Economics Quarterly

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Hong Kong Economic Outlook 2024/2025

COLIN NGAN

We're about two months into the new year, and the prospects and future direction of the economy remain as uncertain as ever. As people living in Hong Kong, it's a good idea to get a picture of how our city's economy has been doing recently, and what the outlook is like going into the next year.

Economic forecasting is a field that incorporates a lot of uncertainty, because nobody in history has ever been able to exactly predict the economy. What we can do, however, is guess at what will probably happen, probably not happen, and might happen in the future, subject to all sorts of conditions. So all the "predictions" and "forecasts" below should be taken with a grain of salt – they are simply a providing a rough picture rather than an exact prediction.

Anyway, below is some of the information and insights I've gathered over the past month about HK's general economic outlook for the next year.

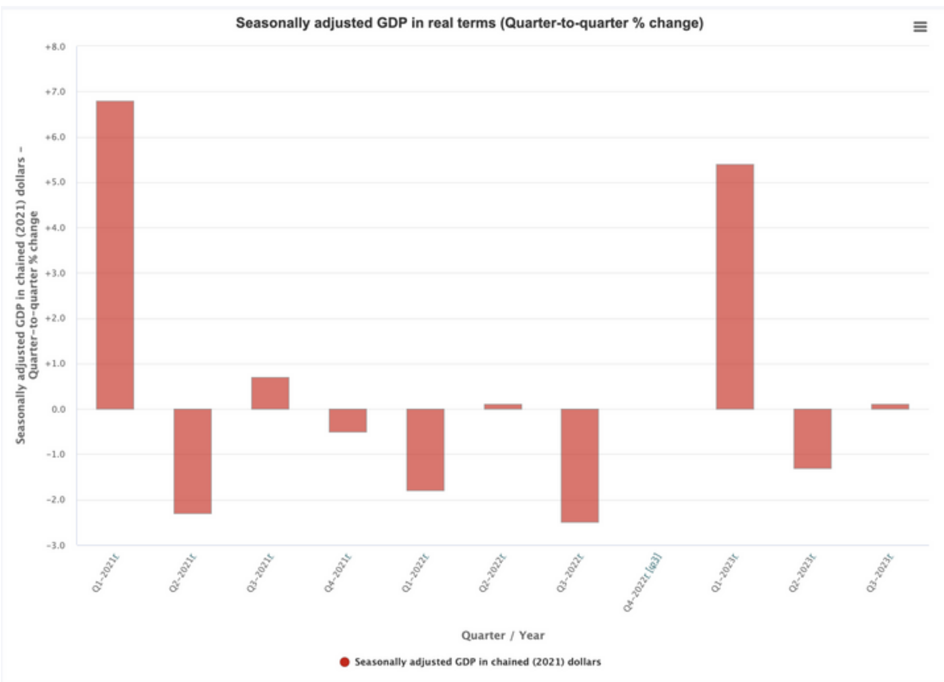
Here are the main things to keep in mind as we head into 2024: GDP growth will likely see a modest increase, as positive factors – like solid domestic consumption and strong resilience in the jobs market, are counteracted by a continued flurry of negative headwinds, like weak demand for exports, declining tourism, and persistent contractionary monetary conditions placing a wet blanket on housing and capital markets.

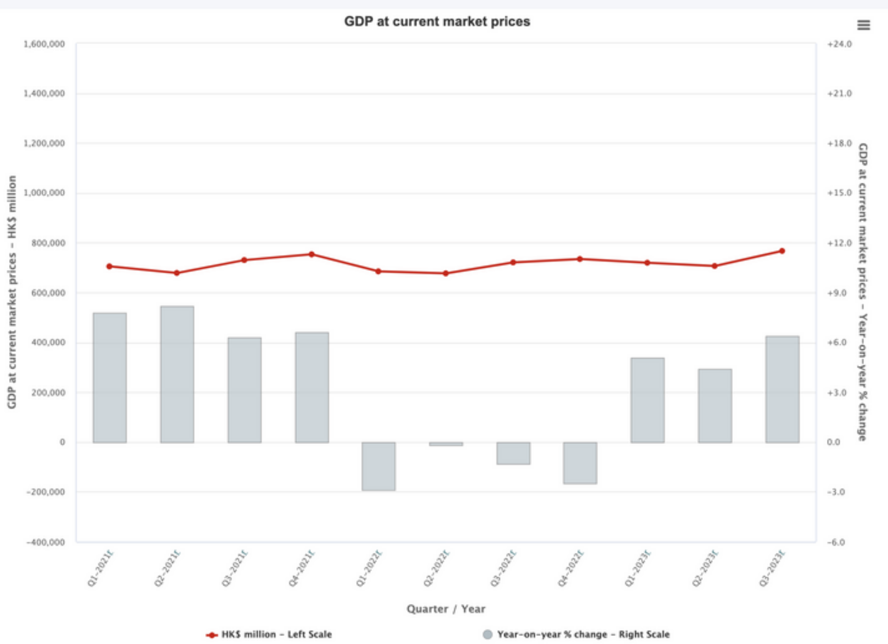
Investment bank Morgan Stanley predicts GDP growth for 2024 to be 0.5%, an improvement over the past two years, but still shy of pre-pandemic levels. This projected growth rate is down from 2023's growth of 3.2% but is still slightly better than the average change over the past two years (a contraction of −0.1% over 2022-23). This is expected to be followed by a recovery of GDP growth to 2% in 2025, moving closer to pre-pandemic standards.

HSBC predicts a slightly different trajectory, with growth expected to remain steady at 2.8% (0.4% lower than the 2023 level) for both 2024 and 2025.

While the first prediction sees growth starting lower but having a larger upward trajectory in the future, whereas the second prediction sees growth starting higher but having little to no change, both hint at a common theme – it is very unlikely that HK GDP will see any explosive or significant changes in 2024, at least in the coming quarters. Growth will be mild at best.

(Right), (Next page):
GDP change in the past few years has been generally flat, with increases largely balanced out and dampened by decreases (Census and Statistics Department, Hong Kong Government).



