www.financialstandard.com.au
23 July 2018 | Volume 16 Number 14

WHEELS TURN IN CUSTODY

More governance, the emergence of crypto-custody and the changing nature of custody deals are among the big themes driving the future direction of the custody market. **Kanika Sood** reports.

01:
Nadia Schiavon
managing director
head of custody and fund services Australia and New Zealand
J.P. Morgan

02:
Robert Brown,
chief executive
Australian Custodial Services Association

03:
David Braga
chief executive
Australia and New Zealand
BNP Paribas Securities Services

Four days after markets closed for the financial year, AustralianSuper blasted media newsrooms across the country with its performance results. In hours, the $140 billion superannuation fund's investment results were on every major news website - it had returned 11.08%.

AustralianSuper's announcement capped off a period of frenzy in J.P. Morgan's Australian offices, where 454 employees in the investment bank's custody and funds administration business had been hard at work to turn out the results.

"When the market closed, it was about how quickly we can get those results out there. We as custodians need to deliver timely, accurate results," J.P. Morgan head of custody and funds services, Australia and New Zealand, Nadia Schiavon[01] says.

On June 30, the custodian's team set about calculating the superannuation behemoth's unit pricing, distributions and client statements. It was supported by offshore teams in Manila, Mumbai and Bengaluru – and June 30 was a Saturday – so J.P. Morgan employees worked the weekend to make AustralianSuper chief investment officer Mark Delaney's Wednesday announcement possible.

When Schiavon sat down for this interview with *Financial Standard*, the custodian was still working through its end of financial year to-do list. It is expected to go on until the end of August.

Welcome to the world of custody – where huge mandates are serviced by big teams for competitive fees. Technology changes are always knocking at its doors and regulatory changes are constantly on the horizon.

Custodians now have about $3.5 trillion of assets under custody for Australian investors – an increase of 4.9% over the 12 months to 31 December 2017. J.P. Morgan, BNP Paribas Securities Services and NAB Asset Servicing hold the top spots in terms of total assets under custody for Australian investors. Meanwhile, State Street and Citigroup break into the top ranks for non-Australian assets held for Australian investors.

The custody incumbents are also members of an industry body, the Australian Custodial Services Association (ACSA). To have a seat on the board, you must be employed at a custodian. The board meets once a month to discuss the issues facing the industry and regularly consults with the regulators.

Its chief executive Robert Brown[02] has previously sat on the board for three different employers. He describes the body as "pre-competition" and steers clear of commenting on individual business.

His role gives him a bird's-eye view of the custody industry. And hence, he is perhaps the best person to ask what has changed in the last year.

"What's new is some comfort and insight into trends that were established last year. There is clarity around the impact of new technologies including things like distributed ledger technology or blockchain to many areas of the industry," Brown says.

Investment in technology

"Superficially, custody looks the same – the assets are the same, the markets are the same," BNP Paribas Securities Services chief executive Australia and New Zealand, David Braga[03] says.

"I think of what we are doing as being a smartphone provider. We might be Apple, we might be Samsung, we might be a Windows phone. We are a platform within which we support all these applications."

Braga acknowledges the phone analogy breaks down because the jump from clunky phones to smartphones was quick. In the custody industry it will be slower, owing to its width and complexity.

BNP Paribas Securities Services has scored two technology wins this year that add app-like value beyond its custody platform. It is beta testing an artificial intelligence (AI) program that uses past trading patterns to predict when a trade is likely to fail.

SmartChaser can identify the subset of trades that are most in danger of failing, suggest the reasons why, and propose the actions needed to rescue them – thereby ensuring middle-office teams can allocate attention where it is most needed.

"For example, you might have a particular broker where you know that Friday afternoons are not the best time for them. So if a trade comes Friday afternoon, it is more likely to fail than Monday afternoon," Braga says.

SmartChaser predicts the time these trades will take to match and suggests smart email "chasers" to counterparties needed to address the structural or system-related issues that typically cause delays, speeding up the resolution.

> *I think of what we are doing as being a smartphone provider.*
> **David Braga**

"In the past we just had to wait and see if they fail and then clean the fails," Braga says.

BNP Paribas Securities Services, which runs a team of 430 people in Australia and New Zealand, has also become the first custodian in Australia to receive corporate actions direct from the ASX as soon as they are released. This came after making tweaks in its custody platform and robotics.

It can do the same the other way around – receiving messages from clients quicker – so as to give them the widest possible window to make a decision.

At many custodians, robotics has taken over at least a part of the manual tasks.

