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GAVI AND THE GLOBAL FUND'S ADOPTION OF ELIGIBILITY, CO-FINANCING, AND TRANSITION POLICIES: AN ASSESSMENT OF THE NEED FOR AN IMPROVED DOMESTIC-FINANCING TRANSITION FRAMEWORK

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ABSTRACT

GAVI AND THE GLOBAL FUND'S ADOPTION OF ELIGIBILITY, CO-FINANCING, AND TRANSITION POLICIES: AN ASSESSMENT OF THE NEED FOR AN IMPROVED DOMESTIC-FINANCING TRANSITION FRAMEWORK

By: Everett A. Jackson

Gavi and Global Fund are among multiple global development-focused organizations encouraging processes promoting "country ownership." They stand out from the other organizations in that they are the only organizations to have introduced policies outlining a clear framework for this process as it relates to the finance of health programs and initiatives. Gavi and the Global Fund have introduced policies determining countries' eligibility to receive funds, co-financing requirements for Gavi and Global fund supported programs, and transition processes to progressively scale countries' domestic finance of those programs to 100%. These policies are uniformly applied to all eligible countries and are driven by a country's GNI per capita and income level as determined by the World Bank.

These policies have introduced a clear and structured framework guiding a country's transition to being fully self-financed, and within this framework 14 countries in the 2010s successfully transitioned programs from Gavi support. As a new, diverse, and large cohort of countries are projected to reach eligibility thresholds in the 2020s, researchers have expressed concerns that this framework will be difficult to successfully apply in the future. A major concern is the new cohort are extremely diverse in their political, economic, and demographic features, and that the driving indicator for the transition process, GNI per capita, is insufficiently sensitive to these differences.

The purpose of this paper is to better understand the historical processes leading to the development of these policies, examine how the policies operate, and assess how two distinct countries, Georgia and Nigeria, faced the transition process of these policies at the time of their introduction. This was done by a thorough review of the literature, the synthesis of the findings into clear summary tables and graphics, and the creation of two case studies to gain a clearer perspective of the policy mechanisms in real settings.

The results of the critical analysis reflect changes in how countries and global health initiatives are likely to interact in future with the onus of financing transferring to countries. Economic shocks, like those experienced in the era of Covid-19, will undoubtedly interrupt the transition to domestic financing for all countries, and particularly those countries whose economic as well as health systems are fragile. The upheaval caused by the Covid-19 pandemic demonstrates vividly why relying on one economic indicator, GNI per capita, as a threshold indicator for domestic financing, is shortsighted and may be a barrier to the desirable goal of genuine partnerships in the global community.

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CHAPTER 1 INTRODUCTION

1.1 Gavi and Global Fund's Changing Policies on Finance

The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) along with the Gavi Vaccine Alliance (Gavi) are major public-private partnerships in the Global Health field. Since their founding, they have contributed a collective 56 billion USD into health development in low and middle-income countries (Gavi Disbursements, 2019) (Global Fund Disbursements, 2019). Many countries rely on their grant disbursements to advance their own health programs and priorities. The grants allow countries with insufficient domestic funds to improve vaccination coverage initiatives and to implement programs controlling HIV/AIDS, tuberculosis, and malaria.

Gavi was founded in 2000, and currently states that its mission is "to save children's lives and protect people's health by increasing equitable use of vaccines in lower income countries." Its decisions are made by their governing body, which is the Gavi Vaccine Alliance Board(*Board composition*, n.d.). This board consists of 28 seats, with the World Health Organization, The United Nations Children's Fund, the World Bank, and the Bill & Melinda Gates Foundation holding permanent seats. The Global Fund was founded in 2002, and its mission is to mobilize the world's funds in ending "AIDS, tuberculosis, and malaria as epidemics." Its decisions are also made by a governing board of 20 voting members representing private sector donors, country governments, and non-governmental organizations (*Members*, n.d.).

In the past decade, the governing boards of both Gavi and the Global Fund have implemented similar policies determining which countries are eligible to receive their financial support, how countries transition out of that support to move toward self-

financing of health programs, as well as what the receiving countries' financial contributions are throughout the transition process. The impetus for the introduction of these policies are widely believed to be the decrease in relative donor funding and the need for increased funding for development as governments expand their development goals (Dieleman et al., 2016). The principles underpinning these policies can be traced back to the shift in philosophy of global public health interventions beginning in the late 1990's (Keijzer & Black, 2020). Whereas development assistance up to that point had depended on conditionalities, there was a shift toward seeing countries and their governments as the primary vehicles for their own development, and that they should be the owners of the process (Savedoff, 2019).

Due to the scale and scope at which these two global health partnerships operate and fund health programs in low and middle-income countries (LMICS), it is important to understand how beneficiary countries interact with Gavi and the Global Fund in light of these policies. It is also important to understand if and how these global health partnerships influence the public health decisions made. Policy changes in financing within Gavi and the Global Fund can ultimately be the difference of tens or hundreds of millions of health programming dollars being available to a country's government. Moving forward in the year 2020 and the new decade, many countries are projected to move from being eligible to receive support from Gavi and the Global Fund to transitioning out of support based on their GNI per capita passing a middle-income threshold (Silverman, 2018).

1.2 Research Question

As countries have begun to transition out of GPPP support, and as other countries have already transitioned to self-financing, there have been papers published examining the success of these transitions. These analyses have sought to describe the transition process, examine the success of the transition, and identify challenges that threaten a successful transition process. In addition, there is a shifting view that GNI per capita is an insufficient metric for determining a country's readiness to transition, and that other emerging factors need to be incorporated into a standardized, formal analysis determining readiness (Dybul, 2017). This paper seeks to analyze the eligibility, transition, and co-finance policies of Gavi and Global Fund, and to critically examine how their structure has informed the transition processes of beneficiary countries. How do countries that are different in their economic, demographic, and political development navigate the same transition and co-financing policies? Are the same trends of successful development seen in the first cohort of graduating countries being recapitulated in this new cohort of graduating countries? And, if not, what are the emerging challenges?

CHAPTER 2: BACKGROUND & CONTEXT

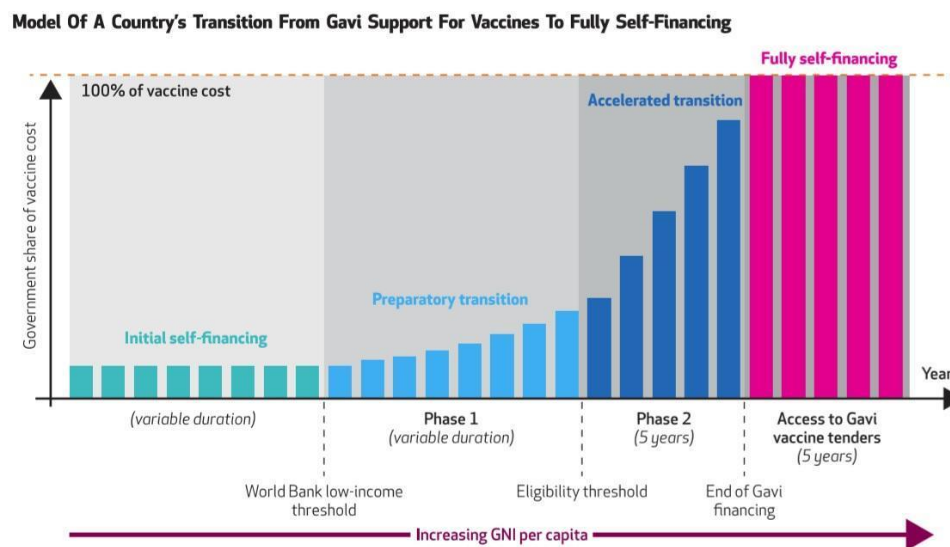
2.1 The Gavi Vaccine Alliance

2.1.1 Gavi's Eligibility and Transition Policy

The current Gavi Eligibility and Transition Policy (GETP), as of the year 2020, is the 3.0 version that was signed and made effective by the Gavi Alliance Board in June of 2018 (Gavi, 2018). The purpose of the Eligibility and Transition Policy is "to set out the criteria…that determine which countries are eligible, and when, to apply for and receive

different forms of Gavi support as they transition along a continuum of economic development to the point that all Gavi support ends." Gavi states two principles guiding this policy- that its support "focuses on lower-income countries," and that its support is "time-limited and directly linked to the governments' ability to pay for its vaccines, as measured by Gross National Income (GNI) per capita"(Gavi Eligibility and Transition Policy, 2018). Gavi visually displays this time-limited support on its Co-Financing Reports on each country using the image found in Figure 1.

Figure 1. *Gavi's visual representation of their transition model.*



Eligibility is based on a GNI per capita threshold, which the GETP currently places at US $1,580. This amount is revised periodically and at the discretion of the Board. All countries that fall below this threshold are acknowledged by Gavi as being eligible to apply for and receive GAVI funds. As the GNI per capita of a country passes the threshold it is still eligible for Gavi funds, but will begin to be phased out of Gavi support. This process is outlined in the Transition Procedures determined by Section 7 of the policy. The GETP sets forth the standards by which a country is ranked into their Phase system that designates a country as being a Low income, Phase 1, Phase 2, or

Phase 3 country. This phase corresponds to a transition designation to be followed, which ultimately will be informed by the Co-financing Policy.

Based on its own criteria and policy, Gavi reported that it recognized 58 countries as eligible to apply for new vaccine support in the year 2019 (Eligibility for Gavi Support, 2019).

2.1.2 Gavi's Co-financing Policy

The current Gavi Co-financing Policy (GCFP), as of the year 2020, is the 2.0 version that was signed by the Gavi Alliance Board in June of 2015 and made effective in January of 2016. The purpose of the Co-financing Policy is ultimately "to increase country financing of Gavi supported Vaccines in order to facilitate the transition out of Gavi support." In section 3 of this policy, Gavi states four principles guiding this policy. These principles, explained in section 3 of the policy, essentially state that "all countries shall contribute to the cost of new vaccines introduced...with Gavi support" and determine the amount at which countries will make their contribution to total vaccine cost.

Section 5 of this policy sets the rates at which countries must co-finance their routine vaccines based on their country status definition. Countries defined as Low-Income face a flat contribution of 20¢ per dose. Phase I and II countries begin to use calculated fractions to determine their contribution and to bring them to finance 100 percent of their vaccine costs. At this point, Phase III countries fully finance their vaccine programs and will, for a time, still benefit from having their vaccines provided at the Gavi negotiated price instead of market price. Section 6 outlines how countries are

expected to finance campaign vaccines, which will not be described in depth in this paper.

77 countries have received Gavi support in some form since its founding, with 71 of these countries having a Co-financing Report that is maintained by Gavi. Some of the countries that lack a Co-Financing Report, like China, transitioned before the implementation of the Co-Financing policy. Other countries that were both eligible to receive Gavi support and subject to the Co-Financing Policy, such as Albania, Angola, Bosnia & Herzegovina, and Ukraine, simply had no report. Cuba was omitted for lack of adequate data, though it is shown by Gavi to be a Fully Self-Financing country.

Table 1. The number of countries receiving Gavi support based on their Transition Policy Designation.

Transition Policy Designation	Number of Countries Within Designation
Initial self-financing	33
Preparatory transition	15
Accelerated transition	9
Fully self-financing	14*
Total	**71**

Source: *Data is based on Gavi's country specific Co-Financing Reports found on their website's Country Hub data explorer.*

* *Gavi states on its website's "Transitioning out of Gavi support" page that Cuba and Angola have also transitioned, bringing this number to 16. They have been omitted from this table, however, due to the countries' lack of a Gavi Co-Financing Report or otherwise missing data despite transitioning under the GCFP.*

2.1.3 Significance of the Policies and Examination of Context

Together, Gavi's policies create a framework (as seen in Table 2) in which Gavi can uniformly establish which countries are eligible to receive funding for their vaccine programs, what the recipient country's financial contribution to those vaccine programs should be, and when countries can expect to transition out of Gavi support. The criteria are based solely on the economic development of a country over time with GNI per capita used as the sole indicator, and the policies do not outline ways to consider burden or need outside of these economic parameters. As a country further develops its economy, the expectation is that the country should be able to finance an increasingly larger portion of their vaccine programs until, ultimately, they are able to independently finance those programs without aid from Gavi. Since the initial first version implementation of these policies in 2011, 13 countries that have been subject to these policies have successfully transitioned to being Fully Self Financing as seen in Table 3. Gavi currently breaks its existence into four phases that describe its different strategic periods. Phase I (2000-2005)[1], Phase II (2006-2010)[2], Phase III (2011-2015)[3], and Phase IV (2016-2020)[4]. Since the initial implementation of these policies, Gavi has seen fourteen countries transition to "Fully Self Financing" status.

