

Monthly Market Insight

November 2023



Technology and Consumer

Comparison of consumer investment cycles

In both private and public markets, consumption sector investments are often labeled as “countercyclical” or “anti-cyclical”. However, over the last decade, we observed significant volatility in the consumer cycle. This volatility can be observed in the rise of the platform economy, data-driven economy, and the sharing economy five years ago. It is also evident in the new wave of consumption driven by young people before the pandemic. One after another, windows of opportunity opened up, generating much excitement among investors. While numerous unicorn companies have emerged, there have also been a significant number of failed startups. This raises the question of why the consumer sector experiences both booms and sudden failures. In this piece, we will explore the lessons learned from each consumer investment cycle in China since 2005.

Building on more than a decade of continuous economic development, especially after China joined the World Trade Organization in 2001, China saw a significant increase in per capita income between 2005 and 2010. This created a huge potential for consumption. During this period, consumers shifted from product-oriented to brand-oriented, resulting in a reshuffling of the consumer sector and entered a stage of brand formation.

Although e-commerce platforms were gaining interest, online retail was still a small portion relative to overall retail activities (in 2009, the proportion of online retail versus other types of retail platforms just exceeded 2%). Retail sales were mainly still from offline channels, therefore investors mostly evaluated a company based on its channel coverage, market penetration speed, and overall growth of its sales category, as well as business indicators such as revenue, net profit, sales per unit, and asset turnover efficiency. These investors are often referred to as “old school” investors.

Infrastructure upgrades between 2005 and 2010, including the introduction of 4G networks¹ and the widespread use of smartphones², kick-started China’s mobile internet era. This era witnessed a transformation in the consumer sector, shifting from product-focused purchasing to lifestyle and emotional-driven purchasing. Traditional subsectors such as apparel, food, housing, and transportation also transformed their business models and marketing methods. New opportunities emerged in life services, gaming and entertainment, social media, and special interest communities. Policy support coupled with investment capital facilitated mass innovation and entrepreneurs, leading to a shorter cycle for trial and error and lowered entry barriers for entrepreneurs.

(1) In 2010, the 4G Network went live.

(2) On 20 Oct 2009, the China Unicom version of Apple’s 3G iPhone first went on sale at the World Trade Center in Beijing.

During this period, investors did not pay close attention to a company's business model, due to the surge in available capital and market optimism. As long as one joined the growth trend, they will more or less receive considerable profit dividends. This era became known as the "Golden Era of Consumer Investment".

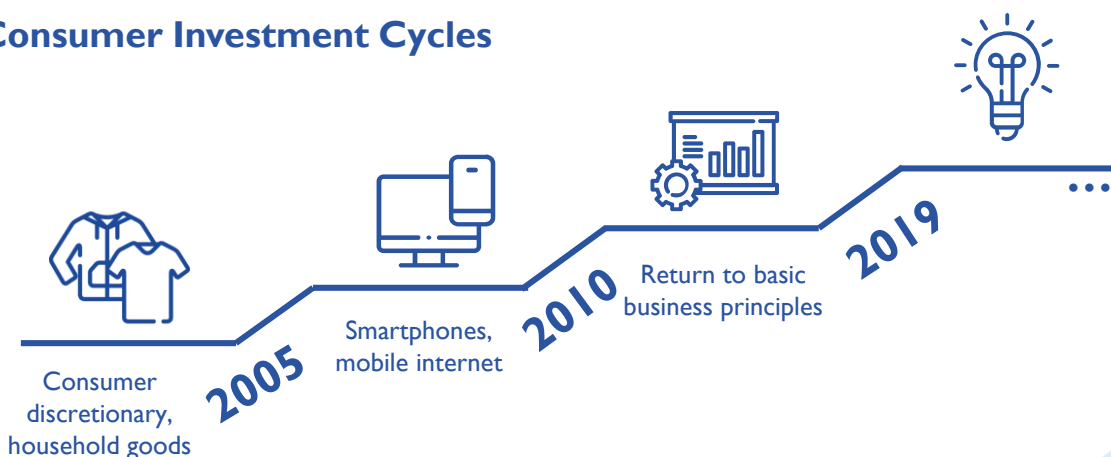
From 2015 to 2019, enthusiasm for consumer sector investments waned as many startups failed. Investors began to reflect on business principles, re-evaluate the reliability of demand, and assess a company's operational effectiveness before making investments. While many companies looked for answers in books, reading up on supply chain operation theories and taking up consumer investment courses, some companies adapted to the new type of consumers. With reignited enthusiasm, these investors crowded over trendy products, new domestic brands, new food and beverage outlets, leading to new sky-high valuations. However, the COVID-19 pandemic in 2020 abruptly halted this wave of investments, sending the consumer sector into a pause.

Looking back, the consumer industry, which was supposed to be countercyclical, went through multiple valuation cycles driven by capital market sentiment. The companies that truly weathered each cycle were those with enduring brands, channels, or service platforms that won consumers' favors in the long run. The demand for a product or service often arises when its value for money improves, quality of life rises, and if it brings convenience and a fulfilling experience to consumers.