"The use of robotics process automation, which generally has a short implementation period, means faster processing times, improved accuracy, enhanced reporting and infinite ability to scale," State Street Asia Pacific managing director, product management, Paul Toepfer[04] says.

Over at J.P. Morgan, about 16 of their 20 robots do manual, repetitive tasks.

"We have found the robots very successful. We always have an individual supplementing the process with a control check," Schiavon says.

J.P. Morgan also leverages technology from markets-based product Athena to its custody and funds administration business. HSBC too is working on a new platform called OneCustody, alongside working to develop APIs to give clients increased access to data.

Blockchain, blockchain, where are you?

In June, the ASX provided day one business requirements for the long-awaited CHESS replacement. ACSA provided a response, advocating its features.

"The stakeholders are fairly broad for something like the stock exchange, it goes from retail right through to large fund managers, superannuation funds and offshore institutions Different stakeholders have different needs. Particularly for the institutions, they typically access

04:
Paul Toepfer
managing director, product management Asia Pacific, State Street

05:
Peter Snodgrass
head of direct custody and clearing HSBC Australia

06:
Angelo Calvitto
managing director and country executive Northern Trust Australia

settlements of the market through custodians," Brown says.

Among ACSA's unpublished submission were five suggestions. Collectively, the custodians asked the ASX to focus on identifying improved functionality and higher levels of automation, particularly in terms of:

- Flexible account structures, including retaining the efficiency of omnibus holding accounts;
- Settlement processing, including a non-batch delivery versus payment settlement facility, more flexible tolerance levels and adding the linking of bilateral settlements to Day 1 scope;
- Improved efficiency of the corporate actions life cycle, with a focus on providing a mechanism to allow electronic elections and acceptance of offers, electronic processing of dividend claims and expanding the number of events where company announcements are sent electronically;
- Innovation in data storage and access, especially to facilitate additional value adding services by custodians to their clients; and
- A significant range of other technical and practical improvements drawn from ACSA members' deep understanding of post-trade services.

Custodians may choose to connect to the ASX's new DLT-based replacement clearing and settlement system with a node.

This would give them the ability to extend straight through processing, eliminate the need to reconcile a participant's DLT node data with the ASX's, and develop software applications directly on the node using smart-contract language called the Digital Asset Modelling Language (DAML) among other features.

Meanwhile at HSBC Australia, head of direct custody and clearing Peter Snodgrass[05] has already started laying the foundations for the blockchain infrastructure when it goes live in 2020.

"We have already begun analysis in what the node infrastructure will look like. There is a cost but it is the next step in technology", he says.

HSBC expects it will have to remap at least some of its data and develop interfaces for the node application."CHESS is an end of life system and both the ASX and market needed change," Schiavon says.

"No one has any announcements of sorts right now. It is still very early days.

"We can come to the table more informed, with our investment in Digital Asset, the strategic partnerships, and our J.P. Blockchain Centre of Excellence."

ACSA's Brown says there is no rush for institutional managers.

"Large super fund managers deal with other people's money. They are fiduciaries. While they may be interested, they probably won't be first movers in [blockchain] spaces like cryptocurrencies for example," Brown says.

"But they are certainly interested in the potential for the technology that would apply to their administration services so that they can do their work more efficiently to connect with either markets or customers."

Despite the custody industry's push toward creating value-add services from data, all custody chiefs interviewed said they hire individuals with strong skills, and subject area expertise instead of computer science expertise.

"Many members are global, and they may have investments in their data scientists in other places. Context and interpretation still matters. You can have a tool but you have to have the local nuance to apply it," Brown says.

Trends in custody fees

"The fees work in a very transparent process per portfolio. Usually, custodians charge a basis point fee for safekeeping the assets," Northern Trust managing director and country executive Angelo Calvitto[06] says.

Northern Trust's client base has a crop of government funds, including the Future Fund, QIC, Commonwealth Superannuation Corporation as well as Crestone Wealth Management and Mercer.

Working on top of the safekeeping fees can be transaction fees, performance fees, unit pricing fees – all usually low.

"The general trend in custody fees has been of compression. But new products can result in new fees. For example the level of reporting – daily, intraday, monthly and annual reporting – you require would affect the fee," Calvitto says.

ESG reporting broke onto the scene about two years ago. BNP Paribas now sources Reuters data to classify assets and provide reporting tools to portfolio managers, including client UniSuper, so they can make decisions about how they are placed. But how big a revenue stream ESG reporting is, the custodian wouldn't say.

J.P. Morgan's Schiavon says it had held gold bullion and water titles in custody but is not currently doing crypto custody. Northern Trust doesn't hold crypto assets in custody but will add a line in its reporting to record it.

