

Deconstructing CBO's Score of the Senate's Drug Pricing Reforms

July 15, 2022

Last week, the Congressional Budget Office (CBO) released its <u>score</u> for the drug pricing <u>reforms</u> Senate Democrats sent to the Parliamentarian for <u>Byrd Rule</u> review to determine if it qualifies for inclusion in the still-developing reconciliation bill. Recall that the authority for Democrats to use reconciliation expires on September 30. Democratic lawmakers are racing to find common ground on the underlying bill; we note that Sen. Joe Manchin (D-WV) is now <u>indicating</u> that he will support reconciliation on the condition that it contains only drug pricing reforms and a two-year extension of the enhanced ACA premium subsidies. Please see our <u>July 6 report</u> for a description of the Senate's drug pricing policies and how they compare to the reforms included in the House-passed <u>Build Back Better Act</u> (BBBA) last year.

We continue to believe that any reconciliation bill that clears this Congress will incorporate drug pricing policies that roughly align with those included in the BBBA after fierce negotiations between progressives and moderates in the House and Senate. The general framework has four major components, each of which is also reflected in the Senate's proposal:

- (1) Limited direct government price negotiations in Medicare for a subset of expensive, mature, branded products without generic or biosimilar competition.
- (2) Inflation caps on pricing in Medicare and the commercial market (though we continue to believe that the Parliamentarian will strike the commercial-related inflation caps as a violation of Byrd).
- (3) A redesign of the Medicare Part D program to cap beneficiaries' out of pocket (OOP) spending, lower government reinsurance payments, increase Part D plans' liabilities for expensive drugs, and apply new discount requirements on manufacturers.
- (4) Full repeal of the Trump "Rebate Rule."

Main Takeaways: A Counterintuitive Relative Tailwind

In this report, we examine the CBO's score of the Senate's proposal and compare it to CBO's score for the drug pricing reforms in the BBBA and the score of the House Democrats' H.R. 3 from the 116th Congress. While H.R. 3 has been abandoned, we believe it is useful to compare the impact of the Senate bill and the BBBA to the broader reforms previously favored by House Democratic leadership to demonstrate how far moderates in the Senate and House have moved the dialogue towards the political center, relatively speaking. We also analyze the impact of the Senate's proposal on total drug spending in Medicare and the commercial market to ascertain the likely effect upon full implementation. Our key findings are as follows:



- ❖ In the final year of the 10-year budget window, 2031, the Senate's Medicare negotiation construct is projected to lower total Medicare drug spending (Part D + Part B, including Medicare Advantage (MA)) by \$24.6 billion. This is 64 percent greater than the \$15 billion spending reduction generated under the BBBA construct, demonstrating that the Senate's approach to negotiation is meaningfully more impactful. However, we note that the Senate's approach is still less than 20 percent as impactful as H.R. 3 at its peak.
- ❖ The totality of the Senate's drug pricing policies is projected to generate about \$299.6 billion in savings over 10-years, of which \$177.5 billion is from substantive policy changes (i.e., price negotiation in Medicare, inflation caps in Medicare and the commercial market, and a Part D redesign) and \$122.1 billion is due to budget gimmickry from repealing the Trump Rebate Rule. In comparison, the BBBA drug pricing language is projected to generate savings of \$306.6 billion over 10 years, of which \$164 billion is from substantive reforms. H.R. 3 would have generated \$528 billion in savings, all from substantive reforms.
- ❖ In 2031, the Senate's construct would cause total Medicare drug spending to be about \$34.6 billion less than under current law due to the combined effects of government price negotiation and inflation caps. This represents a 9.5 percent decline from the projected baseline of \$365 billion in total Medicare drug spending in 2031. However, Medicare drug spending is projected to nearly double from 2023 − 2031 under current law; consequently, under the Senate's approach, total Medicare drug spending would still grow over that time by more than 76 percent. Put differently, the compound annual growth rate (CAGR) of total Medicare drug spending would decline from 8.7 percent under current law to a still robust 7.4 percent under the Senate's policies.
- ❖ The CBO's score implies that total drug spending in 2031 in the commercial market will decline under the Senate's approach by about 5 percent, or about \$17 billion off a \$335 billion baseline, due to the impact of the commercial inflation cap. Commercial drug spending is projected to grow at about half the rate of Medicare drug spending from 2023 − 2031, or about 51 percent, under the baseline, and commercial spending would still grow by about 44 percent over that time under the Senate's construct. The commercial drug spending CAGR would decline from 5.4 percent under current law to a still impactful 4.7 percent under the Senate bill. We note, too, that we continue to believe that the commercial inflation cap is unlikely to become law since we think it does not comply with the Byrd Rule and will be struck by the Senate Parliamentarian. Meaning the impact to the commercial market could be nil.

