

Data Availability and Use

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CONTENTS

Key Points	3
Overview	3
ASX's data business	4
Regulatory framework governing securities market data	5
Access to personal data	6
Cyber security risks	7
Future developments impacting on data	7
Government data	8



Key Points

- Technology is reshaping the availability and uses of data, particularly in the financial sector.
- In securities markets there are well-established commercial arrangements that deliver a wide-variety of data products to satisfy the divergent needs of different user groups.
- These arrangements are supported by a regulatory framework designed to ensure the operation of fair, orderly and transparent markets.
- The arrangements work well, providing a solid foundation for Australia's vibrant equity and derivatives markets, and offer significant benefits to consumers. No additional regulatory intervention is necessary.
- The protection of individuals' personal (and businesses' commercially confidential) information in the face of growing cybersecurity threats is critical to maintaining trust and confidence. Individuals should have the ability to access their personal data and authorise who that information is shared with.
- The pace of change is increasing as the emergence of new technologies, such as distributed ledger technology (DLT) offers the potential to transform how information is collect and shared – encouraging business innovation that will ultimately benefit consumers.
- The potential for technology to deliver value to end-users and generate cost efficiencies is resulting in new business opportunities and partnership models.

Overview

ASX welcomes the opportunity to comment on the Productivity Commission's issues paper, *Data Availability and Use*.

This submission outlines ASX's perspective, based on our experience as a producer of financial market data. This perspective, on the benefits of commercially driven outcomes, may provide some insight when the Commission considers the issues raised in the issues paper.

The emergence of new sources of data and changes in how users consume data is reshaping many industries, as new technologies create new opportunities. Whether existing arrangements for access to and protection of data remain fit for purpose are timely questions and featured in the recommendations of both the Financial System Inquiry and Competition Policy Review.

This discussion needs to be informed by rigorous cost-benefit analysis before considering additional regulatory interventions at a time when businesses and consumers are still adjusting to these new developments.

Improved data availability acts as a driver to enhance economic efficiency, empower consumers and create new business opportunities has been apparent in securities markets for some time.

It is clearly optimal if willing suppliers and consumers of data can come together to agree appropriate arrangements to access data with minimal regulatory involvement. Regulatory authorities have a role to require specific data perform their oversight and enforcement roles or possibly to mandate a standardised form of data where there the benefits outweigh the costs and an industry-led solution cannot be achieved.

In securities markets, the current commercial requirements work well, achieving the right balance between making data available and providing a financial incentive for market operators to invest in the infrastructure necessary to produce data products. Data is also made available at a reasonable cost for any other entities that want to produce more specialized data products. More basic data, particularly suited to the needs of some retail investors, is also available on a slightly delayed basis for free.



There is no market failure that would require an additional layer of regulatory intervention, to sit above existing obligations imposed by financial regulators (e.g. ASIC and RBA). If there are concerns that restricting access to data or pricing of that data is being used as a barrier to entry then the competition policy laws provide an appropriate regulatory framework to address them.

The depth and liquidity of exchange-traded markets in Australia is a testament to strength of the existing arrangements around data transparency and availability.

As a producer and distributor of financial market data ASX has seen first-hand how the expansion in data usage is impacting on existing businesses and is encouraging the emergence of new businesses.

ASX's data business

As a holder of Australian Market and Clearing and Settlement Facility Licences, ASX collects, manages, transforms, and disseminates a wide-range of data related to its equity and derivatives markets, clearing houses, and settlement facilities.

Licensees have overarching obligations to operate “fair, orderly and transparent” markets and “fair and effective” clearing and settlement facilities.

Financial markets rely on data to function effectively, to facilitate the efficient exchange of securities and to perform their critical price discovery role which influences economy-wide resource allocation decisions.

Creating an environment for the ready availability of quality data is a necessary pre-requisite to ensuring Australia's market perform to a high standard and that regulatory authorities have the appropriate tools to identify and manage risks to market integrity and systemic stability.

The existing commercial arrangements governing data provision in this area have delivered good outcomes for data users. Such a framework is flexible in response to changing consumer demand and with in-built incentives to encourage the development of new and innovative data products and services.

Global industry trends that have affected market data arrangements have included the growth in demand for data to power new trading strategies (such as algorithmic and high frequency trading) and to allow regulators to regulate an increasingly complex market structure. Technology has also enabled new data distribution channels to emerge and allow a wider group of consumers to access data that was previously restricted to market professionals (e.g. access to live trading prices through online and mobile applications and a range of free information, on a delayed basis, accessible through various internet portals¹).

