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To: Members of the Executive Board

From: The Secretary

Subject: **Staff Proposal for a COVID-19 Vaccine Window Under the Rapid Credit Facility and Rapid Financing Instrument**

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## STAFF PROPOSAL FOR A COVID-19 VACCINE WINDOW UNDER THE RAPID CREDIT FACILITY AND RAPID FINANCING INSTRUMENT

*The international community has an overwhelming interest in promoting widespread vaccination against COVID-19, as it will save lives and yield massive positive externalities. Given these externalities, grants from advanced and G20 economies should be the main financing source for vaccination programs in lower-income countries. Multilateral development banks should also play a critical role, given their ability to provide highly concessional financing and their expertise in supporting healthcare delivery. Where these financing sources fall short or are delayed, IMF financing can be a “third line of defense” for members with balance of payments (BOP) needs arising from COVID-19 vaccination programs, consistent with the Fund’s mandate. In this context, the paper discusses some of the challenges and considerations in using the IMF’s existing toolkit for this purpose. To help address some of these challenges, staff proposes to establish a vaccine window in the rapid credit facility (RCF) and rapid financing instrument (RFI), with the window’s design tailored toward better supporting member countries’ BOP needs in this area while ensuring necessary risk mitigation measures.*

## INTRODUCTION

**1. Supporting widespread COVID-19 vaccination is a key priority for the international community.** Vaccination is imperative because it will save lives and livelihoods. Vaccinating the majority of the global population also offers massive positive externalities: it will help restore normalcy to the global economy and reduce the risk that vaccine-resistant mutations develop. Economically, arresting the pandemic can generate a \$9 trillion gain in global GDP by 2025; consequently, the international community has a strong interest in promoting widespread vaccination, as estimated and emphasized recently in Agarwal and Gopinath (2021).

**2. In the near term, supply bottlenecks are the key constraint on expanding vaccination, but this constraint is expected to ease significantly in the period ahead.** The supply of vaccines is currently limited, such that additional financing for vaccine purchases is unlikely to affect the pace of vaccination in the very near term. However, additional financing now for advance purchase commitments could help secure delivery of doses (and possibly boost production) in 2022 when supply constraints are expected to ease as production capacity expands and new vaccines are approved.

**3. Vaccination costs for developing countries are likely to be significant, with a wide range of uncertainty.** Vaccinating 60 percent of the population in 153 emerging and developing economies could cost around US\$35 billion according to some estimates.<sup>1</sup> However, vaccination costs could be significantly higher or lower. For example, vaccinating a higher percentage of the population would entail additional costs.<sup>2</sup> The cost per vaccination could also rise, especially if increased efforts are needed to overcome vaccine hesitancy. Further costs could arise from a need for booster shots. Together, such effects could more than double the total estimated cost. Alternatively, total vaccination costs could be below these estimates in good case scenarios in which rapidly expanding manufacturing capacity and deployment of new vaccines sharply reduces costs per dose.

**4. Vaccine financing for lower-income countries should ideally be provided in the form of grants from higher-income economies and highly concessional financing from multilateral development banks (MDBs).** Grants from higher-income economies are especially appropriate given the large positive externalities to COVID-19 vaccination. Concessional financing from MDBs should be the second key source of financing, including because MDBs have extensive expertise in supporting procurement and healthcare delivery.

**5. The above forms of financing are becoming increasingly available.** Important sources include vaccines financed by COVAX's Advance Market Commitment (COVAX AMC), the World Bank (WB) and other MDBs, African Union initiatives, and doses donated directly by vaccine-producing countries (Box 1).

**6. Nonetheless, it is still uncertain whether such sources will fully cover the financing need in time, given uncertainties about the ultimate needs and pace of fundraising.** If all of the commitments above are kept, new grant fundraising and donations continue apace, and the number and cost of required doses do not expand rapidly, then these financing sources may be sufficient to fund the majority of vaccination programs in lower-income countries. Alternatively, if donors are late or fail in keeping their commitments, new donations stall, and/or the cost or number of required doses expands rapidly, available financing may be insufficient or delayed.

**7. Against this background, this paper considers how IMF financing for vaccination programs can be a "third line of defense" after grants and MDB financing (or other preferable sources).** It explores how the IMF's lending toolkit can be adapted to better support members' needs in this area. Vaccination programs create a clear BOP need for many LICs and

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<sup>1</sup> This is based on a cost assumption of US\$12 per person for vaccines and US\$3 per person for delivery, with 2 percent wastage, as calculated in Agarwal and Gopinath (2021). Note that the cost of vaccines in existing procurement contracts has varied significantly, which is not taken into account in this calculation. China, India, and Russia are excluded from the calculation, as they are major vaccine producers. Vaccinating 60 percent of the population is in line with the African Union's current goal of reaching this target by end-2022.

<sup>2</sup> Epidemiologists estimate that reaching "herd immunity" requires that at least 75-90 percent of a population be immune to COVID-19, either from vaccines or previous exposure to the virus.

EMs, as the vast majority of these countries will import their vaccines. The distribution of vaccines within a country may also create BOP needs due, for example, to imports of fuel and refrigeration equipment. Consequently, IMF facilities can help address this BOP need where vaccine financing from grants, MDBs, and other preferable sources falls short or is delayed,<sup>3</sup> such that IMF financing is needed to fill the gap or provide a bridge until such financing is forthcoming. Indeed, conditionality in some existing IMF-supported programs (e.g., Kenya) has already been adjusted to accommodate the cost of vaccine purchases by, for example, including adjustors to quantitative targets. Access in existing IMF-supported programs could also be augmented as appropriate. Given the urgency of the vaccine financing need, members could also seek financing under the IMF's emergency financing facilities if the criteria for using these facilities are met.<sup>4</sup>

### Box 1. Major Sources of External Financing for COVID-19 Vaccination

**Major sources of external financing for COVID-19 vaccination programs in developing economies include the following:**

- COVAX has so far secured grant commitments sufficient to purchase vaccines for 30 percent of the population in the 91 lower-income countries eligible for COVAX's AMC. 1/ COVAX aims to raise additional funding to expand this coverage, though it is unclear at this stage how much these efforts will yield. See Annex 1 for more information on COVAX's operations.
- The WB has announced US\$12 billion in available financing for COVID-19 vaccination programs. In the coming weeks, the WB expects to have approved projects for around 50 countries totaling around US\$4 billion.
- Other MDBs have similar facilities. For example, the Asian Development Bank's (ADB) has made available US\$9 billion for its Asian Pacific Vaccine Access Facility (APVAX), of which US\$509 million has been disbursed to 5 countries so far. 2/ The Inter-American Development Bank has similarly mobilized at least [US\\$1 billion](#) for vaccine acquisition and distribution.
- The African Vaccine Acquisition Trust (AVAT) has so far secured over [1.1] billion doses, which African Union member countries can purchase with cash or with financing from a US\$2 billion facility at the African Export-Import Bank.
- Major vaccine-producing countries have also announced plans to donate vaccines to lower-income countries, with new announcements coming rapidly.
- The forthcoming general SDR allocation could also provide significant financing for vaccination programs. However, it is important to note that a general SDR allocation is intended to meet the *long-term* global need to supplement existing reserves. Consequently, many countries may need to use the SDR allocation for BOP needs unrelated to vaccines, including building reserves. Restrictions on central bank financing of the government may also limit the use of reserves for budget financing in some countries.

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1/ 92 countries are eligible for the AMC, but for the purposes of their calculations Agarwal and Gopinath (2021) discuss India separately, as COVAX takes a tailored approach to India given its large population. This paper follows that convention.

2/ Afghanistan, Mongolia, Philippines, Samoa, Tonga, and Tuvalu.

<sup>3</sup> In countries with access to market financing on favorable terms, such financing may be preferable to increasing unrestricturable obligations to the Fund.

<sup>4</sup> Financing the BOP need arising from vaccination programs is urgent, as vaccination is key to arresting the pandemic and the associated severe economic disruption and loss of life.

## A. Existing Toolkit: Key Challenges and Considerations

### 8. Use of the existing toolkit for financing BOP needs arising from COVID-19 vaccination programs faces several challenges and considerations. Specifically:

- **RCF/RFI access sub-limits.** Many countries will not be able to access financing under the RCF/RFI because they will have no space available under the RCF/RFI access sub-limits. Specifically, under the current framework, cumulative sub-limits on RCF/RFI access will become a constraint for around 50 countries at end-2021 when the temporary increase in these limits is scheduled to expire.<sup>5</sup> Annual or cumulative sub-limits on RCF/RFI access are already binding for 3 countries (Benin, Dominica, and Mozambique) as of end-July 2021.<sup>6</sup>
- **Qualification criteria.** To approve emergency financing under the RFI/RCF, the Executive Board will need to be satisfied that the member has an urgent BOP need<sup>7</sup> and that, normally, the member either (i) has a BOP need that is expected to be resolved within one year with no major policy adjustments being necessary or (ii) lacks capacity to implement an upper credit tranche (UCT)-quality economic program. Criterion (i) (i.e., the “not necessary” condition) has been applied to require that the member does not have a protracted BoP need unrelated to the urgent BoP need. Criterion (ii) (i.e., the “not feasible” condition) requires that a UCT-quality program is not feasible because of the member’s limited policy implementation capacity or the urgent nature of the BoP need. The policy objective behind these qualification criteria is to ensure that low-conditionality emergency support is not used as a shortcut in cases in which countries could instead receive support through a UCT-quality program to address their BOP needs.

On the “not necessary” criterion, a good case could be made that BOP needs arising from COVID-19 vaccination programs will be resolved within one year with no major policy adjustments being necessary, assuming COVID-19 vaccinations will mostly be a one-off

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<sup>5</sup> For the regular window of the RFI and the exogenous shocks window of the RCF, the annual access limit before the crisis was 50 percent of quota. The cumulative access limit before the crisis was 100 percent of quota. During the crisis, these limits have been temporarily increased to 100 percent of quota (annual) and 150 percent of quota (cumulative). These temporary increases are set to expire on December 31, 2021.

<sup>6</sup> Use of the RCF/RFI would also trigger exceptional access policy requirements for 3 countries (Angola, Ethiopia, and Ukraine).

