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Summary

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- Being home to two of the largest crypto exchange hacks in history,
 Japan's history with crypto has been rocky, despite the early adoption.
- This forced regulators to be involved much earlier than in other countries, providing the industry with a clear regulatory framework early on.
- However, regulations were stringent, and combined with the high tax rates, made Japan less competitive than its neighbouring countries such as Singapore and Hong Kong.
- Amidst low volumes and a humdrum domestic entrepreneurial scene, the challenges Japan faces to grow its Web3 industry are broad based, and a revival will require meaningful changes to policy.





Introduction

Starved of yield and facing a domestic stock market lacking excitement, Japanese retail investors have long been known for their appetite for leveraged trading. The collective of retail currency traders in Japan is renowned for their influence on the volatile TRY/JPY FX trading pair, so much so that the international finance community coined the term "Mrs. Watanabe" to represent them. When Bitcoin and other cryptocurrencies hit the retail scene in the early 2010s, Japanese day traders eagerly embraced this esoteric asset class. However, investors were soon faced with domestic challenges including two of the most prominent exchange hacks in crypto history, which, coupled with Japan's comparative unattractiveness from an entrepreneurship and investor point-of-view, dwindled the nation's relevance in the Web3 sector.

In this research piece we (1) cover the history of crypto in Japan, particularly in respect to various regulatory developments, (2) take a look at where Japan stands today, and finally (3) explore a few of the main players in the domestic industry.

History of Crypto in Japan

Japan's journey with cryptocurrency has been marked by significant events such as the Mt. Gox and Coincheck hacks, which led to stringent regulatory measures aimed at protecting investors and ensuring the stability of the financial system. The country continues to evolve its regulatory framework to address new challenges and opportunities in the cryptocurrency space.

Early Years and the Rise of Mt. Gox

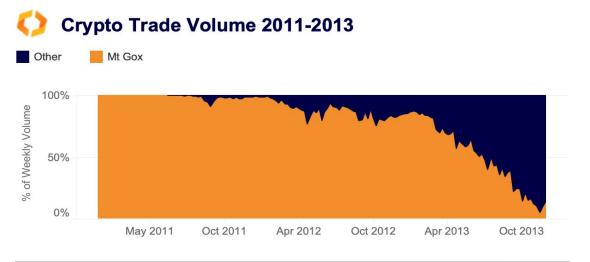
2009:

Bitcoin, the first cryptocurrency, is introduced by an unknown person or group using the name Satoshi Nakamoto. Awareness and adoption are minimal in all geographies during these early years, and despite the creator's Japanese pseudonym, this is no different in Japan.

2011~2013:

Mt. Gox, a Tokyo-based Bitcoin exchange, becomes the largest Bitcoin exchange in the world, handling the vast majority of all Bitcoin transactions at its peak. (Figure 1).

Figure 1: Global CEX volumes up until the end of 2013.



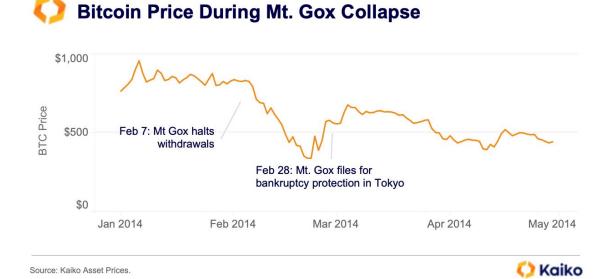


The Mt. Gox Hack and Its Aftermath

2014:

 Mt. Gox suspends trading, closes its website, and files for bankruptcy, announcing that approximately 850,000 bitcoins, almost 7% of all bitcoins worth around \$450 million at the time (750,000 of customers' and 100,000 of their own), are stolen due to a security breach. An investigation reveals that poor management and security practices contribute to the loss.

Figure 2: At one point, BTC dropped over 40% 3 days after Mt. Gox halted withdrawals.



Regulatory Developments and Early Regulations

2015:

- The Financial Action Task Force (FATF), the G7 intergovernmental policy making body, issues guidelines recommending that countries regulate virtual currency exchanges to combat money laundering and terrorist financing.
- The Japanese government begins drafting legislation aimed at regulating exchanges to protect consumers and ensure financial stability.