[1] Gavi Strategy Phase I
[2] Gavi Strategy Phase II
[3] Gavi Strategy Phase III
[4] Gavi Strategy Phase III

Table 2. *A summary of Gavi's Eligibility, Transition, and Co-financing policies.*

Country Status Definition	Eligibility Policy Criteria	Transition Policy Designation	Co-financing Policy for Routine Vaccinations
Low-Income Country	**GNI per capita** ≤ World Bank low-income threshold	Initial Self Financing	A flat US $0.20 per dose
Phase I Country	World Bank low-income threshold ≤ **3 year average GNI per capita** ≤ $1580	Preparatory Transition	Year 1 = Starting Fraction***** Subsequent years = Price Fraction******
Phase II Country	**3 year average GNI per capita** > $1580	Accelerated Transition	Co-financing adjusted annually to bring country to 100% in 5 years*******
Phase III Country	**3 year average GNI per capita** > $1580 & Gavi funding terminated.	Fully Self Financing	Country funds 100% of the vaccine costs

******Starting Fraction = (The country's total financial contribution to co-financed vaccine funding)/(Total cost of all co-financed vaccines). It is calculated in year 1 when a country is defined as Phase 1.*

*******Price Fraction = Calculated by increasing the previous year's fraction by 15%.*

******* *The 5 year time frame can be adjusted depending on the needs of the country and by examining their economic growth.*

Table 3. *Countries that have successfully transitioned a vaccine program from Gavi support.*

Strategic Period	Years	Countries that Transitioned
Phase I	2000-2005	
Phase II	2006-2010	China*
Phase III	2011-2015	Bhutan, Honduras
Phase IV	2016-2020	Armenia, Azerbaijan, Bolivia, Georgia, Guyana, Indonesia, Kiribati, Moldova, Mongolia, Sri Lanka, Timor Leste

*****_China made this transition prior to the formal implementation of the GCFP._

Within this transitional finance framework, it becomes important for these countries, as well as Gavi, to understand the domestic funds that will need to be mobilized for a country to transition out of Gavi financial support and successfully supply and manage its own vaccine programs. Not all countries face the same funding necessities, and thus not all countries will face the same challenges during the transition period. A 2014 paper by Saxenian et. al. examined the then projected class of 14 "graduating" (transitioning) countries and analyzed the funds that those countries would need to raise in order to successfully transition out of Gavi support between the years 2012 to 2018. In this paper, Saxenian et. al. argued that the diversity of these countries meant that the transition period would present different challenges to each country based on their birth cohort and how many vaccines they adopted with Gavi support. A subsequent paper by Kallenberg et al. expanded on this concept and defined the various drivers and determinants of vaccine financial burden to analyze how much a government can expect to spend on vaccines, as well as the enabling factors that help a country adequately address these cost drivers. Important drivers and determinants of cost were identified as the size of the birth cohort, the number of vaccines that have been adopted

with Gavi support, and how long the countries have been in the transition phases as determined by how quickly their economies have grown (Kallenberg et al., 2016). The authors also identified key enabling factors to independently sustaining vaccine programs to be, broadly, sufficient financial resources, strong health systems, and adequate capacity to procure and process vaccines.

Understanding each country's unique combination of drivers and determinants of cost, as well as their enabling factors for successful transition, is essential to understanding what financing strategies will be most effective and how a country performs in the framework set by Gavi's policies. Yet, the policies themselves do not take these factors into consideration. Gavi's transition and co-financing policies only examine a country's economic capabilities based on its GNI per capita. Although two countries may share a similar GNI per capita, the rate at which their economies grow, their demographics, and their health structures may drastically vary. This presents challenges to the successful implementation of the GETP and GCFP.

2.2 The Global Fund to fight AIDS, Tuberculosis, and Malaria

2.2.1 The Global Fund's Eligibility Policy

The current Global Fund Eligibility Policy (GFEP), as of the year 2020, was signed and made effective by the Global Fund Board in May of 2018. The objectives of the Eligibility Policy are to identify "country disease components (e.g. HIV/AIDS, Tuberculosis and Malaria) that are eligible to receive an allocation from the Global Fund," by establishing "the criteria used to determine a disease component's eligibility"

Eligibility is based on GNI per capita and disease burden. Any country that is classified as a low or lower-middle income country using World Bank income group

thresholds is eligible to receive funds. This is determined by a country's GNI per capita, which Global Fund calculates using a 3-year average. Countries that are classified as upper middle income countries must demonstrate an adequately high disease burden of Global Fund's targeted diseases to be eligible for funds. Upper income countries are ineligible to receive monetary assistance from the Global Fund. The Global Fund maintains yearly eligibility lists based on its policy criteria that is reviewed and approved by the Board.

2.2.2 Sustainability, Transition and Co-financing Policy

The Global Fund Sustainability, Transition and Co-Financing Policy (GFSTCP) is outlined in a decision point document presented to the Global Fund Board during their 35th Board Meeting in April of 2016. The structure and function of the policy itself is described in Annex 1 of the document, and it is divided into four parts discussing Sustainability and Transition, Application Focus, Co-Financing, and policy implementation.

Part 1 on Sustainability and Transition presents Global Fund's definition of sustainability, and describes the ways by which the Global Fund will support the sustainability of a country's health programs and interventions. Some strategies stated, as seen in Figure 2, include providing transition funding, applying co-financing requirements for countries in the transition process, transition planning, and support efforts to explore innovative financing. Part 2 on Application Focus explains the requirements set for countries applying for funding. Some requirements worth highlighting include the presentation of evidence -based interventions, consideration of key and vulnerable populations that will benefit from the funding, and directing funding

toward scale-up interventions. Part 3 on Co-Financing is a key section of the policy as it defines co-financing, and sets forth the funding mechanisms that are acknowledged by Global Fund to be co-financing efforts on the part of the beneficiary country. This Part of the policy describes the two co-financing requirements: that 1) the government expenditure on health should be progressive in order to meet goals and that 2) programs should demonstrate "increasing co-financing of Global Fund supported programs over each allocation period, focused on progressively taking up key costs of national disease plans." Part 4 discusses how this policy will be executed, and under what circumstances may the secretariat allow for exceptions given individual countries' context.

Figure 2. *The Global Fund's graphic representation of Parts 1 and 2 of its Sustainability, Transition and Co-financing Policy*

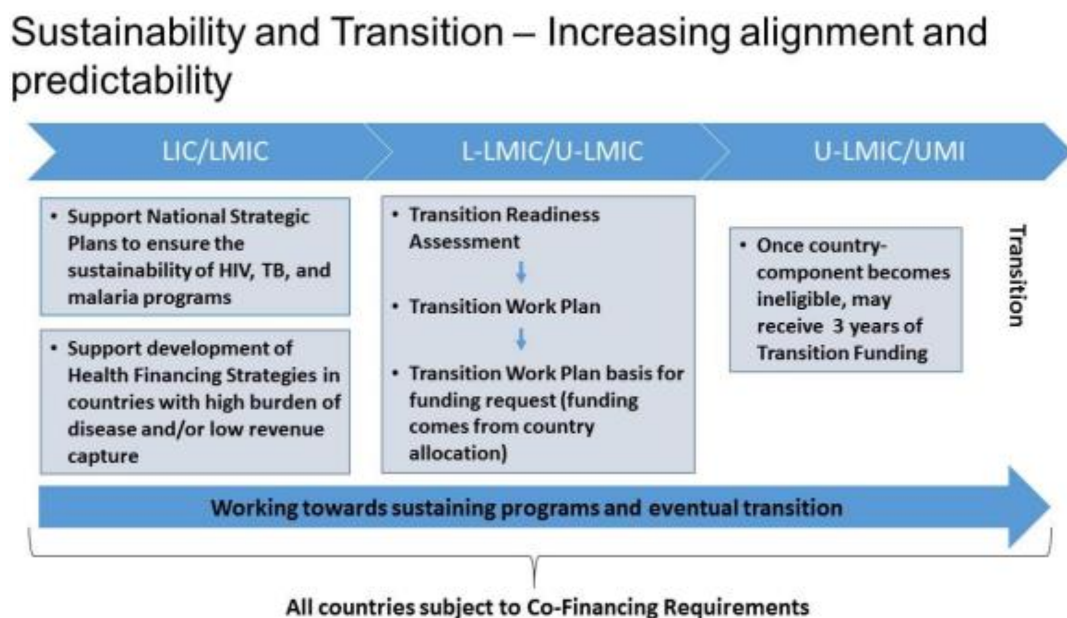
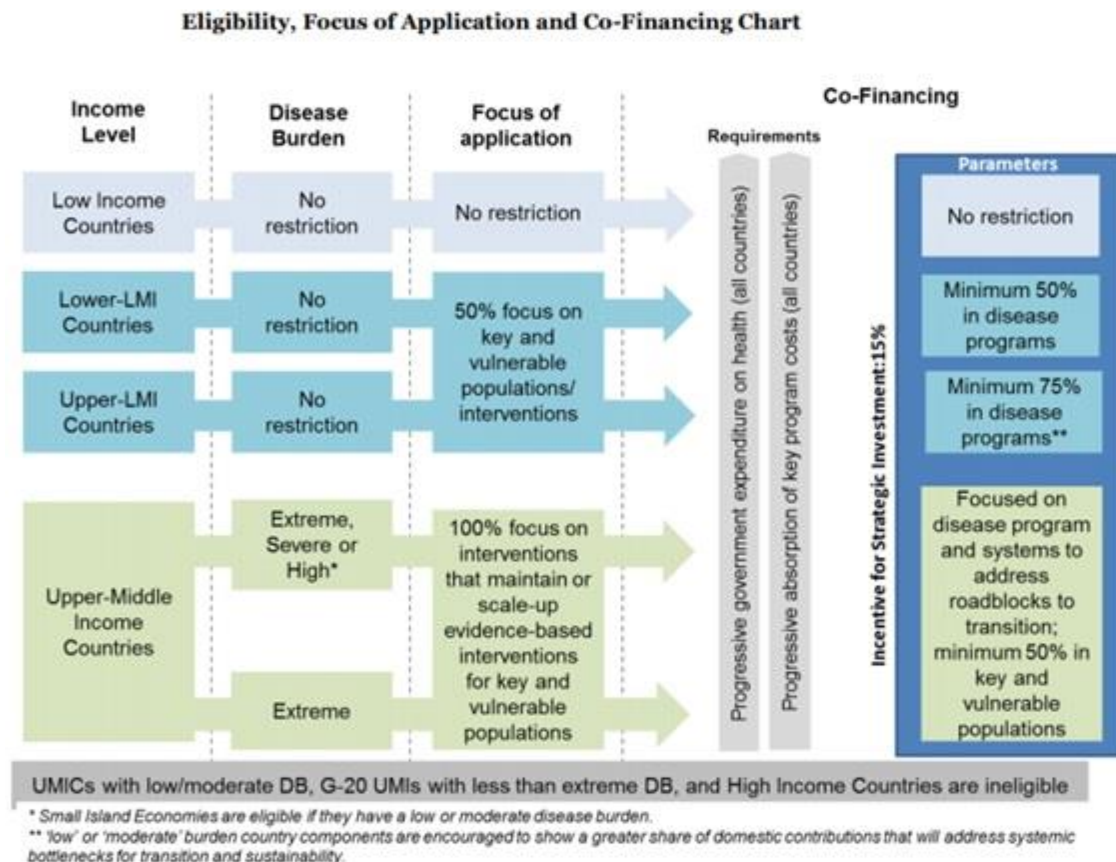


Figure 2 shows the Global Fund's graphic representation of Parts 1 and 2 of its Sustainability, Transition and Co-financing Policy document as presented in Annex 1, displaying some of its sustainability strategies and the transition process. The Global Fund uses a specific set of income designations that seem to be adapted from the World

Bank's income classifications: LIC = Low-Income Country, LMIC = Lower Middle-Income Country, L-LMIC = Lower Lower Middle Income Country, U-LMIC = Upper Lower Middle-Income Country, UMI = Upper Middle Income.

Figure 3. *The Global Fund's graphic representation of Parts 2 and 3 of the Sustainability, Transition and Co-financing Policy*



Source: Sustainability, Transition and Co-financing Policy document as presented in Annex 1, framed in conjunction with the Eligibility Policy.

As the Global Fund maintains a yearly list of countries that are eligible to receive funding, it also periodically publishes papers that show what countries are projected to transition out of Global Fund support given the parameters of the GFEP. In March of 2018, GF published its list showing what countries were projected to transition from GF

country allocations by 2025. Just one year later GF published this list again, but projecting toward 2028.

2.2.3 Significance of the Policies and Context

In contrast to Gavi's policies, the Global Fund's policies are not based solely on the economic development of a country over time. The Global Fund's policies outline a way to consider burden or need outside of economic parameters, creating a disease-based criteria that is not considered in the Gavi framework. This gives the policy the opportunity to be sensitive and reactive to complex changes within a country's disease management program structure, and can give the Global Fund the leverage necessary to provide funds beyond promulgated economic thresholds. The policies set forth by the Global Fund also allow for countries receiving funding to take increased ownership in determining the co-financing requirements as the countries transition. It may be considered, however, that while there are benefits to taking context into consideration when developing the co-financing requirements in conjunction with the beneficiary countries, there is also the cost of unpredictability as there is no standardized co-financing process tied to transition as seen in the Gavi policies.

