FISCAL SPACE FOR HEALTH IN GUATEMALA

Prospects for Increasing Public Resources for Health
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## CONTENTS

Acronyms ........................................................................................................................................ iv

Executive Summary .......................................................................................................................... v

1. Introduction: Defining Fiscal Space for Health ........................................................................... 1

2. Context: Financing Guatemala’s Health Sector ........................................................................... 2
   Who Pays for Health Services? .................................................................................................. 2
   How Much Money is Needed for Health? ................................................................................... 3

3. Study Motivation and Objectives ............................................................................................... 4

4. Methodology: Projecting Fiscal Space for Health ....................................................................... 5
   Scenario-Based Projections ......................................................................................................... 5

5. Sources of Public Financing for Health in Guatemala ............................................................... 8
   Macro-fiscal Context .................................................................................................................. 9
   National Prioritization of Health ............................................................................................... 10
   Health Financing Agents .......................................................................................................... 11

6. Mobilizing New Public Resources for Health in Guatemala ..................................................... 17
   MSPAS Resource Envelope ....................................................................................................... 17
   A Broader View of Public Health Financing ............................................................................ 20
   Municipal Resource Envelope for Health .................................................................................. 21
   Summary of Results .................................................................................................................. 22

7. Recommendations and Discussion ............................................................................................. 23
   Policy and Research Recommendations ................................................................................... 23
   Limitations and Conclusion ....................................................................................................... 25

References ...................................................................................................................................... 26

Annex A. Projections of Macroeconomic Growth .......................................................................... 28

Annex B. Projections of IGSS Affiliates and Contributions ............................................................. 29

Annex C. Logic Model for Resource Envelope Estimation ............................................................... 30

Annex D. Resource Envelope Projections (Millions, Quetzals) ...................................................... 31
LIST OF FIGURES AND TABLES

Figure 1. Share of Health Financing by Agent (% of Total Health Expenditure) ....................... 2
Figure 2. Share of MSPAS Budget Request Met................................................................. 3
Table 1. Health Expenditure in Central America................................................................. 4
Table 2: Revenue Generation, by Scenario ........................................................................... 6
Table 3: Allocation to Health by Level of Government and Scenario ............................... 6
Table 4: IGSS scenario specifications .................................................................................. 8
Figure 3. Potential and Actual Tax Revenue (% of GDP), Selected Countries ....................... 9
Figure 4. Share of Total Tax Revenue (Millions of Quetzals)............................................... 10
Figure 5. Government Health Expenditure as % of Government Expenditure, Selected
Countries (2014) ................................................................................................................. 11
Figure 6. Share of Government Health Expenditure by Agent (2013) ............................... 11
Figure 7. MSPAS Budget and Expenditure: Quetzals and Share of National Budget (2012–
2017) ..................................................................................................................................... 12
Table 5: Mandated Contributions to IGSS ............................................................................ 13
Figure 8. IGSS Budget Deficit and Unpaid Government Obligations (2012–2016) .............. 13
Table 6: IGSS Key Indicators............................................................................................... 14
Figure 9. MSPAS and IGSS Health Budgets and Expenditure (2012–2016) ....................... 15
Figure 10. Transfers to Municipalities .................................................................................. 16
Figure 11. Municipal Revenue by Source, 2012–2016 .......................................................... 16
Figure 12. Comparison of Total Government of Guatemala Resource Envelope
Projections ............................................................................................................................. 18
Figure 13. Comparison of Budgetary Prioritization of Health: MSPAS as Share of Total
Government Budget ............................................................................................................ 18
Figure 14. Comparison of Scenarios: MSPAS Resource Envelope (2016–2026) .............. 19
Table 7: MSPAS 10-Year Resource Envelope, 2017–2026.................................................... 20
Figure 15. IGSS Resource Envelope for Health, by Scenario (2017–2026) ....................... 21
Table 8: Municipal Level, 10-Year Resource Envelope for Health, 2017–2026 .................. 21
Figure 16. Total Resource Envelope for Health, Select Scenarios ...................................... 22
Figure 17. Projected Public Health Budget, Compared to Select Countries
(Int$ per capita, PPP) ............................................................................................................ 23
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMA</td>
<td>sickness, maternity, and accidents</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GGHE</td>
<td>general government health expenditure</td>
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<tr>
<td>HEP+</td>
<td>Health &amp; Education Policy Plus</td>
</tr>
<tr>
<td>IGSS</td>
<td>Guatemalan Social Security Institute</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IVS</td>
<td>disability, old-age, and life</td>
</tr>
<tr>
<td>MinFin</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>MSPAS</td>
<td>Ministry of Public Health and Social Assistance</td>
</tr>
<tr>
<td>NGO</td>
<td>nongovernment organization</td>
</tr>
<tr>
<td>OOPE</td>
<td>out-of-pocket expenditure</td>
</tr>
<tr>
<td>PAHO</td>
<td>Pan American Health Organization</td>
</tr>
<tr>
<td>PEC</td>
<td>Extension of Coverage Program</td>
</tr>
<tr>
<td>PPP</td>
<td>purchasing power parity</td>
</tr>
<tr>
<td>PvtHE</td>
<td>private health expenditure</td>
</tr>
<tr>
<td>SAT</td>
<td>Superintendencia de Administración Tributara</td>
</tr>
<tr>
<td>SCEP</td>
<td>Secretaría de Coordinación Ejecutiva de la Presidencia</td>
</tr>
<tr>
<td>THE</td>
<td>total health expenditure</td>
</tr>
<tr>
<td>US$</td>
<td>U.S. dollar</td>
</tr>
<tr>
<td>USAID</td>
<td>U.S. Agency for International Development</td>
</tr>
<tr>
<td>VAT</td>
<td>value-added tax</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Despite strong economic growth in recent years, Guatemala’s macro-fiscal situation is plagued by public revenues that are among the lowest in the world, at 11 percent of gross domestic product (GDP). Limited public resources have inhibited the Government of Guatemala’s ability to meet the health needs of the growing population and comply with its constitutional obligation to provide health services as a public good. The Ministry of Public Health and Social Assistance (MSPAS) and Ministry of Public Finance, as well as the Congressional Health Commission, have all recently aimed to address this underfunding with 5- to 10-year targets to increase the MSPAS budget. These targets vary vastly, but all represent significant increases over current funding levels. To help the Government of Guatemala achieve its targets and ensure sustainable, long-term financing for the health sector, the Health & Education Policy Plus (HEP+) project, funded by the U.S. Agency for International Development (USAID), analyzed the current sources of public financing for health and the prospects for increasing each.

Current health financing in the country is characterized by high out-of-pocket expenditure, representing more than half of current health spending. Two public institutions, MSPAS and the Guatemalan Social Security Institute (IGSS), represent an estimated 17 and 18 percent of total health financing, respectively. However, with nearly a third of the government’s budget at the central level earmarked for specific institutions and programs—and less than one percent for health—financing of public health services is highly dependent on discretionary expenditure, which made up, on average, 92 percent of the MSPAS budget between 2012 and 2016. Health accounted for, on average, less than 10 percent of the discretionary budget over the same period. IGSS, while a semi-autonomous institution funded primarily by direct and indirect enrollee contributions, relies on the government for nearly a third of its budget, owed as contributions as an employer of public sector employees and through legally mandated subsidies. However, the government has habitually failed to comply with these obligations, paying less than 10 percent of its estimated annual contribution between 2012 and 2016. The result of these factors has been a chronic and severe underfunding of the health sector in recent years.

The 2015 Guatemala Health System Assessment identified the need for “overall increases in government revenue” and “reprioritization of health within the government budget” as two key sources additional of fiscal space (Avila et al., 2015, p. 52). At the same time, both MSPAS and international organizations, including the World Bank and the World Health Organization, have emphasized the need to accompany the allocation of resources with improvements in efficiency in the use of those resources. Although this study does not look at efficiency considerations, these represent an important area of future investigation to complement the mobilization of new resources for health. This study provides an in-depth analysis of both public revenues and budget prioritization to understand realistic prospects for increasing public funds for health as one mechanism for addressing the underfunding of the health sector.

HEP+ estimates that, through gradual achievement of two primary policy goals—increasing tax revenues (as a percentage of GDP) to the regional average of 17 percent and increasing prioritization of health within the discretionary budget to 18 percent—the resource envelope for MSPAS would increase nearly five-fold over 10 years (2017–2026). Under this scenario, the resource envelope for MSPAS in 2026 would be 31.0 billion quetzals, compared to 13.2 billion in the baseline scenario. IGSS also represents a significant source of potential new resources, particularly if the Government of Guatemala begins to comply with its obligations to contribute as an employer of public sector employees and through subsidies for all enrollees. By complying with these obligations, and fully using contributions to the “Sickness, Maternity and Accidents” regime for health, IGSS could quadruple its current resource envelope for health by 2026 to 20.5
billion compared to 12.2 billion in a baseline scenario. Additionally, while municipalities represent a relatively small share of current health expenditure, increasing their share of spending on health to current national levels, coupled with increased central-level revenues, could, in 10 years, increase their annual available resources for health by nine times over current levels or five times over the baseline scenario.

