

2022 ASX Limited Half-Year Results

Dominic Stevens, Managing Director and CEO Gillian Larkins, Chief Financial Officer

Presentation and Speaking Notes

10 February 2022

(Check against delivery)



Good morning and welcome to ASX's financial results briefing for the six-month period ending 31 December 2021 (1H22).

Thank you for taking part in this virtual presentation. I hope you are safe and well from wherever you are joining us.

My name is Dominic Stevens, Managing Director and CEO of ASX. Presenting with me is ASX's CFO Gillian Larkins.

To begin, I would like to acknowledge that I am speaking on the land of the Gadigal People – I pay my respects to elders past, present and emerging.

Before I get to our financial results, as many of you will already be aware – today I announced that I am beginning the process of retiring from my role as CEO of ASX.

I am now in my ninth year at ASX and my sixth as CEO, having been a non-executive director for three years before that. The last six years in particular have been a tremendous journey of transformation for ASX and the team. I am incredibly proud of what we have accomplished for our customers, staff, shareholders and our industry.

When discussing the future and the best time to transition, the Chairman and I agreed that after the completion of CHESS replacement, ASX will be in a position to leverage the significant foundational work put in place. This new phase for the company, which would take us to the back end of this decade, would not be something I could commit to. So, it was important to begin the transition soon, such that a new CEO is able to be brought up to speed as these projects completed. This will enable ASX to hit the ground running as it enters its next strategic phase in 2023, under new leadership and with long-term commitment.



The work the team has done, and the investment the company has made, have put ASX in the best position to maintain its place as a top 10 global exchange and the pre-eminent financial market intermediary in Australia. It has been a privilege to serve as CEO, and I am extremely proud of the company's achievements.

ASX is in a strong financial and operational position. And with the transformation of critical systems, platforms and infrastructure complete or nearing completion, the company is optimally-placed to go from strength to strength.

In the meantime, I remain fully committed to the role and will continue to lead the company and support our customers and other stakeholders to ensure a smooth transition to the new executive leader.



I will now take you through our FY22 half-year results, beginning with an overview of the results, and the market and operational drivers of the last six months. Gill will then take you through the financial detail. I'll then return with an update on our strategic progress, comments around outlook, provide a brief summary and then take questions.



So, let's begin with the financials on slide 4.



| | 1H22 | Change on pcp | % change on pcp. | |
|---------------------|----------|---------------|---------------------|--|
| Operating revenue | \$501.4m | \$30.9m | 6.6% | Strong results for listings and equities trading as well as greater demand for technology and data, partly offset by lower futures volumes |
| Total expenses | \$163.0m | (\$11.6m) | (7.6%) | Continued investment in initiatives coupled with growth in market activity |
| EBIT | \$338.4m | \$19.3m | 6,0% | Strong result, reflecting strength of diversified business |
| Net interest income | \$21.7m | (\$5.0m) | (18.9%) | Reflective of low interest rate environment |
| NPAT | \$250.3m | \$8.5m | 3.5%r | Solid operating performance |
| EPS | 129.3cps | 4.4cps | 3.5% | Reliable EPS profile. |
| DPS | 116.4cps | 4.0cps | 3.5% | 90% dividend payout policy maintained |

In the first half of FY22, ASX delivered a strong result. Our revenue increased by \$30.9 million to \$501.4 million, a healthy increase of 6.6%. This is particularly pleasing, as our largest individual business area – futures – posted lower revenues due to the ongoing effects of the Reserve Bank policy settings we discussed at the FY21 full-year results. In addition, our Listings business, which capitalises and amortises IPO and secondary fees, had an extremely strong half, receiving \$31.4 million more in cash fees than we recognised in our P&L.

This result underlines the benefits of our diversified business model and its ability to deliver consistent results overall through different cycles.

Our growth not only reflects a strong performance in Listings, but also our Securities and Payments, and our Technology and Data businesses. This was offset by a small drop in Markets revenues, where the lower futures revenues I referred to earlier were balanced by growth in our cash equity market business.

Total expenses were up \$11.6 million over the period to \$163.0 million - an increase of 7.6% reflecting continued investment in initiatives coupled with growth in market activity. Gill will address this in detail later in the presentation.

This leaves our EBIT 6.0% higher at \$338.4 million. This was an increase of \$19.3 million and was a record EBIT performance for a half.

The RBA's policy settings also continued to impact our interest income. Whilst net interest income was actually up on the prior half, it was lower than the prior corresponding period (pcp) due to the fact that rates and margins were still falling from higher levels in the pcp. With interest rates close to zero and average margins earned on collateral balances stabilising at lower levels, interest income dropped 19%, or by \$5 million, to \$21.7 million versus pcp.

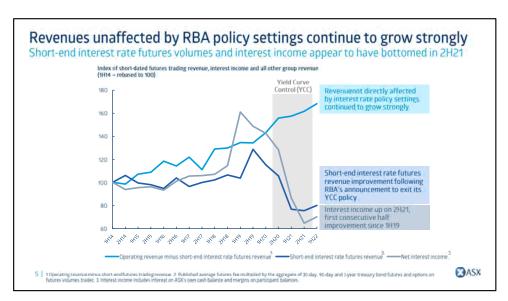
This sees our NPAT higher by 3.5% at \$250.3 million.

EPS also increased 3.5% to 129.3 cents per share.

ASX maintains its policy of paying out 90% of underlying earnings, which means the interim dividend for 1H22 will be 116.4 cents per share fully franked, also up 3.5%.