Today, the reshuffling of consumer flows brought about by business model innovation has gradually receded, and digitalization has become the core theme to enhance marketing, reduce supply chain costs, and improve operational management efficiency. Consumer's household and personal spending choices have become clearer, with a slowdown in demand for non-essential goods as the economy adjusts and reduces impulsive spending. Consumers are re-focusing on essential goods, emphasizing basics, simplicity, and convenience. In the past few years, investment capital focused on "extraordinary" companies, but in the coming years, the focus will shift to stable companies that can maintain and replicate profitability during volatile times. These companies may not require significant investments, but they can ultimately bring value to the vision and resources injected by equity investors. Investors need to have deep industry knowledge, clear logic, and the ability to provide useful advice and value-adds to their partners. When the latest trends dissipate, investors should stand firmly with the company's founders, preparing for the next wave, which will inevitably arrive with China's economic optimization and through the market's growth potential.

Persistence requires investors to adopt a positive mindset and exercise long-term patience, riding through each wave together. Entrepreneurs also need to remain rational and calm at each step. As VMS enters the next investment cycle alongside our portfolio companies, we are committed to supporting their ongoing innovation and growth.

Consumer Investment Cycles



Healthcare

The future of heart treatment

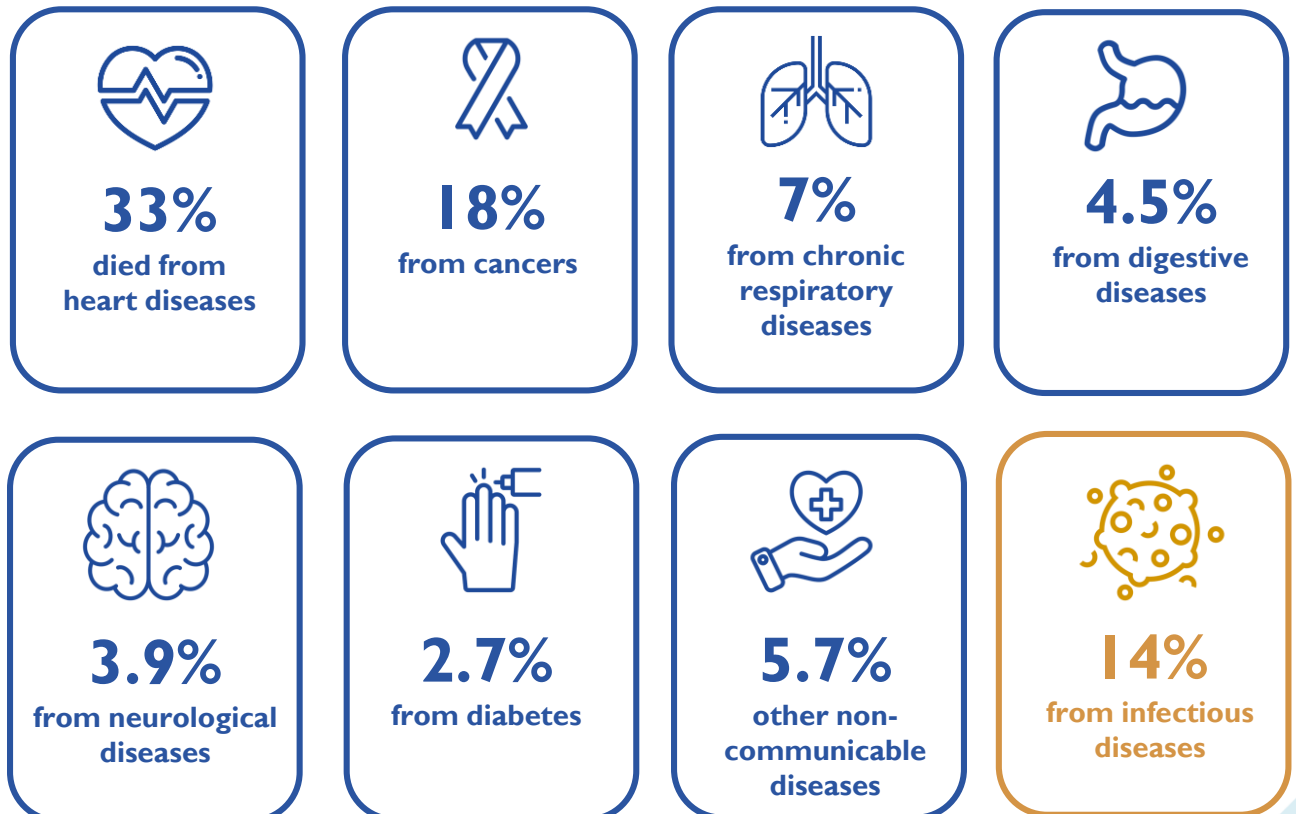
Heart disease, and specifically cardiovascular disease (CVD), is the leading cause of death globally. It represents approximately 33% of all global deaths¹. In fact, in the U.S. alone, it is thought that one person dies every 33 seconds from CVD¹. While developing cures for CVD presents many challenges, we observe continuous growth in innovations for early detection, diagnosis, and treatment options. These advancements aim to improve outcomes and reduce mortality. In particular, innovative medical technologies in interventional cardiology, miniaturized implants/portable wearables with embedded artificial intelligence features, are empowering better early detection and diagnosis, treatment and long-term management.