It is worth noting that arrangements in Australia for the timely availability of securities market data are at least as good as, if not better, than in other major international markets.

ASX has historically provided a range of data services tailored to the needs of a variety of market intermediaries and end-clients. These services have developed over time to embrace the needs of new consumers for more detailed and faster data or to open up new distribution arrangements via third-party distributors who cater to both institutional and retail users.

¹ For example, the ASX website (<http://www.asx.com.au>). In addition, information on Australian and international markets is readily available through a range of websites (e.g. Yahoo, Google Finance, Bloomberg) and mobile applications.



In addition to a wide range of pre and post-trade data, ASX, as a listing market, provides immediate access to a range of corporate material released by listed entities and other issuers of ASX quoted products as required by the Corporations Act and/or Listing Rules through the ASX Market Announcements Platform (MAP).

Market announcements are also made available for free through the ASX website and are also distributed through data providers including IRESS, ThomsonReuters, Bloomberg and Morningstar.

ASX seeks to be responsive to the needs of customers and other stakeholders in delivering data products that assist the market as a whole. There is also a commitment to look for opportunities to harness new technologies to improve the efficiency of collecting information from markets and companies and delivering information to users in standardised formats. The advantage of this approach is that it makes it easier for users to code Application Program Interfaces (APIs), facilitating straight-through-processing and opening up opportunities for new businesses to emerge.

The costs of collecting, storing, processing and disseminating data continue to rise, reflecting the growing amount of data being generated and the specialised demands of users for more detailed and lower latency data feeds.

For example, the amount of trading data has risen exponentially in recent years. On average, each day the equities trading platform processes over 6 million order messages and executes around 1 million trades and the futures platform transacts over 500,000 contracts. Over 500 markets announcements are processed through MAP daily.

As the Murray Committee acknowledged “in many cases private returns are necessary to justify investments in datasets. The challenge is to maintain commercial incentives for developing datasets while facilitating release of data where this improves efficiency.”

Such a model has been embraced in securities markets with commercial returns from data services financing the increased investment in infrastructure which has been critical in delivering reliable and detailed data to users.

The success of the commercial model means there is no case for further regulatory intervention on access or pricing. In fact, such intervention could be counterproductive, reducing the incentives for innovation and the ability to be responsive to consumer needs.

While the creation of new data products and new distribution mechanisms has largely developed organically in response to demand, there has also been a sound regulatory framework underpinning the provision of data in securities markets.

Regulatory framework governing securities market data

Australia has a strong regulatory framework built around fair, orderly and transparent markets.

There are a range of overarching regulatory controls that impact on provision of data by market operators, such as ASX, including the obligation to make pre-trade and post-trade information available on reasonable commercial terms and on a non-discriminatory basis, and to make selected trading information available for free on a delayed basis.

This regulatory framework has proven flexible in dealing with changes in market structure and market dynamics.



For example, some prescriptive regulatory obligations were imposed on licensed market operators, through ASIC Market Integrity Rules when trading in ASX-listed securities was allowed to occur on alternative platforms. These rules were necessary to minimise any inefficiencies that could emerge as trading was fragmented across multiple platforms and to ensure that the regulator had sufficient (and standardised) data to perform whole-of-market supervision.

These requirements were later supplemented by new obligations imposed by ASIC to shine light on segments of the market that had previously been relatively opaque. This included requiring more detailed information on trading of equity securities conducted off-market in broker operator crossing networks.

The latter development reflects the broader global push by regulators to demand greater real-time data reporting on activity in over-the-counter (OTC) markets, particularly derivative markets. This push is designed to address concerns which emerged during the global financial crisis with the lack transparency around the scope, nature, and risks associated with these markets.

The overall result is that regulators now have access to a richer dataset to perform market surveillance functions and the market has more fulsome coverage of the full extent of trading activity.

Access to personal data

As a data services provider ASX acknowledges the importance of maintaining the trust of those who rely on the integrity of data provided and that appropriate privacy and security controls are in place to protect personal and commercially sensitive data.

Decisions on providing access to specific securities market data is viewed through the prism of the regulatory obligation to provide fair, orderly, and transparent markets and fair and effective clearing and settlement facilities. This can involve weighing the interests of individual investors for privacy in relation to their trading intentions versus the markets interests of the broader market for transparency.

As an example of such trade-offs, Australia has an 'anonymous' equity market where orders placed into the trading system do not identify in real-time the originating broker. Market operators and ASIC have access to this information to facilitate regulatory oversight of the market. A full dataset (with broker IDs) is made available publicly with a three-day delay to facilitate quantitative market analysis². This outcome balances individual investors' interests in masking, where possible, their trading intentions for a period of time while satisfying the market's interest in having a complete historical trading record.

