GGBP Case Study Series

Pneumococcal Advanced Market Commitment and Potential Application in Green Growth

Related Chapter: Public-private collaboration

Case developed by: Ben Caldecott

Country: Global

Sector(s): healthcare

Key words: Innovative finance, partnership, health, poverty & equity

Through donor commitments, the pneumococcal Advanced Market Commitment incentivizes vaccine makers to produce suitable and affordable vaccines for developing countries. This model has been proposed as an innovative finance mechanism for clean energy and pollution reduction.

Context

Each year half a million children under five die of pneumococcal disease. The most effective way to prevent these deaths is to ensure access to effective, safe, and affordable vaccines. However, pneumococcal vaccines are new, complex vaccines that would normally reach low-income countries 10-15 years after their introduction in industrialized countries.

In order to accelerate the development and deployment of vaccines that meet developing country needs an innovative financing mechanism was developed.

Approach

In June 2009 the Governments of Italy, the United Kingdom, Canada, the Russian Federation, and Norway, and the Bill & Melinda Gates Foundation launched the pilot Advanced Market Commitment (AMC) against

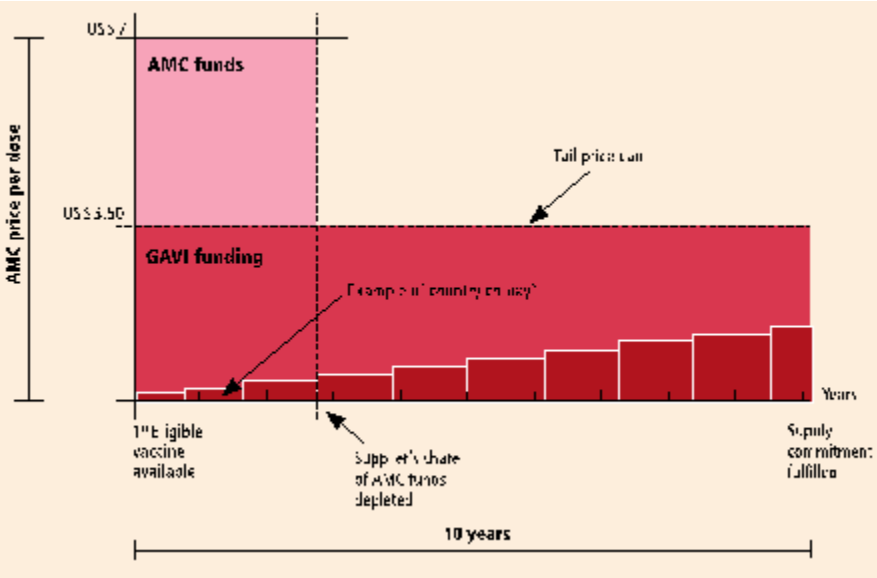
pneumococcal disease with a collective USD 1.5 billion commitment. In addition, the GAVI Alliance endorsed a budget of up to USD 1.3 billion for the period 2010-2015 to help to fund the cost of vaccines. GAVI is a public-private global health partnership. It brings together developing country and donor governments, the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the World Bank, the vaccine industry in both industrialized and developing countries, research and technical agencies, civil society, the Bill & Melinda Gates Foundation, and other private philanthropists.

Companies that participate must sign a legally binding commitment to provide the vaccines at a price affordable to developing countries in the long term.

The AMC mechanisms operate through a combination of roles:

- Donors commit funds to guarantee the price of yet-to-be-developed vaccines. These financial commitments provide vaccine manufacturers with the incentive they need to invest in vaccine research and development, and to expand manufacturing capacity;
- The International Bank for Reconstruction and Development holds donor payments on its balance sheet and pays them to GAVI under the AMC terms and conditions;
- UNICEF issues calls for offers twice a year based on a 15-year demand forecast that is updated biannually by GAVI soon after its board meetings;
- All suppliers that sign a registration agreement of AMC terms and conditions can participate in calls for offers. Offers cannot be higher than the forecasted demand for the start data proposed by the supplier. Offers must have a start date no later than five years into the future;
- UNICEF assesses all offers received and enters into supply agreements with those manufacturers whose products have met the minimum specifications of the target product profile developed by WHO;
- An Independent Assessment Committee of the AMC establishes eligibility of vaccines for AMC funding;
- Vaccines are made available at a maximum price of USD 3.50 per dose to be paid by GAVI and the developing country governments that introduce the vaccines. For approximately 20 percent of the doses, companies will also receive an additional payment of USD 3.50 for each dose they provide, which is paid with donor commitments (AMC funds);
- Participating manufacturers must make a 10-year commitment to supply a share of the total demand forecast of 200 million doses annually. The AMC provides a directly proportional share of the USD 1.5 billion. For instance, if a firm makes an offer to supply 30 million doses, it is entitled to receive USD 225 million, 15 percent of the total USD 1.5 billion AMC funds;
- Once a company has utilized its share of the AMC funds, it is then legally committed to continue supplying its vaccine at the long-term 'tail price' for the remaining period of its supply agreement;
- Countries apply to GAVI for AMC funding according to GAVI procedures. On the recommendation of an Independent Review Committee, the GAVI Board approves the budget for vaccine introduction and annually reviews country progress. Countries contribute to the cost of vaccines based on GAVI's co-financing policy. (See Figure 1.)

