

*EXECUTIVE SUMMARY*

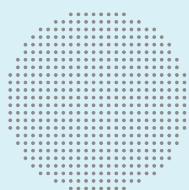
## **Inclusion is the Future**

Opportunities for Enhanced Bilateral Trade  
and Investment between Indonesia and Australia  
in Medical Devices and Assistive Technology

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# Acknowledgement

This report has been prepared by Katalis in partnership with:



EQUITY ECONOMICS

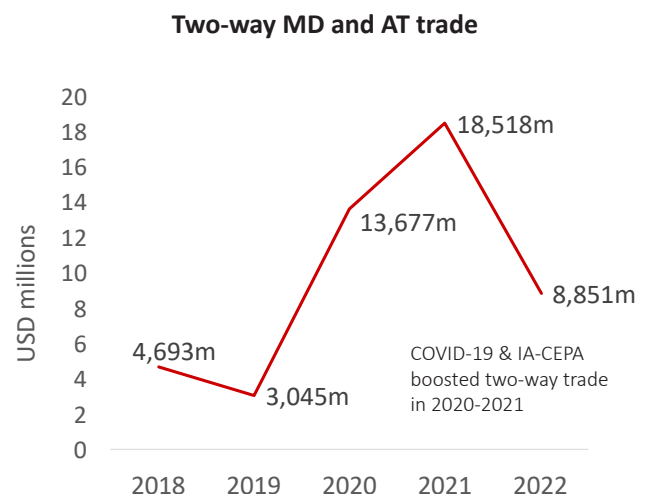


**Katalis is an economic cooperation program designed to maximise the benefits of the Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA) and build stronger, more inclusive, economic partnerships between Indonesia and Australia.** In support of this objective, Katalis commissioned research on bilateral trade in medical devices (MD)<sup>1</sup> and assistive technologies (AT)<sup>2</sup>. This report presents the results of this research and describes Indonesian and Australian industry capabilities and trade flows. The findings and recommendations presented in this report offer a platform to deepen bilateral industry links and economic opportunities, while improving outcomes for all people, especially people with disability.

## Strong growth outlook and complementary industry capabilities

**There is significant unrealised potential to grow the size of Indonesia-Australia two-way trade in MD and AT.** In 2018, two-way trade between Indonesia and Australia in MD and AT was valued at USD 4.7 million and accounted for just 0.05% of total two-way trade. Boosted by demand arising from COVID-19 and IA-CEPA coming into force in 2020, two-way MD and AT trade grew by a 9% compound annual growth rate (CAGR) between 2018 and 2022, reaching USD 8.9 million or 0.07% of total two-way trade in 2022. As Indonesia’s emerging MD/AT industry continues to develop, increased exports are expected to follow.

**In Indonesia, demographics, rising incomes, and the ambitious Government goal of universal health coverage underpin an optimistic growth outlook for MD and AT.** Indonesia is the fourth most populous country in the world, and is predicted to reach 300 million people by 2030. It also has one of Asia’s fastest ageing populations. The number of people aged 65 and over is predicted to grow 173% and to account for 10.5% of the total population by 2035<sup>3</sup>. At the same time, Indonesia’s middle class is growing rapidly, with the number of households with disposable income greater than USD25,000 predicted to overtake Australia by 2030, representing a burgeoning middle class consumer market with increasing healthcare needs. Contributing to projected growth in healthcare spending (and anticipated trade in MD and AT), is the rollout of the Government of Indonesia (GoI’s) national



Source: Trade Map, 2023.

health insurance scheme, Jaminan Kesehatan Nasional (JKN), which provides near universal coverage.

**The MD industry in Indonesia is emergent and prioritised for development by the GoI.** As Indonesia’s MD industry accelerates its growth and becomes internationally competitive, further opportunities to export to Australia will arise. It is expected that exports of lower-value MD where Indonesia is cost-competitive could grow initially, followed by growth in more technologically advanced MD over the period to 2035.

