MARIE STOPES INTERNATIONAL
Children by choice, not chance

Time to Invest: Building the case for investment in contraception

Summary

When CPR increases, states can have higher levels of economic growth, become less dependent on foreign aid, see more girls continue their education, are more stable and secure, and have less gender inequality.

Contraception changes lives.

It allows women to take control of their future. We at Marie Stopes International (MSI) know that in doing so it drives social and economic development.

We also know that the impacts of contraception reach far beyond the individual; that universal access to contraception is a critical enabler for tackling poverty and building more equitable societies. In short, we believe that universal access to contraception is the best investment for achieving the Sustainable Development Goals (SDGs).

To illustrate the potential impact of a nation's investment in contraception, we selected five social and economic indicators for which country-level data are widespread and robust: increase in GDP per capita; primary school completion rate for girls; gender equity score; foreign aid as a percentage of government revenue; and Fragile State Index score.

We hypothesised the sub-Saharan nation of *Contraceptia*. In our example, *Contraceptia* is a small country with 2.2m women of reproductive age (WRA), and a contraceptive prevalence rate (CPR) of 20%. We estimated the benefits of providing contraception to an extra 5% of WRA. The results point to some potentially exciting correlations. A 5% rise in CPR in Contraceptia could be expected to correlate with:

An increase in GDP per capita of US $1,700

A 3.4% increase in girls' primary school completion rate, from 69.9% to 73.3%

An improvement of 2.5 points to *Contraceptia's* Gender Equity Index score

Foreign aid as a % of government revenue falling from 32% to 29%

A four point decline in its Fragile State Index score, from 91 to 87, moving it out of the "Alert" category

Separately, we used internal costing data from 11 MSI country programmes to estimate the cost of providing 1% of women of reproductive age with contraception across lower income countries. To do so we made assumptions on requirements for clinical quality and governance. Taking these variables into account, we calculated that the estimated average cost per woman would be US$16.05 (£10.20).[1]

So, as detailed later in this paper, this means that for the citizens of our hypothetical state of *Contraceptia* an investment in contraception of just US$1.58m (£1.13m) would be needed to see their nation's economy improve, gender equity and girls' educational achievements improve, and their country's financial independence and stability increase.

Marie Stopes International has produced this piece of work to encourage others to join us in improving and developing the approach further. We invite interested parties to collaborate with us, and explore together ways to adapt the methodology.

Our aim is to make the case for contraception as a cornerstone of social and economic development, and for increased investment in these services.

We believe that these data will convince others of the multitude of benefits that arise when women are able to control their fertility, and of the transformative potential of contraception in driving socio-economic change, confirming what our clients tell us every day in countries around the world.

[1] As an average across low income countries, this equates to investing US$252m (£160m) to shift the CPR 1%. This calculation we believe adds a further dimension to the work already done in support of the London Summit on Family Planning and the resulting FP2020 movement.

Background

As a service provider, we see every day the value women and girls place on being able to get access to contraception.

Recent years have seen a variety of publications which attempt to quantify the broader benefits of contraception, the costs of scaling up access globally, and the long term social benefits of investing in contraception[2]. But progressing these arguments, to explore the links between investment in contraception in the developing world and what the precise social and economic benefits might be on a broader level, has so far been lacking.

In an era where all nations are debating where to spend finite resources, there is an urgent need to prove, and cost, the investment case for contraception, with relevance for audiences beyond the health and international development sphere.

In this paper we estimate what some of the broader benefits of increased use of contraceptives would be, and how much it would cost to achieve.

At Marie Stopes International, we are keen to start a conversation seeking feedback on this approach, linking into current discussions with organisations like FP2020, and other efforts in the demography arena, with a view to refining the methodology, and collaborating on a larger piece of future work in partnership to better establish links between investments in contraception, and quantifiable social and economic gains, and ultimately a measure to strengthen the case for investment.

Methods

The relationship to CPR of five measures of economic and social development were explored across countries.

Linking CPR rises with broader societal gains

The relationship between the CPR and five measures of economic and social development for which there was an acceptable availability of data, was explored across countries. The five measures were: GDP per capita; female primary school completion rate; foreign aid as a percentage of government revenue (as an indicator of vulnerability and dependence); the Fragile State Index score[3]; and, the Gender Equity Index score.[4] We then estimated the impact of a 1% increase in CPR on these five measures.