Digging Into the CBO's Scores

We deconstructed CBO's scores of the Senate bill, the BBBA, and H.R. 3 to compare the relevant policies on a granular basis. Figure 1, below, delineates the net impact of each of the major



applicable drug pricing policies. We note that the CBO score for H.R. 3 is over a 2020 – 2029-time horizon while the scores for the BBBA and the Senate draft are over the 2022 – 2031-time horizon. As such, the comparisons to H.R. 3 are not quite exact, but we believe this analysis provides meaningful insight into the relative impact of the BBBA and Senate draft compared to H.R. 3, especially that the former two approaches are materially less impactful than what House Democrats contemplated in the last Congress.

Figure 1. Net Impact to the Federal Budget from Selected Drug Pricing Reforms over 10 Years.

(All Dollars in Millions)

	H.R. 3	ввва	Senate
Medicare Negotiation	\$ (448,200)	\$ (78,800)	\$ (101,796)
Total Negotiation	\$ (501,086)	\$ (78,800)	\$ (101,796)
Medicare Inflation Cap	\$ (37,200)	\$ (61,800)	\$ (71,021)
Net Commercial Inflation Cap	\$ 640	\$ (21,776)	\$ (29,680)
Part D Redesign	\$ 9,512	\$ (1,628)	\$ 25,013
Subtotal	\$ (528,134)	\$ (164,004)	\$ (177,484)
Subtotal Less Commercial	\$ (475,888)	\$ (142,228)	\$ (147,804)
Rebate Rule Rescission	\$ -	\$ (142,551)	\$ (122,151)
Total	\$ (528,134)	\$ (306,555)	\$ (299,635)
Total Less Commercial	\$ (475,888)	\$ (284,779)	\$ (269,955)

Source: CBO

➤ **Medicare Negotiation**: The Senate bill is projected to reduce Medicare drug spending (Part D + Part B, including MA) by \$101.8 billion over 10 years, which is roughly \$23 billion more impactful than the BBBA over the same time horizon and \$347 billion less impact than H.R. 3. The reason the BBBA and the Senate draft are so much less impactful than H.R. 3 is the former two only allow the HHS Secretary to select a drug for negotiation after it has



been on the market for 9 years (small molecule drugs) or 13 years (biologics), and the bills incorporate ceiling prices that are substantially higher than those required by H.R. 3. Regarding the BBBA and the Senate draft, we note that the Senate draft contemplates the negotiation construct first impacting Medicare payments in 2026, a year later than the BBBA. As such, we think a more meaningful comparison for these two bills is to examine the projected impact in the last year of the budget window, 2031, when the Senate draft is projected to lower Medicare drug spending by \$24.6 billion compared to just \$15 billion under the BBBA, a 64 percent difference. We believe the Senate bill is more impactful because it requires the price of a negotiated drug to be the lesser of the applicable ceiling price (i.e., the applicable percentage of the non-federal average manufacturer price (non-FAMP)) or the prior year's Medicare price, meaning the price of a drug could not increase due to being selected for negotiation. The BBBA does not protect against a highly rebated drug (e.g., insulin) benefitting from negotiation.