What a custody client wants

Fidante Partners general manager for Australia, Nick Hamilton[08], oversees the operations of 16 boutique managers, which together run 40 investment strategies.

All have the same custodian – it's been Citi for the last five years while the middle and back office is completed by Fidante in-house.

"We are looking for [custody] partners who are able to respond quickly and can meet the increased requirements for reporting different strategies, in different jurisdictions," Hamilton says.

Fidante's middle and back-office are in contact with their client's custodian daily.

Under Hamilton's watch Avenir Capital joined the Fidante umbrella. The manager threshold tested Avenir's systems and bought them under its own custodian.

"We are the responsible entity for the strategy, we need to have very clear line of sight in underlying services to ensure it is meeting client objectives and the PDS," Hamilton says.

Context and interpretation still matters. You can have a tool but you have to have the local nuance to apply it.
Robert Brown

The custody lawyers

Ask a fund when it started with its custodian and there's a good chance they'll struggle to come up with the exact year – similar to how one might struggle to remember when they first met their partner. In that way, custody is a little like marriage – and superannuation lawyers are the priests solemnising the union.

New custody agreements can take months to draft. The final "custody package" can run into hundreds of pages, including the main contract, the service level agreements which alone can be 100 pages and a slimmer fee schedule of five to 10 pages.

On top of it, you could have further related contracts, deeds and letters that require legal review, negotiation, amendment and settlement, says Luke Hooper[07], special counsel at law firm Mills Oakley.

Hooper has acted for several industry and government funds in drafting, reviewing, negotiating and amending custody agreements.

From his vantage point during his time in the industry, Hooper has seen superannuation funds get bigger and more sophisticated so they understand better what they need "across the board."

They have also ventured into new asset classes, investment vehicles and markets. The result? Custody arrangements have packed on size and complexity.

"The responsibility of getting the custody arrangement to cover that [diversification] is immense – both from the super fund's perspective and from the custodian's – so often negotiations are drilling down to the finer points such as how a bank on the other side of the world processes cash and how that is reconciled on certain accounts," Hooper says.

"Adding to the fact that a custody agreement is one of the largest arrangements a trustee will enter into, and the costs and time it takes to set up a new custody arrangement (for example, the operational due diligence side) plus the time lag to get optimal performance and that solid relationship, I have seen the termination provisions in some custody agreements extend beyond a simple five-year initial term basis."

Yet long-term custodial agreements could have a downside, he warns.

"There are some funds who appear to have had the same arrangement locked in with the same custodian for considerable periods of time like 15 to 20 years. I would recommend that these funds should consider whether their agreements have been updated or otherwise have sufficient flexibility in them to provide the product they currently require," Hooper adds.

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07:
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Mills Oakley

08:
Nick Hamilton
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Australia
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09:
Jonathan Steffanoni
principal consultant,
legal and risk
QMV Solutions

Waiting on regulation

What sort of news do custodians read? "Regulation," Northern Trust's Calvitto says without missing a beat.

The custody industry's width puts it in a catchment area of many regulatory changes. A few of these resurface over and again in conversations with custody chiefs.

Most recently, the Productivity Commission is proposing that super funds should conduct formal due diligence of outsourcing arrangements at least every three years before providing a copy of the assessment to APRA.

The aim of the triannual due diligence is to ensure the arrangements provide value for money.

"I think this recommendation is highly impractical, but if this were to go ahead, questions about short-termism in custody arrangements, fees and costs, and ultimately how risk is balanced could be impacted would arise," Hooper says.

From the funds management perspective there's the regulatory change around corporate collective investment vehicles (CCIVs) aimed at easing offshore investors' access to Australian funds.

"There is a very advanced exposure draft out there at the moment. The regulation hasn't been finalised but is being developed as we speak," ACSA's Brown says.

The industry body has provided input to the regulators and Treasury about how the custody industry collectively views overseas fund regimes..

"The intent for that policy to be effective, ideally it shouldn't add on a whole bunch of new costs to the industry. And secondly, we should ideally make these funds a little more harmonious with the models overseas so that they are not a shock an inbound investor," he says.

One example of regulation affecting managed funds is the Asia Funds Regional Passport, which was recently legislated.

"Problem with passporting a trust based fund out of Australia is that a number of the target markets don't really use a trust based structure," Brown says.

The other benefit of CCIVs is they allow for a different treatment of tax than a trust.

"A concept that not many understand in the world is the present entitlement. It basically says, if I am a fund and I get to the end of the present tax year and haven't distributed all my income and realised gains to members, then I have to pay tax as a trust," he adds.

"It creates all these mechanical issues of constructing it that way and potentially paying out money to the investors when they'd rather not get paid out, they've invested money for growth."