2016:

- The Japanese Cabinet and the Diet (parliament) pass bills to amend the Payment Services Act (PSA) and the Financial Instruments and Exchange Act (FIEA). These amendments recognise virtual currencies (\$BTC, \$ETH, \$XRP, \$LTC, and \$BCH) as a means of payment and impose regulatory requirements on cryptocurrency exchanges, setting the stage for the full implementation of cryptocurrency regulations.
- The Financial Services Agency (FSA) is tasked with preparing for the implementation of these
 regulations, focusing on registration requirements for exchanges, cybersecurity measures, and
 anti-money laundering (AML) protocols.



Coincheck Hack and Strengthened Regulations

2017:

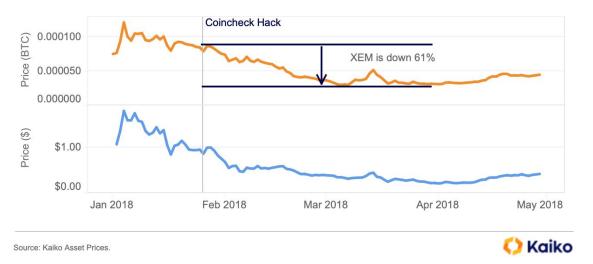
- The amended Payment Services Act comes into effect in April, requiring cryptocurrency exchanges to register with the FSA and comply with AML and know your customer (KYC) regulations. It also categorises BTC as a kind of prepaid payment instrument.
- Bitcoin and cryptocurrencies gain significant popularity in Japan, and many merchants such as Bic Camera, the largest electronics retail company in Japan, start to accept Bitcoin as a form of payment.
- The National Tax Agency (NTA) classifies cryptocurrency earnings as "miscellaneous income," making them taxable.

2018:

Coincheck, one of Japan's largest cryptocurrency exchanges, is hacked, resulting in the theft of approximately 523 million NEM (\$XEM) coins worth around \$530 million at the time. Customers are eventually fully reimbursed by Coincheck. This hack remains as one of the largest cryptocurrency heists in history and prompts the FSA to take stricter regulatory measures. According to Cointelegraph, the exchange was storing the \$XEM in a hot wallet rather than a multisig wallet. In Figure 3, the lower chart shows \$XEM down over 76% in the first 2 months after the hack. Q1 2018 was the brutal beginning of the bear market, but even if we remove the bear market effect by charting \$XEM/\$BTC in the top chart, the pair was down over 61%.

Figure 3: XEM price action around the Coincheck hack.





- Zaif, a smaller exchange, is hacked for around \$60 million.
- The Japan Virtual Currency Exchange Association (JVCEA) is formed as a government-approved self-regulatory body to improve industry standards, and is put in charge of approving tokens for exchange listings.
- The FSA issues business improvement orders to several cryptocurrency exchanges and conducts on-site inspections to ensure compliance with new regulations.
- The FSA limits leverage on cryptocurrency margin trading to 4x the deposit amount, aiming to curb speculative trading and protect investors.



Leverage Trading Regulations and Continued Developments

2019:

- Coincheck, now compliant with new regulations, resumes operations. •
- The Japanese Cabinet approves new regulations limiting leverage in cryptocurrency margin trading to 2-4x the initial deposit.
- The revised Financial Instruments and Exchange Act (FIEA) and Payment Services Act (PSA) come into effect, further tightening regulations on cryptocurrency exchanges and security token offerings (STOs).

2020:

- The FSA reduces the maximum leverage for margin trading to 2x.
- Further amendments to the PSA and FIEA are enforced, focusing on stronger user protection and market integrity.

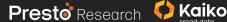
2021:

- Japan continues to develop its regulatory framework, focusing on enhancing investor protection. cybersecurity, and preventing money laundering.
- The FSA establishes a new regulatory body to oversee cryptocurrency exchange operators and ensure compliance with evolving regulations.
- The FSA requests the JVCEA to implement self-regulatory rules concerning the "crypto Travel Rule" for information sharing during transactions.