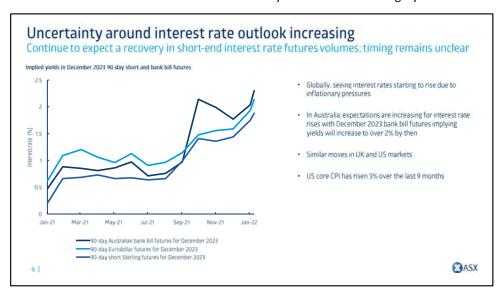
I will now turn to the key drivers of our results in this half.





1H22 saw the busy conditions of FY21 continue to support strong revenue growth across the company, except for the two areas directly impacted by recent monetary policy settings. I will address these in a moment. Equity markets remained buoyant, leading to strong demand for trading, clearing and settlement services. Listings was particularly strong this half, and demand for data and technical services has continued to maintain pleasing rates of growth. This is evidenced on slide 5 by the light blue line in the chart, which shows the consistent healthy growth of the parts of our business that were not impacted.

Since the early days of the pandemic and the introduction of a zero interest rate policy, including Yield Curve Control, trading volumes of bank bill and 3-year bond futures have fallen, and the returns on our own cash and participant collateral have also reduced. Encouragingly, the trading in short-end futures and the interest income line have stabilised, and have risen a touch in the last six months. This can be seen by the darker blue and grey lines in the chart.

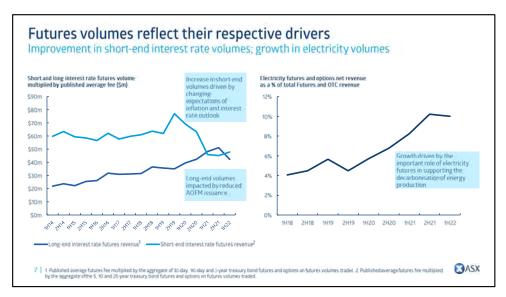


Even more important is the significant change in the local and global outlook for monetary policy. Across the world, there have been material changes in expectations for short-term interest rates due to increases in both headline and underlying inflation rates.

Markets are beginning to expect a normalisation of interest rates, as evidenced by significant trading in contracts pricing the level of short-term rates in future years. If these market predictions eventuate, we expect the trading volume of short-term rates contracts to increase and our interest income line to recover somewhat. Over the last six months, we



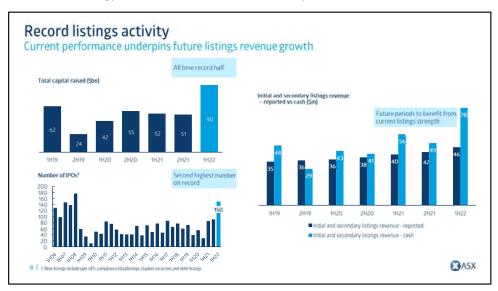
have also seen bill futures volumes increase by 73% – albeit off a low base – reflecting depressed trading levels in the pcp.



Slide 7 shows the changing nature of the futures business over the last few years. Strong growth in long-term rate futures versus the slowdown in short-term rate futures. In the last year, there was a bottoming out of this slowdown, as we see signs of more volatility at the short-end of the curve.

After very strong growth over the past four halves, 10-year futures volumes have pulled back somewhat, reflecting lower bond issuance and the 'risk off' nature of the market over the last six months. However, in the medium-term, the trading volume trend is clear, particularly given longer term trends in fixed income issuance.

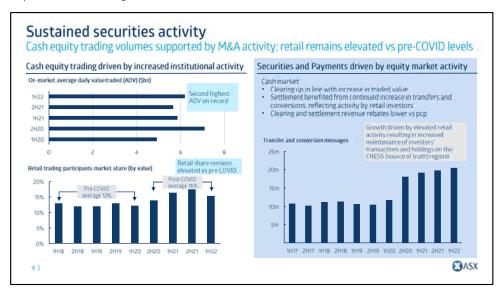
Our electricity derivatives business continued to grow, with a further 14% increase over the pcp. As can be seen on the chart, this business has increased from less than 5% of our revenue to now over 10%, and is growing at a five-year CAGR of over 15%. We see a bright future for this business, as electricity derivatives are playing an important role in supporting the transition to renewable energy and decarbonisation more broadly.



The standout performer for the last half, driven by strong demand for equity capital market transactions, was the record capital raised in the listings market. Total capital raised was circa 50% higher than any other half in the last decade; even larger than the recapitalisation of the market post the GFC. The number of IPOs was the second highest on record, beaten only by the boom in late 2007.



Whilst total capital raised was up 74% on pcp, our IPO and secondary listing revenue was only up 14%. This reflects the accounting methodology to amortise IPO and secondary listings fees over three to five years, which came into effect in FY19. Importantly, whilst we recognise \$46.2 million of amortised revenue for the half, the business received cash fees of \$77.6 million, the majority of which will be recognised in future periods. This gives us confidence about the consistency and quantum of earnings into the future.



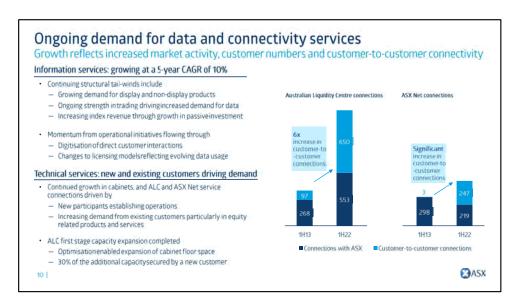
The equity market overall continued to exhibit high volumes during the past six months, with ASX on-market daily value growing close to 6% on the pcp. Volumes in the half were second only to the record 2H20, when the beginning of the pandemic caused extreme volatility.

