Commodity Gap Analysis

2019

Contents

Acknowledgements

This edition of the Commodity Gap Analysis (CGA 2019) is the fifth in a series dating back to 2001. Over the last two decades the report has reflected the evolving priorities and questions of our community. The first two reports, in 2001 and 2009, focused on donor-supported countries and predominantly public sector supplies. More recent iterations of the CGA have expanded this scope to cover a wider set of countries, and they have looked at users, quantities, and costs in both the public and private sectors. These reports have broadened our understanding of the wider market; yielded insights from retail data acquired from IQVIA, and, helped start conversations about what the future might hold as the community looks to meet the Sustainable Development Goals.

With this edition, we take a new approach. While this CGA presents similar findings—current spending, users, consumption quantities, costs and gaps—it does so in new ways that better position these findings to inform the critical discussions happening within our community.

New analytical approaches allowed us to explore how spending, users, and costs vary across not only the public and private sectors, but within the private sector as well, offering greater visibility into the role of donor-subsidized products in the private sector.

This edition also breaks new ground by offering a more nuanced understanding of different patterns in spending, use, and cost across the 135 low- and middle-income countries (LMIC) comprising our analysis.[1] In order to highlight fundamental differences that can help inform future planning, we've segmented these countries into the World Bank's categories of Gross National Income per Capita (GNI): low-income countries (LICs), lower-middle-income countries (L-MICs), and upper-middle-income countries (U-MICs).

Lastly, we've extended the time horizon for this report to 2030 in order to help inform pressing conversations about how we plan for the future and set out strategies for reaching the Sustainable Development Goals (SDGs).

The rich findings of this report help illuminate pertinent facts about the world today, and what changes may happen over the coming decade. From these results, five critical themes emerged, themes so important to the conversations about the future of our sector that we made a final departure from past CGA reports and structured the report itself around them. The five themes are:

01 Reduced or even stagnant donor funding in the decade ahead

Conversations within the reproductive health community suggest that donor support for commodity procurement is declining and will likely continue to decline or, at best, remain stagnant in the decade to come. In the context of shrinking donor funding for commodities, it is important to understand the role donors play in different countries and what can be done to minimize the impact of limited funding on those women who need it most. Nearly half of spending within low-income countries comes from donors, and collectively the public sector accounts for 66% of spending. Looking across the three GNI groups, the role of the public sector—namely, the donor community—diminishes as income increases. Prioritizing donor funding amongst lower-income countries, therefore, will be critical, as will encouraging country governments to play a larger role in funding family planning commodities.

02 Distinct method mix across the public and private sectors

Both the public and private sectors play important roles, yet the composition of each is very different. While the public sector primarily provides long-acting and permanent methods (LAPMs), the private sector almost exclusively provides short-term methods (STMs). This means the two are not interchangeable. We must take caution in assuming that in the context of shrinking donor funding, the private sector can simply take the place of what donors are supporting. Work is needed to ensure that, as the funding landscape shifts, women are still able to access a full range of contraceptive methods.

---

1   The group of 135 low- and middle-income countries excludes China and Venezuela, both of which are categorized by the World Bank as middle-income.

03 The significant, yet variable, role of subsidy within the private sector

The previous CGA sparked debate over the relative role of public sector funding within the private sector, specifically as a result of subsidized socially marketed products. Building on new data and insights shared by DKT, MSI, PSI, and SHOPS Plus, this report distinguishes between users who purchase supplies from private sector entities at subsidized prices and those who pay non-subsidized (market-value) prices. This allows us to present two different financing models: one that is purely market driven, the other that relies on support from the public sector. The results indicate that across the 135 LMICs, only a small share of private sector users (12%) receive subsidized products. In terms of the three GNI groups, subsidized private sector commodities play the largest proportional role within low-income countries. Conversely, non-subsidized private sector commodities play the largest role within upper-middle-income countries, where they account for half of all users.

04 The differences between the distribution of users and consumption costs

The results of this analysis demonstrate that cost is not a function of use. Rather, consumption costs are influenced by a number of factors, such as frequency of units consumed for each method, differences in cost between methods, and the variation of the cost of each method from country to country. Brazil, for example, accounts for only 8% of users, yet makes up 30% of the total consumption cost. By contrast, India accounts for 30% of all users across the 135 LMIC but makes up only 7% of consumption costs. Understanding how the landscapes of use compare to those of cost can help ensure all women can make their own choice from a full range of contraceptive methods.

05 The possibility of significant, yet uneven, growth

Over the coming decade, the total number of women using modern contraception will grow by more than 80 million. This growth, however, will not be evenly distributed across countries. Low-income countries will experience the most rapid growth in relative terms, while lower-middle-income countries will experience the largest increase in absolute terms. The efforts needed to sustain these different growth patterns will vary across countries, with some requiring additional money and more effort than others.

Our community is at a pivotal moment: we are on the cusp of reaching 2020 and beginning to look towards the 2030 Sustainable Development Goals. The issues at the center of this analysis are the issues that will define the new decade for commodity security: the relative role of the public and private sectors; the declining role of donors in commodity procurement; the prospects for increased financial supp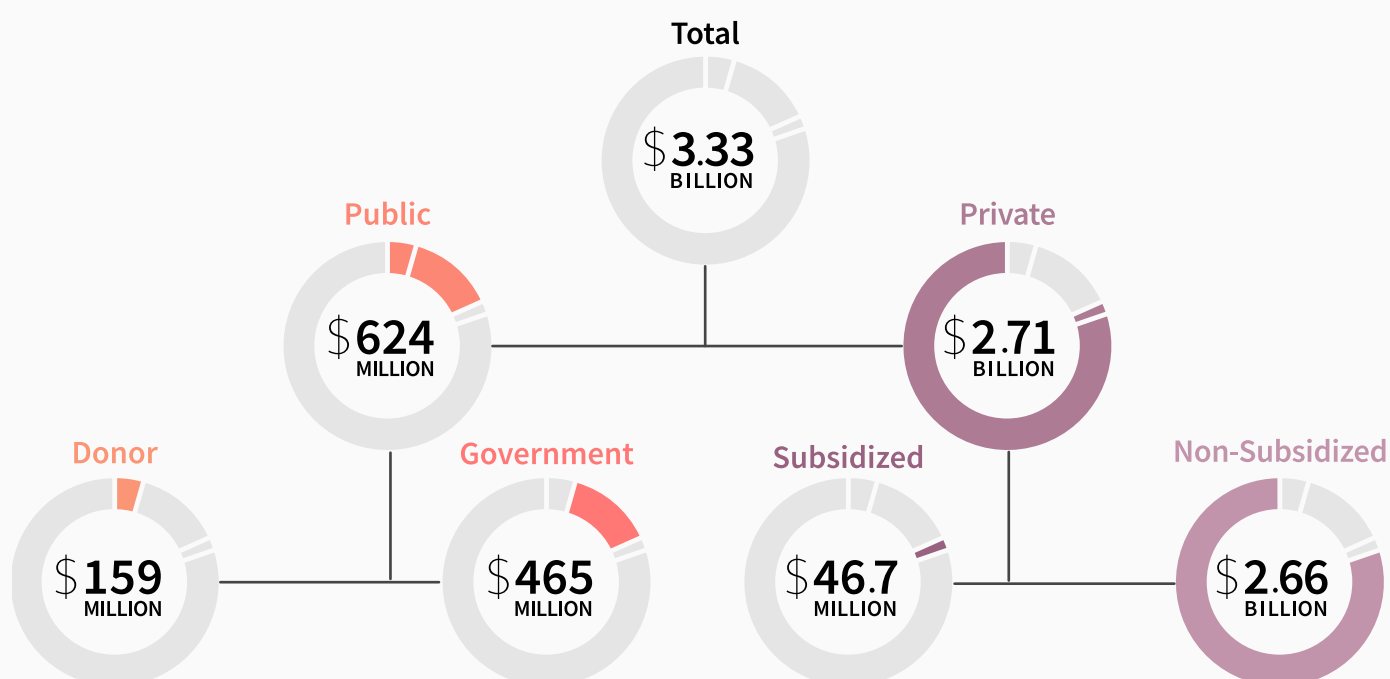ort from country governments; the impact of subsidized supplies on the total market; the evolution of method choice, etc. The conversations and decisions over the coming years will shape the future of contraceptive use and the landscape of reproductive health supplies. And so, just as with the past reports, we hope that this CGA will solicit new questions that our next report can seek to answer.

Prospects of Stagnating Donor Funds

The new data and analytic approaches used in the CGA 2019 report have allowed us to unpack our spending estimates to examine variations within and among each GNI country group, sector, and source of funding. Conversations within the reproductive health community suggest that donor support for commodity procurement is declining and will likely continue to decline or, at best, remain stagnant in the decade to come. In the context of shrinking donor funding, it is important to understand the role donors play in different countries and what can be done to minimize the impact of limited funding on those women who need it most. Nearly half of spending within low-income countries comes from donors—prioritizing donor funding amongst lower-income countries, therefore, will be critical, as will encouraging country governments to play a larger role in funding family planning commodities.

Figure 1.1

Current Spending on Contraceptive Supplies

Total
$3.33 BILLION

Public
$624 MILLION

Private
$2.71 BILLION

Donor
$159 MILLION

Government
$465 MILLION

Subsidized
$46.7 MILLION

Non-Subsidized
$2.66 BILLION

The amount currently spent on contraceptive supplies across the entire LMIC market is $3.33 billion. Over 80% of this amount—four out of every five dollars—comes from individuals purchasing supplies from private sector entities. Within the private sector, most spending is on supplies sold at full commercial prices (98%). Only a small percentage of private sector spending on supplies—just 2% ($46.7 million)—is spent on subsidized supplies. These supplies are typically but not exclusively sold through social marketing agencies. The balance of spending comes from public sector sources, which include both donors and country governments. Governments, however, spend nearly three times more than donors.

Table 1.1

Current Spending by Sector
Segmented by GNI Group

| | TOTAL | PUBLIC | WITHIN PUBLIC | | PRIVATE | WITHIN PRIVATE | |
			DONOR	GOVERNMENT		SUB	NON-SUB
LIC	191,000,000	126,000,000	94,000,000	32,400,000	64,300,000	10,100,000	54,200,000
L-MIC	905,000,000	321,000,000	58,400,000	263,000,000	584,000,000	36,600,000	547,000,000
U-MIC	2,240,000,000	177,000,000	6,850,000	170,000,000	2,060,000,000	43,700	2,060,000,000
Total	**3,330,000,000**	**624,000,000**	**159,000,000**	**465,000,000**	**2,710,000,000**	**46,700,000**	**2,660,000,000**

The Impact of Donor Spending within GNI Groups

Within each GNI Group, there are pronounced differences in public versus private sector spending, and thus the impact of shifts in donor spending. The public sector accounts for the largest share of spending in low-income countries. This is related in large part to the contribution of donors, which accounts for nearly 50% of all spending in this GNI group. The remaining public sector spending—roughly 17%—comes from governments. Amongst lower-middle-income countries, public sector spending accounts for a smaller share (35%) of total spending in large part as a result of the smaller role of donor support (6%). But the level of country government expenditures (29%) compared to that of low-income countries ensures that public sector spending remains significant overall. In upper-middle-income countries, the contribution of public sector resources is negligible: out-of-pocket purchases from private sector entities (92%) dominate all spending.

Because the level of spending varies so much across GNI groups, it is useful to look at not only how things are distributed within GNI groups but also how spending in each sector is distributed across GNI groups.

Currently, donor funding appears to be well targeted towards those who need it most: nearly 60% of spending by donors on contraceptive supplies is spent to procure commodities for low-income countries, with most of the rest spent in lower-middle-income countries.

More than half of government spending (54%) comes from lower-middle-income country governments. While government spending ($170 million) only makes up a small share (8%) of total spending in upper-middle-income countries, it represents 37% of total government spending.

