Good morning and welcome to ASX’s half-year results presentation, whether here at ASX, on the phone or via webcast.

I’m Dominic Stevens the CEO of ASX.
I will begin with our financial results and give an update on strategy. Our Deputy CEO Peter Hiom will then take you through each of our businesses and provide detail on the key drivers and highlights. I will then return to summarise, speak to outlook and take questions. I will be joined for those questions by both Peter and our new CFO Gillian Larkins.

First half 2019, saw a number of highlights:

- it was a record half for ASX, with increased returns to shareholders and solid growth and
- we are continuing to follow our strategy by
  - strengthening our foundations
  - expanding our core customer value proposition and
  - developing new opportunities based around ASX’s expertise, independence and infrastructure.

The solid work from a motivated team over the past 6 months has led to today’s financial results, which I will now take you through.

Overall, our financial results reflect continued strong operating performance across our suite of businesses. They also reflect the significant work ASX is doing to set the organisation up for the next decade, which I believe will be filled with opportunity.
First half revenue has increased to $424.7 million, a rise on the prior comparative period (pcp) of $26 million. This equates to an increase of 6.5% on a like-for-like basis with a new accounting standard that took effect this financial year, and up 3.8% on a statutory basis, which is particularly pleasing given the pcp was a record half.

Expenses for the half were broadly on track with guidance, up $9 million to $105.2 million, which is an increase of 9.4%. As discussed at the 2018 full-year results, ASX is strengthening its foundations in risk management, technology and operations. I will talk about the significant progress we’ve made in a moment.

Notwithstanding this investment in resilience, ASX’s EBITDA is up $17 million to $319.5 million, a rise of 5.6% on a like-for-like accounting basis and 2.1% on a statutory basis. Our EBITDA margin remains at 75% for the half.

NPAT is up $22.8 million to $246.1 million, an increase of 10.2%.

The new accounting standard I mentioned earlier is AASB 15. It requires initial and secondary capital raising revenue to be amortised over a multi-year period, which will reduce the volatility of income recognition.

However, we have not restated the 1H18 statutory numbers. As such, the increase in statutory NPAT of 6.8% reflects this half’s numbers under the new standard compared to pcp numbers under the old standard.

As you can see, NPAT growth has been stronger than EBITDA growth. This is mostly due to higher levels of open derivative positions held at the clearing house. This led to elevated holdings of cash margins, which coupled with higher short-term interest rates, resulted in a rise in interest income.

EPS was 127.1 cents per share, a rise of 10.1% on a like-for-like accounting basis and 6.7% on a statutory reported basis.

The dividend payout ratio remains unchanged at 90% for the half and the interim dividend is also up 6.7% to 114.4 cents per share. The dividend is fully franked.

I’ll now look at the drivers of revenue. It’s been a pleasing half across the board and a positive reflection of the diversity of our business.

**Revenue drivers**

**Solid growth in market activity across all businesses**

<table>
<thead>
<tr>
<th>Revenue ($million)</th>
<th>Revenue up 6.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listings and Issuer Services</td>
<td>$26.0m</td>
</tr>
<tr>
<td>Derivatives and OTC Markets</td>
<td>$6.3m</td>
</tr>
<tr>
<td>Trading Services</td>
<td>$8.0m</td>
</tr>
<tr>
<td>Equity Post-Trade Services</td>
<td>$4.8m</td>
</tr>
<tr>
<td>Other revenue down</td>
<td></td>
</tr>
</tbody>
</table>

Revenue movement ($million)

<table>
<thead>
<tr>
<th>Segment</th>
<th>1H18</th>
<th>1H19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>398.7</td>
<td>424.7</td>
</tr>
<tr>
<td>Listings and Issuer Services</td>
<td>-</td>
<td>6.5%</td>
</tr>
<tr>
<td>Derivatives and OTC Markets</td>
<td>-</td>
<td>6.3%</td>
</tr>
<tr>
<td>Trading Services</td>
<td>6.8</td>
<td>8.6</td>
</tr>
<tr>
<td>Equity Post-Trade Services</td>
<td>-</td>
<td>8.6</td>
</tr>
<tr>
<td>Other revenue down</td>
<td>-</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Listings and Issuer Services revenue was up 8.0% overall. The value of capital raisings in total increased 38% to $62 billion. The strong half was helped by some notably large transactions.