CHAPTER 3: METHODS

3.1 Research Question

- How do countries that are different in their economic, demographic, and political development navigate the same eligibility, transition and co-financing policies?
- Are the same trends of successful development seen in the first cohort of graduating countries being recapitulated in this new cohort of graduating countries? And, if not, what are the emerging challenges?

3.1.1 Purpose

The purpose of this paper is to describe how two countries from different transition cohorts (Georgia and Nigeria) responded or continue to respond to the implementation of Gavi and Global Fund's eligibility, transition, and co-financing policies, and to subsequently assess the challenges faced during transition by both countries.

3.1.2 Rationale

Gavi and the Global Fund were chosen as the focus of this paper because they are global public-private partnerships governed and funded multilaterally through both private and public contributions. Additionally, they are large actors in the funding of global health programs and interventions. Other funders of comparable size and funding capabilities are unilateral organizations, often funded and governed by a single country's government. While these funders may also make changes to their program activities and adapt their policies according to increased emphasis on "country ownership," they are outside the scope of this research question.

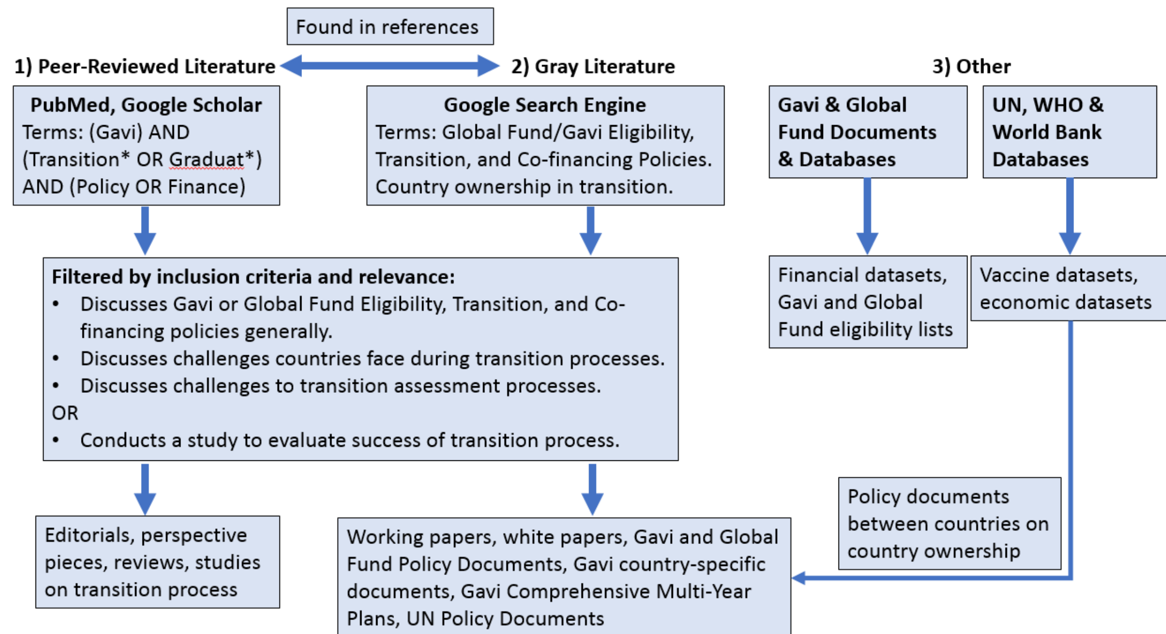
3.1.3 Stated Aims

Therefore, this paper aims to:

1) Clearly and succinctly describe the eligibility, transition, and co-financing policies of both Gavi and Global Fund.
2) Identify the historical basis for these policies, focusing on the philosophies and events that drove their development.
3) Examine transition-assessment literature evaluating the first cohort of successfully transitioned fully self-financing countries, and extract the challenges identified to synthesize a list of factors affecting successful transitions.
4) Write a Case Study analysis on Georgia and Nigeria, examining their individual approaches and responses to the implementation of the Eligibility, Transition, and Co-Financing Policies of Gavi and the Global Fund
5) Assess the limitations and strengths of the policies, and how they may need to be adapted in the future considering the challenges facing the new cohort of transitioning countries and the conclusions drawn from past transition assessments.

3.2 Data Sources & Literature Search

Figure 4. *Flowchart of search methods and resultant data sources*



Due to the nature of this paper, I used a combination of peer-reviewed, gray, and various other literature types to pull pertinent and necessary information. Since the policies being studied are internal policies of Gavi and the Global Fund, the websites of both were heavily relied upon to extract data and information. Only data and documents openly available through Gavi and Global Fund's databases could be retrieved and analyzed. The literature review was not strictly systematic, though it was focused and determined by inclusion criteria. Literature had to meet the 3 criteria shown in Figure 1 to be included, though literature that conducted a study evaluating the transition process of a group of countries specific to these policies were automatically included. Figure 1 shows how information was evaluated for relevance and where it was sourced. The search term (Gavi) AND (Transition* OR Graduat*) AND (Policy OR Finance) was used to find pertinent literature, yielding 28 results in PubMed- of which 3 met all inclusion criteria. I subsequently searched the references of these 3 papers to find similarly pertinent papers

to the research question. I used the same terms in Google Scholar, resulting in a much more liberal search yielding more papers, most of which went unused for failing to meet the inclusion criteria. I incorporated the papers found in Google Scholar that did meet the criteria into the analysis, and I searched their references to find more literature- both peer-reviewed and gray. In general, fewer papers were found for the Global Fund. This is most likely due to the fact that the assessments for Global Fund are disease and program specific rather than country or cohort specific, limiting exhaustive analysis for the purposes and scope of this paper. I used the same or similar search terms to those used for Gavi, and employed the same process.

Gray literature, online literature, and online hosted databases were heavily relied upon to build context and retrieve data specific to countries evaluated in the studies found in the peer-reviewed journals. With this topic being relatively new in global health discourse, and with the policies only recently the subject of formalized studies, much of the literature consists of white papers and working papers of those seeking to provide insight into the effectiveness of the policies. Therefore, this literature had to be used in lieu of primarily peer-reviewed resources in order to provide a complete perspective and discussion of this topic. Additionally, economic data and information on vaccine schedules, pertinent to Gavi, were pulled from UN, WHO, and World Bank databases, as this information is not calculated and measured by Gavi and the Global Fund directly.

Table 4. The types of sources used for data collection.

Peer Reviewed	Gray Literature	Other
• Editorials and perspective pieces • Reviews • Studies on transition process	• Working papers • White papers • Gavi Eligibility and Transition Policy • Gavi Co-Financing Policy • Global Fund Eligibility Policy. • Global Fund Sustainability, Transition, & Co-financing Policy • Gavi Country Co-financing Information Sheets • Gavi Comprehensive Multi-Year Plans	• World Bank's World Development Indicators[5] • Gavi Country Profiles & Associated Documents[6] • Gavi and Global Fund documents on disbursement of funds[7][8] • WHO Immunization, Surveillance, and Monitoring Database[9] • WHO Health Expenditure Database[10]

3.3 Methodology of Aims

3.3.1 Aim 1: Describe the Policies

Gavi's Eligibility and Transition Policy and its Co-financing Policy were downloaded directly from the Gavi website's *Programmatic Policies* page. The documents were read, and the parameters of the policies were synthesized into a single table for easy interpretation. The synthesized table explaining the two policies was supplemented with Gavi's *Model Of A Country's Transition From Gavi Support for Vaccines to Fully Self Financing* graphic[11]. The Global Fund's policies were downloaded directly from their Governance and Policies Page. Graphics from the Global Fund showing how the policies function were extracted from the policy documents themselves,

[5] http://datatopics.worldbank.org/world-development-indicators/
[6] https://www.gavi.org/programmes-impact/country-hub
[7] https://www.gavi.org/programmes-impact/our-impact/disbursements-and-commitments
[8] https://www.theglobalfund.org/en/financials/
[9] http://apps.who.int/immunization_monitoring/globalsummary/wucoveragecountrylist.html
[10] https://apps.who.int/nha/database/ViewData/Indicators/en
[11] https://www.gavi.org/programmes-impact/types-support/sustainability

as they were already the most succinct and consolidated representations of the policy parameters.

3.3.2 Aim 2: Identify the Historical Basis for the Policies

A thorough literature review and search of gray literature, as shown in Figure 1, allowed for the compilation of a timeline delineating the major events, conferences, and decision points that shaped the growth of the "country ownership" concept. The timeline begins in 1996, and continues until 2020 (the year this analysis was completed). Focus was given to developments as they related to the donor-recipient relationship between country governments, the private sector, and multilateral organizations. Documents which pertained solely to the finance of unilateral organizations were excluded, as the scope of this paper encompassed global public private partnerships such as Gavi and the Global Fund. Organizations like the Presidential Emergency Plan for Aids Relief, while also responsive to the movement toward country ownership of public health programs, were excluded for this reason. Documents from the UN speaking specifically to the donor-recipient relationship, country ownership, and the changing expectations in the use of development assistance for health were included.

3.3.3 Aim 3: Examine Transition Assessment Literature & Identify Transition Factors

From the literature search and review, 6 studies evaluating the success of transition and identifying challenges to transition were found to be relevant. These papers were used as the basis for extracting and categorizing common factors affecting a successful transition process. The criteria for including the factors were that 1) the factor was identified in at least one paper, 2) the factor was considered by the authors to be an important yet not adequately considered in the transition assessments run by Gavi or

Global Fund, and 3) it is a factor not taken into consideration in the current Eligibility, Transition, and Co-financing Policies of Gavi or the Global Fund. These factors were then organized in Microsoft Excel to roughly represent the frequency and the time period in which these factors began to be analyzed, and whether their analysis recurred in subsequent papers. Table 5 shows a simple list of the identified factors from these 6 papers.

Table 5. *Identified factors affecting the transition process.*

Enabling Institutional Factors	External Enabling Factors
• Strength of governance and capacity for evidence-based decision making • Capacity of government to sustainably predict and collect revenue • Political will to finance health • Institutional capacity for procurement, regulation, and dispersal of vaccines • Strength of health systems enabling service delivery/equitable coverage • Laws and regulations allowing for access to key populations • Adequate human resources and workforce capacity • Strength of health information systems	• Access to affordable vaccine/medicine prices • Stability of growth/favorable macroeconomic conditions • Incremental, verifiable, milestones and mechanisms for transition established

3.3.4 Aim 4: Write a Case Study Analysis

Georgia and Nigeria were chosen for the case study. Both countries met the basic criteria for inclusion: that the country has received funding from both Gavi and the Global Fund, and that the country has passed the GNP per capita eligibility threshold, thus moving into the transition process. In order to answer the research question, Georgia was chosen because it is a country that has successfully transitioned to be a Fully Self-Financing country in Gavi's transition model, and is transitioning in the Global Fund's model as well. In transition assessments, it is acknowledged as a country belonging to the first cohort of countries to successfully transition and has been present in 5 of the 6

transition assessment papers. Nigeria is a country typically considered in the literature to be a country of the upcoming, or second, cohort of transitioning countries. It is projected to transition during the 2020s, and is an interesting case to study because it has already been granted a transition extension by the Gavi board for the year 2028, indicating difficulties in its transition process.

Table 7 shows the steps taken to produce the case-study analysis. The case study will be used to examine the transition process in depth in two specific countries to support and contextualize the observations found in the 6 transition assessment studies.

Table 6. *Sub-aims and realized procedures realized of the case-study analysis.*

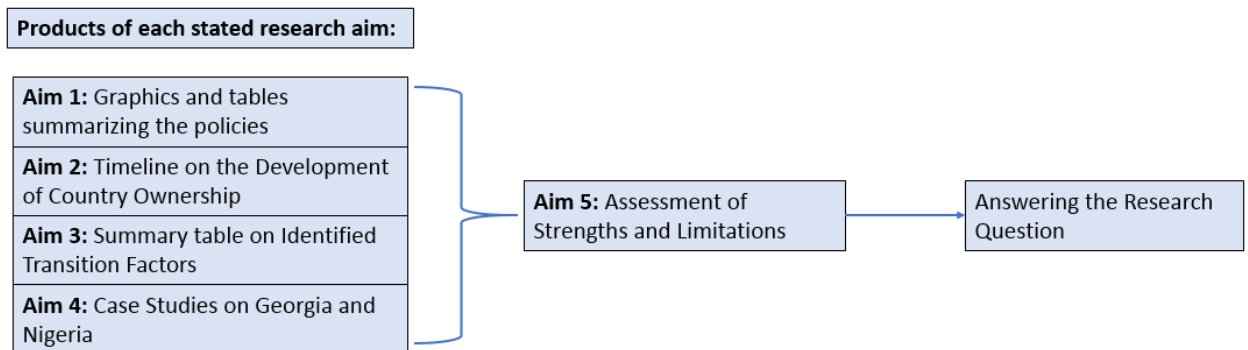
Sub aim	Procedure
4.1	Define the time period in which the countries assessed were affected by the eligibility, transition, and co-financing policies.
4.2	Assess the two countries with respect to their economic, demographic, and political characteristics during the defined time period, using the Transition Factors as a framework.
4.3	Assess the two countries during their defined transition periods based on the factors synthesized from transition-assessment literature.