These indicators were selected to demonstrate correlations between contraceptive use and a broad range of positive social outcomes, including economic prosperity, educational outcomes and increased fiscal independence. The gender equity and fragile state indices differ from the other three indicators as they draw on a range of data sources to allocate scores to states.

Costing of contraceptive services

The overall cost of increasing CPR across the less developed regions of the world was estimated, using MSI's data on the cost of service delivery[5]. Data were available for four west African, six east and southern African, and one Asian country.[6] To determine which contraceptive methods to cost in these countries, DHS data on method-mix in less developed countries was applied to the estimated 1% of women of reproductive age in each country.[7] For short term methods, the costs were for a year's worth of contraceptive coverage, in order to have a proxy for short term users served. The table overleaf summarises how costs were estimated, depending on whether or not the country in question had MSI costing and/or DHS method mix data.

[2] Canning & Shultz (2012) "The economic consequences of reproductive health and family planning", The Lancet, 380 (9837): 165-171.

Ashraf, Weil & Wilde (2013), 'The Effect of Fertility Reduction on Economic Growth', Popul Dev Rev, 39(1).

Guttmacher: Adding it Up Investing in Sexual and Reproductive Health 2014.

Stenberg et al (2014), 'Advancing social and economic development by investing in women's and children's health: a new Global Investment Framework', The Lancet, 383: 1333–54.

Joshi & Schultz (2007). "Family planning as an investment in development: Evaluation of a program's consequences in Matlab, Bangladesh" Economic Growth Center Discussion Paper No. 951. New Haven, CT: Yale University Press.

[3] The Fragile State Index is produced by the Fund For Peace, and has been updated for 2015 (http://library.fundforpeace.org/fsi15-report). It allocates scores to states (with higher scores being more fragile) based on 12 key political, social and economic indicators, including demographic pressures, uneven economic development, human rights & the rule of law, economic decline, and state legitimacy.

[4] The gender equity index is produced by Social Watch, and its latest iteration refers to 2012 (http://www.socialwatch.org/node/14365). States are rated against 11 indicators measuring the gap between men and women in education, empowerment, and economic participation, and higher scores indicate higher levels of equality.

[5] This was estimated using MSI's internal costing tool, the Cost Calculator, which estimates the cost of various family planning services through analysis of all cost elements of service delivery, from commodities to overhead costs.

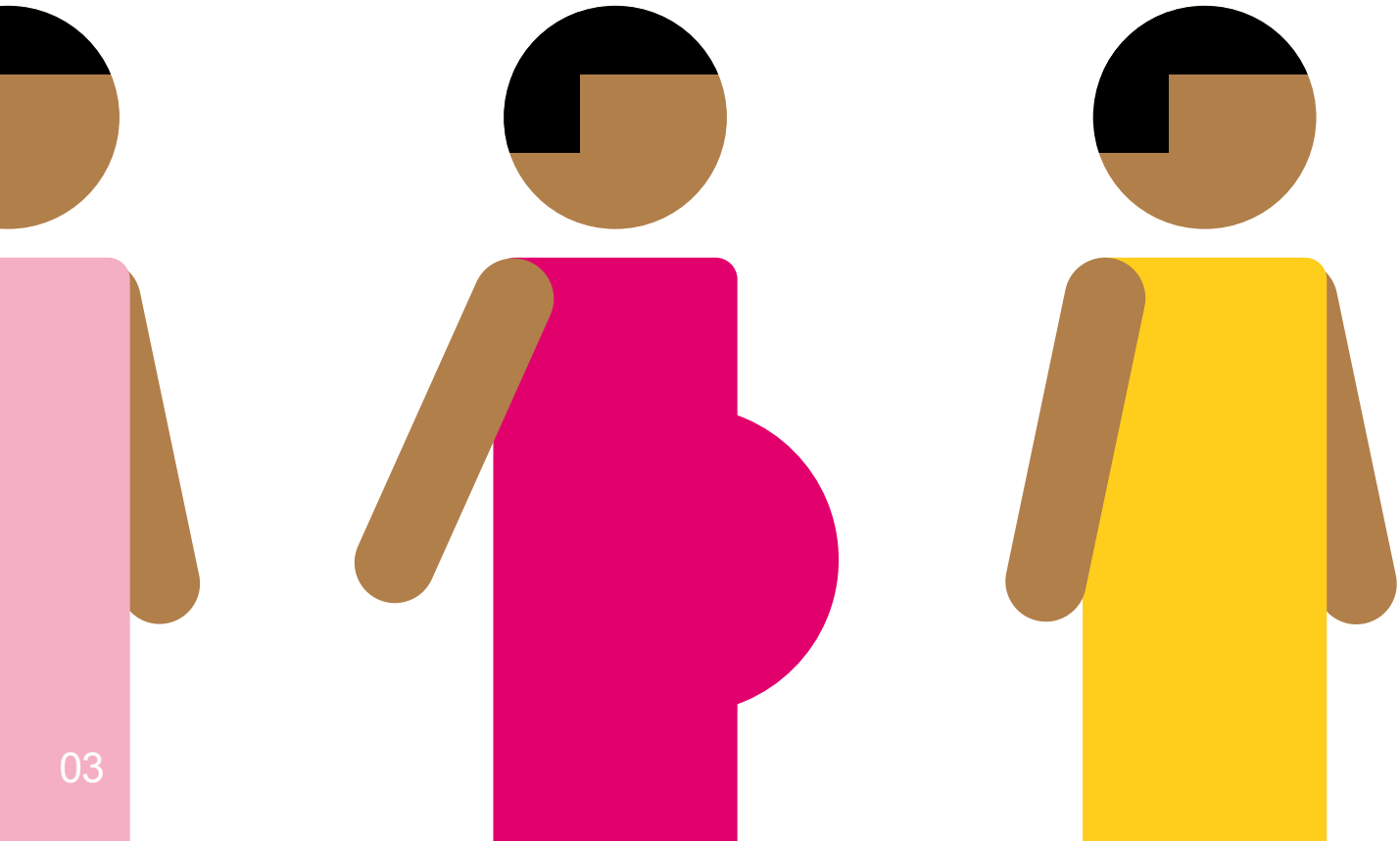
[6] Method specific costs were available for MSI programmes in Bangladesh, Ethiopia, Ghana, Kenya, Malawi, Mali, Nigeria, Senegal, Tanzania, Zambia, and Zimbabwe.