As a result of this activity, issuer services also had a solid half — with increases in the movement of stock on the register and management of entitlement issues leading to revenue up 6.3%.

Annual listing fees were also higher by 9.4%, helped by more listed companies and larger market capitalisation.

Derivatives and OTC Markets revenue increased by 6.3%, driven mainly by a 5.3% rise in futures volumes and a solid half for Austraclear. Notable was the strong rise in trading of SPI and electricity contracts. Austraclear and ASX
Collateral revenue rose 6.7% due to increases in transactions, depository balances and registry fees. In addition, average balances within the ASX Collateral service grew by 29%.

Trading Services had a particularly pleasing half, up 8.6% on pcp, driven by strong equity volumes and continued growth in information and technical services. With the rise in equity market volatility over the past six months, trading revenue rose 15.2%. This was driven by higher turnover, an improvement in our share of on-market trading and the increasing use of auctions, which attract higher revenues.

Information services continued to grow, increasing revenues by 5.5%. Much of the work needed to go live with our data analytics business was completed in the half, and we look forward to on-boarding customers over the coming 6 months.

Technical services increased revenue by 8.3%, with growth from ALC connectivity services, hosting of cabinets and communication services. This demonstrates the continuing demand from our customers for services that help reduce their costs – a theme I will return to later.

And finally, Equity Post-Trade Services was up 4.8% due to the increase in overall market activity.

Our operating expenses were up 9.4% at the half, consistent with our guidance for the whole of financial year 2019 (FY19). As you can see in the chart on the right, this expense growth has mainly come from staff and equipment.

To add clarity, let me separate the growth in our expense base into 3 areas.

Firstly, underlying ‘business as usual’ growth of circa 3% that mainly reflects annual remuneration or other CPI-based increases.

Secondly, revenue initiatives we’ve been working on over the half which is circa 2% of the increase and includes:

- the data analytics capability and
- the work, separate from CHESS replacement, examining the broader application of distributed ledger technology (DLT) to the financial services industry and beyond.

Thirdly, the increase relating to the Stronger Foundations program of circa 4% this half. This program is to:

- ensure ASX continues to maintain its reputation for operational resilience and
- enable new products and services to be easily built on those stronger foundations.

This work program will be in place from a cost growth perspective by June 2019. So, other than some full-year effects in 2020, it will no longer impact expense growth.
Turning to capital expenditure – ASX is in the middle of a program to upgrade a significant part of its technology infrastructure. This includes:

- CHESS and associated operational infrastructure – completing early 2021
- new secondary data centre – completing end-calendar 2019 and

These systems have served the market well over many years. We are replacing or upgrading them with contemporary infrastructure to allow ASX and its customers to take advantage of opportunities in the decade ahead.

Importantly, these are once-in-a-generation projects. But, they are still part of the normal long-term program of renewal across all our technology.

Investment here also includes growth opportunities such as our data analytics platform – completing first quarter 2019.

Capex was $27.6 million for the half, and guidance is unchanged at $70-75 million for the full-year.
Our growth strategy is made up of three important layers:

- **at the base**, a foundational layer, ensuring our operating platform supports our clients by being contemporary, flexible and resilient. This is of critical value to ASX.
- **in the middle** is our core customer value proposition where
  - we see a growing need for ASX products and services to provide better operational, administrative and capital efficiencies, and better data. We are listening to our customers and continually enhancing our offering
  - we also leverage the macro tailwinds of growing investment pools, driven predominantly by the super system
- **and finally, on top of this**, we are pursuing strategic growth opportunities that leverage ASX’s expertise, independence and infrastructure. This includes opportunities such as data analytics, Sympli and other possibilities with DLT.