- ➤ **Total Negotiation**: H.R. 3 would have required the negotiated prices of selected drugs to apply to the commercial market. Consequently, the total impact of the negotiation construct in H.R. 3 is \$501 billion. Neither the BBBA nor the Senate draft would apply negotiated prices to the commercial market. As such, the total impact of the negotiation construct is the same as the Medicare impact.
- ➤ **Medicare Inflation Cap**: The Senate draft is projected to reduce Medicare drug spending by an additional \$71 billion over 10 years due to the application of an inflation cap. This policy would limit net prices in Medicare Part B (average sales price (ASP)) and list prices in Medicare Part D (average manufacturer price (AMP)) for non-negotiated drugs from increasing YoY by greater than the consumer price index (CPI-U). Both H.R. 3 and the BBBA contain similar policies, which the CBO projects will reduce Medicare spending by \$37.2 billion (H.R. 3) and \$61.8 billion (BBBA), respectively. The savings in H.R. 3 due to this policy are lower than the other bills because it would apply to fewer drugs since H.R. 3 contemplates negotiating the prices of nearly all drugs. In comparing the Senate draft to the BBBA, it is not entirely clear why the savings under the Senate bill are greater than under the BBBA, but we assume it is because the Senate bill allows the HHS Secretary to delay implementation of the inflation cap policy until 2025. We believe CBO assumes that prices will increase faster than inflation during the delayed implementation and thus generate greater relative savings in 2025. Indeed, CBO projects the policy will generate \$18.5 billion in savings in 2025 under the Senate bill versus just \$5.9 billion under the BBBA in the same year. The annual impact is roughly comparable between the two bills in every subsequent year of the budget window.
- ➤ **Net Commercial Inflation Cap**: The Senate bill is projected to net the federal government \$29.7 billion over 10 years due to the application of an inflation cap in the commercial market. The commercial cap is projected to generate \$47.5 billion in revenues, but slower commercial price growth will cause Medicaid to recognize relatively lower rebates, which



will result in relatively higher Medicaid spending versus the baseline (\$17.8 billion). Thus, the net effect of the commercial policy is \$29.7 billion. This compares to a projected net impact of \$21.8 billion from the same inflation cap policy in the BBBA; the discrepancy in savings between the two bills (\$7.9 billion) is likely due to CBO establishing a new baseline since it scored the BBBA last year since there is no discernable difference in the legislative language. Regarding H.R. 3, there is roughly no projected impact from this policy because commercial prices would already be affected by negotiation. [Note: The impact to the federal budget from policies affecting the commercial market are decidedly indirect. CBO assumes that lower spending leads to lower premiums, which the agency assumes will result in a relative shift in employee compensation from tax-exempt employer-paid premiums to taxable wages and salary, which will lead to an increase in taxable income and cause federal revenues to increase from the baseline.]

- **Part D Redesign**: The Senate bill's Part D redesign is projected to *increase* Part D spending by \$25 billion over 10 years. This compares to a projected increase in Part D spending of \$9.5 billion under the H.R. 3 redesign construct and a projected decrease in Part D spending of \$1.6 billion via the BBBA's redesign policies. First, we note that these changes in spending are relatively small – over the 2025 – 2031 period, the Part D spending baseline is projected to be \$1.35 trillion, meaning that the aggregate effect of the Part D redesign included in the Senate bill is just 1.7 percent in aggregate and never exceeds more than 2.5 percent in any given year. The reason the redesign proposals barely affect federal spending is because each bill retains the current requirement that the federal government subsidize 74.5 percent of total Part D spending. Thus, federal subsidies will shift from reinsurance payments for expensive drugs to direct premium subsidies, but the total relative amount of subsidization must remain constant. We believe that the Senate bill's approach is projected to increase federal spending compared to the BBBA because the former establishes a 6 percent YoY cap in premium growth. We presume that CBO assumes that plans will maximize the rate growth allowance and therefore cause premium subsidies and therefore federal spending to increase faster than the baseline.
- ➤ **Subtotal**: The major substantive policies in the Senate bill are projected to generate federal savings of \$177.5 billion over 10 years, compared to \$164 billion under the BBBA and \$528.8 billion under H.R. 3. Thus, the impact of the Senate bill and the BBBA are comparable to one another and roughly one-third that of H.R. 3.
- ➤ **Subtotal Less Commercial**: If we are correct and the Senate Parliamentarian strikes the commercial inflation caps as a violation of the Byrd Rule, then the impact of the substantive policies in the Senate draft will drop to \$147.8 billion, versus \$142.2 billion in the BBBA. Backing out all policies related to the commercial market would result in H.R. 3 generating savings of \$475.9 billion.