While ambitious, these targets represent necessary policy goals for the Government of Guatemala. In particular, generating new public revenues are a critical step for the country to achieve not only its current health sector goals but also its long-term, multisectoral Sustainable Development Goals. Such an increase in public resources represents a shared target for all social sectors, and understanding its potential impact on health in particular can provide evidence to support necessary reform and guidance for better aligning sector-specific goals with macro-fiscal policy changes.
1. INTRODUCTION: DEFINING FISCAL SPACE FOR HEALTH

Fiscal space has been broadly defined as “the capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position” (Heller, 2006, p. 75). In health, it refers to the ability to create additional budgetary space for the health sector in a manner that is both fiscally and economically sustainable. A comprehensive understanding of fiscal space for health must take into account a variety of economic and political factors. The Pan American Health Organization identifies six principal sources of—or strategies for creating—additional fiscal space for health. These include:

1. Creation of conducive macroeconomic conditions
2. Greater prioritization of health
3. Creation of new fiscal revenues through higher taxes
4. Increased efficiency in tax collection
5. External support through grants and loans for the health sector
6. Increased efficiency in current health expenditure (PAHO, 2015)

Given the recent focus among the international donor community on domestic resource mobilization for health, and uncertainty in the future of donor financing for health in Guatemala, the Health & Education Policy Plus (HEP+) project, funded by the U.S. Agency for International Development (USAID), analyzed the potential of domestic macroeconomic conditions and fiscal policy to impact fiscal space for health. The analysis takes into account findings from the Guatemala Health System Assessment (Avila et al., 2015), which concluded that:

*Guatemala must expand fiscal space for health by assessing several options including: overall increases in government revenue, reprioritization of health within the government budget, organization and alignment of health-specific foreign aid, and increased efficiency of public institutions by implementing strategic purchasing mechanisms (p. 52).*

An analysis of potential efficiency improvements in the use of funding for health—and identification of current inefficiencies—must also be a priority for comprehensive assessment of Guatemala’s health financing system, but is not within the scope of this analysis. This report addresses the prospects for increasing fiscal space and overall government expenditure for health through public, domestic sources. There are three primary channels for the generation and execution of such funds. These include:

1. The Ministry of Public Health and Social Assistance (MSPAS) budget, financed primarily through both general and earmarked tax revenues
2. Guatemalan Social Security Institute (IGSS) expenditure on health, financed primarily through direct and indirect contributions from enrollees
3. Municipal health expenditure, financed through constitutional transfers and municipal revenues (*ingresos propios*)

The role of municipalities in health financing is particularly relevant in light of recent efforts by the Guatemalan Government to carry out decentralization reform, shifting responsibilities for planning, administration, and financing of social sectors, including health, to municipalities (SCEP, 2017). These efforts aim to better align MSPAS’ role in health service provision with its mandate to “develop health services based on the principles of deconcentration and decentralization” (Reglamento Organico Interno, Article 1) and to improve transparency, responsiveness, and citizen participation in the use of funds for health. Although increasing fiscal space for health at the national level will be a central
component of effective health financing reform, strengthening the role of municipalities in health service provision can both improve efficiency in the use of funds, as well as unlock new sources of health financing.

2. CONTEXT: FINANCING GUATEMALA’S HEALTH SECTOR

Who Pays for Health Services?

Over the last two decades, Guatemala’s health sector has been plagued by chronic under-funding. Although the Constitution of Guatemala—adopted in 1986—defines health as a “bien público” (public good) (Article 95) and “derecho fundamental de ser humano” (fundamental human right) (Article 93) of all Guatemalans, public institutions have struggled to guarantee access to equitable and high-quality health services. The 1997 Health Code and the creation of the Ministry of Public Health and Social Assistance in 1999 further establish the legal responsibility of the state to provide comprehensive healthcare to the population. Nevertheless, MSPAS has lacked the resources and capacity to comprehensively, efficiently, and equitably ensure universal access to health.

According to the 2013 National Health Accounts (MSPAS, 2015), total MSPAS expenditure represented only 17 percent of total health expenditure in 2013. IGSS, represented an additional 18 percent of total health expenditure in 2013, while more than half of total health expenditure was in the form of out-of-pocket payments (see Figure 1). Both MSPAS and IGSS operate their own facilities at all levels of care. However, these facilities—particularly those operated by IGSS and specialized hospitals—are heavily concentrated in urban areas, primarily Guatemala City. Private services are similarly concentrated in urban areas, where clients (with better-paying jobs or private insurance benefits) have the ability to pay out-of-pocket (Avila et. al., 2015).

![Figure 1. Share of Health Financing by Agent (% of Total Health Expenditure)](source: National Health Accounts (MSPAS, 2015)

In contrast, rural areas often face limited or no access to basic health services. Between 1996 and 2014, MSPAS contracted nongovernment organizations (NGOs) to provide health services in rural parts of the country through the Extension of Coverage Program (PEC). By 2012, PEC provided services to an estimated 28 percent of the population (4.3 million people) and 54 percent of the rural population.
(Pena, 2013). However, in 2013, concerns about corruption and lack of transparency in the contracting of NGOs, as well as about the quality of care provided by these NGOs, led the government to pass new legislation prohibiting the outsourcing of health care services (Avila et al., 2015). Although the legislation called for PEC to be phased out by 2016 in order to give MSPAS adequate time to strengthen rural provision of health services and ensure continuity of coverage, most contracts were cancelled abruptly in 2014, leaving much of the country with limited access to basic health care (Avila et al., 2015; Juárez, 2014). In addition to a lack of coverage of basic health care in rural areas, Guatemala’s health sector faces substantial budget gaps for key program areas (see Figure 2).

**Figure 2. Share of MSPAS Budget Request Met**

![Budget allocation and request comparison](source)

**How Much Money is Needed for Health?**

As Guatemala continues to face challenges in guaranteeing the fundamental right of its citizens to health, one of the most pressing needs is to understand how much it will cost to ensure that a sufficient range and quality of services are available to all. MSPAS does not have a defined package of services that it provides, and there is no comprehensive costing of the health sector. These will be important inputs to establishing sufficient and sustainable financing for health in the country, but go beyond the scope of this analysis.

 Nonetheless, it is apparent that current levels of funding fall well short of what is needed to meet the needs of the population. As of 2016, the approved budget for MSPAS was 6,389 million quetzals, 32 percent below the requested amount of 9,339 million (see Figure 2). With more than 75 percent of Guatemalans lacking access to other forms of pre-payment for health services (i.e., IGSS or private insurance), the MSPAS budget per affiliated individual is approximately US$60. Although this is higher than the World Health Organization’s (WHO’s) 2012 recommended expenditure per person of

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1 Requested amounts are based on the MSPAS Plan Operativo Anual.
2 We define MSPAS affiliates as those who rely on MSPAS as their primary form of prepayment of health services, i.e., those who are not covered by IGSS or private health insurance.
US$44 for “basic, life-saving services” it is likely insufficient to provide the “comprehensive” healthcare services MSPAS is mandated to provide. By comparison, IGSS total health expenditure per affiliate is more than US$225.

When compared other Central American countries, Guatemala demonstrates low public financing of health services overall. In 2014, Guatemala was fifth among seven countries in the region in terms of total health expenditure per capita, at $US473 (purchasing power parity [PPP]). However, general government expenditure on health amounted to just US$178 (PPP) per capita, and 38 percent of total health expenditure—both last in the region. Conversely, out-of-pocket expenditure as a percentage of total health expenditure (52%) was the highest in the region (see Table 1).

