

# Singapore digital securities exchange ADDX and the Democratisation of Private Asset Investments

Want to purchase digital tokens representing European office real estate? Fancy investing in digital representations of private equity bonds? Would you like to buy into a major hedge fund but do not have a spare USD1 million laying around that you can lock up for years? Well, you could have made any of those investments, scaled down to bite-sized chunks, and also accessed other alternative assets through the purchase of digital tokens representing the underlying assets and issued by ADDX, the fully regulated Singapore digital securities exchange. And you would be fair in assuming that execution and custody of your investments are pretty safe – not only is the exchange fully regulated by the Singapore authorities but ADDX, which was formerly iSTOX, is also backed by some major names in the form of the Singapore Exchange, the government-owned investment corporation Temasek, the venture capital arm of Japan Investment Corporation, the Development Bank of Japan and a number of other high-profile regional investors. Hubbis met with Chief Commercial Officer Oi Yee Choo to hear what ADDX has achieved to date and what the plans are for the future.

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## In Brief

ADDX is designed to bring private market investments that would normally be distributed to the wealthier HNW and ultra-HNW investment community to accredited investors who can buy in at levels such as USD20000 or lower. The democratisation of the private capital markets is thereby putting previously out-of-reach investments in the hands of underserved investors.

ADDX was founded in 2017, then graduated from the MAS FinTech sandbox in February 2020 and became a fully regulated digital securities exchange, and then began issuing smaller tokenised deals, and has gradually been building its array since, issuing tokens for underlying assets such as hedge funds, private equity bonds and global REITs, amongst others.

ADDX has assembled an impressive array of investors, including the Singapore Exchange, the government-owned Temasek, and several leading Japanese institutions, such as the Development Bank of Japan.

ADDX employs blockchain and smart contract technology to tokenise and fractionalise multiple types of assets, such as private equity, wholesale bonds and unicorn funds, and the protocol facilitates both transparency and instantaneous trading for liquidity.

As ADDX is fully regulated, the platform's creators believe the investment community can feel entirely safe in the execution of trades and in the digitalised custody available.

To issue such tokenised securities, ADDX needs to partner with funds or companies, who thereby obtain access to a larger pool of investors and capital, which in turn helps allow them to stay private for longer and gives them the freedom to focus on long-term growth. Access to capital for sellers of private assets of all types is immensely easy right now, but over time, this approach will add further avenues to the originators and will surely prove ever more of a viable alternative, thereby offering a win-win for all parties.



**In its 'ADDX Factsheet'** the firm reports that ADDX is designed to bring private market access to individuals, and explains that the FinTech company had built the world's leading digital securities exchange and that it was designed to democratise the private capital markets, putting previously out-of-reach investments in the hands of underserved investors.

**“Digitising pre-IPO opportunities allows for liquidity before the IPO itself and allows for far more people to participate,” she comments. “It is very exciting for the investors and for us; so many investors are seeking greater diversification of opportunities.”**

It was back in November 2017 that ADDX was created as iSTOX and armed with SGX and Temasek subsidiary Heliconia agreeing to join as investors roughly a year later. ADDX was accepted into the MAS FinTech Regulatory Sandbox in May 2019. It was then just over a year ago, in February 2020, that ADDX graduated from the MAS sandbox to become a fully regulated platform for the issuance, custody and secondary trading of digital securities.

### **Rapid progress, one step at a time**

The progress continued when in November 2020, ADDX signed a MOU with Chongqing monetary authority to set up a digital securities exchange in China, and in January this year, ADDX closed its Series A round with USD50 million raised when Japan's JIC Venture Growth Investments and DBJ joined as investors. Other shareholders today include Kiatnakin Phatra Financial Group (Thailand), Tokai Tokyo Financial

Holdings (Japan) and Hanwha Asset Management (Korea).

And now that it is up and running commercially, iSTOX has rebranded as ADDX and has launched a bright, shiny new app ready to boost and encourage mobile access.

The ADDX Founder and Chief Executive Officer is Danny Toe, the Co-Founder and Chief Operating

Officer Darius Liu, and Oi Yee Choo is the CCO.