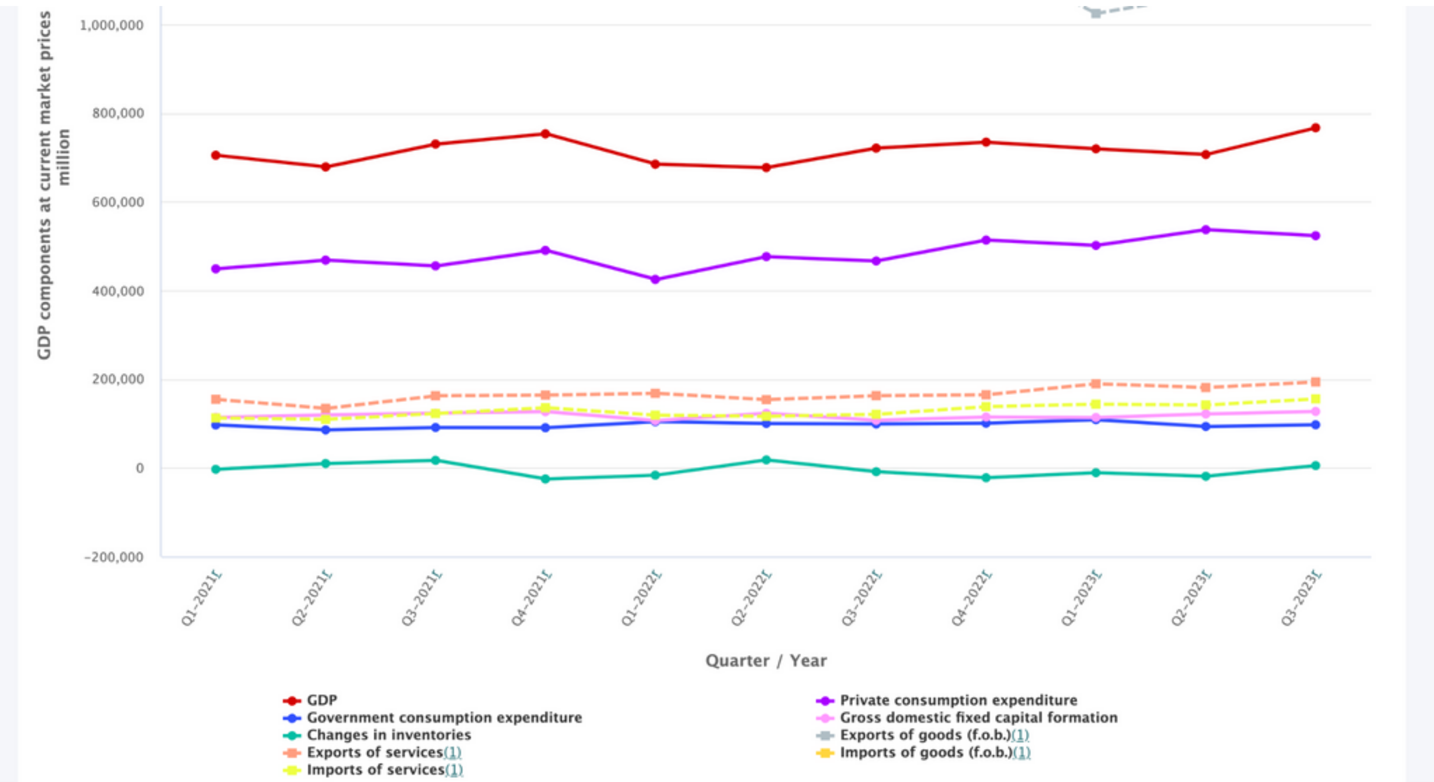


This idea of mild-at-best growth is reflected in the fact that most important economic factors are conflicting with each other a lot right now – some areas of the economy are doing very well, and some other areas are doing very badly. Taking all these factors into account, the effects generally cancel each other out to give a level of growth that is positive but small – meaning the economy still grows, but at a more sluggish rate since negative factors continue to be a drag.

Let's talk about the upsides first. Hope for economic growth this year primarily rests on a solid level of private consumption, backed up by a strong labour market.

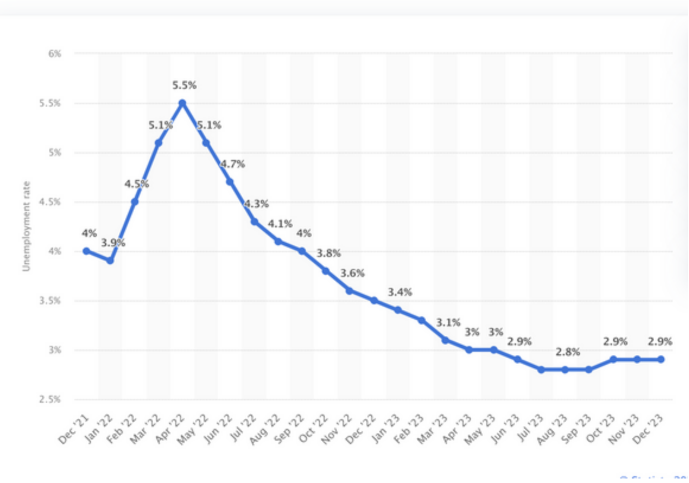
With growth at 4% higher than the 2022-23 average of 3.1%, private spending remains the leading driver of GDP.

(Below):
The purple line, representing private spending, is consistently the highest component of GDP growth (Census and Statistics Department, Hong Kong Government).



Unemployment as of now has also reached and remained below pre-pandemic levels at a historic low of under 2.9%, with wage growth staying positive ever since the end of 2022.

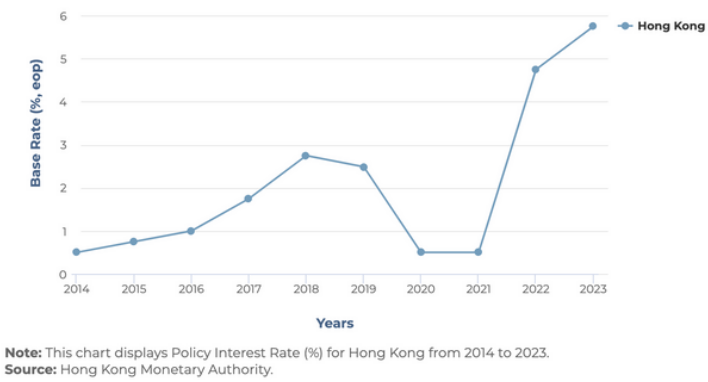
This is largely due to the effects of the post-COVID reopening, where the jobs market, led by the construction, service, and retail industries, recovered and expanded swiftly. These positive effects are expected to remain in the jobs market for the coming year.



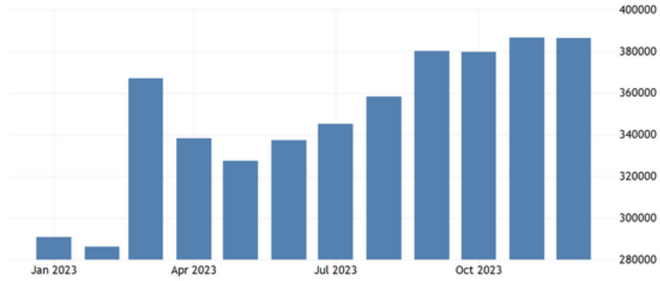
Unemployment levels over the past 2 years (Statista).

Now onto the downsides. While domestic demand is doing alright, imports and exports have been suffering. Exports have fallen 12.3% YOY as of 2023 third quarter, with imports falling 9.7% as well. This reflects a general state of weak foreign demand, which was a significant problem in the past year and looks to be continuing into this one. It is not likely in the near future that global goods demand will recover – HSBC predicts general growth in developed markets across the world to be around 1.0% in 2024 and 1.4% in 2025, suggesting that global demand will stay at this current low level for quite some time. Inbound tourism, after its post-COVID surge, is also seeming to recede, with tourism-dependent service exports dropping back down from its temporary boom during the COVID reopening. Tourism spending remains below pre-pandemic levels as of the end of 2023 and continues in a downward direction.

Monetary conditions remain contractionary. (“Contractionary” means that interest rates in the economy are at a generally high level. When interest rates are high, economic growth generally slows, or “tightens”. The government can increase and decrease interest rates to stimulate or cool down the economy.) The general expectation for HK is that interest rates will remain at a 16-year high of 5.75% for the next six months.



HK base rate for the past 10 years (HKMA).