### More contemporary, flexible and resilient ASX operating platform

**Stronger Foundations resources in place**

- **CLEARING RISK**
  - Market-leading margin call frequency
  - Strengthened CCP resilience
  - Enhanced margin modelling
  - Near real-time risk management capability

- **ENTERPRISE RISK and TECHNOLOGY**
  - New risk, technology and operations leadership teams
  - Refreshed strategies
  - Enhanced policies, processes and tools

- **MARKET OVERSIGHT**
  - Restructured and expanded Listings Compliance team
  - Improved admission process for exchange-traded products
  - New portal for participants’ compliance lodgements
  - Major consultation of listing rules underway

- **TECHNOLOGY INFRASTRUCTURE**
  - New futures trading platform – NTP
  - Enhanced service and efficiency of customer network – ASX Net
  - New secondary data centre (complete late 2019)
  - DLT-based CHESS and related infrastructure (complete 2021)

Expanding on the base layer – the value of ASX is founded on the trust, resilience and independence of our core operating platform. This platform is being significantly enhanced.

The investment is not just in physical systems and technologies. It is also investing in areas such as clearing risk management processes and procedures; in enterprise risk management and governance, which are becoming a bigger focus for financial services firms globally; and in our market oversight processes where we seek to strengthen the integrity of our markets.

And finally, the investment is in replacement technologies for SYCOM, ASX Net, CHESS and others.
Next, I'd like to focus on our growing core customer value proposition.

**Enhancing ASX’s core customer value proposition**
*A history of making the financial services industry more efficient*

**The evolution of trading and data services**
- Chalk boards
- Electronic trading
- Co-location for low latency connections
- Data centre services
- Cross-connections across industry
- Global connectivity

**The evolution of equities clearing and settlement**
- Share certificates
- T+10 → T+5
- Electronic messaging
- T+3
- Expanded into new products
- T+2
- DLT-based CHESS

ASX works hard to apply innovation to the things we do to enhance our offering to customers.

An example of this is ASX’s Australian Liquidity Centre or ALC. Our technology business started with the move from trading floors to computer-based trading, where ASX was one of the global leaders. We then saw the development of co-location with the creation of the ALC, leading to data centre services. Next came cross-connections throughout the industry. Then global connectivity with ASX Net. All this has improved customer service and lowered total technology costs. It also created a technical services business that has grown at close to 10% per annum for a decade.

Another example is the innovation in the clearing and settlement of equities. When I started in this industry, settlement happened when back offices got around to it. Scrip was walked around the city inside leather pouches. ASX was the first exchange globally to dematerialise share ownership to enable electronic management, with settlement times dropping from T+10 to T+5. Settlement and the reconciliation of positions were predominantly handled via the CHESS subregister system, which allowed interrogation of an electronic source of truth. After this, T+5 became T+3, then there was the addition of new products like ETFs, CHESS depository instruments, mFund, etc, all settling on the one CHESS system.

In 2016, T+3 became T+2 and at the same time ASX began investigating DLT, the next big step forward in post-trade services.

**Enhancing ASX’s core customer value proposition**
*DLT-based CHESS will unlock efficiencies for customers and the financial services industry*

- Real-time data
- Verifiable, source-of-truth data
- Secure, permissioned access
- Ability to cross-connect with one another
The DLT replacement of CHESS will deliver customers:

- real-time data
- data that can be verified as true without messaging ASX
- a secure environment for permissioned users and
- the ability to cross-connect with other customers and automate work flows.

When stakeholders interact over a system where everyone knows they have the same information there should not be any issues with accuracy, latency or integrity. Our customers will have the ability and the tools to revolutionise industry efficiency.

Let me now spend some time on the development of new revenue streams. While these will play out in the medium-term, they show where ASX is looking to leverage its expertise and infrastructure into new opportunities.

ASX has expertise in:

- operating critical technology and connectivity platforms
- building market-wide open, reliable infrastructure solutions and
- perhaps most importantly, being trusted and independent.

Over the coming decade, the financial services industry will need solutions to improve operational, administrative and capital efficiencies. ASX is well-placed to provide trusted and independent services to help satisfy this need.

I’d like to run through three examples of where we are exploring opportunities to offer this value.
The most immediate opportunity is our new data analytics offering.

This investment will enable ASX to create analytics solutions for its customers. It will support access to data science and machine learning capabilities, and offer a broad range of ASX and non-ASX datasets. The initiative will also allow those who contribute data and analytics to create their own new revenue streams.

Over the last 12-18 months, ASX has been building a broad range of capabilities to support the data analytics offering, including:

- secure and scalable technical platform, with access to machine learning tools, a range of data science languages and a broad range of data sets and
- robust governance and legal framework to support data management, data access and an ecosystem of data contributors and product developers.