Recent Developments

2022:

- The FSA introduces additional guidelines for the custody of digital assets by exchanges, emphasising the need for robust internal controls and risk management practices.
- JVCEA introduces the Travel Rule in its self-regulatory rule, while the Cabinet Secretariat amends the Act on Prevention of Transfer of Criminal Proceeds (APTCP) to enforce it.
- Japan's tax committee revises its taxation laws to exempt token issuers from paying corporate taxes on unrealised cryptocurrency gains.
- Japan explores the potential issuance of a central bank digital currency (CBDC), with the Bank of Japan conducting experiments and research.
- The upper house passes a bill regulating stablecoins, monitoring money laundering, and cracking down on money-laundering activities.
- The Liberal Democratic Party (LDP) Headquarters for the Promotion of a Digital Society releases the "NFT White Paper: Japan's NFT Strategy for the Web 3.0 Era" proposing policy recommendations for the development and protection of NFTs.
- The Ministry of Economy, Trade and Industry (METI) launches a Web3 Policy Office to develop a supportive business environment for Web3-related industries.
- The FSA moves forward on lifting a ban on foreign-issued stablecoins.





2023:

- The FSA continues to refine its regulatory approach, focusing on emerging trends such as DeFi and non-fungible tokens (NFTs).
- The FSA launches a public consultation on draft orders to revise the Order for Enforcement of the APTCP, specifying the application of the Travel Rule to Japanese Virtual Asset Service Providers
- Prime Minister Fumio Kishida emphasises Web3 as a pillar of economic reform, describing it as "the new form of capitalism" and highlighting its potential to drive growth through resolving social issues.

2024:

- The JVCEA plans to simplify the listing process for digital currencies, aiming to streamline the approval process for tokens that already exist in the market.
- The expected removal of the lengthy pre-screening process for certain digital assets on authorised exchanges.
- The cabinet approves a bill that may allow venture capital firms' investment vehicles to hold digital assets directly.



So where are we now? Japan's struggle for Web3 adoption

Japan's weakness in Web3 adoption stems from regulatory restrictions, particularly in regards to exchange listings and taxes. Exchange listings are highly regulated by the FSA, with local CEXs missing major coins and unable to provide stablecoin liquidity (Figure 4).

Figure 4: Local CEX offerings are limited.

Comparison of Japanese and Internation CEXs for Spot Coin Offerings

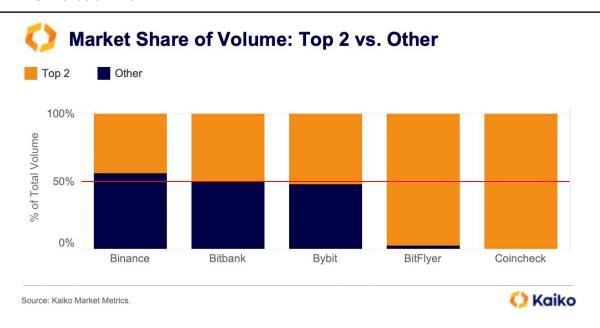
			Japan			International	
			BitFlyer Coincheck Bitbank			Binance ByBit	
		Final Count	11	10	13	27	30
		Total Spot Offerings	33	27	38	399	376
(dı	1	Bitcoin (\$BTC)	Yes	Yes	Yes	Yes	Yes
	2	Ethereum (\$ETH)	Yes	Yes	Yes	Yes	Yes
	3	Tether (\$USDT)	No	No	No	Yes	Yes
	4	BNB (\$BNB)	No	No	Yes	Yes	Yes
etcs	5	Solana (\$SOL)	No	No	No	Yes	Yes
arke	6	USDC (\$USDC)	No	No	No	Yes	Yes
inm	7	Ripple (\$XRP)	Yes	Yes	Yes	Yes	Yes
8	8	Dogecoin (\$DOGE)	Yes	No	Yes	Yes	Yes
apitlisation	9	Toncoin (\$Ton)	No	No	No	No	Yes
	10	Cardano (\$ADA)	No	No	Yes	Yes	Yes
	11	Shiba Inu (\$SHIB)	Yes	Yes	No	Yes	Yes
of C	12	Avalanche (\$AVAX)	Yes	Yes	Yes	Yes	Yes
Top 20 by Market Capitlisation (coinmarketcap)	13	Tron (\$TRX)	No	No	No	Yes	Yes
	14	Chainlink (\$LINK)	Yes	Yes	Yes	Yes	Yes
	15	Uniswap (\$UNI)	No	No	No	Yes	Yes
	16	Polkadot (\$DOT)	Yes	Yes	Yes	Yes	Yes
	17	Bitcoin Cash (\$BCH)	Yes	Yes	Yes	Yes	Yes
	18	Near (\$NEAR)	No	No	No	Yes	Yes
	19	Litecoin (\$LTC)	Yes	Yes	Yes	Yes	Yes
	20	Polygon (\$MATIC)	Yes	Yes	Yes	Yes	Yes
, G	1	dogwifhat (\$WIF)	No	No	No	Yes	Yes
Top 10 Coins in 30-day Volume, not already mentioned	2	Optimism (\$OP)	No	No	Yes	Yes	Yes
	3	Mantle (\$MNT)	No	No	No	No	Yes
	4	Bonk (\$BONK)	No	No	No	Yes	Yes
	5	Ondo (\$ONDO)	No	No	No	No	Yes
	6	Injective (\$INJ)	No	No	No	Yes	Yes
	7	Filecoin (\$FIL)	No	No	No	Yes	Yes
	8	Worldcoin (\$WLD)	No	No	No	Yes	Yes
do	9	Sui (\$SUI)	No	No	No	Yes	Yes
7	10	Ordinals (\$ORDI)	No	No	No	Yes	Yes