Institutional trading value grew by almost 10% over the pcp, while retail volumes continued to be strong. Market volatility during the first part of the pandemic caused volumes in the lit market to pick up significantly with more price discovery happening intraday. This effect unwound somewhat over the last 12 months, with auctions activity growing 19% over pcp. Volumes have continued to be strong into calendar 2022.

These volumes flowed on to our clearing and settlement businesses, with higher cleared volumes and greater usage of our broad range of subregister services, coupled with lower rebate levels all leading to higher revenues.

While Austraclear saw solid issuance, turnover was a touch lower, exhibiting a similar trend to the quieter bond futures market. These results also include the impact from our investment in Sympli, our property e-Settlement joint venture with InfoTrack.

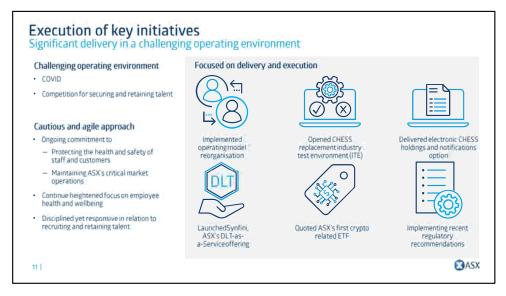




Finally, our Technology and Data business achieved a pleasing increase in revenue. On the data side there was consistent growth across almost all parts of the business leading to a more than 12.9% increase on the pcp. Growth was also strong in technical services, with demand from new participants establishing their operations and increased demand from existing players. Over the last six months, we have expanded our ALC floor space and the number of cabinets available to customers. About 30% of this new space was snapped up immediately and we have a pipeline we are working with to fill the remaining space.

Bringing in new customers and expanding existing footprints have a leveraged effect within the technical services business. There are 139 customers in the ALC, this expands out into the use of 369 cabinets, accessing over 1,200 service connections (both ASX and non-ASX services hosted by ASX). We also have 104 customers connected through ASX Net communications infrastructure, where they access 466 service feeds.

The most interesting part of this business is the growth in customer-to-customer connections since the ALC was put into service. The chart on slide 10 shows the significant growth in these connections at the ALC and also through customers who connect via ASX Net, our communications network. These connectivity benefits create operational efficiencies for our customers.



As a final point on business drivers, I want to address the current challenging operating environment. Over the last six to nine months, the business environment has been adversely effected by the Delta lockdown and then the Omicron



wave. At the same time, there has been a significant pick-up in demand for skilled employees in technology, risk and compliance, leading to challenges in delivering BAU services and project execution.

There is limited inward movement from offshore to ease these pressures and the Omicron wave has resulted in more employee sick leave and isolation days. ASX is prudently navigating this environment, with a primary focus on protecting the health and safety of staff and customers, and maintaining our critical market operations.

We keep a close watch on developments and remain flexible so as to adapt to changing circumstances.

Notwithstanding this, ASX has continued to deliver a range of initiatives and I am pleased to note the significant achievements of the team over the last six months.

Not only have we reorganised our operating model, but we have:

- opened the CHESS industry test environment
- provided electronic statements for CHESS users
- launched Synfini, our 'DLT as a service' offering
- quoted our first crypto-based ETF
- and we are working through our programs to address regulatory recommendations.

So, in conclusion, in addition to a solid financial half, ASX has delivered operationally in a difficult environment.

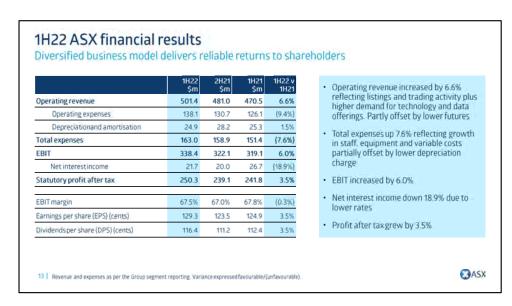
I will now hand over to Gill to take you through the financials.



Thanks Dom, and good morning.

The ASX result for the first half of 2022 (1H22) is notable for the heightened capital market activity seen in both our Listings and issuer services offerings. Despite the continuation of the low yield environment, introduced through the course of the second half of 2020, it was pleasing to see elevated cash equities trading from the prior comparative period and an increase in total ASX on-market value traded, which both assisted our Markets and our Securities and Payments business results for 1H22.

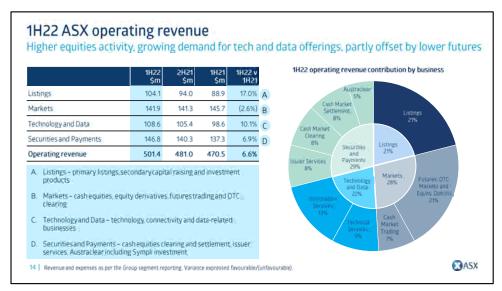




Turning to the financials, and starting with the top line, revenue for the half is up 6.6% from 1H21, with capital market activity being the largest contributor, followed closely by equities trading, and higher demand for ASX's technology and data offering.

1H22 saw total expenses for the Group increase by 7.6%, with staff costs the largest contributor due to wage growth and the inclusion of restructure costs from the new operating model installed at the start of the 2022 financial year. The impact was lessened by the lower depreciation and amortisation charge for the half, due to the roll-off of fully amortised technology systems.

Moving through the table, the interest income line shows an 18.9% decline from the previous half, as expected. This fall was largely through decreased earnings rates. However, the stronger revenue from capital markets and tech offerings in the half more than offset the interest income decline and led to an increase in both underlying and statutory profit after tax by 3.5%. This translated into the same increase in EPS, with the Board declaring a dividend of 116.4 cents per share for the half. Now to the individual performance of our business lines.