Overall, two-thirds of total spending comes from upper-middle-income countries, most of which is private sector spending (76%).

Figure 1.2

Current Spending
Comparison by GNI and Sector
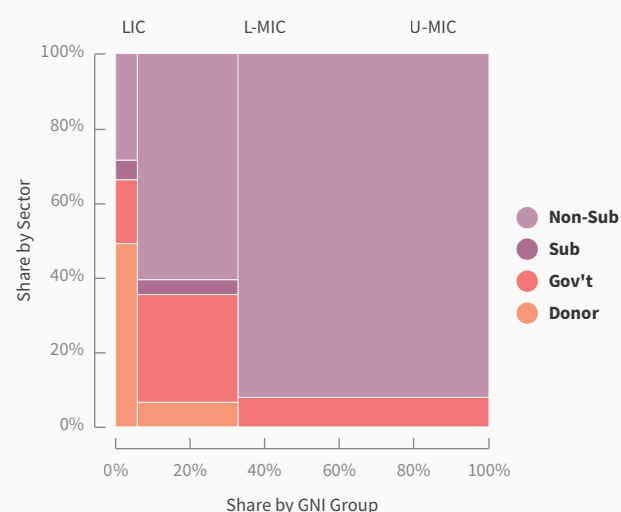
While these patterns can easily be interpreted to imply some sort of natural, inevitable transition from public to private sector spending as country GNI increases, they are by no means a prescription for what the future holds. These patterns are all moments in time and representative of those countries currently falling within each GNI group today.

There are also suggestions that the relatively smaller contribution of public sector expenditures within upper-middle-income countries may be specific to spending on contraceptive supplies. A wider analysis of health commodity expenditures suggests a potential resurgence of government spending not seen in this

analysis among upper-middle-income countries.[1] This may be due to unique policy decisions about the role of public sector spending on contraception among some of the large upper-middle-income countries.

These findings suggest that shortfalls in donor funding that may appear minor in the overall context could have a disastrous impact should they occur in low-income countries. At the same time, these findings also suggest that because of their larger revenue bases, governments in middle-income countries—both upper and lower—may be better positioned to provide funding for supplies and thus may be more capable of absorbing costs previously borne by donors.

Funding Gaps

If the amount spent annually on contraceptive supplies remains at the current level while the number of women who need supplies continues to grow, a funding gap of $178 million will emerge in 2020. As the discrepancy between total consumption costs and current spending on supplies continues to grow, so will the funding gap, reaching $266 million in 2025 with the cumulative gap over five years (2021–2025) reaching $1.17 billion. A funding gap of this size could have devastating consequences for women who wish to prevent or delay pregnancy.

Funding Gaps by Sector

Currently, women purchasing their own contraceptives from private entities make up the largest share of spending. Looking forward, this group will account for the largest share of the gap. The amount that will need to be spent out-of-pocket in the private sector (referred to as the private sector cost share[2]) will increase to $2.85 billion in 2025, meaning women will need to spend $144 million more than they currently do.[3] Because of differential patterns of growth across countries, however, a smaller share of the cumulative gap (59%) is attributed to private out-of-pocket expenditure than the cost share attributed to this group (80%).

The remaining 41% of the cumulative gap is attributed to public sector entities ($481 million). This share of the gap is more than double the current cost share attributed to the public sector (20%). Because increases in consumption costs are concentrated in countries with a higher reliance on public sector funding, the gap will also be concentrated in these countries.

Despite the fact that governments account for a larger share of current spending than donors they end up over the 2021–2025

<div style="background:#e8f0f5; padding:1em;">

Box 1.1

Influence at the Country Level

The individual countries that make up each GNI group vary greatly in population size and contraceptive use (mCPR). Cumulatively, 49% of all users live in just four countries: India (30%), Brazil (8%), Indonesia (7%), and Bangladesh (5%). By contrast, 116 countries in the global market each account for less than 1% of the total number of users. Government programs and policies, cultural norms, market strength, and other factors influence the level and type of contraceptive use in each country. As we observe patterns in the global market, we should keep in mind that in some cases just a few countries carry the same weight as the other 131 countries combined.

The spending pattern in upper-middle-income countries is largely influenced by Brazil where private sector users of injectables, pills, and condoms dominate the market (60% of all users). Recent studies have suggested that limited availability of IUDs and implants in the public sector, and even the private sector, have contributed to this method skew.[1]

1   See Bahamondes, Luis, Fernandes, Arlete, & Monteiro, Ilza. (2017). Barriers to Implementing and Consolidating a Family Planning Program that would Meet Brazilian Needs. Revista Brasileira de Ginecologia e Obstetrícia, 39(8), pp. 373–375. https://dx.doi.org/10.1055/s-0037-1604423; and Sora Yasri, Viroj Wiwanitkit. (2017). Contraceptive sales after the Zika epidemic. The European Journal of Contraception & Reproductive Health Care 22:6, pp. 479–479. https://www.tandfonline.com/doi/full/10.1080/13625187.2017.1397623

</div>

period with a similar cumulative gap ($240 million versus $241 million). This is due to the differences in growth patterns between low-income countries, where donors account for the majority of public sector funding, and lower-middle-income countries, where governments account for the majority of public sector funding. Donors will thus need to increase their funding more than governments—in both relative and absolute terms—in order to maintain their share.

Funding Gaps by GNI Group

A closer look at the different patterns of change in consumption costs within each GNI group provides a varied view of future funding gaps. Because the total consumption cost is declining in upper middle-income countries, the gap in these countries will shrink over time; by 2025 the spending gap will equal only 1% of the cost share. On the other hand, low-income countries will incur the largest increase in consumption costs, thus causing the gap in these countries to grow the fastest. In 2020, low-income

---

1   An Initial Estimation of the Size of Health Commodity Markets in Low- and Middle-Income Countries: https://www.cgdev.org/publication/initial-estimation-size-health-commodity-markets-low-and-middle-income-countries

2   The cost share is calculated by GNI Group. The total consumption cost for each GNI Group multiplied by the share of current spending attributed to each sector (donor, government, private). The total cost share for each sector is summed from the cost share in each of the three GNI groups.

3   Gaps are calculated by GNI group then summed to the total. Since there are different patterns of growth in each GNI group as well as different patterns of current spending, the overall shares of the gap across sector differ to the current share of spending.

Table 1.2

Projected Funding Gaps, 2020 and 2025
Segmented by Sector

	TOTAL			PRIVATE			PUBLIC		
	SPENDING	COST SHARE	GAP	SPENDING	COST SHARE	GAP	SPENDING	COST SHARE	GAP
Current	3,330,000,000	—	—	624,000,000	—	—	2,710,000,000	—	—
2020	—	3,510,000,000	178,000,000	—	682,000,000	57,800,000	—	2,830,000,000	121,000,000
2025	—	3,600,000,000	266,000,000	—	746,000,000	122,000,000	—	2,850,000,000	144,000,000
Change (#)	—	87,700,000	87,700,000	—	64,300,000	64,300,000	—	23,400,000	23,400,000
Change (%)	—	2%	49%	—	9%	111%	—	1%	19%
Cumulative (5 yr)	—	17,800,000,000	1,170,000,000	—	3,600,000,000	481,000,000	—	14,200,000,000	692,000,000

Table 1.3

Projected Funding Gaps, 2020 and 2025
Within Private Sector

	DONORS			GOVERNMENT		
	SPENDING	COST SHARE	GAP	SPENDING	COST SHARE	GAP
Current	159,000,000	—	—	465,000,000	—	—
2020	—	185,000,000	25,600,000	—	497,000,000	32,200,000
2025	—	223,000,000	63,700,000	—	523,000,000	58,300,000
Change (#)	—	38,100,000	38,100,000	—	26,100,000	26,100,000
Change (%)	—	21%	149%	—	5%	81%
Cumulative (5 yr)	—	1,040,000,000	241,000,000	—	2,570,000,000	240,000,000

countries will have the smallest gap, representing 18% of the total cost share that year. By 2025, their gap will be the second largest—nearly as large as that in lower-middle-income countries. By 2025, the gap will represent 37% of low-income countries' total cost share. Therefore, in order to keep up with the growing needs in low-income countries, spending will need to grow much more rapidly relative to current spending levels. The total cumulative five-year gap across all low-and-middle-income countries will total $1.17 billion. The gap will be largest in lower middle-income countries ($521 million), followed by low-income countries ($419 million), and upper-middle-income countries ($233 million).

Private sector out-of-pocket spending by individuals accounts for the largest share of the cumulative gap within lower-middle-income countries (65%), as well as upper-middle-income countries (92%). In contrast, nearly half of the gap within low-income countries (49%) is attributed to donors alone, with the total gap in public sector funding reaching 66%.

As with other results by GNI Group, it is also useful to look at how the gap attributed to each sector will be distributed across each the three groups. As seen earlier, both donors and governments will have a similar cumulative five-year gap. The donor gap, however, will be almost entirely concentrated within low-income countries, where it will account for nearly half (49%) of the funding gap in those countries. Meanwhile, just under two-thirds

Table 1.4

Projected Cost Share and Gaps, 2020 and 2025
Segmented by GNI Group

	2020			2025		
	COST SHARE	GAP	GAP AS % OF COST SHARE	COST SHARE	GAP	GAP AS % OF COST SHARE
LIC	233,000,000	42,600,000	18%	303,000,000	112,000,000	37%
L-MIC	973,000,000	68,300,000	7%	1,030,000,000	129,000,000	12%
U-MIC	2,310,000,000	67,500,000	3%	2,260,000,000	25,200,000	1%
Total	**3,510,000,000**	**178,000,000**	**5%**	**3,600,000,000**	**266,000,000**	**7%**

(63%) of the government funding gap will be concentrated in lower-middle-income countries.

Despite the majority of private sector consumption costs coming from upper-middle-income countries, they will only account for 31% of the private sector gap. The gap will skew more towards the other two GNI groups, where the largest increases in cost will take place.

These results show the important role that donors play, especially within low-income countries. Should donors fail to increase their spending, governments or women paying out-of-pocket in the private sector will have to make up the shortfall. Governments must already increase their spending, just to keep up with the growing costs.

Figure 1.3

Cumulative Gap by Sector, 2021–2025
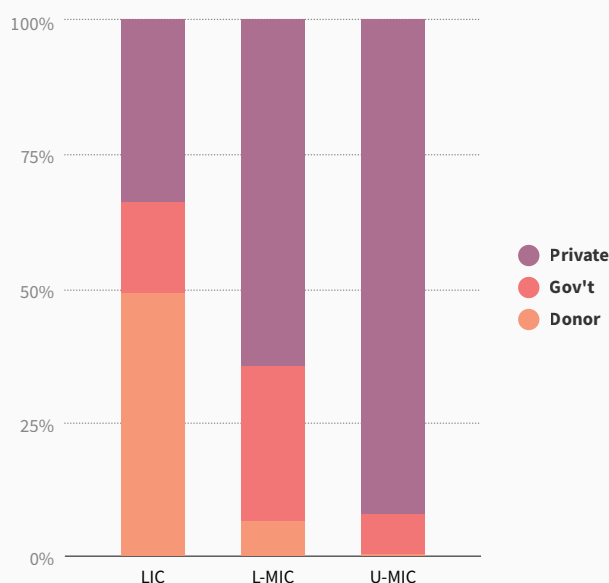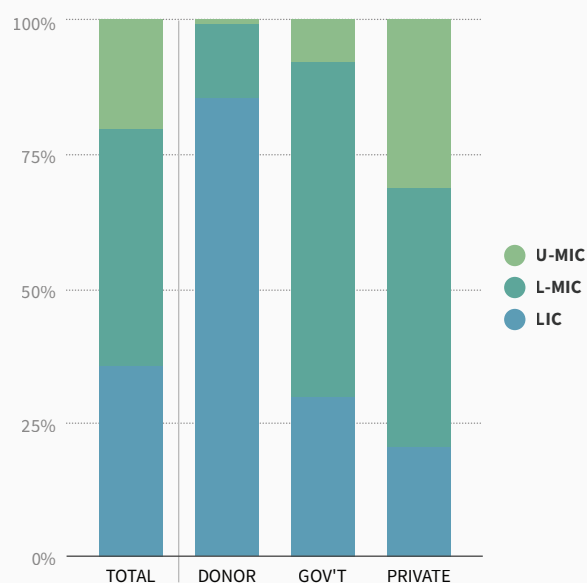*Comparison by GNI Group*

Figure 1.4

Cumulative Gap by GNI Group, 2021–2025
Comparison by Sector

Distinct Landscapes Between the Public and Private Sectors

02

While the public and private sectors each play important roles in the contraceptive supplies market, the two are not interchangeable. The public sector primarily provides long-acting and permanent methods (LAPMs), while the private sector focuses more on short-term methods (STMs). This means that in the context of shifting funding landscapes, the private sector cannot compensate for a lack of funding in the public sector. In response to shrinking donor funding, care must be taken to ensure women can make their own choices from a full range of contraceptive methods.