<sup>7</sup> The member must be experiencing an urgent BOP need characterized by a financing gap that, if not addressed, would result in an immediate and severe economic disruption. In this context, BOP needs arising from vaccination programs to save lives and end pandemic-related economic disruptions (due to social distancing, lockdowns, sickness, uncertainty, etc.) would seem to clearly qualify as an urgent need. The Fund also has to be satisfied that the member’s BOP difficulties are not predominantly caused by a withdrawal of financial support by donors (see Section II, paragraph 1(d) (2) of the PRGT Trust Instrument). Other standard requirements for use of Fund resources (e.g., the member’s debt being sustainable) also apply.

expenditure and given that vaccinations are expected to pay for themselves several times over by unlocking pandemic-related output constraints.

However, countries may also have protracted BOP needs and macroeconomic imbalances unrelated to vaccinations that warrant medium-term program engagement. In such cases, it may be difficult to argue that the “not necessary” condition (i.e., no major policy adjustments being necessary) is met. Consequently, such countries may not be able to access IMF emergency financing facilities for vaccine-related BOP needs unless the “not feasible” condition is met.

As noted above, a UCT-quality program is considered “not feasible” when a member lacks capacity to implement a UCT-quality program owing to its limited policy implementation capacity or the urgent nature of its BOP need. There could be cases in which questions might arise as to whether this condition is met, particularly if the country has good implementation capacity and it would be feasible to adopt a UCT-quality program. If neither the “not necessary” nor the “not feasible” condition is met, a member would normally not qualify for emergency financing.

If the member does not meet the criteria for emergency financing, it could instead request a Fund arrangement or an augmentation of access under an existing arrangement to fund its vaccine financing need. However, the time required to negotiate a UCT-quality program and the conditionality it entails would need to be balanced against the urgent need for widespread vaccination at the global level and the very high social and economic returns to vaccination, as well as possible reputational risks for the Fund from not quickly providing much-needed vaccine financing and from imposing stringent conditions on such financing.

- **Governance safeguards.** As emphasized by the Board during the 2020-21 round of pandemic-related emergency financing, staff should seek commitments and, if necessary, prior actions to reduce risks of misuse of Fund resources as appropriate. In this context, many countries committed to measures on procurement transparency and auditing of pandemic-related spending. However, given the fairly uniform nature of vaccine spending, it may be possible to design safeguards that are more specifically tailored to this BOP need.

## B. Proposal

**9. Against this background, staff proposes to create a temporary COVID-19 vaccine window within the RCF/RFI, with the necessary risk mitigation measures.** The window’s design is geared toward supporting members’ BOP needs during the global pandemic while addressing some of the challenges noted above. The proposed window’s key features include the following:

- **Exemption from RCF/RFI ceilings.** Access under the proposed window would not count toward the other ceilings on RCF/RFI access (i.e., the annual and cumulative sub-limits). In

other words, countries that have reached cumulative or annual access limits in the regular window of the RFI, the exogenous shock window of the RCF, or the natural disaster window under the RFI or RCF would still have access to the vaccine window, up to the cap of 25 percent of quota. This treatment is justified on the grounds that COVID-19 vaccination programs are exceptional in that the economic and social returns to spending on COVID-19 vaccination programs are exceptionally high and thereby provide unusually strong economic benefits to the member, including strengthening its repayment capacity. Access under the vaccine window would still count toward all other limits and thresholds, including overall PRGT and GRA access limits and thresholds for exceptional access and high combined credit procedures, as these limits are important for safeguarding Fund resources.

- **Access capped at 25 percent of quota.**<sup>8</sup> The suggested access is derived as a trade-off between containing risks to the Fund’s balance sheet and adequacy to cover much of the residual vaccine financing gap. The suggested access would meet the needs of nearly all members in the SDN scenario and in a somewhat more adverse scenario (Annex 2). However, in a severely adverse scenario—which assumes a 33 percent increase in cost-per-vaccination relative to the SDN scenario and a 88 percent increase in the number of vaccinations due to a need for booster shots and covering 75 percent of the population—such access may be insufficient to fully cover about one-third of the needs. If such a severe adverse scenario materializes, the Board may need to consider recalibrating the access cap under this window.

With access capped at 25 percent of quota, staff estimates that total use of the window might be only around US\$50 million in the SDN scenario. However, there is significant uncertainty around this estimate, with a high probability of minimal use in upside scenarios, but also a possibility of use rising over US\$6 billion in severe adverse scenarios. The expected value of use might be in the range of US\$3 billion, depending on the probabilities assigned to various scenarios, with about 40 percent of this coming from the PRGT.<sup>9</sup> This is broadly in line with the recent staff report on PRGT reform, which included in its projected financing needs for the PRGT a buffer for health spending, including residual vaccine financing.

- **Qualification criteria.** The “not necessary” condition described above would be amended for the vaccine window to require that BOP needs that result specifically from vaccination programs would be expected to resolve within a year without major policy adjustments

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<sup>8</sup> If a member exhausts its space under the vaccine window and still has space available under the annual and cumulative limits on the regular window of the RFI or under the exogeneous shock window of the RCF, the member could still request RCF/RFI financing for any urgent BOP needs, including for vaccines. However, the qualification criteria for these windows would apply for this additional amount, rather than the amended criteria proposed for the vaccine window in the next bullet.

<sup>9</sup> The expected value (i.e., mean) for use of the window is higher than the median because outcomes are not distributed symmetrically around the median. Rather, use of the window in good-case scenarios is truncated at zero (no use) while use of the window in bad-case scenarios could be several multiples of the median estimate.

being necessary. Qualification under this criterion would thus be possible even if there are BOP needs unrelated to vaccination programs that will take more than one year to resolve.

The justification for this proposed amendment, which broadens access to the RCF under this criterion, is that vaccination programs are likely to pay for themselves many times over by being the key factor in rapidly re-starting economic growth, as noted in Agarwal and Gopinath (2021). Consequently, the BOP need associated with vaccination programs is not only expected to resolve on its own, but filling this need is expected to significantly reduce other BOP needs and macro imbalances (unrelated to vaccines) that a country may face, as well as boost a country's capacity to repay the Fund. Such high returns to IMF-financed expenditure are virtually unprecedented and thus justify the proposed approach.

It is expected that nearly all requests would satisfy the amended "not necessary" condition, as the window and its sunseting (see below) are predicated on the expectation that COVID-19 vaccination will be largely a one-off expenditure and that this expenditure will more than pay for itself. However, as with other emergency financing, countries could also qualify under the "not feasible" condition if applicable.

- **Standard requirements.** All other standard safeguards for RCF/RFI lending would still apply, including that a member's debt is assessed to be sustainable, the member has the capacity to repay the Fund, the BOP need is justified, and the member signs a Letter of Intent in which it commits to undergo a Safeguards Assessment (including an MOU agreement between the central bank and government on their respective roles and responsibilities for servicing financial obligations to the IMF), commits to not introduce measures or policies that would compound its BOP difficulties, and articulates the general policies (broad macroeconomic and public health/vaccination policies) that it plans to pursue to address its BOP difficulties and, for an RCF request, advance its poverty reduction and growth objectives.
- **Prior action(s).** Prior action(s) could also be employed as needed to help address the challenges related to governance safeguards and avoiding price escalation. For example, a prior action to publish a contract for vaccines that are purchased in coordination with a reputable multilateral mechanism, such as COVAX, AVAT, or an MDB-assisted project would help ensure that IMF resources are used for their intended purpose (by ensuring that effective vaccines are actually purchased) and reduce risks that the window is used to evade MDBs' procurement oversight. The use of multilateral purchase mechanisms would also reduce the risk that uncoordinated bidding for vaccines leads to price escalation. There may be other prior actions that may be better suited for specific countries, based on their circumstances. Access under the window would be limited to BOP needs arising from COVID-19 vaccination programs, including BOP needs arising from domestic delivery costs (e.g., BOP needs arising from cost of refrigeration, distributing vaccines, etc.).

Other approaches that achieve the objectives of ensuring adequate governance safeguards and avoiding excessive price escalation could also be considered as needed. Additional tailored measures (including possibly different additional prior actions) may be needed in specific cases, especially if governance-related risks are high.

- **Concurrent use of the vaccine window with existing Fund arrangements.** To ensure that all countries meet the same conditionality requirements and to avoid disadvantaging countries with existing IMF arrangements, staff proposes that countries with such arrangements (regardless of whether they on-track or off-track) could opt to access this proposed window (instead of obtaining such financing through an augmentation of access under the arrangement, though this option would also remain open), provided that they meet the proposed qualification criteria above.
- **Repeated use.** Repeated use of the window would be allowed, up to the cumulative cap on the window of 25 percent.
- **Processing.** To ease processing, staff could develop brief, standardized templates for request staff reports and Letters of Intent, with approval on a lapse-of-time basis, absent objections from the Board. If a number of requests come at once, staff could alternatively explore the feasibility of bringing these to the Board simultaneously in a CCRT-like umbrella paper, though each member's request would need to be assessed on its own merits.
- **Sunset clause.** The window is predicated on a scenario in which COVID-19 vaccine financing is largely a one-off expenditure, with successful deployment of vaccines staunching its spread. However, if mutations and/or waning immunity from vaccines cause COVID vaccination to become a permanent expenditure, countries will eventually need to adjust to these permanent costs, such that the emergency financing approaches considered in this note would no longer be the most appropriate mechanisms. Consistent with this, staff proposes to view the window as temporary and set to expire at end-2022. If necessary, the appropriateness of this end date could also be re-assessed by staff as the date nears, depending on how the pandemic and vaccine financing evolve.
- **Bridging to grants.** As noted above, grants are the most appropriate form of financing for COVID-19 vaccination for lower-income countries, given the large positive externalities. To encourage that IMF financing catalyzes grant financing and does not crowd it out, Fund staff should continue to advocate strongly that advanced/G20 economies deliver on their grant commitments for vaccine financing and expand these further, including to help countries repay their borrowing from the vaccine window. In this way, the vaccine window could in some cases provide bridge financing until advanced/G20 economies are able to provide grants to lower-income countries for COVID-19 vaccination.
- **Voting majorities.** The vaccine window can be established within the RCF and RFI by a majority of the votes cast by the Executive Board.

