Ozempic and Wegovy:

The Investment Side Effects

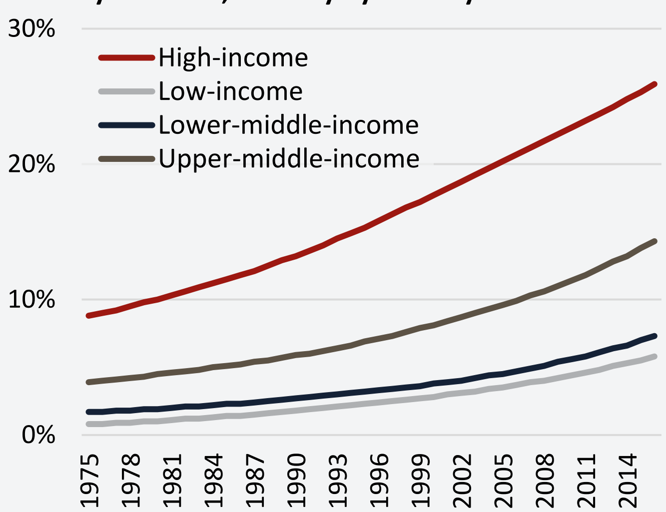
SEPTEMBER 2023

We believe the impacts of GLP-1s will spread beyond the healthcare industry over the next decade, creating investment pitfalls and opportunities.

Ozempic and Wegovy have become household names over the course of the past 12 months. The drugs' weight loss and cardiovascular benefits have been trumpeted in headlines and across social media, while new studies are exploring applications from Alzheimer's to addiction. These and other GLP-1 receptor antagonists have seen widespread adoption and anticipated future sales have driven rallies in the prices of the drugs' manufacturers and companies in the supply chain for their delivery. However, the investment story does not end there.

As companies develop oral versions and patent expirations push down prices, usage is likely to greatly expand. More than 42% of Americans are obese. Though most countries are slimmer than the United States, the problem is global and growing. Europe last reported a 17% obesity rate in 2019 and Chinese researchers estimate 1 in 7 adults are obese, with 1 in 5 likely by 2030.

Obesity in Adults, Globally by Country Income Cohort



Source: WHO, Global Health Observatory (2022). Estimated prevalence of obesity, based on general population surveys and statistical modeling.

Given the media and market attention on Eli Lilly (LLY) and Novo Nordisk (NVO) stock, it is important to remember the future will bring a plethora of these drugs at low cost and low barriers to access - biosimilars, domestic Chinese competitors, and oral versions are all on the horizon.

Instead of attempting to do the impossible - predict the future precisely - let's predict what would happen if 10% of American adults took a GLP-1 by 2033.

This is meant to be provocative, and today may seem like a staggering number. However, it is not without precedent - 28% of Americans over 40 years old currently take a statin to reduce cholesterol levels. Without even considering its more "off-label" usage, is it far-fetched to believe that 25% of the 42% of Americans that qualify for GLP-1 treatment might take a widely available, generic oral medication?

Who loses in this scenario?

GLP-1s work by mimicking hormones that our bodies release when we eat. This causes our brains to believe we are eating more than we actually are. In a Morgan Stanley patient survey (n=300), patients reduced calorie intake by 20-30%. This points to a potential reduction in total American caloric intake of ~2.5%. While this may not sound like a lot, there is a catch. Patients reported disproportionate cutbacks in sugary and fatty foods, in addition to alcohol.

This suggests staples companies and restaurant chains levered to unhealthy foods may see 0.5% annualized basis point headwinds to growth per year over the next decade, or even higher if this impacts family members' consumption. Operating deleverage would result in up to 10% less earnings in 2033 than pre GLP-1 forecasts, and likely a modestly lower multiple given the lower growth trajectory. Companies like Pepsi, Mondelez, and Dominos are at risk but have not seen a commensurate hit to their equity prices.

On the other hand, the market seems confident that the impending wave of adoption will significantly reduce type 2 diabetes in the US. Dexcom and Insulet, the two most prominent pure-play diabetes device companies, have seen their equities decline by over 20% in the last few weeks. Though their businesses are heavily weighted to type 1 diabetes patients today - a genetic disease that GLP-1s do not prevent - the equities' lofty multiples are predicated on long term penetration of the type 2 market. It is difficult to forecast the impact of GLP-1s on this market, as we don't yet know how much preventative use reduces the odds of developing type 2 diabetes (though we likely will eventually). However, we do know that ~10% of the US population has type 2 diabetes and ~90% of type 2 diabetics are overweight, a nearly completely overlapping Venn diagram.

While GLP-1s are unlikely to reduce the number of diabetics soon, the market is a forecasting machine, and recent forecasts expected approximately 20 million more diabetics in the US alone by 2035 - 55 million total. Even if only one quarter of GLP-1 patients are prevented from developing type 2 diabetes, this would mean ~8 million fewer diabetics or a 15% reduction in the type 2 market. Given the high incremental margins of Dexcom and Insulet, this could reduce earnings from type 2 patients by 30%. While this analysis is overly simplistic and relies on a number of approximations, it demonstrates the market's response is driven by real long-term concerns.

Recently, Dexcom has pushed back on this bear case by publishing data from Optum insurance claims showing that adoption of continuous glucose monitors increased after patients began GLP-1 treatment. We believe investors are likely to remain highly reactive to incremental datasets published by companies and healthcare researchers which help quantify the impacts of treatment.

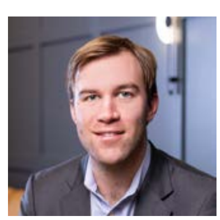
And though trials have not been run, there are anecdotal indications that GLP-1s may help curb other addictive behaviors. To the extent that this proves to be the case, investors will need to look out for impacts across all the other sources of our dopamine hits, from alcohol and gambling to compulsive shopping.

Are there any unexpected beneficiaries?

So far, the beneficiaries have been mostly limited to the direct value chain sitting beneath LLY and NVO, namely manufacturers and distributors. We have seen extensive sell side research sizing the earnings impact of every additional million patients and won't rehash this work. Unusually for a major evolution in consumer behavior, the direct impact of these drugs is less consumption, which makes for a shorter list of immediate winners.

One surprising result of the medications is patients report exercising more.

Potential beneficiaries could include gyms or athleisure companies. This is a long way off and likely more difficult to detect in growth rates given more cross currents such as fashion cycles and consumer confidence than health care peers. Likewise, early survey data indicates a possible shift to healthier calories, but it is largely self-reported and too early to know if it is offset by reduced calorie intake. Regardless, it is important to watch how these trends develop and assess the long-term ramifications.



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