[7] UN Population Prospects (http://esa.un.org/wpp/Excel-Data/population.htm).

The data are compelling, but need further examination. Our example uses a novel approach by hypothesising the small nation of *Contraceptia*.

Country characteristics: data available	Assumptions/how the data were used
Method-mix known, cost known	Service specific costs from MSI were used to estimate the cost of serving 1% of all WRA in the country, based on method mix.
Method-mix known, cost unknown	When MSI costing data did not cover all methods, a regional average cost for the method was used. For African countries that fell outside of west, east, and southern Africa, a weighted average cost per method for all of Africa was created from the ten countries with MSI costing data. For a global average, the regional averages for east Africa, west Africa and south Asia (the data for Bangladesh, also applied to India, Nepal, Pakistan and Sri Lanka) were weighted by population size. The relevant averages were then used to estimate the cost of serving 1% of WRA in the relevant countries.
Method-mix unknown, cost unknown	For less developed countries without reliable data on contraceptive method mix, an average cost per woman of reproductive age was used, taken from all other countries with method mix data.

NB: In producing the above estimates we have made a number of assumptions. A linear relationship between CPR and the indicators was assumed, correlation does not indicate causal direction, and confounding factors affecting the relationship between CPR and outcomes were not controlled for. We also made assumptions on the cost of providing contraceptive methods, applying our own costing data to many countries we do not work in, in the absence of reliable national data.