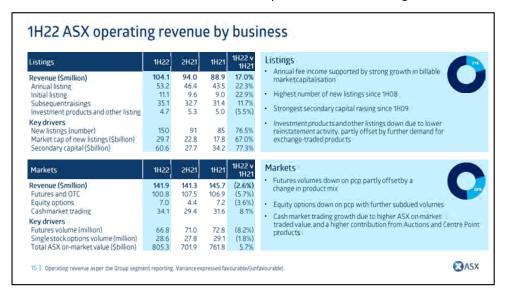


ASX undertook an operating model review in early 2021 and introduced a structure at the start of this financial year that better aligns business responsibilities and enhances our focus on customers. ASX now has four businesses:



Listings, Markets, Technology and Data, and Securities and Payments, with all comparatives restated as of 1H22. Further information on the restatement is disclosed in the 18 November market announcement last year, which is also on our website.

This slide shows the 6.6% overall ASX revenue increase is composed of: Listings increasing by 17% as a result of higher annual fee income, elevated new listings and strong secondary raisings. Markets decreasing by 2.6% reflecting subdued futures volumes partly offset by higher cash market trading activity. Solid demand for our Technology and Data products secured a 10.1% increase on the prior half, with the higher cash market trading activity predominantly supporting the 6.9% revenue increase in the Securities and Payments business. Looking at this in more detail.



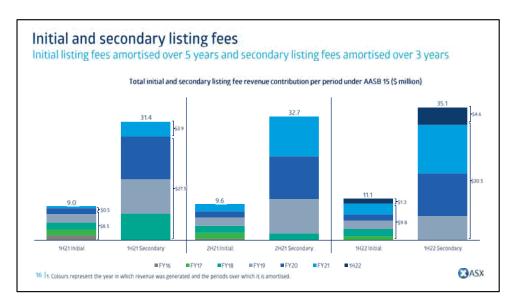
Over half of the revenue made in the Listings business for 1H22 is through the annual fee income that we charge issuers based on their market capitalisation as of May 2021. Higher overall market capitalisation at this date than in the prior years, coupled with the strong number of new company listings, contributed to a 22.3% increase in annual listings revenue for 1H22.

As already highlighted, the number of new listings increased by 76.5% to 150, with the total number of listings increasing by 4.5% to 2,299 entities.

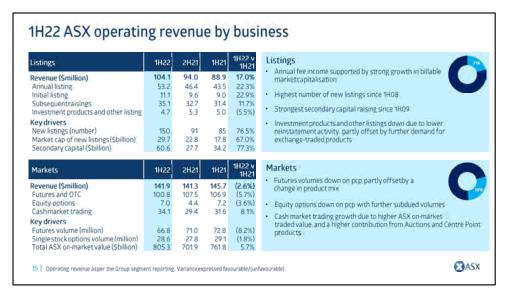
Initial capital raised increased by 67% from 1H21 to \$29.7 billion, with secondary capital raisings increasing by 77.3% to \$60.6 billion, both of which assisted the strong cash inflow for the half.

The requirement to amortise initial capital raisings over five years and secondary capital raisings over three years results in the strong listings activity being less noticeable at the revenue line. On the following slide, you can see the amortised 1H22 contributions in the dark blue box to the right of the chart, and the profile of the expected revenue booking for the next few halves.





Moving now to the Markets business.

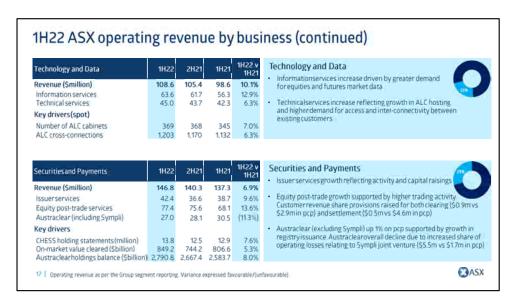


Our Markets business has seen a notable decline in futures volumes since the end of March 2020 when we entered the current period of low interest rates. Futures volumes are down 8.2% from 1H21 due to the material decline in 3 and 10-year bonds, partially offset by notable growth in 90-day bank bills, amid speculation about inflationary pressures and timing of RBA policy changes. The impact of this on the revenue line is not as severe, due to the continued strong growth in the higher margin electricity futures business, which has a higher average fee versus the lower fee for interest rates futures. As we shift closer to interest rate rises, the expected volatility should assist our futures income in the medium-term.

Equity options revenue decreased by 3.6% from 1H21. Equity options volumes continue to decline, with single stock options volume down 1.8% on the same period last year and index options down 9.4% due to a fall in institutional activity linked to lower market volatility.

The 8.1% growth in cash market trading over the last half has been underpinned by the reasonably strong daily average turnover, particularly in the second quarter, with growth seen in our premium products - that being 18.9% in Auctions and 15.7% in Centre Point - leading to higher margins overall.





Information services saw a strong half, with growth across its product suite, including increased market data usage, increased audit fee revenue and price increases effective in 2H21, which flowed into this half's financial results. All of this activity contributed to a 12.9% increase for 1H22.

Technical services also increased, with revenue coming in 6.3% more than last half. The business saw an increase in demand for cabinets by 7%. As well as a pick-up in demand for ALC service connections and feeds by clients. Finally, moving onto our fourth business – Securities and Payments.

Through the operating model redesign, the previously named Equity Post-Trade business changed to Securities and Payments. It now includes both the Austraclear business and our share in the performance of the Sympli joint venture.

This half saw the strong level of corporate actions activity give an immediate benefit to issuer services revenue by 9.6%. This was through both the higher trading activity and the Primary Market Facilitation Fees growth in line with the increased initial and secondary listings.