## C. Risks

**10. While careful design of the vaccine window can mitigate risks, important risks will remain.** Of note:

- **Countries' failure or inability to deliver vaccines.** Widespread vaccine hesitancy and/or capacity constraints in regard to delivery and refrigeration could result in significant wastage in some cases. There is thus a risk that some countries may receive the vaccines but are unable to deliver them to cover the population. In such cases, the expected health and economic benefits of vaccination, including the expected positive effects on the capacity to repay the Fund, would not materialize. Similar outcomes would arise if vaccine suppliers renege on their contracts (due, for example, to unforeseen export restrictions) and do not deliver the vaccines or if vaccines prove insufficiently effective at curtailing infections due to the rise of new, vaccine-resistant variants.
- **Incentives to enter a UCT-quality program.** Access to low-conditionality financing from the vaccine window may at the margin reduce some countries' incentive to enter into a UCT-quality Fund-supported program. However, this effect is likely to be modest, given the cap on access under the proposed window.
- **Credit exposure.** The window could increase the Fund's credit outstanding and hence its credit risk. However, these amounts are expected to be moderate except in severe downside scenarios (Annex 2). Credit risks are contained by the proposed cap on access and other standard safeguards, such as the requirement that a member have sustainable debt and adequate capacity to repay.

## D. Alternative Approaches

**11. Staff considered other ways to support members' BOP needs arising from vaccine financing but considered that implementing them would take too long to be useful.** These other options include the following:

- **New facility.** One alternative option would be to create a new temporary facility for BOP needs arising from COVID-19 vaccination. One advantage of a new facility is that it would allow more flexibility in deviating from the existing RCF/RFI purposes and design. However, the establishment of any new facility within the PRGT would require consent by 155 affected contributors to the PRGT, involving potentially lengthy domestic procedures in some countries which may not conclude in a timely manner to address the current needs.
- **New trust.** Another alternative would be to create a new trust funded primarily by SDRs that are lent ("channeled") by donor countries. Such a trust would allow more flexibility in the design of the lending scheme. However, to protect lenders against credit risk and

maintain the ability for contributors to treat trust contributions as reserve assets, a new trust would likely require many of the design features of the PRGT, such as funding a reserve account and agreements to allow encashment. Setting up such a trust would likely take considerable time, given the need to secure resources, to reach tailored agreements with contributors, and for contributing countries to complete domestic approval processes.

Consequently, staff considered these options to be incompatible with the urgency of the vaccine financing need, especially as these options would likely provide little value-added over the proposed RCF/RFI vaccine window.

## **E. Issues for Discussion**

- Views on the key challenges and considerations identified by staff?
- Views on the establishment of a vaccine window in the RCF/RFI?
- Views on the proposed design of the window?
- Views on the scenarios underpinning this proposal?

## Annex I. Vaccine Access under COVAX

*COVID-19 Vaccines Global Access (COVAX) is the vaccine pillar of the Access to COVID-19 Tools Accelerator (ACT-A). COVAX aims to promote equitable access to COVID-19 vaccines across the globe. This annex briefly describes how COVAX works.*

1. **COVAX leadership.** COVAX is co-led by the Coalition for Epidemic Preparedness Innovations (CEPI), Gavi, and the World Health Organization (WHO), alongside key delivery partner UNICEF.
2. **Broad approach.** COVAX's approach differs based on a country's income level, with countries divided into two broad categories: (i) lower-income countries with access to subsidized vaccines through COVAX's Advance Market Commitment (AMC) and (ii) higher-income countries that can participate in COVAX's self-financing arrangements.
3. **AMC countries.** 92 low- and middle-income economies are eligible to receive support through COVAX's grant-funded AMC mechanism, as well as through a cost-sharing approach.<sup>1</sup>
  - Grant-funded AMC. COVAX's AMC draws most of its funds from official development assistance. The AMC has currently secured sufficient financing to fully subsidize vaccines (i.e., provide them for free) for 30 percent of the population of the 91 AMC countries (excluding India).<sup>2</sup> This includes the cost of syringes for administering vaccines, freight and insurance to ship the vaccine cargo to country ports, and provision for the no-fault compensation scheme. Eligible countries are required to confirm participation in the COVAX Facility and complete a Vaccine Request in order to be allocated their doses.
  - Cost-sharing approach. AMC countries who want to secure doses through COVAX to vaccinate more than 30 percent of their population have the option to purchase additional doses through a cost-sharing approach, which is currently being designed. For this approach, the participant will have to provide part (or possibly all) of the financing, either from domestic resources or other funding, such as multilateral development banks. Countries have been asked to announce their interest in a certain number of doses in framework agreements that are non-binding. At a later stage, COVAX makes a specific supply offer to countries for a specific number and type of vaccine. At this stage, countries that wish to purchase vaccines must either make a cash payment or secure a letter of funding commitment (these are expected to come from MDBs).

<sup>1</sup> See [https://www.gavi.org/sites/default/files/covid/pr/COVAX\\_CA\\_COIP\\_List\\_COVAX\\_PR\\_12-05-21.pdf](https://www.gavi.org/sites/default/files/covid/pr/COVAX_CA_COIP_List_COVAX_PR_12-05-21.pdf) for the list of eligible countries. It includes all economies with Gross National Income per capita below US\$ 4,000 plus other IDA-eligible economies.

<sup>2</sup> The AMC takes a tailored approach to India, given that India accounts for 17 percent of the world's population.

## Self-Financing Participants (SFP)

4. Participants that are not eligible for COVAX AMC funding can take part under COVAX's self-financing arrangements. Upon joining COVAX, a SFP is requested to indicate the share of its population (between 10 and 50 percent) it wishes to cover. COVAX then negotiates Advance Purchase Agreements with manufacturers on behalf of participants. SFPs can choose among two types of arrangements: the Committed Purchase Arrangement and the Optional Purchase Arrangement.

- *Committed Purchase Arrangement.* Under this arrangement, participants make an upfront payment of US\$3.20 per person and provide a financial guarantee of US\$17.90 per person, amounting to an estimated all-inclusive cost of US\$21.10 per person. If the price of a vaccine candidate is lower than the estimated cost, a country can select to purchase additional courses (if available) or have the remainder of the financial guarantee returned. If the price is higher than the estimated cost, the country is only obligated to pay the total committed amount, implying lower population coverage. A country can only opt-out of a particular vaccine candidate if the price of the vaccine is more than double the initially estimated all-inclusive cost. This arrangement provides the advantage of relatively low upfront cost with less funding at-risk as well as the ability to opt out of purchasing high-priced vaccines.
- *Optional Purchase Arrangement.* Under this arrangement, participants pay the full upfront payment of US\$6.20 per person, plus a risk-sharing guarantee of US\$0.80 per person. They can then decide which vaccine candidates they will purchase during two decision windows:
  - ***Decision window 1:*** The first decision window is before COVAX and manufacturers enter into an agreement. If a participant decides that it is interested, it will be issued an option to purchase doses from that deal in the second decision window.
  - ***Decision window 2:*** The second decision window occurs when COVAX confirms orders with manufacturers. If a participant exercises its option, the participant receives doses that have been “pre-paid” out of its upfront payment and can purchase the remainder of its allocation at the price per dose agreed between COVAX and the manufacturer.

If a participant is not interested in exercising its option, it can in the first instance trade its allocation on the proposed COVAX Exchange or donate its allocation to other participants or to the COVAX AMC at its discretion. If the participant ultimately decides not to exercise its option, it will not be committed to purchase its allocation. However, COVAX will also not refund its share of the upfront payment invested in this candidate. The risk-sharing guarantee is released back to the participant only if COVAX does not incur liabilities from participants' waiving of the purchase option.

This arrangement has the advantage of a low financial guarantee and the ability to select certain vaccine candidates.

**5. Recent developments.** COVAX has recently reached out to AMC countries to gauge their interest in the cost-sharing approach to go beyond coverage of 30 percent of the population. Separately, COVAX has started delivery to several SFPs. As of June 25<sup>th</sup>, COVAX has shipped more than 89 million vaccines to 133 participant countries. This pace of delivery is below COVAX's initial targets due mainly to restrictions on vaccine exports from India. While short-term supply constraints are expected to continue through July and August, 1.9 billion doses are forecast to be available by end-2021.

COVAX's financing models might be further reviewed and developed over the coming months as COVAX develops its strategy for 2022. For example, Gavi recently announced that terms and conditions for self-financing countries will be revised for 2022 (<https://www.gavi.org/news/media-room/gavi-board-strengthens-commitment-reaching-most-vulnerable-through-routine>).

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Gavi website: <https://www.gavi.org/gavi-covax-amc> ; <https://www.gavi.org/vaccineswork/gavi-covax-amc-explained>; <https://www.gavi.org/vaccineswork/what-does-covaxs-latest-supply-forecast-tell-us>

## Annex II. Vaccine Costing and Financing Scenarios

*This annex estimates potential demand for the proposed vaccine window as a third line of defense after grants, in-kind donations, and more concessional financing by other institutions. Three scenarios are considered. Scenario 1 is aligned with Agarwal and Gopinath (2021) and finds modest demand for the window, with perhaps 6 countries accessing it for a total amount of around US\$50 million. Scenarios 2 and 3 suggest that higher vaccination costs and vaccine needs—reflecting broader coverage, potential boosters, higher delivery costs, and higher wastage—could increase demand for the vaccine window to around US\$5-6 billion during 2021-22. If a 40 percent probability is assigned to Scenario 1 and 2 and a 20 percent probability is assigned to Scenario 3, use of the vaccine window would be US\$3.2 billion in expectation (US\$1.3 billion from the PRGT and US\$1.9 billion from the GRA), but with significant uncertainty around this estimate. Details on the assumptions behind these estimates are below.*

### A. Assumptions

**Scenario 1 aligns with Agarwal and Gopinath (2021) on costing assumptions and updates financing assumptions to reflect additional courses secured since the SDN’s publication.** It departs from the SDN by considering a smaller sample of countries. In particular:

- While all member countries are eligible for the new window, the sample is restricted to the 83 members that have tapped IMF financing since the onset of the pandemic in March 2020, as these members are most likely to access the new window.<sup>1</sup> In this way, the sample excludes countries that are unlikely to access the window because their debt is unsustainable, they have no BOP need (e.g., due to very high reserves), or they are reluctant to use IMF resources due to perceived stigma or other reasons, as these factors would likely have also prevented these countries from accessing IMF financing during the pandemic.
- Staff assumes a goal of covering 60 percent of the total population of each country with one full course of vaccine (i.e., 1 dose of the Johnson and Johnson vaccine or 2 doses of other vaccines) and an estimated wastage of 2 percent (Table 1).
- To determine the potential residual vaccine course gap, staff identified total courses for which financing is already secured as of July 1<sup>st</sup>, 2021, for each of the 83 countries. The approach includes courses (i) secured through regional and bilateral deals, (ii) procured through COVAX either financed through grants or self-financing, (iii) secured with confirmed financing from MDBs (WB, ADB, EIB), and (iv) already delivered in the form of in-kind donations.<sup>2</sup>

<sup>1</sup> This excludes countries with a Flexible Credit Line (FCL).