### Table 1. Health Expenditure in Central America

<table>
<thead>
<tr>
<th>Country</th>
<th>THE per capita*</th>
<th>THE as % of GDP</th>
<th>GGHE per capita*</th>
<th>GGHE as % of GDP</th>
<th>GGHE as % of THE</th>
<th>PvtHE as % of THE</th>
<th>OOPE as % of THE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guatemala (rank)</td>
<td>473 (5)</td>
<td>6.2 (6)</td>
<td>178 (7)</td>
<td>2.3 (7)</td>
<td>38 (7)</td>
<td>62 (7)</td>
<td>52 (7)</td>
</tr>
<tr>
<td>Belize</td>
<td>489</td>
<td>5.8</td>
<td>328</td>
<td>3.9</td>
<td>67</td>
<td>33</td>
<td>23</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1,389</td>
<td>9.3</td>
<td>1,010</td>
<td>6.8</td>
<td>73</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>El Salvador</td>
<td>565</td>
<td>6.8</td>
<td>373</td>
<td>4.5</td>
<td>66</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>Honduras</td>
<td>400</td>
<td>8.7</td>
<td>202</td>
<td>4.4</td>
<td>51</td>
<td>49</td>
<td>43</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>445</td>
<td>9.0</td>
<td>251</td>
<td>5.1</td>
<td>56</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>Panama</td>
<td>1,677</td>
<td>8.0</td>
<td>1,228</td>
<td>5.9</td>
<td>73</td>
<td>27</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Global Health Expenditure Database (WHO), 2014

*US$ (PPP)

THE = total health expenditure, GDP = gross domestic product, GGHE = general government health expenditure, PvtHE = Private health expenditure, OOPE = out-of-pocket expenditure

### 3. Study Motivation and Objectives

As MSPAS, and the Government of Guatemala in general, aims to make health a greater national priority, there is a need to understand the extent to which resources can be mobilized for health. MSPAS, the Ministry of Finance (MinFin), and the Congressional Health Commission have all recently released competing proposals, or projections, for the health budget. However, a variety of factors affect the economic and fiscal viability of these proposals.

In late 2016, MSPAS advocated successfully for a significant increase in its institutional budget for 2017 to 6,897 million quetzals (MinFin, 2017a), and the MSPAS multiannual plan (2018–2022) calls for a further increase to 25,466 million quetzals by 2022—an average annual increase of 32 percent. At the same time, MinFin, considering current trends in economic growth, revenue generation, and budget allocation and execution, recently released budget ceilings for all government ministries, secretaries, and agencies for the period of 2017–2022. The projections reflect their targets for economic and fiscal performance. Under these projections, the budget for MSPAS reaches only 12,291 million quetzals by 2022—less than half of the MSPAS budget recommendation. Lastly, a Universal

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3 In this instance, the “health budget” refers to the share of the Presupuesto General de Ingresos y Egresos del Estado (national budget) allocated to MSPAS.

4 MinFin projections include debt financing, most notably from a US$100 million World Bank loan approved in early 2017 and expected to be released in 2018.

5 MinFin projections do not include budgetary ceilings for autonomous or decentralized government institutions, including IGSS or municipalities.
Coverage and Financing for Comprehensive Healthcare Law currently being proposed by the Congressional Health Commission calls for an increase in the MSPAS budget by 0.25 percent of gross domestic product (GDP) annually over 10 years until it reaches 3.5 percent of GDP (Congreso, 2014). At present, such a figure would represent nearly a third of the entire government budget.

These ambitious and competing proposals highlight the need to better understand realistic prospects for new fiscal space for health. To that end, this analysis aims to answer the following key questions:

1. Considering macroeconomic and fiscal constraints, how much new fiscal space for health can feasibly be created within the government’s budget, and what will be the effects of specific policy and fiscal targets for revenue generation and prioritization of health?
2. To what extent can decentralized and semi-autonomous institutions increase fiscal space for health?

4. **Methodology: Projecting Fiscal Space for Health**

To understand where and how much new fiscal space can be created for health, HEP+ undertook a detailed analysis of the three primary sources of public health expenditure—MSPAS, IGSS, and municipalities. For each, we first examined revenue sources and trends, earmarks and constitutional obligations that reduce flexibility in the allocation of funds, and allocations to health. To analyze the prospects for creating additional space within each of these “sources” of health financing, we then developed sets of projections—or scenarios—based on macroeconomic trends, fiscal and tax policies, and political priorities. This scenario-based model covered the period of 2017–2026. For each year we calculated a “resource envelope” (i.e., the amount of money available for the health sector) for MSPAS, IGSS, and municipalities. The following sections present the specific methodology for this analysis.

**Scenario-Based Projections**

**MSPAS and municipalities**

For MSPAS and municipalities, HEP+ developed scenarios in two stages. The first set of scenarios analyzed the impact of increases in revenue generation for the overall resource envelope for the government at the central level. These scenarios take into account the tax composition, estimating the shares of total revenue generated by specific taxes (at the central level) with a percentage allocated for transfer to municipalities (from value-added tax and taxes on vehicles, petroleum, and property). The second set of scenarios calculated resource envelopes for MSPAS and municipalities, based on four factors:

1. Macroeconomic conditions (i.e., GDP growth and debt balance)
2. Public revenue generation (as a percentage of GDP)
3. Revenue composition and earmarks (i.e., the share of revenue accounted for by specific taxes and the share of those taxes designated for specific purposes or programs)
4. Prioritization of health within the discretionary (i.e., non-earmarked) budget

**Government revenue projections**

For revenue generation, we consider three scenarios at the central level and their impact, through constitutional and other earmarked transfers, at the municipal level (see Table 2). A baseline for revenue generation is estimated using International Monetary Fund (IMF) estimates of public (central) revenue as a percentage of GDP for 2016–2021 and projected linearly by HEP+ for 2022–

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6 HEP+’s assumptions for macroeconomic conditions are presented in Annex A.
2026 (IMF, 2016). This is compared to two scenarios for revenue increases. In an ambitious, “high” scenario, central government revenues increase to the regional average—17 percent of GDP—by 2026.7 In a more feasible, “moderate” scenario, revenues increase to 13 percent of GDP by 2026. This reflects an increase in tax effort8 to the regional average of 55 percent (Fenochietto and Pessino, 2013).

Given the focus of this analysis on domestic fiscal space for health, and the relatively small share of grants within overall government revenue, grants are assumed to remain relatively constant as a share of GDP at approximately 0.05 percent. Loans are also assumed to remain constant as a share of GDP at 2.0 percent, based on MinFin projections.9 Municipalities’ “own-source revenue” (i.e., those collected through local taxes or financial activities rather than from national-level transfers) were also projected based on their share of GDP, using a 5-year moving average (2012–2016).10

### Table 2: Revenue Generation, by Scenario

<table>
<thead>
<tr>
<th>Level of government</th>
<th>Scenario</th>
<th>Tax revenue as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Baseline</td>
<td>11.2% (based on IMF projections)</td>
</tr>
<tr>
<td></td>
<td>High revenue increase</td>
<td>17% by 2026</td>
</tr>
<tr>
<td></td>
<td>Moderate revenue increase</td>
<td>13% by 2026</td>
</tr>
</tbody>
</table>

#### Government resource envelopes for health

The second set of scenarios estimate the potential impact of increasing prioritization of health within the discretionary government budgets at the central and municipal level (see Table 3).11 These scenarios consider earmarks for sectors or programs that reduce flexibility in budget allocation at the central level. Here, three scenarios are developed each at the central and municipal level.

### Table 3: Allocation to Health by Level of Government and Scenario

<table>
<thead>
<tr>
<th>Level of government</th>
<th>Scenario</th>
<th>Allocation to health as a % of discretionary budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Baseline</td>
<td>~11% (5-year moving average)</td>
</tr>
<tr>
<td></td>
<td>High prioritization of health</td>
<td>18% by 2026</td>
</tr>
<tr>
<td></td>
<td>Moderate prioritization of health</td>
<td>15% by 2026</td>
</tr>
<tr>
<td>Municipal</td>
<td>Baseline</td>
<td>~2% (5-year moving average)</td>
</tr>
<tr>
<td></td>
<td>High prioritization of health</td>
<td>8% by 2026</td>
</tr>
<tr>
<td></td>
<td>Moderate prioritization of health</td>
<td>5% by 2026</td>
</tr>
</tbody>
</table>

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7 The regional median is calculated based on figures for tax revenue as a percentage of GDP calculated by Fenochietto and Pessino (2013). For the purposes of this analysis, based on data availability, we have considered the region to include Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama.

8 “Tax effort” refers to the percentage of potential tax revenue actually collected.

9 Although MinFin projects slight fluctuations in deficit financing between 1.5% and 2.6% of GDP from 2017 to 2019, we assume a constant level of borrowing as a share of GDP of 2.0%, based on longer-term projections (2020–2022). MinFin’s projections differ from those of the IMF, which assumes loans will remain constant at 1.6% of GDP over a similar period (2017–2021).