3.3.5 Aim 5: Assess the limitations and strengths of the policies

Aim 5 can be thought of as the overall synthesis of the previously collected data, and the primary vehicle by which the research question will be explored and answered. All previous aims provide the data to be able to draw conclusions and make evidence-based judgements as to the gaps in the policies as they relate to the potential differences in challenges between the two cohorts of transition countries. Aims 1-4 all resulted in

compilations of data and products created for this paper to better visualize and analyze the transition process. These products will serve as tools to generating an assessment as aim 5. Figure 4 shows the conceptual framework on how the data retrieved in aims 1-4 were compiled and analyzed to inform the assessment produced in aim 5.

Figure 5. *The conceptual framework on data collection and analysis for aims 1-4*



3.4 Methodological Limitations

There are two limitations to the methods employed in this paper. The first is that this topic is new and evolving, meaning that few comprehensive studies have been published on the transition processes informed by Gavi and Global Fund's Eligibility, Transition, and Co-Financing Policies. Only 14 countries have become Fully Self-Financing countries with respect to Gavi's support, and no countries have reached this status in Global Fund's framework yet, meaning that there is also a small sample size of countries informing the data that is analyzed by these few studies. This reduces the generalizability of the conclusions as they are initial findings, and the reality may change as more data is collected and more research is done.

The second major challenge is that much of the data needed is pulled from freely available data posted on a myriad of organizations' websites. The fidelity of this data

cannot be tested against any other dataset, as these are the only datasets that exist. There is the possibility that withheld information and information not found on the websites exists, and that it provides a different perspective or different values to what is currently available.

CHAPTER 4: LITERATURE REVIEW

4.1 History of Global Public-Private Partnerships

It is important to start an examination of Gavi and the Global Fund through understanding the historical forces that spurred their development, and the paradigm shifts in global health that have influenced their policy development process since both were established. Gavi and the Global Fund are among the largest global health organizations that provide funding for programs in qualifying countries (Dieleman et al., 2016). Unlike other large global health organizations like the US President's Emergency Plan for AIDS Relief (PEPFAR) and the President's Malaria Initiative (PMI), Gavi and the Global Fund utilize a governance structure that became increasingly popular in the global health and development world at the turn of the new millennium: the Global Public-Private Partnership model. In addition to a distinct governance structure, the Global Public-Private Partnership model differs from PEPFAR and PMI which are funded solely by the US Government. aGavi and the Global Fund are funded multilaterally by both private donors such as corporations, foundations, and individuals, as well as governments *(Gavi: Donor profiles*, n.d.) (*Global Fund: Financials*, n.d.).

Global Public Private Partnerships (GPPPs) are a governance structure that aligns the interests of private donors and organizations with a government's interests in order to solve large development and health problems that are otherwise inadequately addressed by either sector alone (*WHO | Public-private partnerships (PPPs)*, n.d.). The strengths of both sectors allow for the correction of "failures" in both the private and public sectors when addressing development issues, such as maldistribution of resources through market forces and bureaucratic inefficiency (Buse & Walt, 2000). GPPPs first began to become popular in the global health field in the late 20th century, originating in the

1990’s and proliferating during early 2000’s. In the wake of the growing popularity and utilization of GPPP structures, K. Buse and G. Walt published two seminal papers that sought to explain their rise and speculate about their future.

In their first paper, Buse and Walt describe the attitudes and events of the latter half of the 20th century that precipitated the conditions allowing for the development of GPPPs in the new millennium. Prior to the 1980s, there was minimal effort by the United Nations (UN) to engage the private sector (Buse & Walt, 2000). The ascendancy of neoliberalism in the 19080s prompted the UN to reconsider its position and begin to engage the private sector in order to realize its mission and meet its goals. The authors argue that the private sector was increasingly seen as a responsible party with an obligation to better the health and development of people around the world. Donors began to explore the opportunity to collaborate with the private sector in addition to governments, and the UN had to rethink its strategy moving forward. The authors list three factors that influenced the development of GPPPs at this point in history:

- Donors had concern that the UN was ineffective and inefficient due to its bureaucracy. Partnerships with the private sector seemed to promise more efficiency.
- The UN was facing a budgeting challenge, where donors demanded that the UN budget be a zero-based budget where all desired funds had to be justified annually. Within a GPPP, the UN believed, the UN would have the opportunity to maintain funding to realize their goals.
- The private sector saw these partnerships as a way to show their commitment to improving global conditions when faced with public scrutiny. Additionally,

working closely with the public sector, and the UN, would allow some influence among policy makers who created global economic policies and frameworks. The UN, which became a champion of GPPPs, had a set of interests:

- Harness the private sector, and its reputation for efficiency, for human development.
- Bestow legitimacy on the United Nations
- Bestow authority on the United Nations
- Enable the UN to fulfill its functions and mandates
- Enable the UN agencies to leverage financing and advice from the private sector.

The Millennium Development Goal (MDG) era coincided with the emergence of GPPPs, and also coincided with a growth in development assistance for health (DAH) (Dieleman et al., 2016). From 2000 – 2015, DAH had increasing annual growth especially in relation to MDG content areas. Post 2015, however, the growth in DAH is slowing, posing a risk to the Sustainable Development Goals (SDGs) that are even more ambitious than the MDGs (Dieleman et al., 2016). This fact is another reason why private donor funds being channeled through GPPPs are attractive to the UN as it works toward its development goals.

4.2 Emergence of the concept of Country Ownership

W. Savedoff, in a paper examining the meaning of “country ownership” and how it is operationalized, explains that the term arose in the 1990s in opposition to the IMF and World Bank’s conditionality frameworks for funding (Savedoff, 2019). Whereas “conditionality” was a way for donor governments to use financial assistance sent to recipient countries as a way to influence governance, encourage policies, and inform

health priorities, “country ownership” emphasized that countries and their governments should be “the primary agents in choosing policies and designing programs financed by foreign aid”(Savedoff, 2019). Savedoff explains that there was little mention of the term “country ownership” in the literature prior to the 1990s. Perhaps reacting to the growing demand for country ownership in development, the World Bank introduced the Comprehensive Development Framework (CDF) in 1999 (Keijzer & Black, 2020). The CDF encouraged country ownership by calling for countries to formulate Poverty Reduction Strategy Papers (PRSPs), which served as a way for countries, in conjunction with their external partners, to contribute to the formulation of poverty reduction strategies and policies (Wolfensohn and Fischer, 2000).

This is the era and context in which the Gavi Vaccine Alliance and the Global Fund for AIDS, Tuberculosis and Malaria were founded. An increased amount of funding for global health was emerging from donors, the governments of high-income countries were committed to formulating strategies with private-sector partners, recipient countries needed external funds to realize the goals set forth in the MDGs, and private industry was invested in making a positive difference through social interventions to manage their public relations and have a seat at the development table. The Gavi Vaccine Alliance was founded in 2000 and its board was evidence of the rise of GPPPs- it included the WHO, UNICEF, and the World Bank, but also private donors, such as the Bill & Melinda Gates Foundation (*Board composition*, n.d.). The Global Fund was subsequently founded in 2002, governed and funded in the same GPPP style. GPPPs became major players in the “country ownership” realm as they instituted policies informed by that development philosophy.

4.3 Growth of Country Ownership and the Emergence of the concept of Domestic Finance

One measure of country ownership is the increased ability of a country to domestically finance its own public health programs and interventions. The first International Conference on Financing for Development was hosted by the UN, bringing together heads of state and ministers of foreign affairs, "placing financing for development firmly on the global agenda" (*Third International Conference on Financing for Development*, n.d.). In addition to participants from country governments, the conference brought together "civil society, the business community, and the institutional stakeholders on global economic issues" (*Financing for Sustainable Development*, n.d.). The Monterrey Consensus was the signed agreement that came out of this conference- signatory countries, both high income countries providing funds and lower income countries receiving countries, affirmed their respective responsibilities in poverty reduction and development finance. Throughout the MDG era, two more International Conferences on Financing for Development would be held, reaffirming and strengthening the burgeoning concept of domestic finance within the framework of country ownership.

"Country-ownership" as a concept was further formalized in the international arena with the signing of the Paris Declaration for Aid Effectiveness in 2005(Keijzer & Black, 2020). The Paris Declaration was the document and agreement produced from the Second High Level Forum on Aid Effectiveness held in 2005 (*Paris Declaration and Accra Agenda for Action—OECD*, n.d.), which sought to "take far-reaching and monitorable actions to reform the ways [countries] deliver and manage aid as [they] look ahead to the UN five-year review of the (MDGs)..." The Paris Declaration uses "ownership" as a central principal in its philosophy. While the Paris Declaration does not

formally define the term, "ownership" is used frequently within the document to set the standards of behavior for "developing countries" that receive aid. The declaration states it is essential that "Partner countries exercise effective leadership over their development policies, and strategies and co-ordinate development actions." The document also states that partner countries commit to:

- "Exercise leadership in developing and implementing their national development strategies through broad consultative processes."
- "Translate these national development strategies into prioritised results-oriented operational programmes as expressed in medium-term expenditure frameworks and annual budgets."
- "Take the lead in co-ordinating aid at all levels in conjunction with other development resources in dialogue with donors and encouraging the participation of civil society and the private sector."

Essentially, the Paris Declaration defines country-ownership as a state of governance, and goal, in which countries take full responsibility for the formulation of development priorities and goal-setting, the management of the systems to reach those goals, the finances to fund activities in alignment with their priorities, and the capacity to evaluate the results, among other implied responsibilities.

The push for country ownership further intensified following the 2008 global financial crisis when DAH levels began to stagnate (Gotsadze et al., 2019). Funding was not keeping pace with the increasing demands for health programming in the late MDG era and beginning of the SDG era, forcing GPPPs like Gavi and the Global Fund to reconsider the financing structures of global health programs and projects. The Accra

Agenda for Action was signed in 2008, and it identified 4 areas for improvement: ownership, more inclusion and participation among partners within a partnership, that aid should be focused on measurable impacts and development, and that capacity development needs to be strengthened to allow countries to take charge of their development into the future (*Paris Declaration and Accra Agenda for Action—OECD*, n.d.). The Accra Agenda for Action was seen as a reaffirmation of the Paris Declaration's endorsement of country ownership, and emblematic of the paradigm of the era post 2008 global financial crisis, where funds from donors would no longer be sufficient for the health needs of the globe. It is important to note that both Gavi and the Global Fund are signatory GPPPs of the Paris Declaration and the subsequent Accra Agenda for Action (*Endorsements to the Paris Declaration and the Accra Agenda for Action (AAA)—OECD*, n.d.).

Complementing the reaffirmation of country ownership in the Accra Agenda for Action in 2008, that same year the second International Conference on Financing for Development was held in Doha, Qatar. This Conference produced the Doha Declaration in which signatory countries reaffirmed the Monterrey Consensus, and encouraged that high-income countries continue their commitments to development aid despite the global financial crisis. Acknowledging that developments assistance from private donors was decreasing relative to the increased demands of health development goals, this conference also saw the formation of the Taskforce on Innovative International Financing for Health Systems (Fryatt & Mills, 2010).

4.4 Implementation of Country Ownership and Domestic Finance Measures Post Crisis

In 2009, President Barack Obama's administration introduced the US Global Health Initiative (US GHI). This initiative was built on a 6-year plan promising $63 billion US dollars to support "health care in the world's poorest countries during tight budgetary times" (Bendavid & Miller, 2010). The US GHI, informed by the growing principles of country ownership during the decade, sought to move US funding toward more health-systems approaches and provide funding to GPPPs, such as Gavi and Global Fund, that were beginning to work with building country capacity. The shift to health systems strengthening approaches married the ideas set forth in the Paris Declaration and the Accra Agenda for Action with respect to country ownership of development, and also incorporated aspects of the previous two International Conferences on Financing for Development, which began to promote domestic and innovative financing models. The international opinion was that if a country has a robust health system and adequate funding mechanisms, then with supplemental help from high-income countries and private donors low and middle-income countries would be able to reach the MDG health goals and maintain them into the future despite the relative drop in donor funds.