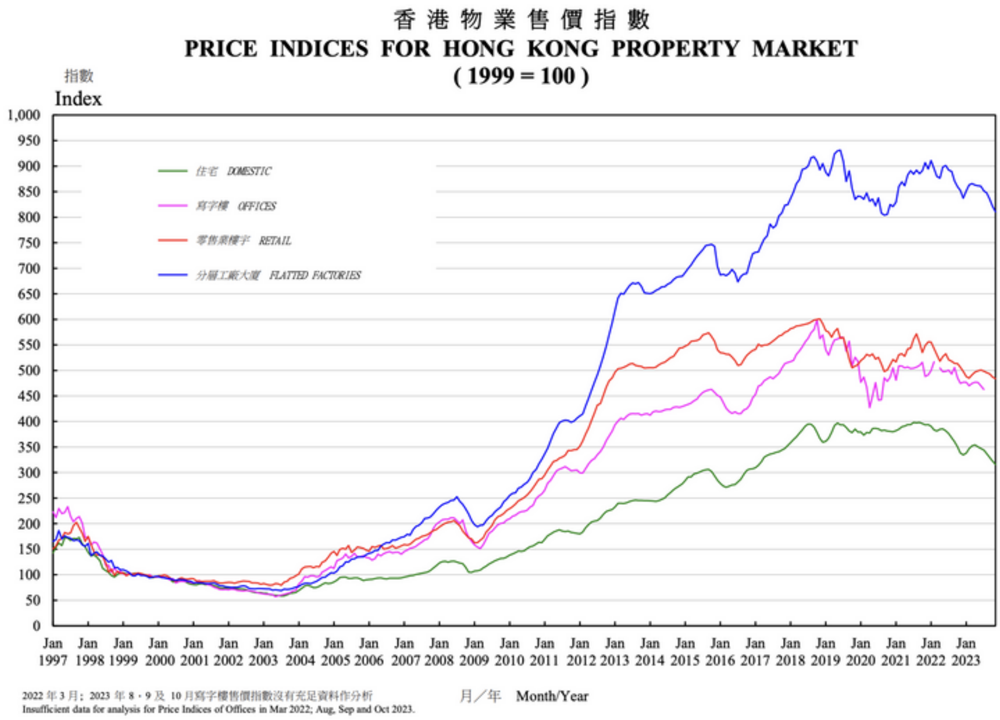
Exports are generally muted and flat for the past few months (CEIC), (Census and Statistics Department, Hong Kong Government).

These tight conditions have led to a mediocre performance of HK financial markets, with a disappointing number of IPOs (companies offering their shares on the market), a slowdown in credit capital markets, and a general dampening of the financial sector in the past year, resulting in two periods of contraction in a row in 2023.

The Hang Seng Index. Note the sharp drop over the past two years (TradingView).

High rates have also placed downward pressure on demand for home purchases, driving the property market downward as housing prices fall. Morgan Stanley predicts this drop in demand to result in a ~5-10% decline in housing prices.

Note the sharp decline in property prices over the past 2 years.



Interest rates remain high not just in Hong Kong, but also globally, especially in the USA, where the Federal Reserve still has not yet begun cutting rates. With global conditions still tight, the dim outlook for exports we mentioned before is only further reinforced.

This conflict between the upsides and downsides introduces a significant amount of uncertainty. Thus, it's difficult to say exactly what will happen. But we can give a general range of what the possible outcomes for this year are.

In a more pessimistic scenario, the downsides overpower the upsides. As property values drop, private consumption, the main hope for economic growth, is pulled down alongside it, due to something known as the "negative wealth effect" (where lower property values lead to consumers spending less on goods). The possible cancellation of consumption voucher schemes (as the economy has largely gotten over COVID) may also lead to private consumption undershooting expectations. A weaker global environment, especially a weakening of China's economy, will further exacerbate the decline in demand for tourism and exports. As a worst-case prediction, GDP growth is –0.5% for 2024.

Yet there is reason to believe in a more optimistic scenario. The current period of high interest rates is expected to last only for the next six months, after which a series of rate cuts lasting into mid-2025 is highly possible.

In a more optimistic scenario, improved demand in China and Asia, and a recovery in financial markets overshoot the current dim expectations, and, coupled with the already strong consumer goods and labour markets, boost Hong Kong's GDP growth to 2.8% in 2024. Hong Kong has also been recently investing in its human capital with its talent attraction schemes and has been making investments in innovative projects in the Greater Bay Area region, potentially opening up new opportunities in the long term.

In any case, any large, explosive, notable level of growth will have to wait until at least late 2024 or early 2025.

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Hong Kong: Taxes, Houses, and Monopolies

SEBASTIAN ZHU

Hong Kong is one of the most diverse cities in the world. Here the East and the West meet: its fusion a breeding ground for one of the freest economies in the world. The vibrant metropolis serves as a platform for foreign companies to access the Asia-Pacific region, with its favourable tax policies, free market economy, and impeccable business reputation. However, under Hong Kong's allure, there are many underlying problems too: its exorbitant property prices have deterred many from putting themselves through decades of mortgage payments; and worse for its residents, rent is no cheaper. One of the often-overlooked factors is the presence of monopolistic entities in various markets in driving Hong Kong's economy, such as Jardine Matheson Holdings, which took over the monopoly board from the East India company, and still holds much of it today. All of these factors are closely intertwined with each other, creating a unique economic landscape that is only seen in Hong Kong.

Tantalizing Taxes

"Death and Taxes". By and large, more-developed countries with better social welfare benefits tend to have higher taxes, such as Scandinavian countries, with Finland and Denmark having the second and third highest personal income tax rates, with maximas of 56.95% and 56% respectively. The funds gained through taxation goes towards public services, thus such high taxation is common in more-developed economies, where residents have better living standards and have higher GDP per capita, allowing the government to offer better social welfare with tax money. On the other hand, tax havens such as the Bahrain, Bermuda and Cayman Islands offer very low foreigner tax liability, often 0% on paper for individuals and companies alike; to gain traction and generate income through fees and other methods.

Hong Kong is both a traditional tax haven and a corporate tax haven. Its personal income tax is levied in brackets, which ranges from 2% to 17%, based on net chargeable income, capped at an overall 15%. Its corporate tax rate is merely 8.25% for the first 2 million, and 16.5% afterwards. While this may not seem attractive compared to a "0%" tax rate, Hong Kong is a strategic location in Asia-Pacific, and as one of the leading financial capitals in the world serves as a key entry point for the China mainland market, which is the second largest consumer market in the world. It also boasts some other perks and policies that are especially friendly for businesses and wealthy individuals, such as the lack of a sales tax, taxes on capital gains, interest, or dividends. The key policy that allows for Hong Kong's Tax Haven status is the "territorial principle", where no tax is levied on profits derived from abroad, even if operations are carried out in Hong Kong; allowing for clever manipulations to reduce taxable amounts. For the wealthy parking their money in the city, they also need not worry about their financial activities being leaked, with Hong Kong ranking 4th on the Financial Secrecy Index (2020), and refusing to give in to EU and US pressure to share foreign bank account information, even after Switzerland did so.

Aside from being a tax haven for the corporate wealthy, Hong Kong's tax system is also friendly towards its residents and tourist shoppers. With the aforementioned lack of taxes placed on all goods except for cigarettes and wine, luxury goods are generally cheaper than other shopping destinations, not to mention the sheer amount of malls and flagship stores in every corner of Hong Kong. In comparison, mainland China has a 13% VAT (Value-Added Tax), with other countries such as Hungary, Sweden and Germany at 27%, 25% and 19% respectively. For its residents, although the income taxes may not be as low as other tax havens, the well-constructed infrastructure and public welfare/services such as medical coverage is disproportionate to the amount of tax; and the lack of additional taxes on top of income tax applies to the individual as well. The government also allows for deductions and allowances, which is subtracted from the assessable income to generate the net chargeable income.