<sup>2</sup> Data is drawn from the UNICEF dashboard, Airfinity, and Duke Global Health Innovation Center for bilateral deals and donations. Regional deals include deals from the African Union through AVAT and financed by Afreximbank,

(continued)

	<b>Scenario 1 (SDN)</b>	<b>Scenario 2</b>	<b>Scenario 3</b>
<i>Description</i>	<i>One course of vaccine</i>	<i>Need for boosters and higher coverage and wastage</i>	<i>Scenario 2 + higher prices, coverage and wastage</i>
<i>Population coverage</i>	60%	70%	75%
<i>Vaccines per person</i>	2	3	3
<i>Vaccine cost</i>	<i>US\$12 per course</i>	<i>US\$12 per course</i>	<i>US\$14 per course</i>
<i>In-country delivery cost</i>	<i>US\$3 per course</i>	<i>US\$3 per course</i>	<i>US\$ 6 per course</i>
<i>Wastage</i>	2%	15%	20%
<i>Courses with Secured Financing</i>	<i>Courses secured through bilateral and regional deals, COVAX's self-financing mechanism, COVAX grants for AMC-91 countries to cover 30% of the population, MDB financing, and donated doses that have been delivered</i>	<i>Scenario 1 + adds 50% of doses secured through AVAT to the residual gap to be financed</i>	
<i>IMF share of residual financing gap</i>	35%		

*Source: IMF staff assumptions.*

- The difference between total courses needed and total courses with secured financing provides the residual gap in courses. To estimate the residual financing gap in terms of US dollars, the price per course of the vaccine is set at US\$12, with an in-country delivery cost of US\$3.<sup>3</sup>
- Staff assumes that 35 percent of the residual financing need would be covered by the proposed vaccine window, with the remaining 65 percent likely to be covered by further donations, grants, concessional financing from bilateral donors and MDBs, and other sources.

which are assumed to cover 30 percent of the population for all African Union members. Data on courses financed by MDBs and COVAX draws from their respective websites and project papers. It is assumed that COVAX grants cover 30 percent of the population of AMC-91 countries (AMC-91 refers to the AMC-92 countries excluding India). Optioned doses from bilateral deals are not included, as countries may still need to secure financing for these. Committed but not delivered donations are also excluded as they could be delivered with significant lags. Vaccine brands included are those that are approved by the WHO's Emergency Use Listing Procedure as well as Sputnik and Bharat.

<sup>3</sup> For countries that would have a negative financing gap, i.e., they have more than 60 percent of their population already covered, the gap is set to zero.

This assumption aims to balance adequate prudence in assuming that demand for the window could be significant once it becomes available with the recognition that substantial sources of other financing at more favorable terms also remain available and should be relied upon first. For example, the available financing estimates from the WB include only the US\$2.7 billion that has so far been approved for the countries in the sample, but this number will likely rise further as additional vaccine supply becomes available for purchase (the WB has stated that it has at least US\$20 billion available for such needs).<sup>4</sup> Similarly, other MDBs have announced the availability of further financing for vaccines that is well beyond what they have so far lent. Some countries may also choose to finance vaccines out of market financing, reserves, or the general SDR allocation, rather than relying on the Fund's emergency financing instruments.

- Countries that would require Fund financing below 0.05 percent of GDP are excluded from the aggregate results, as they would likely not turn to the window for such relatively small amounts of financing.

**Scenario 2 and 3 focus on the potential need to procure more doses and the risk of higher vaccine and delivery costs.** Scenario 2 assumes that one additional dose is needed as a booster, while also expanding population coverage to 70 percent. In addition, staff assumes higher wastage at 15 percent.<sup>5</sup> The scenario also adds half of the secured doses through AVAT to the residual financing gap, reflecting various downside risks, including if a need arises to diversify vaccine types and/or finance them on more favorable terms. Scenario 3 builds on Scenario 2 and additionally assumes that population coverage needs to be raised to 75 percent to reach herd immunity and that vaccine and delivery prices increase, reflecting, for example, a shift towards more expensive technologies and higher-than-expected in-country delivery costs to reach the population and reduce hesitancy. Wastage is also raised to 20 percent. In line with scenario 1, staff assumes that 35 percent of the residual financing gap could be financed under the proposed vaccine window.

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<sup>4</sup> As of July 1, 2021, the World Bank approved operations to support vaccine rollout in 53 countries amounting to US\$4.4 billion. The number cited here is smaller as (i) it only includes the subset of countries that are part of the sample and (ii) it counts only the amount that is specifically allocated to vaccine procurement and delivery (Table 7).

<sup>5</sup> A vaccination campaign of this scale and with the particular target of vaccinating older adults, who are the most vulnerable, is unprecedented. It is thus unclear how prepared health systems are. Indicative wastage rates for vaccines range between 5 percent and 50 percent, depending on the vial presentation (dose per vial) and whether it is routine or campaign vaccinations (WHO, 2019). The World Bank currently works with a recommended estimate of 5 percent for COVID-19 vaccinations, citing a lower bound of 3 percent and a higher bound of 15 percent. The WHO uses 10 percent. This number could reduce as health systems gather experience or increase as reaching additional segments of the population could become more cumbersome. Wastage for scenario 2 and 3 is chosen at higher levels compared to the World Bank and WHO estimates as the scenarios aim to simulate realizations of more severe downside risks.

## B. Results

**Scenario 1 implies very modest demand for the vaccine window.** IMF financing to cover an estimated 35 percent of the residual financing gap would result in total demand for the vaccine window of US\$50 million for 6 countries (Table 2), of which 5 are PRGT-eligible. These 6 countries would need access of 4 percent of quota on average. Other countries' potential demand for IMF financing would remain below 0.05 percent of their GDP (Table 4). They are thus not expected to draw on the window given the relatively small amount.

**Demand for the vaccine window could rise in Scenario 2 and 3.** IMF financing could rise to US\$5.8 billion in Scenario 2 and US\$9.6 billion in Scenario 3, with 66 countries and 72 countries, respectively, drawing from the window. For PRGT access, this would correspond to US\$2.8 billion and US\$4.5 billion, respectively.<sup>6</sup> The average amount in percent of quota would reach 17 and 25 percent in the two scenarios, with 16 countries requiring more than 25 percent of quota in Scenario 2 (Table 5) and 25 countries requiring more than 25 percent of quota in Scenario 3 (Table 6).<sup>7</sup> These estimates are before any cap on access is applied. If a cap of 25 percent of quota is applied, IMF financing would only rise to US\$5.0 billion in Scenario 2 and US\$6.1 billion in Scenario 3. PRGT access would be US\$2.1 billion in Scenario 2 and US\$2.4 billion in Scenario 3.

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<sup>6</sup> This calculation assumes that blenders draw 1/3 of their financing need from the PRGT and 2/3 from the GRA.

<sup>7</sup> This is based on projections for January 1, 2022. In Scenario 2, three countries would trigger exceptional access policy requirements (Ethiopia, Angola, and Ukraine). In Scenario 3, this number would rise to five (Ethiopia, Pakistan, Angola, Kenya, and Ukraine). Pakistan would not be included in this list if a cap of 25 percent of quota is assumed.

**Table 2. Aggregate Results – Scenario 1 (SDN)**

Scenario 1												
Country Group	No. of Countries	Total Courses Needed	Total Courses with Financing Secured	Residual Course Gap 1/	of which		Potential IMF Demand (35 percent of gap) 3/				No. of Countries triggering EA (cap 4/5/	
					At-risk courses being secured 2/	Residual Financing Gap	No. of Countries	Total Financing (no cap)	Total Financing (cap) 4/	Percent of Quota (average) (no cap)		Percent of Quota (average) (cap) 4/
			<i>(In mn of courses)</i>			<i>(In bn of USD)</i>		<i>(In bn of USD)</i>		<i>(In % of quota)</i>		
<b>LICs + EMs (excl. BRIC)</b>	<b>83</b>	<b>1,165.4</b>	<b>1,367.5</b>	<b>38.1</b>	<b>150.0</b>	<b>0.6</b>	<b>6</b>	<b>0.05</b>	<b>0.05</b>	<b>3.8</b>	<b>3.8</b>	<b>0</b>
<b>LICs</b>	<b>53</b>	<b>669.1</b>	<b>731.1</b>	<b>12.3</b>		<b>0.2</b>	<b>5</b>	<b>0.05</b>	<b>0.05</b>	<b>3.9</b>	<b>3.9</b>	<b>0</b>
Blenders	20	281.6	326.7	5.2		0.1	3	0.03	0.03	3.3	3.3	0
Non-Blenders	33	387.6	404.5	7.1		0.1	2	0.02	0.02	4.8	4.8	0
<b>EMs</b>	<b>30</b>	<b>496.2</b>	<b>636.4</b>	<b>25.8</b>		<b>0.4</b>	<b>1</b>	<b>0.01</b>	<b>0.01</b>	<b>3.5</b>	<b>3.5</b>	<b>0</b>

Sources: Staff calculation using data from UNICEF, Airfinity, Duke Global Health Innovation Center, COVAX, World Bank, ADB, EIB. Current as of July 1<sup>st</sup> 2021.