Introducing "country capacity" as a concept demonstrated a shift toward health system strengthening rather than disease intervention, but is also created ambiguity as to the role of both donor and recipient parties of DAH funds. J. Goldberg and M. Bryant in a 2012 paper sought to better understand what the introduction of both country ownership and capacity building into the international dialogue meant for health systems

strengthening efforts (Goldberg & Bryant, 2012). The authors defined capacity building in a country ownership context as:

> *"a continuous and participatory process undertaken independently or in collaboration with external partners to empower the organization to systematically identify and respond to its institutional needs and the needs of the population it serves in order to better meet its stated mission and goals, solve problems, implement change and increase efficiency."*

For the purpose of this policy analysis and case study, I will refer to "country ownership" as the broad concept that encompasses components such as "domestic finance" and "co-finance". "Co-finance" will be used to refer to the financing of health and development efforts that occurs when both a donor (organization or country) is supplying a portion of the funds in conjunction with the beneficiary (country, project, or program). "Domestic finance" will be the term used to refer to the funding of projects or programs through a country's endemic mechanisms.

4.5 Metrics for assessing beneficiary country contributions to domestic finance

Thus far, GPPPs have not developed a common standardized way to analyze a country's contribution to co-financing and domestic financing for health. Gavi, for example, uses its own measurements such as the starting fraction and the price fraction, which demand that countries progressively increase their financial contributions to Gavi supported vaccines. The Global Fund states that it uses government expenditure on health as its metric, and that the expectation is for government expenditure on health to increase as a country transitions. Dieleman and Haakenstad in a 2017 editorial stated that there is a need to develop standardized and comparable metrics for health financing (Dieleman &

Haakenstad, 2017). They note that there are five types of data available for assessing health financing.

1. The WHO's Global Health Expenditure Database
2. National Health Accounts
3. Development assistance for health as reported by the Institute for Health Metrics and Evaluation
4. Disease-specific financing that is reported annually to international organizations.
5. Intermittent surveys and country-level tracking.

Dieleman and Haakenstad go on to explain the strengths and weaknesses of these sources, and why there is a need to develop a standard process for collecting health financing data for the sake of analysis. This point is particularly important as Gavi and Global Fund, among other donors and researchers interested in the transition process, move on to assess past transition processes in order to inform future ones. The disparity between data availability on health financing for specific countries can hinder this process and take away from the ability to identify effective financing strategies during transition.

To overcome these challenges, Yamey et al. in their 2019 paper adapt 5 existing health financing indicators for their cohort comparison study of countries that transitioned from Gavi funding prior to 2020, and those that are set to transition from 2020 onward (Yamey, Gonzalez, et al., 2019). The benefit of these indicators is that they can be easily compared between countries, though some data quality challenges as mentioned by Dieleman and Haakenstad remain. Nonetheless, the indicators were sufficient enough for a comparative analysis in order to draw conclusions as to how

"ready" the next projected cohort of transitioning countries are. The indicators that they identified in the paper and that are used for the analysis are shown in Table 1.

Table 7. *Identified health financing indicators*

Health Financing Indicator	**Interpretation**
Government health expenditure (GHE) as a % of total government expenditure	The higher this number, the more it is suggested that a government is financing its own health programs.
General government health expenditure (GGHE) as % of GDP	This metric can show how much the government spends on health as a proportion of GDP. This can also indicate the government's commitment to financing health programs.
Out-of-pocket (OOP) health expenditure as a % of total expenditure on health	Indicates the proportion of total health expenditure on health is left to citizens to pay on their own. This can indicate the robustness of universal health coverage, or lack thereof.
Development Assistance for health (DAH) as a % of general government health expenditure	This number indicates the proportion of the government's general health expenditure is derived from external funds. The higher this number, the more dependent a government is on external financing.
% of routine vaccines funded by the government	Assesses the proportion at which a government is directly contributing financed to vaccination programs.

Source: *Adapted from Yamey et al. paper. These are the 5 health financing indicators used to compare health financing between the cohort of countries that made their transition before 2020, and those that are projected to be the next cohort of successfully transitioned countries.*

4.6 The Growth of Middle-Income Countries (MIC) & The Challenges Faced in Transition

Based on the uses of the term in the literature, the term "transition" is used to refer to any country that is phasing out of financial support from an external organization or

government. For the purposes of this paper it will almost exclusively refer to countries moving out of support from Gavi and the Global Fund based on their policies determining eligibility and transition.

More countries are reaching middle income status, and thus more countries are reaching the thresholds for transition set out by GPPPs such as Gavi and the Global Fund. In a 2015 paper examining the experiences of 14 graduating countries, H. Saxenian et al. utilized Gavi’s transition planning assessments (TPA) to identify strengths and weaknesses of the transition process for this cohort (Saxenian et al., 2015). The authors examined these countries (Indonesia, Sri Lanka, Angola, Bolivia, Azerbaijan, Honduras, Georgia, Congo, Moldova, Armenia, Mongolia, Guyana, Bhutan, and Kiribati) on 3 dimensions: full financing of immunization programs with sustainable domestic funds, country management of vaccine supply and procurement, and development of sound decision making processes. One of the major findings of this paper was that the TPAs revealed that the cohort needed to improve their national regulatory agencies (NRA). The authors expressed that this is significant because one challenge of vaccine uptake by the public is to show that the vaccines are safe an effective. Should this not be the case, the countries risk losing public acceptance of vaccines. This paper was one of the firsts to provide an analysis of the graduation process and concluded that the projected economic growth for these countries was favorable so long as there is adequate political will to invest in health. Additionally, they introduced an examination of cost drivers by stating the fact that experiences with cost will differ between countries based on the number of vaccines adopted with Gavi support, ultimately affecting the amount of money a country will need to generate through domestic finance. The authors ultimately suggest that

transition processes cannot only consider vaccines and immunization, but rather the entirety of the health system to ensure sustainability in the procurement, quality evaluation of, and application of vaccines.

A subsequent paper by Kallenberg et al. expanded on this concept and defined the various drivers and determinants of vaccine financial burden to analyze how much money a government can expect to need to raise through domestic financing, as well as the enabling factors that help a country adequately address these cost drivers. Important drivers and determinants of cost were identified as the size of the birth cohort, the number of vaccines that have been adopted with Gavi support, and how long the countries have been in the transition phases as determined by how quickly their economies have grown (Kallenberg et al., 2016). The authors also identified key enabling factors to independently sustaining vaccine programs to be, broadly, sufficient financial resources, strong health systems, and adequate capacity to procure and process vaccines.

Another paper in 2018 by T. Cernuschi et al. examined 14 transitioning countries (Angola, Armenia, Azerbaijan, Bhutan, Bolivia, Congo Republic, Georgia, Ghana, Guyana, Honduras, Moldova, Mongolia, Papua New Guinea, Sri Lanka, and Uzbekistan) based on transition assessment documents. The authors pulled all country transition assessments and transition plans that were available to the WHO as of May 2016 and examined them with respect to four areas: decision making, political commitment and financial sustainability, demand for an equitable delivery of vaccines, and access to timely and affordable supply (Cernuschi et al., 2018). Their conclusions found, amongst this cohort, that;

- Decision making processes were weak. The authors' analysis showed that evidence-based decision making was inadequate. To remedy that, Gavi at the time invested 30% of transition funds to improve data and information systems. The authors acknowledge, however, that the transition timeline posed a threat to successful implementation of these systems by the cohort.
- Political commitment and financial sustainability were weak. There was a lack of skills and processes necessary to "develop sound financing and resource mobilization strategies." Gavi directed 3% of its funds to support countries strengthen management areas such as financial planning and budgeting.
- There was inadequate demand for vaccines and inadequate equitable delivery of vaccines. While transition plans showed resources directed to address these issues, the authors note that 36% of the identified challenges were not addressed.
- There are threats to the cohort's ability to self-procure vaccines.

Throughout the paper, the authors mention that one major lacuna of the current evaluation processes for transition, as well as the transition process itself, is that it does not take a system wide approach to investigate whether or not countries are ready to transition, and whether or not that transition is happening as expected. While the emphasis is on immunization and the country's ability to procure and deliver vaccines to populations, there is little ability to identify "systems-wide constraints". The authors end the paper by stating that, "development of a shared theory of change towards sustainable immunization programmes and a related monitoring and evaluation framework would allow clearer measurement of progress, gaps, and understanding of key areas for future development."

With respect to countries' experiences transitioning from the Global Fund's support, a paper by G. Gotsadze et al. examined common challenges to transition faced by a group of Eastern Europe and Central Asian (EECA) countries (Armenia, Belarus, Bulgaria, Georgia, Kosovo, Kyrgyzstan, Moldova, Turkmenistan, Ukraine, and Uzbekistan). Gotsadze et al. make note in their paper that there is a lack of literature exploring empirical evidence for what is good transition practice, and the appropriate steps to be taken for a successful transition. Using Bennet's definition of transition, the authors examined the transition preparedness assessments (TPA) created by the Global Fund to examine, both quantitatively and qualitatively, the challenges presented by the transition process(Gotsadze et al., 2019).

Some notable external challenge areas that were common to this cohort were the lack of political will to fund health, and poor economic situations disallowing for increased funding in health. Some countries also had laws and regulations in place making it difficult to reach key populations, such as stigmatized groups (drug users or sexual identity minorities). There was a high dependence on external funds, and unclear projections of future expenses for disease programs. Overall, the challenges identified aligned with four health systems building blocks: deficiencies in governance, finance, health information systems, and health workforce.

The authors discuss the areas of greatest risk during transition in order to contribute to global knowledge about the most expected transition challenges. Out of the assessment, the authors generated four key steps that emerged in their analysis. These steps, they state, offer a framework that encourages country ownership on the part of the government:

1. Early planning with the government, reaching a time-bound transition that is acceptable to all parties. The transition plan should include clear milestones allowing for adjustments if necessary.
2. "Aligning of donor funded program components with government structures and funding modalities before transition."
3. Building government capacity, and budgeting for support throughout the transition process.
4. Developing and using a clear framework to monitor the transition process while holding both the donor and recipient country accountable.

In the EECA countries, the Global Fund has primarily worked with TB and HIV/AIDS. The incidence rates of HIV/AIDS more than doubled from 2006 to 2015, and it was concluded that this rise was driven by key populations. The need to focus on key populations in order to reduce disease burden is recognized by the Global Fund in their eligibility policy, which acknowledges that middle-income countries that would otherwise be ineligible based on income and burden can be considered for funding if they have a key population that can be care for through Global Fund funding.

In a viewpoint paper for the Journal of Global Health, Resch and Hecht argue that the Global Fund, among other major global health organizations, should work together to "defined key research topics, commission high quality analysis, and ensure its main findings feed back into global and country practices" in order to address the problem that most transition assessments have been "fragmented and uncoordinated" (Resch & Hecht, 2018). The authors' commentary strengthens the premises of papers that came

beforehand, stressing the need to standardize a set of quantitative measures for transition capacity, and measuring external economic factors that can affect the transition process.

4.7 GNI as an inadequate indicator of capacity for successful transition toward domestic finance from GPPP support.

The papers previously discussed intimate at the fact that a transition process is inadequately assessed if a health systems approach, or at least a multifactorial assessment of capacity, is not taken into consideration (Yamey, Ogbuoji, et al., 2019). GNI alone as an indicator may not be sufficient in understanding the strengths of a country during transition, what challenges a country will face, and whether or not there is the political will to ensure the sustainable finance following transition from Gavi or the Global Fund.

In a 2017 editorial by Mark Dybul for the journal Health Economics, Policy and Law, Dr. Dybul of the Global Fund examines and comments on the utility of GNI. He mentions that GNI per capita was a metric developed by the World Bank in the 1960's, and since then it has been used as a proxy for development. It has been widely used for its relative simplicity, and its utility as a standardized metric. As transition processes become increasingly common, Dr. Dybul makes a note of the fact that 75% of GPPPs, multilateral health financers, and other development agencies use GNI per capita to establish eligibility and co-finance standards. He goes on to say that:

> *"GNI is an imperfect proxy for health and social development, as it does not reflect inequalities between subnational regions of states nor inequalities among populations within countries. Some of these key populations, for example, transgender people, refugees and prisoners,*

face high risk and vulnerability to HIV, tuberculosis and malaria, and must be included in the global response to these three diseases."

Additionally, of the 63 countries classified as low-income countries (LICs) at the turn of the millennium, only about half (34) remained in that income category by 2017 (Dybul, 2017). Middle-Income countries (MICs), as stated before, are diverse and face many different challenges. They are also the countries that have the largest share of disease burden as fewer countries are classified as low-income, and as that LIC countries increasingly represent less of the world population. This incongruence between the need to use health metrics so that MICs still qualify for aid while donor organizations use GNI in their policies to determine eligibility led to the formation of the Equitable Access Initiative (EAI) in 2015 where "nine leading multilateral health and development organizations…[explored] the strengths and weaknesses of GNI" to "[develop] alternative and complementary measures that could inform policies"(Dybul, 2017). The EAI analysis identified 3 limitations to policies informed only by GNI:

1) GNI is insensitive to important dimensions of a successful transition such as a country's need, its fiscal capacity, and its policies. A more comprehensive framework should be utilized.
2) There is a need to emphasize incentive structures for government spending on health. GNI per capita does not inform as to a government's spending patterns, and does represent well a government's current or future capacity to domestically finance health programs.
3) There is a need to handle transition processes in a way that do not threaten resurgence of diseases when external finance ends.