Equity post-trade services saw an increase in both cash market clearing and settlement revenue, contributing to an overall 13.6% rise. This reflects the increase of 5.3% in on-market value cleared, increase in message volume and less rebates owed this half by just over \$6 million.

Austraclear, excluding Sympli, saw higher registry activity, with revenue coming in 1% more than last year and in line with 2H21. The overall average collateral balance did decline from \$27.9 billion to \$14.3 billion, as a direct consequence of the changes in RBA monetary policy and the resultant excess liquidity, which lowered demand for our service. This led to lower ASX collateral fee revenue, much in line with 2H21. The overall Austraclear business now accommodates ASX's investment in Sympli, whereby you can see that the overall decline in this business line of 11.3% is mainly attributable to the increased share of operating losses of the joint venture by \$3.8million versus last year. Turning now to total expenses.



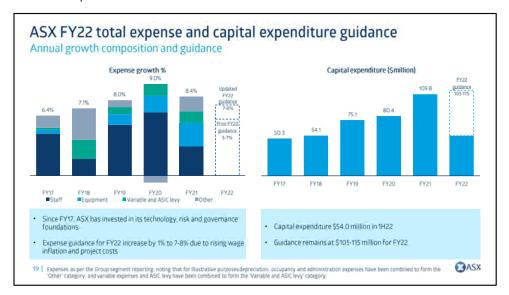
| | 1H22 \$m | 2H21 Sm | 1H21 \$m | 1H22 v 1H21 | |
|------------------------------|-------------|------------|-------------|----------------|---|
| Staff | 85.7 | 78.4 | 75.9 | (13.0%) | Staff expense growth reflects costs |
| Occupancy | 4.5 | 4.6 | 4.8 | 6.7% | associated with operating model redesign, headcount increase and |
| Equipment | 23.6 | 21.5 | 21.0 | (12.2%) | higher contractor costs to support project initiatives |
| Administration | 13.0 | 14.9 | 13.0 | 0.3% | |
| Variable | 8.0 | 7.4 | 6.8 | (16.8%) | Equipment uplift due to new licensing and maintenance costs |
| ASIC supervisionlevy | 3.3 | 3.9 | 4.6 | 27.8% | for initiatives, and projects that went live in the past 12 months |
| Operating expenses | 138.1 | 130.7 | 126.1 | (9.4%) | |
| Depreciationand amortisation | 24.9 | 28.2 | 25.3 | 1.5% | Variable increase linked to market- related activity ASIC decrease reflects current fee estimate |
| Total expenses | 163.0 | 158.9 | 151.4 | (7.6%) | |
| FTE (average) | 749 | 747 | 737 | (1.7%) | |

Total expenses for 1H22 were 7.6% higher than 1H21. The expense uplift was mainly through the 13% increase related to employees over the last half in response to the operating model redesign, annual salary increases, heightened recruitment, and additional staff working on our project and regulatory initiatives. Expenses also grew due to costs associated with ASX's technology upgrade, including cyber security and our digital initiatives, with equipment costs coming in at 12.2% more.

Administration was flat due to lower travel and marketing costs with the COVID restrictions, which absorbed an increase in consulting for projects such as our electronic CHESS statements initiative.

With the heightened market activity continuing into 1H22, the expenses attached to the increased transaction volumes were higher, coming in on the variable cost line 16.8% more than 1H21. However, only 8% more than 2H21, with the revenue attached to this activity more than absorbing the expense.

ASIC has currently guided ASX to an estimated supervision levy lower than previous halves – which will be confirmed in the second half - with the depreciation and amortisation line remaining fairly constant with 1H21, leading to an overall increase in total expenses of 7.6% for 1H22.



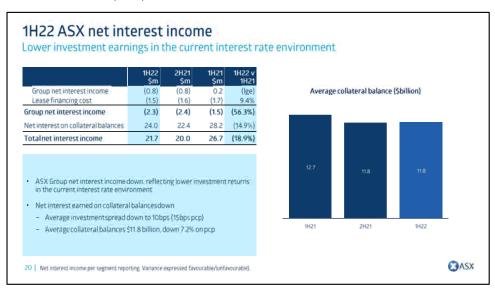
Since 2017, ASX has invested to strengthen our technology, risk and governance foundations to build an exchange for the future. The left hand side of this slide reflects the full-year growth composition over the last five years.



Over the last 18 months in particular, we have bolstered teams and updated our governance models where needed in the aftermath of the ASX trade outage, and recent operating model and regulator reviews. This has contributed to the growth profile to date, with these initiatives continuing over the next six months. This, coupled with the rising wage inflation for experienced technology, risk and compliance staff in particular, means we are now expecting the expense guidance to be in the range of 7-8% for FY22. An increase of 1% from prior guidance.

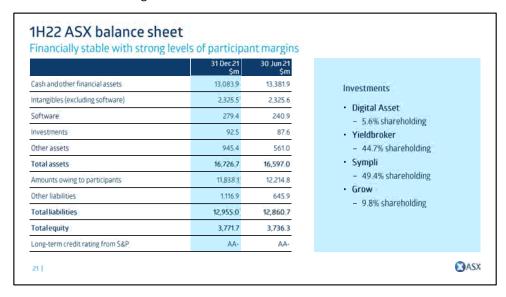
On the right hand side of this slide, you can see ASX has invested \$54 million in capital expenditure during the period, compared to \$54.5 million in the pcp. This is inclusive of our CHESS replacement project, as well as various initiatives to strengthen the resiliency of ASX services.

Our guidance to market on our capex spend for FY22 is still \$105-\$115 million.