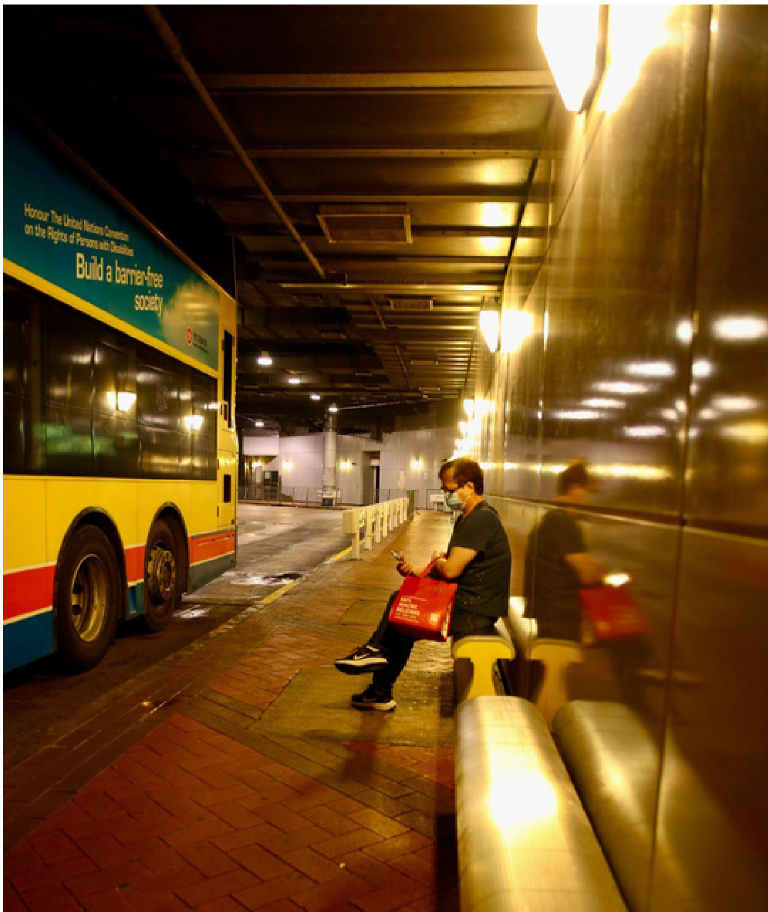
Pricey Properties

With the government hosting light taxation policies, it gains revenue back through other methods. The most successful way for the Hong Kong government to compensate for the low taxation gains is through land; whether granting leasehold land, directly leasing land for shorter periods, or property tax. Technically, all land in Hong Kong is owned by the People's Republic of China, however the Chief Executive of Hong Kong is authorized to grant government leases, often for very long periods of time. This, paired with the largely inflated property market, means that plots of land often can be sold for billions of dollars; such is the case when Henderson Land Development Co. purchased a commercial plot of land in Victoria Harbour for more than 50 billion HKD in 2021. With the estimated government revenue for 2021 sitting at just under 600 billion HKD, proportionally this means the sales proceedings of one single plot of land accounted for nearly 10% of the total government revenue.

The residential housing market is equally as demanding. Although property markets are hard to objectively quantify, Hong Kong tops many, if not most lists that attempt to evaluate the affordability of housing in cities. People are forced to live in public rental housing, or even cage homes: some research by HK Business Times even point to a real home ownership rate of 22.1%. There are simple reasons for this on the surface: it is just a straightforward case of supply and demand. With more than 7 million people living in Hong Kong, there isn't enough space to provide adequate housing for everyone. However, the extortionate prices don't truly reflect the housing situation in Hong Kong. 75% of Hong Kong's land is undeveloped, while only 7% of Hong Kong is marked as residential land, which is nearly evenly split between rural and urban housing. There is a candid solution to Hong Kong's housing problems: simply to allocate, rezone, and reclaim land to be developed into high-density residential areas.

This, however, is against the interest of many parties involved. The environmentalists would argue strongly against the conversion of Hong Kong's "green space" for development: as they should remain to be the lungs of Hong Kong, and continue to allow a metropolis to be integrated with nature. However there are monetary incentives and bureaucracy involved as well. As the Hong Kong government makes a large portion of its revenue from land sales and property tax, the artificially created land scarcity keeping the housing prices high is beneficial for its earnings. With the lack of land available for development, supply is artificially reduced by the government to continue to inflate housing prices. Simply put, more land for residential development would mean less money, for the government, for land developers, and for the ultra-wealthy property tycoons and corporations who own vast quantities of land in Hong Kong as investments. When a proposition would upset the politicians, bureaucrats, and capitalists alike, it is unlikely to be implemented, as is the case in Hong Kong.

Unfortunately, the vested interests in Hong Kong's market have been deeply rooted in the economy of Hong Kong ever since the taxation system was established in 1947, and profits derived from land-related transactions have been leveraged by the government to support low taxation levels. The Hong Kong economy has benefited from the boom in growth and foreign businesses, but the flaws and downsides of its policies are showing in its inability to solve its housing problem. The 7% of residential land has virtually remained unchanged in the past 15 years.



Mighty Monopolies

Many seemingly unrelated franchises in Hong Kong can be traced back to the same mother company, often originating from colonialist times. Many sectors only have one or two players in the market, with Towngas being the only source of gas, CLP and Hong Kong Electric hosting electricity in different areas, the Hong Kong Jockey Club, privately owned, having a total monopoly on gambling… the list goes on. Jardine Matheson alone owns companies ranging from Wellcome, Mannings, to 7-11, MX, Starbucks, KFC, and even Dairy Farm, Mandarin Oriental, and Ikea. CK Hutchison on the other hand owns 3, Park n Shop, Taste, Fortress, and Watsons. Often, ordinary Hong Kong residents purchase all their daily necessities from these brands without realizing that they all belong to the same corporate group.

There are evident reasons why letting a single corporation be in charge of an entire sector would be detrimental to the market. Unmonitored power on pricing, lack of motivation, and inefficiencies can all arise as a result of monopolies. The numerous monopolies in Hong Kong is partly a result of its free market economy and minimal government regulation, which has proved to be effective in growing its economy. The downsides are evident, however. The lack of regulation may result in natural monopolies, poor working conditions and wages, lack of public goods; which are all issues prevalent in Hong Kong. For example, the growing earnings gap between the city's elite and its poor is testament to the deeper systematic errors of the government system; with its Gini Coefficient sitting at 7th, the only region out of the top 20 in Asia or Europe.

The problem is harder to solve than often imagined. Due to the preexisting government structure in Hong Kong, it is not empowered to directly disrupt such complex monopolies. Doing so also will require a change in regulation and moderation structure, which may be harmful for the Hong Kong economy; which is true for any attempt to solve the housing crisis as well. Reducing the effects or completely abolishing its free trade and investment policies will mean simultaneously abandoning its status as a financial hub; which would mean companies pulling out of Hong Kong and opting for other options such as Singapore, ultimately proving to be disastrous for the Hong Kong economy. The government does have current preventative measures in place, such as the Merger Rule, which prevents mergers that "substantially lessen the amount of competition in Hong Kong".

Overall, Hong Kong as a city is not without its problems. There is the glamorous side to it: the accumulation of wealth, freedom of trade, and incredibly efficient financial system; however, more should be aware of the deeper underlying issues that occur alongside such an economic landscape. With signs of Hong Kong's economy facing obstacles and with a continuously climbing cost of living, its government may need to rethink their approaches in an attempt to revitalise Hong Kong once again.

