.6	0.2	5.9
Sri Lanka	0.6	0.0	0.0	0.0	0.6
Thailand	0.2	0.0	0.0	0.4	0.6
Timor-Leste	0.0	0.1	1.9	5.2	7.2
Viet Nam	0.0	0.0	0.7	0.6	1.4
<b>Simple average lower estimate</b>	<b>1.3</b>	<b>0.1</b>	<b>1.2</b>	<b>0.9</b>	<b>3.5</b>

### Upper Estimate

Country	Education	Other Services	Health Care	Social Protection Cash Benefits	Total
Azerbaijan	0.0	0.0	2.0	6.8	8.8
Cambodia	4.1	0.5	1.9	7.6	14.1
PRC	0.2	0.0	0.0	1.5	1.7
India	0.2	0.2	1.8	6.1	8.3
Indonesia	1.5	0.0	2.1	3.4	7.0
Kazakhstan	0.0	0.0	0.8	3.1	3.9
Lao PDR	3.4	0.0	2.3	4.6	10.3
Malaysia	0.0	0.0	0.0	6.0	6.0
Mongolia	1.4	0.3	0.6	5.4	7.7
Myanmar	3.0	0.0	2.2	8.4	13.6
Nepal	2.6	0.0	0.9	11.2	14.7
Philippines	4.1	0.0	1.6	3.9	9.6
Sri Lanka	0.6	0.0	0.0	2.2	2.9
Thailand	0.2	0.0	0.0	4.9	5.1
Timor-Leste	0.0	0.1	1.9	12.7	14.7
Viet Nam	0.0	0.0	0.7	6.6	7.4
<b>Simple average upper estimate</b>	<b>1.3</b>	<b>0.1</b>	<b>1.2</b>	<b>5.9</b>	<b>8.5</b>

GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Author's calculations.

## **Asia's Fiscal Challenge**

*Financing the Social Protection Agenda of the Sustainable Development Goals*

Developing countries in Asia have expanded their social protection programs. One of the key challenges is creating sustainable financing—considered the bedrock for success of the social protection agendas of the United Nations Sustainable Development Goals (SDGs) Agenda and Strategy 2030 of the Asian Development Bank (ADB). This book focuses on the analysis of fiscal requirements to achieve the social protection agenda of the SDGs and explore options to close the gaps in population coverage and adequacy of protection of social assistance, health care, and social insurance systems of ADB developing members over the next decade.

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