10 Municipal revenue is projected to remain at approximately 0.7% of GDP over the period of 2017–2026.

11 We define the “discretionary budget” as the portion of the total national-level budget that is not designated for specific institutions or purposes either in the form of tax earmarks or constitutional transfers. Debt service is considered to be part of the discretionary budget.
At the central level, a baseline scenario is estimated using a five-year moving average and historical budget data from 2012–2016 (MinFin, 2013-2017a). In this case, the share of the discretionary budget allocated to health remains at approximately 11 percent (2017–2026). A “high prioritization” scenario increases discretionary funds for health to 18 percent by 2026, assuming a continued upward trend in the budget prioritization of health, in line with 2012–2016 growth. A “moderate prioritization” scenario assumes a target, by 2026, of 15 percent for discretionary spending for health.

For municipal health budgets, a baseline scenario—projected using a 5-year moving average (2012–2016) (World Bank, 2017)—is compared to high and moderate scenarios, where the total amount budgeted by municipalities for direct provision of health services is assumed to increase to 8 percent and 5 percent, respectively, by 2026 (see Table 4). By allocating 8 percent of their budgets for health, municipalities would be roughly in line with average 2012–2016 health expenditure at the national level.

At both the central and municipal levels our estimates assume that future health budgets are equal to the total resource envelope available for MSPAS and municipal governments. This contrasts with historical analysis (2012–2016), where the total value allotted to health in the Presupuesto General de Ingresos y Egresos del Estado (national budget) is considered to be the total resource envelope. However, budgets have habitually overestimated total revenue (including loans). As a result, in some scenarios our estimates demonstrate a “decline” in the resource envelope—both for health and overall—between the baseline year (2016) and the first year of the projection (2017).12

IGSS

For IGSS, HEP+ also examined fiscal space in two stages, looking at how government compliance with its financial obligations and improved alignment of expenditures with contributions by regime would impact the resource envelope for health.13

IGSS revenue projections

In the first stage, we developed two scenarios for projecting the total IGSS resource envelope. The first assumes full compliance with mandated contributions by employers, employees, and the Government of Guatemala (see Table 4). In this case, contributory revenues were based on the estimated number of contributors and estimated average salary of contributors (see Annex B). The number of contributors was estimated through 2026 based on population projections and historical figures of the percentage of the population contributing to IGSS for the period of 2002–2015 (IGSS, 2013–2016). Average annual salaries were similarly estimated based on historical figures for the period of 2002–2015 as well as projected GDP per capita growth.14 The number of contributors and average salary were then multiplied by the mandatory contribution rate of 18.5 percent.15

---

12 In 2016, the total government (central) budget was 71,347 million quetzals, while actual revenue totaled 57,413 million and new loans were estimated at 10,875 million—a total resource envelope of 68,288 million quetzals. For 2017, we project revenues in the baseline scenario to be 62,469 million quetzals and the value of new loans to be 11,358 million for a resultant resource envelope of 73,827 million quetzals.

13 Contributions to IGSS are designated in set proportions to two regimens for “sickness, maternity, and accidents” (EMA) and “disability, old-age, and life” (IVS).

14 Growth in GDP per capita was calculated using GDP projections developed previously for the analysis and population projections based on historical figures from 2002–2015.

15 The total contribution is divided between employer (10.87%), employee (4.83%), and the Government of Guatemala (3.00%).
Table 4: IGSS scenario specifications

<table>
<thead>
<tr>
<th></th>
<th>Scenario</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue from the Government of Guatemala (% of government obligations)</td>
<td>Baseline</td>
<td>~6% (5-year moving average)</td>
</tr>
<tr>
<td></td>
<td>Alternate</td>
<td>100% of government obligations</td>
</tr>
<tr>
<td>Spending on health (% of total spending)</td>
<td>Baseline</td>
<td>~47% (5-year moving average)</td>
</tr>
<tr>
<td></td>
<td>Alternate</td>
<td>~53% (sickness, maternity, and accidents [EMA] contribution)</td>
</tr>
</tbody>
</table>

The second scenario assumes that contributions by the government will remain at their current level, falling well short of obligations. In this case, contributions from employees and private employers were calculated using the same methodology as above, while government contributions were projected as a percentage of the total government obligation (as calculated in the scenario above) based on a five-year moving average. This is referred to as the “baseline” scenario in our results. Both scenarios project non-contributory revenues based on actual revenues from 2012 to 2016.

**IGSS resource envelope for health**

For the second stage, HEP+ developed two scenarios for projecting the IGSS budget for health services. In the first, the share of IGSS’s budget spent on health services is projected based on historical figures from 2012–2016 (IGSS, 2012–2017) and fluctuates only slightly, between 51 and 46 percent over the period of 2017–2026. In the second scenario, beginning in 2017, the IGSS budget for health is set as equal to total contributions to the sickness, maternity, and accidents (EMA) regime.

**Summary of scenarios**

In total, the analysis yielded 108 scenarios, accounting for distinct combinations of revenue generation (central level), government contributions to IGSS, and prioritization of health by all three primary domestic health financing agents: the Government of Guatemala (MSPAS), municipalities, and IGSS. The model for estimating fiscal space from these sources is summarized in Annex C. A summary of results from selected scenarios is presented later in this report.

5. **Sources of Public Financing for Health in Guatemala**

As discussed earlier in this report, public expenditure on health in Guatemala comes from two primary sources at the central level: MSPAS, financed through general government revenues, and IGSS, financed primarily through direct and indirect contributions by enrollees. Municipalities represent a

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16 Both scenarios assumes full compliance by employers and employees with their mandated contributions.
17 The government contribution rate (as a percentage the total government obligation) was estimated at approximately 6% annually.
18 When government contributions did not meet the full obligation, they were allocated to the EMA and IVS regimes proportionally in accordance with the estimated required contribution by regime.
third source of health expenditure, as they oversee the allocation and execution of both funds transferred from the central level and their own-source revenues. The National Health Accounts estimated that in 2013 these three agents represent 97 percent of government health expenditure in Guatemala. The following section examines each in detail.

**Macro-fiscal Context**

As discussed previously in this report, Guatemala faces low public financing for health—both in per capita terms and as a share of GDP—primarily driven by low public revenues. According to Fenochietto and Pessino (2013), Guatemala was last in the region—and among the lowest globally—in terms of both “tax capacity” (i.e., potential tax revenues as a percentage of GDP) and “tax effort” (i.e., the percentage of potential revenues actually collected). As a result, Guatemala’s actual tax revenues, are estimated at less than 11 percent of GDP, compared to a regional average of 17 percent (see Figure 3).

![Figure 3. Potential and Actual Tax Revenue (% of GDP), Selected Countries](source: Fenochietto and Pessino, 2013)

General revenue collected by the Government of Guatemala consist primarily of tax revenue, which represents, on average, 94 percent of total government revenue, and non-tax and capital revenue, which represents the remaining 6 percent. Between 2012 and 2016 tax revenues collected by the government increased from 42,820 million quetzals to 54,104 million quetzals—an increase of 26 percent in nominal terms, while non-tax revenues (including capital revenues) increased 21 percent, from 2,734 million to 3,304 million quetzals. In total, the general revenues collected by the government increased from 44,861 to 57,413 million quetzals from 2012 to 2016 (MinFin, 2013–2017a).

Guatemala’s value-added tax (VAT) is the principal source of revenue for the government and represented, on average, almost half (47%) of annual tax revenue (2012–2016).\(^{19}\) Income taxes represented an additional 27 percent of tax revenue, on average, and, in total, revenue from these two

---

\(^{19}\) Guatemala’s national VAT was established by law in 1992 and last modified to 12% in 2002.
taxes amounted roughly to three-quarters of total government tax revenue (SAT, 2017b) (see Figure 4).

Of the Government of Guatemala’s total revenue (excluding loans), nearly a third are earmarked for specific institutions or programs. Financial sources of revenue (i.e., loans) represented a significant amount of total revenue, but declined slightly from 21.9 percent in 2012 to 18.9 percent in 2016. The value of new loans also declined as a percentage of GDP from 2.5 to 2.1 percent during that period (MinFin, 2017a).

Grants represented an extremely small share of the government’s total resource envelope (including domestic revenue, grants, and loans) at the central level—declining from 0.9 percent to 0.2 percent between 2012 and 2016 (0.5 percent on average). All external donations (i.e., Official Development Assistance)—which include both on-budget (i.e., grants) and off-budget assistance—were equal to 5.7 percent of the total government resource envelope, on average, between 2012 and 2015. However, these also demonstrated a significant decline over the same period from 4,834 million quetzals to 1,918 million quetzals—from the equivalent of 8.4 percent of the government’s resource envelope to 3.1 percent. Furthermore, over 2012–2015, only 7.3 percent of such funds were allocated to the health sector. In total, the value of funds allocated to health from Official Development Assistance (including both on- and off-budget assistance) was equivalent to, on average, just 4.7 percent of the government’s health budget.