1/ The residual course gap does not equal total courses needed minus total courses with financing secured. This is because some countries have courses that cover more than 60% of its population, while others have less than that. For the former the residual course gap is set to zero in the aggregation.

2/ Raising coverage beyond existing aspirations of COVAX/AU and preparing for booster needs. The IMF SDN (Agarwal and Gopinath, 2021) has set aside 1 billion doses for at-risk investment in vaccines to handle down-side scenarios, of which an estimated 300 million is in the pipeline to be delivered in early 2022.

3/ Only countries that have potential IMF demand of more than 0.05 percent of GDP.

4/ Caps access at 25 percent of quota.

5/ As of January 1, 2022.

Table 3. Aggregate Results - Scenario 2 and 3

Scenario 2												
Country Group	No. of Countries	Total Courses Needed	Total Courses with Financing Secured	Residual Course Gap 1/	of which		Potential IMF Demand (35 percent of gap) 3/					No. of Countries triggering EA (cap) 4/5/
					At-risk courses being secured 2/	Residual Financing Gap	No. of Countries	Total Financing (no cap)	Total Financing (cap) 4/	Percent of Quota (average) (no cap)	Percent of Quota (average) (cap) 4/	
		<i>(In mn of courses)</i>			<i>(In bn of USD)</i>			<i>(In bn of USD)</i>		<i>(In % of quota)</i>		
<b>LICs + EMs (excl. BRIC)</b>	<b>83</b>	<b>2,299.3</b>	<b>1,188.6</b>	<b>1,134.6</b>	<b>150.0</b>	<b>17.0</b>	<b>66</b>	<b>5.8</b>	<b>5.0</b>	<b>16.7</b>	<b>13.1</b>	<b>3</b>
<b>LICs</b>	<b>53</b>	<b>1,320.2</b>	<b>621.9</b>	<b>698.4</b>		<b>10.5</b>	<b>49</b>	<b>3.7</b>	<b>2.9</b>	<b>19.9</b>	<b>15.2</b>	<b>1</b>
Blenders	20	555.6	300.6	255.0		3.8	18	1.3	1.2	12.6	12.1	0
Non-Blenders	33	764.7	321.3	443.4		6.7	31	2.3	1.7	24.1	16.9	1
<b>EMs</b>	<b>30</b>	<b>979.1</b>	<b>566.7</b>	<b>436.2</b>		<b>6.5</b>	<b>17</b>	<b>2.2</b>	<b>2.1</b>	<b>7.4</b>	<b>7.3</b>	<b>2</b>
Scenario 3												
Country Group	No. of Countries	Total Courses Needed	Total Courses with Financing Secured	Residual Course Gap 1/	of which		Potential IMF Demand (35 percent of gap) 3/					No. of Countries triggering EA (cap) 4/5/
					At-risk courses being secured 2/	Residual Financing Gap	No. of Countries	Total Financing (no cap)	Total Financing (cap) 4/	Percent of Quota (average) (no cap)	Percent of Quota (average) (cap) 4/	
		<i>(In mn of courses)</i>			<i>(In bn of USD)</i>			<i>(In bn of USD)</i>		<i>(In % of quota)</i>		
<b>LICs + EMs (excl. BRIC)</b>	<b>83</b>	<b>2,570.7</b>	<b>1,188.6</b>	<b>1,394.9</b>	<b>150.0</b>	<b>27.9</b>	<b>72</b>	<b>9.6</b>	<b>6.1</b>	<b>25.0</b>	<b>15.4</b>	<b>4</b>
<b>LICs</b>	<b>53</b>	<b>1,476.0</b>	<b>621.9</b>	<b>854.1</b>		<b>17.1</b>	<b>52</b>	<b>6.0</b>	<b>3.5</b>	<b>30.4</b>	<b>17.7</b>	<b>2</b>
Blenders	20	621.1	300.6	320.5		6.4	19	2.2	1.6	19.8	15.6	1
Non-Blenders	33	854.9	321.3	533.6		10.7	33	3.7	1.9	36.5	18.8	1
<b>EMs</b>	<b>30</b>	<b>1,094.6</b>	<b>566.7</b>	<b>540.7</b>		<b>10.8</b>	<b>20</b>	<b>3.6</b>	<b>2.7</b>	<b>11.0</b>	<b>9.5</b>	<b>2</b>

Sources: Staff calculation using data from UNICEF, Airfinity, Duke Global Health Innovation Center, COVAX, World Bank, ADB, EIB. Current as of July 1<sup>st</sup>, 2021.

1/ The residual course gap does not equal total courses needed minus total courses with financing secured. This is because some countries have courses that cover more than the targeted population, while others have less than that. For the former the residual course gap is set to zero in the aggregation.

2/ Raising coverage beyond existing aspirations of COVAX/AU and preparing for booster needs. The IMF SDN (Agarwal and Gopinath, 2021) has set aside 1 billion doses for at-risk investment in vaccines to handle down-side scenarios, of which an estimated 300 million is in the pipeline to be delivered in early 2022.

3/ Only countries that have potential IMF demand of more than 0.05 percent of GDP.

4/ Caps access at 25 percent of quota.

5/ As of January 1, 2022.

## C. Caveats

**There is high uncertainty around the underlying assumptions of this exercise due to a lack of comprehensive data and a range of risks affecting demand, supply, and financing.**

**Data.** While a uniform price is assumed, countries' bilateral commercial vaccine procurement shows significant variation in the price of vaccines, varying between US\$2.19 (European Commission) and US\$40 (Argentina), according to UNICEF. It is also extremely difficult to estimate delivery costs and wastage, as the scale and nature (targeting older adults) of this global vaccination campaign is unprecedented. Comprehensive data on vaccine donations and bilateral deals are also lacking, and committed in-kind donations are excluded from the exercise. These aspects suggest the exercise might overestimate the residual financing gap. On the other hand, for some of these deals, countries might not have yet paid the full amount, suggesting that financing might not be fully secured. This would suggest an underestimation of the residual financing gap.

**Assumptions.** The scenarios assume that the vaccine window fills a uniform 35 percent of the residual financing gap for all countries in the sample. In practice, however, there will be substantial variability across countries, with many countries choosing not to access the vaccine window at all and some countries possibly accessing significantly more than 35 percent of their residual financing gap. This distribution of demand across countries could significantly affect the total amount of financing provided under the window, depending on whether higher demand is concentrated in larger or smaller economies.

**Risks.** The main risks in the outlook stem from the following:

- **Supply side:** While global production is increasing, dislocation in global supply chains and an unexpected interruption in a major producer could lead to tighter supply conditions and drive up prices. On the upside, new suppliers and vaccine donations flooding the market could drive down prices.
- **Demand side:** Booster shots for variants and immunization of children could raise the need for additional rounds of vaccines and thereby limit excess vaccines for donation, keeping demand and prices high. Wastage, vaccine shopping, and hesitancy could also affect demand, prices, and delivery costs.
- **Financing:** There could be further mobilization of grants and concessional financing from bilateral donors and other international organization that could reduce the Fund's share of the financing gap. However, grants might also materialize with a lag as donors need to approve them in their budgets. The Fund's vaccine window could provide interim financing for urgent BOP needs linked to vaccination programs.

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Table 4. Country-Level Scenario 1 Results

Country	Total Courses Needed	Total Courses with Financing Secured	Residual Course Gap	Residual Financing Gap (US\$ mil)	Potential IMF Financing (no cap)				Potential IMF Financing (cap)			
					US\$ mil	in % of quota	in % of GDP	EA Triggered	US\$ mil	in % of quota	in % of GDP	EA Triggered
Nicaragua	4,054,500	2,129,257	1,925,243	28.9	10.1	2.7	0.08	N	10.1	2.7	0.08	N
Tajikistan	5,837,256	4,633,828	1,203,428	18.1	6.3	2.5	0.08	N	6.3	2.5	0.08	N
Haiti	6,978,636	3,790,261	3,188,375	47.8	16.7	7.1	0.08	N	16.7	7.1	0.08	N
Solomon Islands	420,444	216,853	203,591	3.1	1.1	3.6	0.07	N	1.1	3.6	0.07	N
Papua New Guinea	5,475,564	2,789,348	2,686,216	40.3	14.1	3.7	0.06	N	14.1	3.7	0.06	N
Armenia	1,813,356	573,603	1,239,753	18.6	6.5	3.5	0.05	N	6.5	3.5	0.05	N
Jamaica	1,812,132	620,220	1,191,912	17.9	6.3	1.1	0.04		6.3	1.1	0.04	
Samoa	121,176	60,588	60,588	0.9	0.3	1.4	0.04		0.3	1.4	0.04	
Pakistan	135,185,904	116,609,750	18,576,154	278.6	97.5	3.3	0.04		97.5	3.3	0.04	
Nepal	17,831,844	15,356,303	2,475,541	37.1	13.0	5.7	0.04		13.0	5.7	0.04	
Tonga	64,872	32,436	32,436	0.5	0.2	0.9	0.03		0.2	0.9	0.03	
Namibia	1,555,092	913,443	641,649	9.6	3.4	1.2	0.03		3.4	1.2	0.03	
Albania	1,761,336	871,345	889,991	13.3	4.7	2.3	0.03		4.7	2.3	0.03	
Montenegro, Rep. of	384,336	143,674	240,662	3.6	1.3	1.4	0.02		1.3	1.4	0.02	
Bosnia and Herzegovina	2,007,972	1,245,386	762,586	11.4	4.0	1.0	0.02		4.0	1.0	0.02	
Georgia	2,441,268	1,888,747	552,521	8.3	2.9	1.0	0.02		2.9	1.0	0.02	
Gabon	1,362,312	744,876	617,436	9.3	3.2	1.0	0.02		3.2	1.0	0.02	
Grenada	69,156	37,373	31,783	0.5	0.2	0.7	0.02		0.2	0.7	0.02	
St. Lucia	112,608	73,631	38,977	0.6	0.2	0.7	0.01		0.2	0.7	0.01	
Kyrgyz Republic	3,992,688	3,837,736	154,952	2.3	0.8	0.3	0.01		0.8	0.3	0.01	
Bahamas, The	240,516	71,290	169,226	2.5	0.9	0.3	0.01		0.9	0.3	0.01	
Barbados	175,644	109,375	66,269	1.0	0.3	0.3	0.01		0.3	0.3	0.01	
St. Vincent and the Grenadines	67,932	57,121	10,811	0.2	0.1	0.3	0.01		0.1	0.3	0.01	
North Macedonia	1,274,796	1,131,484	143,312	2.1	0.8	0.4	0.01		0.8	0.4	0.01	
Ukraine	26,765,208	26,037,114	728,094	10.9	3.8	0.1	0.00		3.8	0.1	0.00	
Myanmar	33,298,920	33,071,522	227,398	3.4	1.2	0.2	0.00		1.2	0.2	0.00	
Afghanistan	23,823,936	23,800,652	23,284	0.3	0.1	0.0	0.00		0.1	0.0	0.00	
Ethiopia	70,357,968	71,167,575	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Niger	14,814,684	15,169,693	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Burkina Faso	12,792,636	12,912,022	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Malawi	11,707,560	11,842,319	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Chad	10,052,712	10,248,529	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Madagascar	16,946,892	17,105,047	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Mozambique	19,128,060	25,771,828	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Mali	12,393,612	12,509,274	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Uganda	27,993,492	37,638,738	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Benin	7,419,276	7,592,044	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Somalia	9,726,516	10,021,285	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Cameroon	16,246,152	16,499,768	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Bangladesh	100,789,668	108,436,752	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Democratic Republic of the Congo	54,811,332	55,348,352	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	