Figure 1. AMC funding



Source: GAVI

Outcomes

By collaborating closely with the developers and manufacturers of vaccines and pooling resources donors have been able to incentivize investment into vaccine development and this has ensured that developing countries have received lower-cost vaccines much sooner than otherwise would have been the case. The pneumococcal AMC was launched in 2007 and pneumococcal vaccines produced from the public-private collaboration are now being successfully rolled out in developing countries (GAVI Alliance, 2010).

Lessons

AMC models could be used to incentivize investment into a new area. The Oxford Institute for Energy Studies lays out a typology for this (Müller et al., 2012):

- *Direct purchase* – The funder offers to buy output at a specified price with a given pool of public funds. To achieve the most reductions with the given pool of funds, a 'procurement' process or 'reverse' auction could be held. The funder would solicit bids from vendors who specify the amount they are willing to supply at what price. Feed-in tariffs could be classed as a form of direct purchase AMC;
- *Top-up instrument* – Funders commit to pay the vendor the difference between an agreed price and the prevailing market price. This serves to 'top up' the revenue generated through the sale of output into an existing market or emerging market. If the prevailing market price exceeds the agreed price when the vendor is ready to deliver the output, the funder pays nothing, the funder's obligation to the vendor ends, and the output is simply delivered to market;
- *Tradable put options* – The funder creates tradable option contracts for vendors. The contract provides the vendor with the right, but not the obligation, to sell (in other

words, a 'put option') to the funder a certain amount of output at a certain agreed price ('strike price') by a certain time. These contracts can be bought and sold: if the current holder decides they are unlikely to use the contract, they can sell it to someone else who will use it. Contracts will usually flow towards lowest cost vendors of output. If the option contract is executed and the funder buys the output at the strike price, the put option looks like a direct purchase where the funder is actually acquiring the output. However, like a top-up instrument, use of the instrument is linked to a market: if the market price is higher than the strike price, the vendor will sell output directly into the market, the contract will expire, and the funder will have no further obligation associated with that contract. This means that limited pools of public funds can underwrite much larger amounts of output than either a direct purchase or top-up instrument.

AMC models, particularly top-up instruments and tradable put options, have been suggested as ways to pump-prime green markets such as global methane emissions abatement and the international carbon market (Edwards et al., 2011 and Methane Finance Study Group, 2013). They could also conceivably be used in other areas where governments want to provide the private sector with enough certainty to invest.

While the model is replicable in other areas, creating an AMC requires effective collaboration between a wide range of stakeholders and this implies contractual relationships, high transaction costs and the need for a sufficient degree of common purpose. This might be hard to replicate in some areas and suggests that AMCs need to be of sufficient size to keep transaction costs and legal fees low as a proportion of total cost to ensure value for money.

Further Information

Gavi Alliance - Pneumococcal AMC: http://www.gavialliance.org/funding/pneumococcal-amc

References

Müller, B., Ghosh, A., Pizer, W., and Wagner, W. 2012. Mobilizing the Private Sector Quantity-Performance Instruments for Public Climate Funds. Oxford Institute for Energy Studies.

Edwards, R., Caldecott B.L., & Gray, S. 2011. Signal failure? Real economy signals for developing country climate finance and the future of the Green Climate Fund. Climate Change Capital Think Tank (London, UK). See: http://www.climatechangecapital.com/media/213802/0453%20green%20climate%20fund%20doc%202011_07_05.pdf

Methane Finance Study Group. 2013. Using Pay-for-Performance Mechanisms to Finance Methane Abatement. See: http://energimyndigheten.se/Global/Internationellt/Klimatinsatser/Methane%20Finance%20Study%20Group%20Report.pdf

Gavi Alliance. 2010. Gavi Second Evaluation Report. See: http://www.gavialliance.org/results/evaluations/gavi-second-evaluation-report/

Disclaimer

This case is a summary of research input to the Green Growth in Practice: Lessons from Country Experiences report published by GGBP in July 2014. The views and information expressed in this case study are not necessarily endorsed by the GGBP sponsors or organizations of the authors.

December 2014

GGBP sponsors:

Global Green Growth Institute

European Climate Foundation

CDKN Climate & Development Knowledge Network

Ministry of Foreign Affairs of the Netherlands

UKaid from the British people