The new data analytics offering will enable ASX and our customers to access more data and apply leading data science and machine learning technologies to solve complex problems.

Initially, ASX is applying this capability to a range of internal use cases, with on-boarding of customers beginning later this half. We are excited about the possibilities of this initiative.

ASX is also in the early stages of investigating other opportunities with DLT. This is separate to the CHESS replacement project currently in full swing.
Over the past two years ASX has spent an enormous amount of time examining the significant benefits that DLT will bring to the equity post-trade area. This has allowed us to understand the benefits that a DLT-based system has to offer more broadly.

This includes the benefits of the programming tool (known as DAML) being developed by our software vendor Digital Asset. DAML is a powerful differentiator that enables ASX and third parties to develop solutions over a distributed ledger faster, more efficiently and with better security than alternatives.

The further we work with DLT, the more we believe in its transformative qualities, its relevance to other parts of the financial services world, and its broader application to any logistical or organisational problem that would benefit from permissioned, real-time, source of truth data.

In other words, ASX’s investment in the technology to replace CHESS has attractive optionality.

The final opportunity I will speak to is our investment in Sympli. It’s another example of ASX creating optionality by applying our specific skills in adjacent areas.

ASX, the number 1 player in the clearing and settlement of securities, is entering the e-conveyancing market with its joint venture partner, ATI (the parent of InfoTrack and LEAP) the number 1 player in both the property search market and in practice management systems for conveyancers.

Sympli has a ‘fast-follower’ advantage in this market and a deep understanding of the problems customers are experiencing. ASX and ATI have excellent track records working with customers to improve process efficiency:

- ASX has a multi-decade relationship with the banks and the RBA in delivering clearing and settlement solutions and
- ATI has a multi-decade relationship with conveyancing firms in providing efficient solutions, property-based data services and practice management systems.

Sympli is engaging with market participants to ensure its systems solve key industry problems. We believe the e-settlement service with the best software solution and workflow efficiency for the customer will win the market. We can already see that Sympli will deliver operational savings to customers via faster processing times, less double keying of information, lower risk of delayed settlement, and more competitive pricing.

This opportunity still has much work ahead of it. But we are encouraged by the industry support received thus far. Sympli has already conducted non-financial transactions in two states, and is looking to on-board customers and execute multi-party financial transactions in the coming half.

I look forward to updating you on these initiatives as they progress. With that, I will now handover to Peter to elaborate on each of the businesses.
Thank you Dom, and good morning everyone. I will now run through in detail the half-year results of our four businesses – being Listings and Issuers Services, Derivatives and OTC Markets, Trading Services, and Equity Post-Trade Services. I will also cover dividend and interest income before handing back to Dom.

So to begin, let’s look at Listings and Issuers Services, which contributed ...

... 26% of operating revenue. Listings and Issuer Services covers listings, capital raising, investment products and a range of other services we provide to issuers.

Revenues for the half were up 8% at $111.5 million. For clarity, the numbers here are under the new accounting standards for the first half of FY19 compared to the first half of FY18 on a like-for-like basis. Listings revenues were up 8.6%, aided by some large transactions. This meant that the market cap of new listings was very strong, as you can see in the chart at the top right.

We have provided a waterfall breakdown chart at the bottom right to help explain the revenue movements. Growth in annual fees was driven by an increase in the number of companies listed and an uptick in market capitalisation. Initial listing revenues are up 14.2%, driven by new capital raised 192.4%, aided largely by the Coles demerger and despite there being 5 less IPOs compared to pcp. Secondary listing fees are up 8.3%, despite a 12.3% decrease in secondary capital raised. This reflects the solid performance of secondaries over the past 3 years under the new accounting standard.

I mentioned the Coles demerger, and together with other large transactions (such as Transurban), this generated greater issuer subregister activity. As a result we see Issuer Services revenues up 6.3%.
Looking at our business development progress, we remain focused on our technology and international listing strategy. In the last 6 months ...