ACSA is joined by the Financial Services Council, alongside whom the custodian body sometimes works with, in calling for a simpler tax regime for Asia Passport Regional Funds.

Also on Brown's mind is the "tail-end" of the Attribution Managed Investment Trust (AMIT) regime where he thinks there are still some residual steps of implementation remaining.

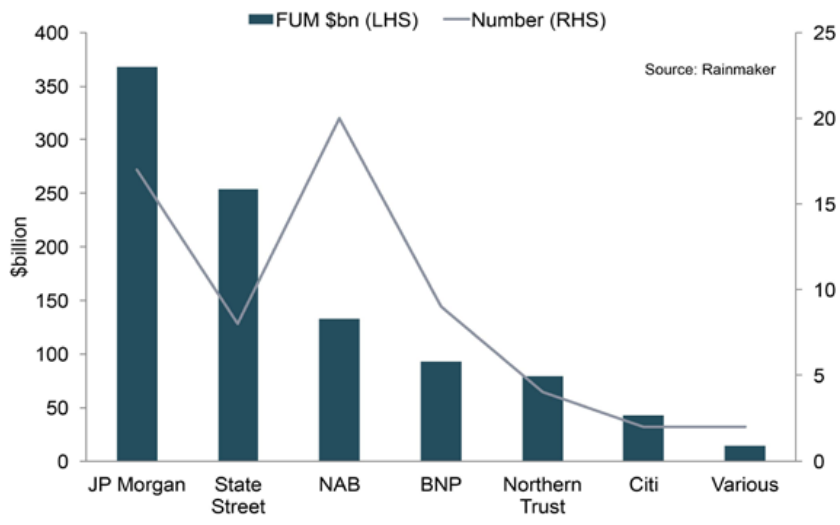
On the horizon is an ASIC initiative of recurrent data collection. The overall cost and fragmented approach in collecting regulatory data is another significant issue, Brown says.

"So rather than coming up with an issue de jour, they want to on a regular basis, monthly say, collect data from regulated entities," Brown says.

Managed funds is an area of focus for these changes with interest in applying a pilot program of data collection to the area. ACSA is currently working alongside other peak bodies to encourage a uniform approach across regulators.

"We need to ensure that data is ideally collected once and not multiple times and it's definition is consistent across regulators so they wouldn't classify the data different ways," Brown says.

Figure 1. Custodians servicing NFP super funds, 2018



We need to have very clear line of sight in underlying services to ensure it is meeting client objectives and the PDS.
Nick Hamilton

Custody at the Royal Commission

Could custodians have a role to play when superannuation funds go up before Commissioner Kenneth Hayne in August? After all, one of custodians' many jobs is to provide clients with reporting data – and this could be asked for by the Royal Commission.

QMV Solutions principal consultant, legal and risk, Jonathan Steffanoni[09] says it's unlikely.

"The Royal Commission is more likely to look at consumer-facing issues facing the superannuation funds," Steffanoni says.

"However, the Commission may look at administrative error and remediation within the superannuation industry and some third-party arrangements may be discussed."

State Street head of sector solutions Australia and New Zealand, Sinclair Scholfield says: "The Royal Commission may result in recommended changes to regulation for the insurance, asset management and superannuation industries, amongst others. We anticipate opportunities to work with industry constituents to understand any changes and implement required asset servicing solutions in Australia."

Super fund mergers

When two or more superannuation funds merge, whose custodian stays and whose gets shown the door?

APRA-regulated super funds are expected to half from 238 now to about 108 in the next decade, according to KPMG's latest Super Insights Report.

KPMG director of asset and wealth services Peter Bentley states the bitter obvious – custodians like super funds are very much in a business of scale (see Figure 1).

"It is possible that super fund mergers could have a flow-on effect on the custody industry," he says.

"Larger custodians could gain dominance, especially with their bigger IT systems and continuation of trend of custody clients asking for value added services like data management and risk management."

An early example of this may have come to play in the July 6 announcement that Prime Super and Combined Super were considering merger plans. Combined Super may come on board with Prime's custodian.

On the bright side, consolidation could also give superannuation funds more bargaining power. In fact, Mills Oakley's Hooper thinks the market can dictate what may be negotiated into a custody agreement, more so than regulatory change.