### **Opening the door to a world of private assets**

“The mission for ADDX from inception was really quite simple,” Choo explains. “We saw an opportunity to create something for wealthy investors to invest in alternative assets that are private and therefore often unavailable to non-institutional investors and that are illiquid unless tokenised in the form of digitised assets.

As we have seen in recent years, more money has shifted to private markets as investors try to find more assets that are little or not at all correlated to the public markets. We have seen the demand from the family offices, the ultra-high net worth investors, and this wave is continuing to sweep through towards high net worth investors.”

She explains that typical private assets might have a holding period of 10 years, which might be fine for a sovereign wealth fund, but less so for smaller, albeit wealthy





**OI YEE CHOO**  
ADDX

investors, who struggle with the risk assessment over such long periods and of course the illiquidity.

### Blockchain at the beating heart

Using blockchain and smart contract technology, ADDX can tokenise and fractionalise multiple types of assets, such as private equity, wholesale bonds and unicorn funds, and in doing so at the same time overcomes the manual processes in the traditional issuance and investment space that have hitherto made it impossible, or at least very cumbersome, to serve large numbers of smaller investors.

“We use the blockchain technology behind cryptocurrencies such as Bitcoin, as it is an incredibly robust and transparent way not only to verify all the trades,” Choo elucidates, “but also as it allows for really easy automation to seamlessly transfer funds from an investor to the issuer, and for investors to then trade in and out of investments rapidly.”

### Scaled-down to fit

The creation of regulated security tokens reduces the

### Getting Personal with Oi Yee Choo

Choo is Singaporean and studied accountancy at the Nanyang Technological University, soon after that deciding that auditing was not her calling, which led her to the UK to complete her MBA in Manchester, before returning to Singapore to work in capital markets with Citigroup from 1999 onwards, spending most of her career focusing on the then-nascent REIT market in Singapore and elsewhere, first with Citigroup, then Nomura, Morgan Stanley finally UBS, most recently as head of investment banking before she joined ADDX in January 2020.

Married with two children aged 17 and 15, she looks forward to the return to normality that will allow the family to head to their favourite ski resorts of Hokkaido and Hakuba in Japan. At home, she enjoys cooking the family an eclectic range of foods from Asian to European. And spare time in Singapore might see her enjoying a game of tennis with friends or her coach.

She closes the discussion by referring to the charities she is involved in. She sits on a couple of school boards, as well as the National Kidney Foundation. She is also on a statutory board, the Civil Aviation Authority of Singapore, which takes up a lot of her time, but that she reports is immensely interesting and enjoyable.

minimum investment ticket size for interesting private market investments from sums of USD1 million or more to as little as USD20,000 or less. This extends access through ADDX to all individual accredited investors, not just institutions or ultra-high-net-worth individuals with the right connections. The investors must be accredited, because the regulator requires it for private market investments, which come with a higher risk-reward profile than public market products.

Today, the ADDX platform already serves investors from 27 countries, spanning Asia, Europe, the Americas (excluding the US), Australia and New Zealand. The

proprietary exchange that ADDX has built also allows the secondary buying and selling of securities among investors, enhancing the liquidity and value of those investments. Blockchain technology has also reduced the settlement period for investors from two working days to an instant of literally around one second.

### Benefits for all

With the efficiency gains from tokenisation, companies that issue such tokenised securities benefit from lower fees, a lower minimum fundraising threshold, faster speed to issuance, and less uncertainty. The funds or companies or securities represented via the tokens get access to a larger pool



### Key priorities

Choo reports that the first mission for ADDX is to boost the range of opportunities on the platform by expanding the types of fund managers ADDX onboard. “We began slowly in 2020 with smaller fund managers and small issues, and we are now building an array of opportunities that are much more global in nature and more recognisable, such as Mapletree, which has a global portfolio,” she reports. “We are optimistic about bringing many more exciting names in the months ahead.”

The second priority is to make sure the private equity product range gets set with the right approach, she says. “What I mean is that to focus on the really exciting pre-IPO space, the unicorn space, that requires a lot of thought and work on the right structuring and the re-listing of these assets,” she explains.