Currently, there are 467 million users of contraception living in the countries that constitute the low- and middle-income countries market for supplies. Overall, these users are almost equally split between LAPMs and STMs with 232 million and 235 million users, respectively. The predominant method of contraception in LMICs is sterilization; its 162 million users make up more than one-third of the total method mix. One in five users of contraception (91.8 million) consume pills, making it the second most popular contraceptive method in the LMIC market.

When comparing the differences in method use between the public and private sectors, one can observe a division of labor of sorts, where the public sector plays a greater role in delivering LAPMs, while private sector entities provide the majority of STMs. Injectables effectively straddle the divide: slightly more injectable users get their method from the public sector (37.4 million) than the private sector (32 million). Of the total number of users of contraception in LMICs, 57% (268 million) obtain supplies from the public sector while the remaining 43% (199 million) obtain their supplies from private sector entities.

Within the public sector, two-thirds (67%) of users rely on LAPMs. By contrast, users of pills, injectables, condoms, and other modern methods—all STMs—make up the majority (73%) of the private sector method mix. This pattern seems to indicate that investments in healthcare facilities and staff training, combined with the potential to leverage economies of scale, give the public sector an advantage in providing LAPMs, which require a medical service, trained personnel to provide that service, and a physical space in which the service can be provided. STMs, especially pills and condoms, on the other hand, often require little more than a simple retail transaction. The dominance of STMs in the private sector may be a function of limits on what can be offered and by whom within private sector entities due to their type of facility

Figure 2.1

Users by Method, 2018
Comparison by Sector
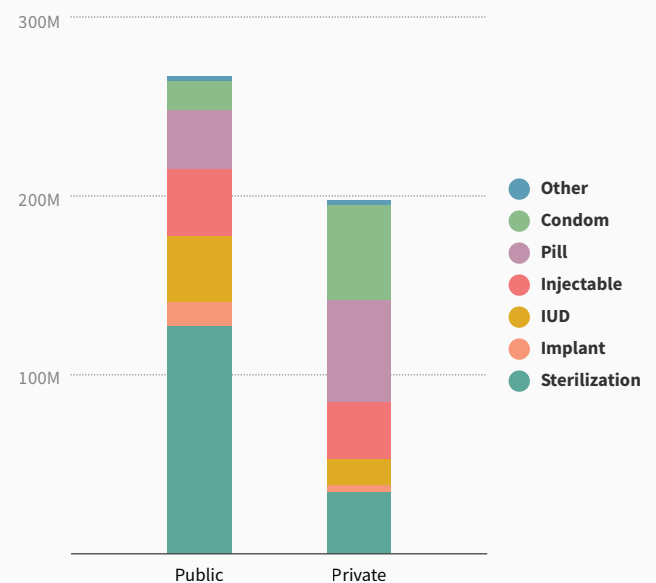
(such as drug shops) or level of provider. They may also be a function of the greater profit-making potential of methods that require re-supply.

Table 2.1

Users by Sector, 2018
Segmented by GNI Group

| | TOTAL | PUBLIC | PRIVATE | WITHIN PRIVATE | |
				SUBSIDIZED	NON-SUBSIDIZED
LICs	44,700,000	31,300,000	13,400,000	5,320,000	8,050,000
L-MICs	283,000,000	166,000,000	116,000,000	19,000,000	97,300,000
U-MICs	139,000,000	70,000,000	69,200,000	217,000	68,900,000
Total	**467,000,000**	**268,000,000**	**199,000,000**	**24,500,000**	**174,000,000**

Public versus Private Sectors within GNI Groups

With 283 million users, lower-middle-income countries account for 61% of the total number of users. Upper-middle-income countries account for 30% of users (139 million), while low-income countries account for only 10% (44.7 million).

Within low-income countries the most commonly used method is injectables, accounting for 36% of users (16 million). Fewer than half that number use each of the next most popular methods: 7.13 million women (16% of users) use pills and 6.65 million (15% of users) women use implants.

Figure 2.2

Share of Users, 2018
Comparison by GNI Group and Sector

In lower-middle-income countries, sterilization is the predominant method (43%), followed by pills (18%) and injectables (14%). Because this GNI group represents almost two-thirds of total users, combined with the fact that India—a lower-middle income country—represents such a large share of users compared to other LMIC countries, the overall LMIC method mix closely mirrors that of lower-middle-income countries.
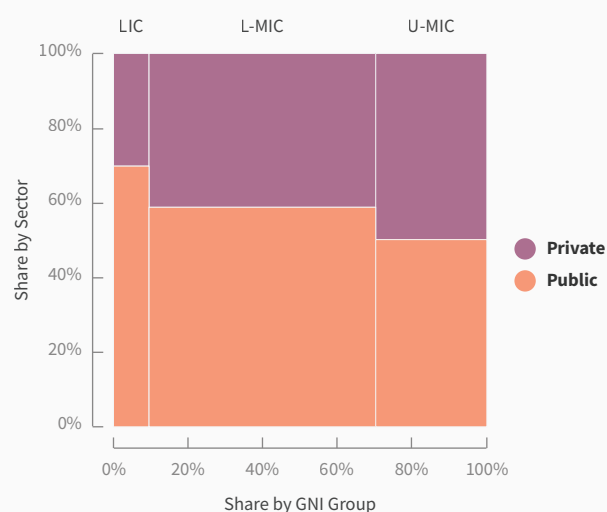
Within upper middle-income countries, sterilization is also the most prevalent method, but it accounts for a much smaller share of overall use (27%). Pills and condoms each make up roughly comparable shares of the method mix (25% and 21% respectively).

Lower-middle-income countries are not only home to the largest number of users overall, but also to the largest number of both public sector users (166 million) and private sector users (116 million). In relative terms, however, the contribution of the public sector diminishes as GNI increases; it is the largest share in low-income countries (70%), and smallest in upper-middle-income countries (50%).

While there are some differences in the private sector method mix across the three GNI groups, these differences are subtle. Between 70% and 75% of the private sector method mix in each income group is made up of just three methods: injectables, pills and condoms. The relative use of these three methods, however, varies. In low-income countries, condoms and injectables are the most common methods used by private sector users, while in lower- and upper-middle-income countries, pills are the most common method in the private sector.

Within the public sector, however, the differences in method mix across GNI groups becomes more pronounced. Injectables account for 40% of the public sector method mix in low-income countries, but only 10% and 12% in lower- and upper-middle-

income countries, respectively. We also see a much more pronounced role of implants within public sector users in low-income countries—19% compared to less than 5% in the other two GNI groups. In fact, despite many fewer public sector users in low-income countries compared to the other two GNI groups, in absolute terms there are more public sector implant users (5.88 million) living in low-income countries than in lower- or upper-middle-income countries (4.97 million and 2.5 million, respectively).

A more significant difference emerges in the role of public sector sterilization. Within lower-middle-income countries nearly 60% of public sector users rely on sterilization compared to only 9% in low-income countries and 39% in upper middle-income countries.

The differences between the method mix in the public and private sectors suggest that shifting efforts from the public to the private sector as a strategy to deal with limited donor funding may not be feasible on its own. Along with cost barriers, such a shift may limit method choice in situations where private sector entities play a limited role in providing LAPMs.

Figure 2.3

Method Mix within Private Sector, 2018
Comparison by GNI Group

Legend:
- Other
- Condom
- Pill
- Injectable
- IUD
- Implant
- Sterilization
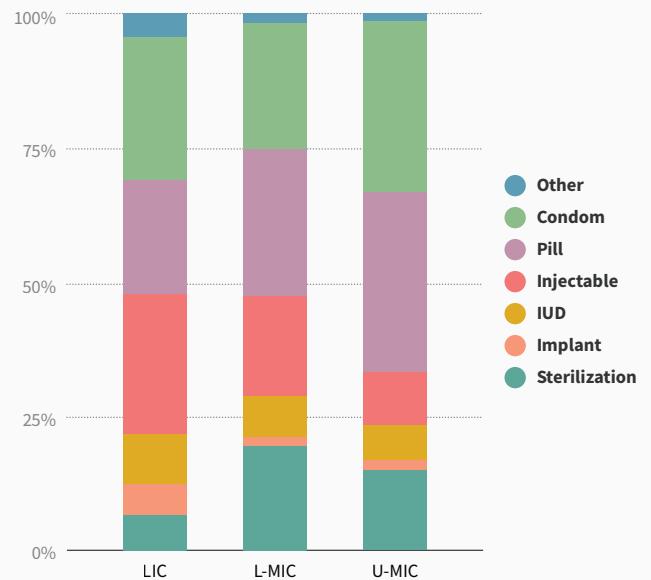
The Role of Subsidies in the Private Sector

The previous CGA sparked debate over the relative role of public sector funding within the private sector, specifically as a result of subsidized socially marketed products. This year we build upon new data and insights shared by DKT, MSI, PSI, and SHOPS Plus to distinguish between users who purchase supplies from private sector entities at subsidized prices and those who pay non-subsidized (market-value) prices. This allows us to present two different financing models: one that is purely market driven, the other that relies on support from the public sector. The results indicate that across the 135 LMICs, only a small share (12%) of private sector users receive subsidized products. In terms of the three GNI groups, the subsidized private sector commodities play the largest proportional role within low-income countries. Conversely, the subsidized private sector is non-existent in upper-middle-income countries.

Figure 3.1

The Path from Funding to Clients
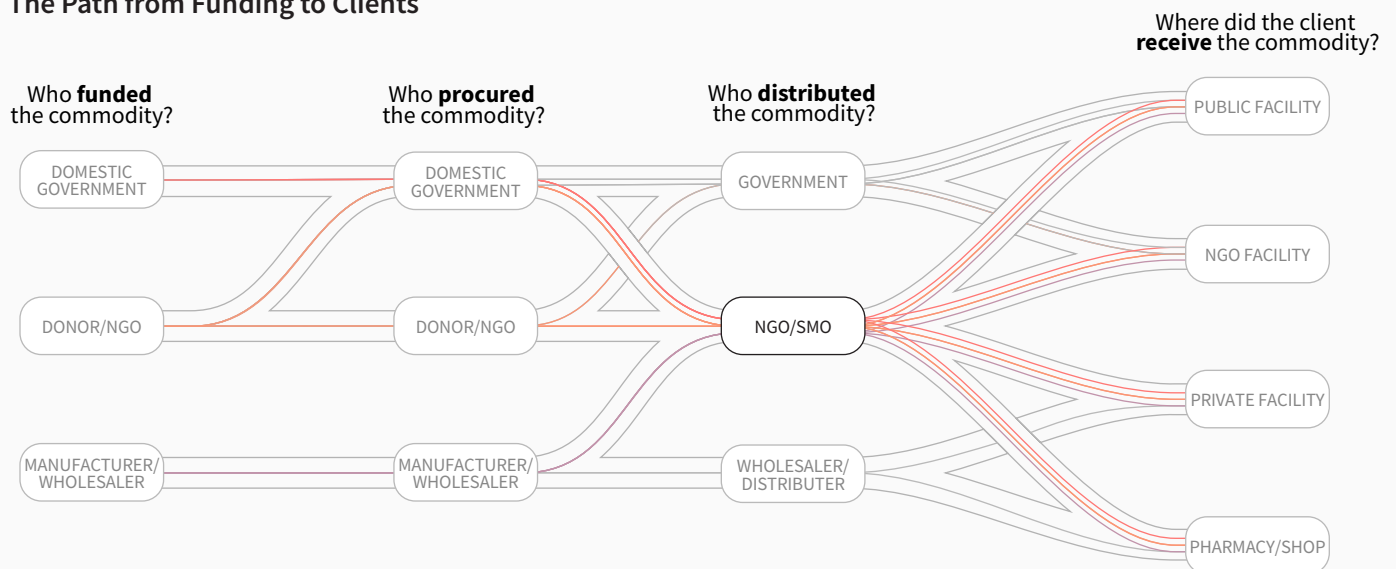
Where a woman gets her contraception doesn't necessarily tell us who funded, procured or distributed the commodities.