**National Prioritization of Health**

Total government health expenditure in Guatemala accounts for an estimated 18 percent of total government expenditure (including by decentralized and semi-autonomous institutions) in 2014 (WHO, 2017), suggesting that prioritization of health expenditure within the overall national budget in Guatemala is relatively high compared to other countries in the region (see Figure 5). However, less than 50 percent of government funds for health are allocated through the Presupuesto General de

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20 Income taxes are levied on both personal income and corporate income. Personal income up to 30,000 quetzals monthly is taxed at a rate of 5%. Above 30,000 quetzals is taxed at a marginal rate of 7% plus a fixed 1,500 quetzals. Individuals are allowed a personal deduction of 48,000 quetzals annually. Corporations can opt to pay the same rate of 5–7% on gross revenue, or 25% of net profits (Deloitte, 2017; SAT, 2017a).
Ingresos y Egresos del Estado, either to MSPAS and other line ministries (see Figure 6). The majority of funds for health are allocated and executed by decentralized and semi-autonomous institutions, primarily IGSS and municipalities.

**Figure 5. Government Health Expenditure as % of Government Expenditure, Selected Countries (2014)**

![Chart showing government health expenditure as % of government expenditure for selected countries in 2014.]

Source: Global Health Expenditure Database (WHO, 2017)

**Figure 6. Share of Government Health Expenditure by Agent (2013)**

![Chart showing share of government health expenditure by agent in 2013.]

Source: National Health Accounts (MSPAS, 2015)

**Health Financing Agents**

**MSPAS**

Between 2012 and 2016 there has been increasing prioritization of health within the national budget.\(^{21}\) MSPAS’s budget, as a share of the overall budget, grew from 7.3 percent in 2012 to 9.3 percent by 2015, leveling off to 9 percent in 2016 (MinFin, 2017a). Much of this increase has come in the form of mid-year modifications to the health budget, which increased in total value by an average of 15 percent between 2014 and 2016 (see Figure 7). In nominal terms, the final MSPAS budget grew from 4,412 million quetzals in 2012 to 6,389 million in 2016—an increase of 45 percent.

\(^{21}\) The national budget refers to the Presupuesto General de Ingresos y Egresos del Estado. It includes transfers to semi-autonomous or decentralized institutions, including IGSS and municipalities, but does not include revenue collected directly by these institutions or what transfers are used for (known as the “finality” of expenditure).
The primary source of these funds was general tax revenue. MSPAS’s share of the discretionary budget grew from 9.0 percent in 2012 to 11.3 percent in 2016. Over the same period, earmarked sources of funds accounted for 7.5 percent of MSPAS’s total resources, on average. These earmarks, which represent less than 1 percent of total government revenue, are assigned from two specific “sin taxes.”

The Law on Tobacco and Tobacco Products (Decree Number 61-77) specifies that 100 percent of taxes on tobacco products be allocated to the health sector budget. Although revenue under the tax increased from 312 million to 405 million quetzals between 2012 and 2014, it has declined over the past two years and, in 2016, totaled just 365 million quetzals. The Law on the Tax on the Distribution of Distilled Alcoholic Beverages, Beer, and Other Fermented Beverages (Decree Number 21-04) specifies that 15 percent of taxes collected from the distribution of alcoholic beverages must be allocated for reproductive health, an amount which increased from 44 million quetzals in 2012 to 60 million quetzals in 2016 (SAT, 2017b).

Execution of MSPAS’s budget has averaged 90 percent between 2012 and 2016—in line with national budget execution of 91 percent—with total expenditure increasing from 4,227 million to 5,931 million quetzals over that period. As a result, MSPAS’s budget and expenditure have represented similar shares of total government budget and expenditure, respectively (see Figure 7).

Figure 7. MSPAS Budget and Expenditure: Quetzals and Share of National Budget (2012–2017)

![Figure 7. MSPAS Budget and Expenditure: Quetzals and Share of National Budget (2012–2017)](image)

Source: MinFin, 2017a

**IGSS**

IGSS revenues come primarily from direct and indirect contributions from enrollees, which represents, on average, 77 percent of total IGSS revenue between 2012 and 2016. The leasing of property accounts for an additional 19 percent of IGSS revenue.

By law (IGSS, 2003), formal sector employees contribute 4.83 percent of their salaries to IGSS, while their employers contribute an additional 10.67 percent (see Table 5). The Government of Guatemala is obligated to contribute as an employer as well as contribute a subsidy of 3 percent of the total value of

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22 Sin taxes refer to specific taxes on consumption goods which may be hazardous to public health or the health of the consumer.
salaries of contributors, both from the private and public sector. The Organic Law of IGSS states that these contributions should be financed by a specific tax established for that purpose. However, such a tax was never established, and, partially as a result, historically, the government has failed to comply fully with these obligations.

<table>
<thead>
<tr>
<th>Regime</th>
<th>Employer</th>
<th>Employee</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sickness, maternity, and accidents</td>
<td>7.00%</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Disability, old-age, and survivors (life)</td>
<td>3.67%</td>
<td>1.83%</td>
<td>25% of benefits paid</td>
</tr>
</tbody>
</table>

As of 2016, the government has reportedly accumulated a debt of more than 33,000 million quetzals to IGSS, primarily from unpaid subsidies (Pocasangre, 2016). Private employers and municipalities have also accumulated debts of approximately 1,000 million and 600 million quetzals, respectively. From 2012 to 2015, the Government of Guatemala paid to IGSS, on average, just 7 percent of its estimated obligation annually (World Bank, 2017; IGSS, 2012–2017).

Total government obligations account for approximately one-third (33%) of estimated contributory revenue. The government’s failure to comply with these obligations, therefore, has been the primary cause of a budget deficit of approximately 18,102 million quetzals, or 27 percent, from 2012 to 2016 (see Figure 8). Although the government’s contributions were projected to grow over the period of 2012–2016 from 2,783 million to 4,617 million, the actual amount paid peaked at just 369 million quetzals in 2016.

Despite these regular deficits, the IGSS budget grew from 10,370 million quetzals to 16,320 million over the same period (see Table 6), and further, to 16,953 million in 2017. Contributory revenue, including from the government, was projected to grow by 51 percent (2012–2016) and account for 74%

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23 The Government of Guatemala is obligated to pay 25% of the costs of benefits paid out under the disability, old-age, and life (IVS) regime.

In 2015, more than 13% of IGSS enrollees were public employees (IGSS, 2013–2016). The Organic Law of IGSS states that the government must only provide the subsidy of 3% of salaries of contributors to IGSS when the IGSS enrolls the entire population “if necessary.” However, IGSS maintains that this contribution is necessary to further expand coverage.

24 IGSS budgets assume full compliance of GoG with its financial obligations.
percent of the total revenue increase over that period. From 2012 to 2016, the share of the IGSS budget allocated to health services remained relatively constant, between 31 and 33 percent of the total budget. In absolute terms, the budgeted amount for health services increased from 3,266 million to 5,355 million quetzals, an increase of 64 percent.

### Table 6: IGSS Key Indicators

<table>
<thead>
<tr>
<th>Enrollment (2015)</th>
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<tbody>
<tr>
<td>Contributing Affiliates</td>
</tr>
<tr>
<td>Beneficiaries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenue and Expenditure (2016), in Quetzals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
</tr>
<tr>
<td>Revenue</td>
</tr>
<tr>
<td>Expenditure (total)</td>
</tr>
<tr>
<td>Health</td>
</tr>
<tr>
<td>Social Security</td>
</tr>
<tr>
<td>Administration</td>
</tr>
</tbody>
</table>

Source: MinFin, 2017a

However, health expenditure by IGSS has fluctuated significantly over the same period, between a high of 5,173 million quetzals in 2012 and a low of 3,670 million quetzals in 2015. IGSS health expenditure, therefore, averaged 51 percent of total expenditure and 59 percent of contribution revenue—below the estimated 64 percent of contributions mandated for the EMA (i.e., health) regime. Differences in the collection rate across the EMA and “disability, old-age, and life” (IVS) regimes may contribute to this, although non-compliance by the government does not appear to be a major factor as annual estimated government obligations account for an equal share—approximately one-third, on average—of estimated required contributions for both EMA and IVS.

Given these trends, IGSS’s health budget as a share of the overall health budget averaged 41 percent from 2012 to 2015, peaking at 45 percent in 2016. As a share of total health expenditure, however, IGSS’s contribution dropped sharply from 54 percent in 2012, averaging 44 percent from 2013 to 2016. When compared to MSPAS, this represents a smaller share of both health budget and expenditure (see Figure 9).