### Listings and Issuer Services

**Growth in key initiatives, with increased market capitalisation**

*Further growth in strategic sectors*
- 10 new technology listings¹ in 1H19, 6 of which were foreign
- 17 foreign listings¹ in 1H19 - 286 entities listed at 31 December, now representing 32.5% of overall listings
- Exchange-traded products (ETPs) - 26 listings in 1H19, 248 ETPs listed, total market value $40.8 billion, up 13.4% on pcp
- Continued growth in unlisted managed funds through mFund service, FUM up 15% since the end of FY18

*Continually enhancing service offering*
- NZ strategy progressing - NZ office announced in November
- Team restructure to enhance market compliance outcomes
- Major consultation on listing rules underway
- 20 listing applications rejected at pre-vetting stage
- New online portal for participant compliance filings

¹ Includes IPOs and backdoor listings

... we have added 10 new technology companies and 17 new foreign listings (noting that 6 companies sit in both these numbers). We have included a map on the top right to show the geographic diversity of our foreign listings, which now make up 12.5% of all listings. Our focus on Israel, South East Asia, New Zealand and North America is delivering results. In November 2018, we announced that we plan to open a New Zealand office to support our ongoing efforts, which include not only NZ listings, but also NZ interest rate and electricity futures, and interest rate swap clearing.

We remain resolutely focused on strengthening the brand and reputation of our listings business. This is reflected in our rigorous admissions pre-vetting process where we have rejected 20 applications; the investments we are making in our compliance team, including the analytical tools we use; the continuous improvement of our rulebook; and the online portal we are developing for our customers.

We also continue to expand the range of products we offer. Growth has continued in the ETF sector with 26 new products, bringing the total to 248, with a market value of $40.8 billion, up 13.4% on pcp. mFund also continues to grow with funds under management up 15%. The chart at bottom right shows good growth in the whole investment product segment in the last 5 years, and most notably in ETFs.

Now let’s look at our largest business ...

### Derivatives and OTC Markets

**Increased futures activity with market volatility**

<table>
<thead>
<tr>
<th></th>
<th>1H19</th>
<th>1H18</th>
<th>Var</th>
<th>Var %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue ($Million)</td>
<td>146.8</td>
<td>138.1</td>
<td>8.7</td>
<td>6.3%</td>
</tr>
<tr>
<td>Futures and OTC</td>
<td>109.3</td>
<td>101.6</td>
<td>7.7</td>
<td>7.6%</td>
</tr>
<tr>
<td>Equity options</td>
<td>10.2</td>
<td>10.9</td>
<td>(0.7)</td>
<td>(6.4%)</td>
</tr>
<tr>
<td>Austraclear</td>
<td>27.3</td>
<td>25.6</td>
<td>1.7</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

**Key drivers**

- Futures volume (million) - 78.4 (74.5) 3.9 5.3%
- OTC cleared value ($billion) - 3,096.5 (3,187.6) (30.1%)
- Single stock options volume (million) - 36.6 (41.8) (5.2) (12.3%)
- Index options volume (million) - 6.2 (5.9) 0.3 4.4%
- Collateral average balance ($billion) - 23.6 (18.2) 5.4 29.5%

**Revenue $146.8 million, up 6.3%**

- Futures and OTC $109.3 million, up 7.6%
- Growth in 10 year bonds, SPI and electricity
- Equity options $10.2 million, down 6.4%
- Growth in index options partly offset decline in single stock options
- Austraclear $27.3 million, up 6.7%
- Higher level of issuances and holding balances up 4.5%
- Transaction volume up 4.0%

¹ Revenues and expenses are at the NZD reporting currency, for unless stated to the prior comparative period of NZD expressed favourably / (unfavourably)
... which is Derivatives and OTC Markets that contributed 35% of operating revenue. This includes all futures, OTC clearing, equity options and Austraclear – including the ASX Collateral service.

Revenues were $146.8 million, up 6.3%. This is a strong result, supported by good growth in futures volume – up 5.3% against pcp led by growth in 10 year government bond futures. Open positions continue to grow across our benchmark interest rate contracts, which were up 12.3% at December compared to pcp. You have heard us talk about the long-term positive trend in our futures business illustrated by the chart at top right showing futures volume has grown at a CAGR of 5.9% over the past 5 years. Futures volume was a record for the first half of the year, with the macro-economic environment driving increased activity from banks and end users.

It is also pleasing to see the strong performance of our non-interest rate products – specifically the SPI and Australian electricity futures, where both have benefited from increased volatility in their underlying markets. You can see from the chart at the bottom right that both have significantly grown over the pcp.