Net interest income dropped 18.9% to \$21.7 million for the half, through portfolio returns declining as maturing investments were replaced with lower yielding investments.

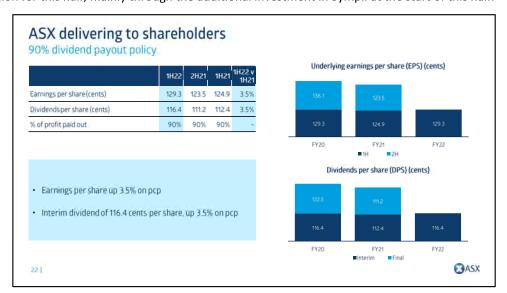
Investment spread income booked in the Net Interest on collateral balances line is down due to the average investment spread being 10bps compared to 15bps in the prior period. Of note, collateral balances are also down by 7.2%, leading to lower interest earned on the average balance.



ASX's balance sheet is strong and positioned conservatively with very little difference in the underlying components between halves. We currently have an S&P long-term rating of AA- and hold a nominal amount of debt for working



capital reasons. And, as you can see in the table, there has been an increase in the value of our total investments by circa \$5 million for this half, mainly through the additional investment in Sympli at the start of this half.



ASX has benefited from strong capital markets and equities trading activity, and solid customer demand for technology data across the last six months. This softened the increase in expenses and the lower investment spread income, leading to positive earnings growth for this half overall.

Underlying profit after tax increased by 3.5%, also leading to an underlying EPS increase of the same amount. The Board has determined a 1H22 fully franked dividend of 116.4 cents per share, representing an increase of 3.5% on 1H21. The dividend can be fully funded from retained earnings and represents a payout ratio of 90% of underlying NPAT, in line with our dividend policy guidance.

Amid continuing mixed external conditions, ASX is maintaining its strategy to strengthen the foundations of our business, while investing in both core and adjacent growth opportunities for the future.

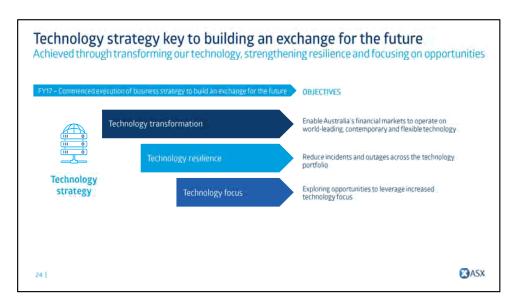
With that, I will hand back to Dom. Thank you.



Thank you Gill.

I would like to spend a little time now on what has been achieved by the execution of our technology and business strategy over the past five years, and what this means for ASX over the medium-term.





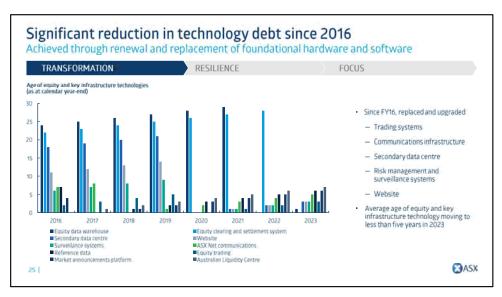
In setting our strategy back in 2016, we knew we needed a pathway that enabled ASX to embrace the accelerating changes in technology and digitisation. It was clear that this was the overriding business theme on which to focus. Embarking on a transformational strategy is never easy to execute, and putting ourselves at the forefront of technological change would mean a significant multi-year body of work. However, this repositioning would enable Australia's financial markets to reap the benefits of world-leading, flexible technology, and was the right strategic path to take.

This led us to implement a program with three technology-focused goals. We needed to:

- Transform our technology to put ASX on a contemporary platform that would enable Australia's financial markets to
 develop and prosper over the next decade. This would also reduce the chance of a competitor being able to leapfrog
 ASX with disruptive technology.
- Secondly, we needed to increase the resilience of our technology and operations. Not because they were failing, but because of the heightened focus on operational resilience, rising cyber threats and importantly, to better support our customers
- And finally, in addition to upgrading our existing technology and operating platform, we would focus on finding fresh
 ways to leverage new technology and our significant skill base to create opportunities to grow and expand into the
 future

These goals were ambitious – the transformation of legacy technology while maintaining existing service levels around the clock is an extremely difficult undertaking.



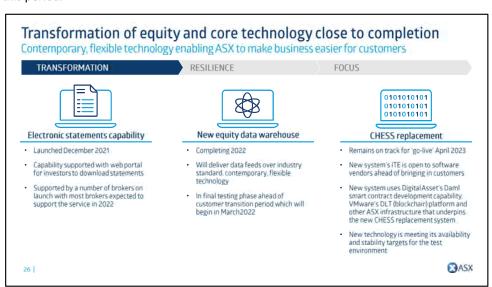


Considering the first of our goals, I am proud of the significant progress we've made. Technology transformation is about reducing technology debt, the digitisation of processes, and transforming the core foundational systems and hardware that underpin the offering – not just updating a thin external layer.

The transformation we have brought comes into sharp focus when we look at the renewal in our equity and enterprise technology infrastructure. Given the high profile of our CHESS replacement project, it is understandable that the breadth of our overall program, which you can see on the chart on slide 25, is overlooked.

We have replaced data centres, communication networks, trading systems, risk systems, websites and more.

Importantly the average age of our infrastructure is moving to less than five years old, as much of it will have been replaced over this period.