Table 4. Country-Level Scenario 1 Results (concluded)

Country	Total Courses Needed	Total Courses with Financing	Residual Course Gap	Residual Financing Gap (US\$)	Potential IMF Financing (no cap)				Potential IMF Financing (cap)			
					US\$ mil	in % of quota	in % of GDP	EA Triggered	US\$ mil	in % of quota	in % of GDP	EA Triggered
Nigeria	126,157,680	128,990,736	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Kenya	32,907,852	45,738,229	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Guinea-Bissau	1,204,416	1,215,656	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Rwanda	7,926,624	9,347,202	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Guinea	8,037,396	8,469,410	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Uzbekistan	20,483,028	28,601,405	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Comoros	532,440	537,409	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Bolivia	7,143,876	24,949,671	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
South Sudan	6,850,728	6,914,662	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Angola	20,113,992	23,463,677	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Central African Republic	2,955,960	2,983,546	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Jordan	6,244,236	6,945,899	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Mauritania	2,845,800	2,900,410	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Sierra Leone	4,881,924	5,314,263	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Djibouti	604,656	661,299	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Egypt	62,628,408	127,905,880	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Gambia, The	1,479,204	2,003,079	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Côte d'Ivoire	16,143,336	21,482,547	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Ghana	19,016,676	26,247,916	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Liberia	3,095,496	3,138,155	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
South Africa	36,297,108	42,621,220	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Honduras	6,061,860	6,481,452	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Ecuador	10,797,516	24,568,570	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Kosovo	1,098,080	1,167,381	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Senegal	10,247,328	16,435,318	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Morocco	22,589,532	56,970,755	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Eswatini	709,920	785,904	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Cabo Verde	340,272	414,802	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Moldova	2,468,808	2,889,652	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Seychelles	59,976	81,371	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Panama	2,640,780	4,378,423	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Dominica	44,064	59,517	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Tunisia	7,233,228	12,776,672	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Mongolia	2,006,136	2,915,398	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Lesotho	1,310,904	2,466,552	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
São Tomé and Príncipe	134,028	157,617	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
El Salvador	3,969,432	6,152,166	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Dominican Republic	6,638,976	16,006,039	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Maldives	331,092	729,569	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Costa Rica	3,117,528	4,715,895	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Sudan	26,835,588	27,213,527	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	
Togo	5,066,748	6,567,169	0	0.0	0.0	0.0	0.00		0.0	0.0	0.00	

Table 5. Country-Level Scenario 2 Results

Country	Total Courses Needed	Total Courses with Financing Secured	Residual Course Gap	Residual Financing Gap (US\$ mil)	Potential IMF Financing (no cap)				Potential IMF Financing (cap)			
					US\$ mil	in % of quota	in % of GDP	EA Triggered	US\$ mil	in % of quota	in % of GDP	EA Triggered
Somalia	19,190,798	7,589,656	11,601,142	174.0	60.9	25.8	1.13	N	59.0	25.0	1.10	N
South Sudan	13,516,755	5,201,980	8,314,775	124.7	43.7	12.3	0.98	N	43.7	12.3	0.98	N
Malawi	23,099,475	8,915,429	14,184,046	212.8	74.5	37.2	0.80	N	50.1	25.0	0.54	N
Madagascar	33,436,883	12,868,324	20,568,559	308.5	108.0	30.6	0.73	N	88.2	25.0	0.60	N
Central African Republic	5,832,225	2,244,556	3,587,669	53.8	18.8	11.7	0.69	N	18.8	11.7	0.69	N
Sierra Leone	9,632,228	4,093,782	5,538,445	83.1	29.1	9.7	0.66	N	29.1	9.7	0.66	N
Democratic Republic of the Congo	108,144,908	41,645,519	66,499,389	997.5	349.1	22.7	0.63	N	349.1	22.7	0.63	N
Mozambique	37,740,413	20,989,813	16,750,600	251.3	87.9	26.8	0.63	N	82.0	25.0	0.59	N
Afghanistan	47,005,560	23,800,652	23,204,908	348.1	121.8	26.1	0.61	N	116.9	25.0	0.58	N
Niger	29,229,953	11,466,022	17,763,930	266.5	93.3	49.1	0.59	N	47.5	25.0	0.30	N
Liberia	6,107,535	2,364,281	3,743,254	56.1	19.7	5.3	0.58	N	19.7	5.3	0.58	N
Chad	19,834,395	7,735,351	12,099,044	181.5	63.5	31.4	0.51	N	50.6	25.0	0.40	N
Ethiopia	138,819,030	53,578,083	85,240,947	1,278.6	447.5	103.1	0.48	Y	108.5	25.0	0.12	Y
Sudan	52,947,668	20,504,630	32,443,038	486.6	170.3	69.5	0.48	N	61.3	25.0	0.17	N
Guinea-Bissau	2,376,360	914,552	1,461,808	21.9	7.7	18.7	0.47	N	7.7	18.7	0.47	N
Tajikistan	11,517,135	4,633,828	6,883,307	103.2	36.1	14.4	0.46	N	36.1	14.4	0.46	N
Burkina Faso	25,240,373	9,713,863	15,526,510	232.9	81.5	46.9	0.43	N	43.5	25.0	0.23	N
Rwanda	15,639,540	7,365,546	8,273,994	124.1	43.4	18.8	0.41	N	43.4	18.8	0.41	N
Mali	24,453,083	9,410,871	15,042,212	225.6	79.0	29.3	0.40	N	67.4	25.0	0.34	N
Gambia, The	2,918,528	1,633,278	1,285,249	19.3	6.7	7.5	0.32	N	6.7	7.5	0.32	N
Uganda	55,232,258	30,640,365	24,591,893	368.9	129.1	24.8	0.31	N	129.1	24.8	0.31	N
Guinea	15,858,098	6,460,061	9,398,037	141.0	49.3	16.0	0.30	N	49.3	16.0	0.30	N
Pakistan	266,727,090	116,609,750	150,117,340	2,251.8	788.1	26.9	0.30	N	733.1	25.0	0.28	N
Nepal	35,182,928	15,356,303	19,826,624	297.4	104.1	45.9	0.29	N	56.6	25.0	0.16	N
Togo	9,996,893	5,300,482	4,696,411	70.4	24.7	11.6	0.29	N	24.7	11.6	0.29	N
Kyrgyz Republic	7,877,730	3,837,736	4,039,994	60.6	21.2	8.3	0.28	N	21.2	8.3	0.28	N
Benin	14,638,523	5,737,225	8,901,298	133.5	46.7	26.1	0.27	N	44.7	25.0	0.26	N
Comoros	1,050,525	404,299	646,226	9.7	3.4	13.2	0.26	N	3.4	13.2	0.26	N
Nicaragua	7,999,688	2,129,257	5,870,431	88.1	30.8	8.2	0.25	N	30.8	8.2	0.25	N
Haiti	13,769,123	3,790,261	9,978,861	149.7	52.4	22.2	0.25	N	52.4	22.2	0.25	N
Cameroon	32,054,295	12,438,230	19,616,065	294.2	103.0	25.8	0.23	N	99.6	25.0	0.22	N
Myanmar	65,700,075	33,071,522	32,628,553	489.4	171.3	23.0	0.22	N	171.3	23.0	0.22	N
Solomon Islands	829,553	216,853	612,699	9.2	3.2	10.7	0.20	N	3.2	10.7	0.20	N
Mauritania	5,614,875	2,188,960	3,425,915	51.4	18.0	9.7	0.19	N	18.0	9.7	0.19	N
Papua New Guinea	10,803,503	2,789,348	8,014,154	120.2	42.1	11.1	0.17	N	42.1	11.1	0.17	N
Angola	39,685,695	18,435,179	21,250,516	318.8	111.6	10.4	0.16	Y	111.6	10.4	0.16	Y
Nigeria	248,914,050	97,451,316	151,462,734	2,271.9	795.2	22.4	0.15	N	795.2	22.4	0.15	N
São Tomé and Príncipe	264,443	124,110	140,333	2.1	0.7	3.4	0.15	N	0.7	3.4	0.15	N
Kenya	64,928,483	37,511,266	27,417,216	411.3	143.9	18.4	0.14	N	143.9	18.4	0.14	N
Bangladesh	198,861,968	108,436,752	90,425,215	1,356.4	474.7	30.8	0.13	N	385.0	25.0	0.11	N
Armenia	3,577,823	573,603	3,004,220	45.1	15.8	8.5	0.13	N	15.8	8.5	0.13	N

Table 5. Country-Level Scenario 2 Results (concluded)