Huge market underpinned by high mortality and social burden

CVD accounted for 46.7% and 44.3% of all deaths in rural and urban areas in China, respectively. It is estimated that there are approximately 330 million individuals affected by CVD in China² and the incidence of CVD continues to increase with age.

Each year, on average, CVD accounts for about 12% of total healthcare expenditure³ in the US and more than 22% of total medical expenses in China⁴. Commonly found CVD include hypertension, coronary heart disease, vascular disease, and heart failure.

Top causes of death in the U.S., 2022



Source: IHME Global Burden of Disease and Global Terrorism Database

Technology advancement continues to reshape healthcare by promoting minimally invasive procedures, automation, artificial intelligence, and wearables for continuous real-time tracking, for example:

1) Ongoing advancement in CVD medical technology. One area that has seen significant progress is interventional cardiology, which helped to restore blood flow and also addressed unmet needs in hypertension. Recent advancements in AI-embedded algorithms in implantable devices allow for more accurate diagnosis and provides protection against sudden, life-threatening conditions.

- **Expanding the application of catheter-based interventions** – this procedure has evolved over the years and can now repair and replace heart valves without open-heart surgery, as well as modify blockages in heart and other blood vessels. Additionally, higher accuracy in mapping systems has led to better outcomes in treating irregular heart rhythms such as atrial fibrillation. More recently, the potential application of catheter-based ablation technology continued to evolve and has shown promising results in other major areas as well.

In particular, catheter based renal denervation therapy (RDN) has demonstrated in recent years as a viable and effective non-pharmaceutical treatment for resistant and uncontrolled hypertension, when even medications have not been effective⁵. The recent approval of RDN systems by the US Food and Drug Administration further supports the clinical benefits and safety of this treatment. It is exciting to anticipate the near-term clinical adoption of RDN for hypertension, especially when lifestyle management and drug therapies fail to achieve satisfactory blood pressure control.

- **Implantable devices integrated with artificial intelligence (AI) enable accurate long term cardiac monitoring** – one of the commonly used implantable devices is called an implantable cardiac monitor (ICM). It is a small device that is placed inside a patient's body to monitor their heart activity for a long period of time, up to 4 years or more. The device is used to detect abnormal heart rhythms, otherwise known as arrhythmias. Recent advancement in the ICM includes AI integration. This new feature has the potential to minimize false alarms and accurately identify true episodes, allowing healthcare providers to focus on actionable events. The AI algorithm can also differentiate between various types of irregular premature heart contractions in the atrium or ventricles, helping physicians to better diagnose and classify risk levels.



2) The digitalization and technological advancements are revolutionizing early disease diagnosis and chronic diseases management in cardiology. This revolution aims to enhance the accuracy of predicting and analyzing the risk of developing cardiovascular disorders. Additionally, smart point-of-care systems and wearables enable better healthcare monitoring and remote healthcare services.

- **Analytics software, combined with machine learning and artificial intelligence (AI) to enable precise early diagnosis** – medical imaging is commonly used to detect various cardiovascular disorders, including atherosclerosis, a condition where the arteries are narrowed and restricts the blood flow, causing heart attack, stroke, and other coronary artery disease. It also makes it possible to accurately diagnose conditions and plan procedures. By combining image analytics solution with machine learning/AI, the diagnostic capabilities in cardiology can be improved. These advancements will also be able to reduce errors in manual interpretation and provide more precise and efficient diagnosis, enabling early detection and intervention and ultimately improving the treatment outcome.

With the increasing availability of clinical and wearable data, artificial neural networks can be trained to monitor heart disease symptoms and classify risk levels, offering improved clinical benefits.

- **Wearables and miniaturized portals to track physiological data in both clinical and household remotely** – with technological advancement, wearables can assess a range of metrics, including blood pressure, blood oxygen levels, and even monitoring heart activity (ECG). These wearables are able to report dangerous arrhythmic incidences and provide other important physiological data. For instance, the miniaturized ECG wearable monitoring device, coupled with an app to monitor heart abnormalities that has consistently shown strong agreement with traditional Holter monitors, is well poised to expand the scope of cardiac diagnosis beyond its current limitations.

- (1) Centers for Disease Control and Prevention
- (2) Report on cardiovascular health and diseases in China, *Journal of Geriatric Cardiology*
- (3) Heart Disease and Stroke Statistics - 2023
- (4) Does the medical insurance system play a real role in reducing catastrophic economic burden in elderly patients with cardiovascular disease in China, *Globalization and Health*
- (5) AHA Journals

Leaders from our Private Equity Team



Jianming Zou (JM)
Head of Private Equity



Andrew Ng
Head of Healthcare



Kevin Gong
Head of Technology
& Consumer