Interviews

COLIN NGAN, TIM HE, SEBASTIAN ZHU, HOWARD DENG

In order to thoroughly understand the perspectives of Hong Kongers on the housing situation, Economics Quarterly conducted a series of interviews with locals of varying demographics.

Click the link or scan the QR code to watch the interviews.

https://youtu.be/ThMFaXSBU1Q

Recommended Holding

TIM HE

Disclaimer

This is not financial advice, and is purely for educational purposes only. Our organization and the organization's members will not be held liable for any losses taken by readers. Our organization does not own any shares of the respective company or securities derived from the share price of the company below.

Indie Semiconductor Inc.
NASDAQ: INDI

Note: This holding was recommended on January 30th, when the share price of the respective stock at market close was $6.40. Alerted to subscribers on Feb 5th ($6.01).

Company Overview

Indie Semiconductor is a relatively small semiconductor company that specializes in producing automotive semiconductors and corresponding software. They have offerings in connectivity, infotainment, and advanced driver-assistance systems (ADAS), positioning them strategically in the dynamic automotive sector, allowing for them to capitalize on the growth of the emerging autonomous vehicle market. Indie Semiconductor leads the way in innovation in an industry undergoing major transformation by using an integrated approach to automotive technology. The business highlights its capacity to provide specialized solutions made to meet the unique requirements of its customers. This could entail creating and assembling semiconductor parts to satisfy the demands of certain IoT and automotive applications. Overall, Indie semiconductor is well-situated to capitalize on the future growth of both mainstream and niche markets, making it a worthwhile investment.

Fundamentals Analysis

The Semiconductor Industry

The semiconductor industry's remarkable success is widely known, with industry leaders such as Nvidia (NASDAQ: NVDA), Advanced Micro Devices (NASDAQ: AMD), and ASML Holdings (NASDAQ: ASML) increasing their market capitalization many times over throughout 2023. The entire industry valuation is poised to surge from $664 billion to $939 billion over the next four years (Precedence Research). Capturing just a tiny portion of market share would allow for sizeable profits. From an investor's perspective, although entering into already well-established semiconductor leaders would likely produce substantial returns, smaller companies exist that present a more lucrative opportunity.

Recent Catalysts

Ficosa and Indie Semiconductor have partnered to develop AI-driven camera systems for automobiles with the goal of improving safety. Scalable neural network-based camera systems customized for edge sensing are expected to be produced by the partnership under the terms of their joint global commercialization agreement. By working together, they hope to provide best-in-class image and detecting capabilities that comply with the most recent car safety standards. It is projected that the first smart camera systems coming from this collaboration will start to be sampled in 2024, and that full-scale production will follow by 2025. This strategic partnership demonstrates a dedication to fulfilling the industry's changing safety standards and increasing technology in the automotive sector.

Despite a difficult macroeconomic climate, Indie Semiconductor has posted strong third-quarter earnings that greatly outpace market growth rates. Co-founder and CEO of independent Donald McClymont credited the company's success to the growing need for its unique Autotech solutions. McClymont stated that he was pleased with the company's $6.3 billion strategic backlog. Compared to $4.3 billion the year before and $2.6 billion in 2021, this represents a significant gain, underscoring the positive momentum created by design victories in ADAS, UX, and electrification.

Furthermore, Indie and STMicroelectronics and Indie Semiconductor have partnered together to improve security and privacy for wireless charging in cars. The partnership intends to progress the field and provide improved security and privacy protocols for in-car wireless charging devices. This partnership is a testament to both businesses' dedication to tackling important automotive technology issues for a safer and more effective user experience.

Financial Statement Highlights

Revenue Update from Third Quarter Report:

- Q3 Revenue of $60.5M, up 101% YoY and 16% sequentially
- Expands Non-GAAP Gross Margin 226 Basis Points YoY to 52.7%
- Guides Q4 2023 Revenue to $70M-$75M and non-GAAP EBITDA Breakeven
- Reiterates Plan to More than Double Revenue in 2023
- Raises Strategic Backlog to $6.3B, up from $4.3B last year and $2.6B in 2021

Additionally, hedge funds have increased holdings by 3.2 million shares in the last quarter, which is seen as positive for investors.

CEO Statement

"Indie achieved robust results in the third quarter, surpassing market growth rates despite a challenging macroeconomic environment. This success was fueled by growing demand for Indie's highly sought-after products. Our commercial success has made Indie the fastest-growing semiconductor company in the world, among 224 peers, over the past two years based on a recent assessment by Morgan Stanley."
— Donald Clymont, Indie Semiconductor's Co-Founder and Chief Executive Officer

Technicals Analysis and Entry

In the weekly chart of Indie Semiconductor's share price, key levels have been marked out, with red lines as current resistances and green lines as current supports. We adopt an accumulation entry strategy with this recommendation, gradually buying into the position at prices highlighted in the white area shaded on the chart ($4.43 to $6.57). This allows us the opportunity to average down in positions and build it slowly until price has the chance to bounce from one of the support levels. The resistance levels highlighted can also act as targets.

Recommended Investment Time Horizon

The recommended investment time horizon, which is the approximate amount of time to hold the respective equity, is a minimum of 6 months for this holding recommendation. Keep in mind this is a relatively long term investment, and small price changes should not prompt one to immediately exit.

Update on Previous Recommendation

We previously recommended Volkswagen AG (OTCPK: VWAGY).
Market close price on article release date (27/10/2023): $11.17
Current price (as of 30/1/2024 market close): $13.87
Percentage change (%) ≈ 24.17
Alpha (relative to S&P 500 Index, 30/1/2024 market close) ≈ 4.15
Alpha (relative to DAX Performance Index, 30/1/2024 market close) ≈ 5.28
Notes: Strong recovery, price crossed above both 8 EMA and 20 SMA on the weekly chart, targets have not yet been hit

References

"Semiconductor Market Size to Surpass USD 1,883.7 Billion by 2032." Precedenceresearch.com, 2023, www.precedenceresearch.com/semiconductor-market. Accessed 31 Jan. 2024.

S&P's New Record High, The Magnificent 7, and Stock Indexes

COLIN NGAN

US stocks have just smashed through to an all-new record high of 5048, following a massive year-long rally in 2023.