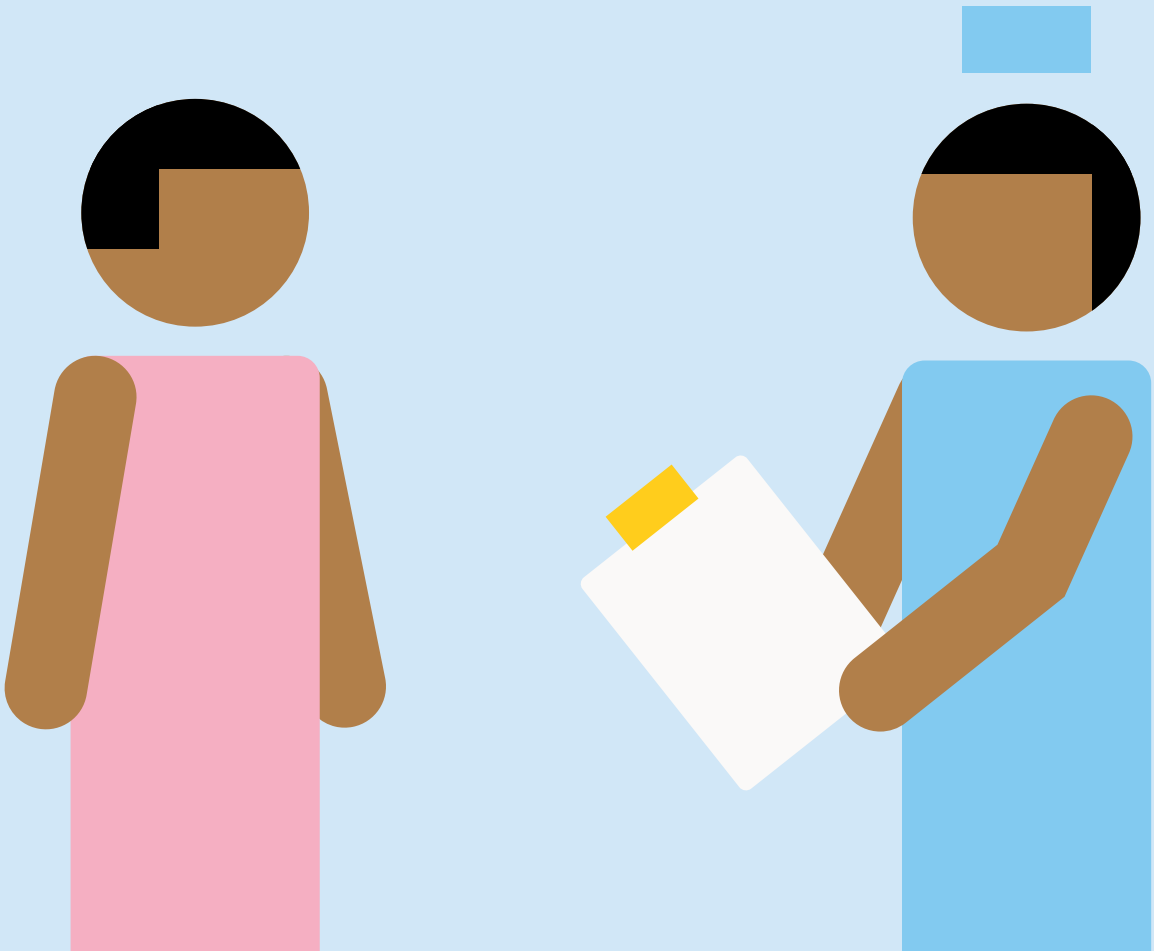
Results

The analysis considers the expected social gain for a 1% increase in CPR at a global level. On average, a 1% increase in CPR correlates with the following outcomes:

Indicator	Expected change, for every 1% increase in CPR
GDP per capita	+ $340
Foreign aid as % of government revenue	- 0.6% points
Female primary school completion rate	+ 0.7% points
Fragile State Index score	- 0.8 points
Gender Equity Index score	+ 0.5 points

When CPR increases, states can have higher levels of economic growth, become less dependent on foreign aid, see more girls continue their education, are more stable and secure, and have less gender inequality. To bring context to the Fragile State Index score, the largest improvement from 2014 to 2015 of any state was a decline of 3.4 points, which helps highlight how significant a decline of 0.8 points for every 1% point rise in CPR is.