The graphic above represents the numerous paths that connect funding to the facilities where clients receive contraception. For NGOs and SMOs, the pathways are especially complex, illustrating the variety of models for service delivery and product sales.

The commodities clients receive at any facility could be free, subsidized, or non-subsidized (market price).

Publication of the 2018 edition of the CGA offered our community greater visibility into private sector provision of contraceptive supplies. New data from IQVIA revealed the higher prices paid by those who secured their supplies through private sector entities. The CGA 2018 analysis applied these higher prices to a proportion of private sector consumption, recognizing that this sector comprised both subsidized and non-subsidized products. But it left an incomplete picture, in large part because uncertainties remained over the exact size the private market for of the subsidized and non-subsidized supplies. The 2018 edition of the CGA also treated the social marketing sector as a subset of the private sector when in fact the work of social marketing agencies straddled both the public and private sectors.

This edition of the CGA breaks new ground by setting aside the distinctions between the social marketing and full commercial sectors, focusing instead on the supplies themselves: whether they are sold at full commercial price, or whether they benefit from some sort of public sector subsidy. For this analysis, who sells in the private sector is less important that the cost structure of what they sell.Informed by data and insights from SMO actors and other private sector experts, the CGA 2019 is now able to tease out those circumstances where products received or purchased by individuals from private sector facilities were subsidized by either donors or country governments. Because of wide diversity in international NGO and SMO models for service delivery and product sales, only a subset of the supplies they distribute or services they provide fall into the classification of subsidized private sector—that proportion of their work where public sector funding reduces the price to users within the private sector.[1]

Of the 199 million users of contraception who obtain supplies from private sector entities, 88% (174 million) purchase non-subsidized supplies. Overall, subsidized supplies play only a small role in low- and middle-income countries, largely due to the fact that most countries have no institutions (such as SMOs) through which subsidized products enter the private market. Among those that do, the size of the private market—which itself can vary greatly from country to country—often pales in comparison to the public sector.

Of the 135 LMICs, only 49 have contraceptives available at subsidized prices within the private sector. Nonetheless, 24.5 million users of contraception do currently purchase supplies at subsidized prices from the private sector. And, at least for certain contraceptive methods, the role of subsidy is not insignificant: 32% of implant users and 23% of IUD users who get their method from private sector entities purchase subsidized products.

Figure 3.2

Share of Users within Private Sector, 2018
Comparison by Method
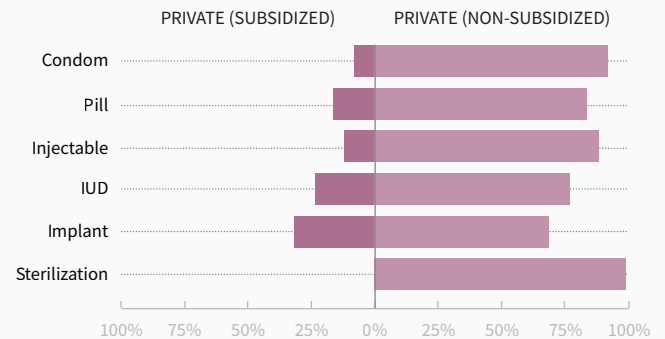
When it comes to GNI groups, just as the size of the private sector varies, so does the role of subsidized services within the private sector. Not surprisingly, the subsidized private sector plays the largest role in low-income countries, where 40% of private sector users purchase subsidized supplies. Within lower-middle-income countries the role of the subsidized private sector shrinks by about half, and virtually disappears within upper-middle-income countries. However, while the subsidized private sector plays a larger role within low-income countries, in absolute terms there are more users of subsidized supplies living in lower-middle-income countries (19 million versus 5.32 million) due to the larger number of users in this GNI group.

Box 3.1

Pill Subsidies from Country to Country

Using the private sector pill market as an example, the following three countries illustrate how the role of subsidies can vary from country to country:

Brazil has a large private sector pill market with no subsidized pill products present.

Zimbabwe has a medium-sized private sector pill market, half of which is made up by subsidized supplies.

Ethiopia has a small private sector pill market, the entirety of which is covered by subsidized supplies.

---

1   Because our analysis reflects commodities sold or distributed by NGOs and SMOs, we are largely capturing the more traditional model of subsidizing commodities. But subsidies can be applied in different ways, even if they are not captured here.

The Impact of Subsidies on Consumption Costs

Drawing on an expanded range of data sources country and regional estimates, both subsidized and non-subsidized private sector prices have been incorporated into the consumption cost analysis. Whether private sector users access subsidized or non-subsidized products has important implications for private sector consumption costs, since for any method the subsidized price is lower than the non-subsidized price. In addition, there is a wide variation in both the subsidized and non-subsidized prices across countries and regions.[2]

Comparing the subsidized and non-subsidized private sector price within each region gives a sense of the magnitude of the subsidy. Overall, injections have the lowest subsidy. Those who consume subsidized private sector products pay on average 31% of the non-subsidized price. IUDs and pills both have the greatest

Figure 3.3

Share of Users within Private Sector, 2018
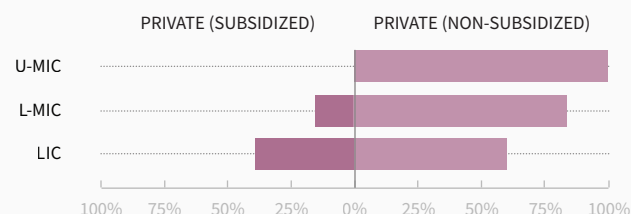*Comparison by GNI Group*

Table 3.1

Private Sector Prices by Method
Regional averages Among LMICs

	PRIVATE SUBSIDIZED				PRIVATE NON-SUBSIDIZED			
	IMPLANT	IUD	INJECTION	PILL	IMPLANT	IUD	INJECTION	PILL
Asia	$0.87	$0.31	$0.43	$0.07	$44.24	$7.75	$1.40	$3.11
Europe	—	—	—	—	$181.72	$5.00	$1.92	$7.06
Africa	$4.17	$0.44	$0.70	$0.15	$14.60	$7.57	$1.09	$0.66
Americas	$0.62	—	$0.49	—	$29.34	$21.83	$4.37	$5.31
Overall	**$3.68**	**$0.37**	**$0.68**	**$0.13**	**$31.09**	**$12.55**	**$2.22**	**$3.14**

Table 3.2

Subsidized Prices as Share of Non-Subsidized Price
Regional averages Among LMICs

	IMPLANT	IUD	INJECTION	PILL
Asia	2%	4%	31%	2%
Europe	—	—	—	—
Africa	29%	6%	64%	23%
Americas	2%	—	11%	—
Total	**12%**	**3%**	**31%**	**4%**

subsidy, with subsidized users paying less than 5% on average of the non-subsidized price. Subsidized implants are, on average priced at 12% of the non-subsidized price, however only a small share of implant users purchase their methods from private entities.

Across low-and-middle-income countries only 2% of private sector costs come from spending on subsidized commodities. While this may seem small, it still equates to a total of $46.7 million. And for many of the women purchasing these subsidized supplies, especially those in the poorest countries, these products may have been unaffordable at higher prices.

Supplies from private sector entities make up the largest relative share within low-income countries. In this GNI group, subsidized supplies account for 40% of private sector users but only 16% of private sector costs. The discrepancy can be attributed differences in prices paid between subsidized and non-subsidized products, and differences in method mix. Although the subsidized

---

2   These averages were only used when country specific data was unavailable.

Figure 3.4

Share of Consumption Costs within Private Sector, 2018
Comparison by GNI Group

PRIVATE (SUBSIDIZED)   PRIVATE (NON-SUBSIDIZED)

| | U-MIC | L-MIC | LIC |

100% 75% 50% 25% 0% 25% 50% 75% 100%
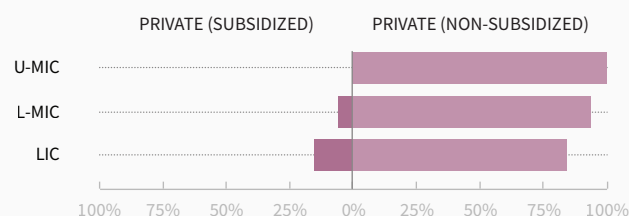
commodities make up a larger share of private sector costs within low-income countries, in absolute terms more than three times that amount ($36.6 million) is spent purchasing subsidized supplies from the private sector in lower-middle-income countries. However, in this GNI group, only 6% of private sector costs derive from users purchasing subsidized supplies.

In addition to out-of-pocket spending by individuals who purchase supplies at subsidized prices from private sector entities, an additional $44.2 million is incurred by the public sector to cover the subsidy. In this analysis, we include this cost within the total public sector consumption costs.

Box 3.2

A Wider Approach to Subsidy
Looking beyond subsidized commodities

The CGA 2019 analysis of subsidy within the private sector is primarily focused on commodities themselves. However, discussions within the RHSC community have highlighted other approaches to applying subsidies within the private sector. The text below, provided by PSI, highlights their latest thinking on moving beyond a supply-side subsidy.

Supply-side subsidy is frequently used to offset commodity costs to increase market inputs and ultimately reduce the price paid for commodities and services by the consumer. Subsidized commodities are important to the promotion of critical health seeking behavior by priority audiences, however, long-term reliance on subsidized commodities can impede market evolution when not managed thoughtfully.

Market development requires a long-term view toward equitable growth and adaptation. Subsidy can be targeted at any point within a market to encourage critical market functions for growth, equity, quality, and sustainability. Decisions about where and how to target subsidy should ensure that priority audiences benefit equitably and that no individual players across the value chain, e.g. brands or providers, are inhibited or crowded out from performing key market functions. Market growth and equity often require subsidy that targets vulnerable groups by addressing specific obstacles that these groups face. Subsidy that reduces price across the market may not effectively increase use among youth for instance, unless other obstacles for access are recognized and addressed. Subsidy might better be used to promote youth-friendly services or provider behavior change. Targeting subsidy to correct specific market constraints strengthens the total market and creates resilience that eventually reduces reliance on donors.

PSI has estimated that adjusting and increasingly targeting subsidy within a cost-recovery approach can move certain modern contraceptive markets from extrinsic donor dependency to sustainability within the short to medium term. Over that period, subsidy would need to be increasingly targeted to encourage new users and address obstacles for vulnerable users, including policy and the enabling environment.

04
# Differences in the Distribution of Users versus Costs

Consumption cost is not simply a function of use. The differences in the method mix of users and the method mix of costs are due to a number of factors, including differences in the number of units per year of each method a user must consume; differences in costs between methods; and differences in cost for each method from country to country. By understanding the relationship between users and costs, the reproductive health community can ensure resources are adequately distributed such that women can continue to access a full range of contraceptive method.