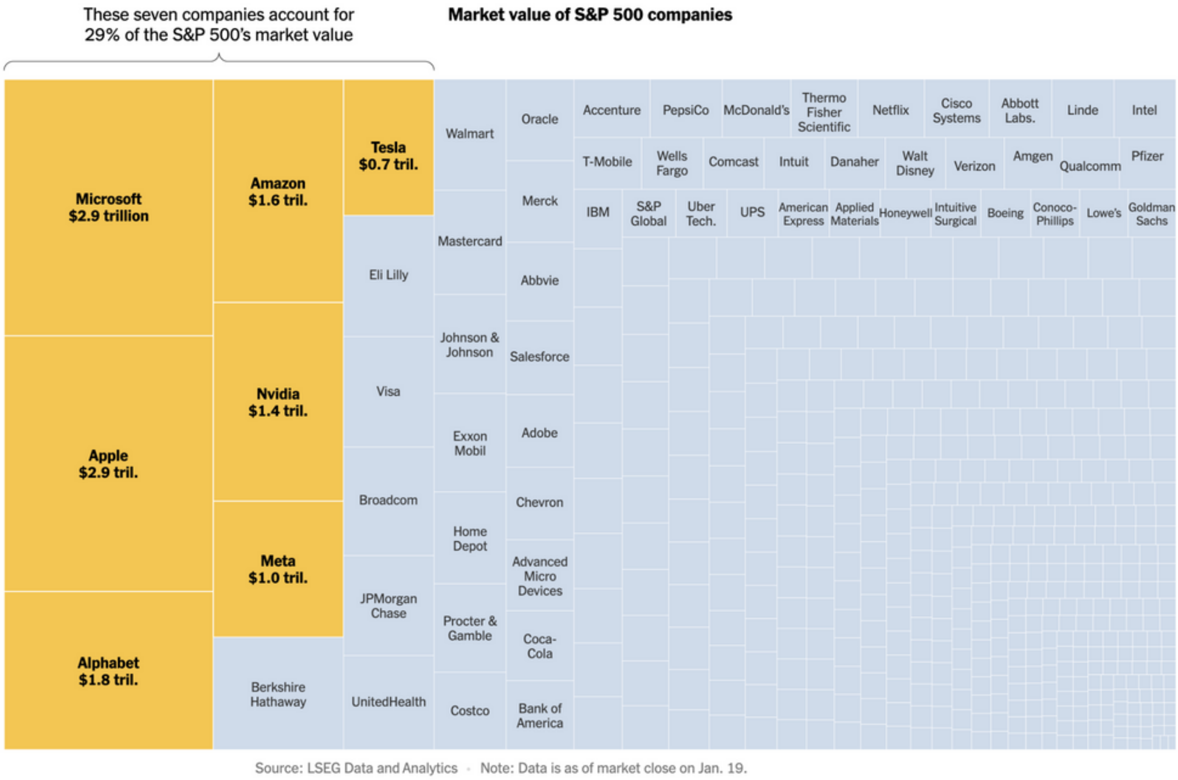
Take a look at this chart of the S&P 500. The S&P 500 is a stock index that tracks the overall performance of the US economy. It takes the size-weighted average of 500 stocks in the US, and the resulting number is widely accepted to indicate how well US stocks are doing.

It's been wild for US stocks in the past two years. In January 2022, on the back of pandemic stimulus and low-interest rates, the S&P set a high of 4818. It would not reach this number again for the next two years. Following January 2022 was a flurry of negative shocks, from nearly uncontrollable inflation, to drastic rate hikes, to the failure of several banks, to several wars and supply chain bottlenecks. Fears of economic stagnation, hyperinflation, and even a recession were spreading rapidly. The S&P dropped to 4530 in March, then reaching a two-year record low of 3871 in October 2022.

Starting in 2023, the S&P began an epic rally, rebounding all the way up to 4607 in July, just a hair away from its previous high in Jan 2022. Then the S&P slid down a little bit due to some lingering inflation and fears of a bubble, but rebounded again in October, starting a second rally throughout late 2023 and January 2024, that boosted the S&P all the way up to 5048, finally smashing through its previous 2022 record.

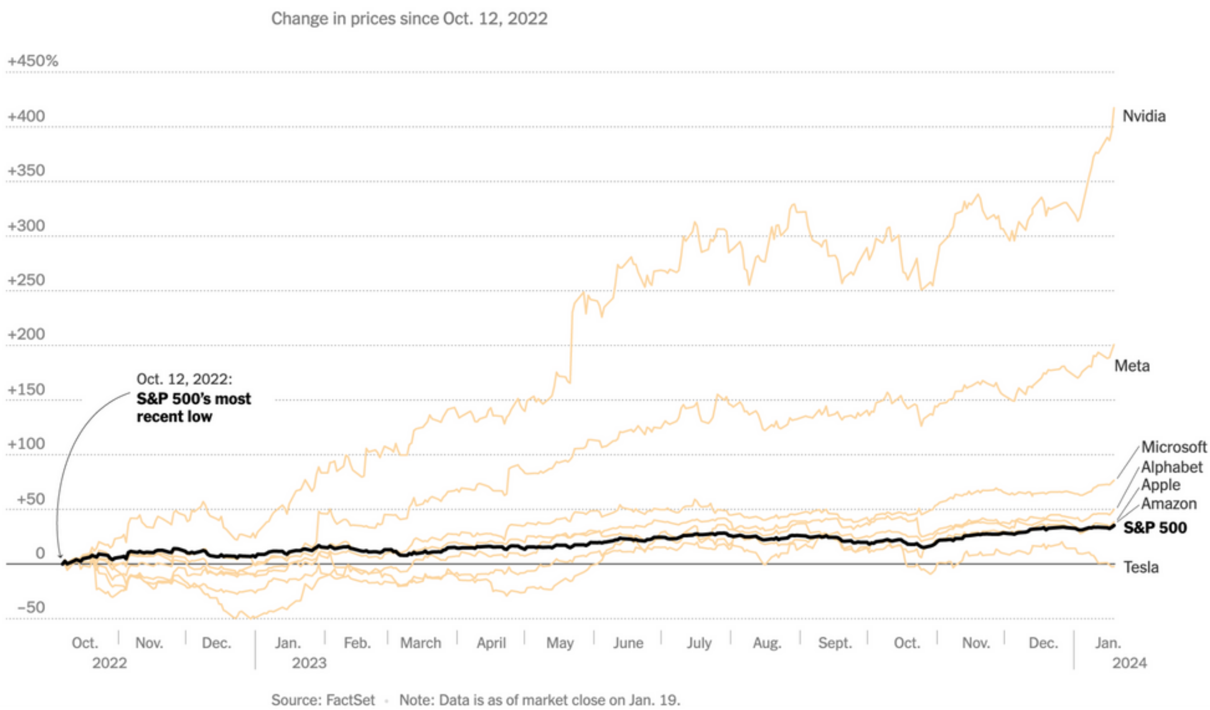
Driving this explosive rally, were 7 tech stocks: Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, and Tesla. These 7 stocks, nicknamed "the Magnificent Seven" by Wall Street, did the heavy lifting and delivered the crucial blow to drive the S&P to this record.

(New York Times, “These 7 Tech Stocks Are Driving the Market”)



These 7 stocks account for 29% of the S&P, which has a total of 500 constituent stocks. Why do 7 stocks account for such a large proportion of the index? The S&P is weighted by market capitalization, meaning the larger the size of a company, the more weight its price has on the S&P. The Magnificent 7 are as of now the largest companies in the S&P, so movements in the Magnificent 7 have the largest impact on how the index moves. The reason why the S&P was able to break its record in such a spectacular way, is because of the powerful performance of the Magnificent 7.

Take a look at this chart, comparing the movements of the Magnificent 7 with the trajectory of the S&P.



(New York Times, “These 7 Tech Stocks Are Driving the Market”)

The S&P seems almost flat when compared to the drastic surges of these tech stocks, particularly Nvidia and Meta.

It turns out that differences between the trajectory of the entire S&P and parts of the S&P are not limited to only tech. The chart below compares the movements of the S&P with the trajectories of the Tech, Healthcare, Energy and Real Estate sectors.

The Tech, Healthcare, Energy and Real Estate sectors are each subsections of the economy, and are tracked by the SPDR XLK, XLV, XLE, and XLR ETFs, which are indexes similar to the S&P, but track subsections of the economy rather than the whole economy.

Not surprisingly, the Tech industry (orange line at the top) outperforms the most, surging drastically past the S&P. The Healthcare sector (in blue) is roughly similar to the S&P, moving at similar levels.