Moving to Austraclear, revenues are up 6.7% driven by growth in transaction volumes, higher level of issuance, and increased holding balances. As with futures, we also expect to see macro-economic tailwinds continue to drive long-term growth in Austraclear.

Let’s look at some of our business development initiatives and there’s ...

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**Derivatives and OTC Markets**

Global distribution and continued momentum in key investments

<table>
<thead>
<tr>
<th>Futures</th>
<th>OTC Clearing</th>
<th>Austraclear and Collateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Growth in 10 year bond contracts up 3.5 million, 16.1% on pcp</td>
<td>• Lower volumes with a period of lower short-end rates volatility in Australian rates markets</td>
<td>• Average collateral balance increased to $23.6 billion in 1H19; averaging 36% of RBA open market operations; peak collateral balance at $25.9 billion achieved during 1H19</td>
</tr>
<tr>
<td>• Increase in offshore futures trading with addition of new firms</td>
<td>• Volumes and market share are up in January with increased market volatility</td>
<td>• USD payment capability live in Austraclear, with JPMorgan as the first cleaner</td>
</tr>
<tr>
<td>• OTC client clearing live, with JPMorgan as the first clearer</td>
<td>• OTC notional value cleared (in $billion)</td>
<td>• ASX Collateral balances ($billion)</td>
</tr>
<tr>
<td>• Growth in 10 year bond contracts up 3.5 million, 16.1% on pcp</td>
<td>1H14 1H15 1H16 1H17 1H18 2H18</td>
<td>Average Balance (LHS) ASX % of RBA open market operations (RHS)</td>
</tr>
</tbody>
</table>

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... three things I’d like to highlight.

Firstly, we have seen lower OTC cleared volumes, which are down about 35%. This is due to a reduction in global AUD OTC interest rate activity – especially in shorter dated swaps, which forms a large part of our business. We remain focused on growing our client clearing service, with the first customer being on-boarded in the half. Despite lower cleared volumes in the first half, OTC activity levels have been encouraging early in the second half, with ASX achieving a record for OTC cleared value in January.

Secondly, growth continues in our collateral management service – with balances peaking at $25.9 billion in the half. You can see from the chart at the bottom right that our collateral balances now represent 36% of open market operations (up from 32% pcp). We are working to add customers to this service.

Thirdly, while it is early days, I’d like to note the progress made in providing USD payment capabilities in conjunction with JPMorgan. This adds further multi-currency payment capabilities to our offering that already includes Renminbi, and gives customers the ability to irrevocably settle foreign currency in the Australian time zone.

Now let’s move to our Trading Services business, which ...
Trading Services
High market activity and continued growth in ecosystem

Revenue ($million) 1H19 1H18 Var Var %
Cash market trading 26.0 22.6 3.4 15.2%
Information services 47.2 44.7 2.5 5.5%
Technical services 40.3 37.2 3.1 8.3%

Total ALC on-market value ($billion) 586.7 510.1 76.6 15.0%
Auctions value ($billion) 161.2 122.5 38.7 31.6%
Centre Point value ($billion) 57.2 53.4 3.8 7.0%
Number of ALC customers 130 122 8 6.6%

Revenue $113.5 million, up 8.6%
- Cash market trading $26.0 million, up 15.2%
  - ASX on-market value traded up 15.0%
  - Growth in the use of auctions, traded value up 31.6%
  - Stable usage of Centre Point, traded value up 7.0%
- Information services $47.2 million, up 5.5%
  - Growth in customer usage and end of fee waiver
- Technical services $40.3 million, up 8.3%
  - Increased cabinets and service connections within the ALC
  - Strong growth in market access connections

Here we see revenues of $113.5 million, up 8.6%. This is a good performance and has been driven by growth in all lines of this business.

Cash market revenue is up 15.2% on the back of higher levels of market volatility. On-market value traded is up 15%, auctions are up 31.6% and Centre Point is up 7%. The strong growth in auctions reflects customer demand for execution certainty at the end of the day – although, as you can see from the chart at the top right, the continuous lit market remains an important source of intra-day liquidity to those who need it.