Country	Total Courses Needed	Total Courses with Financing	Residual Course Gap	Residual Financing Gap (US\$)	Potential IMF Financing (no cap)				Potential IMF Financing (cap)			
					US\$ mil	in % of quota	in % of GDP	EA Triggered	US\$ mil	in % of quota	in % of GDP	EA Triggered
Samoa	239,085	60,588	178,497	2.7	0.9	4.0	0.12	N	0.9	4.0	0.12	N
Senegal	20,218,380	13,873,486	6,344,894	95.2	33.3	7.1	0.12	N	33.3	7.1	0.12	N
Namibia	3,068,258	524,670	2,543,588	38.2	13.4	4.8	0.12	N	13.4	4.8	0.12	N
Ghana	37,520,648	21,493,747	16,026,900	240.4	84.1	7.9	0.11	N	84.1	7.9	0.11	N
Honduras	11,960,288	6,481,452	5,478,836	82.2	28.8	8.0	0.11	N	28.8	8.0	0.11	N
Côte d'Ivoire	31,851,435	17,446,713	14,404,722	216.1	75.6	8.1	0.11	N	75.6	8.1	0.11	N
Jamaica	3,575,408	620,220	2,955,187	44.3	15.5	2.8	0.11	N	15.5	2.8	0.11	N
Uzbekistan	40,413,818	28,601,405	11,812,413	177.2	62.0	7.8	0.10	N	62.0	7.8	0.10	N
Tonga	127,995	32,436	95,559	1.4	0.5	2.5	0.10	N	0.5	2.5	0.10	N
Eswatini	1,400,700	608,424	792,276	11.9	4.2	3.7	0.10	N	4.2	3.7	0.10	N
Djibouti	1,193,010	510,135	682,875	10.2	3.6	7.8	0.10	N	3.6	7.8	0.10	N
Lesotho	2,586,465	2,138,826	447,639	6.7	2.4	2.3	0.10	N	2.4	2.3	0.10	N
Georgia	4,816,718	1,888,747	2,927,971	43.9	15.4	5.1	0.10	N	15.4	5.1	0.10	N
Cabo Verde	671,370	329,734	341,636	5.1	1.8	5.2	0.09	N	1.8	5.2	0.09	N
Moldova	4,871,055	2,889,652	1,981,403	29.7	10.4	4.2	0.09	N	10.4	4.2	0.09	N
Ukraine	52,808,805	26,037,114	26,771,691	401.6	140.6	4.8	0.09	Y	140.6	4.8	0.09	Y
Albania	3,475,185	871,345	2,603,840	39.1	13.7	6.8	0.08	N	13.7	6.8	0.08	N
Gabon	2,687,895	404,298	2,283,597	34.3	12.0	3.8	0.07	N	12.0	3.8	0.07	N
Bosnia and Herzegovina	3,961,808	1,245,386	2,716,421	40.7	14.3	3.7	0.06	N	14.3	3.7	0.06	N
Jordan	12,320,123	6,945,899	5,374,223	80.6	28.2	5.7	0.06	N	28.2	5.7	0.06	N
South Africa	71,615,618	33,546,943	38,068,674	571.0	199.9	4.5	0.06	N	199.9	4.5	0.06	N
Kosovo	2,166,554	1,167,381	999,174	15.0	5.2	4.4	0.06	N	5.2	4.4	0.06	N
Montenegro, Rep. of	758,310	143,674	614,636	9.2	3.2	3.7	0.06	N	3.2	3.7	0.06	N
North Macedonia	2,515,223	1,131,484	1,383,739	20.8	7.3	3.6	0.05	N	7.3	3.6	0.05	N
St. Vincent and the Grenadines	134,033	57,121	76,911	1.2	0.4	2.4	0.05	N	0.4	2.4	0.05	N
Grenada	136,448	37,373	99,075	1.5	0.5	2.2	0.05	N	0.5	2.2	0.05	N
St. Lucia	222,180	73,631	148,549	2.2	0.8	2.5	0.04	N	0.8	2.5	0.04	N
Tunisia	14,271,443	10,968,365	3,303,078	49.5	17.3	2.2	0.04	N	17.3	2.2	0.04	N
Mongolia	3,958,185	2,915,398	1,042,787	15.6	5.5	5.2	0.04	N	5.5	5.2	0.04	N
El Salvador	7,831,845	6,152,166	1,679,679	25.2	8.8	2.1	0.03	N	8.8	2.1	0.03	N
Seychelles	118,335	66,377	51,958	0.8	0.3	0.8	0.03	N	0.3	0.8	0.03	N
Dominica	86,940	59,517	27,423	0.4	0.1	0.9	0.03	N	0.1	0.9	0.03	N
Barbados	346,553	109,375	237,178	3.6	1.2	0.9	0.03	N	1.2	0.9	0.03	N
Bahamas, The	474,548	71,290	403,258	6.0	2.1	0.8	0.02	N	2.1	0.8	0.02	N
Egypt	123,568,305	112,248,778	11,319,527	169.8	59.4	2.0	0.02	N	59.4	2.0	0.02	N
Costa Rica	6,151,005	4,715,895	1,435,110	21.5	7.5	1.4	0.01	N	7.5	1.4	0.01	N
Panama	5,210,363	4,378,423	831,939	12.5	4.4	0.8	0.01	N	4.4	0.8	0.01	N
Bolivia	14,095,148	24,949,671	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Ecuador	21,303,923	24,568,570	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Morocco	44,570,033	51,323,372	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Dominican Republic	13,098,960	16,006,039	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Maldives	653,258	729,569	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N

Table 6. Country-Level Scenario 3 Results

Country	Total Courses Needed	Total Courses with Financing Secured	Residual Course Gap	Residual Financing Gap (US\$ mil)	Potential IMF Financing (no cap)				Potential IMF Financing (cap)			
					US\$ mil	in % of quota	in % of GDP	EA Triggered	US\$ mil	in % of quota	in % of GDP	EA Triggered
Somalia	21,455,550	7,589,656	13,865,894	277.3	97.1	41.1	1.81	N	59.0	25.0	1.10	N
South Sudan	15,111,900	5,201,980	9,909,920	198.2	69.4	19.5	1.55	N	69.4	19.5	1.55	N
Malawi	25,825,500	8,915,429	16,910,071	338.2	118.4	59.1	1.28	N	50.1	25.0	0.54	N
Madagascar	37,382,850	12,868,324	24,514,526	490.3	171.6	48.6	1.16	N	88.2	25.0	0.60	N
Central African Republic	6,520,500	2,244,556	4,275,944	85.5	29.9	18.6	1.10	N	29.9	18.6	1.10	N
Mozambique	42,194,250	20,989,813	21,204,437	424.1	148.4	45.2	1.06	N	82.0	25.0	0.59	N
Sierra Leone	10,768,950	4,093,782	6,675,168	133.5	46.7	15.6	1.06	N	46.7	15.6	1.06	N
Democratic Republic of the Congo	120,907,350	41,645,519	79,261,831	1,585.2	554.8	36.0	1.01	N	384.8	25.0	0.70	N
Afghanistan	52,552,800	23,800,652	28,752,148	575.0	201.3	43.0	1.00	N	116.9	25.0	0.58	N
Niger	32,679,450	11,466,022	21,213,428	424.3	148.5	78.1	0.93	N	47.5	25.0	0.30	N
Liberia	6,828,300	2,364,281	4,464,019	89.3	31.2	8.4	0.93	N	31.2	8.4	0.93	N
Chad	22,175,100	7,735,351	14,439,749	288.8	101.1	49.9	0.81	N	50.6	25.0	0.40	N
Ethiopia	155,201,400	53,578,083	101,623,317	2,032.5	711.4	163.8	0.76	Y	108.5	25.0	0.12	Y
Sudan	59,196,150	20,504,630	38,691,520	773.8	270.8	110.5	0.76	N	61.3	25.0	0.17	N
Guinea-Bissau	2,656,800	914,552	1,742,248	34.8	12.2	29.7	0.74	N	10.3	25.0	0.62	N
Tajikistan	12,876,300	4,633,828	8,242,472	164.8	57.7	23.0	0.74	N	57.7	23.0	0.74	N
Burkina Faso	28,219,050	9,713,863	18,505,187	370.1	129.5	74.5	0.69	N	43.5	25.0	0.23	N
Rwanda	17,485,200	7,365,546	10,119,654	202.4	70.8	30.6	0.67	N	57.8	25.0	0.54	N
Mali	27,338,850	9,410,871	17,927,979	358.6	125.5	46.6	0.63	N	67.4	25.0	0.34	N
Gambia, The	3,262,950	1,633,278	1,629,672	32.6	11.4	12.7	0.55	N	11.4	12.7	0.55	N
Uganda	61,750,350	30,640,365	31,109,985	622.2	217.8	41.8	0.53	N	130.3	25.0	0.32	N
Pakistan	298,204,200	116,609,750	181,594,450	3,631.9	1,271.2	43.3	0.49	Y	733.1	25.0	0.28	N
Guinea	17,729,550	6,460,061	11,269,489	225.4	78.9	25.5	0.48	N	77.3	25.0	0.47	N
Togo	11,176,650	5,300,482	5,876,168	117.5	41.1	19.4	0.48	N	41.1	19.4	0.48	N
Kyrgyz Republic	8,807,400	3,837,736	4,969,664	99.4	34.8	13.6	0.47	N	34.8	13.6	0.47	N
Nepal	39,334,950	15,356,303	23,978,647	479.6	167.9	74.1	0.47	N	56.6	25.0	0.16	N
Benin	16,366,050	5,737,225	10,628,825	212.6	74.4	41.6	0.43	N	44.7	25.0	0.26	N
Comoros	1,174,500	404,299	770,201	15.4	5.4	21.0	0.41	N	5.4	21.0	0.41	N
Nicaragua	8,943,750	2,129,257	6,814,493	136.3	47.7	12.7	0.39	N	47.7	12.7	0.39	N
Haiti	15,394,050	3,790,261	11,603,789	232.1	81.2	34.3	0.38	N	59.1	25.0	0.28	N
Myanmar	73,453,500	33,071,522	40,381,978	807.6	282.7	37.9	0.37	N	186.5	25.0	0.24	N
Cameroon	35,837,100	12,438,230	23,398,870	468.0	163.8	41.1	0.36	N	99.6	25.0	0.22	N
Mauritania	6,277,500	2,188,960	4,088,540	81.8	28.6	15.4	0.31	N	28.6	15.4	0.31	N
Solomon Islands	927,450	216,853	710,597	14.2	5.0	16.6	0.30	N	5.0	16.6	0.30	N
Papua New Guinea	12,078,450	2,789,348	9,289,102	185.8	65.0	17.1	0.27	N	65.0	17.1	0.27	N
Angola	44,369,100	18,435,179	25,933,921	518.7	181.5	17.0	0.26	Y	181.5	17.0	0.26	Y
São Tomé and Príncipe	295,650	124,110	171,540	3.4	1.2	5.6	0.25	N	1.2	5.6	0.25	N
Nigeria	278,289,000	97,451,316	180,837,684	3,616.8	1,265.9	35.7	0.24	N	886.0	25.0	0.17	N
Kenya	72,590,850	37,511,266	35,079,584	701.6	245.6	31.3	0.23	Y	195.9	25.0	0.19	Y
Bangladesh	222,330,150	108,436,752	113,893,398	2,277.9	797.3	51.8	0.23	N	385.0	25.0	0.11	N
Senegal	22,604,400	13,873,486	8,730,914	174.6	61.1	13.1	0.22	N	61.1	13.1	0.22	N