The total consumption cost of contraceptive supplies LMICs is $3.45 billion. Unlike users, where the proportion using LAPMs versus STMs is fairly even, the method mix in terms of costs is dominated by STMs, comprising 91% of the total consumption cost. For example, with a total of $2.38 billion, pills are by far the greatest contributor to consumption cost, making up 69% of the total, yet they account for only 20% of users. In contrast, IUDs account for 11% of users but only 3% of costs, while implants make up a similar share of both use and cost, at 4% and 3%, respectively.

While each sector has a distinct landscape in terms of method use, even greater differences appear when comparing consumption costs across sectors. Overall, the majority of costs (79%) derive from users purchasing supplies from private sector entities, even though these same clients account for only 43% of users. By contrast, only 21% of costs ($738 million) comes from the public sector despite the fact that most users get their supplies from public entities. This pronounced disparity is due to the preponderance of STMs (which require frequent resupply and therefore greater volumes) in the private sector, coupled with the fact that private sector consumers often pay higher prices than public sector procurers for the same method.

Figure 4.1

Method Mix of Use versus Cost, 2018

Legend:
- Other
- Condom
- Pill
- Injectable
- IUD
- Implant
- Sterilization
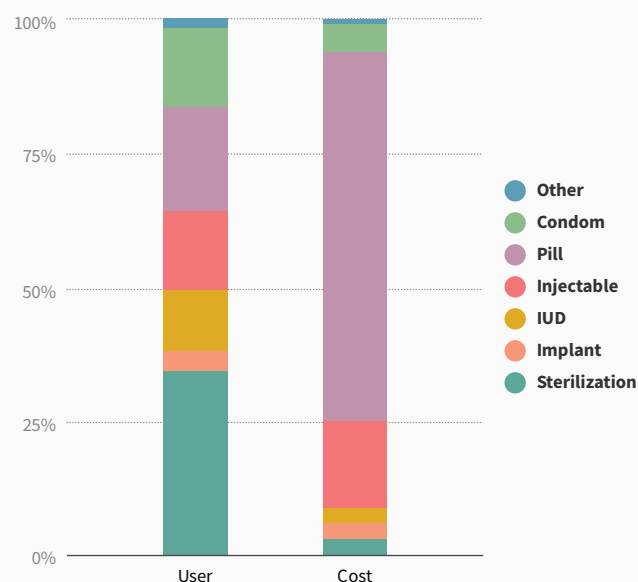
Box 4.1

Costs versus Users at the Country Level

The countries with the most users are often not the countries with the largest consumption costs due to differences in method mix and differences in the unit prices paid for commodities. The clearest example of the disconnect between costs and users can be seen when contrasting India and Brazil:

India accounts for 30% of users across the 135 LMICs but makes up only 7% of consumption costs: this is due to high levels of LAPM users in India, many of whom have low or no consumption cost associated with them.

Brazil accounts for only 8% of users across the 135 LMICs but makes up 30% of consumption costs: This is due to several factors, including a relatively large number of pill users in Brazil (14.3 million) and higher prices for commodities in Latin American countries.

Figure 4.3

Consumption Cost by Method, 2018
Comparison by Sector

Figure 4.4

Method Mix of Use versus Cost, 2018
Within Public Sector
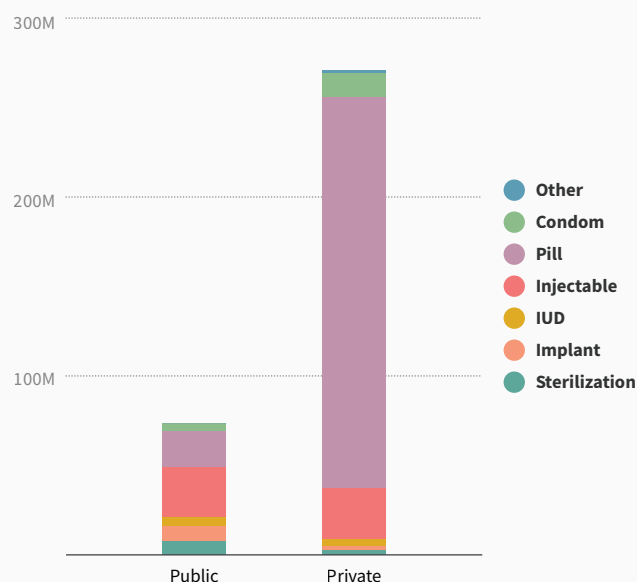
Within the public sector LAPMs account for two-thirds of users, but only 29% of costs. This is because STMs are relatively costly per user even in the public sector. Injectables and pills represent 38% and 26% of the public sector cost method mix, despite representing only 14% and 12% of the public sector use method mix.

Greater variability in the price paid by private sector consumers means that differences in use and cost by method are even more pronounced within the private sector. Most private sector costs come from pill consumption (81%) despite pills representing only 29% of the private sector use mix.

Users versus Cost within GNI Groups

The distinct landscape of users compared to that of costs can also be seen within each GNI group. Divergent method mixes and price points across the three GNI groups means that the distribution of costs both across and within each GNI group looks different. While lower-middle-income countries are home to the majority of users, the highest consumption costs are actually found in upper middle-income countries. Two-thirds of the total consumption cost comes from upper-middle-income countries despite only accounting for 30% of users. The share of costs from lower-middle-income countries (27%) is less than half of the share
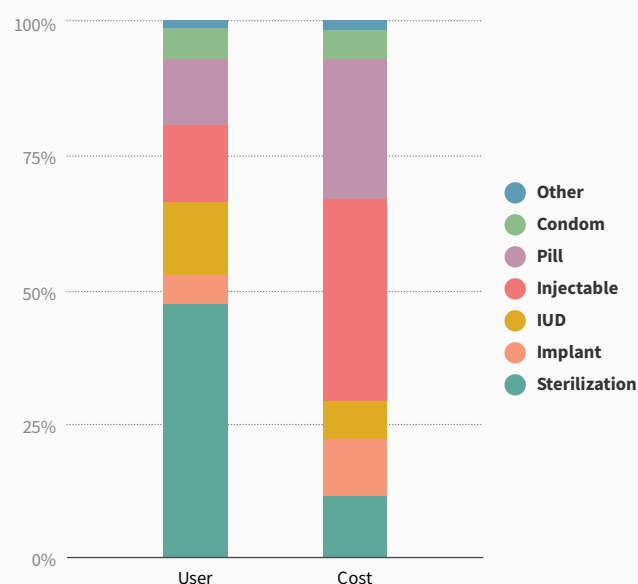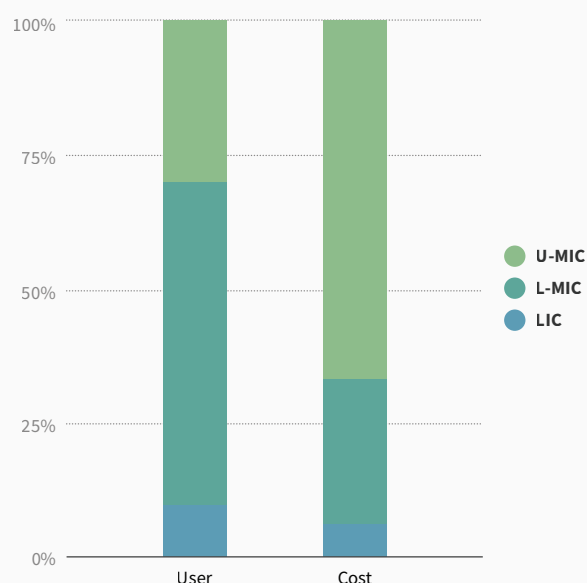
Figure 4.5

Share of Users versus Cost, 2018
Comparison by GNI Group

of users (61%). Low-income countries account for 6% of costs compared to 10% of users.

Within upper-middle-income countries, pill consumption accounts for the lion's share of total costs (82%). Pills are also the largest contributor to costs in lower-middle-income countries, though they represent a much smaller share (46%). Within low-income countries injectables represent the largest share of costs (47%).

A quarter of all spending on implants takes place in low-income countries, while nearly three-quarters of spending on sterilization comes from lower-middle-income countries, and only 38% of spending on injectables comes from upper-middle-income countries.

As is the case with users, the public sector plays a comparatively smaller role across each income group when looking at costs; however, these differences are much more pronounced—from 69% within low-income countries to only 10% within upper-middle-income countries. The difference between the share of public sector users and public sector costs is most stark within upper-middle-income countries; the public sector accounts for 50% of users but only 10% of costs. Discrepancies are also seen in lower-middle-income-countries; in this GNI group the public sector accounts for 59% of users by only 38% of costs. Within low-income countries the public sector plays a similar role in both use (70%) and cost (69%) due to differences in method mix and prices in this GNI group.

Making comparisons between the distribution of users and costs can be helpful in planning adequately for the level of funding and effort needed to sustain contraceptive use in different settings. Ensuring all women have access to a full range of contraceptive methods and are able to use the method they chose is critical to ensure rights and choice. This analysis of use versus cost is not to suggest an optimal method mix or advocate for a shift to lower cost methods. Rather, it is meant to illustrate the importance of understanding complexities behind the contraceptive market—and the utility of looking at the market from multiple perspectives.

Figure 4.6

Share of Consumption Costs by Method, 2018
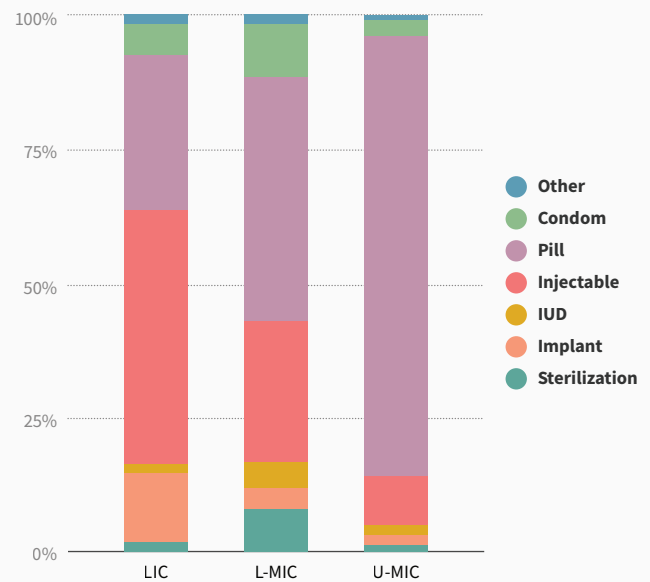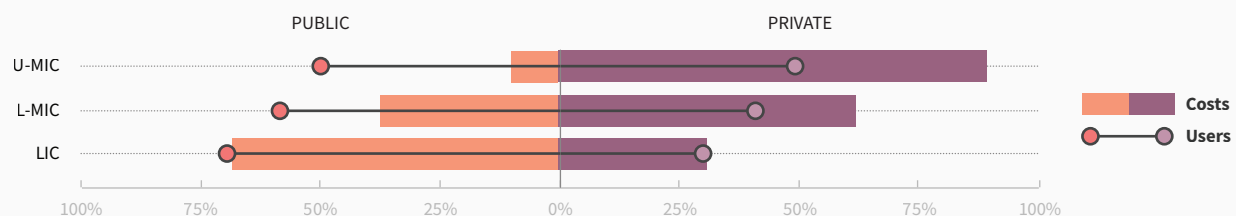*Comparison by GNI Group*

Figure 4.7

Share of Consumption Costs versus Users by Sector, 2018
Comparison by GNI Group

Significant Yet Uneven Growth in the Decade Ahead

In this section, we look at where the world will be if current trends persist for the coming decade. While it is impossible to predict what lies ahead, we know that the conversations taking place now will largely shape future trends. We make no assumptions about future economic, political, environmental, or cultural disruptions that might alter the trends we see today. Instead, we see this chapter as a starting point for discussions, providing a baseline assessment of where things could be to help inform conversations about what changes may be needed to support the future needs of contraceptive users.