We have also seen good revenue growth in information services, up 5.5% and technical services, up 8.3%. The chart on the bottom right shows how material those services now are in the context of the overall business, contributing nearly 80% of Total Trading Services revenue.

The story for this business is one of continued momentum in our strategy of delivering execution services that our customers value, expanding our product offering in information services, and growing the community of ALC customers. So let’s ...

Trading Services
Continued focus on expansion of ecosystem and delivering ASX data platform

Cash market trading
- On-market trading market share 88.7% (85.9% pcp)
- Auctions 27.1% of ASX on-market value traded (24.0% pcp) as customers seek deep liquidity
- Centre Point 9.7% of ASX on-market value traded (10.5% pcp)

Information services
- Growth from recent product licensing changes, BRkw opening up new benchmark data opportunities
- Data platform and governance models built, analytics underway

Technical services
- Growth in ecosystem within the ALC - 130 customers (up 6.6%), 333 cabinets (up 3.9%) and 1,030 service connections (up 10.3%)
- Futures access growth to 467, up 28.7% supported by customer acquisition
- Upgrade of ASX Net near completion

... look at this in a little more detail.
I’ve already talked about our efforts in cash market trading. Pleasingly, this has resulted in our on-market share increasing from 85.9% to 88.7% due to ASX providing better execution outcomes than our competitor.

In information services, we have continued to develop and refine our product offering. Over the last few years this has included the introduction of non-display, advisor and futures participant data products, as well as the highly successful development of the BBSW benchmark – which is world-leading in its methodology (using tradeable rather than indicative prices).

The success of our work on BBSW is leading to new opportunities, such as the development of a risk free AONIA (or cash rate) benchmark and a secured reference rate for AUD. These create new revenue opportunities and enhance our interest rate franchise.

Another important focus for our data business in the half has been our analytics offering that Dom covered earlier.

So, finishing with our technical services business, we are pleased with our progress in building our ecosystem. This has been supported by the acquisition of new traders as well as continuing demand for ALC data centre services. This resulted in more customers, more cabinets, and more service connections.

To support the expansion of the technical services we carry, we are nearing the completion of the ASX Net upgrade. This will provide a broader range of access options and we expect the upgrade to be completed around the end of FY19.

Our last business is influenced heavily by the trading activity levels in the cash market that we have just discussed, and that is ...

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**Equity Post-Trade Services**

Higher cash market and settlement activity

<table>
<thead>
<tr>
<th>Revenue ($million)</th>
<th>2019</th>
<th>2018</th>
<th>Var</th>
<th>Var %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash market clearing</td>
<td>27.3</td>
<td>25.9</td>
<td>1.4</td>
<td>5.7%</td>
</tr>
<tr>
<td>Cash market settlement</td>
<td>27.4</td>
<td>26.3</td>
<td>1.1</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Key drivers

- On-market value cleared ($billion) | 619.8 | 555.9 | 63.9 | 11.5% |
- Main settlement messages (million) | 10.1 | 8.8 | 1.3 | 15.0% |
- Average trades per day (million) | 1.3 | 1.1 | 0.2 | 17.3% |

Revenue $54.7 million, up 4.8%

- Clearing $27.3 million, up 5.7%
  - On-market value cleared up 11.5% in line with cleared trades value
  - Revenue sharing rebate $1.4m vs nil in pcp
- Settlement $27.4 million, up 3.8%
  - Total messages up 7.1% with main DvP settlement messages up 15.0%
  - Revenue sharing rebate $0.7m vs nil in pcp

---

... Equity Post-Trade Services. This encompasses the clearing and settlement of the entire Australian cash market. It is our smallest business, contributing 13% of operating revenue.

Total revenues were $54.7 million, up 4.8%, with clearing up 5.7% and settlement up 3.8%. Clearing and settlement are also subject to a rebate mechanism that delivers 50% of revenue growth back to clearing and settlement participants. This was $2.1 million for the first half.

Growth in clearing is consistent with the overall growth in market activity – albeit slightly lower at 11.5%. This is because not all traded activity is cleared (for example off-market transactions where the clearer is the same for both sides). Growth in settlement was driven by more CHESS messages that support the delivery vs payment process – albeit this again will be lower than the growth in cash market trading due to the inherent netting efficiency in the batch settlement process.