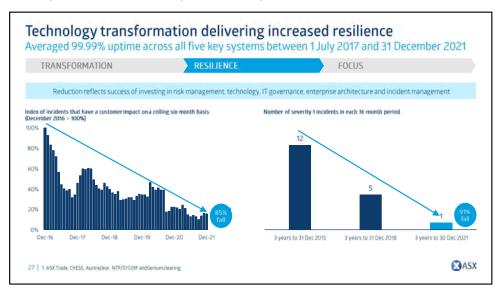
This transformation program is moving towards completion. Over the last half, we have seen further progress across three of these workstreams in particular:

- We have made available electronic statement capability to enable retail customers to access a web portal for their CHESS statements.
- For our new equity data warehouse, we have opened a customer testing environment and will begin a parallel run with the market in coming months.



CHESS replacement remains on track for go-live and the industry test environment is open to software vendors, with
customers joining in the coming months. The system uses Daml smart contracts, VMware's DLT platform and
connects to other ASX infrastructure that underpins the new system. It is meeting its availability and stability targets.
The team has plenty of work ahead, as we now transition to the industry readiness stage.

Our new CHESS system will be at the leading edge globally, with a DLT system capable of managing a multitrillion dollar ecosystem with millions of trades and billions of value turning over every day. It also means ASX's clearing and settlement systems are fully contemporary, using global standard ISO20022 messaging, and operating on modern hardware across multiple data centres with improved security.

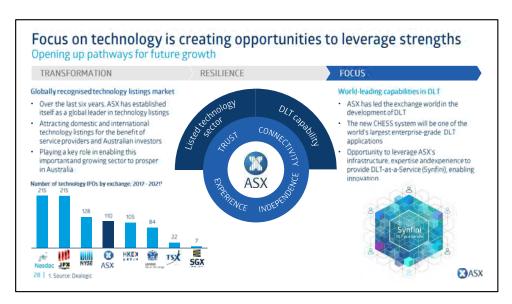


As for our second goal of resilience, I will not spend too much time on this as we have talked about our improved performance before. However, in looking back over the last six years, we are particularly proud of the reduction in incidents and outages across our key systems and platforms. This is a direct result of the investment in people, new software and new hardware.

As you can see, incidents have been falling for five years and are down 85% over the period. If we look at the last three years, we have had just one severity 1 incident. Over the preceding three years, we had five. Even more telling is going back a further three years before our transformation commenced, where we saw 12 severity 1 incidents.

ASX continues to invest to enhance the resilience of our offering, and we're currently working on improving the excellence around software delivery. However, with a circa 90% reduction in many of our metrics, further significant improvements will be harder to come by.





Thirdly, while we have had a busy program transforming the existing technology base, ASX has also been exploring opportunities to leverage our strengths and new technology base in adjacent areas.

There are a number of examples where we have increased our technology focus. I will cover off four today.

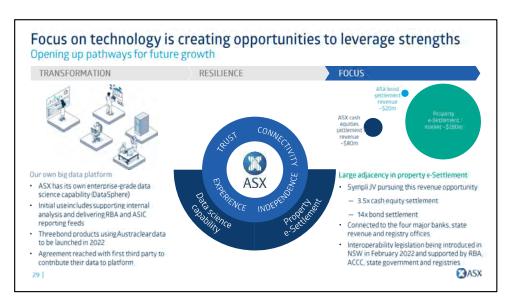
The first is how ASX targeted technology listings and equity capital markets related to technology. Over the last six years, ASX has gone from an underweight position in technology listings to being globally competitive. This not only enables the listing of domestic technology companies, but also attracts listings from offshore. Consistent with our view on the growing importance of technology into the future, it is imperative that ASX and Australia maintain a healthy listed market for technology companies. I see ASX's listing offering, ETFs and our technology indices working with unlisted and VC capital to create a globally competitive ecosystem to support this critical sector of the Australian economy.

In addition to stimulating the local technology economy, the growth of this ecosystem has enabled accounting, legal, banking, advice, listings and auditing skills to also prosper. Ensuring this business is not lost to northern hemisphere capital markets generates significant benefit for our country.

Another example I would like to call out is our investment in distributed ledger technology, often referred to as blockchain. There are many differing views about public blockchains, cryptocurrencies, de-fi, NFTs, etc. However, there seems little argument that blockchain technology will be one of the most important technologies in financial services over the next 10 years. ASX saw this early and has been working towards enabling the benefits of this technology in its new clearing and settlement system. We see significant value in permissioned distributed ledgers allowing stakeholders to enjoy real-time immutable synchronisation of their industry, and the ability to further enhance the benefits of this synchronisation by writing smart contracts over these ledgers.

In addition, we are also offering this enterprise-grade technology to the market for a broad array of uses. Synfini, our 'DLT as a service' platform, went live late last year, with a number of companies looking to leverage the benefits – first among them KPMG with its Building Assurance Solution (or trustworthy index) for the NSW government. While it's still early stages, ASX is at the global forefront in utilising this technology for permissioned enterprise-grade solutions.





A third area we believed back in 2016 was going to grow and be important to ASX was big data, data science and Al. Given we operate in an industry that creates a tsunami of data, we believe this is a core skill set for the organisation. In addition to investing in people, we developed ASX DataSphere, which enables access to raw data, a data science platform and data science tools in a secure and governed ecosystem.

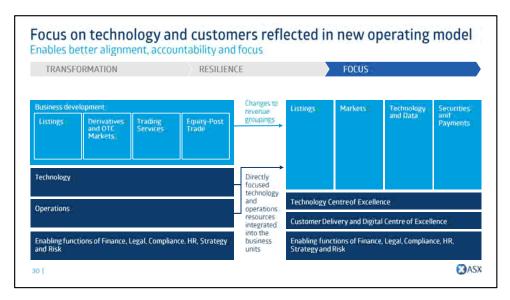
Our use of this technology is growing internally for our own purposes and also for managing regulatory data requests. We are also beginning to see products built on the platform providing key insights into fixed income markets for our customers. Over the medium term, we are confident that these capabilities will be an important part of our exchange infrastructure.