Dybul ends his editorial stating that the health and development landscapes have increased in complexity since the MDG era, and with the SDG era it is important to adequately adapt to the need for improved investment, metrics, and thinking.

As more researchers and members of financing bodies responsible for overseeing transitions become aware of Dybul's point, there is an increased call for the standardization of health expenditure metrics in order to quantify and empirically evaluate the success of transition programs. Papers that consider these factors in their analysis are not common, and may only recently be beginning, as evidenced by Resch and Hecht's 2018 paper.

4.8 Moving forward – Gaps and Future Research

It is not entirely discussed in the literature how countries navigate these policies, nor what financial instruments they utilize to meet their vaccine programs' funding needs. As countries are faced with the reality of diminishing support from Gavi and the Global Fund, it is important that they look to other countries that have successfully transitioned for ideas and insight. It is also important to know what funding models are employed during the transition periods of these countries, as these can prove to be resources or strategies for other countries that are projected to transition in the coming decade.

The challenge to establishing a uniformly followed framework, as well as to using a group of countries as models for successful transition, is that there are various internal and external factors that determine the financial and technical burden of a country's transition process. While the Global Fund has moved toward standardizing a pre-transition assessment process that comprehensively reviews these factors, there is not a

single approach to doing so. that can inform interested researchers and organizations as to appropriate evaluation methods.

A few important points can be concluded from the literature. First, GNI per capita is inadequate to determine financial strength and self-financing viability of a country. There is a need to use better financial metrics to determine which countries can begin a successful transition process. Secondly, it is important to note that many of the factors identified in papers performing transition assessments resemble health systems building blocks. This may suggest that a health-systems approach and thus a health systems evaluation of some sort may yield a more whole. A third following point is that the literature, including external evaluations of the transition process, can be strengthened by the development of a standardized set of transition indicators. This will allow for comparing the experiences of the diverse set of middle-income countries that are moving into the transition processes.

Another interesting point is that in the literature there seems to be a paucity of the country-perspective in the literature. If country ownership is a guiding principal used to justify a transition process, then we should observe more analyses on the country-perspectives throughout transition processes.

My research questions are, therefore how do countries that are different in their economic, demographic, and political development navigate the same transition and co-financing policies? Are the same trends of successful development seen in the first cohort of graduating countries being recapitulated in this new cohort of graduating countries? And, if not, what are the emerging challenges? In what ways might the policies be altered to help facilitate a transition process for the upcoming graduating countries? The purpose

of the case study analysis is to determine if the challenges during transition faced by Georgia will be the same challenges faced by Nigeria, and to examine how each country has moved along its respective transition period under Gavi and Global Fund transition and Co-financing policies. By answering these questions and providing the contextual insight of two case studies, this paper hopes to provide insight as to the areas where these policies may be improved.

4.9 Results of Literature Review

Table 8. *Timeline summarizing the development of the "country ownership" defining the transition processes.*

Year	Key Event
1996	• In reaction to the IMF and World Bank's stance of "conditionality", the concept of "**country ownership**" develops in development assistance literature (*What Is "Country Ownership"?*, n.d.).
1999	• The World Bank develops the **Comprehensive Development Framework**, which is used to produce the **Poverty Reduction Strategy Papers**. They are a formulation of strategies by government to encourage "ownership"(Keijzer & Black, 2020). These papers, developed by each country, are often required by the IMF, World Bank, and donors before receiving debt and aid relief (*Factsheet—IMF Support for Low-Income Countries*, n.d.).
2000	• **Gavi** is founded. • Millennium Development Goals are developed.
2002	• **The Global Fund** is founded. • The first International Conference on Financing for Development is held in Monterrey, and the **Monterrey Consensus** is adopted. The UN describes the consensus as a "'landmark framework for global development partnership in which the developed and developing countries agreed take joint actions for poverty reduction" with attendance of country heads of state, the IMF, the WTO, and the World Bank (Page & Pugatch, 2003).
2005	• The **Paris Declaration on Aid Effectiveness** is adopted. Its 5 Pillars are ownership, alignment, harmonization, managing for results, mutual accountability (*Paris Declaration and Accra Agenda for Action—OECD*, n.d.). Sets goals to be met by 2010.
2007	• Gavi introduces its first Co-Financing Policy
2008	• Onset of the global financial crisis and the beginning of the Great Recession. • Amid the global financial crisis, the UN calls for the second International conference on Financing for Development, where **The Doha Declaration** is signed. • The **Accra Agenda for Action**, a follow up to the Paris Declaration, is developed. The Accra agenda reaffirms the Paris Declaration, and focuses on four improvement areas: Ownership, inclusive partnerships, delivering results, and capacity development (*Paris Declaration and Accra Agenda for Action—OECD*, n.d.).
2009	• President Barack Obama's administration introduces the **US Global Health Initiative**, a 6-year plan seeking to develop health systems through US aid funding and seeking to coordinate the efforts between US funded disease-specific programs. • Gavi introduces its first Eligibility and Transition Policy.
2015	• **Sustainable Development Goals** are adopted by the UN, including language that prioritizes "national ownership" of development. • The **Addis Ababa Action Agenda** is signed after the third International Conference on Financing for Development. Papers:

	• Saxenian et al.: *Overcoming challenges to sustainable immunization financing: early experiences from Gavi graduating countries*
2016	• The current version (2.0) of **Gavi's Co-financing Policy** is approved by the Gavi Board. • The **Global Fund's Sustainability, Transition and Co-Financing Policy** is outlined and presented to the Board through a decision point document. Papers: • Kallenberg et al.: Gavi's Transition Policy: *Moving From Development Assistance To Domestic Financing Of Immunization Programs*
2018	• The current version (3.0) of **Gavi's Eligibility and Transition Policy** is approved by the Gavi Board. • The current version of **Global Fund's Eligibility Policy** is approved by the Global Fund Board Papers: • Resch & Hecht: *Transitioning financial responsibility for health programs from external donors to developing countries: key issues and recommendations for policy and research* • Cernuschi et al.: *Challenges to sustainable immunization systems in Gavi transitioning countries*
2019	Papers: • Gotsadze et al.: *The Challenges of Transition From Donor-Funded Programs: Results From a Theory-Driven Multi-Country Comparative Case Study of Programs in Eastern Europe and Central Asia Supported by the Global Fund* • Yamey et al.: *Transitioning from foreign aid: Is the next cohort of graduating countries ready?*

Table 9. *Summary table of factors affecting a country's successful transition that were identified and analyzed in key research papers*

		Vaccine Cost Drivers Considered			Enabling Institutional Factors								External Enabling Factors		
Author, Year	**GHI Examined**	Size of Birth Cohort	Number of vaccines adopted with GAVI support	Length of time in transition phase I	Strength of Governance and Capacity for evidenced based decision making	Capacity of Government to sustainably predict and collect revenue	Political Will to Finance Health	Institutional Capacity for procurement, regulation, and dispersal of vaccines.	Strength of health systems enabling service delivery/ equitable coverage	Laws and regulations allowing for access to key populations	Adequate human resources and workforce capacity	Strength of Health Information Systems	Access to affordable vaccine/medicine prices	Stability of growth/favorable macroeconomic conditions	Incremental, verifiable milestones and mechanisms for transition established
Saxenian et al., 2015	GAVI	■				■	■	■						■	
Kallenberg et al., 2016	GAVI	■	■	■	■	■	■	■					■		
Resch & Hecht, 2018	Global Fund				■	■	■								■
Cernuschi et al., 2018	GAVI				■	■	■		■		■	■	■		
Gotsadze et al., 2019	Global Fund				■		■	■		■	■	■	■	■	■
Yamey et al., 2019	GAVI				■		■		■	■				■	

CHAPTER 5: CASE STUDIES

5.1 Case Study on Georgia

Figure 6. *Summary data for Georgia (2009)*

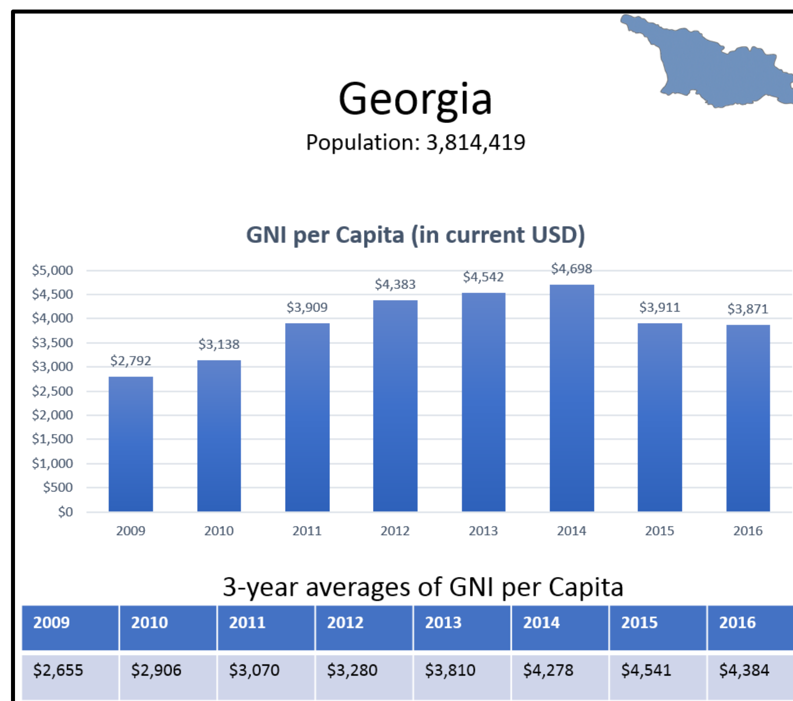


Table 10. Data on Georgia at the onset of its transition to domestic financing process (2009)

Select Determinants of Overall Financing Needs	
Determinants of Vaccine Price	
Size of Birth Cohort	56,060
# of Vaccines adopted with Gavi support	
Disease Burden	
HIV/AIDS Prevalence (Estimate)	3,500
Incident Malaria Cases	7
New and Relapse Tuberculosis Cases	4,310
Health Financing Indicators	
Domestic government health expenditure (GHE) as a % of total government expenditure	5.9%
Domestic government health expenditure as % of GDP	2.1%
Out-of-pocket health expenditure as a % of total expenditure on health	68.9%
Domestic GHE as % of total health expenditure	21.4%
% of routine vaccine costs funded by the government	97.0%

Table 11. *Economic, Health Expenditure, and Domestic Health Financing Data for Georgia (2009-2016)*

Year	2009	2010	2011	2012	2013	2014	2015	2016
Population (in thousands)	3,814	3,786	3,756	3,728	3,717	3,719	3,725	3,727
GNI (in million USD)	$10,649	$11,884	$14,685	$16,342	$16,884	$17,475	$14,570	$14,428
GNI per Capita (in USD)	$2,792	$3,138	$3,909	$4,383	$4,542	$4,698	$3,911	$3,871
% Change in GNI per Capita	-0.15	0.12	0.25	0.12	0.04	0.03	-0.17	-0.01
Health Expenditure (in million USD)								
Total GHE	$1,059	$1,111	$1,211	$1,327	$1,355	$1,393	$1,110	$1,211
Domestic GHE	$227	$237	$212	$258	$319	$385	$395	$444
Domestic Health Financing Indicators								
D-GHE as % of total government expenditure	5.9%	6.2%	5.1%	5.5%	6.9%	7.8%	9.6%	10.3%
D-GHE as % of GDP	2.1%	2.0%	1.5%	1.6%	2.0%	2.3%	2.8%	3.1%
OOP as % of total expenditure on health	68.9%	72.7%	75.6%	73.4%	69.1%	66.0%	57.3%	55.6%
D-GHE as % of total health expenditure	21.4%	21.3%%	17.5%	19.4%	23.6%	27.6%	35.6%	36.6%
% of routine vaccine costs funded by government	97.0%	83.3%%	67.3%	37.8%	48.9%	77.0%	92.8%	88.7%

In 2009, Georgia was classified by the World Bank as a lower middle-income country. Its GNI per capita was $2,792USD and its 3-year average was $2,655USD. This means that while Georgia still qualified to receive assistance from Gavi, according to GNI per capita it was economically positioned to begin its transition toward being a fully self-financing country under Gavi's then Eligibility and Transition Policy. The Global Fund at the time had not yet implemented a transition policy, and Georgia would not be subject to a formalized co-financing policy until 2013.

The major determinants of vaccine prices at the time were the size of Georgia's birth cohort and the number of vaccines adopted with Gavi support. Georgia's birth cohort was small at 56,600 live births. With a low fertility rate, it was not expected that the size of the birth cohort would increase dramatically during the transition period. The

comprehensive multi-year plan (cMYP) for 2007-2010 was developed by Gavi with Georgia's support, and stated that there was no need to introduce new vaccines with Gavi funds. Rather, it was necessary to improve access and overall coverage of the vaccines already on Georgia's schedule. By 2009 Georgia was already financing 97% of the costs for its 7 routine vaccines (BCG, DTP, DT, Td, OPV, HepB, and MMR), and the strengths of the vaccination programs were more comprehensive than the weaknesses identified in the analysis presented in the cMYP.