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25 Mandated figure is based on average estimated required contributions for 2012–2016.
26 The “overall health budget” refers to the sum budget for health by MSPAS, IGSS, and municipalities.
27 There is a discrepancy between the National Health Accounts’ estimates of MSPAS and IGSS expenditure presented in Figure 6 and those calculated by HEP+ presented in Figure 9. For 2013, MSPAS and IGSS reported health expenditures of 4,904 million and 4,101 million quetzals, respectively, compared to 4,410 million and 4,718 million estimated by the National Health Accounts.
Municipalities

The current management of public resources in Guatemala is partially decentralized, with municipalities playing a significant role in the execution of public funds. By constitutional mandate, 10 percent of “ordinary revenues” must be transferred to municipal governments (Congreso, 1993).28 Ninety percent of these funds are to be used for education, preventive health, infrastructure, and public services that improve the quality of life for inhabitants of the municipality, with 10 percent for the operational costs of the municipality. Municipalities receive an additional transfer equal to 12.5 percent of the VAT, of which 75 percent must be used for investment (capital) expenditure, and 25 percent for recurrent expenditure, including operational costs, benefits, and pensions (Congreso, 1992a).29 Specific percentages of the tax on petroleum (6–7%) (Congreso, 1992b),30 vehicle registration (50%) (Congreso, 1994), and property (75%) are also allocated to municipalities (Congreso, 1998).

The total value of transfers to municipalities increased from 5,546 million quetzals in 2012 to 6,621 million in 2016. In 2016, funds from the VAT represented 48 percent of these transfers, while constitutional transfers represented 45 percent (MinFin, 2017a (see Figure 10).

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28 This transfer is known as the situado constitucional and defined in Article 257 of the Constitution. Ordinary revenues are defined as those without specific allocations to other decentralization institutions, as established by law. Ordinary revenues accounted for approximately 49% of total revenue for the Government of Guatemala in 2016.

29 Funds from the VAT allocated to municipalities, as well as those allocated to district development councils (8.3%) and the Fund for Peace (8.3%), are known collectively as the “IVA Paz.”

30 An excise tax of 4.60 quetzals per gallon on gasoline (4.70 for superior), of which 0.10 is earmarked for the Municipality of Guatemala and 0.20 for all other municipalities. These funds are designated for the improvement of transportation infrastructure and services.
The legal, and in some cases, constitutional status of these transfers has been successful in ensuring compliance with them. In fact, the total amount transferred to municipalities regularly exceeds the legally stipulated amounts by an average of 7 percent annually between 2012 and 2016. This corresponds to regular overestimates of annual revenue by, on average, nearly 10 percent over the same period.

Municipalities also have broad authority to collect their own revenue from a variety of sources. From 2012 to 2016, “own-source” revenue (i.e., those collected by municipalities) increased from 3,009 million to 3,364 million quetzals, but declined slightly as a share of GDP (from 0.76 percent to 0.63 percent) and of total municipal revenue (from 35.2 percent to 33.7 percent). In total, municipal revenue grew from 8,556 million quetzals in 2012 to 9,985 million quetzals in 2016 (see Figure 11).

However, municipal budgets greatly exceeded annual revenue from 2012 to 2016, by an average of 54 percent. In 2016, total municipal budgets amounted to 13,469 million quetzals (MinFin, 2017b). This marked a sharp 12 percent decrease from 2015. Municipal expenditure has also surpassed revenue between 2012 and 2015, by an average of 18 percent. Like budgets, expenditure fell sharply in 2016,
from 11,289 million quetzals to 9,155 quetzals, a decline of 19 percent. While limited revenue appears to have significantly constrained execution of municipal budgets, municipalities have also incurred a significant debt to the central government in recent years.31

The total amount budgeted by municipalities for direct expenditure on the provision of health services in 2016 was only 267 million quetzals, or 2 percent of the total budget for municipalities. Municipal expenditure on health was even lower—only 150 million or 1.6 percent of total municipal expenditure. This is in line with findings from a 2015 study conducted by the USAID-funded NutriSalud project, which found that in 30 municipalities sampled, expenditure on strengthening the local network of health services accounted for, on average, just 1.1 percent of total municipal expenditure. An additional 8.7 percent, on average, of municipal expenditure was designated for the provision of clean water and sanitation. A broader definition of “indirect” expenditure in health—including creation and improvement of sanitary public spaces, emergency preparedness and response, support for community health promotion networks, and improved rural roads and transportation networks to improve access to health services—adopted by the same study, increased total direct and indirect expenditure on health to an average of 20.5 percent (NutriSalud, 2015).

In light of a renewed focus on decentralization and strengthening the role of municipalities in the planning and execution of funds, policymakers should consider how municipalities can allocate more funding—and how much more—for health. Municipalities are legally mandated to participate in health service provision and may allocate both own-source and transfer revenue to health (HEP+, 2017a). Although capacity to plan and execute health programs varies significantly across municipalities, this conducive legal framework, pared with ongoing efforts for capacity development, paves the way for greater municipal investment in health. In conjunction with MSPAS and IGSS, municipalities must increase contributions to health financing if Guatemala is to achieve its overall health sector goals.

The following section considers the fiscal space for each of these three sources—MSPAS, IGSS, and municipalities—and provides a comprehensive vision of the fiscal and policy targets necessary to achieve Guatemala’s goals for public financing of health.

6. Mobilizing New Public Resources for Health in Guatemala

MSPAS Resource Envelope

Comparison of Government of Guatemala Revenue Projections

In most of our scenarios, the general government health budget—allocated to and executed by MSPAS—remains the primary source of fiscal space for health. Given projected trends in economic growth, public revenue, and borrowing, the total resource envelope for the Government of Guatemala grows to approximately 110 billion quetzals by 2022 and 152 billion by 2026 in our baseline scenario. (see Figure 12). Our moderate projections are closely aligned with those of MinFin and demonstrate an increase in the total government resource envelope to 118 billion quetzals by 2022 and 173 billion by

31 HEP+ projections presented in the next section of this report assume that municipal expenditure is equal to total revenue, therefore incurring no new debt.
In our ambitious scenario, the total resource envelope reaches 138 billion quetzals and 219 billion, by 2022 and 2026, respectively.

Our baseline scenario projects that MSPAS’s share of the overall government budget will continue to increase modestly, from just under 9 percent to nearing 11 percent by 2026 (see Figure 13). Our moderate scenario is again more closely aligned with MinFin’s budget ceiling, reaching 10.4 percent of the overall budget by 2022 (compared to 10.3 percent projected by MinFin) and nearing 12 percent by 2026. Our ambitious scenario sees the MSPAS budget approach 14 percent in the same time frame.

Combining these two stages of analysis, MinFin’s budget ceiling remains closely aligned with our moderate scenarios. That is to say, achieving it will require increasing revenue to approximately 12.1 percent of GDP and increasing budgetary prioritization of health (within the discretionary budget) to

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32 MinFin projects an increase in total revenue of 119 billion quetzals by 2022. This represents total tax revenue (excluding non-tax and capital revenue) of 11.3% of GDP, compared to 11.4% in HEP’s moderate scenario.
approximately 13.3 percent of the total government budget by 2022. These align with longer-term (i.e., 10-year) targets to reach 13 percent and 15 percent for revenue generation and budget prioritization, respectively.

**Comparison of MSPAS Budget Projections**

Comparing these scenarios to those proposed by MSPAS and the Congressional Health Commission (see Figure 14), we further find that those targets are unlikely to be achievable within the proposed time frame. MSPAS’s budget recommendation nearly triples in four years, from 8,697 million quetzals in 2018 to 25,466 in 2022. Within our range of revenue generation scenarios, this would represent between 18 and 23 percent of the total resource envelope for the Government of Guatemala in 2022.

![Figure 14. Comparison of Scenarios: MSPAS Resource Envelope (2016–2026)](image)

We estimate the Congressional Health Commission target for MSPAS’s budget—proposed in the Universal Health Coverage Law as benchmarked allocations for health as a percentage of GDP—to be lower in 2022 than MSPAS own recommendation, but still well above those established by MinFin and HEP+’s scenarios. Under this proposal, by 2022, MSPAS budget would climb to 2.5 percent of GDP and amount to 20,897 million quetzals, further climbing to 3.5 percent and 40,332 million by 2026. This would represent between 18 and 27 percent of the total estimated government resource envelope.