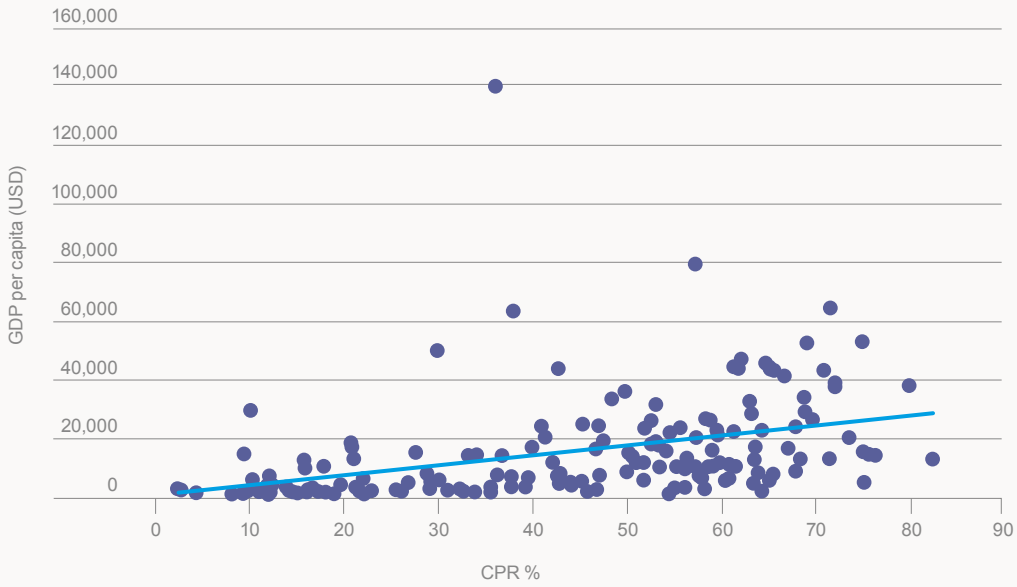
As a complement to existing global costing exercises, this method estimates that it would cost US$252m (£160m) to shift the CPR by 1% in the less developed regions of the world, which equates to an average of US$16.05 (£10.20) for every woman. This method's estimate - which serves as a starting point for MSI's call for collaboration - should be considered an upper estimate, as MSI's own costing data, of services that are predominantly clinical and long-acting, was used to estimate the cost of contraceptive service provision.



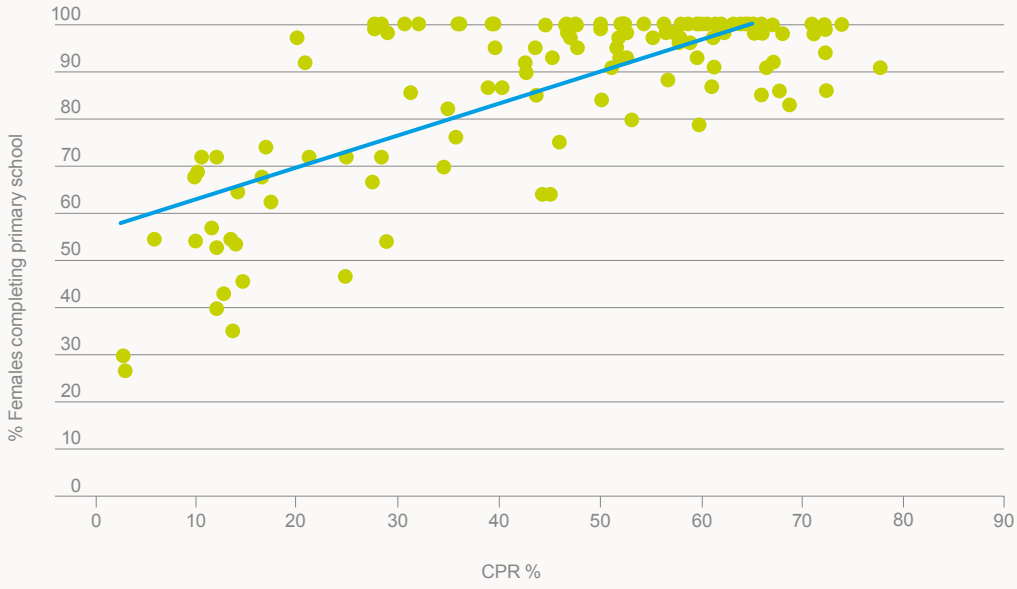
Indicators selected were those for which country-level data are widespread and robust, and which correlated positively with CPR.

Each dot represents an individual country.