Note: We look at USDT-paired coins for Binance and ByBit given that neither offer USD-fiat. For ByBit, \$SHIB and \$BONK are provided in 1000-unit blocks (\$1000BONK and \$SHIB1000).



With the exception of Bitbank, which marginally had the highest coin offerings out of the Japanese exchanges, this has strengthened the dominance of majors on Japanese exchanges (Figure 5):

Figure 5: Volume market share of top 2 assets for top Japanese and international CEXs. Duration: 2024 YTD.



Meanwhile, crypto gains are considered miscellaneous income, making them taxable at the individuals' income tax bracket plus local tax, making the top-end 55% (Figure 6).

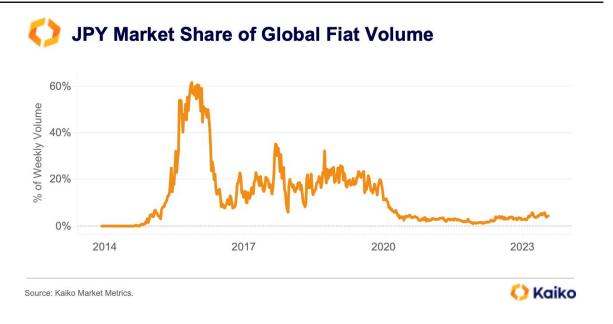
Figure 6: Japan has prohibitively high capital gains tax for crypto.

Cryptocurrency Tax by Country							
Country	Tax	Note					
Japan	15~55%	Cryptocurrency profits are considered "miscellaneous income" and is taxed according to your progressive income bracket plus local tax, irrespective of holding period.					
South Korea	20%	A flat 20% capital gains tax is set to be implemented in 2025 for annual gains exceeding KRW 2.5 million (approximately USD 1,900). South Korea does not differentiate between short-term and long-term gains for cryptocurrencies					
Singapore	0%	Gains are only taxed if they are considered revenue in nature (e.g., frequent trading).					
Hong Kong	0%	Profits from cryptocurrency trading are only taxed if they are considered part of a business activity. In such cases, they are subject to profits tax at a rate of 16.5%.					
US	10~37%	Short-term capital gains (<1yr) are taxed as ordinary income with rates ranging from 10% to 37%. Long-term capital gains are taxed at 0%, 15%, or 20%, depending on the individual's taxable income.					



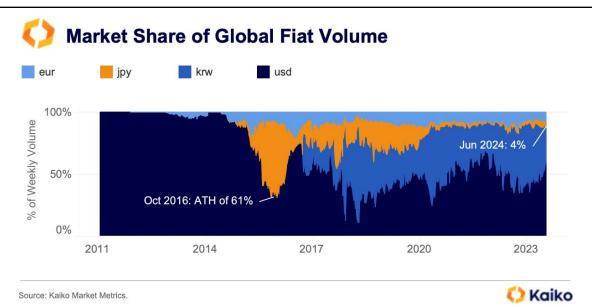
Before institutional interest, there was a time when JPY volumes were greater than USD volumes, but the above challenges have made the landscape challenging.