- ▶ Rebate Rule Rescission: The Senate bill would rescind the Trump Rebate Rule effective January 1, 2027, which generates illusory savings for the federal government of \$122.2 billion. Recall that the Rebate Rule which will never go into effect despite still technically being on the books was projected to increase federal spending by about \$170 billion over 10 years. Thus, by delaying or rescinding the rule, lawmakers are credited with generating savings versus the baseline by CBO. Since lawmakers already delayed implementation for 3 years (2023 2026) as part of the bipartisan infrastructure law and subsequently delayed implementation by an additional year (2026 2027) in the bipartisan gun control bill recently signed into law, the maximum savings that lawmakers can now generate from full rescission is \$122.2 billion. We note that the \$142.6 billion credited to this policy in the BBBA is because it predated the gun control bill becoming law and therefore includes an additional year of rescission. H.R. 3 predated the finalization of the Rebate Rule.
- ➤ **Total**: In total, the Senate bill is projected to generate \$299.6 billion in federal savings over 10 years, of which \$177.5 billion is due to substantive policy changes and \$122.2 billion is from rescission of the Rebate Rule. In comparison, the BBBA was projected to generate \$306.6 billion in total savings, including \$164 billion from substantive reforms and \$142.6 billion from rescinding the rebate rule (though about \$20 billion in Rebate Rule savings was used by the gun control law).
- ➤ **Total Less Commercial**: If the Parliamentarian disallows the commercial inflation caps, the Senate bill is projected to generate \$270 billion in federal savings over 10 years, which is roughly comparable to the BBBA (especially if one backs out the \$20 billion in savings from rescission of the Rebate Rule no longer available due to the passage of the gun control law) and substantially less than H.R. 3. Thus, we believe that Democrats will have about \$270 billion in drug pricing savings in the reconciliation bill to spend on healthcare policies or to dedicate towards deficit reduction.

In summation, the Senate bill and the BBBA are substantially less impactful than was H.R. 3. The two former bills are relatively comparable, though the Senate draft establishes a more robust Medicare negotiation policy and a more expensive Part D redesign.

Relative Impact of the Senate's Drug Pricing Reforms on Aggregate Drug Spending Growth

The savings numbers projected by the CBO from the policies included in the Senate bill (and the BBBA) appear large in isolation, but the effect is demonstrably less impactful once put into the context of total drug spending and projected spending growth under the baseline. We establish below that the Senate's approach is projected by 2031 to cause total Medicare drug spending to be 10 percent less than the baseline and total commercial drug spending growth to be 5 percent less than the baseline. However, because drug spending is expected to grow rapidly over the next several years (roughly doubling in the Medicare market and increasing



by 50 percent in the commercial market), we postulate that the net impact of the Senate bill is relatively benign and manageable. We do not mean to understate or minimize the impact of 5 – 10 percent lower spending, nor the disproportionate impact these policies are likely to have on certain companies and drugs; rather, we merely aim to demonstrate that the pharma and biotech subsectors very likely will remain profitable with excellent growth potential even if the Senate approach becomes law.

Medicare Drug Spending

We estimate that total Medicare drug spending (Part D + Part B, including MA) is likely to grow from \$187 billion in 2023 to \$365 billion in 2031 under current law, which represents growth of 95.1 percent, or a CAGR of 8.71 percent. Our estimate, which is reflected in Figure 2 below, is derived from several sources: (a) CBO's <u>baseline projections</u> on Part D spending, (b) CMS's <u>reporting</u> of FFS Medicare Part B spending in 2020, (c) HHS's <u>analysis</u> that FFS Part B spending is growing at a CAGR of > 8 percent and that MA spending on Part B drugs is likely growing at a comparable rate, and (d) CMS's <u>estimate</u> of MA penetration.