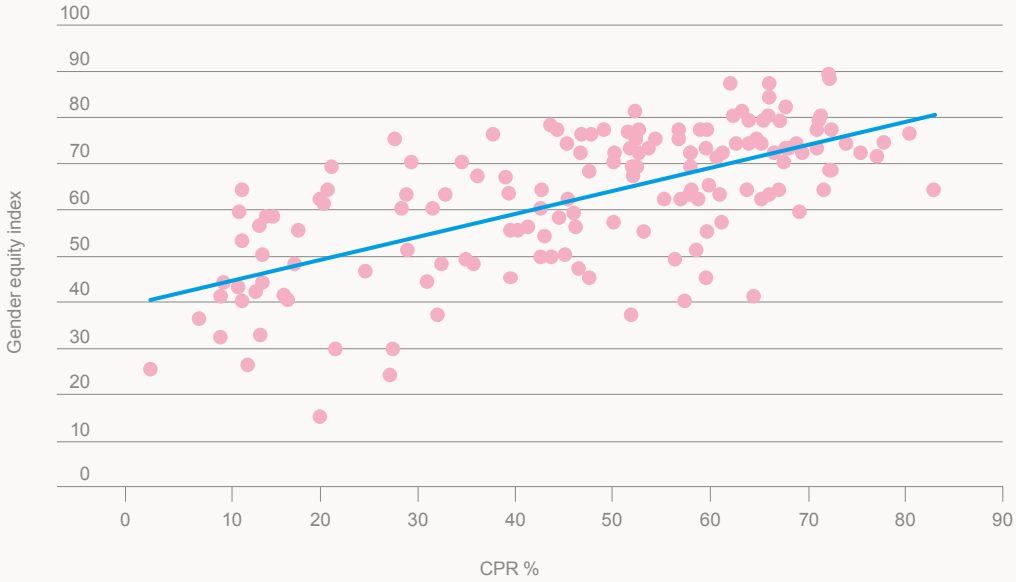
GDP per capita (USD) by CPR



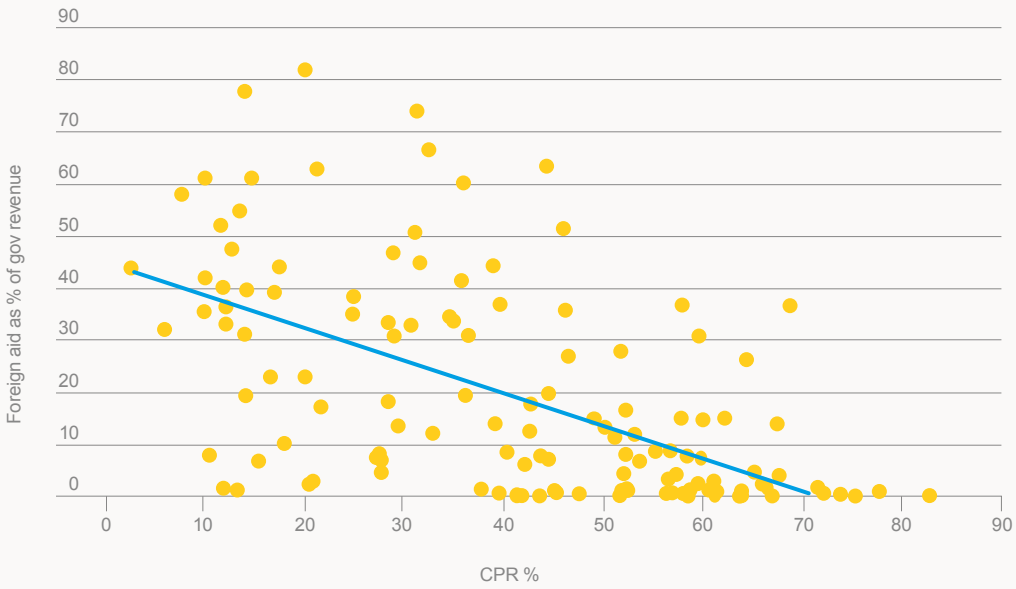
% Females completing primary school by CPR