The major weakness identified stated the need improve overall vaccination rates. These included the general skepticism of vaccine quality on behalf of the health professionals and the public given that that the vaccines were seldom produced domestically, and the inability to adequately serve vulnerable populations. Some internal strengths identified in this period were that immunization policies and schedules were "well in place and respected by health staff." Total disbursements from Gavi to Georgia in 2009 were $485,212 (*Disbursements and Commitments*, n.d.). This amount would increase yearly until its precipitous drop in 2018, presumably due to Georgia successfully transitioning from Gavi support.

Table 12. *Gavi funds disbursed (in thousand USD) by year to Georgia*

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
$485.2	$604.7	$995.5	$336.0	$852.4	$582.4	$601.5	$846.8	$921.8	$29.8

Source: Gavi's Disbursements and Commitments Database.

Though Georgia was not subject to a transition policy by Global Fund at the same time as its transition from Gavi, it is still interesting to consider the financing of HIV/AIDS and tuberculosis and the implications of a transition toward a domestically

self-financing scheme. Georgia was classified eligible to receive grant disbursements from Global Fund for HIV/AIDS and tuberculosis programs, and in 2009 received a total of $11,403,468.

While macroeconomic conditions were favorable in Georgia prior to 2008, by 2009 the economic data painted a different story into the future. 2009 was the year directly following the 2008 global financial crisis and Georgia's armed conflict with Russia, creating a need for Georgian officials to work closely with their counterparts in the International Monetary Fund and the World Bank to stabilize their economy to maintain the economic growth that they had seen in previous years. A 2010 IMF Survey Interview with Edward Gardner, the then IMF Resident Representative in Georgia, described the situation as severe enough for Georgia to request IMF to provide $750 million in a Stand-By arrangement (Georgia sees early signs of recovery, but risks linger, n.d.).

The macroeconomic factors affecting the contraction of the economy are seen in the drop in domestic government health expenditure (D-GHE) as a percent of total health expenditure. In the years immediately following the crisis this percentage dropped, showing that domestic government spending on health was falling in relation to the amount spent from external partners- a trend opposite of a country that is to move toward being fully self-financing. This could be due to many reasons- perhaps foreign aid toward health increased as a proportion, for example, or perhaps the government simply had less to spend on health amidst the macroeconomic crisis and prioritized its dollars to other sectors. Additionally, general government health expenditure as a percent of GDP

decreased as GNI per capita also decreased, further showing a drop in overall funding for health.

A subsequent press release on Gardner's IMF mission to Georgia shows Gardner claiming that Georgia's government successfully employed the Stand-By arrangement funds, and restored confidence in the economy. He goes on to state that the government's actions stabilized the situation and poised the country to continue its growth moving forward. This proved true, as the subsequent years showed Georgia's GNI per capita consistently rising again until 2015 (*Press Release*, n.d.-b). As GNI per capita consistently rose from 2010 to 2014, seen in Table 11, health indicators demonstrating the government assuming more health costs in alignment with transition policy responded by rising as well.

By 2016 Gavi and Georgia were already coordinating the disbursement and use of transition grants to strengthen Georgia's capacity to run its vaccine programs independently of Gavi and through its own domestic finance. Katib-Othman, Gavi's Manager Director of Country Programs at the time, addressed a letter approving these funds to David Sergeenko, Georgia's Minister of Labor, Health, and Social Affairs. In this letter, they state that these funds would carry Georgia through to its scheduled transition in 2017 (*All Country Documents | Gavi, the Vaccine Alliance*, n.d.). Gavi's Co-Financing Information Sheet for Georgia shows that this transition proved successful, with Gavi citing Georgia as one of the countries to become fully self-financing by the end of 2017. This means that Georgia transitioned its Gavi-supported vaccine programs to being fully domestically financed in 8 years- 3 years more than the 5 years proposed for

the accelerated transition period implemented in the most updated versions of Gavi's Co-Financing Policy (2016) and Eligibility & Transition Policy (2018).

Georgia was not faced with The Global Fund's transition policies during this period, and thus avoided the economic stress of transitioning out of aid from two major donors. Global Fund would not formally implement its policies on transition until 2016. To prepare for the transition process, however, Georgia and the Curatio International Foundation performed a transition preparedness assessment under the assumption that it would have to domestically finance its HIV/AIDS and Tuberculosis programs by 2022 (*Georgia develops 5-year plan for transitioning from Global Fund support | Aidspan*, n.d.). In this transition assessment, Georgia evaluated its own governance structures, financial and human resources, information systems, and organization capacities to calculate an expected cost of a successful transition while addressing its identified weaknesses.

The report discussed the drivers of disease prevalence, giving attention to vulnerable populations such as the incarcerated, injection drug users, men who have sex with men, and sex workers while encouraging a more navigable legal framework to help assist delivery of health interventions and programs to these populations. Taking these populations into consideration, the report detailed the steps that the government would take to assist in rapid detection of disease and providing funds to strengthen programs, demonstrating clear political will to adequately address their HIV and TB burden. In total, Georgia and Curatio estimated that this transition process would require that they finance $2.4 million over five years (2017-2022).

5.2 Case Study on Nigeria

Figure 7. *Summary data for Nigeria (2009)*

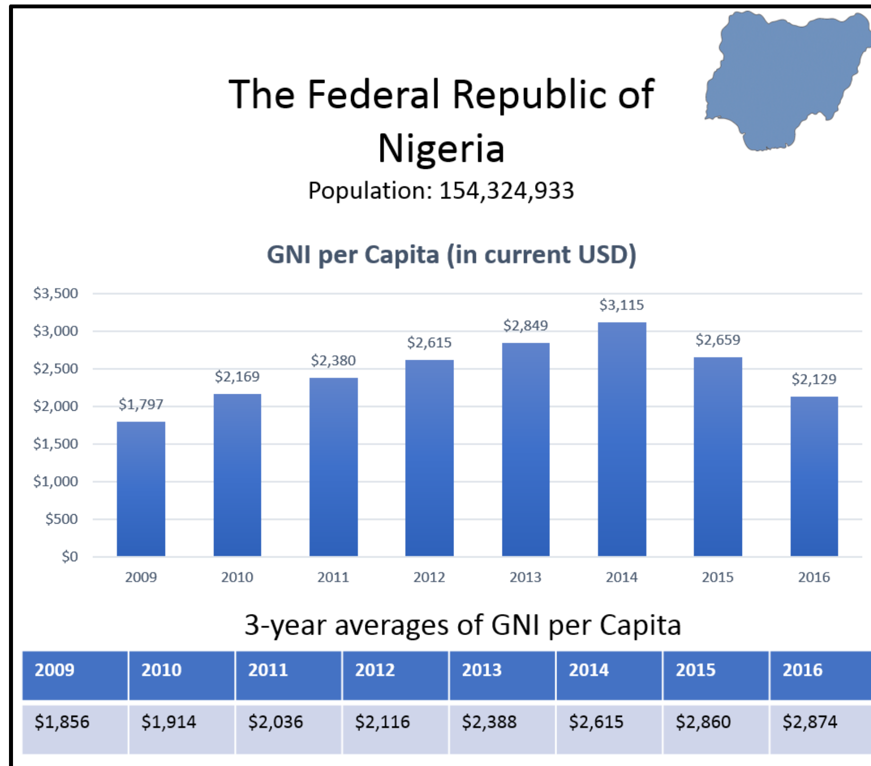


Table 13. *Data on Nigeria at the onset of its transition to domestic financing process (2009)*

Select Determinants of Financing Needs	
Determinants of Vaccine Price	
Size of Birth Cohort	6,439,530
# of Vaccines adopted with Gavi support	
Disease Burden	
HIV/AIDS Prevalence (Estimate)	3,300,00
Incident Malaria Cases	4,295,686
New and Relapse Tuberculosis Cases	88,590
Health Financing Indicators	
Domestic government health expenditure (GHE) as a % of total government expenditure	4.2%
Domestic government health expenditure as % of GDP	0.6%
Out-of-pocket health expenditure as a % of total expenditure on health	75.6%
Domestic GHE as % of total health expenditure	14.7%
% of routine vaccine costs funded by the government	-

Table 14. Economic, Health Expenditure, and Domestic Health Financing Data for Nigeria (2009-2016)

Year	2009	2010	2011	2012	2013	2014	2015	2016
Population (in thousands)	154,324	158,503	162,805	167,228	171,765	176,404	181,137	185,960
GNI (in million USD)	$277,317	$343,845	$387,549	$437,290	$489,445	$549,528	$481,570	$395,950
GNI per Capita (in USD)	$1,797	$2,169	$2,380	$2,615	$2,849	$3,115	$2,659	$2,129
% Change in GNI per Capita	-0.16	0.21	0.10	0.10	0.09	0.09	-0.15	-0.20
Health Expenditure (in million USD)								
Total GHE	$10,648	$12,166	$13,751	$15,487	$17,615	$19,036	$17,716	$14,761
Domestic GHE	$1,567	$1,517	$1,832	$2,293	$2,317	$2,349	$2,721	$1,775
Domestic Health Financing Indicators								
D-GHE as % of total government expenditure	4.2%	2.7%	2.8%	3.9%	3.7%	3.5%	5.3%	5.0%
D-GHE as % of GDP	0.6%	0.4%	0.5%	0.5%	0.5%	0.4%	0.6%	0.5%
OOP as % of total expenditure on health	75.6%	77.7%	75.4%	73.4%	71.4%	72.3%	72.1%	75.2%
D-GHE as % of total health expenditure	14.7%	12.5%	13.3%	14.8%	13.2%	12.3%	15.4%	12.0%
% of routine vaccine costs funded by government	-	0.9%	-	-	-	0.2%	0.4%	0.3%

In 2009, Nigeria was classified by the World Bank as a lower middle-income country. Its GNI per capita was $1,797 USD and its 3-year average GNI per capita was $1,856 USD. By the time Gavi implemented its first Eligibility and Transition Policy, Nigeria had already crossed the eligibility threshold and was thus technically subject to Gavi's new policy. Nigeria never went through the transition process, however, and in fact would go on to receive more aid from both Gavi and Global Fund over the following years. The Global Fund at the time had not yet implemented a transition policy, and Nigeria would not be subject to a formalized co-financing policy until 2013.

The major determinants of vaccine prices at the time (2009) were the size of Nigeria's birth cohort and the number of vaccines adopted with Gavi support. Nigeria's

birth cohort was large at an estimated 6,439,530. Nigeria's fertility rate was dropping at the time but remained relatively high at 5.87 births per woman, one of the highest in the world. The size of the birth cohort would grow over the following years as Nigeria's population in total also grew. Nigeria's vaccine coverage was low, and the government's financing of vaccines represented less than 1% of total routine vaccine costs from 2009-2016 for the years where the data is available. Had Nigeria entered a transition in 2009, it would have been responsible for assuming 100% of the financial burden without having previously funded more than 1%, meaning find financing sources for 99% of the vaccine costs in under 5 years.

The major determinant of program costs in Nigeria with respect to HIV/AIDS, Tuberculosis, and Malaria are disease burden. The Global Fund at the time considered Nigeria to have a high HIV/AIDS burden, a high Tuberculosis burden, and a high malaria burden. This is reflected in the total disbursements from the Global Fund to Nigeria in 2009, which totaled $284,702,031. In the subsequent years, these disbursements would continue in the absence of a transition policy on the Global Fund's part.

Economically, Nigeria faced the same struggle that many low and middle-income countries faced in 2009. Years of economic growth were cut short by the 2008 global financial crisis. According to the IMF, Nigeria's reliance on oil prices meant that it would have a hard time recovering, and that the government would face challenges in stabilizing its economy (*Press Release*, n.d.-a). The macroeconomic conditions at the time were not favorable, and as money available to the government decreased, the amount of money financed by the government for the health sector decreased as well. In fact, from 2009-2016 D-GHE as a % of total government health expenditure never rose above 5.3%, and

D-GHE as a % of GDP never rose above its 2009 value of 0.6%. It is also worth noting that the highest percentages for D-GHE as a % of total government health expenditure were reached in 2015 and 2016, when GNI per capita was decreasing. This could have been due to many reasons, both internal and external, but it is clear that the whole story is not easily represented by measuring GNI per capita alone. In general, for all indicators shown in Table 5, Nigeria made little or no progress in increasing these numbers regardless of the trends in GNI per capita, suggesting that Nigeria may face additional problems beyond macroeconomic conditions that are stunting its ability to become fully self-financing.