Both our level of certainty and the utility of detailed projections diminishes the further we look into the future. Because of this, we divide the coming decade into two parts: the near-term changes that may happen over the five years leading up to 2025, and the longer-term changes that may occur as we approach 2030. In this section, therefore, some more detailed results are only presented to 2025 rather than 2030.

In addition, our estimate of total users is far more certain than our estimates of what methods they may be using, given the many

factors that could impact future changes in method mix. Instead of attempting to predict future changes we instead continue recent patterns of method mix changes into the future—results therefore provide a baseline of what things would look like if current patterns persist.

Lastly, it is important to note that our estimates of consumption costs are evaluated at today's prices, as we make no guesses about inflation or fluctuations in currency value.

Figure 5.1

Change in Users, 2020–2030
Comparison by Method
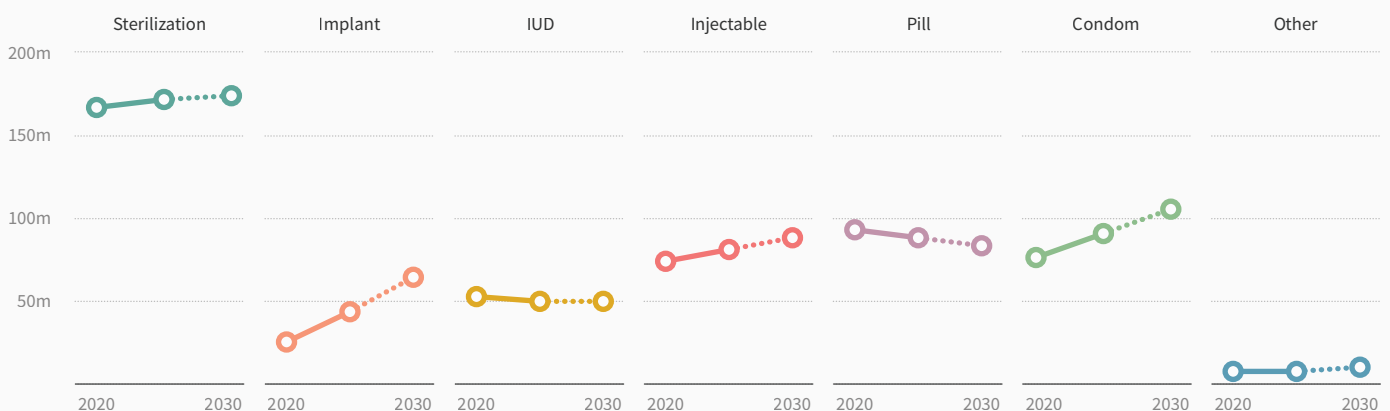
Changes in Users of Contraception

By the year 2020, the market for supplies in LMICs will be home to 487 million users of contraception. According to current trends, that number will reach 569 million by 2030, an increase of 82.2

million users. The rate of increase, however, will begin to slow in the second half of the decade; from 2020 to 2025 the total number of women using contraception will grow by 44 million (+9%), but

Figure 5.2

Percentage Point Change in Method Mix, 2020–2030
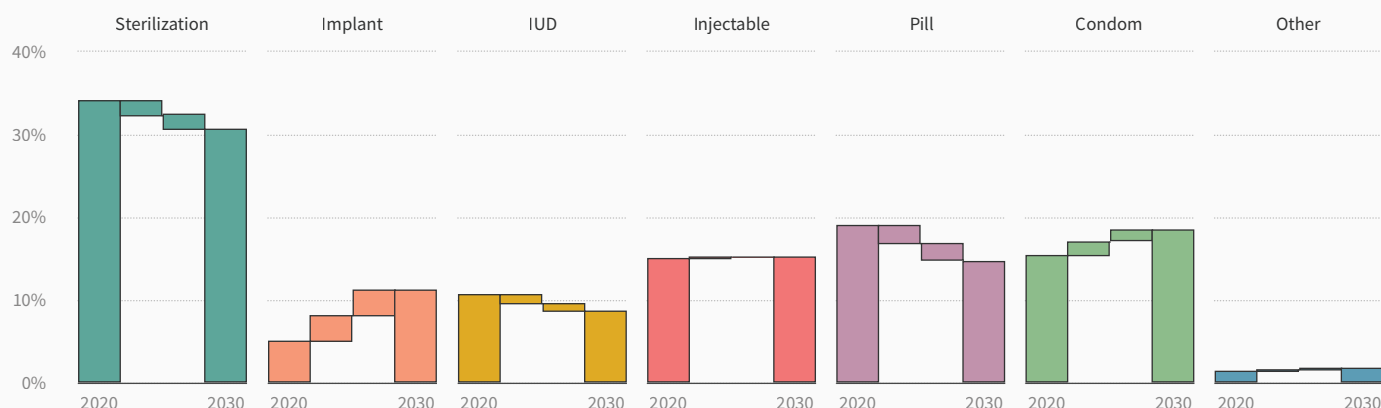
will only increase by 38.2 users (+7%) in the five years leading to 2030.

Between 2020 and 2025, LAPMs and STMs will gain roughly equal numbers of users (+22.9 million and +21.1 million, respectively). From 2025 to 2030, however, LAPMs will see a slightly larger increase with 21.4 million users versus an additional 16.8 million users of STMs.

Users of implants will see the largest increase in both absolute and relative terms. The number of women who use implants will grow from 23.9 million in 2020 to 42.6 million in 2025 and 63.5 million in 2030; an increase of 39.6 million over ten years. However, despite this rapid growth, implants will still be one of the least used methods, accounting for just 8% of the total LMIC method mix in 2025 and 11% in 2030. The growth trend for implants could be strongly influenced by financing from donors and governments to make implants affordable to more women. If this is the case, this trend may be particularly sensitive to a leveling off or decline in public sector support.

Users of pills will see the largest decline: the number of women who use pills will decline from 91.7 million in 2020 to 83.3 million in 2030, a decline of 5.24 million. Despite this overall decline, increases in the number of users of pills will occur in nearly half of the countries within the LMIC market.

Because these changes in users are relatively small when compared to the total, changes to method mix are fairly minimal. Overall, users of LAPMs and STMs will each continue to represent roughly half of the method mix in 2030, as they do now.

The share of women using sterilization and IUDs will decline slightly between 2020 and 2030 (-4% points and -2% points, respectively), these declines will be offset by an increase in

implants from 5% to 11% of the method mix (+6% points).

The share of women using pills will decline by 4% points (from 19% to 15%); this decline will be largely offset by an increase in male condoms. Injectables share of the method mix will hold steady at 15%.

While the aggregate share of LAPM users within the overall method mix will remain similar, the gains will be unevenly distributed across countries. Implants will increase their share of method mix in all countries; recent data suggests that the largest gains are already happening within sub-Saharan Africa, particularly West Africa. Changes in sterilization and IUDs are more mixed—in some countries their share in the method mix is increasing, while in others it is stagnant or declining.

Changes in Users by GNI Group

Between 2020 and 2030 the largest increase in users in absolute terms will be seen within lower-middle-income countries, where total users will increase by 47.2 million. Just over half of this increase will take place in the five years leading up to 2025 (+26.3 million), with slightly fewer users being added in the later five years (+21 million). Due to the large user base in these countries, however, this increase represents only a 9% change from 2020 to 2025 and 16% increase over the entire decade leading up to 2030.

Low-income countries will see the most rapid growth, increasing by nearly 30% between 2020 and 2025 alone. While the pace of increase will decline slightly, low-income countries will add more users in the five years leading to 2030 (+15.6 million) that will be added from 2020 to 2025 (+14.3 million). In total over the 10 years leading up to 2030, this GNI group will see a 60% increase in users (+29.9 million).

Box 5.1

Country-Level Projections: Users

From country to country, there will be wide variations in changes in the number of women using contraception over the coming five years.[1] The largest increase will be in India (+11.1 million). Ethiopia and Nigeria will see the next largest increase in users though the gains are much smaller in absolute terms (just under 3 million users in each country). Nonetheless, these gains will be much more rapid in relative terms—increasing by 34% in Ethiopia and 38% in Nigeria, compared to only 8% in India. The largest relative increase, however, will be in South Sudan, where the number of users will increase by 168% from 99 million to 266 million.

By contrast, nine countries are projected to experience slight declines in their total user numbers from 2020 to 2025: Russian Federation, Thailand, Ukraine, Korea DPR, Romania, Cuba, Belarus, Bulgaria, and Georgia. These are countries where contraceptive use is already high and population growth is slowing. In all cases these declines are very small, ranging from 1% to 10% in each country.

Increases in pill users are projected in half of the countries in the LMIC market. These countries will gain in aggregate 5.23 million pill users, and just over one-third of this increase will come from three countries: Egypt (+794 million), Philippines (+628 million), and Indonesia (+445 million). These gains, however, are offset by a larger decline in pill users in the remaining countries, which will see a collective decline of 8.41 million pill users from 2020 to 2025.

These changes in users are driven by divergent patterns in method mix. For example, when it comes to long-term methods, Nigeria will see a large increase in implants' share of the method mix, from 20% to 32%. On the other hand, IUD use will remain low. In Indonesia, both implants and IUDs will gain similar shares of the method mix, with implants increasing from 7% to 10% and IUDs increasing from 10% to 13%. In Mexico, the gain in implants (7% to 9%) will be almost entirely offset by the gain in IUDs (19% to 18%).

1   At the country level, our projections for changes in the method mix of users are informed by recent patterns of change at the regional level, and not by country-specific policies or implementation plans, which could also influence method mix shifts.

Finally, growth in upper-middle-income countries will nearly stagnate because many of the countries in this group already have high levels of contraceptive use and slower rates of population growth. Less than half as many users will be added in the five-year period after 2025, than the five years preceding it. This GNI group will only experience a 4% increase (+5.11 million) over the entire decade leading up to 2030.

While there will be declines in IUD users between 2020 and 2030 within upper-middle-income countries (-3.59 million), this method will gain users within the other two GNI groups (+221 thousand in low-income countries and +643 thousand in lower-middle-income countries). Users of implants will increase across all three GNI groups; just over half of the increase in implant users will come from lower-middle-income countries (+20.3 million); a significant share of the increase (35%) will also be seen among low-income countries (+13.9 million). Low-income countries will also experience the largest increase in terms of injectables (+11.4 million).

Pill use will decline in all three GNI groups, though the decline in low-income countries will be relatively small (-774 thousand).

Table 5.1

Change in Users, 2020–2030
Segmented by GNI Group

	2020	2025	2030	5-YR CHANGE (2020 TO 2025) #	%	5-YR CHANGE (2025 TO 2030) #	%
LIC	49,900,000	64,200,000	79,800,000	14,300,000	29%	15,600,000	24%
L-MIC	296,000,000	322,000,000	343,000,000	26,300,000	9%	21,000,000	7%
U-MIC	141,000,000	145,000,000	146,000,000	3,420,000	2%	1,690,000	1%
Total	**487,000,000**	**531,000,000**	**569,000,000**	**44,000,000**	**9%**	**38,200,000**	**7%**

Figure 5.3

Change in Users, 2020–2030
Comparison by GNI Group

Figure 5.4

Method Mix in 2020, 2025, and 2030
Low-Income Countries (LIC)
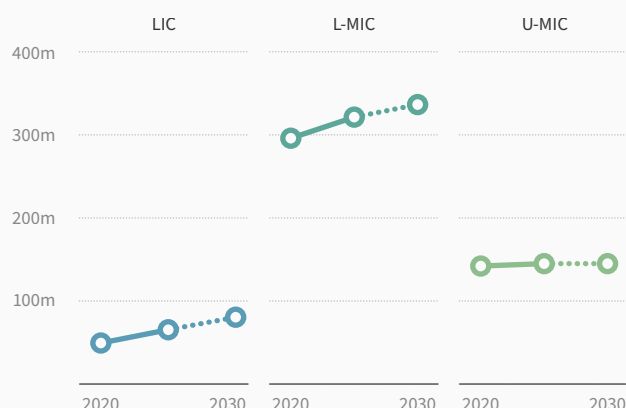
Lower-middle-income countries will also see a small decline in injectable use (-581 thousand). Within upper-middle-income countries, three methods are projected to decline (IUDs, pills, and sterilization). Because overall increases in users is limited in within this GNI group declines in the method mix of methods are more likely to result in actual declines in users. Overall, despite these changes, the method mix will stay fairly similar within each

GNI group over the coming decade.