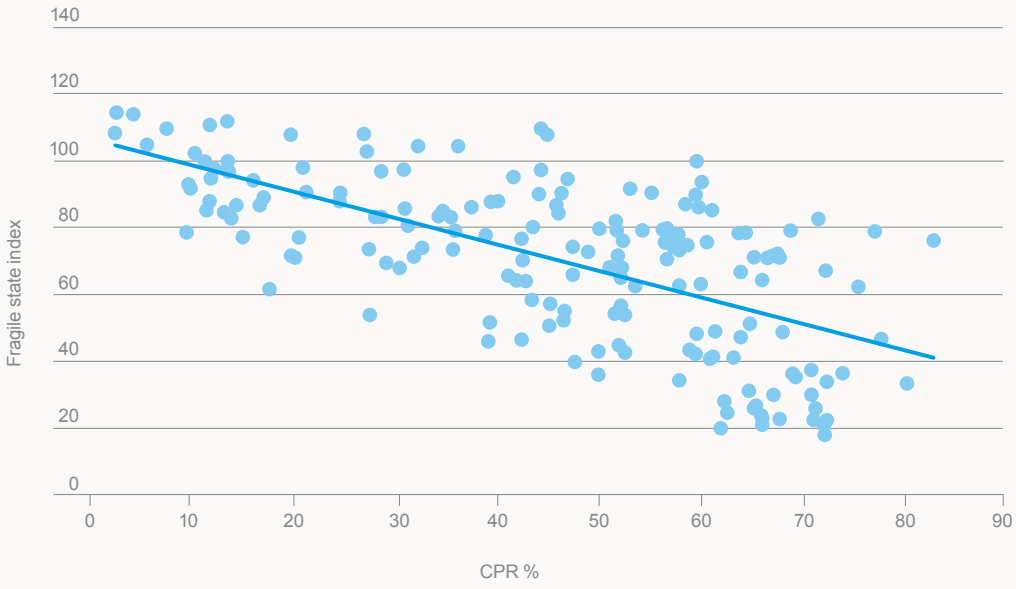
Gender Equity Index by CPR



Foreign aid as % of gov revenue



Fragile State Index by CPR




An increase of $1,700 in GDP per capita
Welcome to Contraceptia
A four point decline in its Fragile State Index score, from 91 to 87, moving it out of the “Alert” category
A 3.4% increase in girls’ primary school completion rate, from 69.9% to 73.3%

What could investment in contraception mean on a national level?

To illustrate, we have modelled our work using a hypothetical sub-Saharan African state of *Contraceptia*. *Contraceptia* has a relatively low CPR, of just 20%. As of 2015, it was home to 2.2m women aged 15-49, which means around 440,000 women were using modern contraception and 32% of women have an unmet need for contraception.

Around a third of *Contraceptia's* government revenue comes in the form of foreign aid. Three in every ten girls do not complete primary school, and it scores 91 on the Fragile State Index, which puts it in the "Alert" category.

Providing contraception to 5% of women of reproductive age in *Contraceptia*, exclusively focusing on those who are not already using it, would cost an estimated US$1.58m (£1.13m). Based on our estimates, an overnight improvement from 20% to 25% in *Contraceptia's* CPR would correlate with:

— A $1,700 increase in GDP per capita

— A 3.4% increase in girls' primary school completion rate, from 69.9% to 73.3%

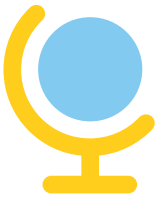
— A four point decline in its Fragile State Index score, from 91 to 87, moving it out of the "Alert" category

— Foreign aid as a % of government revenue falling from 32% to 29%

— And an improvement of 2.5 points to its Gender Equity Index score.

This exercise is an illustration of the kinds of economic and social benefits we might expect to see in the fictional state of *Contraceptia*, if - overnight - an additional 5% of women were enabled to use contraception, as a result of an injection of just over £1 million.

A call to action, a call for collaboration



There has never been a better time to build a strong investment case for getting contraception to every woman who wants it.

This analysis has estimated what an investment in contraception might mean for improvements in a nation's economic output, the educational achievements of its girls, the gender equality of its women and the financial independence and stability of the country.

It has also estimated the cost of providing contraception to an additional 1% of women of reproductive age across the developing world.

Having made these calculations, it was possible to estimate the cost and benefits of serving greater numbers of women, as the example above did, through estimating the impacts of a 5% rise in CPR.

This is an important first step.

Our example does not suggest uniform advances across countries which commit resources to improve access to contraception. Rather, it offers a framework to measure consistently, and provide comparisons. We acknowledge the challenges inherent in drawing conclusions from *Contraceptia* and this approach.

As the community of nations looks to 2030, how to invest in their individual futures, and the realisation of the global Sustainable Development Goals, there has never been a better time to build a strong investment case for getting contraception to every woman who wants it.

For the case to be as strong as possible, for it to persuade governments, donors and funders who may have not considered the transformative potential of contraception, it must be a collective, collaborative effort.

We invite others to collaborate in improving and developing our approach further.

Our aim is to make the case for contraception as a cornerstone of social and economic development.

It is time to convince others of the multitude of benefits that arise when women are able to control their fertility, and of the transformative potential of contraception in driving socio-economic change.

Join us.

If you'd like to find out more about this work you can contact the Impact Analysis team by emailing:
impactanalysis@mariestopes.org

Marie Stopes International
1 Conway Street
Fitzroy Square
London W1T 6LP
United Kingdom

Telephone: **+44 (0)20 7636 6200**
Fax: **+44 (0)20 7034 2369**
Email: **info@mariestopes.org**

www.mariestopes.org
facebook.com/mariestopes
twitter.com/mariestopes
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