Figure 7: JPY's market share of global fiat volume.



JPY's outright dominance - over 60% of all fiat volume at one point - was short lived, and faded into irrelevance after the Covid period (Figure 7). However, the total share of Asian fiat volume has remained somewhat steady over time with a shift in volumes from JPY to KRW (Figure 8).

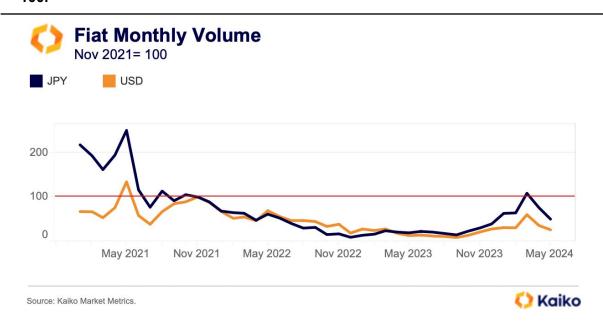
Figure 8: Market share of JPY volumes relative to other currencies'.





Interestingly, when we rebase JPY and USD volumes to the previous all-time-highs in November 2021, JPY volumes have shown a stronger recovery this cycle (Figure 9).

Figure 9: JPY and USD volumes rebased with the previous highs in November 2021 = 100.



On the institutional side, Japan is a content IP rich country that offers companies such as SEGA and Kodansha, making it prime for NFT and gaming driven projects. Theoretically, these companies bring with it attention, users, research capabilities, and capital - the issue is, this playbook has shown minimal effectiveness in any country, and this has been touted as Japan's bull case for years now.

Politically, there are recent concerns around the deregulatory ruling party's defeat in the House of Representatives elections in April 2024, giving momentum to the opposition Constitutional Democratic Party. However, given the LDP's sustained majority in both Houses of the Diet, as well as the growing international and domestic competition of Web3 adoption, we believe these developments are of little concern for now.

There are many headwinds to crypto but simply put, a lot of the issues are simply cultural, making them unquantifiable and without an easy solution. English adeptness is extremely low for a global city, there is an inherent lack of entrepreneurial spirit, stable jobs at big local name corporations is still seen as the pinnacle of post-graduate employment, strong level of cautiousness by corporations which juxtaposes the "move fast" nature of crypto, etc. All of these factors are comparative, particularly against the Asian rivals of Singapore and Hong Kong, but a lot of them are also absolute, making the challenge ever more so difficult. Coupled with the tax and CEX product offering challenges, it's hard to imagine Japan's adoption catching up to its Asian neighbours anytime soon.



Main players in the Japanese crypto market

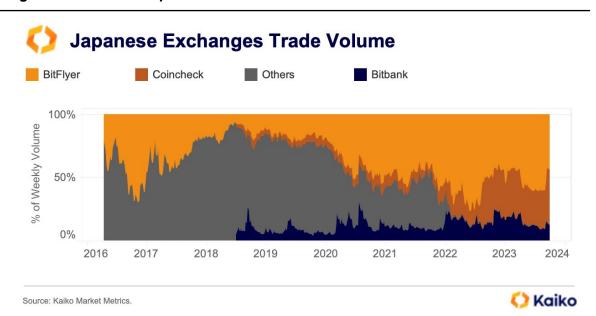
i) CEXs

As explored in the previous section, when compared to their international counterparts, Japanese CEXs have struggled to compete in their product offerings while the high capital gains tax makes cryptocurrency trading unattractive. These challenges are reflected in the trading volumes of domestic exchanges, and although this is a difference observed beyond that of crypto exchanges, the UI/UX of these exchanges also fall behind their foreign rivals'.

There are 29 crypto-asset exchange service providers registered with the FSA in Japan, and we explore in charts what the current landscape looks like.

BitFlyer, the biggest exchange by volume, has maintained their dominance in recent years.