Figure 2. Estimated Total Medicare Drug Spending: 2023 – 2031. (*All Dollars in Billions*)

	2023	2024	2025	2026	2027	2028	2029	2030	2031
Part D	\$ 119	\$ 118	\$ 138	\$ 163	\$ 181	\$ 212	\$ 192	\$ 225	\$ 239
FFS Part B	\$ 48	\$ 52	\$ 57	\$ 61	\$ 66	\$ 71	\$ 77	\$ 83	\$ 90
MA Part B	\$ 20	\$ 21	\$ 23	\$ 25	\$ 27	\$ 29	\$ 31	\$ 34	\$ 36
<u>Total</u>	\$ 187	\$ 192	\$ 218	\$ 249	\$ 274	\$ 312	\$ 300	\$ 342	\$ 365

Sources: CBO, CMS, HHS, Veda Partners

As shown in Figure 3, below, the combined effect of Medicare price negotiation and Medicare inflation caps in the Senate bill is projected to cause Medicare spending to decline by nearly 10 percent in the outyears of the budget window.

Figure 3. Projected Impact of Medicare Drug Pricing Policies on Medicare Drug Spending.

(All Dollars in Billions)

		2023	2024	2025	2026	2027	2028	2029	2030	2031
Negotiation	\$	-	\$ -	\$ -	\$ (5)	\$ (9)	\$ (18)	\$ (21)	\$ (24)	\$ (25)
Inflation Cap	\$	(2)	\$ (3)	\$ (19)	\$ (6)	\$ (7)	\$ (7)	\$ (8)	\$ (9)	\$ (10)
Total	\$	(2)	\$ (3)	\$ (19)	\$ (11)	\$ (16)	\$ (26)	\$ (29)	\$ (33)	\$ (35)
% of Baseline	-	1.25%	-1.72%	-8.52%	-4.43%	-5.87%	-8.23%	-9.57%	-9.56%	-9.47%

Sources: CBO and Veda Partners



We note, though, that even if the Senate policies are enacted, total Medicare drug spending is still projected to increase from \$187 billion in 2023 to \$330 billion in 2031. This represents an increase of over 76 percent, or a CAGR of 7.37 percent.

Figure 4. Growth in Total Medicare Drug Spending 2023 - 2031: Baseline vs. Senate Plan.

	Total	CAGR
Baseline	95.10%	8.71%
Senate Plan	76.62%	7.37%

Sources: CBO, CMS, HHS, and Veda Partners

Thus, in aggregate, the Senate bill still results in substantial growth in Medicare drug spending.

Commercial Drug Spending

We believe that CBO's analysis implies that aggregate commercial drug spending (retail + physician-administered) will decline by about 5 percent from the baseline under the Senate's proposed commercial inflationary cap. The analysis is complex:

- ✓ In 2031, CBO <u>projects</u> that federal tax revenues will increase by about \$6.9 billion due to the Senate's inflation cap policy.
- ✓ Since the <u>average income tax rate</u> is 13.29 percent according to the latest IRS data, this implies that the CBO assumes total taxable revenues will increase in 2031 by about \$52 billion due to the policy.
- ✓ The CBO <u>projects</u> that there will be roughly 180 million individuals enrolled in commercial coverage in 2031, meaning the \$52 billion in new revenues equates to about \$290 per commercially insured person.
- ✓ This per capita income increase is assumed to derive from a shift in employee compensation from tax-exempt employer-paid premiums to taxable income and wages. Since employers likely will pay about \$23,400 per year in employee premiums in 2031, the \$290 in new per capita income implies that total premiums are projected to decline from the baseline due to the inflation cap policy by about 1.25 percent.
- ✓ And since drug spending (retail + physician-administered) equates to about <u>31.3 percent</u> of total commercial healthcare spending, the data imply that drug spending is projected to decline by around 3.96 percent from the baseline. We assume the actual change is closer to 5 percent to reflect uncertainty in our analysis.