Just to finish I’d like to spend some time covering ...
... our progress in building the next generation equity post-trade platform to replace CHESS.

At the beginning of the half, we announced the finalised Day 1 scope of the platform. This was the culmination of approximately 18 months of industry consultation to identify the new requirements for the replacement system. As part of this process, customers gave us feedback that they needed more time to prepare for the new system, so we adjusted the schedule and now have a target live date of March/April 2021.

We are progressing with the build of the system with our partner Digital Asset. At the end of the half we released the first tranche of technical documentation that details the first software to be deployed into the customer development environment, which will be made available in the second half. This will enable customers to begin their preparation activities to integrate their systems to the new platform.

Of course consultation with customers and stakeholders will be intensive and ongoing. This includes participants, issuers, registry firms and software vendors, and will continue throughout the lifecycle of the project.

That concludes the summary of progress on our businesses. I’ll now cover interest and dividend income ...

---

### Interest and dividend income

Growth in collateral balances and elevated short-term rates led to an increase in interest

<table>
<thead>
<tr>
<th>$million</th>
<th>1H19</th>
<th>1H18</th>
<th>Var</th>
<th>Var %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASX Group net interest income</td>
<td>10.9</td>
<td>8.7</td>
<td>2.2</td>
<td>26.3%</td>
</tr>
<tr>
<td>Net interest on collateral balances</td>
<td>38.9</td>
<td>24.4</td>
<td>14.5</td>
<td>59.3%</td>
</tr>
<tr>
<td>Total net interest income</td>
<td>49.8</td>
<td>33.1</td>
<td>16.7</td>
<td>50.7%</td>
</tr>
<tr>
<td>Dividend income</td>
<td>5.1</td>
<td>5.1</td>
<td>0.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Interest and dividend income</td>
<td>54.9</td>
<td>38.2</td>
<td>16.7</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

**Highlights**

- ASX Group net interest income up 26.3% reflecting higher average cash reserves
- Net interest earned on collateral balances up 59.3%
  - Average collateral balances (including commitments) up 15.5% to $6.1 billion
  - Investment spread 54 bps up on pcp (29 bps) due to elevated BBSW and repo rates
  - December collateral balances finished at $7.3 billion, lower than the average for 1H19, dropping to $7.1 billion in January

... which is up 43.8% due to a number of different factors.

ASX Group net interest income is up 26.3% due to higher average cash reserves as well as higher average earnings rates.

Net interest income on collateral balances is up 59.3%. This is due to two things.
Firstly, collateral balances are up by 15.5% - consistent with the growth we are seeing in open positions in our benchmark futures contracts.

Secondly, investment spreads have been significantly higher at 54bps compared to 29bps in the first half of FY18. This is due to elevated BBSW and repo rates. Suffice to say, 54bps would be considered well above average investment returns, particularly given the implementation of our more conservative investment policy in FY18.

I would also note that the collateral balances at the end of December were below the average for the first half.

That concludes my presentation. I will now hand back to Dom. Thank you.

Thank you Peter.

Before we move to questions, I’d like summarise and comment on outlook.

**Summary and outlook**

- Strong result amid market volatility
- Delivered increased returns to shareholders with interim dividend up 6.7% to 114.4cps
- On track to implement Stronger Foundations initiatives by end of FY19
- Focused on growth projects that leverage our expertise, independence and infrastructure to deliver new opportunities for customers
- Markets continue to be influenced by global political instability and increasing economic uncertainty

ASX’s first half results were strong amid market volatility. We have delivered increased profitability and returns to shareholders. The results demonstrate the benefits of ASX’s diversified business.

We are on track to implement our Stronger Foundations initiatives, and we are working on a number of areas that expand our core competencies and provide benefits to our customers.

We are also executing on a strategic plan to pursue new revenue streams where our expertise, independence and infrastructure can be leveraged.
We expect market volatility will continue and be underpinned by global political instabilities and increasing uncertainty in the economic outlook for the coming 12–24 months.

This may provide good support for our trading businesses. However, it may also lead to a moderating environment for capital raising.

To conclude, it has been a very busy six months for ASX and we look forward to an exciting 24 months ahead.

Thank you. We’ll now open to questions – first in the room, then from the phones, from analysts, then media.