#### Background

Smart-contract platforms are blockchains that are optimised for processing a wide range of smart contracts. They are the foundational layer upon which all sorts of applications ('apps') run. Popular categories of apps include decentralised finance ('DeFi'), gaming and non-fungible tokens ('NFTs').

Colloquially, the terms 'smart-contract platforms' and 'blockchains' have become interchangeable over time because, these days, nearly every blockchain is optimised to execute smart contracts. (One of the few exemptions is Bitcoin.)

BTC Snapshot <sup>1</sup>	\$ ('000)
12-month high	47.1
12-month low	16.4
Price (09 Jan 2024)	46.9
Key Market Metrics	
BTC Dominance	50.8%
ETH price	\$2,350.00
Total Crypto Market Cap	1.812T
Smart Contract Platform Mkt	502.4B
Сар	

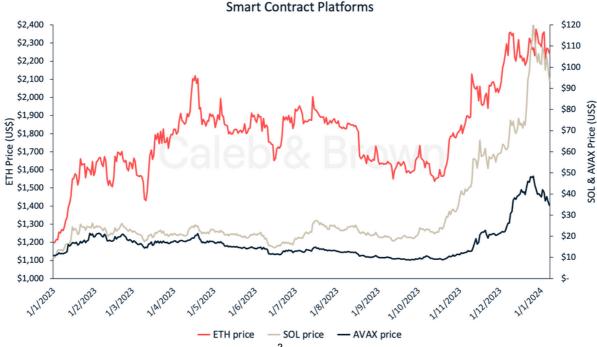
The market for smart-contract platforms is extremely competitive, with each vying for a relatively small, yet growing, pool of smart-contract programmers to build apps that gain meaningful user adoption. Underscoring this saturation, there are 30 cryptocurrencies native to smart-contract platforms currently in the top 100 cryptocurrencies by market cap—the most of any other category—and dozens more exist beyond this.

### **Existing Market Landscape**

There is a relatively new cohort of 'next-generation' smart-contract platforms (e.g. Sui, Aptos, Sei) that are often touted for their high throughput and low latency (i.e. superior performance compared to incumbents), but have thus far failed to gain meaningful market share and developer adoption in the 1–2 years since launching on mainnet.

Indeed, as in various other industries, the market leaders are not always those with superior technology. The success of a smart-contract platform—and, to a certain ext, the price performance of its native cryptocurrency—can be influenced by several other factors (e.g. timing, business development, developer relations, initial token distribution).

In 2024, competition will only intensify as these blockchains compete to execute smart contracts as efficiently as possible while maintaining 'sufficient' decentralisation. (What is considered 'sufficient' is subject to ongoing debate.) For investors, monitoring a given smart-contract platform's key metrics (e.g. developer activity, user activity, fee revenue, network performance) will be crucial in the year ahead.



Past performance is not indicative of future results.<sup>2</sup>

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2. Coingecko Historical Data: https://www.coingecko.com/en/coins/ethereum/historical\_data#panel

<sup>1.</sup> Coingecko Price Data: https://www.coingecko.com/en/coins/bitcoin

# Smart Contract Platforms to Watch

## Ethereum (ETH)

Ethereum is the leading smart-contract blockchain by various metrics (e.g. usage, developer adoption, market cap). It has long endured scalability issues, and continues to scale via layer-two (L2) solutions, which are essentially blockchains built on top of Ethereum.

<u>2023 highlights</u>: Staked ETH withdrawals were enabled in April, officially completing Ethereum's migration to a proof-of-stake blockchain. Adoption of L2s, led by Arbitrum and Optimism, was a core theme. Lastly, this was the first year the supply of ETH decreased (i.e. net deflation), improving the asset's scarcity and investment appeal.

<u>2024 outlook:</u> Ethereum's major upgrade ('Dencun') should go live in March or April. Expect confirmation of a release date in January. Dencun will slash the cost of using L2s, helping Ethereum in its pursuit of a rollup-centric roadmap. Lastly, if the SEC approves a spot Bitcoin ETF in early January—as is widely expected—increased investor speculation over a potential spot Ethereum ETF may become a tailwind for ETH.

## Solana (SOL)

Solana is a smart-contract blockchain optimised for fast and cheap transactions while maintaining a sufficient level of decentralisation. It is the leading example of a monolithic blockchain (i.e. a blockchain that performs all the core functions of blockchain without outsourcing).

<u>2023 highlights</u>: Solana started the year fighting for survival after the FTX collapse dealt a blow to its reputation and wiped out several ecosystem projects. Pleasingly, it survived this existential crisis and has finished the year with strong price performance and a rejuvenated, fast-growing ecosystem.

<u>2024 preview</u>: Solana is poised to capitalise on the wave of momentum it has generated in recent months. Crucially, the broader Solana ecosystem will likely benefit from a so-called 'airdrop season' throughout 2024, where at least 10 projects are expected to airdrop tokens to early users. These airdrops should further galvanise the community and help ensure the network's long-term success—much like Ethereum in 2020 and 2021. Lastly, anticipation will only continue to grow regarding 'Firedancer', an upcoming validator client that should dramatically improve Solana's performance and security.

At the time of writing, Solana is currently trading at \$99 USD, up approximately 890% since January 1st, 2023, whilst still down 62% from all-time-high prices set in November 2021.<sup>3</sup>

## Avalanche (AVAX)

Avalanche is a network of smart-contract blockchains composed of three primary chains (i.e. C-Chain, X-Chain and P-Chain) on top of which sit so-called 'subnets' (i.e. customisable blockchains). Experiencing price performance comparative to Solana, AVAX is currently up 229% over the current year. Similarly again, AVAX remains significantly drawn down from 2021 all time highs, down approximately 75% and trading at \$36 USD.<sup>4</sup>

2023 highlights: The Avalanche ecosystem grew noticeably this year, particularly in gaming and real-world assets (RWAs). Institutional adoption was helped by Ava Labs announcing enterprise-friendly Evergreen Subnets in April. Various gaming subnets (e.g. Shrapnel, Beam) were announced throughout the year.

2024 outlook: Expect Avalanche v2.0 to become public knowledge in the coming months. This major upgrade was <u>teased</u> by the CEO of Ava Labs in mid-November at a community event but has yet to be formally announced. The public release of Shrapnel—one of the most highly anticipated blockchain-based games—in 2024 will likely spark increased usage and investor interest in Avalanche.

This report has been prepared by Caleb and Brown Pty Ltd ACN 619 023 559. The information within the report is not intended as legal, financial, or investment advice and should not be construed or relied upon as such.

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3. Coingecko: https://www.coingecko.com/en/coins/solana 4. Coingecko: https://www.coingecko.com/en/coins/avalanche