1 This report uses the following Harmonised System (HS) codes to analyse the MD trade: HS 9018 (medical appliances and instruments); HS 9019 (mechano-therapy devices); HS 9020 (breathing appliances and gas masks); HS 9022 (x-ray and radiotherapy apparatus); and HS 9402 (medical furniture).

2 This report uses the following HS codes to analyse AT: HS 9021 (which broadly covers products such as hearing aids, artificial limbs, pacemakers, orthopaedic appliances, and appliances which can be implanted into the body); HS 8713 (manual and mechanised wheelchairs); and HS 9003 and HS 9004 (corrective eyewear, spectacles and frames).

3 Jones, 'Policy brief: The 2010 to 2035 Indonesian Population Projection', [https://indonesia.unfpa.org/sites/default/files/pub-pdf/Policy\\_brief\\_on\\_The\\_2010\\_%E2%80%93\\_2035\\_Indonesian\\_Population\\_Projection.pdf](https://indonesia.unfpa.org/sites/default/files/pub-pdf/Policy_brief_on_The_2010_%E2%80%93_2035_Indonesian_Population_Projection.pdf).

**In Australia, similar population trends including an aging population and rising incomes as well as comprehensive national health insurance, is likely to fuel current and projected growth in the MD and AT markets.** While hosting a considerably smaller population (26.6 million), Australia is experiencing similar trends regarding the growth in the size of the aging population. Currently 16% of the population is over 65. This number is projected to steadily increase to reach 20% by 2066<sup>4</sup>.

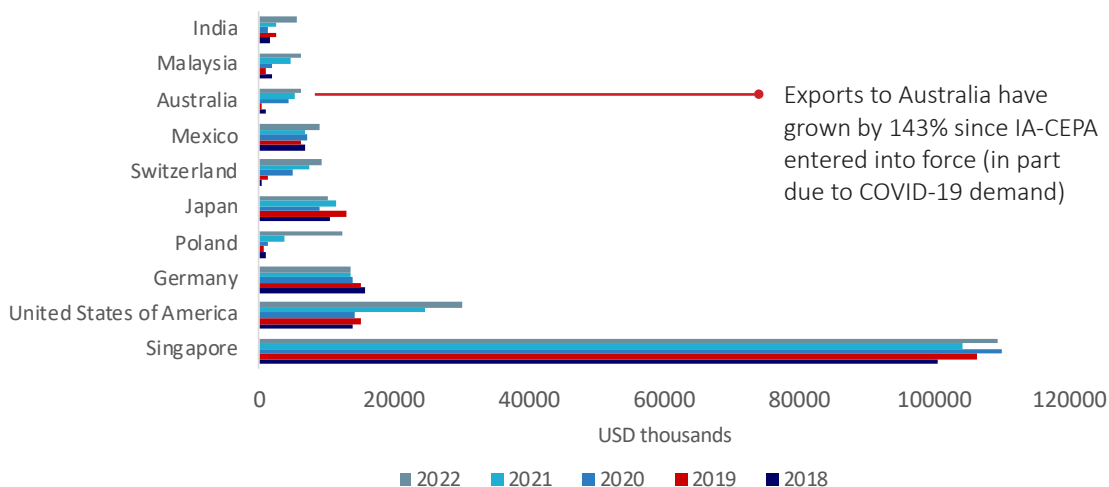
**Australia’s MD industry is highly specialised and export-oriented, with local manufacturers specialising in high-margin, niche technologies.** Technological advances and ongoing investment in research and development mean manufacturers have been able to offer the latest medical devices to downstream markets, keeping them at the forefront of innovation and driving industry sales.

## Deep dive: Medical Devices

**Indonesia is a net importer of MD, and imports are growing faster than exports as Indonesia’s local production cannot meet local demand.** Medical appliances and instruments, such as surgical face masks, syringes, needles, electro-diagnostic appliances (Harmonised System code; HS 9018),<sup>5</sup> is the largest category of both imports and exports, accounting for 62% of all medical device imports in 2022. The second largest import category is x-ray and radiotherapy apparatus (HS 9022), which has grown by 12% CAGR since 2018, and accounted for 22% of medical device imports in 2022.