"As more and more custodians enter the market, and others lose their super fund contracts due to consolidation, [larger] super funds probably will find themselves in the driver's seat a lot more and therefore may expect higher levels of service or greater protections against risk." **FS**

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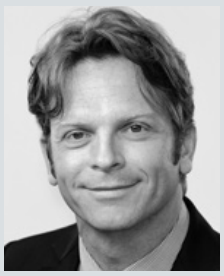

01:
Nicolas Le Clech
head of product and transformation
BNP Paribas Securities Services Australia & New Zealand

Technology – Shaping the way we engage

The global financial services industry is undergoing a period of rapid and unprecedented transformation as globalisation and technology dramatically change the industry landscape. Cost and competitive pressures, sustainability, cultural diversity, rapid regulatory change and the evolution of distributed models are driving global firms to invest significantly in technology to develop a sustainable advantage.

Global custodians like BNP Paribas Securities Services are historically seen as the steady foundation in the investment industry hierarchy with often highly commoditised, process driven services, but increasingly we are at the forefront of the technological evolution as keepers of vast pools of data.

We have been an early adopter and innovators of digital technology. In 2017, we committed more than €3 billion to a 2020 digital transformation strategy. By placing digital at the heart of our business model we are able to collaborate and co-create with clients, regulators and industry, and investing in promising tech startup. By adapting our approach, we are able to deliver innovative and sustainable solutions that can transform the global value chain.

With dynamic shifts occurring in the industry, we are working closely with clients, **collaborating with fintech** to identify and 'co-create' innovative technology solutions to enhance clients experience.

We seek partnerships with innovative firms through the BNP Paribas FinTech & Corporate Accelerator program. Through this program we took an equity stake in fintech startup, Fortia Financial Solutions in 2016.

Fortia develops software to assist the managed fund industry meet compliance obligations and manage large volumes of data using artificial intelligence, machine learning and business process monitoring. Working with Fortia and leveraging BNP Paribas' expertise and knowledge of the market, a new generation investment compliance platform has been developed.

The Fortia platform assists asset managers and asset owners more effectively and efficiently monitor not only the investment compliance of their funds, but also local and international regulatory requirements such as Anti-Money Laundering (AML) and Know Your Client (KYC) obligations. The Fortia platform is now being deployed in BNP Paribas' depositary business, assisting asset manager clients enhance internal controls, improve operational efficiency and access advanced data analytics and scenario based simulations.

Collaboration and co-creation is challenging the old product design and development model that historically delivered under a push rather than a pull strategy which can mean new products and services are not entirely aligned with client requirements and specifications. Co-creation is about engaging and collaborating with stakeholders to harness their creativity in the process of product development. We actively engage with clients and other actors in the supply chain to develop new products and services through the co-creation process.

Since 2015, we have organised the BNP Paribas International Hackathon, a close collaborative partnership between talented startups and BNP Paribas. The hackathons places the creativity, agility and resourcefulness of tech entrepreneurs with the insights and skills of BNP Paribas experts to create the best solutions. The emergence of the popularity of the BNP Paribas hackathons is a testament to the power of co-creation ultimately developing innovating products and solutions in collaboration with partners.

Leveraging new technology such as artificial intelligence (AI) and natural language processing (NLP) open a vast array of potential applications in the financial services sector. For example, the application of AI in post-trade processes can deliver intelligent automation of tasks that are typically manual and delivered by multiple systems. AI-based software applications can process multiple sources of information, analyse historical data to predict future outcomes, and ultimately identify potential errors or risks suggesting appropriate corrective actions.

NLP, a branch of AI that enables computers to understand, process and generate language is another area with significant potential to improve operational efficiency. Asset servicing firms are increasingly using NLP to analyse contracts, KYC documents and regulatory reporting to ensure documents are valid and have all information required to meet legal obligations.

We partnered with an asset manager and developed a prototype that uses NLP automation processes to review and extract information from thousands of documents. This automation process significantly reduces the time taken to complete the tasks generating efficiency and productivity improvements further enhancing the client experience.

The quote

Custodians are at the forefront of the technological evolution.

Ultimately, in a highly competitive financial services industry, **organisational culture** has been a key source of our competitive advantage. Our highly trained and culturally diverse workforce, supported and empowered by the leadership has translated into a higher quality of service delivery to institutional clients. In addition, workforce diversity combined with the commitment to develop a learning organisation leads to a highly skilled, workforce capable of embracing technological change and delivering innovative solutions for clients and stakeholders.

Rapid technological change in the financial services industry demands that suppliers adapt their business models to deliver creative and innovative solutions to an increasingly digitised consumer. We are at the forefront of this revolution and by building an organisational culture and technological ecosystem that fosters collaboration, innovation and the development of emerging technologies, we can continue to deliver cutting edge solutions to enhance the clients experience. **FS**

For more technology insights from BNP Paribas Securities Services, visit https://securities.bnpparibas.com/insights.html