However, the likely inability of Guatemala to reach these targets should not indicate that the prospects for fiscal space for MSPAS is bleak, but rather that the current targets are overly ambitious. Even in our baseline scenario, in which revenue generation and budgetary prioritization of health plateau at current levels, the MSPAS resource envelope over the next 10 years (2017–2026) is estimated at 94,575 million quetzals (see Table 7), and reaches 13,220 million quetzals annually by 2026—double its current annual budget.
Table 7: MSPAS 10-Year Resource Envelope, 2017–2026

<table>
<thead>
<tr>
<th>Revenue (as % of GDP)</th>
<th>11%</th>
<th>15%</th>
<th>18%</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>124,820,100,253</td>
<td>148,204,748,767</td>
<td>165,512,982,378</td>
</tr>
<tr>
<td>13%</td>
<td>102,869,141,646</td>
<td>122,583,932,545</td>
<td>137,145,696,566</td>
</tr>
<tr>
<td>11.2%</td>
<td>94,574,678,183</td>
<td>112,717,638,148</td>
<td>126,099,273,668</td>
</tr>
</tbody>
</table>

Prioritization of Health (as % of discretionary budget)

Under more ambitious scenarios, the total 10-year resource envelope reaches as high as 165,513 million quetzals—30,972 million annually by 2026.

**A Broader View of Public Health Financing**

Our additional results highlight the importance of taking a broader view of the public health sector that includes not just MSPAS but also the role of IGSS and municipalities in financing health services.

**IGSS Resource Envelope for Health**

IGSS, which historically has been a comparable source of health financing to MSPAS, will continue to be a significant source of funds for health. HEP+ projects that without any significant changes to how IGSS collects or allocates funds, its resource envelope for health will grow from 4,893 million quetzals in 2016 to 12,182 million in 2026 (see Figure 15). The most significant factor in further increasing IGSS resources for health would be for the government to begin to comply with its obligations to contribute as an employer and to provide a subsidy to all enrollees. Doing so alone would increase IGSS resources for health by more than 40 percent annually. Additionally, if IGSS were to better align its budget for health services with the share of contributions mandated for the EMA regime, it would increase the resource envelope for health by approximately 13 percent annually. When these two scenarios are combined, the total annual value of IGSS’s resources for health increases to an estimated 20,470 million quetzals in 2026.
Municipal Resource Envelope for Health

The potential role of municipalities in health financing is not nearly as significant as that of MSPAS or IGSS, but nonetheless represents an important complementary source of funds. Although municipalities spent just 150 million quetzals on health in 2016, clarifying the mandate of municipalities to participate in the financing and provision of health services, and accordingly increasing the prioritization of health within municipal budgets to align with historical national-level trends, could create a resource envelope for health of around 2 billion annually at the municipal level by 2026. In total, municipalities could mobilize as much as 11 billion quetzals in funds for health over the next 10 years (2017–2026) (see Table 8).

Table 8: Municipal Level, 10-Year Resource Envelope for Health, 2017–2026

<table>
<thead>
<tr>
<th>Revenue (Central) as % of GDP</th>
<th>Baseline</th>
<th>Health Expenditure Aligned with EMA Contributions</th>
<th>Government Compliance with Obligations</th>
<th>Government Compliance + EMA Alignment</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>3,936,969,331</td>
<td>7,457,117,597</td>
<td>11,110,329,014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14%</td>
<td>3,463,354,154</td>
<td>6,498,598,172</td>
<td>9,645,391,114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.2%</td>
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<td>6,104,281,349</td>
<td>9,038,241,689</td>
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<tr>
<td>Prioritization of Health (as % of Discretionary Budget)</td>
<td>2.2%</td>
<td>5%</td>
<td>8%</td>
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The municipal resource envelope for health in 2026 varies between 1,776 million and 2,372 million quetzals based on revenue generation at the national level. In our moderate revenue generation scenario, the resource envelope is 1,961 million.
Summary of Results

In total, these three sources could mobilize as much as 54 billion quetzals annually for health by 2026 (see Figure 16). This is more than twice as much as we estimate will be available for health (26 billion) in our baseline scenario, highlighting the importance of deliberate fiscal and policy reform to increase public funds for health.

Figure 16. Total Resource Envelope for Health, Select Scenarios

Considering current trends in population growth and inflation, baseline projections will increase real per capita public funds for health by 28 percent, from 695 million quetzals to 891 million in 2026. This figure is nearly double under the most ambitious scenario—1,852 million quetzals, or an increase of 167 percent from 2016. Such an increase would bring Guatemala’s per capita public expenditure on health in line with that of El Salvador and Belize (see Figure 17), two neighboring countries with roughly comparable levels of economic development, as measured by GDP per capita. However, it is important to remember that the availability of public funds for health overall—or even per capita—is only one consideration for ensuring that health services are made available in a comprehensive and equitable manner, as guaranteed in the constitution. The following, and final, section of this report discusses additional considerations as they relate to the creation of fiscal space for health.

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34 The scenarios make the following assumptions in regards to the IGSS resource envelope for health: “Moderate targets” and “high prioritization only” assume no increase in the contribution rate of the government to IGSS (i.e., no increase in compliance with obligations) but do assume alignment of the budget for health services with EMA contributions. “High revenue only” assumes full compliance of the government with its obligations to IGSS, but no change in the share of resources allocated to health services.
7. Recommendations and Discussion

Creating sufficient fiscal space for health is a critical step in developing an effective and sustainable health financing system. However, critical questions remain around where these resources will come from, how they are used, and whom they will benefit.

Policy and Research Recommendations

Fiscal and Tax Reform

Generating additional revenue is a critical step in increasing fiscal space for health. However, Guatemala’s fiscal dependence on the VAT and low revenue from income taxes—both proportionally and in absolute terms—have created a highly regressive tax system (Cabrera and Schneider, 2015). Further efforts to increase compliance with the VAT are likely to disproportionately target informal businesses and workers. To promote financial protection and equitable access to health, future efforts to increase government revenue will need to be more progressive and avoid overburdening the most financially vulnerable and those at risk of catastrophic expenditure.

The creation of new, earmarked taxes may be one way to both create a designated revenue stream for health and ensure that new taxes are progressive in nature. The 2016 health sector reform proposal identified potential new taxes—with specific designation for health—on sugary drinks, drivers’ licenses, firearms, and munitions, as well as new earmarks for health within the VAT and taxes on mineral royalties (Vice Presidencia de la Republica and MSPAS, 2016). These could be further considered, both for their economic and political viability. Without new earmarks for health, and with current earmarks representing only a small share of total government funding for health, the sector must remain a political priority to ensure it receives a steady, and increasing share of discretionary funding.

Municipalities may also be a focus for future efforts to strengthen tax administration. Despite broad authority to collect taxes, own-source revenue is extremely low in all but a few municipalities.
Increased collection of property taxes, which are set nationally but administered by municipalities, is one source, while the revenue potential of new taxes on municipal services, including water, sanitation, or electricity may be further explored.

**Decentralization and Fiscal Space**

Guatemala is already aiming to increase the role and capacity of municipalities in the management and execution of funds for health. Historically, although municipalities receive significant “devolved” funding (i.e., transfers from the national level), the responsibilities to execute use of these funds are unclear. A pervasive but mistaken belief among municipal governments is that these funds cannot be used for recurrent expenditure, which has limited municipal contributions to the direct provision of health services (HEP+, 2017b). To address this, the recently launched National Decentralization Plan and National Decentralization Agenda, as well as HEP+-supported municipal pilot programs, aim to strengthen and better define the role of municipalities in the provision of key social services, beginning with health, and improve coordination with MSPAS and other national regulatory bodies to align municipal investments with national priorities.

**Improving Efficiency**

There is a consensus among leadership in government and the health sector that current funding for health is inefficiently used and poorly aligned with the National Development Plan (K’atun 2032). Better aligning funding allocations with priority and high-impact programs will require strengthening capacity for planning, executing, and tracking resources at all levels of health administration, including municipalities. Furthermore, additional analysis is needed to understand the potential cost savings of achieving greater efficiency in commodity procurement and the administration of the health sector.

By demonstrating that funding for health is done efficiently, maximizes impact, improves health outcomes, and is aligned with the country’s long-term development goals, health sector institutions—particularly MSPAS—will be better positioned to advocate for additional budget allocations for health.

Another source of potential efficiency gains is through greater coordination between MSPAS and IGSS (and potentially municipal health facilities). Currently MSPAS does not receive reimbursement from IGSS for services rendered to its enrollees. Furthermore, many IGSS beneficiaries live in “bedroom communities” outside of urban centers where they work and where IGSS facilities are concentrated. This increases utilization and overcrowding of MSPAS facilities. Better coordination between MSPAS and IGSS, including cost-sharing of infrastructure and human resources and a reimbursement mechanism between the institutions could lead to the more cost-effective use of existing resources.