**Australia is Indonesia’s 8<sup>th</sup> largest destination market for MD exports, especially for medical furniture and appliances, with growth of 143% since 2020 to reach USD 6.3 million.** While some of the growth may be due to increased demand for hospital beds arising from COVID-19, as well as IA-CEPA coming into force in 2020, it indicates Indonesia is an internationally competitive supplier of medical furniture, with potential to grow.

**Indonesia’s exports of medical devices, top 10 destination markets, 2018-2022**



Source: Trade Map, 2023.

**Indonesian imports of Australian MD grew rapidly between 2018 and 2021, to reach USD12.9 million.** The composition of trade was strongly influenced by COVID-19, with greater demand for mechano-therapy appliances, including artificial respirators, in 2021. However, the specific products imported shift annually, suggesting imports are more to fill gaps in supply—when local content requirement (LCR ) regulations permit and not indicative of an ongoing, sustainable commercial relationships.

**Due to the specialised nature of Australia’s MD industry, Australia remains a net importer of MD, although exports are growing faster than imports.** Exports have been dominated by artificial respirators and oxygen therapy products (HS 9019), especially during the pandemic. Indonesia is an underdeveloped market for Australian exports of MD, representing less than 1% of overall MD exports (or USD3.3 million) in 2022.

<sup>4</sup> AIHW, 2023, <https://www.aihw.gov.au/reports/older-people/older-australians/contents/demographic-profile>.

<sup>5</sup> HS 9018 refers to medical appliances and instruments including but not limited to surgical face masks, syringes, needles, electro-diagnostic appliance.



## Deep dive: Assistive Technology

**Indonesia's AT market is large and expected to grow, but imports are well below what would be expected considering the population size and nascent state of the domestic industry.**

Indonesia's market is valued between USD180-200 million,<sup>6</sup> with the JKN and the large and aging population expected to create future growth.<sup>7</sup> In 2022, imports were valued at USD143.3 million, with corrective eyewear and spectacles accounting for 60% of this (USD86.7 million). Growth of Indonesia's domestic industry is hampered by a lack of quality standards and investment, particularly for AT provided under the JKN.

**Accessibility and affordability remain major barriers to accessing AT in Indonesia, with significant unmet needs particularly for women and rural populations.**

Indonesia's AT prices are far higher than comparable countries in ASEAN (and Australia), making them unaffordable for all but the richest 20% of households. As a result, 60% of the 4.6 million Indonesians with a moderate or severe disability (and need for AT) are not using any AT.<sup>8</sup> Indonesia has a shortage of every type of AT, especially for women (77%) and people living in rural areas (62%),<sup>9</sup> and for glasses (80% of people in need do not have them) and mobility aids (28% of people who need a walking cane do not have one; over 75% of people who need a prosthetic do not have one).<sup>10</sup>

**Australian exports of AT to Indonesia are underdone.**

Australia's exports of AT to Indonesia peaked at USD323,000 in 2018 and were valued at only USD261,000 in 2022. Australian exports of AT are dominated by a few products, including orthopaedic articles (37% of all exports in 2022), artificial body parts (24%), hearing aids (12%) and corrective eyewear (11%). Australian exports of AT largely target Western markets, reflecting both the relatively high cost of manufacturing AT in Australia and the types of products in which Australia is internationally competitive (e.g. high value, adaptive and individualised AT).

6 Author estimation.

7 Katalis analysis of Susenas data estimate that there are 5,805,162 households in Indonesia with disability related spending/a member of a household with disability. Of these households:

- 1,722,991 households have per capita spending of over IDR1.5 million (AUD147) every month.
- 1,824,707 households have household expenditure of IDR5 million (AUD491) every month.

8 BKF-Prospira,2021.

9 Ardianuari et al., 2023 ' Assistive Technology unmet need in Indonesia: challenges and opportunities for enhancing equitable access'.