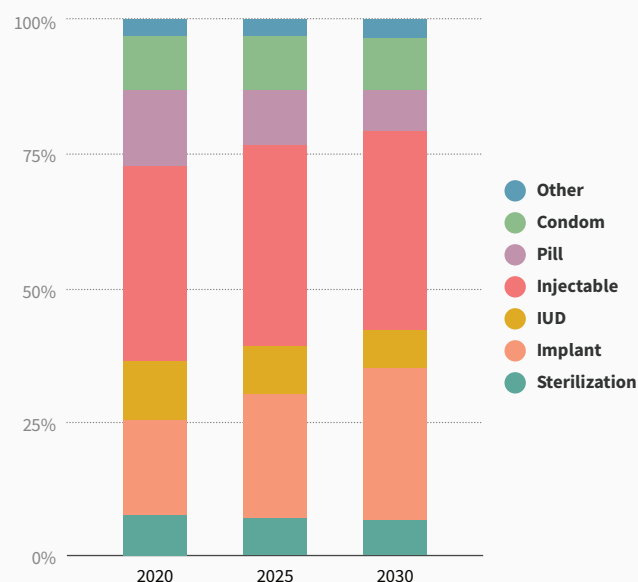# Changes in Consumption Costs

As the total number of users of contraception grows, so too will the costs. In 2020, the cost of all supplies consumed by users in the LMIC market will be $3.51 billion. By 2025, that figure will increase to $3.6 billion at today's prices, with the cumulative cost over the five-year period (2021–2025) totaling $17.8 billion. By 2030, the total consumption cost across the LMIC market will $3.63 billion, an increase of $120 million over the ten-year period.

Just as the growth in the number of users is projected to slow down over the course of the coming decade, so too will the increase in consumption costs. From 2020 to 2025, consumption costs will grow by $87.7 million (+2%), while in the five years leading to 2030, they will grow by less than half that amount—$32.4 million (+1%).

Overall, the share of total consumption cost attributed to each method will stay fairly consistent between 2020 and 2025. There are, however, some notable changes.

Increases in the number of users of implants and injectables will drive most of the increase in consumption cost. The consumption cost of implants will increase by $74.9 million between 2020 and 2025, while the consumption cost of injectables will increase by $72.5 million. A sizeable increase will also be seen in the

consumption cost of male condoms (+$43.2 million).

Increases in the consumption costs of implants, injectables and condoms will, however, be largely offset by declines in the costs of other methods. Most notably, the consumption cost of pills will decline from $2.37 billion in 2020 to $2.27 billion in 2025. Nonetheless, pills will continue to dominate consumption costs, representing 67% of the total cost of supplies in 2020, 63% of the total cost in 2025, and 58% of costs in 2030.

Changes in Consumptions Costs by GNI Group

From 2020 to 2030 low-income countries will see the largest gain consumption costs in both relative (+62%) and absolute (+$144 million) terms. Despite these gains, they will still only account for 10% of the total consumption cost in 2030.

Among lower-middle-income countries consumption costs will increase by $101 million, a 10% increase over ten years (2021–2030). In contrast, upper-middle-income countries will see a decline in consumption costs (-125 million), though they will still account to the largest share of consumption costs (60%) across the LMIC market.

Figure 5.5

Change in Consumption Cost, 2020–2030
Comparison by Method
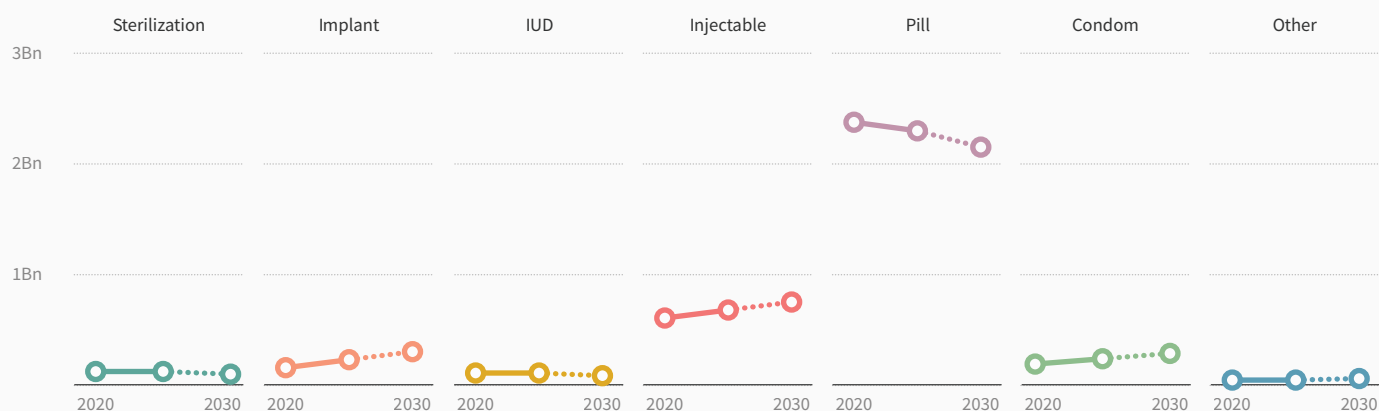
The projected changes in consumption cost by GNI group will become even more divergent as 2030 approaches. Low-income countries will gain even more cost in absolute terms from 2026-2030 (+$74.5 million) than in the five years leading up to 2025 (+$69.7 million). By contrast, the increase in costs in lower-middle-income countries will be nearly $20 million smaller (+$40.8 million) in the five years after 2025 than the gains in the five-year leading to 2025 (+$60.3 million). Finally, the decline in cost in upper-middle-income countries will accelerate; the decline will nearly double from $42.3 million from 2020 to 2025 to

$82.9 million from 2025 to 2030. However, given the magnitude of consumption costs in this GNI group, these declines represent only a 2% and 4% decline respectively.

While upper middle-income countries will add less than half as many implant users as low-income countries over the coming decade, the gains in implant consumption cost between these two groups will be similar (+$41.5 million versus +$47.35 million). This is due to the higher unit prices of implants within upper-middle-income countries. Similarly, while upper middle-income

Box 5.2

Country-Level Projections: Costs

Over the period from 2020 to 2025, the largest increases from in consumption costs will be seen in the Russian Federation (+$16.5 million), Nigeria (+$14.7 million), and Ethiopia (+$13.5 million). Interestingly, the Russian Federation will see the largest increase despite experience a slight decline in user numbers. The increase in cost will result mainly from a shift away from IUDs towards pills and condoms. On the other hand, twenty-five countries will see costs decline between 2020 and 2025, despite an increase in the number of users in most of these countries. The declining costs will be nearly all attributable to shifts in method mix that result in lower consumption cost.

Nearly half of all countries will see increases in the consumption cost of pills between 2020 and 2025. The largest of these increases will be in the Russian Federation (+$20.1 million), the Philippines (+$7.78 million), and Iraq (+$6.03 million). By contrast, Egypt and

Indonesia are expected to be among the top three countries to see an increase in pill users, and yet they will rank fourth and eighth, respectively, in terms of costs due to differences in the price of pills and the relative contributions of the public and private sectors to pill use.

Despite declining consumption costs of all supplies in Brazil, the country will see the largest absolute increase in costs associated with injectables from 2020 to 2025 (+$15.2 million), followed by Ethiopia (+$8.82 million) and Nigeria (+$7.59 million). When it comes to implants the largest increases in costs will be seen in India[1] (+$8.87 million), Brazil (+$6.81 million), and Nigeria (+$6.15 million).

Overall, Brazil will still have the highest consumption cost of any one country by far, though its share of the total will decline slightly from 30% in 2020 to 28% in 2025.

1   While contraceptive implants are not currently provided in India regional shifts in method mix would suggest very low levels of implant use by 2025 (2% of the method mix).

Table 5.2

Change in Consuption Cost, 2020-2030
Segmented by GNI Group

	2020	2025	2030	5-YR CHANGE (2020 TO 2025) #	%	5-YR CHANGE (2025 TO 2030) #	%
LIC	233,000,000	303,000,000	377,000,000	69,700,000	30%	74,500,000	25%
L-MIC	973,000,000	1,030,000,000	1,070,000,000	60,300,000	6%	40,800,000	4%
U-MIC	2,310,000,000	2,260,000,000	2,180,000,000	-42,300,000	-2%	-82,900,000	-4%
Total	**3,510,000,000**	**3,600,000,000**	**3,630,000,000**	**87,700,000**	**2%**	**32,400,000**	**1%**

countries will only account for 18% of the increase in injectable users from 2020 to 2030, they will account for 40% of the increase in cost over this same period.

As this section has revealed, changes in consumption cost reflect the growth in users, shifting patterns in the method mix, the relative role of the public and private sector in service provision, and country level differences in prices. Just as discussed in Theme 4, changes in costs are not simply a function of changes in users. As our community plans for the future, it is important to not only consider where growth in users will be taking place, but also how the consumption costs associated with those users may change.

Figure 5.6

Change in Consumption Cost, 2020–2030
Comparison by GNI Group
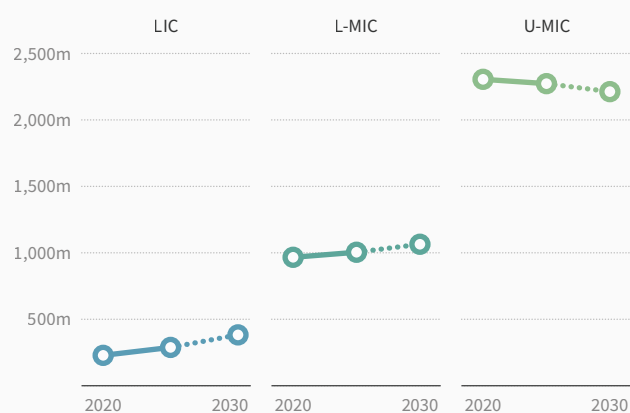
Readers Guide

DATA SOURCES

This report is built on the power of partnership. Drawing on data provided by partners across the reproductive health community, the CGA is able to create the most comprehensive picture possible for each country. This wide array of sources helps to shape country specific patterns in contraceptive use.

RELATIVE VERSUS ABSOLUTE

Throughout the CGA 2019, results are presented one of two ways: relative or absolute. Both provide useful but distinct ways to understand how things vary within categories and across all categories. Where relevant, figures can be toggled to switch between showing results as relative (% of each element) or absolute (whole numbers). Take, for example, a figure showing users by method, comparing the public versus private sector. The relative view should show the method mix within each sector—e.g. what proportion of public sector users rely on injectables as compared to private sector users. This is useful for understanding patterns within each sector and how they differ. However, because different numbers of women access their contraception from the public and private sectors, the relative view does not tell us about how many public versus private sector injectable users there are. Changing this figure to the absolute view would show this difference.

GNI GROUPS

In 2016 and 2018, the CGA published results for the full set of 135[1] LMICs as well as the subset of 69 FP2020 countries. This year, we take a new approach. In this report we segment the 135 LMICs into three GNI groups as defined by the World Bank[2]: low-income countries (LIC), lower-middle-income countries (L-MIC), and upper-middle-income countries (U-MIC). This segmentation allows for visibility into differential patterns across each GNI group and can help focus discussions on the different needs of countries at different income levels. Throughout the report, results are presented in two ways. Comparisons of data sets are made across the three GNI groups (e.g. what share of implant users live in each GNI group) as well as within each GNI group (e.g. method mix of users within each GNI group). These two different perspectives provide useful insights into differences across the GNI groups.