But the Energy and Real Estate sectors (purple and yellow respectively), on the other hand, have remained consistently below the S&P, and have been largely flat for the past couple of years, with Energy even declining a little.

This leads to an interesting point: While indexes are useful in summarizing the performance of an entire economy or sector in a single graph, they often obscure information about what's going on underneath the surface. If we just look at the S&P graph by itself, we think that it's been doing very well, but if we compare the S&P with some of its constituent sectors, we immediately see that while Tech is doing extremely well, there's been quite some turbulence in other areas, like Energy and Real Estate. The exceptional performance in Tech masked the turbulence that was going on underneath in other areas.

Indexes, and indeed, most indicators, are limited in how much information they can convey. While indexes can summarize the performance of an economy and sector well, you can't immediately gain insights into the nuances and details of what's happening within that economy and sector, just by looking at the index. Different industries within the same economy can differ a lot in performance, but information regarding that is out of the scope of what the S&P can tell you.

In fact, the way different indexes are calculated also has an effect on the information conveyed. Aside from the S&P, the Dow Jones Industrial Average (or "the Dow") and the NASDAQ are two other indexes that also track the performance of the entire US economy.

This is a chart comparing how these three indexes have moved for the past couple of years.

The NASDAQ (top) is consistently higher than both the S&P (middle) and the Dow (bottom), and the Dow has remained consistently the lowest of the three. The NASDAQ also seems much more volatile than the Dow, as it moves up and down more drastically.

These three indexes are all commonly used indicators that describe the US economy's performance, but they all give very different results.

The reason for the differences between these three indexes comes down to what stocks they include.

The Dow includes only 30 stocks and all of its constituents are large, reputable, dividend-paying, well-established companies, which are referred to as "blue-chips". These include well-known household names like McDonalds, Coca-Cola and Disney. Blue chip stocks tend to be relatively flat, meaning they protect well against down-markets, but don't move up as drastically in up-markets.

The NASDAQ on the other hand includes 2,500 stocks, among which tech stocks like Microsoft and Nvidia are weighted the most. Driven by tech stocks, which tend to be more volatile, the NASDAQ goes up more when the market is up, but goes down more when the market falls.

BYD: Pioneering Growth and Innovation in the Global EV Market

HOWARD DENG

The Electric Vehicle (EV) market has been booming over the past decade. Currently, EVs take up a sizable portion of the automobile sector. Most notably, Tesla's market capitalization as of 25.10.21, is equivalent to that of the next 10 largest automakers at 1.01 trillion USD. This means that its value is tantamount to the combined wealth of Toyota, Honda, BMW, Mercedes, Ford, GM, Daimler, Stellantis, SAIC, and BYD, signaling investor confidence in the sector's future.

BYD Auto, often recognised as China's equivalent of Tesla, is currently the largest EV producer globally. The company, backed by Warren Buffet since 2008, experienced rapid growth. It scaled from 600k annual sales in 2021 to 1.8 million in 2022 and over 3 million in 2023. To put this into perspective, the total car sales in the US in 2022 was 2.86 million. These figures placed BYD as 212th on Fortune 500, with total revenue increasing from $33.48B in 2021 to $62.14B in 2022, while latest financial reports estimates TTM as $82.09B. Direct EV sales contribute to approximately 70-80% of BYD's revenue stream, battery production for other tech companies such as DJI with Foxconn contribute 10-20%, while its new "Sky Rail" project which aims to serve as a cheap alternative to underground metros chips in 5-10%.

While most EV companies outside of China predominantly use NCM batteries, BYD uses the LFP battery which it sees as a safer and more sustainable option. While the same mass of NCM and LFP batteries produce 160 and 140 watts respectively, NCM is highly pyrophoric, and relies heavily on Congolese cobalt mines. The nail penetration test, which simulates the most extreme condition, is set as a BYD's standardized testing of its batteries. The test puts a steel needle through the battery to replicate an internal short circuit. NCM batteries tend to immediately explode upon contact, whereas LFP batteries would heat up and smoke. To ensure maximum safety, BYD introduced the Blade Battery. The unique structural design allows for better heat dissipation and reduced risk of thermal runaway. Its shape also allows for denser battery composition in the vehicle chassis, addressing its battery deficiency compared to previously used NCM batteries. The Blade Battery heats up to a maximum of 60 degrees celsius in the nail penetration test with no visible effects, making it the safest battery across the entire electric vehicle industry. This technology is currently unique to BYD, it is internally manufactured at BYD, giving them a competitive edge in the market. Another primary market concern is electric vehicle's range. The Blade Battery's denser chassis composition allows its new models to travel up to 700 km per charge, exceeding the average internal combustion vehicle range of approximately 400-600 km.

BYD's current plan prioritizes two main objectives, overseas market expansion and premiumization. BYD currently competes in markets across all continents with the exception of North America. BYD's current share in China's NEV market is approximately 35%, leading the sector being the only company exceeding 10%, demonstrating a significant presence. BYD also leads in the overall passenger car market with a 12.5 percent share in 2023, ranking first on the CPCA's list. 2023 marks BYD's third overseas expansion phase, its factory in Brazil produces over 150,000 cars annually while a new factory is under construction in Hungary, which will distribute cars across the EU. Due to the lack of domestic car brands in SEA markets, BYD is aggressively competing in its markets, currently occupying 30% of the Thailand NEV market. The secretary of board remarked that BYD has established good relationships with Brazilian and Hungarian governments, and will continue expanding overseas to establish a larger presence in its markets. This year, BYD exported over 230,000 cars, while the board estimates 400-500k for 2024.

BYD premiumizes through its three distinct sub-brands: Denza, Yang Wang, and Fangchengbao. Each brand caters to a specific segment of the luxury vehicle market. Denza specializes in the production of premium automobiles with an average price of over $400,000 per unit. The brand has achieved a commendable sales volume, averaging 10,000 units sold monthly. Notably, Denza boasts a profit margin of 30%, which is significantly higher than BYD's overall average margin of 20%. Yang Wang represents the pinnacle of luxury within BYD's portfolio, with vehicles priced upwards of $1 million each. The brand is recognized for its exclusive focus on crafting high-end off-road vehicles equipped with four-wheel drive, appealing to enthusiasts seeking both luxury and performance. Fangchengbao, the third sub-brand, offers a range of vehicles with an average price point above $300,000, primarily focusing on the SUV segment. These vehicles blend luxury with practicality, meeting the needs of consumers who desire premium SUVs.

The secretary of board noted that Tesla is not a direct competitor of BYD, since BYD targets and dominates the EV market below $200k USD, which occupies around 70% of the total NEV sector. The three sub-brands are still at very rudimentary stages with no ability to compete with Tesla's large presence in the luxury EV market. Aside from producing EVs, BYD also aims to create sustainable cities through carbon neutral, effective and economical public transportation. The "cloud track" system is priced at just 30% of the cost of traditional underground metros for the same distance, while its "sky shuttle" system comes in at a mere tenth of the price. Furthermore, BYD produces cutting edge batteries, supplying nearly all iPad batteries in partnership with Apple Inc.

BYD's remarkable growth trajectory and strategic diversification underscore its position as a leader in the global EV market. The company's substantial market share within China, its aggressive international expansion, and its commitment to premiumization through its sub-brands Denza, Yang Wang, and Fangchengbao, demonstrate a clear, forward-thinking strategy for the future of sustainable transportation. BYD's pioneering battery technology, particularly the Blade Battery, sets a new industry standard in safety and efficiency, further solidifying its competitive edge. The company's expansion into ancillary markets, such as its sky rail project and battery production for consumer electronics, illustrates its multifaceted approach to growth. As BYD continues to navigate the balance between reaching new markets and enhancing its product offerings, its trajectory suggests a robust potential to influence the future of both the automotive industry and sustainable city planning on a global scale.