Finally, another adjacency we have been pursuing is the opportunity created by the move from paper-based to electronic-based settlement of property transactions, or e-Settlement. This is our Sympli joint venture. To give an idea of the size of the opportunity, compare it with the electronic settlement of the fixed income market and the equity market that ASX currently manages. In revenue terms, the e-Settlement opportunity in property is 14 times the size of bond settlements revenue and three to four times the size of equity settlement revenue.

In property e-Settlements, ASX is the challenger rather than the incumbent. However, we are now connected to all the major banks, registries, and state revenue offices. We have also seen State Governments, the ACCC, the Australian Banking Association, the Australian Institute of Conveyancers and the Law Council of Australia all agree to interoperability as a model for the industry. Last month, it was confirmed legislation will be introduced into the NSW parliament shortly. Governments, regulators and industry are spending time and money building momentum to enable interoperability.

With a more contemporary technology platform, and the ability to learn from the shortcomings of the incumbent offering, we see an opportunity to grow this business. It is clear the market now better understands why we saw tremendous value in this business area.

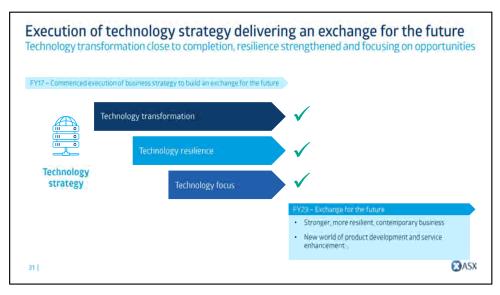




Reflecting the changes in our focus, as Gill noted earlier, we have also recently reviewed our operating model. These changes better align the businesses and improve accountability, and bring operations and technology closer. Two further changes, which reflect some of what I have said today, are the dedicated focus on our customers and the standalone Technology and Data business line.

We have a customer centre of excellence tasked with enhancing the end-to-end service across all our lines of business to our individual customers. This is an area where we feel we can add more value by gaining a better cross-product view of how customers use our services.

Moreover, the Technology and Data area is now its own discreet business, separated from the equity trading business. With an expanding data centre footprint, a DLT platform and a big data platform in place, we are exploring the growth opportunities in this area.



So, to summarise the last five years, ASX has:

- Delivered a significant transformation in its technology, evidenced by the decommissioning of a number of old technologies and the reduction of average age of its tech stack.
- Delivered a significant increase in operational and technology resilience, evidenced by a dramatic reduction in incidents and outages across our platforms.



• Put technology at the forefront of our focus to create future opportunities, shown by the number of technology-related initiatives delivered or close to delivery.

So, how does this set ASX up for 2023 and beyond?

ASX is a strong business that provides critical market infrastructure across a number of financial market areas. As such, it is important that ASX reinvests in its business and maintains a contemporary infrastructure with leading edge technology to ensure we meet the increasing expectations of our many stakeholders.

This multi-year transformation makes ASX a stronger, more contemporary business, with reduced technology debt and improved operational and technical resilience. This also lessens the probability of ASX being disintermediated by the technology of others.

It also enables a whole new world of product development and service enhancement. Customers who may have been reluctant to build on legacy technology will be more comfortable building on the new DLT platform, our new hardware, and using global messaging standards.

The technology transformation, resilience and focus have put ASX in the best place to maintain our strong market position, with optionality to build our portfolio in new, interesting and sustainable ways into the future, while we work to enhance our customer focus.



Finally, moving to the outlook.



Outlook Increased uncertainty around the political, geopolitical and economic outlook January 2022 update Strong growth across a number of businesses Cash market equity trading value up 45% and clearing value up 40% Continued momentum in IPOs and secondary capital raisings Markets outlook Inflation outlook likely to lead to increased interest rates and interest rate volatility Equity market volatility likely to continue IPO pipeline remains solid, albeit expected to soften from 1H22 highs ASX Group outlook Anticipate operating environment to remain challenging Expense guidance for FY22 now 7-8% versus 5-7% previously Capital expenditure guidance for FY22 remains unchanged at \$105-\$115 million C ASX 33 I

The second half of FY22 is off to a strong start. In what is typically a quiet time of year, January has been a standout month. This has been aided by the activity in Block/Afterpay and the BHP unification.

Compared to the January prior:

- on-market trading value in our equity business increased by 45%
- IPO capital was many multiples larger
- secondary capital raised was up 70%
- clearing value was up 40%
- futures were up 1%.

More broadly, markets are currently at a critical point. There is increased uncertainty and concern around the future political, geopolitical and economic outlook, and the prospect of an election in Australia sometime this half.

Importantly, we are seeing the problem of inflation in many countries for the first time in about 30 years. I cannot predict what will happen, however, in the last six months, inflation has gone from a transitory issue to one that many people are worried about. It is sobering to think that the last time inflation in the US was at these levels, 10-year bond rates in the US were closer to 8%.

For ASX, these uncertainties lead us to think that the equity market will continue to exhibit volatility and volume supporting a number of our business areas. In addition, for the first time in a few years, moves in the short-end of the rates curve are a possibility, which may support our futures business as well as improve the returns on our capital and collateral balances.

After a record breaking calendar 2021, the IPO market may take a breather over the course of 2022, notwithstanding that there is still a reasonable pipeline of business.

Like many, we anticipate the operating environment to remain challenging as we continue to navigate COVID-19.

Against this backdrop we have seen a marginal increase to our expense guidance, while our CAPEX guidance remains unchanged.