It is important to keep in mind, however, that while this segmentation provides a useful lens for viewing various patterns, there can still be great variation across the countries comprising each group.

PUBLIC SECTOR SPENDING

Public sector spending is estimated based on expenditures by public sector entities. Levels of public sector spending are averaged to minimize the inevitable fluctuations in annual spending level that occur as a result of the timing or size of procurement orders, and to leverage multiple data sources[3] which provide estimates for different years.

Public sector spending is divided into donors and governments. Donor funding includes a relatively small amount of spending by NGOs ($14.8 million, or 9%). Donor spending was calculated based on three years' worth of data on donor spending (2016–2018) and four years' worth of data on government spending (2014–2017).

Government spending comprises data from 127 countries, which is 55 more countries than were available to us in the CGA 2018. In addition, we have improved estimates of government spending for some countries, most notably India. These new figures should not be interpreted as new or additional spending but rather spending that was previously unreported.

We have also modified our definition of government spending to include basket funds and loans, two categories of funding source previously considered in 2016 and 2018 CGA reports as donor funding. This amounts to an additional $55 million of spending in the CGA 2019 now classified as government, instead of donor. This reclassification of spending from donors to governments, coupled with more recent data showing declines in donor spending means that our overall donor spending estimate for 2019 is lower than in CGA 2018.

As a result of all these changes in data sources and greater data visibility, the spending estimates in the CGA 2019 report are not comparable to the estimates in the 2016 and 2018 reports. Values from the three reports, therefore, should not be used to form a trend in spending over time.

---

1   China and Venezuela—both of which are categorized as upper-middle-income countries—are not included in our analysis. Three countries (Micronesia, Kosovo, and American Samoa) are included in our totals; however, no estimates of contraceptive use are available for these countries, so they do not contribute to the estimates. However, given the relatively small sizes of these countries populations, their exclusion is unlikely to impact the aggregate results.

2   The World Bank segments countries into four income groups based on their Gross National Income (GNI) per capita. For their 2018 classifications, countries are grouped as follows: low-income (<$995), lower-middle-income ($996–$3,895), upper-middle-income ($3,896–12,055), high-income (>$12,055).

3   Multiple data sources are available providing estimates of public sector spending on commodities by both donors and governments. In some cases, data sources overlap (e.g. multiple estimates for the same country and year); however, these estimates frequently don't match. Generally, we look at an average of all the available data (multiple sources plus multiple years of data). However, in some cases, some data was excluded in favor of other data deemed more reliable.

PRIVATE SECTOR SPENDING

Private sector spending is estimated from the CGA estimate of private sector consumption costs. New data from SMOs on sales of subsidized products, as well as the incorporation of additional data sources on private sector pricing, has resulted in a new price scheme for costing the volume of products obtained by users at both subsidized and non-subsidized prices. Thus, this year we have broken down private sector spending—the amount spent by individuals who purchase their supplies from private sector entities—into spending on subsidized versus non-subsidized spending.

USER PROJECTIONS

Our estimate of the total number of users of modern contraception comprises individual estimates for each of the 135 LMICs. For the subset of 69 FP2020 countries, projections are aligned with the values published in the 2018 FP2020 Progress Report[4] up to 2020. For the remaining non-FP2020 countries total user estimates are based on the median variant projection from the UN Population Division (UNPD).[5] For 2021 to 2030 for the 69 FP2020 countries, a hybrid trend is created by adding the additional users from the UNPD trend to the 2020 user estimate in each country.

Both the FP2020 and UNPD estimates are created using a statistical model[6] which uses all available survey data from Demographic and Health Surveys (DHS), Multiple Indicator Cluster surveys (MICS), PMA2020, and national surveys,[7] as well as high-quality service statistics in select countries.

USERS BY METHOD

Data from DHS, MICs, PMA2020 and national surveys are also used to estimate the number of users of each contraceptive method. For each country a starting method mix is taken from the most recently survey. From there, the method mixes for each subsequent year (from date of survey to 2030) is calculated by applying regional or sub-regional annual method mix changes calculated from the most recent two surveys available.[8]

USERS BY SECTOR

Users of each method are then further sub-divided based on the source of their supplies (from either the public sector or one of multiple private sector sources[9]) using the most recent DHS in a country or a sub-regional average. A new feature of CGA 2019 is the distinction between private sector users who purchase subsidized products and those who purchase non-subsidized products. This was done based on data shared by DKT, PSI and MSI[10] as well as publicly available data in the Social Marketing Statistics published annually by DKT. For each method, country specific market shares of subsidized product were calculated by dividing the volume of subsidized products provided by NGOs and SMOs by the CGA 2019 estimate of total private sector consumption. These calculations did not include the full set of services or products provided by NGOs and SMOs, but rather limited this to subsidized products that were ultimately provided through private sector channels.[11]

Where possible, estimates were validated against other sources. For example, we found that our market share estimates largely aligned with the SHOPS Plus Family Planning Private Sector Assessment in Cote d'Ivoire and their finding that "[…] with the exception of condoms, inexpensive socially marketed products dominate the [private] contraceptive market, with shares as high as 90 to 100%."

CONSUMPTION COST

The consumption cost reflects the consumption quantity of supplies multiplied by their price. This includes both the cost of the contraceptive commodity itself as well as associated clinical supplies. The consumption cost does not include other cost factors such as fees paid for necessary medical services or required visits, taxes, freight, or tariffs, nor does it capture the effects of inflation or fluctuations in currency exchange rates.[12]

4   FP2020. Catalyzing Collaboration (2017-2018).

5   Based on: (1) Mark Wheldon, Vladimíra Kantorová, Philipp Ueffing and Aisha N. Z. Dasgupta (2018). Methods for estimating and projecting key family planning indicators among all women of reproductive age. United Nations, Department of Economic and Social Affairs, Population Division, Technical Paper No. 2. New York: United Nations; (2) United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision; (3) United Nations, Department of Economic and Social Affairs, Population Division (2018). World Contraceptive Use by Marital Status and Age 2018.

6   The Family Planning Estimation Tool (FPET) was designed to produce annual estimates of the contraceptive prevalence rate (CPR) and other indicators using statistical modeling that incorporates survey data and service statistics. For more information, see Technical Brief: Family Planning Estimation Tool.

7   United Nations, Department of Economic and Social Affairs, Population Division (2018). World Contraceptive Use 2018.

8   Calculations are done separately for married and unmarried users; though the CGA2019 only reports on the aggregated totals not by marital status. The average annual change analysis was limited to countries with a survey after 2005 to reflect more recent shifts in method mix; a total of 270 individual surveys feed into the change analysis. Patterns of change for married method mix are calculated for sub-regions (e.g. Southern Asia, Eastern Africa), while for unmarried method mix aggregate regions (e.g. Asia, Africa) are used due to more limited data availability.

9   For the purpose of this analysis all non-public sources are classified as private. This includes a small number of sources such as shops and acquaintances that may not otherwise be considered private sector.

10   These three organizations shared detailed data related to services provided and products distributed by country and channel. We are grateful for them sharing both this data, and their expertise in order to make this new analysis possible.

11   Data was removed for delivery channels likely being picked up under "public sector" (e.g. mobile outreach services provided within public sector clinics and sales of commodities to governments), and for countries where programs are largely commercial, meaning little or no donor subsidy was attached to the provision (e.g. DKT Philippines have almost no donor funding).

12   However, in the case of private sector consumption costs some of these factors may be inherently included in the price that the client is ultimately charged at the point of sale.

To produce our public sector consumption cost estimates, we used data from the Guttmacher Institute's annual Adding It Up[13] report, as well as additional information concerning eight Latin American and Caribbean (LAC) countries that was obtained through an RHSC survey that asked governments to identify the prices of contraceptive commodities they procure.[14] The Guttmacher analysis takes into account variations in the price paid in the public sector for contraceptive commodities and associated clinical supplies in a country, as well as the mix of different products (e.g. types of implants) used, to produce an average cost per method for each country. The public sector consumption cost also includes the value of the subsidy for subsidized products purchased by users in the private sector.[15]

To produce our private sector consumption cost estimates, we used a range of data sources[16] to estimate country-specific (or, where data was not available, regional) price points for both subsidized and non-subsidized products for four methods with sufficient data: implants, IUDs, injectables, and pills.[17] For the remaining methods, we used the public sector prices for all private sector consumption.[18]

METHOD MIX BY USE AND COST

The CGA 2019 report analyzes method mix in two ways: by use and by cost. The user method mix shows the percentage of all users of modern contraception that use each method. The cost method mix shows the relative cost of the quantity of supplies consumed of each method. Method use and cost are disaggregated by the six most prevalent contraceptive methods and a seventh category representing the least used methods, called other:[19]

Long-acting and permanent methods (LAPMs)

▸ Sterilization (male and female)

▸ Implants

▸ IUDs

Short-term methods (STMs)

▸ Injectables

▸ Pills

▸ Condoms (male; for contraception only)[20]

▸ Other

CONSUMPTION QUANTITY

The consumption quantity is the amount of supplies that a user of contraception must personally consume over the course of a year to avoid becoming pregnant, multiplied by the number of users. Variation in the frequency with which different methods are consumed is especially important when comparing the method mixes of use versus cost.

Different approaches were used to estimate consumption quantities for short-term versus long-acting and permanent methods. Users of short-term methods must consume multiple products each year to obtain a full year of coverage. By contrast, a most users of implants, IUDs, and sterilizations will have no need to consume any supplies in the current year. Based on average duration of use the CGA estimates the volume of LAPM supplies that users will consume each year.

Consumption quantities are attributed to either the public or private sector, with the private sector further subdivided into subsidized and non-subsidized, based on the user estimates by sector described above.

Please note that consumption quantities are different from procurement volumes bought by institutional purchasers, which may be above or below the quantities needed for user consumption.[21]

---

13   Jacqueline E. Darroch, Singh S., Weissman E. Adding it Up: The Costs and Benefits of Investing in Sexual and Reproductive Health in 2014. Guttmacher Institute, 2016.

14   RHSC LAC survey of Honduras, El Salvador, Guatemala, Nicaragua, Mexico, Paraguay, Bolivia, Peru.

15   This was calculated as the difference between the public sector price and the private subsidized price for each product; therefore, sharing the total cost between the two sectors. In total $44.2 million in subsidy costs was allocated into public sector consumption costs in 2018.

16   Data sources include: IQVIA, FP Watch, SHOPS Plus Private Sector Assessments, Track20 M&E Officer retail audits (unpublished), DHS analysis on prices paid by private sector users, PMA2020 analysis on prices paid by private sector users.

17   Since most data sources do not distinguish between the prices of subsidized and non-subsidized products, any price point that was below the public sector price was considered to be subsidized. This assumption may not hold true in some specific situations but will generally capture the variation in price points between subsidized and non-subsidized products. Where multiple data sources existed, the average price across sources was used.

18   This was done for sterilization, and other methods due to limited data availability. For condoms there is large variation in price across brands and it is difficult to accurately capture this variation; therefore, using a single price for all condom consumption was the more conservative approach.

19   "Other" methods of contraception include, where data are available, female condom, emergency contraception, Standard Days Method, LAM, spermicide, and other barrier methods.

20   The CGA only quantities condoms used primarily for contraception; therefore, estimates do not represent the full condom market. For current spending estimates, only 30% of spending on condom procurement is included as the remainder is allocated to HIV/STI related spending (based on UNFPA Supplies guidance).

21   Procurement volume may reflect a number of factors in addition to user consumption, such as the volume necessary to fill supply pipelines and maintain adequate inventory levels from central warehouses to individual service delivery points. Procurement volumes may take into account the volume of supplies already present or on order, inventory holding policies along the supply chain, and wastage or "leakage" of supplies at various levels.