And the third priority is expanding into new asset classes. “For example, we do not handle cryptos directly, but there are many, many ways of representing exposure to cryptos, such as through funds, funds of funds, structured products,” she observes. “And then how do we offer more thematic plays, such as catching the current vogue of ESG or decarbonisation. We are constantly searching for the right product that we could bring to our investors that makes sense and can clear our listing committee.”

of investors and capital, which in turn helps allow them to stay private for longer, giving them the freedom to focus on long-term growth, rather than the constant demand for short-term profits required from the public markets.

ADDX reports that according to data from Bain & Co., global private equity markets are some 4.5 times larger than the public equity markets and says that according to Cambridge Associates, these private assets offer roughly double the long-term returns. Giving individuals fair access to the private markets will go a long way in promoting wealth equality, ADDX evidently believes.

### Building the digitised portfolio

By way of some examples of the types of tokens ADDX can issue, Choo points to iQuant, a feeder fund into the world-class hedge fund Quantedge, which she says in tokenised form on ADDX also performed above its target return of 17% p.a. with an actual return of 27% since inception in May 2020 through to late April this year.

Quantedge, she reports, was founded in 2006 and currently manages more than USD2 billion worth of assets and has garnered numerous international awards and accolades over the years, including Top 5 Large Hedge Funds

by Bloomberg in 2014 and 2016, Best Asian Billion Dollar Hedge Fund by EurekaHedge in 2018 and Fund of the Year by AsiaHedge in 2014 and 2016.

### Hedge funds for the people

The ADDX site explains that the Quantedge fund has a strategy of ultra-diversification, dynamic asset allocation and constant total risk to extract the market risk premiums of multiple asset classes and geographical regions.

**“We want our digitised assets to be the equivalent of the underlying security, and that is what we have achieved in the eyes of the MAS. It is vital, as we are democratising opportunities that in the world of private banking would require higher levels of net worth before you can buy in. The base-level offering of some of the global private banks for these opportunities is often USD250,000, but we can scale that down dramatically.”**

“This is a really good example of our democratisation of private investments,” she explains, “as this fund was previously well out of the reach of even most accredited investors, as it normally costs a minimum of USD1 million to buy in and there is a lock-in period of three or five years. We were proud to provide access to our investors for a fraction of that amount and without lock up.”

### PE bonds and REITs

In March this year, ADDX tokenised Temasek-linked Astrea private equity bonds, and in April ADDX tokenised the Europe Office Fund by Mapletree, one of the largest real

estate asset managers in the world with over SGD60 billion in AUM.

Choo is proud of the arrival of the Mapletree Europe Income Trust, a private fund designed for stable and resilient income, managed by a leading real estate development, investment and capital management company.

“Investors buy into Prometheus, a special purpose Singapore vehicle incorporated to make an investment in Mapletree Europe Income Trust,” she explains. “In

doing so they gain access to an attractive target distribution yield of 7% over the life of the fund achieved through a stable income stream from a Grade A office portfolio in highly sought-after locations in Europe and the UK, all managed by a very experienced management team and committed sponsor with a proven track record and strong alignment of interests.”

The ADDX site reports that as of 31 March 2020, Mapletree owned and managed SGD60.5 billion of office, retail, logistics, industrial, data centre, residential and lodging properties, and that the group manages four Singapore-listed REITs and six private equity real estate

funds, which hold a diverse portfolio of assets in Asia Pacific, mainland Europe, the UK and the US.

### Riding the ‘Unicorns’

Choo reports that late last year, ADDX also gave investors access to the world’s first digitised unicorn fund for an investment size from USD20,000 via the ICHAM Unicorn Opportunity Fund, which Choo says was the first unicorn fund in the world to launch in digital securities format.

“That was a rare opportunity for investors to get exposure to a diversified portfolio of late-stage, highly valuable private unicorns in the US, Europe and Asia,” she elucidates. “It’s a four-year fund targeting a 20% return that invests in highly valuable private tech companies via the secondary market. The unicorn fund was listed for trading at the end of December and offered investors access at a minimum initial investment of USD20,000.”