10 Cameron and Suarez, 2017, 'Disability in Indonesia', [https://www.monash.edu/\\_\\_data/assets/pdf\\_file/0003/1107138/Disability-in-Indonesia.pdf](https://www.monash.edu/__data/assets/pdf_file/0003/1107138/Disability-in-Indonesia.pdf).



## Bilateral trade opportunities

**Boosting bilateral market insights and removing actual and perceived barriers to trade will be key to growing trade and investment.** There is currently limited understanding of the two-way market opportunity, but high interest exists on both sides. In addition to increasing awareness of trade opportunities in the MD and AT sectors, reducing the negative impact on industry development and trade relationships from non-tariff barriers such as LCR will be critical.

**Existing investments can be leveraged to increase bilateral trade and investment.** Recent significant infrastructure investments by Australian companies like Aspen Medical International present opportunities for growth in Foreign Direct Investment (FDI) and MD/AT exports from Australia. Working closely with established partners will assist Australian companies to navigate complex local market dynamics.

**Strong demand and fewer market entry barriers for digital health services and AT suggest the digital space offers opportunities for enhanced short-term trade.** There is already strong demand for digital health and AT supports, such as text-to-speech, screen magnifiers, screen readers, video communication tools, and augmentative and alternative communication devices designed for the Indonesian market. In addition, Asia, including Indonesia, is experiencing significant growth in digital health care.<sup>11</sup> This growth and unmet demand unlocks significant opportunities for bilateral health services and medical technology (MedTech) trade in Indonesia, which are not subject to LCR and other restrictive non-tariff trade barriers. Encouraging examples of the potential are a recent commercial partnership between Australia's telehealth

provider Connect2MyDoctor (C2MD) and Surabaya's Locus Medical Hub, and the entry to the Indonesian market by Spokle, an Australian AT company that offers a speech therapy application.

**There are also opportunities for bilateral cooperation to support Indonesian industry development.** This could include Australian support for the introduction of industry-wide national quality standards that align to international standards, which would be catalytic for industry development by overcoming one of the major barriers to Indonesia's global competitiveness, while ensuring devices are safe and meet needs.

**Bilateral economic cooperation could also support Indonesia's needs for skills and knowledge transfer in AT.** This could be achieved by leveraging the existing skills exchange between Australia and Indonesia to strengthen health care professionals' skills in prescribing AT. It could also include innovative research collaborations that support technology and knowledge transfer, such as that being explored by Koneksi, the Indonesia and Australia Knowledge, Technology and Innovation Collaboration, which is connecting industry, universities, government and civil society to create an enabling environment for bilateral collaboration across the AT value chain and build capacity in Indonesia's AT industry. Bilateral industry cooperation is also a promising area of potential, by combining Australia's expertise in research and development, design, after-sales and service, with Indonesia's expertise and cost-competitiveness in manufacturing at scale. Australian technology and knowledge could build up Indonesian AT manufacturing capability, which aligns with, and directly supports, GoI industry development ambitions.

<sup>11</sup> Baur et al., 2021, 'The future of healthcare in Asia: Digital health ecosystems', McKinsey & Company.


IA-CEPA ECP Katalis (Katalis) is a unique, five-year (2020-2025) government-backed business development program unlocking the vast potential of economic partnership between Australia and Indonesia. Katalis was established under the Indonesia-Australia Comprehensive Economic Partnership Agreement Economic Cooperation Program (IA-CEPA ECP). The program complements other Australian development programs with a commercially oriented, bilateral approach and places gender equality and social inclusion at the centre of everything we do.

IA-CEPA ECP Katalis is supported by the governments of Australia and Indonesia under IA-CEPA.



[info@iacepa-katalis.org](mailto:info@iacepa-katalis.org)

Tower 2, Level 25, International Financial Centre (IFC),  
Jl. Jend. Sudirman Kav. 22-23, Jakarta 12920, Indonesia

 [iacepa-katalis.org](http://iacepa-katalis.org)

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