The comprehensive multi-year plan (cMYP) for 2007-2010 stated clearly that Nigeria's health system was "weak," although there was great political will to institute change. The approach moving forward would be to strengthen the health system in tandem with the government's National Economic Empowerment and Development Strategy (NEEDS) framework (*Gavi Country Hub, Nigeria*, n.d.). This would be done through the Health Sector Reform Program, with the stated objectives of:

- Improving the stewardship role of Government
- Strengthening national health systems and its management
- Reducing the burden of disease
- Improving availability of health resources and their management
- Improving access and quality of health services
- Promoting effective collaboration and partnership within and without the health sector.

In 2004, the Nigerian government established the National Program on Immunization to address low vaccination rates, and through stakeholder engagement developed a strategic plan for stable and routine immunization for the years 2006-2010. The cMYP was Gavi's adaptation of this plan in alignment with Gavi's collaboration with the Nigerian government and highlights some key objectives. The government sought to better manage the financing of vaccinations by establishing a national health accounts (NHA) system. Gavi's funds in Nigeria represented efforts to vaccinate a larger proportion of population as well as to strengthen their immunization program, ability to execute cold chain delivery, and efforts to introduce new vaccinations into their routine immunization schedule. These routine immunizations included BCG, OPV, DPT, HepB, Measles, Yellow Fever, and vitamin A (a supplement rather than a vaccine that is included in the schedule). In 2009 alone, Nigeria received $5,217,224 USD in disbursements from Gavi. Table 6 shows how Gavi disbursement in the following years increased and remained higher than those in 2009 even up until 2018. The large increase in 2013 occurred when Nigeria introduced pentavalent and pneumococcal vaccines.

Table 15. *Gavi funds disbursed (in thousand USD) to Nigeria by year*

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
$5,217	$7,670	$27,296	$44,195	$146,960	$76,841	$130,337	$128,416	$114,200	$78,014

Source: Gavi's Disbursements and Commitments Database.

The domestic health financing indicators show that Nigeria, despite its GNI per capita, would have faced many challenges if forced to enter a transition toward being fully self-financing in 2009, and would likely have even suffered losses in immunization rates. Despite being qualified, Nigeria was not sent along Gavi's transition process. It was

projected to fully transition from Gavi support in 2021, but as that date approached Gavi's board grew concerned about the prospects of success for this transition. Gavi's board decided in June of 2018 that Nigeria should be offered an extension until 2028, which is now the target date for Nigeria's transition.

Global Fund does not include Nigeria on any of its projected transition reports. From 2014-2016, Nigeria struggled to pay its appropriate contribution toward health programs in accordance with Global Fund's "counterpart financing" requirements at the time (*Global Fund chops $170.6 million from Nigeria's 2014–2016 allocation | Aidspan*, n.d.). As a result, the Global Fund reduced the total grant allocation for those years, which left Nigeria to receive less funds than it had anticipated.

The mid to late 2020's will be a crucial period for Nigeria, as it will be expected to transition from Gavi funds. Although Global Fund has not formally stated that its expectations for Nigeria are the same, under the policies currently in place it would be expected that Nigeria transition from their funding, too. To Nigeria, this can be daunting. It is a country that has shown the political will and that it is willing to collaborate, but some of its major structural challenges are beyond the scope of the stated missions of Gavi and the Global Fund.

CHAPTER 6: DISCUSSION & CONCLUSION

Table 16. *Summary of key findings*

Key Conclusions of the Literature Review and Case Studies
• More countries are reaching Middle-Income status, and thus more countries will be subject to Gavi and Global Fund's Eligibility, Co-Financing, and Transition Policies • Policies mandating the transition toward domestic finance seem to be an inevitability moving into the 2020s and are being increasingly adopted in the health development sector. • Gavi and Global Fund are leaders in this change and are the only major GPPPs to have developed clear, formalized policies. • Research will need to keep pace with the changing landscape, evaluate the results, and inform stakeholders as to what the best practices are during countries' transitions to domestic finance. • While Gavi and Global Fund policies provide a good transition framework that proved successful for one cohort of graduating countries, that framework will need to be adapted for the new cohort of countries projected to enter transition. • This new framework must include additional indicators to compliment GNI per capita's use an economic development indicator.

The international support for the Millennium Development Goals and the Sustainable Development Goals along with institutions such as the World Bank and The World Health Organization are clear indicators that the world is dedicated to the reduction of poverty and increased development. The economic potential and health outcomes for many people around the world are projected to improve as this development happens. More countries are expected to move from low-income status to middle income status, and the citizens of these countries are predicted to represent an increasing proportion of the global population and the world's wealth. The World Bank states that

"Middle Income Countries are a diverse group by size, population, and income level, and are home to 75% of the world's population and 62% of the world's poor."

At the same time, however, the financial contributions to these institutions that promote development and that fund initiatives in lower income countries are being questioned as high-income countries face their own economic and social challenges. The constituents of high-income countries are increasingly beginning to ask that their governments look inward, and finance more solutions domestically rather than sending resources abroad. Poor macroeconomic conditions and financial crises stunted aid from private donors at the same time as health initiatives grew in scale and scope, making it evident that that foreign aid alone would not keep pace to meet growing demand.

In this environment, domestic financing of development initiatives is being informed by the world's philosophical shift toward the country ownership paradigm. As countries develop, it is assumed that they gain the financial resources to contribute to development initiatives and self-finance. Increased development is seen as being directly related to increased financial capacity of governments, suggesting that higher levels of development should correlate with higher rates of self-financing. It is both the reality of many countries entering middle-income status in the years to come and this primary assumption – that economic development and the capacity to finance are directly linked – underpinning the transition to domestic financing that many GPPPs and GHIs have begun to formally implement in policy and execute since the 2010's.

While many GPPPs and unilateral agencies have adopted this philosophy in the health development sphere, only Gavi and the Global Fund have defined policies that clearly provide parameters and phases. Promulgating this structure benefits both donors

and beneficiary countries by setting predictable thresholds and delineating the processes by which countries move through transition phases toward domestically self-financing their health programs. This has facilitated transparency and collaboration between donors and beneficiary countries, allowing for discrete designations that can be evaluated by both internal and external investigators of the transition process.

A major concern raised by external investigators is that while these eligibility, co-financing, and transition processes implemented by Gavi and the Global Fund have allowed for a distinct cohort of countries to transition during the 2010's, that the countries predicted to become subject to these same policies and transitions during the 2020's are distinct and will face unique challenges. By the end of the 2010's, Gavi claimed that 14 countries successfully transitioned from Gavi support and had begun to fully-finance. These 14 countries became the subject of research looking into the social, demographic, and political characteristics that those countries had in common, what made them different, and what challenges they faced in their transition process. The Global Fund also formalized its first fully comprehensive policy around its transition and co-financing process in 2016, prompting researchers to investigate the effect that these policies would have on the integrity of the disease-focused programs supported by the Global Fund, as Global Fund currently projects that 19 countries will have at least one diseases program in transition by 2025.

These research papers have only recently been written, since the mid 2010's, as those were the years in which the first cohort of countries successfully finished their transition process. Research like these papers – ones evaluating the success of previous countries, analyzing the challenges face by countries in transition, and the comparing the

first cohort of countries to the countries projected to pass through the same transition to domestic finance – are pivotal to ensure that countries are adequately attended to during the process. Early findings of these papers show that the new cohort of graduating countries will face unique challenges due to their inherent differences in factors such as demographics, health systems building blocks such as governance and human resources, and economic conditions. The diversity of the countries that are approaching middle-income status demands that Gavi and Global Fund, if they hope to remain successful in their transition processes, adapt their transition framework to address the challenges that these research papers are identifying.

Thus far, Gavi and Global fund have chosen to use GNI per capita as a proxy for development, and thus as the primary indicator of domestic financing capacity. GNI per capita determines when and how their policies are to be implemented, and they have built their thresholds for eligibility and their phases of transition around GNI per capita values. This practice is not without precedent, as GNI per capita has been employed by the World Bank whose mission is rooted in the reduction of global poverty. The benefits of doing so are clear. It is a standardized metric that is readily available for all countries. It is calculated annually to track changes and is a good tool to understand economic growth. Health development as a subset of economic development, and the transition toward domestic health financing, must be informed by additional indicators along with GNI per capita to give country governments, donors, and researchers a clearer idea as to a country's standing in the health development process.

A holistic set of indicators should be used in addition to GNI per capita. This paper used five health financing indicators suggested by Yamey et al. to look at the

conditions of two countries, Georgia and Nigeria, to get a clear view of their economic and financing conditions at the time they initially met the income thresholds to begin a transition toward domestic finance. Additionally, cost determinants and cost drivers of health programs as suggested by Kallenberg et al. were taken into consideration. While these factors were assessed in the Georgia and Nigeria case studies, they are not the only indicators and factors that are suggested to be taken into consideration and are certainly not exhaustive of all external and internal factors identified through the literature review. The point was to begin building a framework for a transition assessment that can be uniformly applied and sufficiently sensitive to the diversity of strengths and weaknesses that will present themselves in the upcoming cohort of “graduating” countries subject to transition policies.

The case studies demonstrate that two countries can have very different experiences within their transition based on their individual demographic, economic, and political contexts. An increasing GNI per capita may or may not align with the augmentation of government funds directed toward health programs. This is due to the fact that, as seen in the case studies, there are multiple factors that are wholly beyond Gavi and Global Fund’s control, such as governance, political will, and the ability to successfully generate revenue, that determine expenditure patterns. While both Georgia and Nigeria technically fell into the same categories according to Gavi and Global Fund’s policies, their trajectories from 2009-2016 diverged more each year. While Georgia’s expenditures and health financing indicators demonstrated sensitivity to increases in GNI per capita, there seemed to be no predictable relationship between a rise in GNI per capita and health expenditure in Nigeria’s case. This is not to say that the upcoming cohort of

countries will be incapable of a successful transition, but rather that their diversity alerts to the need for the policies to be more robust in order to deal with the unique combination of strengths and weaknesses that will present themselves in the next decade.

There are a few issues that arose through the case studies that are exemplary of what authors have predicted. Politically, government structure and responsiveness to health needs are important for both the adequate finance of health programs as well as productive cooperation with donors and organizations. Georgia and Nigeria both faced the same economic crisis in 2008. Georgia's interaction with IMF allowed for essential disbursements of money to stabilize the economy. Nigeria's cooperation with IMF allowed for the critical assessment of the country's major resource generating economic growth and revenue for the government, and to develop strategies to promote recovery.

It is also important to note that as Global Fund begins to implement it transition policy, Nigeria will be forced to deal with at least two transitions in tandem while Georgia will only have to face one. This burden of a double transition, or perhaps multiple as these policies become implemented across development assistance organizations, is a clear threat to the financial stability of health programs in beneficiary countries. Without a coordinated effort between these organizations, or an alignment of their policies to work in concert through standardization, it will be left to the governments of beneficiary countries in transition to navigate these multiple transitions. If a country already has weak governance within its political and health systems, this stress could potentially exacerbate the situation. The results could be the ultimate failure of the transition process, gaps in funding during the interim, and the ultimate loss of previously gained milestones in health programs.

The availability to collect and maintain health financing data was cited as weak in the Nigeria case study. Nigeria did not have a national health accounts system, meaning that many measurements on expenditure at the time of the cMYP were heavily estimated. Data presented by Gavi on DTP-3 coverage is also inconsistent, showing that there are weaknesses in Nigeria's ability to surveil coverage and need. Gavi and the Global Fund will have difficulties in reliably reaching goals if they do not work with countries in building data management capacities.

While some researchers have suggested that Gavi and Global Fund interventions take a systems-wide approach, it is arguably not the responsibility of the two GPPP's to fund such initiatives. In some ways, health system strengthening is outside of the immediate scope of Gavi and the Global Fund's operational missions, though it is an integral part of success for the sustained reduction in disease burdens and it has become a financed objective for both GPPPs. A reasonable compromise may be that Gavi and Global Fund build within their policies parameters that consider the strength of a country's health systems.

Informally, Gavi and the Global Fund do take many of these factors into consideration. In both transition readiness assessments and special Board meetings, concerns raised about a specific country's readiness or ability to transition can be assessed and exceptions made. While this process can be corrective and necessary, it can also be inefficient and lack transparency. A major benefit to these frameworks is that they allow for predictable progression through defined thresholds. If a country is truly to be held responsible for "country ownership," then it must be able to accurately and predictably place itself along this transition process and prepare for future outcomes.

Unwritten concessions and appeals processes do little to clarify this process, and ultimately can harbor resentment between donors and beneficiary countries.

The development of a clear and standardized framework driven by a set of informative health financing indicators should be a major focus of beneficiary countries, private donors, donor countries, GPPPs, and researchers. This focus is timely, pertinent, and necessary given the development realities that the world will face in the 2020s. The new cohort of countries entering the transition to domestic-financing process will benefit from such a framework for its predictability, and for its greater sensitivity to their financing capacity. Countries of the same GNI per capita do not face the same demographic, political, and economic realities, thus Gavi and Global Fund must base their financing judgements on an augmented set of indicators that encapsulate the extent of a country's self-financing viability.

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