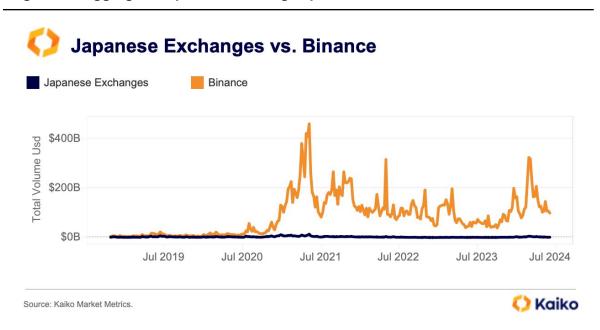
Figure 10: Share of Japanese CEX volumes.





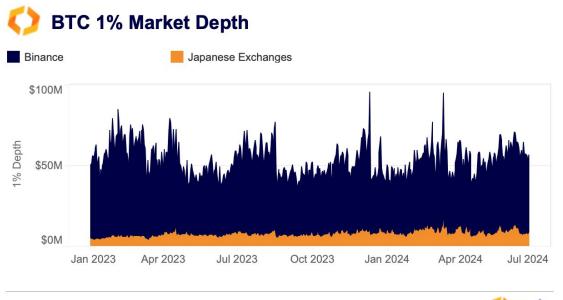
 However, when compared to top international exchanges, Japan's domestic exchanges are hardly competitive in volumes. Binance has left Japanese exchanges in the dust since Covid.

Figure 11: Aggregate Japanese exchange spot volumes versus Binance's.



 This difference can similarly be observed when comparing the depth of the exchanges' spot BTC orderbooks.

Figure 12: 1% depth in spot BTC orderbooks, Japanese exchanges versus Binance.







ii) Investment Groups:

SBI Digital

SBI Holdings (TYO: 8473) is a Tokyo-based financial services conglomerate established in 1999. Initially part of the SoftBank Group, it became independent in 2000. SBI Holdings operates in various sectors, including financial services, asset management, and biotechnology. It is known for integrating technology with traditional financial services to drive innovation and growth.

SBI Digital Asset Holdings is a subsidiary of SBI Holdings, focusing on digital assets and blockchain technology and the largest investment group involved in crypto in Japan. Launched in 2020, SBI Digital aims to revolutionise the traditional financial industry by offering comprehensive solutions such as digital asset trading, token issuance, and custodial services. They provide a secure platform for trading various digital assets and facilitate the issuance of tokens, enabling businesses to raise capital through innovative methods like security token offerings (STOs). Their custodial services ensure the safe storage and management of digital assets, leveraging advanced security measures to protect investments. SBI Digital also collaborates with global financial institutions, such as its joint venture with SIX Digital Exchange to establish a crypto venture fund in Singapore, which aims to enhance liquidity and infrastructure for digital assets across Asia and Europe. Another significant initiative is the Digital Space Fund, launched in 2023, with a capital of up to \$660mm, focusing on Web3, metaverse, AI, fintech, and other emerging technologies

SBI offers a multitude of services in both traditional finance and crypto, including custody solutions and market-making via their consolidated subsidiary B2C2.



iii) Protocols/Projects

Astar Network

The Astar Network is a decentralised application (dApp) platform built on the Polkadot ecosystem and one of the leading crypto projects to come out of Japan (although famously not headquartered in Japan, and instead in Singapore). It was founded by Sota Watanabe, who is a prominent figure in the blockchain space in Japan. Astar aims to provide a scalable, interoperable, and decentralised network for developers to deploy their applications. The network supports multiple virtual machines, including Ethereum Virtual Machine (EVM) and WebAssembly (WASM), allowing developers to write smart contracts in various programming languages.

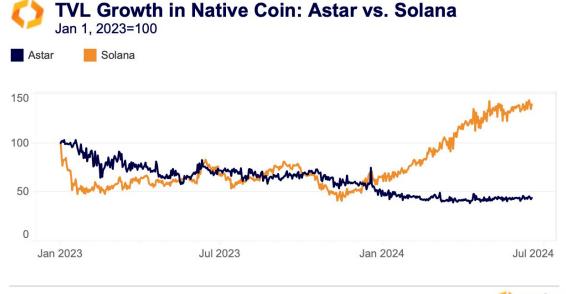
The network is designed to facilitate the development of dApps by providing essential tools and infrastructure, thereby fostering innovation in decentralised finance (DeFi), non-fungible tokens (NFTs), and other blockchain applications. Astar's integration with Polkadot enhances its interoperability with other blockchains, making it a crucial part of the broader blockchain ecosystem.