She says that to be able to offer investors access to these large and exciting pre-IPO companies, such as perhaps Singapore’s Grab and the UK’s TransferWise, for example, is incredibly exciting.

“Digitising pre-IPO opportunities allows for liquidity before the IPO itself and allows for far more people to participate,” she comments. “It is very exciting for the investors and for us; so many investors are seeking greater diversification of opportunities.”

### 2020 – a year of successful experimentation

All of these opportunities were made available after earlier smaller offerings that ADDX had made as

it built its model and systems. In a February report on the ADDX site, Choo offered her updates on the platform and the progress towards democratising private capital market investing.

She highlights for example the redemption of ADDX's very first issuance, ICH Genesis, a short tenor 6-month bond, which matured and was redeemed on the platform in May 2020. "This marked the first ever fully digitised bond to be successfully issued, traded and redeemed on a regulated blockchain-based exchange," she explains. "This bond was collateralised by a bank guarantee and paid a 6% coupon."

### A variety of ideas

She also pointed to Eternal Glade, ADDX's first tokenised fund, which is a discretionary fund focused on Asia. "The fund started trading in March 2020 with a target return of 10%," she explains. "I am very pleased to note that by correctly anticipating the market recovery of China, Eternal Glade's fund manager has delivered a return of 18.5% since inception in March 2020."

And she referred to the Elite Logistics Trust issue in July 2020, bringing investors a truly forward-looking estate fund that is well-positioned to benefit from the spread of the work-from-home business model and the rise of e-commerce.

"Since their listing, the fund manager has introduced Macquarie Principal Finance as a strategic investor and partner and completed an additional acquisition in Spain in December 2020," she reports. "Elite announced a 10% annualised distribution yield for the period of June to October.

Subsequently, we listed a second tranche that would help finance that Spanish acquisition."

And in December last year, ADDX listed Ternary Cypress Fund, an absolute-return fund with a strategy focused on scarce, real assets and a target of growing invested capital by 300% in the next 3 to 5 years. "It invests in public securities of small and mid-cap companies with high barriers to entry, backed by real assets that are productive," she reports, adding that it had recently announced a December 2020 return of 14.8%."

### Fully regulated and playing the global game

Regulation, Choo explains, is very important to the business model. She says ADDX is armed with all the requisite Singapore licenses to allow the firm to issue securities, to provide custody and operate an exchange.

"We are not a cryptocurrency business that wants to remain outside the global financial system," she says. "We want our digitised assets to be the equivalent of the underlying security, and that is what we have achieved in the eyes of the MAS. It is vital, as we are democratising opportunities that in the world of private banking would require higher levels of net worth before you can buy in. The base-level offering of some of the global private banks for these opportunities is often USD250,000, but we can scale that down dramatically."

### Safety at the core

As to custody, she reports that customer accounts are with DBS and segregated. She explains



that when an investor presses the button to invest in the Mapletree Europe Fund tokens the DLT captures that, and their investment is safe, ring fenced from, for example, ADDX going bankrupt in the very worst-case scenario.

“That is all both regulated and assured, and therefore gives comfort to investors who are drawn to the great appeals of tokenisation to make inaccessible opportunities accessible and illiquid assets liquid and easily tradable,” she reports.

### Part of the ecosystem

Choo also sees ADDX as part of the financial markets’ ecosystem, not a competitor to those private banks and other banks and firms distributing private asset opportunities themselves. She reports that several external asset managers and brokerages have already onboarded with ADDX as they seek to boost their involvement in the private and alternative assets phenomenon that, to some considerable extent, is dominated by the biggest banks who have the personnel, expertise and infrastructure to handle the origination and/or selection and due diligence of the best opportunities.

“The ability to properly distribute private market assets in their underlying form only exists in the really large firms, who can afford the infrastructure,” she says. “But through ADDX, any of the distributors out there, any banks or brokerages or advisory firms can leverage our capabilities as a seamless part of the private assets ecosystem, as opposed to considering us as competition.” She adds that a shareholder, Tokai Tokyo of Japan, is, for example,

planning a product that they will list on the ADDX platform and redistribute into their investor base in Japan.