**Equity in Healthcare Access and Services**

Although Guatemala’s current tax-funded health system provides one manner of financial protection for the cost of healthcare, Guatemala’s high rate of out-of-pocket expenditure—at more than 50 percent of total health expenditure—suggests that there is a need to improve pooling resources for health. IGSS and private insurers provide coverage to a limited portion of the population (i.e., formal sector employees) and consideration should be given as to how to expand IGSS in particular to cover the informal sector and the poor. There may also be a role for smaller and geographically based schemes including municipal, community-based, micro, and mass market insurance schemes. Guatemala should aim to eventually move toward reducing fragmentation of schemes and a single, national risk pool to improve efficiency in purchasing and service delivery and increase cross-subsidization of poorer and more vulnerable populations (i.e., those most at risk of facing catastrophic expenditures for health). However, in the short term, these smaller and geographically based schemes present possibilities for better pooling and more efficiently using household funds currently spent on health.
Relatedly, IGSS’s heavy reliance on the government’s contributions highlights the danger of IGSS “crowding out” other government funding for health. In other words, particularly if the government were to comply with these obligations, it may do so at the expense of funding for MSPAS. In this sense, the government’s transfer to IGSS represents subsidization of health services for predominantly wealthy, formal sector workers who are enrolled in IGSS, potentially at the expense of the poor and informal workers, who primarily benefit from MSPAS. Future consideration of the role and sustainability of IGSS is needed to ensure that this “reverse subsidization” does not create less equitable access to health services.

Limitations and Conclusion

This analysis has explored in-depth the sources of public, domestic funding for health and its potential growth over the next 10 years. Although we have included in our analysis estimates of external financing for health in the government budget—including through grants and loans—these represent a small percentage of total funds for health and we have not looked in-depth at their potential for creating additional fiscal space (i.e., above baseline projections). Analysis of potential new sources of external financing—such as a US$100 million (~750,000,000 quetzals) loan recently approved by the World Bank and Global Financing Facility (pending approval by Guatemalan authorities) to combat chronic malnutrition (Banco Mundial, 2017)—would need to consider the political, fiscal, and sustainability implications of additional utilization of these sources.

Furthermore, and as previously stated in this report, Guatemala must ensure that any new funding is used effectively and that health financing agents, including MSPAS and municipalities, have the capacity to execute such funds in a manner aligned with national priorities and objectives. This analysis does not explore how greater efficiencies can be achieved, which is recommended as an area of future research. However, ongoing efforts by HEP+ and its partners aim to improve the capacity of financial administrators and decision-makers at all levels to better plan and execute funds for health. Greater prioritization of health service provision at all levels of government will require further efforts to establish what is an appropriate level of financing for health and to align national funding priorities with the country’s long-term, multi-sectoral development goals laid out in the K’atun 2032 and the Sustainable Development Goals. Most importantly, deliberate fiscal and policy reform will be necessary to increase the overall envelope of public resources and avoid crowding out of competing national priorities.
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ANNEX A. PROJECTIONS OF MACROECONOMIC GROWTH

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<tbody>
<tr>
<td>GDP (billions of quetzals)</td>
<td>567.9</td>
<td>612.3</td>
<td>661.5</td>
<td>714.6</td>
<td>772.7</td>
<td>835.9</td>
<td>904.8</td>
<td>980.1</td>
<td>1,062.4</td>
<td>1,152.3</td>
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<td>GDP growth (real) (annual %)</td>
<td>3.7</td>
<td>3.8</td>
<td>3.8</td>
<td>3.9</td>
<td>4.0</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
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<tr>
<td>Inflation (GDP deflator) (annual %)</td>
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<td>3.9</td>
<td>4.1</td>
<td>4.0</td>
<td>4.0</td>
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<td>4.0</td>
<td>4.0</td>
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<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
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### Annex B. Projections of IGSS Affiliates and Contributions

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<td>17.6</td>
<td>17.9</td>
<td>18.2</td>
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<td>GDP (billions of quetzals)</td>
<td>567.9</td>
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<td>772.7</td>
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<td>904.8</td>
<td>980.1</td>
<td>1,062.4</td>
<td>1,152.3</td>
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<td>GDP per capita (quetzals)</td>
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<td>35,493</td>
<td>37,662</td>
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<td>48,090</td>
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<td>1,356,698</td>
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<td>% of population</td>
<td>7.71%</td>
<td>7.72%</td>
<td>7.72%</td>
<td>7.73%</td>
<td>7.73%</td>
<td>7.74%</td>
<td>7.74%</td>
<td>7.75%</td>
<td>7.76%</td>
<td>7.76%</td>
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<tr>
<td>% of population</td>
<td>18.77%</td>
<td>18.88%</td>
<td>18.99%</td>
<td>19.10%</td>
<td>19.21%</td>
<td>19.31%</td>
<td>19.42%</td>
<td>19.53%</td>
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<td>Average contributor salary (annual, quetzals)</td>
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<td>68,308</td>
<td>73,017</td>
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<td>83,555</td>
<td>89,472</td>
<td>95,873</td>
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ANNEX C. LOGIC MODEL FOR RESOURCE ENVELOPE ESTIMATION

Public Revenue
GDP
x
Public revenue as % of GDP

Government Contributions
Required contribution
x
% compliance

Municipal Allocation to Health Services
Municipal resource envelope
x
% allocated for health

MSPAS Budget Allocation
Government resource envelope
x
% of government budget allocated for health

Municipal Revenue
Government of Guatemala
Resource Envelope

Municipal Transfers
Government resource envelope
x
Taxes/revenues with designation for municipalities
x
% of specific taxes/revenues designated for municipalities

IGSS Allocation to Health Services
IGSS resource envelope
x
% allocated for health

IGSS Health Resource Envelope

MSPAS Resource Envelope

Municipal Health Resource Envelope

Non-contributory Revenues

Private Sector and Employee Contributions

Contributory Revenue
Contributing enrollees
x
Average salary
x
% mandated contribution
(employer + employee)

Government of Guatemala
Resource Envelope

Municipal Own-Source Revenue
GDP
x
Municipal revenue as % of GDP

Municipal Resource Envelope

Municipal Transfers
Government resource envelope
x
Taxes/revenues with designation for municipalities
x
% of specific taxes/revenues designated for municipalities

Municipal Own-Source Revenue
GDP
x
Municipal revenue as % of GDP

Municipal Resource Envelope

Municipal Allocation to Health Services
Municipal resource envelope
x
% allocated for health

Municipal Health Resource Envelope

MSPAS Resource Envelope

IGSS Resource Envelope

IGSS Allocation to Health Services
IGSS resource envelope
x
% allocated for health

IGSS Health Resource Envelope

MSPAS Budget Allocation
Government resource envelope
x
% of government budget allocated for health

Municipal Allocation to Health Services
Municipal resource envelope
x
% allocated for health

Municipal Health Resource Envelope

MSPAS Resource Envelope

IGSS Resource Envelope

MSPAS Budget Allocation
Government resource envelope
x
% of government budget allocated for health

Municipal Allocation to Health Services
Municipal resource envelope
x
% allocated for health

Municipal Health Resource Envelope

MSPAS Resource Envelope

IGSS Resource Envelope

MSPAS Budget Allocation
Government resource envelope
x
% of government budget allocated for health

Municipal Allocation to Health Services
Municipal resource envelope
x
% allocated for health

Municipal Health Resource Envelope

MSPAS Resource Envelope

IGSS Resource Envelope

MSPAS Budget Allocation
Government resource envelope
x
% of government budget allocated for health

Municipal Allocation to Health Services
Municipal resource envelope
x
% allocated for health

Municipal Health Resource Envelope

MSPAS Resource Envelope

IGSS Resource Envelope

MSPAS Budget Allocation
Government resource envelope
x
% of government budget allocated for health

Municipal Allocation to Health Services
Municipal resource envelope
x
% allocated for health

Municipal Health Resource Envelope

MSPAS Resource Envelope
### ANNEX D. RESOURCE ENVELOPE PROJECTIONS (MILLIONS, QUETZALS)

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<td>6,473</td>
<td>6,782</td>
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<td>9,576</td>
<td>10,341</td>
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<td>Moderate*</td>
<td>6,389</td>
<td>6,502</td>
<td>7,390</td>
<td>8,403</td>
<td>9,540</td>
<td>10,825</td>
<td>12,273</td>
<td>13,906</td>
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<td>6,731</td>
<td>8,107</td>
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<tr>
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<td>31,912</td>
<td>36,375</td>
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<td>53,815</td>
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*The "moderate" MSPAS scenario is that most closely aligned with MinFin budget ceiling projections.*
For more information, contact:

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