We estimate that total commercial drug spending (retail + physician-administered) is likely to grow from \$221 billion in 2023 to \$336 billion in 2031 under current law, which represents growth of 51.8 percent, or a CAGR of 5.36 percent. In order to ascertain that baseline, we consulted two data sources: (a) CMS's National Health Expenditures (NHE) data on retail drug spending, including projections, and (b) The Health Care Cost Institute's (HCCI) report on 2020 cost and utilization to determine the relative percentage of total drug spending in the commercial market attributable to physician-administered drugs (i.e., 27.12 percent).

Figure 5. Estimated Total Commercial Drug Spending: 2023 – 2031. (All Dollars in Billions)

	2023	2024	2025	2026	2027	2028	2029	2030	2031
Retail	\$ 155	\$ 161	\$ 167	\$ 173	\$ 180	\$ 187	\$ 195	\$ 204	\$ 213
Physician	\$ 66	\$ 71	\$ 77	\$ 83	\$ 90	\$ 97	\$ 105	\$ 113	\$ 122
<u>Total</u>	\$ 221	\$ 232	\$ 244	\$ 257	\$ 270	\$ 284	\$ 300	\$ 317	\$ 336

Sources: CMS, HCCI, and Veda Partners

If we are correct that CBO expects commercial spending to be about 5 percent lower in 2031 due to the Senate commercial inflation cap policy, that means that total commercial drug spending will be about \$16.8 billion lower than the baseline. However, total commercial drug spending is still projected to increase from \$221 billion in 2023 to \$319 billion in 2031 under the Senate plan. This represents an increase of over 44.2 percent, or a CAGR of 4.68 percent.

Figure 6. Growth in Total Commercial Drug Spending 2023 - 2031: Baseline vs. Senate Plan.

	Total	CAGR
Baseline	51.79%	5.36%
Senate Plan	44.20%	4.68%

Sources: CBO, CMS, HCCI, and Veda Partners

Like with Medicare drug spending, commercial drug spending will continue to grow under the Senate bill's construct, albeit at a slower rate. We again note that we think the commercial inflation cap policy will be jettisoned by the Senate Parliamentarian as a violation of the Byrd Rule, which prohibits policies for which the budgetary impact is "merely incidental."

What It All Means: Reconciliation is the Second-Best Outcome for Pharma & Biotech

While it is undeniable that the status quo is the best possible outcome for the pharma and biotech subsectors, we continue to believe that the drug pricing policies under consideration by Democrats, if enacted, represent the second-best possible outcome. Certain companies and



drugs will be materially impacted by these proposed policies, if implemented, but we believe the aggregate impact on the subsectors is eminently manageable. The effect on the Medicare market is relatively limited, the impact to the commercial market ranges from benign to nonexistent if the inflation cap is nixed by the Parliamentarian, launch prices would remain unregulated, the negotiation authority is relatively limited to a subset of drugs in Medicare and carves out most orphan products, and the capping of Part D beneficiaries' OOP expenditures likely will lead to greater adherence (and thus increased Medicare sales) and qualitatively will lessen the pressure seniors place on politicians to focus on drug pricing.

In sum, the drug pricing policies being developed by Democrats still allow for meaningful growth in drug spending in the critical Medicare and commercial markets. Importantly, passage of these reforms would also represent a critical clearing event by removing a perennial policy and sentiment overhang for perhaps a decade or more as the new policies are implemented. We recognize that a failure by Democrats to pass these reforms is the ideal situation for the subsectors and investors, but we believe that passage and enactment of the reforms is counterintuitively a relative tailwind for the pharma and biotech industries in aggregate.

To be clear, we do not mean to minimize the impact of these policies. Our analysis indicates that the annual growth rate of Medicare drug spending would decline by over 15 percent from the baseline growth rate (8.71 percent to 7.37 percent) and the annual growth rate of commercial drug spending would decline by over 12 percent from the baseline growth rate (5.36 percent to 4.68 percent). These are real dollars being removed from the healthcare system. But if drug pricing reforms are inevitable – and we believe that Democrats will include such reforms in a reconciliation bill – the reforms under consideration are manageable. This is particularly true if, as we expect, the commercial-related policies are disallowed by the Parliamentarian. When combined with the removal of a long-term policy and sentiment overhang, we think the net effect of these policies is more positive than perhaps it appears at first glance.

