

GLOBAL MARKETS

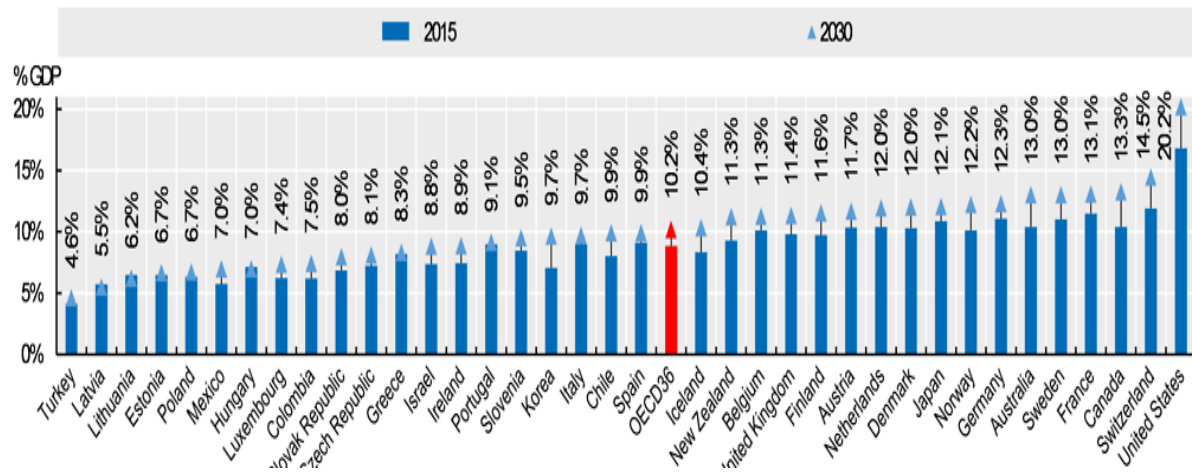
The Investment Theme

**Why
HEALTHCARE
is Growth
Area in post-
COVID World**



Rising health expenditures as a backdrop for Healthcare industry

Figure 7.23. Health expenditure as a share of GDP, projection to 2030



Source: OECD and Krungthai Global Markets

When thinking about which industries will do well in the next decade or two, especially in the world post-covid, healthcare definitely stands out as one of the frontrunners. Global demographic backdrop with growing aging population as well as higher spending power by mid to upper class are the two main factors driving the growth in this industry. Healthcare spending as a %of GDP has been growing at least since the last decade, and is expected to continue growing well into the next decade as well.

The objective of this writing is to explore ideas on what areas within the healthcare industry are likely to outperform and hence are worth keeping an eye on. There are many aspects of this industry we can look at

Health technology

- With technology developing at an exponential pace and becoming a growing part of everyone's life, it's only a matter of time before our overall healthcare system becomes digital. Just as fintech has taken over a significant part of our financial industry, we expect the same thing to happen in healthcare as well. Telemedicine or a virtual meeting with a doctor has become much more widely adopted, thanks to covid, as a way to avoid in-person contact. It's a lot more convenient, less time-consuming given no need to commute, and very likely less costly.
- The smart, wearable device market has been growing and is expected to continue growing as people become more health conscious. It's become much easier for people to monitor their health and fitness. Everything is connected and this can lead to many other tie-in services, medically.

- Another technology which has been a great transform to healthcare is artificial intelligence and robotics. Their possible uses range from early detection, diagnosis, all the way to performing treatment and surgery and even aftercare. Its use can be tied to data collected by those smart wearable gadgets.
- 3D-printing/bio-printing is another technology which has been ground-breaking for healthcare. We now can print artificial internal organs as well as prosthetics, blood vessels, and the list just goes on. Its use is becoming more and more popular, but still has much more potential to expand.
- Big data and data-sharing. We are transitioning to the world where every data is stored online. The data collected by those wearable devices, analyzed by AI, can be shared with other industries, such as insurance, to help reduce premium on a policy if the person lives a healthy lifestyle, etc.

Growing markets opportunities for Wearable Devices

Worldwide Wearable Devices End-User Spending by Type, 2019-2022 (Millions of Dollars)

Device Type	2019	2020	2021	2022
Smartwatch	18,501	21,758	25,827	31,337
Wristband	5,101	4,987	4,906	4,477
Ear-worn	14,583	32,724	39,220	44,160
Head-mounted display	2,777	3,414	4,054	4,573
Smart clothing	1,333	1,411	1,529	2,160
Smart patches	3,900	4,690	5,963	7,150
Total	46,194	68,985	81,499	93,858

Source: Gartner (January 2021)

Source: Gartner

New and improved cure/treatments

- One example is mRNA technology, which has become well-known, thanks to covid-19, though its uses can go far beyond just covid. There are many other technologies being studied and developed around the world.
- Another interesting area is genome sequencing plus other genomic technology developments. This ranges from people finding out more about their genetics, and hence can take better care or precautions with regards to their health, to to-be parents choosing some characteristics of their children, though it remains a much controversial issue.
- New drug delivery systems, which are more targeted, precise and efficient, also have big potential. For example, targeted cancer treatment or nanotechnology which may enable doctors to remotely controlled pills or equipment put into a patient's body.
- Another important focus is cure for mental health issues, which can be as painful as physical ones. It is estimated that over 20% of the world's population has mental health disorder, such as depression, bipolar disorder, dementia including autism. Mental health has been getting more attentions, thanks to all those athletes and celebrities which have come out and shared their stories. A breakthrough for more effective and permanent cures for these diseases will surely have a very big market opportunity.

Shift in trends from cure to prevention

- As society evolves, more demand, and hence more spending and resources, will shift towards preventive medicine/preventive care, from cure and treatment. With current technology, it has become possible for people to constantly monitor, check, and test to see if they are at risk of certain illness. This has long been popular among wealthy consumers. An example is anti-aging treatments, not only cosmetically but also those personalized prescriptions of vitamins and supplements. Given growing aging population and longer life expectancy, and with the rich getting richer and faster, thanks to all markets booms, this market can only grow.

To sum up, there are many aspects of the healthcare eco-system besides just hospitals and pharmaceutical companies. There are many investment vehicles available for us retail investors in forms of listed stocks, ETFs as well as mutual funds for both domestic and overseas exposure. **Given increased spending and demand from both growing aging population and wealth consumers, together with technological advancements allowing for fast innovations, we believe that healthcare is an industry where much of the growth will be in the coming decades.**

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