Regulators and market operators seek to balance these sometimes conflicting interests through public consultation on these arrangements to determine the best overall outcomes to facilitate the growth and integrity of the market.

Financial services regulators (ASIC, the RBA, and APRA) and self-regulatory organisations (such as ASX) have access to a range of personal or commercially confidential information on participants, investors and market activity. Such data is necessary to manage risks to financial system integrity and stability.

² ASX also provides detailed historical corporate and trading data to the Securities Industry Research Centre of Asia-Pacific (SIRCA) who in turn make that information available for academic research purposes.

It is important that when data is provided for regulatory purposes, arrangements are put in place to ensure this data is used for the purposes it for which it is provided and not for unrelated commercial purposes. It is also critical that private or commercially confidential information is not released publicly or to third-parties without approval.

Within these constraints there should be scope for consumers to make informed decisions to directly authorise service providers to share their personal data with approved third-parties.

To facilitate this, Australian data protection laws need to keep pace with: the changing nature of business; growing consumer expectations that they should have greater control over access to their personal data; and the heightened risks of unauthorised access to this data from the threat of cyber-attacks.

The laws should also be cognizant of regulatory developments in other major jurisdictions and the changing expectations of data providers and users in these countries to ensure Australia remains an internationally competitive place to do business.

These are important questions around what the appropriate framework not only is for imposing obligations around how data is collected and managed but also who it is released to. Authorities and stakeholders should work cooperatively to deliver arrangements suitable for their particular industry circumstances.

Cyber security risks

Managing cyber security risks is a critical challenge for all Australian businesses, particularly those who have responsibility for protecting personal and confidential information acquired through the course of their operations.

Operators of systemically important financial market infrastructure and other financial market institutions are at the forefront of these challenges given the very sensitive nature of the information they hold on individuals.

The complexity and costs associated with addressing these risks have risen significantly and this will continue to grow in the future. Organisations need to invest in security measures to protect the integrity of data and operation of financial markets. Without these investments in critical systems market confidence could be seriously undermined.

As an operator of critical financial market infrastructure ASX has been actively cooperating with government and industry stakeholders, through arrangements such as the Cyber Security Strategy.

Future developments impacting on data

While the foregoing has focussed on existing arrangements (and how they have developed over time) it is important to acknowledge that we are in a period of significant structural change driven by the disruptive effects of technology.

This means that the consideration of access and use of data must recognise the need for flexibility to adapt to new opportunities and challenges.

For example, the emergence of Distributed Ledger Technology (DLT) and its application to a broad range of financial services may fundamentally change the way that information is collected and stored. DLT combines technologies to create a better way to store asset information digitally, producing a perfect, secure, audit



trail; a chain of title that cannot be altered and that can be distributed to those who are allowed access to it. This creates a 'single source of truth' upon which everyone can rely.

A diverse group of financial organisations are exploring the opportunities that this new technology can deliver. For example, ASX announced in January 2016 that it had selected US-based firm Digital Asset Holdings, LLC (Digital Asset) to develop a new post-trade solution for the Australian market utilising DLT. A final decision on the design of our post-trade infrastructure is expected to be made in 2017 and any decision to use DLT will be made in consultation with all of our stakeholders.

While the development and deployment of this technology for wide-spread use in markets and other financial services is still in its infancy it offers the potential to generate significant efficiencies that will reduce operational costs and benefit consumers. It is also creating environments where new business opportunities and models will emerge, including through partnerships between existing firms and fintech innovators.

However, the eventual rollout of such technology will raise debates around the appropriate access arrangements for this data (i.e. closed vs open access). The relevant regulators and industry stakeholders are best placed to work through those issues.

Government data

While this submission has focused on the role of private data in facilitating financial market activity, it is also important to acknowledge that Government produced data also plays an important role in financial markets, impacting on investment decisions and driving macro-market movements.

For this reason, the Australian Bureau of Statistics (ABS) must be well-resourced to provide timely and accurate economic and financial data. Beyond the normal economic statistics that can drive investor perceptions (e.g. national accounts, CPI, unemployment, etc.) the ABS also produces a range of financial sector data that provides an important overview of the size, structure and flow of funds in the sector (e.g. national financial accounts, and specific releases on superannuation; venture capital, lending and managed funds).

ASX would be happy to discuss any of the matters raised in this submission or to provide more detailed information if that would assist in the Inquiry's work. In the first instance you could contact Gary Hobourn, Senior Economic Analyst (tel: 20 9227 0930 or email: gary.hobourn@asx.com.au).