Waiting on Reconciliation: It's Now or "Never"

In closing, we believe that the drug pricing reforms proposed by Senate Democrats will be included in any reconciliation bill that materializes, and that such policies have the 50 votes necessary to clear the upper chamber and can secure the 218 votes needed to pass the House. The critical question is whether a reconciliation bill will materialize at all and clear Congress before the authority expires on September 30. We believe it is more likely than not that such a bill will come to the Senate floor, pass both chambers, and become law, though failure is surely still an option.

If Democrats fail to pass a reconciliation bill, drug pricing reforms as outlined in this report are effectively dead for the foreseeable future. Republicans are highly likely to win control of



the House in the November election, and perhaps the Senate, too, and it is no secret that the GOP disfavors government negotiation in Medicare and most Republican lawmakers also oppose the application of inflation caps. The only policy that likely could survive into 2023 is a Part D redesign.

In the event of failure, we would expect the Biden Administration to pursue regulatory drug pricing reforms through the auspices of the CMS Innovation Center. However, we note that the Supreme Court's recent <u>ruling</u> in *West Virginia v EPA* on the "major questions" doctrine brings into question how far CMS plausibly could go in effectuating broad reforms not explicitly authorized by Congress.

Thus, there is much at stake for Democrats and the pharma and biotech subsectors over the next several months. Either certain, relatively limited drug pricing reforms are enacted through reconciliation, or drug pricing policies are likely off the table for the foreseeable future. For now, we continue to believe that it is more likely than not those reforms will be enacted in September, and we counterintuitively believe that the effect on the pharma and biotech industries would be a relative tailwind.



Distribution

This research report and all information contained within is intended for institutional clients of Veda Partners and qualified prospective institutional clients and is not meant for redistribution.

Analyst Certification

I, Spencer Perlman, hereby certify that the views expressed in the foregoing research report accurately reflect my personal views about the subject securities and issuer(s) as of the date of this report. I further certify that no part of my compensation was, is or will be directly, or indirectly, related to the specific recommendations or views contained in this report.

Financial Interests: Neither I, Spencer Perlman, nor a member of my household has purchased the security (ies) which is/are the subject of this research report. Neither I, nor a member of my household is an officer, director, or advisory board member of the issuer(s) or has another significant affiliation with the issuer(s) that is/are the subject of this research report. I do not know or have reason to know at the time of this publication of any other material conflict of interest.

Important Disclosures

Veda Partners is an independent research company and is not a registered investment advisor and is not acting as a broker dealer under any federal or state securities laws.

Veda Partners is a member of IRC Securities' Research Prime Services Platform. All personnel of Veda Partners (i.e. Research Analysts and Sales People) are registered representatives of IRC Securities, a FINRA member firm registered as a broker-dealer with the Securities and Exchange Commission and certain state securities regulators. As registered representatives and independent contractors of IRC Securities, such personnel may receive commissions paid to or shared with IRC Securities for transactions placed by Veda Partners' clients directly with IRC Securities or with securities firms that may share commissions with IRC Securities in accordance with applicable SEC and FINRA requirements.

As registered representatives of IRC Securities, our analysts must follow IRC Securities' Written Supervisory Procedures. Notable compliance policies include (1) prohibition of insider trading or the facilitation thereof, (2) maintaining client confidentiality, (3) archival of electronic communications, and (4) appropriate use of electronic communications, amongst other compliance related policies.

Finally, Veda Partners does not have the same conflicts that traditional sell-side research organizations have because Veda Partners (1) does not conduct any investment banking activities and (2) has only institutional investor clients.

Company Disclosure

Veda Partners is a wholly-owned subsidiary of Veda Holdings LLC. The Company has no contractual relationship, nor have we received any compensation from any of the companies listed in this research report.