### Partners with the financial industry

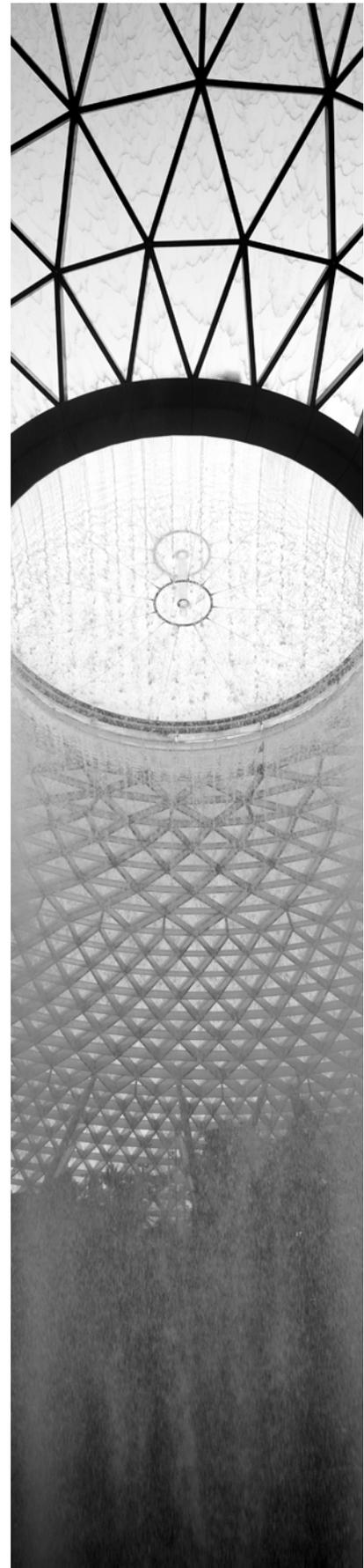
Choo adds that as costs inexorably rise in the global wealth management industry, many of the private banks are moving further and further up the wealth scale, leaving a growing vacuum in the USD2 million to USD20 million wealth bracket.

“And here we are offering, say, a good pre-IPO opportunity to investors at a minimum of perhaps USD10,000 where they would never had had the chance to participate,” she says, “and we see more investors being pushed out of the private bank, so we are offering a genuinely valuable product through a different form of access. And as to the private banks, we are indeed having a lot of conversations around how we can partner efficiently with them anyway, because for example we cannot offer leverage, margin trading, and other products or services that they can provide.”

### Partners with the funds

Choo also offers some insights into how ADDX works with partners such as Mapletree or Quantedge. “When we work with these partners, these funds, we can scale the individual commitments down to perhaps as low as USD10,000, or even below,” she explains. With Mapletree Europe Income Fund it was USD20,000. With a VC Fund, it was down to USD10,000.

“For the fund managers, they are pleased,” she reports, “as they do not have to manage perhaps 50 or 100 investors putting in USD10,000



each, they simply get the capital they were looking to raise, and we offer a solution to the investors wanting to gain access at modest levels. It is a win-win for everyone.”

Choo explains that ADDX does not push too far into the world of advisory and asset allocation theories with their clients. “We offer an alternative access to this alternative asset space, sized to fit many more individuals’ portfolios,” she says, “but we leave that responsibility to the individuals to decide how they are right-sizing

for their own portfolio. An investor can suddenly gain access to a hedge fund such as Quantedge at a manageable investment commitment, but it is up to them to decide how that fits into their overall portfolios.”

**A win-win for all**

Choo’s final word is to reiterate that ADDX aims to be a win-win for all parties to the equation. “There is immense value both for our investors and for the managers of the underlying funds,” she says. “To be honest, right now, such is

global liquidity and the scale of private asset opportunities and demand that we can offer only a modest increment to those seeking capital. However, we offer access to numerous investors who can participate in some great opportunities at a manageable scale for them. And digitisation is the buzzword right now, so many of these fund managers we can work with want to get involved in this process early on. After all, additional capital is additional capital. This model will grow very rapidly in the months and years ahead.” ■