All information is provided during a personal company visit to BYD headquarters on 25/12/2023. Recording of conversation with secretary of board is available for source verification.

Investing Concepts 2: Technical Analysis

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Unlike fundamental analysis, technical analysis does not evaluate a company (or any security) based on the business's earnings, sales, or the health of their balance sheets. It focuses on analyzing the price and volume history of a traded security and finding patterns in price movement that can potentially be used to predict future price trends assuming that history tends to repeat itself. It also assumes that the Efficient Market Hypothesis (EMH), a hypothesis that theorizes that share prices reflect all information and are always priced fairly, is false, and that prices can deviate from their fair value.

Thousands of various technical analysis tools and techniques exist, however there are two that are frequently used by both professional fund managers and the average retail investor: Support and Resistance Levels and Moving Averages.

Support and resistance levels are plotted on the price chart of a certain security where price has been observed to react or "bounce". Essentially, this means the areas where price is likely to reverse its trend direction, fueled by aggressive buy or sell side pressure at the level, or simply high supply or demand present at certain areas. Levels plotted on higher timeframes not only work, but are much more effective when trading on lower timeframes. It is helpful to think of them as trampolines, in which price likely reverses direction after hitting them.

Take the daily price chart of Paypal Holdings (NASDAQ: PYPL) for example. Although the company's share price has been dropping since the coronavirus pandemic, an investor wishes to enter a long position and purchase some of its shares. It is assumed that the investor is not investing a large amount of money (large enough to move market prices significantly), and that the intention to invest manifested relatively recently, in which Paypal's share price was trading at around $60. How should the optimal entry price be determined?

As the share price is trading around $60 and the investor wishes to buy, he/she should look at price history below the current share price to locate strong support/demand levels he/she can enter into. The only price history below $60 currently available for Paypal is history 6 years back in June of 2017. As seen on the above chart, price drops suddenly and recovers, wicking out and making a low at $50.83. This indicates that a strong demand level is present there.

Back to the present, the investor waits for price to continue dropping and close below the $50.83 support level (deviation) on the 4-hour price chart. Then, they wait for price to close back above the level, confirming the bounce, and enters into their long position. Price subsequently reverses and trends upwards in the opposite direction.

The effective utilization of the support and resistance technical analysis technique is demonstrated above. However, it is important to remember that these levels become weaker the more often price hits them. Additionally, levels do not necessarily have to be horizontal, and can also be plotted diagonally as trendlines as well.

On the other hand, moving averages aim to plot the average closing prices of a security over a set period of time, and can be utilized in a variety of ways. They can be used for crossover strategies, determining the securities' fair value, and as dynamic support and resistance levels that price can bounce from. The most common moving averages used are the 20, 50, and 200 simple/exponential moving averages. Simple moving averages have previous closing prices weighted equally in its calculation while exponential moving averages apply more weight to more recent closing prices in the calculation.

Take the daily chart of Starbucks (NASDAQ: SBUX) from 2022 for example. A relatively short-term moving average crosses above a relatively long-term moving average (in this case 50 and 200 respectively), triggering a long position entry. Price then subsequently trends to a high of $108.55, and $113.67 later on, all while the 50 SMA stays above the 200 SMA.

As technical analysis solely examines the historical price behavior of a company and disregards its intrinsic value, the validity of the concept remains a topic of intense debate. Ultimately, as Corvin Codirla, professional portfolio manager said, "If they make money, who am I to deny another poker player's place in the sun?" – if investors and traders that use technical analysis can consistently generate profits with the application of the concept, then there is no reason to convince them otherwise.

Dogecoin and Elon Musk

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Introduction

The Shiba Inu is arguably one of the most recognizable breeds of dogs in the world. Now you would be hard-pressed to go longer than a couple of minutes on social media without running across the memorable Doge in one meme format or another. It has been used as the face of many products, most notably a cryptocurrency with a strange cult following: Dogecoin, created in 2013 by the software engineering duo Jackson Palmer and Bill Marcus as an offshoot of Litcoin an open source code which was derived from Bitcoin (Team). Envisioned as more as a joke or meme currency, it has slowly evolved into less of a laughing stock and more of a legitimate currency. Over the years it has been endorsed by a variety of celebrities from Mark Cuban to Snoop Dog, however, most notably it has been endorsed by billionaire businessman and investor Elon Musk.

In terms of objective analysis of it as a cryptocurrency, it is certainly not the worst cryptocurrency. It is for all intents and purposes a bog standard cryptocurrency. It has been established as a reputable cryptocurrency and has been listed on a variety of different crypto exchanges. However, the one thing that sets it apart from its competition is its possession of a large almost cult like following, not following the cryptocurrency itself but the tweets of the second richest man in the world, billionaire businessman and investor, Elon Musk.

Timeline

To set the stage here's a basic timeline.

1. On the 4th of February 2019, Elon first tweeted "Dogecoin might be my fav cryptocurrency. It's pretty cool." This tweet marked the beginning of Musk's interest in Dogecoin, and three days later Dogecoin quite nearly doubled in value.
2. After staying silent about the cryptocurrency for nearly two years he tweeted "Dogecoin is the people's crypto," bringing the price of the bitcoin to new highs, from under a cent to the highest it had ever been at.
3. A couple of months later on the 7th of May Elon Musk appeared on the famous American TV show Saturday Night Live where at one point he admitted that he thought that the crypto was in his words a "hustle", the stock started the day reaching a new high of $0.73 but a few weeks later depreciated to a mere $0.30.
4. Then in April of 2023, after Elon changed the logo of Twitter to that of a Doge the stock grew by nearly 30% ("RPubs").

Dogecoin Stock Price from its Inception ("Dogecoin USD")

Whilst correlation is not necessarily causation, from the evidence provided it can be deduced that Elon Musk's tweets have had a legitimate impact on the stock price of the cryptocurrency. This has also raised questions about the implications of a public figure and has raised into the public zeitgeist the question of legitimacy concerning cryptocurrencies and the increasing effects of public figures and social media on financial markets. Despite Elon's public endorsement of the coin, his company Tesla has never invested in the coin despite also possessing nearly two hundred and eighty million dollars in bitcoin. Elon Musk himself has been sued in a class action lawsuit by investors, as a high schooler I am no in no place to judge so here are the facts of the case. Elon has been sued for 258 billion dollars for allegedly driving the price up more than 36,000% in two years and then engineering its downfall whilst simultaneously making billions for Tesla. However, Musk's lawyers have argued that Elon's remarks about Dogecoin should not be taken for fact for his tweets were meant to be taken as humor, without intent to cause financial harm (Reuters). The outcome of the trial may shape Dogecoin and cryptocurrencies for years to come. If true it could possibly lead to increased regulation of the cryptocurrency.

Many should keep in mind that whilst endorsements by public figures can lead to increased interest in certain products it also ends in significant volatility in the stock market and is certainly a topic that investors should approach with caution (Daly). Whilst Dogecoin had a meteoric rise in stock price, it was followed by an equally meteoric crash that it has yet to recover from. One must remember that when investing always carefully research what you tend to invest in and to do so carefully. The stock market is not a toy, it is a legitimate occupation of which tens of thousands occupy.

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