Table 6. Country-Level Scenario 3 Results (concluded)

Country	Total Courses Needed	Total Courses with Financing	Residual Course Gap	Residual Financing Gap (US\$)	Potential IMF Financing (no cap)				Potential IMF Financing (cap)			
					US\$ mil	in % of quota	in % of GDP	EA Triggered	US\$ mil	in % of quota	in % of GDP	EA Triggered
Lesotho	2,891,700	2,138,826	752,874	15.1	5.3	5.2	0.21	N	5.3	5.2	0.21	N
Armenia	4,000,050	573,603	3,426,447	68.5	24.0	12.9	0.20	N	24.0	12.9	0.20	N
Ghana	41,948,550	21,493,747	20,454,803	409.1	143.2	13.4	0.19	N	143.2	13.4	0.19	N
Samoa	267,300	60,588	206,712	4.1	1.4	6.2	0.19	N	1.4	6.2	0.19	N
Uzbekistan	45,183,150	28,601,405	16,581,745	331.6	116.1	14.6	0.19	N	116.1	14.6	0.19	N
Honduras	13,371,750	6,481,452	6,890,298	137.8	48.2	13.4	0.18	N	48.2	13.4	0.18	N
Côte d'Ivoire	35,610,300	17,446,713	18,163,587	363.3	127.1	13.5	0.18	N	127.1	13.5	0.18	N
Namibia	3,430,350	524,670	2,905,680	58.1	20.3	7.4	0.18	N	20.3	7.4	0.18	N
Jamaica	3,997,350	620,220	3,377,130	67.5	23.6	4.3	0.16	N	23.6	4.3	0.16	N
Eswatini	1,566,000	608,424	957,576	19.2	6.7	5.9	0.16	N	6.7	5.9	0.16	N
Djibouti	1,333,800	510,135	823,665	16.5	5.8	12.6	0.16	N	5.8	12.6	0.16	N
Tonga	143,100	32,436	110,664	2.2	0.8	3.9	0.15	N	0.8	3.9	0.15	N
Georgia	5,385,150	1,888,747	3,496,403	69.9	24.5	8.1	0.15	N	24.5	8.1	0.15	N
Moldova	5,445,900	2,889,652	2,556,248	51.1	17.9	7.2	0.15	N	17.9	7.2	0.15	N
Cabo Verde	750,600	329,734	420,866	8.4	2.9	8.6	0.15	N	2.9	8.6	0.15	N
Ukraine	59,040,900	26,037,114	33,003,786	660.1	231.0	8.0	0.14	Y	231.0	8.0	0.14	Y
Albania	3,885,300	871,345	3,013,955	60.3	21.1	10.5	0.12	N	21.1	10.5	0.12	N
Jordan	13,774,050	6,945,899	6,828,151	136.6	47.8	9.6	0.11	N	47.8	9.6	0.11	N
Bosnia and Herzegovina	4,429,350	1,245,386	3,183,964	63.7	22.3	5.8	0.10	N	22.3	5.8	0.10	N
Kosovo	2,422,235	1,167,381	1,254,854	25.1	8.8	7.4	0.10	N	8.8	7.4	0.10	N
Gabon	3,005,100	404,298	2,600,802	52.0	18.2	5.8	0.10	N	18.2	5.8	0.10	N
South Africa	80,067,150	33,546,943	46,520,207	930.4	325.6	7.4	0.10	N	325.6	7.4	0.10	N
Montenegro, Rep. of	847,800	143,674	704,126	14.1	4.9	5.6	0.09	N	4.9	5.6	0.09	N
North Macedonia	2,812,050	1,131,484	1,680,566	33.6	11.8	5.8	0.09	N	11.8	5.8	0.09	N
St. Vincent and the Grenadines	149,850	57,121	92,729	1.9	0.6	3.8	0.08	N	0.6	3.8	0.08	N
Tunisia	15,955,650	10,968,365	4,987,285	99.7	34.9	4.4	0.08	N	34.9	4.4	0.08	N
Mongolia	4,425,300	2,915,398	1,509,902	30.2	10.6	10.1	0.07	N	10.6	10.1	0.07	N
Grenada	152,550	37,373	115,177	2.3	0.8	3.4	0.07	N	0.8	3.4	0.07	N
El Salvador	8,756,100	6,152,166	2,603,934	52.1	18.2	4.4	0.07	N	18.2	4.4	0.07	N
St. Lucia	248,400	73,631	174,769	3.5	1.2	4.0	0.07	N	1.2	4.0	0.07	N
Dominica	97,200	59,517	37,683	0.8	0.3	1.6	0.05	N	0.3	1.6	0.05	N
Seychelles	132,300	66,377	65,923	1.3	0.5	1.4	0.05	N	0.5	1.4	0.05	N
Egypt	138,150,900	112,248,778	25,902,122	518.0	181.3	6.2	0.05	N	181.3	6.2	0.05	N
Barbados	387,450	109,375	278,075	5.6	1.9	1.4	0.04	N	1.9	1.4	0.04	N
Bahamas, The	530,550	71,290	459,260	9.2	3.2	1.2	0.03	N	3.2	1.2	0.03	N
Costa Rica	6,876,900	4,715,895	2,161,005	43.2	15.1	2.8	0.02	N	15.1	2.8	0.02	N
Panama	5,825,250	4,378,423	1,446,827	28.9	10.1	1.9	0.02	N	10.1	1.9	0.02	N
Maldives	730,350	729,569	781	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Bolivia	15,758,550	24,949,671	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Ecuador	23,818,050	24,568,570	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Morocco	49,829,850	51,323,372	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N
Dominican Republic	14,644,800	16,006,039	0	0.0	0.0	0.0	0.00	N	0.0	0.0	0.00	N

**Table 7. Country-Level Groups and MDB Financing**

Country	AMC92	African Union	Financing from MDBs (millions of US dollar)			
			WB 1/	ADB	EIB	IDB 2/
Afghanistan	Yes		113	50		
Albania						
Angola	Yes	Yes				
Armenia						
Bahamas, The						
Bangladesh	Yes		500	940		
Barbados						
Benin	Yes	Yes	29			
Bolivia	Yes					
Bosnia and Herzegovina						
Burkina Faso	Yes	Yes				
Cabo Verde	Yes	Yes	4			
Cameroon	Yes	Yes				
Central African Republic	Yes	Yes				
Chad	Yes	Yes				
Comoros	Yes	Yes	9			
Costa Rica						
Côte d'Ivoire	Yes	Yes	95			
Democratic Republic of the Congo	Yes	Yes	135			
Djibouti	Yes	Yes				
Dominica	Yes					
Dominican Republic						
Ecuador			122			63
Egypt	Yes	Yes				
El Salvador	Yes		36			
Eswatini	Yes	Yes	5			
Ethiopia	Yes	Yes	207			
Gabon		Yes				
Gambia, The	Yes	Yes	8			
Georgia			34			
Ghana	Yes	Yes	144			
Grenada	Yes					
Guinea	Yes	Yes	26			
Guinea-Bissau	Yes	Yes	5			
Haiti	Yes					
Honduras	Yes		20			
Jamaica						
Jordan			62			
Kenya	Yes	Yes	127			
Kosovo	Yes		5			
Kyrgyz Republic	Yes		20			

**Table 7. Country-Level Groups and MDB Financing (concluded)**

Country	AMC92	African Union	Financing from MDBs (millions of US dollar)			
			WB 1/	ADB	EIB	IDB 2/
Lesotho	Yes	Yes	26			
Liberia	Yes	Yes	5			
Madagascar	Yes	Yes	71			
Malawi	Yes	Yes	26			
Maldives	Yes					
Mali	Yes	Yes				
Mauritania	Yes	Yes	10			
Moldova	Yes		30			
Mongolia	Yes		26	19		
Montenegro, Rep. of						
Morocco	Yes	Yes				
Mozambique	Yes	Yes	60			
Myanmar	Yes					
Namibia		Yes				
Nepal	Yes		74			
Nicaragua	Yes					
Niger	Yes	Yes	29			
Nigeria	Yes	Yes				
North Macedonia						
Pakistan	Yes		153			
Panama						
Papua New Guinea	Yes		10			
Rwanda	Yes	Yes	26			
Samoa	Yes			8		
São Tomé and Príncipe	Yes	Yes	3			
Senegal	Yes	Yes	131			
Seychelles		Yes				
Sierra Leone	Yes	Yes	8			
Solomon Islands	Yes					
Somalia	Yes	Yes				
South Africa		Yes				
South Sudan	Yes	Yes	7			
St. Lucia	Yes					
St. Vincent and the Grenadines	Yes					
Sudan	Yes	Yes	80			
Tajikistan	Yes		8	25		
Togo	Yes	Yes	24			
Tonga	Yes			6		
Tunisia	Yes	Yes	92			
Uganda	Yes	Yes				
Ukraine	Yes		70		61	
Uzbekistan	Yes					
<b>Total</b>	<b>65</b>	<b>43</b>	<b>2,672</b>	<b>1,048</b>	<b>61</b>	<b>63</b>

1/ Amount shown only includes financing for the procurement and deployment of COVID-19 vaccines.

2/ Guarantees.