

GLG INNOVATION EQUITY STRATEGY FIVE THEMES IN INNOVATION

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The terms 'innovation' and 'disruption' are often used in investment circles, but it's clear that these words mean different things for different companies. We believe they often represent both opportunity and threat. To illustrate what they can mean in practice, here are five examples of current themes we're watching in innovation, and the potential investment opportunities we think they present.

1. A SMART CONNECTED CAR

The disruption of the automotive industry remains in our view one of the most promising long-duration change themes in the innovation space. Among others, the dual factors of the electrification of the drive train and the move to autonomous driving have significant implications, both in the short term and the long term. We believe that technological innovation will have a significant impact on the automotive industry and its supply chains. Given that technology operates in a much shorter design cycle versus traditional automotive suppliers, technology suppliers can potentially enjoy the benefits of a longer design lifetime and product lock-in versus the shorter consumer electronics and computing industries, while more traditional automobile component producers may feel the pressure to deliver advanced technology in even shorter product development and design cycles.

Global automotive volumes (in seasonally-adjusted annual terms) have also benefited from easy and extended financing in North America, and increasingly in Western Europe over the last couple of years. The prospect of 'peak auto' may be impacted more materially in the short term by traditional factors such as the sustainability of easy consumer financing, and volumes and pricing in the used car market. However, we believe that autonomous driving is even more meaningful to global volumes, as it may substantially disrupt the economics of owning a car. In the short to medium term, we believe some automotive semiconductor suppliers can offer potential growth opportunities. This is because content increases (due to the factors above), and these suppliers could continue to benefit if global auto volumes roll over. On the other hand, auto suppliers that see no material increase in content, and that would be impacted by a potential fall off in unit volume, look more threatened. As well as this ongoing focus on the direct impact to the supply chain and current original equipment manufacturers (OEMs), our team is beginning to explore the further potential effects of autonomous driving on a number of auto-related industries.

2. THE RISE OF FINTECH AND PAYMENTS

While the fintech industry has been slow to experience outright disruption, existing trends in electronic payment continue to take

share versus cash, benefiting payment networks. Last November, the Indian government's plan to demonetize a majority of the high value cash notes in circulation in order to curb corruption and tax avoidance was highly criticized for the speed of its implementation. That urgency and the move itself highlights why all governments ultimately favor a move to electronic payment: it is a useful tool for a government's fight against tax evasion, corruption and terrorist activity. In the shorter term, the relaxing of the EMV standard deadline ('Europay, Mastercard, Visa' – a joint initiative to move consumers to chip-and-pin methods of card payment) for small and medium-sized enterprises (SME) in the US has implications for the whole fintech infrastructure, both hardware and software, in our view. As a regulatory tailwind fades in the short term, we're interested to see the effects on infrastructure players like payment terminals and chipcards.

3. 'VIDEO KILLED THE TV STAR' – A NEW ERA FOR TELEVISION

The world of television is changing dramatically. This industry is built on the consumption of content and monetization via subscription or advertising models that have evolved very little in decades. This is an important area of change to monitor, with broadcast TV in decline as audiences, especially younger demographics, embrace 'over-the-top' (OTT) services on demand. This significant structural shift presents potential opportunities for investors, and my team is focused on ways to potentially monetize its further ripple effects. Indeed, we feel it's important to look across the broad supply chain here: including advertising, media measurement, transmission technologies and intellectual property rights (IPR) royalty businesses. We are wary of companies that are over-indexed to the old model without a path forward.

4. SUPPLY CHAINS AND 'THE NEW COMPUTER'

Smart phones have become an essential part of everyday life, but we have not seen a material hardware or software evolution in recent years. There is growing confidence, however, that the launch of Apple's iPhone 8 later this year could change that, with the introduction of augmented reality and organic light emitting diodes (OLED) screens. Indeed, we believe we may be nearing the start of a software innovation cycle around augmented and virtual reality, particularly in the gaming and e-commerce arenas, where OLED displays are crucial for better screen resolution. But to understand the impact of these dynamics on companies, we believe it's important to consider the wider supply chain. Materials to build increasingly sophisticated smart phones won't come cheap, so investors might look towards incumbent semiconductor suppliers, for example, which may be on the losing end of cost-squeezing attempts by smartphone original equipment manufacturers (OEMs).

Meanwhile, new technology crucial suppliers have seen (and may continue to see) material volume ramp ups ahead of new launches. Investors have to balance these volume ramps with the aggressive stock price appreciation of some of these specialized suppliers, which may present opportunities ahead of such launches. Longer term, monopolistic companies in this area, which fulfil crucial parts of the new functionality, may be well-positioned.

5. THE NETWORK EFFECT – ECOSYSTEM COMPANIES

The rise of internet-based companies and social media is well documented, and one of its most important effects is the ability of companies to capture data and information about customers. In certain internet-dominated market segments, where large incumbents maintain unique and unparalleled data ownership with network effects, this results in a 'winner takes all' dynamic. For example, a dominant social network company which uses a walled garden approach can use its significant access to users' personal data to target advertising more effectively, which drives up the rates of advertising revenue. Equally, leaders in e-commerce, online search engines and mapping services are in similar positions to target advertising. All of these benefit from the virtuous circle of their increasing ubiquity generating even higher numbers of users with daily lock in.

These platforms, led by companies in the US, are nothing new, but we're increasingly seeing a similar leadership evolution in China. However, these differ from their Western peers in that they are even more advanced in 'online-to-offline' services (ie. restaurants, movie tickets, food delivery, location-based coupons), but they are at an

earlier stage when it comes to advertising revenue and cloud computing. Chinese incumbents have the added 'protection' of the Chinese government, presenting a barrier to entry to foreign competitors without state backing. We believe there may be potential opportunities here, although long term risks remain around regulation and increasing competition between the giants in this space. Their ability to expand into new addressable markets may also threaten the smaller vertically focused internet players.

GENERATING ALPHA THROUGH COMPANY INNOVATION

By its nature, innovation is a difficult phenomenon to predict with accuracy. In this context, our investment process aims to identify securities where market consensus expectations lag change. We therefore focus on companies and sectors undergoing change – but importantly, we look for those opportunities where we believe innovation can create a dislocation between share prices and prospects. We look for a high dispersion of future earnings estimates, possibly indicating inefficiency in the market's assessment of a company's value: leading to potential opportunities in both overvalued assets (where we would implement short positions) and undervalued assets (where we would go long). By conducting detailed bottom-up research, our team aims to understand the drivers of value in individual companies, before setting them in the context of broader industry change. Indeed, it's no secret that the world is changing at a rapid pace. We believe that the most successful investment strategies over the coming years will be those which combine an awareness of industry wide innovation with a detailed, disciplined and consistent stock selection process.

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