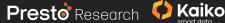
Astar is significant in Japan as it represents one of the leading blockchain projects in the country, showcasing the growing interest and investment in blockchain technology within Japan's tech community. However, perhaps representative of Japan's Web3 interest, activity on Astar is still nascent: Figure 13 shows the chain's TVL in USD, while Figure 14 shows the growth in TVL in its native coin.

Figure 13: Astar TVL in USD compared to larger chains.

	Astar	Ethereum	BSC	Solana	Arbitrum	Base
TVL (\$ mm)	28.03	63,759.57	5,311.81	4,387.28	3,088.67	1,687.86
Mulitple of Astar	1	2,274	189	157	110	60

Figure 14: Astar TVL compared to Solana TVL measured in their native coins (\$ASTR and \$SOL), rebased to 01Jan23=100.







Backpack

Backpack is one of the most exciting wallet providers to launch in recent years. Their non-custodial wallet, currently supporting Solana, Ethereum and Arbitrum, is available as a browser extension as well as an iOS and android app. Interestingly, the company was started by 2 non-Japanese founders who decided on Tokyo as their home base. We spoke with Tristan Yver, one of the co-founders of Backpack on their decision to base his company out of Japan:

- 1. Who are you and what is Backpack?
 - I'm Tristan Yver, the co-founder of Backpack, a cryptocurrency wallet aiming to revolutionize digital finance by providing a secure, user-friendly platform for managing all of your crypto assets and of the Mad Lads NFT collection, the leading NFT collection on Solana and one of the most powerful communities in crypto.
- 2. Why did you choose Japan as your HQ location? We decided to be based in Japan because its regulatory environment is moving in a comprehensive direction, we have a local team based here, and out of any country in Asia, it is where we most wanted to be based out of as a team because of its safety and quality of life. We've also made it a mission to evangelize Japan as a flourishing Web3 country and have focused on inviting other founders and teams to visit us and our office here.
- 3. What do you think has to change domestically for crypto adoption to increase? For crypto adoption to truly take off in Japan, there needs to be more Japanese resources for engineers to learn about programming on blockchains, and for the Japanese entrepreneurial sector to realize how much opportunity exists in the Web3 space. I also believe that a more favorable tax regime towards crypto would attract a lot more retail participants in Japan.
- 4. Can you highlight any upcoming updates that we can expect from Backpack? At Backpack, we're excited to be adding more blockchains to our wallet, we began with Solana and Ethereum, but now we support Arbitrum and soon we will have support for Base, Optimism and Polygon. This innovation aims to make crypto non-custodial management have the best user experience possible.

Final words

Despite the head start in retail adoption, a confluence of factors such as regulatory scrutiny following exchange hacks, prohibitive taxes, limited coins offered by exchanges, and cultural headwinds, has left Japan well behind its Asian peers in the Web3 world. The current government under the LDP Kishida leadership has its sights in the right direction, but progress is slow. Activity on local exchanges reflect this struggle, and it's difficult to see what catalysts may change the tide for Japan. However, the comprehensive regulatory environment, as well as the lifestyle aspects of safety and quality of life as Tristan mentioned, continue to make Japan an attractive place to live, and just as we see with Backpack, talented people may choose Japan as its base of operations.





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Required Disclosures

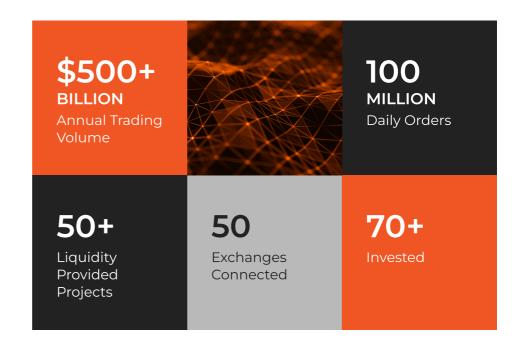
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